ARMY TM 11-7440-217-15
NAVY NAVSHIPS 0967-324-0030
AIR FORCE TO 31W4-2G-41

OPERATOR'S, ORGANIZATIONAL, DS, GS, DEPOT MAINTENANCE MANUAL

CARD PUNCH, HIGH-SPEED

RO - 312/G

This copy is a reprint which includes current pages from Changes 1 through 8

DEPARTMENTS OF THE ARMY, THE NAVY, AND THE AIR FORCE

MAY 1970

WARNING

DANGEROUS VOLTAGES EXIST IN THIS EQUIPMENT

Be careful when working anywhere within the inclosure of this equipment.
Serious injury or death may result from contact With high-voltage terminals.

DON'T TAKE CHANCES!

TM 11-7440-217-15
EE630-AM-OMI-010/E110 RO312
TO 31W4-2G-41
C 8

CHANGE

No. 8

DEPARTMENTS OF THE ARMY,
THE NAVY, AND THE AIR FORCE
Washington, DC, 1 January 1986

OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT,
GENERAL SUPPORT AND DEPOT MAINTENANCE MANUAL
INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS
CARD PUNCH, HIGH SPEED RO-312/G
(NSN 7025-00 851-5116)

TM 11-7440-217-15/NAVELEX 0967-324-0030/TO 31W4-2G-41, 19 May 1970, is changed as follows:

1. The title of the manual is changed as shown above.

2. New or revised material is indicated by a vertical bar in the margin. Where an entire chapter, section, or illustration is added or revised, the vertical bar is placed opposite the identification number and title.

3. Remove old pages and insert new pages as follows:

Remove pages	*Insert pages*
i through iv	i through iv
1-1 through 1-3/(1-4 blank)	1-1 through 1-3/(1-4 blank)
2-1 and 2-2	2-1 and 2-2
3-11 and 3-12	3-11 and 3-12
3-31 and 3-32	3-31 and 3-32
3-39 and 3-40	3-39 and 3-40
4-1 and 4-2	4-1 and 4-2
4-8.1 through 4-10	4-8.1 through 4-10
4-17 and 4-18	4-17 and 4-18
4-20.1 through 4-24	4-20.1 through 4-24
4-29 and 4-30	4-29 and 4-30
4-33 and 4-34	4-33 and 4-34
5-1 and 5-2	5-1 and 5-2
6-13 and 6-14	6-13 and 6-14
A-1/(A-2 blank)	A-1/(A-2 blank)
D-7 and D-8	D-7 and D-8
8-9/(8-10 blank)	8-9/(8-10 blank)
8-11/(8-12 blank)	8-11/(8-12 blank)
8-35 and 8-36	8-35 and 8-36
83 through 86	83 through 86
119 and 120	119 and 120

4. File this change sheet in front of the publication.

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TECHNICAL MANUAL
NO. 11-7440-217-15
TECHNICAL MANUAL
EE630-AM-OMI-010/E110 RO312
TECHNICAL ORDER
NO. 31W4-2G-41

TM 11-7440-217-15
EE630-AM-OMI-010/E110 RO312
TO 31W4-2G-41
DEPARTMENTS OF THE ARMY,
THE NAVY, AND THE AIR FORCE
WASHINGTON, DC, *19 May 1970*

Operator's, Organizational, Direct Support, General Support, and Depot Maintenance Manual Including Repair Ports and Special Tools Lists CARD PUNCH, HIGH-SPEED RO-312/G (NSN 7025-00-851-5116)

LIST OF ILLUSTRATIONS

LIST OF ILLUSTRATIONS

LIST 0F TABLES

RECORD OF CHANGES

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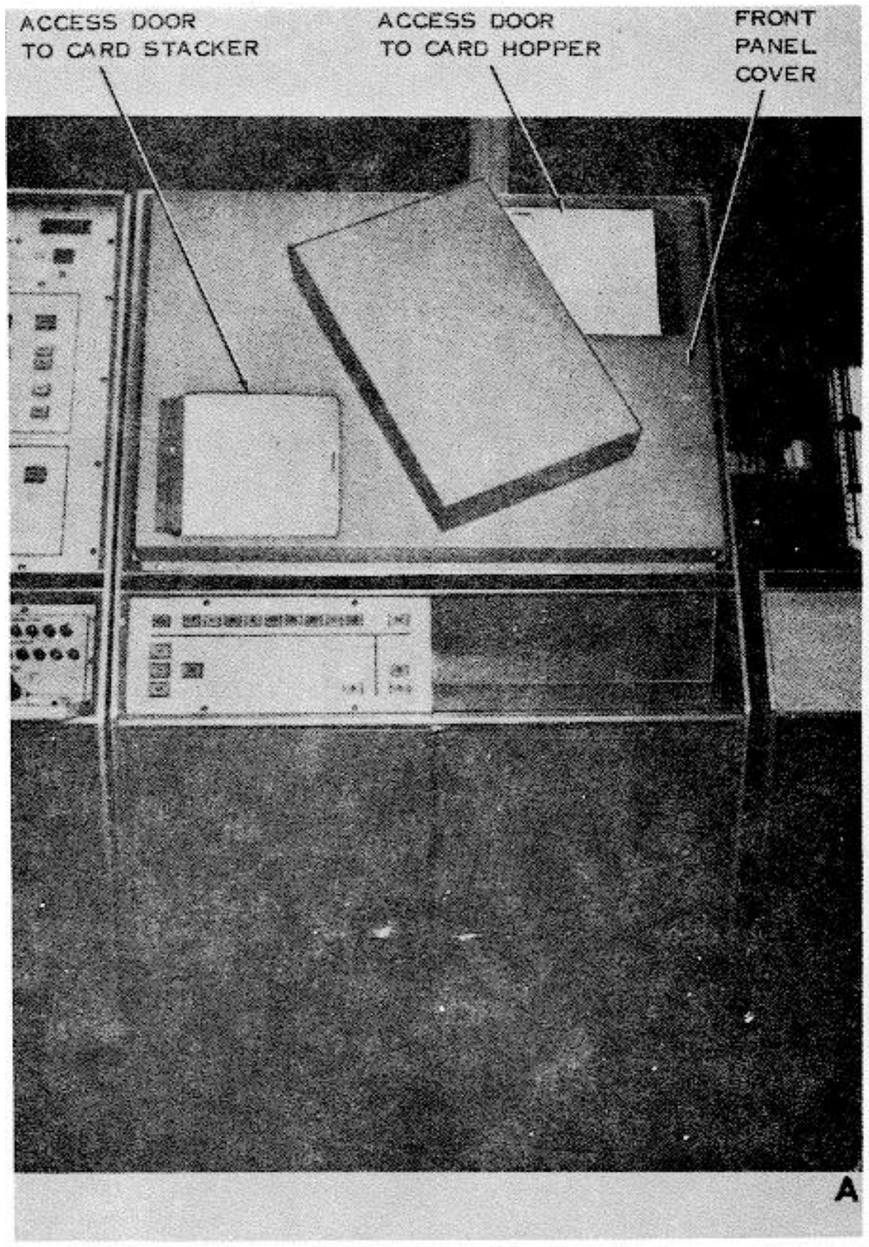
CHANGE NO.	DATE	TITLE OR BRIEF DESCRIPTION	ENTERED BY

Figure 1-1. Card Punch, High-Speed RO-312/G, less running spares. (without noise reduction modifications)



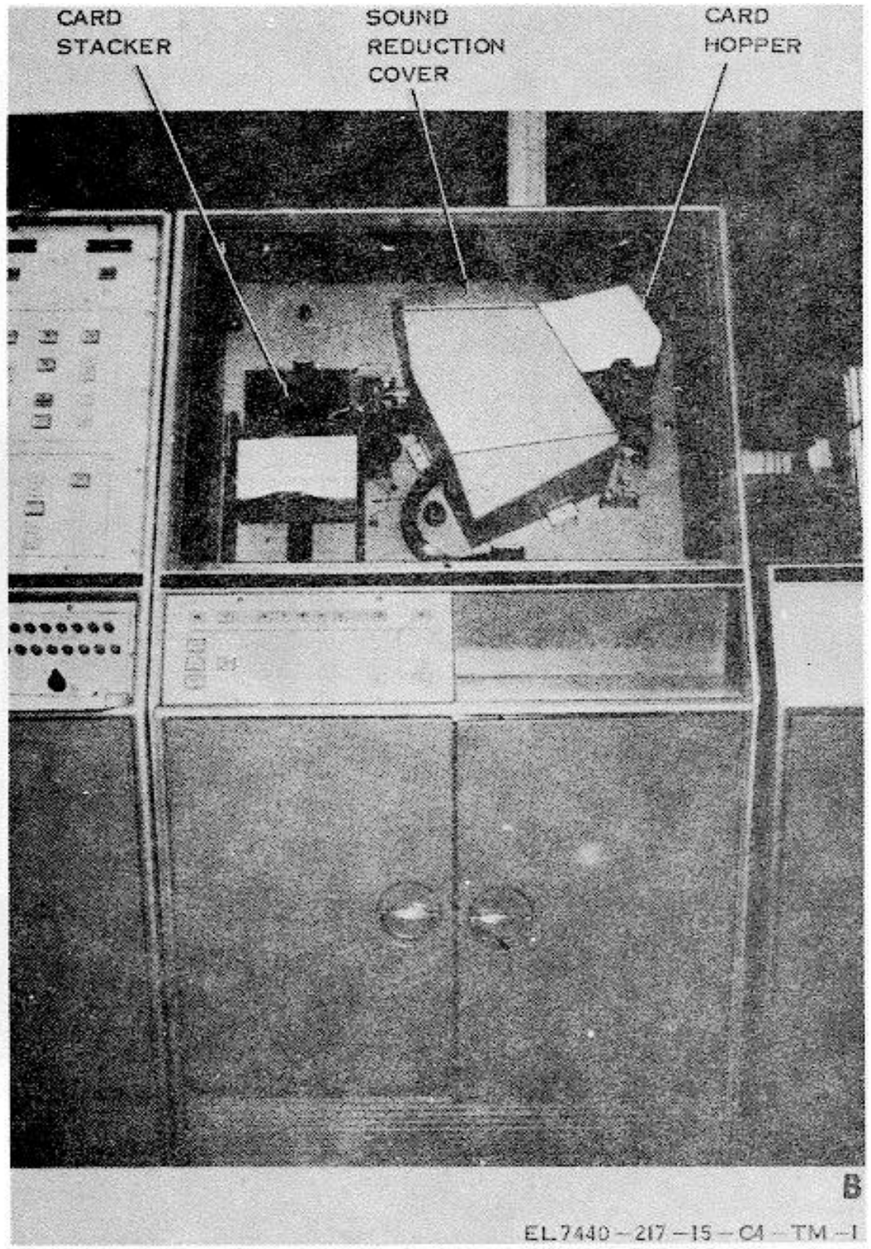


Figure 1-1.1. Card Punch, High Speed RO-312/G, Modified for noise reduction.

CHAPTER 1
INTRODUCTION

Section I GENERAL

1-1. Scope

This manual describes Card Punch, High Speed RO-312/G thigh speed card punch) (fig. 1-1) and contains operation and maintenance information. It also covers detailed functioning of the high speed card punch and includes Items Comprising an Operable Equipment (para 1-6); Maintenance Allocation Chart (app C), and Repair Parts List (app D). Refer to TM 11- 7440-239-15/NAVELEX 0967-324-0110/TO 31W4-4-1-111 (app A). for installation and checkout procedures.

1-2. Consolidated Index of Army Publications and Blank Forms

Refer to the latest issue of DA Pam 310-1 to determine whether there are new editions, changes or additional publications pertaining to the equipment.

1-3. Maintenance Forms, Records, and Reports

a. Reports of Maintenance and Unsatisfactory Equipment. Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pam 738-750 as contained in Maintenance Management Update. Air Force personnel will use AFR 66-1 for maintenance reporting and TO-00-35D54 for unsatisfactory equipment reporting. Navy personnel will report maintenance performed utilizing the Maintenance Data Collection Subsystem (MDCS) LOW OPNAVINST 4790.2, Vol 3 and unsatisfactory material conditions (UR submissions) LOW OPNAVINST 4790.2, Vol 2, chapter 17.

b. Report of Packaging and Handling Deficiencies. Fill out and forward SF 364 (Report of Discrepancy (ROD)) as prescribed in AR 735-11-2/DLAR 4140.55/NAVMATINST 4355.73/AFR 400-54/MCO 4430.3E.

c. Discrepancy in Shipment Report (DISREP) (SF 361). Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55-38/NAVSUPINST 4610.33C/AFR 75-18/MCO P4610.19D/DLAR 4500.15.

1-3.1. Reporting Errors and Recommending Improvements

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms), direct to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: AMSEL-ME-MP, Fort Monmouth, New Jersey 07703-5007. For Air Force, submit AFTO Form 22 (Technical Order System Publication Improvement Report and Reply) in accordance with paragraph 6-5, Section VI, T.O.00-5-1. Forward direct to prime ALC/MST. For Navy, mail comments to the Commander, Naval Electronics Systems Command, ATTN: ELEX 8122, Washington, DC 20360. In either case, a reply will be furnished direct to you.

1-3.2. Reporting Equipment Improvement Recommendations (EIR)

a. Army. If your Card Punch, High Speed RO-312/G needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design. Put it on an SF 368 (Quality Deficiency Report). Mail it to Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: AMSEL-ME-MP, Fort Monmouth, New Jersey 07703-5007. We'll send you a reply.

b. Air Force. Air Force personnel are encouraged to submit EIR's in accordance ravish AFR 900-4.

c. Navy. Navy personnel are encouraged to submit EIR's through their local Beneficial Suggestion Program.

1-3.3. Administrative Storage

Administrative Storage of equipment issued to and used by Army activities will have preventive maintenance performed in accordance with TM 740-901 before storing. When removing the equipment from administrative storage, the PMCS should be performed to assure operational readiness.

1-3.4. Destruction of Army Electronics Materiel

Destruction of Army electronics materiel to prevent enemy use shall be in accordance with TM 750-244-2.

Section II. DESCRIPTION AND DATA

1-4. Purpose and Use

a. The high-speed card punch is used to convert electrical input data to printed characters and perforations in standard 80-column Electronic Industries Association (EIA) cards. Incoming data is received from the Common Control Unit (CCU) over eight parallel lines (seven data bits and parity bit) in the form of eight bit American Standard Code for Information

Interchange (ASCII) signals at a rate of 150 characters per second. In response to the input data, the high speed card punch converts the data to the 12-bit FIPS-14 code and punches rectangular holes in the card in 80 columns, each column representing one character.

b. Cards are picked and punched in response to control signals from the CCU (fig. 1-2). Protective circuits in the high-speed card punch stop operation automatically in response to anyone of eight alarm conditions. For testing and maintenance, the high-speed card punch can be operated off-line, independent of the CCU.

c. The high speed card punch is used as part of the digital subscriber terminal (DST) sets in the automatic digital network (AUTODIN} portion of the military communications system. The high-speed card punch functions as an output component of Digital Subscriber Terminals AN/FYA-71(V)4 and AN/FYA-71(V)6 as described in TM 11-7440-238-15/NAVELEX 0967-LP-324-0100/TO 31W4-4-1-101.

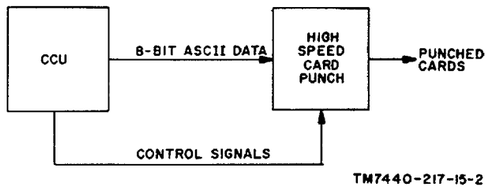


Figure 1-2. Typical system application, block diagram.

1-5. Technical Characteristics

Type of card	ETA standard 80 column card
Punch type	Rectangular holes conforming to EIA standard RS-292.
Output data	Card perforations in 12-bit FIPS-14 code.
Hopper capacity	1000 cards
Stacker capacity	1000 cards
Information code and transfer	ASCII information transferred on a bit-parallel, character-serial basis with eight bit of each character maintaining odd parity.
Card rate	112.5 cards per minute minimum.
Power requirements	120 volts (+12, -24), 50 Hz (±2 5) or 60 Hz (±3), single-phase ac, 57 amperes starting current, 14 amperes running current.

1-6. Comprising an Operable Equipment

NSN	*Qty*	*Nomenclature, part No., and mfr code*	*Dimensions (in.) Depth*	*Height*	*Width*	*Weight (lb)*
		NOTE **The part number is followed by the applicable 5-digit Federal Supply Code for Manufacturers (FSCM) identified in SB 708-42 and used to identify manufacturer, distributor, or Government agency, etc.**				
7025-00-851-5116		Card Punch High Speed: RO-312/G 58189; A64002-001 Consisting of:				
7440-995-4627	1	Photo Diode Assy: A32523T1; 07264				
7440-543-3361	1	Picker Belt Set: B14653; 07264				
	1	Belt, Eject: A60055, 07264				
3330 00-837-8302	1	Belt Punch: 225L075: A60056, 07264				
3030-00-087-6583	1	Belt Main Drive; 60 cycle, 285L075: A60113; 07264				
	1	Belt, Main Drive; 50 cycle, 300L075F: A60109; 07264				
7530-00-027-6178	10,000	Cards, Punch: Y07069-001: 58189	30	64	35	400
3030-00-087-6584	1	Pump to Picker & Motor to Stocker: A6010r; 07264				
	1	Belt: A60050; 07264				
	1	Pulley; 50 cycle; A14887. 07264				
	1	Bushing: A14879 07264				
	1	Belt Main Drive: 50 cycle 300L075F: A60109; 07264				
	1	Oil; Soroban: 75; 07264 Oiler, Eagle: 66; 07264				

NOTE

NSN 7040-01-048-8823 is the National Stock Number for Card Punch, High Speed RO-312/G that has been modified by MWO 11-7440-217-50-1.

1-6.1. Expendable Consumable Supplies and Materials

Expendable Consumable Supplies and Materials are listed in table 1-1.

Table 1-1. Expendable Consumable Supplies anal Materials

The supplies and materials listed in this table are required for operation of this equipment and are authorized to be requisitioned by CTA 50-970. The NSN for the applicable unit of issue required can be found in appropriate supply catalogs. The FSCM is used as an element in item identification to designate manufacturer or distributor or Government agency, etc., and is identified in SB 708-42.

Item	*Description*	*Ref No. and FSCM*	*FSC*
1	Cards, Punch	58189	7530
2	Oil, Soroban	07264	

1-7. Common Names

The following list provides the reference designations, official item name, common name used in this manual, and the manufacturer's part number of each item listed. Although the full reference designations are shown below, abbreviated reference designations are frequently used in this manual. Prefix the abbreviated reference designation with the applicable assembly and subassembly identification letters and numbers to obtain the complete reference designation for the item.

Reference Designation	*Item name*	*Common name*	*Mig. part No.*
A1A1	PC Card	Timing Generator	A65117-001
A1A2	PC Card	solenoid Driver	A65081-001
A1A3	PC Card	Punch Register	A52766-001
A1A4	PC card	Punch register	A52766-001
A1A5	PC card	Punch register	A52766-001
A1A6	PC card	Punch register	A52766-001
A1A7	PC card	Octal to Hollerith converter	A52638-001
A1A8	PC card	Encode matrix	A53721-001
A1A9	PC card	Encode matrix	As3721-001
A1A10	PC card	Decode matrix	A53725-001
A1A11	PC card	Decode matrix	A53725-001
A1A12	PC card	Code converter input	A59774-001
A1A13	PC card	Data input	A65089-001
A1A14	PC card	Control interlace	A65121-001
A1A15	PC card	Master counter	A65085-001
A1A16	PC card	Punch cycle control	A65101-001
A1A17	PC card	Mode switch control	A65093-001
AIA18	PC card	Error detection	A65109-001
A1A19	PC card	Motion control	A65105-001
A1A20	PC card	Lamp driver	SM-E-546659
A1A21	PC card	Error Function	A65177-001
A1A21*	PC card	Error function/motor stop	A57601-001
PSIA1	Component board assembly	+4.75 volt regulator	38864
PSIA2	Component board assembly	+12 volt and - 2 volt regulators	38869
PSIA3	Component board assembly	-48 volt regulator	38874
PSIA12	Sequence module	Sequence module	39251

☆Used on HSCP serial numbers 1 through 197 which have been modified by MWO 11-740-217-30-1

1-8. Description of High Speed Card Punch

When ready for operation, the components of the high speed card punch are assembled as shown in figure 1-1.

a. Logic Assembly A1. Logic Assembly A1 (fig. 1-3) contains a chassis which supports 21 printed circuit (PC) cards and appropriate interconnecting cabling required for high speed card punch control and data processing. Logic assembly A1 is slide mounted in the enclosure. The slides and handles on the front panel provide easy access to the chassis for maintenance.

b. Mechanism Assembly A8. Mechanism Assembly A2 (fig. 1-3) consists of a steel panel which supports a hopper, picker, punch head, stacker, and capstans on its front side. A vacuum pump and motor along with associated gears and belts, are mounted on a chassis assembly on the rear side of the panel. A vacuum pump and motor along with associated gears and belts, are mounted on a chassis assembly on the rear side of the panel. A door at the rear of the cabinet provides a means of getting to the rear side of the mechanism for maintenance.

c. Control Panel As. Control Panel A3. (fig. 1-3), consists of a panel containing the pushbutton controls and indicators necessary for the operation of the high speed card punch.

d. Power Supply PS1. Power Supply PSI is a slide mounted chassis which supplies +4.75, -12, + 12, and -48 volts DC, and 15 volts AC for operation of components of the high speed card punch. The power supply is mounted directly, below the logic assembly and contains all the regulated DC power supplies. The front panel of the power supply chassis contains a separate fuse for each DC power supply and fuses which protect the drive motor, fans, and the indicator lamps of the control panel. Spare fuses are also mounted on the front panel. Function and value of each fuse is marked on the front panel.

e. Blower B1. Blower B1. (fig. 1-3) is mounted behind the grill in the bottom of the enclosure. Blower B1 provides cooling air to the power supply and logic assemble and through an air duct assembly to the mechanism assembly A2.

f. Filter Assembly FL1. fig. 1-3). The Filter Assembly FL1 is mounted at the left low er rear of the enclosure. The Filter Assembly FL1 filters the high frequency line noise from the AC power input to the power supply.

g. Enclosure. The enclosure is a free standing cabinet that provides mounting surfaces for the logic assembly, card punch mechanism, control panel, power supply, blower and filter. Access to the logic assembly, power supply, blower and filter is provided by trio hinged doors on the front of the cabinet. A full width door on the rear of the enclosure provides access to the rear of the card punch mechanism. A removable cover on the upper front portion of the enclosure allows access to the punch mechanism components mounted on the front of the panel.

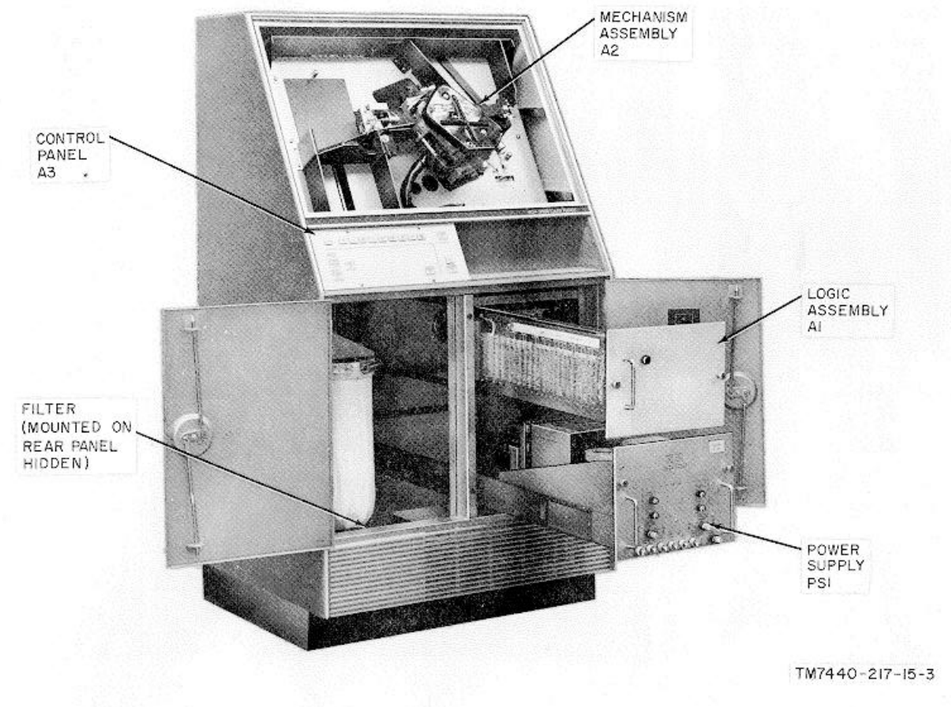


Figure 1-3. High speed card punch, assembly locations.

NOTE

Motor stop assembly A4 consisting of a bracket containing an elapsed time meter and a toggle switch in mounted on the left door tramp immediately below Control panel AS on Pl1 high speed card punches serial number 1 through 197 modified by MWO 11-7440-217-30-1. Figure 1-3 of the manual shows the high speed card punch without this item.

h. Motor Stop Assembly A4. Motor Stop Assembly A4 consists of a bracket containing an elapsed time meter and a motor control a switch-and relay to enable automatic shut-off of the punch mechanism A2 drive motor during long idle periods. This decreases the acoustic noise generated by the punch mechanism during non-punching standby periods and also reduces maintenance requirements.

CHAPTER 2
OPERATING INSTRUCTIONS

2-1. Operator's Controls and Indicators

(fig. 2-1)

Control indicator	*Function*
AC POWER switch indicator (Z2)	Controls and indicates when ac power is applied. Lights WHITE when ac power is applied.
DC POWER indicator (DSI)	Lights WHITE when all dc power is present in high speed card punch.
OUT SYN indicator (DS7)*	Lights RED when high speed card punch is out of synchronization with CCU.
CODE CONV ERROR indicator (DS2)*	Lights RED when code converter errors detected.
STEP FAIL indicator (DS3)	Lights RED when card position is out of step with count of columns punched.
PUNCH ERROR indicator (DS4)*	Lights RED when punch error is detected.
PARITY ERROR indicator (DS5)*	Lights RED when panty error is detected.
MOTION FAIL indicator (DS6)	Lights RED if picked card fails to reach punch station or stacker within required time.
CARD ALARM indicator (DS8)	Lights RED when either hopper is empty or stacker is full
CHAD indicator (DS9)	Lights AMBER when card bag is full.
HOPPER LOW indicator (DS10)	Lights AMBER when hopper contents are low.
NOT ASSIGNED indicator (DS11)	Lights AMBER when high speed card punch is not assigned for on line operation with CCU.
LAMP TEST switch (Z3)	Lights all indicators, except AC POWER and DC POWER indicators.
SINGLE FEED switch-indicator (Z4)	When momentarily pressed, initiates picking, feeding. and stacking of one blank card
AUDIBLE RESET switch (Z1)	After high speed card punch malfunction, AUDIBLE RESET switch is pressed to remove audible alarm at the CCU.
START switch4ndicator (Z5)	When not lit, it indicates that high speed card punch is not ready for on-line operation. Depressing indicator causes it to light GREEN. When green, it indicates that high speed card punch is ready to be assigned at CCU and that no faults are detected When lighted WHITE, it indicates that high speed card punch is ready for operation, is assigned a channel at CCU, is selected, and no faults are detected.
STOP switch-indicator (Z6)	When depressed, manually stops high speed card punch. Lights RED when pressed or when high speed card punch is stopped automatically as result of automatic detection of fault. Lights RED also when power is first applied.
LOCAL TEST switch indicator (Z7)	When high speed card punch is not assigned and is in stop mode, pressing LOCAL TEST switch-indicator initiates local picking and punching of cards with test codes. Indicator lights amber in this condition.

*This indicator, when lit, causes a block repeat function to be generated at the end of the error block. If the block is repeated correctly, the device will continue to process data and the indicator light will be reset. If the block is not repeated correctly, the device will cause an alarm stop condition to be generated by the CCU and go into the STOP mode.

2-1.1. Motor Stop Assembly Control and Indicator

(fig; 2-1.1)

Control indicator	*Function*
MOTOR CONTROL switch (A4S1)	When at CONTINUOUS RUN, operation of punch motor is controlled by AC POWER switch and will operate continuously when AC POWER switch is lit. When at AUTOMATIC STOP, motor operates only when ac power is applied and card punch has been selected by CCU. After starting, motor operates a minimum of 30 seconds to a maximum of 3 minutes after Reselection of card punch by CCU.
Elapsed time meter (M1)	Provides visual display of hours of operation of punch mechanism drive motor.

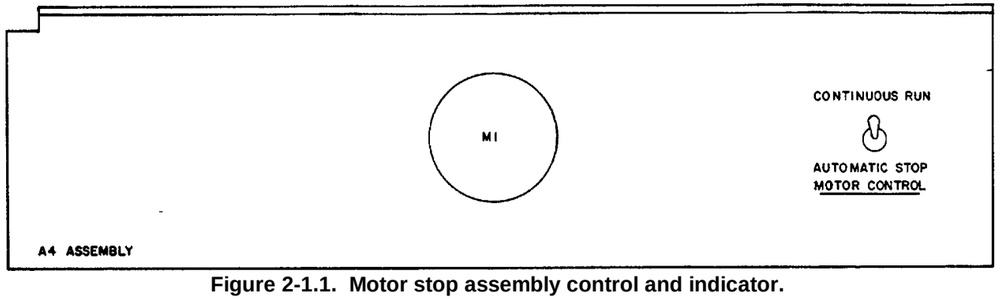


Figure 2-1.1. Motor stop assembly control and indicator.

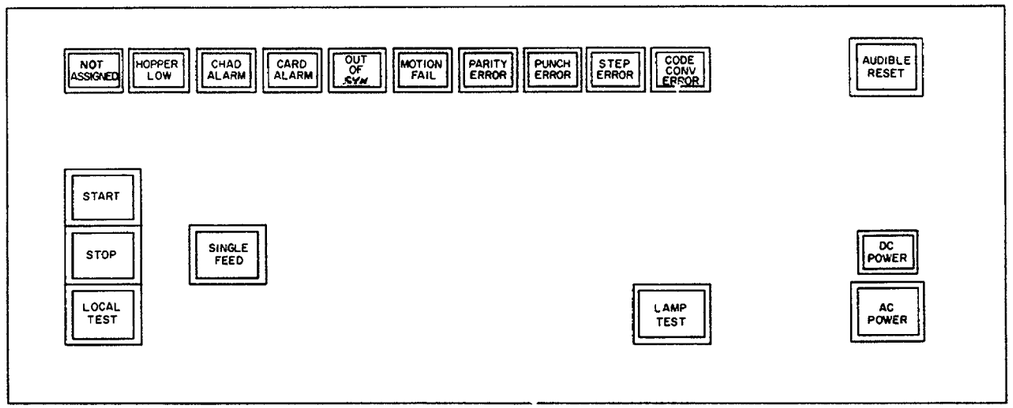


Figure 2-1. Control panel controls and indicators.

2-2. Types of Operation

a. The high speed card punch can be operated in either the on-line or local test mode of operation. Selection of the on-line mode transfers control of the high speed card punch to the CCU. The local test mode is used for test and maintenance.

b. Perform the following sequence of procedures when operating the card punch:

(1) Preliminary starting procedure (para 2-3).
(2) Loading procedure (para 2-4).
(3) Starting procedure (para 2-5).
(4) Operating procedure (para 2-6).
(5) Stopping procedure (para 2-7).

2-3. Preliminary Starting Procedure

Depress the AC POWER pushbutton on the control panel. Check that the AC POWER, DC POWER and STOP indicators are lit.

2-4. Loading Procedure

NOTE

It is recommended that before cards are used they should be conditioned in a room having a relative humidity from 45 to 65 percent, ambient room temperature should be from 70° to 75° Fahrenheit, and conditioning time prior to use should be from 24 to 48 hours;

a. Fan the stack of cards to be punched and square the stack on the card squaring shelf at the right of the control panel.

b. Take about a Winch stack of cards and place in the card hopper with the No. 12 row nearest the operator and column 1 to the left.

c. Load the rest of the cards to be punched face down on top of the loaded cards as in b above.

d. Press the SINGLE FEED switch indicator and check to be sure the first card is properly picked, fed, and stacked.

2-5. Starting Procedures

a. Depress the START control on the control panel.

b. Check that the following indicator lamps are not lit:

(1) STOP control indicator
(2) All fault alarm indicators

2-6. Operating Procedures

a. On-line Operation. To select on-line operation, press the START pushbutton-indicator and check that the pushbutton-indicator is lighted green. The cards can then be picked and punched in response to select commands from the CCU.

b. Local Test Operation. To initiate local test operation, press the LOCAL TEST pushbutton-indicator and check that the STOP pushbutton-indicator is extinguished. (NOT ASSIGN INDICATOR must be lit Amber ... equipment is deassigned at CCU).

2-7. Stopping Procedure

a. Standby Condition. Normally, when the high speed card punch is not used for short periods of time during a work shift, the power is left on so that the drive motor runs continuously and the equipment, in effect, is in a standby condition.

b. Stop Condition. Stop the high speed card punch from on-line or local test operation by pressing the STOP pushbutton.

c. Powerdown Condition. Press the stop switch, then the AC POWER pushbutton-indicator to remove ac and dc power from the high speed card punch.

2-8. Correcting Alarm Conditions

When an alarm condition occurs, correct as follows:

a. Check the control panel fault indicators to determine the fault.

b. After the fault is corrected, place the high speed card punch in the on-line mode by depressing the START pushbutton or in the local test mode by depressing the LOCAL TEST pushbutton.

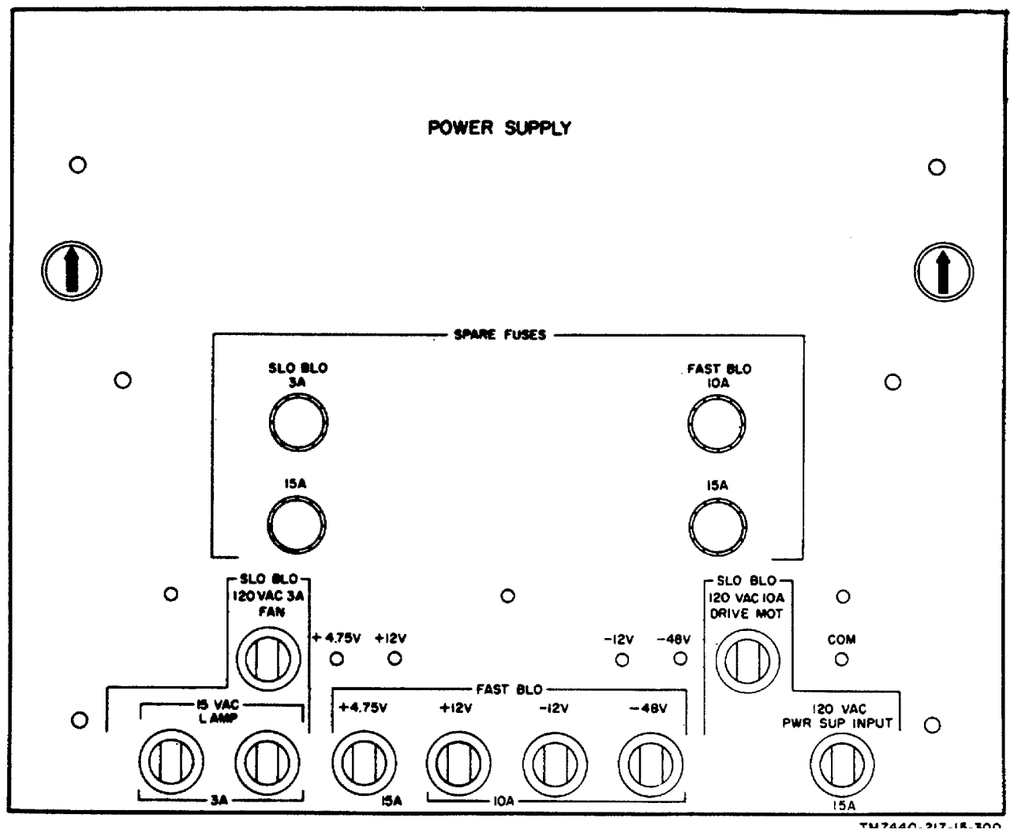


Figure 2-2. Power supply, front panel.

2-9. Clearing Card Lams

The following steps describe the proper procedure for clearing card jams in the high speed card punch. Follow the procedures carefully to avoid damage to the die plate or to the punch head.

a. Turn power off and remove the drive motor fuse on the power supply front panel (fig. 2-2).

b. Loosen the thumb screws 1 and 2 (fig. 2-3) on top of the punch head and remove the die plate.

NOTE

Be extremely careful w hen removing the die plate to avoid damaging it.

c. Attempt to remove all pieces of the jammed card. Be sure that all pieces are removed.

d. If pieces of the card are still jammed in the punch head, remove the punch head from the machine (para 4-31*a*). The remove the feeder mechanism (para 4-32*a*) and remove all the pieces of the card from the punch head. Replace the feeder mechanism (para 4-32*b*) and replace the punch head in the machine (para 431*b*).

e. Replace the drive motor fuse, turn power on and depress the single feed switch once to assure proper card travel; Run the punch in the local test mode to check the complete operation of the punch head and the logic circuits. Check punched card for proper punch registration.

f. With power on but the punch head not running, manually feed a card through the punch head to check for a clear card path. To energize the gate solenoids, cover the gate photocell (fig. 4-35)and manually actuate the picker solenoid.

CAUTION

Feeding a card under power into a clogged track may damage the feed arms and card guides.

g. Turn the power off and reinstall the die plate and tighten the thumb screws 1 and 2 (fig. 2-3).

h. Replace the drive motor fuse, turn power on and depress the single feed switch to check the operation of the punch. Run the punch in the local test mode to check the complete operation of the punch head and the logic circuits.

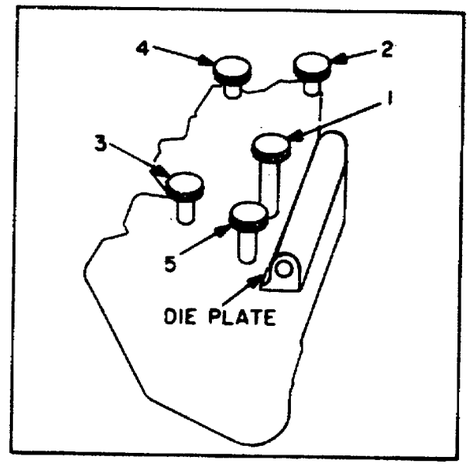


Figure 2-3. Card punch thumbscrew locations.

CHAPTER 3
FUNCTIONING OF HIGH SPEED CARD PUNCH

NOTE

The purpose, operation, and interoperation of the various circuits (electrical, electronic, mechanical, electromechanical; and optical) in this equipment are explained in this chapter. Familiarity with the equipment, how it works, and why it works that way are valuable tools in troubleshooting the equipment rapidly and effectively.

Section I. GENERAL FUNCTIONING OF HIGH SPEED CARD PUNCH

3-1. High Speed Card Punch, Block Diagram (fig. 3-1)

All of the card handling and card punching functions of the high speed card punch are performed by punch mechanism assembly A2. Within this assembly, cards are automatically transported from the hopper through the punch station where punching takes place and then to the stacker for storage. Control of the card motion and processing of the data prior to punching are performed by electronic circuits in logic assembly Al and by manual switches on control panel A3. These functions are described in paragraphs 3-2 through 3-10.

3-2. Card Picking

Before operating the high speed card punch standard blank punch cards (EIA-RS-292) are loaded into the hopper in punch mechanism assembly A2. Picking cards from the hopper for transport to the punch station may be controlled remotely from the Common Control Unit (CCU) or manually from control panel A3.

a. Remote Operation. Automatic card picking under control of the CCU is accomplished by operation of the START mode switch on control panel A3.

This enables mode switch control circuits in logic assembly Al to switch to the start mode for remote operation.

(1) If an error condition exists in the high speed card punch as indicated by a general stop signal from the error control circuits, the mode switch control circuits are prevented from entering the start node. However, if no error condition exists, the start mode is initiated. This causes a green START visual indication on control panel A3 and also causes a ready signal to be sent through transmit interface circuits to the CCU. The ready signal causes an appropriate visual indication on the front panel of the CCU to indicate to the CCU operator that the high speed card punch is ready for remote operation.

(2) Actual card picking under control of the CCU cannot begin until the CCU operator assigns the high speed card punch to operate with the CCU. He does this by pressing a front panel pushbutton on the CCU. This results in an assigned signal (fig. 3-2) which is routed through receive interface circuits to the mode switch control circuits.

(3) Even after the CCU has assigned the high speed card punch to operate with the CCU, a pick command for a specific card cannot be generated until the CCU circuits sense that a complete data block of 80 characters is ready for transmission to the high speed card punch. When this condition is satisfied, the CCU sends a select signal which is also routed through the receive interface circuits to the mode switch control circuits.

(4) The presence of both the assigned and select signals from the CCU causes a white START indication on control panel A3 and causes a pick start signal to be sent to the motion control circuits which generate the required solenoid drive signal to cause a card to be picked. The solenoid drive signal is switched off by the motion control circuits as soon as the card has reached the punch station.

(5) The select signal from the CCU remains active only until the complete block has been transmitted. The select signal is then terminated to prevent another card from being picked until a new data block is ready for transmission to the high speed card punch. At that time the select line is again activated and the process is repeated.

b. Local Operation. When the high speed card punch is not assigned to the CCU, the operator can initiate card picking manually by pressing either a LOCAL TEST or SINGLE FEED pushbutton on control panel A3. Pressing the SINGLE FEED pushbutton causes only one card to be picked. Pressing the LOCAL TEST pushbutton causes continuous card picking by allowing a new pick start signal to be generated each time the previous card reaches the stacker. This is indicated by a card position signal from punch mechanism assembly A2.

3-3. Card Feed

Once a card reaches the punch station in punch mechanism assembly A2, it is fed through at a rate of two columns in approximately 9ms.

a. The punch drive motor drives the various parts of the punch mechanism assembly, A2, through positive drive, toothed belts and pulleys. Bosses on one of the drive pulleys are sensed, magnetically, and the resultant pulses are converted to feed pulses and punch pulses. Three of each type are generated for each revolution of the drive pulley.

b. The feed and punch pulses are supplied to punch cycle control circuits which supply a feed timing pulse to the motion control circuits to initiate card feed by energizing a feed control solenoid in punch mechanism assembly A2. The feed timing pulse is synchronized to the first feed pulse that is received from the punch mechanism assembly A2 following the first punch pulse after the card reaches the punch station. When the card reaches the punch station a corresponding position indication signal is supplied to the motion control circuits. These circuits then generate a count enable signal which is supplied to the punch cycle control circuits. The count enable signal permits the punch cycle control circuits to convert the next feed pulse received from punch mechanism assembly A2 into a feed timing pulse to initiate card feed.

3-4. Card Punching

a. As the card is fed through the punch station it is punched with data two columns at a time. The punching operation for two columns is called a punch cycle. Thus, a total of 40 punch cycles are required to punch all 80 columns in the card. A 41st punch cycle is required to punch a special control bit in column 81 of the card to identify certain cards (header card, canceled card, error card). To provide an indication as to when the 41st punch cycle is being performed, the punch cycle control circuits contain a master counter which is stepped one count for each punch cycle.

b. Since the card is continuously fed through the punch station, the data to control the punched character codes must be received at a rate synchronous with the operation of the punching mechanism. Three punch cycles are performed during each shaft revolution of the punch mechanism. Punching of each two columns takes place at the time in which the punch pulse is generated, and feeding to the position for punching the next two columns takes place between punch pulses.

3-5. Card Punching in Remote Operation

The punch cycle control circuits operate in the start mode when the ready signal to the CCU is received from the mode switch control circuits. Then receipt of the count enable signal indicates that the card has reached the punch station, the punch cycle control circuits generate a data request signal. This signal is routed through the transmit interface circuits to the CCU where it causes the first character of the block to be transmitted to the high speed card punch.

a. The character is received on eight parallel lines in ASCII code format at the receive interface circuits.

These circuits are conditioned to accept the eight data bits on those eight lines by an internal select signal. This signal is generated by the punch cycle control circuits as soon as the card reaches the punch station as indicated by the count enable signal.

b. The eight data bits are accompanied by a 4-.sec data strobe pulse which is centered in the middle of the data bit pulses. On receipt of the data strobe pulse, the data request pulse to the CCU is terminated.

c. The eight data bits are applied to the data input circuits for preliminary processing prior to code conversion from eight-bit ASCII to 12-bit Hollerith code. In the data input circuit, the eight data bits are reduced to six bits which can represent all of the 64 possible character codes that can be punched. The six bits are applied to code converter circuits 3-1

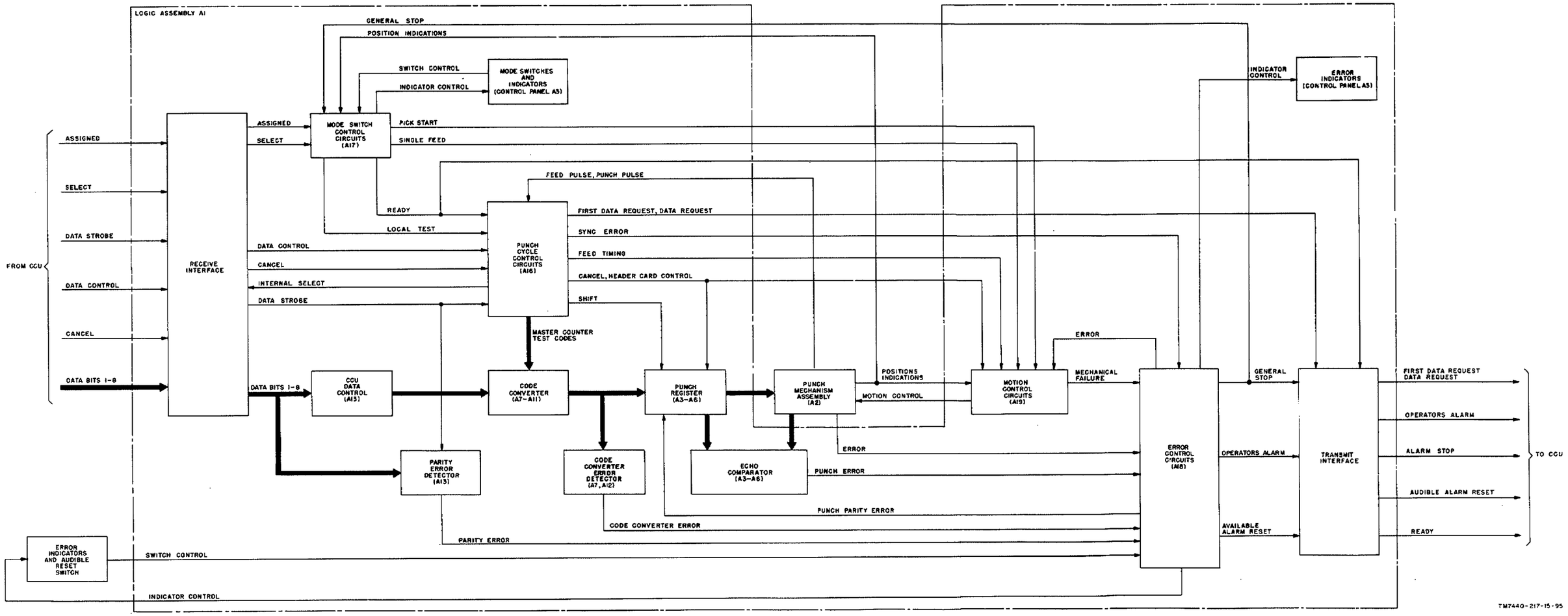


Figure 3-1. High speed card punch, block diagram.

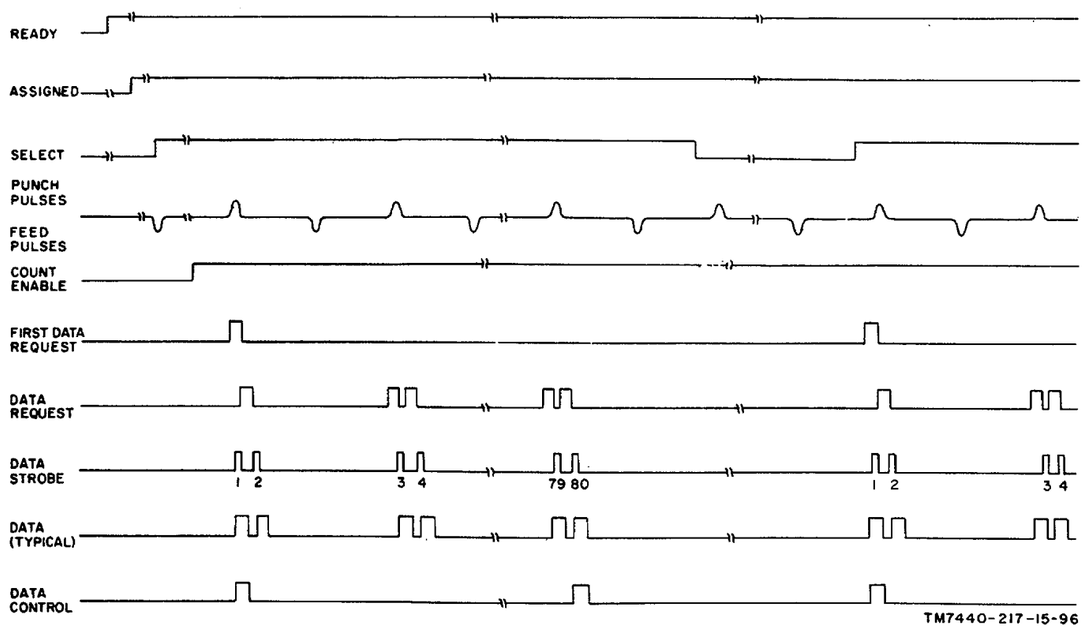


Figure 3-2. High speed card punch timing diagrams.

which perform the conversion to produce a 12-bit Hollerith code output.

d. There is negligible circuit delay in going through the data input and code converter circuits. Thus, the received data is immediately available in 12-bit Hollerith code at the output of the code converter circuits. This data is shifted into a punch register by a shift pulse from the punch cycle control circuits.

The shift pulse is derived from the data strobe pulse so that, effectively, the data strobe pulse strobes the data into the punch register. The data strobe is necessary to ensure that the character is not stored until it is made available by the CCU.

e. As soon as the first character has been strobed into the punch register, another data request signal is supplied to the CCU. This results in receipt of the next character with an accompanying data strobe.

Thus, the second character is also stored in the punch register.

f. Once the first two characters have been stored in the punch register, punching can take place. This occurs at the next punch pulse. The 24 punch register output signals are fed to punch mechanism assembly A2 to control the punching of the 24 bit positions in the first two columns. Each active bit results in a punched hole.

g. Each pair of data requests is initiated by one punch pulse. The second data request of each pair is initiated by the trailing edge of the data strobe which accompanies the first character of each pair.

This process is followed throughout the 40 punch cycles, with the punch register being loaded with two characters as soon as the previous two characters are punched and a punch operation occurring at each punch pulse.

h. When the 41st punch cycle is reached, a decision is made whether to punch a special control bit. If the card is the first card of a message, it is punched with a control bit to identify it as a header card. Header card identification is provided by a data control signal from the CCU. This signal contains a pulse during the first character time of the first block in each message as well as a pulse during character 80 at the end of each block and a pulse during the 81st character time following the 80th character of the last block in a message. The data control line is routed through the receive interface circuits to the punch cycle control circuits for decoding. When a start of message (SOM) pulse is detected in the first character of a block, the punch register is caused to insert a header card control bit (bit 9) in column 81.

i. If a block is cancelled by the CCU, the card also receives a special control bit in column 81. Cancelling of a block is indicated by a cancel pulse from the CCU during the first character time. When a cancel pulse appears, the punch register is caused to insert a cancel control bit (bit 8) in column 81.

j. Similarly, if an error is detected during the punching of a card and a block repeat function is to be performed, the error control circuits supply a punch error signal to the punch register. This causes the insertion of an error control bit (bit 4) in column 81 of the card. The errors that cause this control bit (bit 4) in column 81 are OUT OF SYNC, CODE CONVERTER ERROR, STEP ERROR, PUNCH ERROR or PARITY ERROR.

3-6. Card Punching in Local Operation

a. Local Test Mode. When card picking is accomplished as a result of pressing the LOCAL TEST pushbutton on control panel A3, the data for punching is generated by the master counter in the punch cycle control circuits. In the local test mode, this counter operates on a 64-count cycle. Each of the 64 counts is used to represent a different character code so that 64 different characters can be punched in the first 64 card columns. Since the master counter is recycled after count 64, the first 16 characters are repeated in column 65 through 80. The test code signals generated by the master counter are routed to the code converter in parallel data format for code conversion and punching.

b. Single Feed Mode. When a single card is picked as a result of pressing the SINGLE FEED pushbutton on control panel A3, the card is fed through the punch station without any actual punching taking place.

3-7. Card Ejection

When a card completes its passage through the punch station as indicated by the end of the 41st punch cycle, the feed timing signal for the motion control circuits is terminated. At the same time, the motion control circuits activate an eject solenoid which causes the card to be ejected from the punch station and passed on to the stacker.

3-8. Card Offset

On its way to the stacker, the card passes through an 'offset mechanism which may offset the card slightly for identification. The motion control circuit causes an offset solenoid to activate the offset mechanism in case any one of a number of error conditions is detected by the error control circuits, in case a cancel command has been received from the CCU as detected by the punch cycle control circuits, in case the card is a header card as detected by the punch cycle control circuits, or in case the card was picked as a result of operation of the SINGLE FEED pushbutton on control panel A3.

3-9. Error Control

a. The high speed card punch contains a number of error detection circuits which monitor and check the various card handling and data processing operations. When any error is detected, it causes the error control circuits to light a corresponding error indicator on control panel A3. For alarm conditions such as hopper low or chad bag full an operator alarm signal is sent through the transmit interface circuits to the CCU to activate an audible alarm. For other alarm conditions, a general stop signal is produced which prevents further card picking and punching. The general stop signal is also routed to the transmit interface circuits for conversion to an alarm stop signal. The alarm stop signal is routed to the CCU where it activates the audible alarm and prevents any further data processing until the problem has been corrected.

b. When the audible alarm in the CCU is activated as a result of an operator alarm or alarm stop signal from the high speed card punch, the operator can switch off the audible alarm by pressing an AUDIBLE RESET switch. This causes the error control circuits to generate an audible alarm reset signal which is routed through the transmit interface circuits to the CCU to reset the alarm.

3-10. Error Detectors

The individual types of errors which may be detected in the high speed card punch are as follows:

a. Parity Error. A parity error detector monitors the parallel input data from the receive interface circuits. The sum of all eight data bits in each character is checked for odd parity at the time when the data strobe pulse appears. If the odd parity requirement is not satisfied, a parity error exists. This causes the error control circuits to send an error signal to the punch register to cause a special control bit to be punched in column 81: Also, an error

signal is sent to the motion control circuits to cause the card to be offset. A block repeat function is also generated and the CCU will repeat the last block. If a parity error is again detected in the data received, a general stop is produced and an alarm stop signal is sent to the CCU.

b. Punch Error. To check the accuracy of the punching operation for each character, 24 echo contacts in the punch monitor the 24 punch pins which. perform the actual punching of two Hollerith characters at a time. The echo contacts indicate exactly which bits were punched during each punch cycle. Signals generated by the echo contacts representing the two characters punched are routed to an echo comparator where they are compared with the corresponding characters stored in the punch register. If a discrepancy exists, a punch error signal is supplied to the error control circuits. This causes a special control bit to be punched in column 81 and causes the card to be offset. A block repeat function is also generated and the CCU will repeat the last block. If a punch error is again detected during the punching of the data, a general stop is produced and an alarm stop signal is sent to the CCU.

c. Code Converter Error. The operation of the code converter is automatically checked at the end of each card cycle by allowing the master counter in the punch cycle control circuits to generate a sequence of 64 test codes in ASCII format. These are applied to the code converter so that they can be converted in the normal manner to Hollerith format. However, instead of being used to punch an actual card, the converted codes are routed to a code converter error detector. This circuit divides the 12 Hollerith bits in four groups and sums up each group over the 64 characters. If the result differs from the expected value, a code converter error signal is supplied to the error control circuits. This causes the card which was previously punched to be offset. A block repeat function will be generated and the CCU will repeat the last block. If a code converter error is detected in the repeated block, a general stop is produced and an alarm stop signal is sent to the CCU.

d. Sync Error. The punch cycle control circuits check the end of block pulse (EOB) which appears on the data control line from the CCU at the 80th character in each block. If this pulse does not occur during the second data strobe of the 40th punch cycle, the high speed card punch is out of sync with the CCU and a sync error signal is generated. This causes the card being punched to be offset. A block repeat function will be generated and the CCU will repeat the last block. If a sync error is detected in the repeated block a general stop is produced and an alarm stop is sent to the CCU.

e. Step Error. Card length check contacts in the punch station check the synchronism of movement of the card through the punch station. These contacts are closed by the card when it is in position to have columns 77 and 78 punched. If these contacts are not closed during the appropriate punch cycle, a step error is produced. This causes the card to be offset. A block repeat function will be generated and the CCU will repeat the last block transmitted. If a step error occurs in the second card, a general stop is produced and an alarm stop is sent to the CCU.

f Hopper Empty, Stacker Full If the hopper becomes empty or the stacker becomes full at any time, a corresponding signal is supplied from punch mechanism assembly A2 to the error control circuits. This card alarm condition does not interfere with processing of the card but causes a general stop as soon as the card in progress is loaded into the stacker.

g. Hopper Low, Chad Bag Full. If the hopper becomes low or the chad bag becomes full at any time, a corresponding signal is supplied from punch mechanism assembly A2 to the error control circuits. This causes an operator alarm signal to be sent to the CCU but does not interfere with card processing. However, if the chad bag is full, a general stop is generated after the message has been completed.

NOTE:

The card punch has been modified to the Federal Standard FIPS-14 card code hereafter referred to as Hollerith code.

3-11. Signalling Code The Signalling code used by the CCU to transmit data to the high speed card punch is the eight-bit ASCII code. Seven of the ASCII bits contain the data.

The eighth bit is a parity bit which is added or left out, as necessary, to have odd parity for each character. Table 3-1 lists 128 ASCII characters received and the 64 Hollerith characters which can be punched in the cards and the symbols which can be printed on the cards for each punched character. When punching in the Hollerith code, an invalid character is represented by an asterisk.

Table 3-1. ASCII and Hollerith code formats (part 1 of 6).

CHARACTER		INPUT ASCII CODE		HOLLERTH CODE	
Symbol	Name	8(P) 765 4321 (Bits)		Punched Code (Columns)	Symbol Printed
&	Ampersand	0	010 0110	12	&
‘	Apostrophe	1	010 0111	5-8	‘
(	Opening parenthesis	1	010 1000	12-5-8	(
)	Closing parenthesis	0	010 1001	11-5-8	)
*	Asterisk	0	010 1010	11-4-8	*
+	Plus	1	010 1011	12-6-8	+
,	Comma	0	010 1100	ϕ-3-8	,
-	Hyphen	1	010 1101	11	-
.	Period	1	010 1110	12-3-8	
/	Slant	0	0101111	ϕ-1	/
ϕ	Zero	1	011 0000	ϕ	ϕ
1	One	0	011 0001	1	1
2	Two	0	011 0010	2	2
3	Three	1	011 0011	3	3
4	Four	0	011 0100	4	4
5	Five	1	011 0101	5	5
6	Six	1	011 0110	6	6
7	Seven	0	011 0111	7	7
8	Eight	0	011 1000	8	8
9	Nine	1	Oil 1001	9	9
:	Colon	1	011 1010	2-8	:
;	Semicolon	0	011 1011	11-6-8	;

Table 3-1. ASCII and Hollerith code formats (part 2 of 6).

CHARACTER		INPUT ASCII CODE	HOLLERTH CODE	
Symbol	Name	8(P) 765 4321 (Bits)	Punched Code (Columns)	Symbol Printed
<	Less than	1 011 1100	12-4-8	<
=	Equals	0 011 1101	6-8	=
>	Greater than	0 011 1110	ϕ-6-8	>
?	Question mark	1 011 1111	ϕ-7-8	?
@	Commercial at	0 100 0000	4-8	`
A	A	1 100 0001	12-1	A
B	B	1 100 0010	12-2	B
C	C	0 100 0011	12-3	C
D	D	1 100 0100	12-4	D
E	E	0 100 0101	12-5	E
F	F	0 100 0110	12-6	F
G	G	1 100 0111	12-7	G
H	H	1 100 1000	12-8	H
I	I	0 100 1001	12-9	I
J	J	0 100 1010	11-1	J
K	K	1 100 1011	11-2	K
L	L	0 100 1100	11-3	L
M	M	1 100 1101	11-4	M
N	N	1 100 1110	11-5	N
0	0	0 100 1111	11-6	0
p	P	1 101 0000	11-7	P
Q	Q	0 101 0001	11-8	Q

Table 3-1. ASCII and Hollerith code formats (part 3 of 6).

CHARACTER		INPUT ASCII CODE	HOLLERTH CODE	
Symbol	Name	8(P) 765 4321 (Bits)	Punched Code (Columns)	Symbol Printed
R	R	0 101 0010	11-9	R
S	S	1 101 0011	ϕ-2	S
T	T	0 101 0100	ϕ-3	T
U	U	1 101 0101	ϕ-4	U
V	V	1 101 0110	ϕ-5	V
W	W	0 101 0111	ϕ-6	W
X	X	0 101 1000	ϕ-7	X
Y	Y	1 101 1001	ϕ-8	Y
Z	Z	1 101 1010	ϕ-9	Z
[	Opening bracket	0 101 1011	12-ϕ	[
\	Reverse Slant	1 101 1100	ϕ-2-8	~
]	Closing bracket	0 101 1101	11-ϕ	]
^	Circumflex	0 101 1110	11-7-8	^
_	Underline	1 101 1111	ϕ-5-8	-
`	Grave accent	1 110 0000	4-8	`
a	a	0 110 0001	12-1	A
b	b	0 110 0010	12-2	B
c	c	1 110 0011	12-3	C
d	d	0 110 0100	12-4	D
e	e	1 110 0101	12-5	E
f	f	1 110 0110	12-6	F
g	g	0 110 0111	12-7	G
h	h	0 110 1000	12-8	H

Table 3-1. ASCII and Hollerith code formats (part 4 of 6).

CHARACTER		INPUT ASCII CODE	HOLLERTH CODE	
Symbol	Name	8(P) 765 4321 (Bits)	Punched Code (Columns)	Symbol Printed
i	i	1 110 1001	12-9	I
j	j	1 110 1010	11-1	J
k	k	0 110 1011	11-2	K
l	1	1 110 1100	11-3	L
m	m	0 110 1101	11-4	M
n	n	0 110 1110	11-5	N
o	o	1 110 1111	11-6	0
p	p	0 111 0000	11-7	P
q	l q	1 111 0001	11-8	Q
r	r	1 111 0010	11-9	R
s	s	0 111 0011	0-2	S
t	t	1 111 0100	0-3	T
u	u	0 1101 0-4	U	
v	v	0 111 0110	0-5	V
w	w	1 111 0111	0-6	W
x	x	1 111 1000	0-7	X
y	y	0 1111001	0-8	Y
z	z	0 111 1010	0-9	Z
{or+0	Opening brace or plus zero	1 1111011	12-ϕ	[
|	Vertical line	0 111 1100	ϕ-2-8	~
}or -0	Closing brace or minus zero	1 111 1101	11-ϕ	]
	Tilde	1 111 1110	11-7-8	^
DEL	Delete (space)	0 111 1111	ϕ -2-8	-

Table 3-1. ASCII and Hollerith code formats (part 5 of 6).

CHARACTER		INPUT ASCII CODE	HOLLERTH CODE	
Symbol	Name	8(P) 765 4321 (Bits)	Punched Code (Columns)	Symbol Printed
NUL	Null	1 000 0000	11-4-8	*
SOH	Start of heading	0 000 -0001	11-4-8	*
STX	Start of text	0 000 0010	11-4-8	*
ETX	End of text	1 000 0011	11-4-8	*
EOT	End of transmission	0 000 0100	11-4-8	*
ENQ	Enquiry	1 000 0101	11-4-8	*
ACK	Acknowledge	1 000 0110	11-4-8	*
BEL	Alarm (ell)	0 000 0111	11-4-8	*
BS	Backspace	0 000 1000	11-4-8	*
HT	Horizontal tab	1 000 1001	11-4-8	*
LF	Line Feed	1 000 1010	11-4-8	*
VT	Vertical tab	0 000 1011	11-4-8	*
FF	Form Feed	1 000 1100	11-4-8	*
CR	Carriage return	0 000 1101	11-4-8	*
SO	Shift out (figures)	0 000 1110	11-4-8	*
SI	Shift in (letters)	1 000 1111	11-4-8	*
DLE	Data link escape	0 001 0000	11-4-8	*
DC1	Device control 1	1 001 0001	11-4-8	*
DC2	Device control 2	1 001 0010	11-4-8	*
DC3-	Device control 3	0 0010011	11-4-8	*
DC4	Device control 4	1 001 0100	11-4-8	*
NAK	Negative acknowledge	0 001 0101	11-4-8	*
SYN	Synchronous idle	0 001 0110	11-4-8	*

Table 3-1. ASCII and Hollerith code formats (part 6 of 6).

CHARACTER		INPUT ASCII CODE		HOLLERTH CODE	
Symbol	Name	8(P) 765 4321 (Bits)		Punched Code (Columns)	Symbol Printed
ETB	End of xmxn block	1	001 0111	11-4-8	*
CAN	Cancel	1	001 1000	11-4-8	*
EM	End of medium	0	001 1001	11-4-8	*
SUB	Start special seq.	0	001 1010	11-4-8	*
ESC	Escape	1	001 1011	11-4-8	*
FS	File separator	0	001 1100	11-4-8	*
GS	Group separator	1	001 1101	11-4-8	*
RS	Record separator	1	001 1110	11-4-8	*
US	Unit separator	0	001 1111	11-4-8	*
SP	Space (blank)	0	010 0000	No punches	None
!	Exclamation point	1	010 0001	12-7-8	!
“	Quotation mark	1	010 0010	7-8	“
#	Number sign	0	010 0011	3-8	#
$	Dollar sign	1	010 0100	11-3-8	$
%	Percent sign	0	010 0101	ϕ-4-8	%

Section II. MECHANICAL FUNCTIONING OF HIGH SPEED CARD PUNCH

3-12. General

(fig. 3-3)

The cards to be punched are placed in the hopper face down and with column I to the left. On a pick command, the bottom card is driven through a pneumatic throat to the initial punch position. Following eight punch cycles, the external equipment may issue an eject command and the eject assembly of the punch head will deliver the card through the offset stacker rollers to the card stacker. When an offset command is issued by the external equipment, a solenoid skews a pinch roller of the offset mechanism and the card is displaced in the stacker for identification.

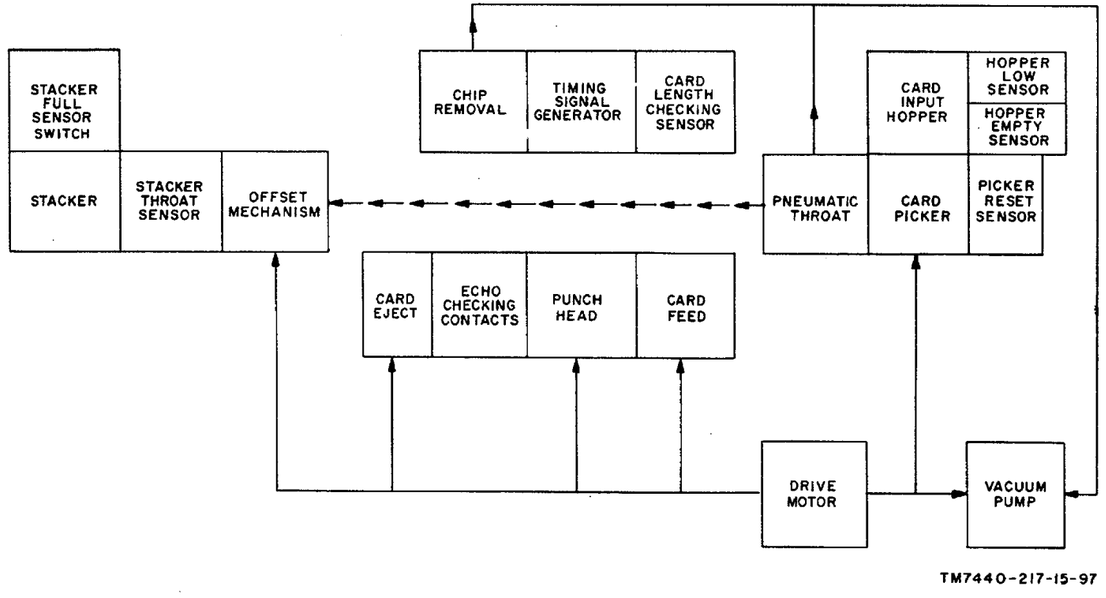


Figure 3-3. High speed card punch mechanism, block diagram.

3-13. Mechanical Drive

(fig. 34)

The mechanical drive for the high speed card punch mechanism is supplied by an induction motor through an arrangement of pulleys and toothed belts. The motor drives the vacuum pump and offset capstan assembly directly through the toothed belts. The picker assembly is driven through a toothed belt from a pulley on the vacuum pump. The punch head assembly is driven through the punch drive belt from the drive motor. Drive is transferred through the punch cam shaft to the punch pulley. A toothed belt connected to the punch pulley is used to drive the feed assembly and the eject assembly.

The eject pulley may be adjusted for proper tension of the feed and eject drive belt.

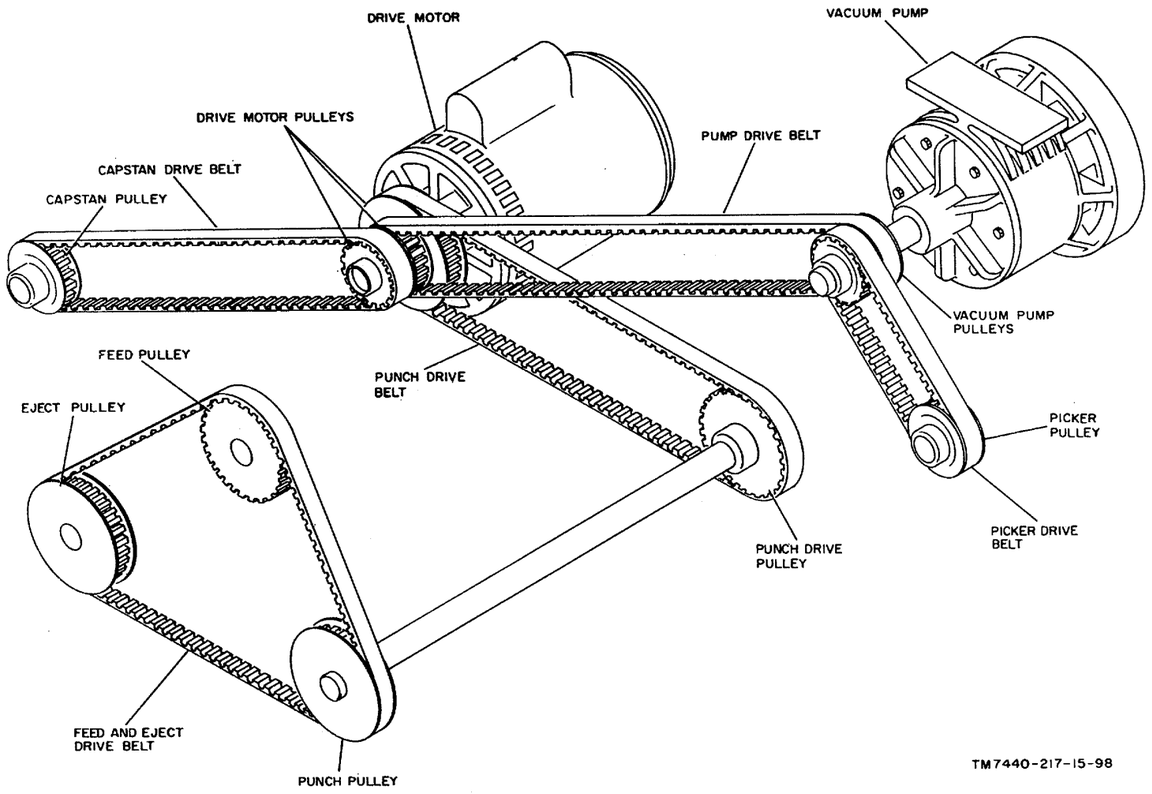


Figure 3-4. Mechanical power distribution system.

3-14. Picker Assembly

(fig. 3-5)

The picker assembly consists of a matched set of roller driven perforated belts passing on top of a movable vacuum manifold. When a pick command is generated, the vacuum manifold is moved upward toward the perforated belts by a push-pull solenoid. This raises the picker belts against the bottom card in the hopper and the vacuum through the perforation's of the belts, grips the card against the belts and the card is driven through the pneumatic throat to the initial card position of the punch head. The vacuum for operation of the picker is supplied by a dry oil-less vane type pump.

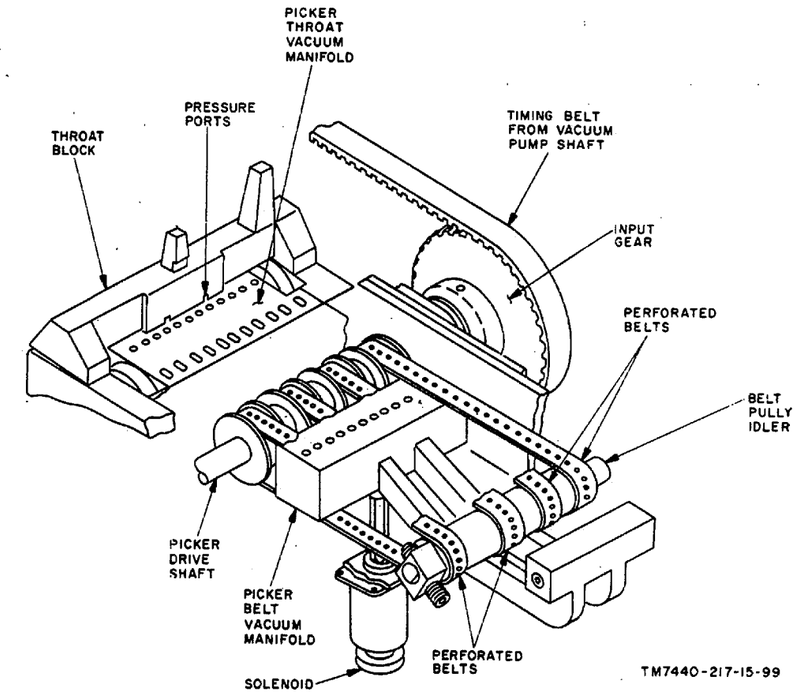


Figure 3-5. Picker assembly, functional diagram.

3-15. Pneumatic Throat

The purpose of the pneumatic throat (fig. 3-5) is to permit only one card at a time to enter the card punch. At the entrance to the pneumatic throat the picker plate contains a series of holes which are supplied with a vacuum. The vacuum holds the end of the card against the picker plate to prevent the end of the card from striking the frame of the throat. The upper member of the throat contains some small ports which are supplied with air pressure. The air pressure separates any second card clinging to the card being picked and prevents the card from attempting to enter the throat. The aperture of the throat is adjusted to a value that inhibits two normal cards from entering the throat at one time.

3-16. Punch Head

(fig. 3-6)

The punch head is driven by the main drive motor at approximately 6480 punch cycles per minute at the nominal voltage and frequency. This is the equivalent of 108 punch cycles per second. Each cycle punches two columns of the card simultaneously. The punches, coming up from the bottom, cut out pieces of the card which are pushed through the die plate into the vacuum chute where they are removed.

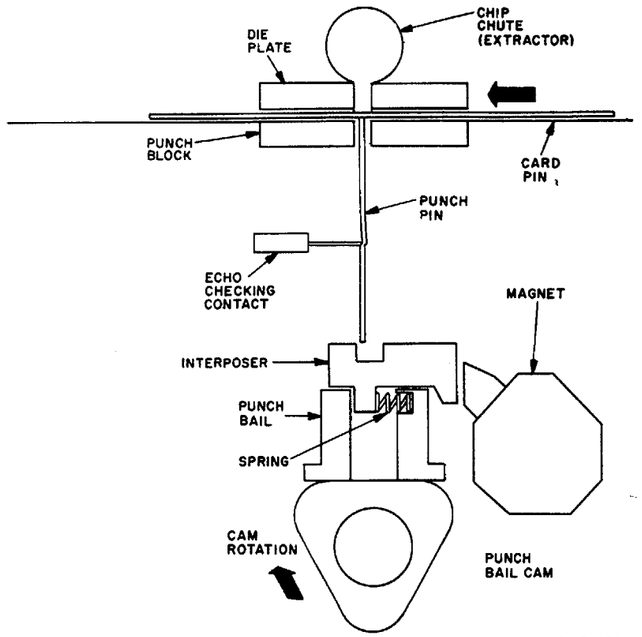


Figure 3-6. Punch head, functional diagram.

3-17. Code Magnets
(fig. 3-6)
The punch head has two rows of code magnets and each row contains 12 individual magnets. Each row of 12 magnets is associated with one vertical column on the standard unit record card and any or all 12 code magnets of a vertical column can be energized simultaneously to punch a complete vertical column.
The high speed card punch is designed to record data in a parallel character bit serial format and one punch cycle records two data columns. The logic circuits of the external equipment energize the code magnets for two data columns. The energized magnets draw the interposers under the punch pins so that when the punch bail cam rotates the punch bail pushes the punch pins up through the card. When the magnet is deenergized, a spring returns the interposer to its normal position. When a magnet is not energized, the punch pin falls into a well in the interposer and movement of the punch bail is not passed on to the punch pin. In this manner, the particular pin associated with the deenergized magnet does not punch the card.

3-18. Echo Checking Contacts
(fig. 3-6)
The punch head contains 24 normally closed echo checking contacts, 12 for each of the two columns.
Each echo checking contact is associated with a punch pin. As the punch pins are driven upward, at one half of the punch pin stroke, the associated echo checking contact begins to operate and at two thirds of the punch pin stroke the echo checking contact is fully operated. The remainder of the punch pin stroke is over travel for the contact. As a punch pin operates, an open circuit is presented to the external equipment as a signal that the punch pin has operated.

3-19. Chip Extractor (fig. 3-6)
The chips (punchings) driven into the vacuum chute by the punch pins are extracted by the vacuum or suction generated in a unit identified as an extractor.
The extractor uses a jet of air under pressure to create the vacuum or suction to remove the chips from the punch head chip chute and forces the chips through a tube to a separate collection chamber.

3-20. Feed Cycling
(fig. 3-7)
The card to be punched arrives at the registration gate, from the hopper. When the gate is retracted magnetically, clamps at the end of pivoted feed arms grasp the card at each edge and, by swinging through an arc of about 59 advance the card exactly two columns. At the end of the swing, the arms dwell briefly and the clamps release. The card is held by friction brakes while the card is punched and the arms swing back to their former position. Again there is a brief dwell following which the cycle repeats. The card is gripped, advanced, punched and the arms are then returned.

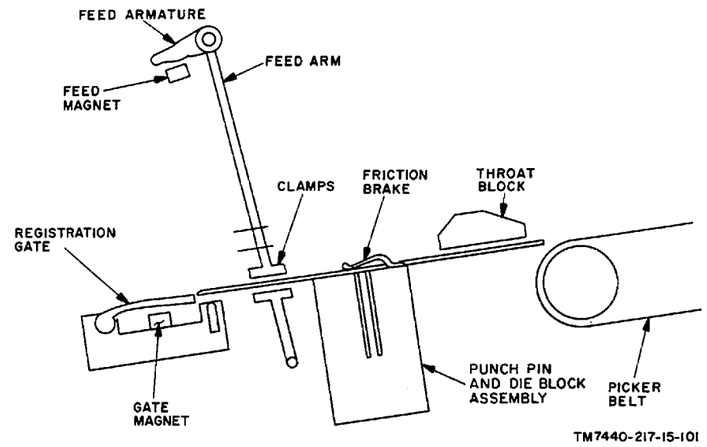


Figure 3-7. Feed mechanism, functional diagram.

3-21. Registration Gate
(fig. 3-7)
The registration gate places a card in the proper position for the first punch cycle when a card is delivered from the picker into the punch. The registration gate is actuated by two magnets connected in series and controlled by logic circuitry. When the logic circuitry, in response to the signal from the initial position sensor, causes the picker solenoid to be deenergized. Deenergizing the picker solenoid generates a picker reset signal which when recognized, energizes the registration gate magnets to clear the card track in the punch head. When the registration gate retracts, it actuates a miniature switch which signals the logic circuitry that the registration gate has been retracted and that the card path is clear.

3-22. Feed Magnet
(fig. 3-7)
The logic circuitry must issue a feed command to energize the feed magnet each punch cycle. Energizing the feed magnet permits the clamps of the feedarms to grip the card during the dwell period of the feed-arm motion and since the feed-arm card clamps are cam controlled, they can only grip the card during the proper interval of the feed-arm travel.

3-23. Eject Cycle
(fig. 3-8)
In order for a card to eject from the punch it must have traveled through eight full cycles (16 columns) to have reached a point where the eject belt will contact the card when the eject solenoid is activated.
Activation of the solenoid raises the eject belt to a point where it contacts the card emerging from the punch. The logic circuitry furnishes the eject command. This eject command is gated to prevent it from occurring before the eight cycles are completed.

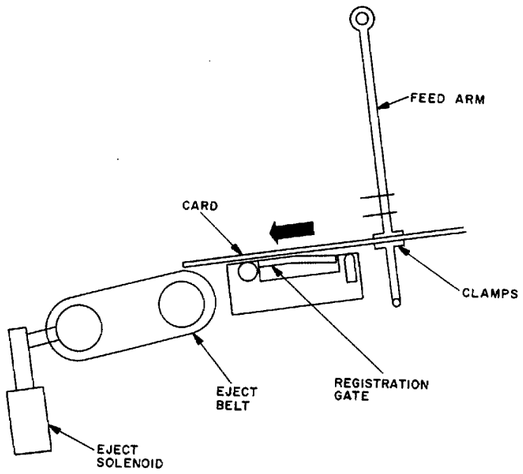


Figure 3-8. Eject mechanism, functional diagram.

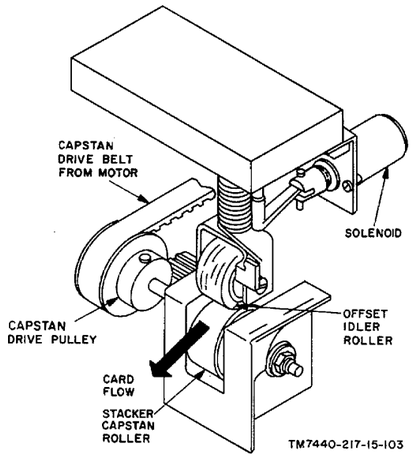


Figure 3-9. Offset capstan, functional diagram.

3-24. Offset Capstan

(fig. 3-9)

The offset capstan receives the card ejected from the punch and delivers the card to the stacker. The pinch roller of the assembly is pivoted and controlled by a solenoid. When the position of a card being stacked is to be identified, the external equipment must energize the solenoid and this rotates the pinch roller slightly and displaces the card in the stacker.

3-25. Offset Stacking

(fig. 3-10)

The offset stacking function is accomplished by energizing a solenoid which controls the position of the pinch roller of the offset mechanism. When a card is to be offset stacked, the solenoid should be energized simultaneously with the eject solenoid, but in any case not later than 3 milliseconds after the eject solenoid, and maintained energized for a period of 60 to 80 milliseconds. This must be accomplished in the external logic circuits.

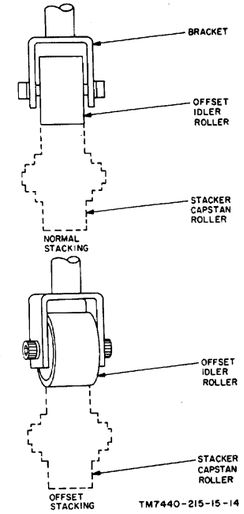


Figure 3-10. Offset stacking, functional diagram.

3-26. Stacker Assembly

(fig. 3-11)

The stacker assembly receives the card from the offset drive roller. The stacker contains a spring loaded flat platform. As the number of cards on the stacker platform increases, the weight of the cards forces the platform downward. When the platform has reached the limit of its travel, the cards continue to build up on the platform which in turn raises the hinged card deflector. When the card deflector is raised to a prearranged height the stacker full switch is actuated to provide the stacker full signal to the logic circuitry.

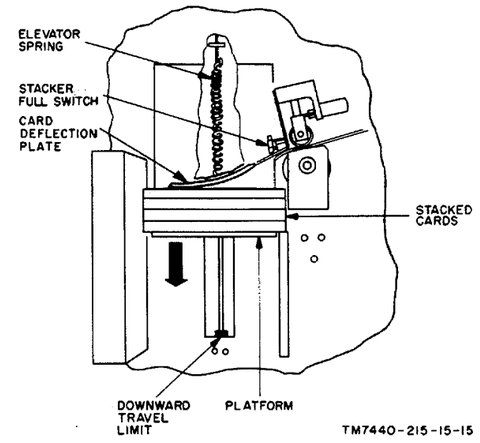


Figure 3-11. Stacker assembly, functional diagram.

3-27. Vacuum System

(fig. 3-12)

The vacuum system contains a dry oil-less carbon vane pump. The suction side of the pump provides the vacuum for the card picker and pneumatic throat.

The exhaust side of the pump provides the pressure for the pneumatic throat and the jet nozzle of the chip extractor. The fitting assembly on the suction or inlet side of the pump is equipped with a relief valve to adjust the vacuum applied to the picker and pneumatic throat to the desired value.

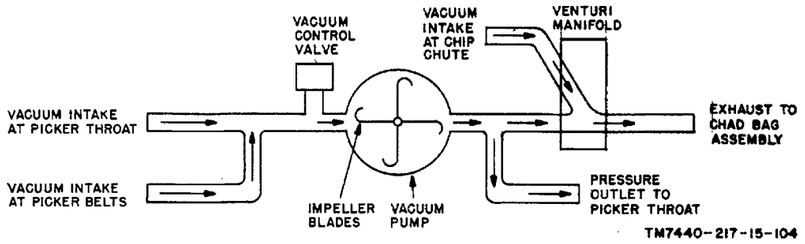


Figure 3-12. Vacuum system, functional diagram.

3-28. Sensors

(fig. 3-13)

A number of the sensors described below consist of a miniature lamp and phototransistor combination. All of them conform to the same electrical characteristics. The maximum current through the phototransistor when it is dark is 0.25 milliamperes with 10 volts applied and the minimum light current is 2.0 milliamperes with 5 volts applied. The output signals are used by the external circuitry, which provides the polarizing voltages, to control functions of the punch and the interface electronics.

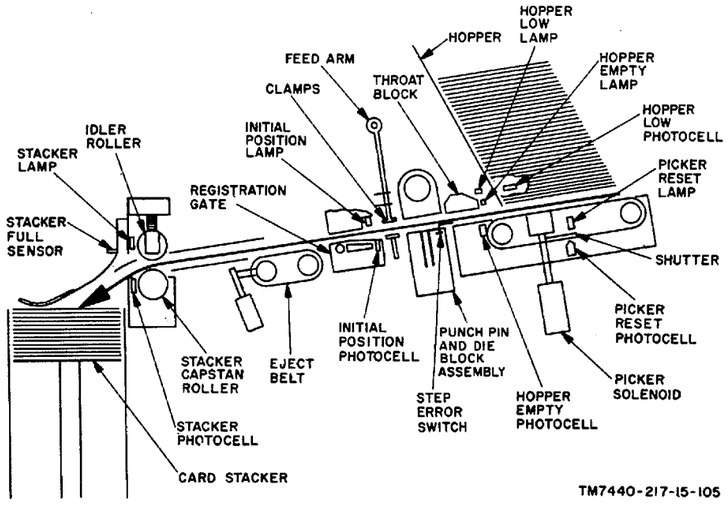


Figure 3-13. Sensors, functional diagram.

3-29. Hopper Low Sensor

(fig. 3-13)

The hopper low sensor is a light source-photo sensor combination which cuts across the corner of the input hopper. When the stacks of cards in the hopper falls to approximately 190 cards the light beam is no longer cut off and the corresponding photo sensor turns *on*.

3-30. Hopper Empty Sensor

(fig. 3-13)

The hopper empty photo sensor remains *off* as long as there are cards remaining in the hopper. When the last card leaves the hopper the beam is no longer cut off and the photo sensor turns on.

3-31. Picker Reset Sensor

(fig. 3-13)

A bracket mounted on the picker solenoid blocks the light to the sensor when the picker solenoid is actuated. The photosensor turns *on* again when the picker solenoid returns to its reset, or non-actuated position.

3-32. Initial Card Position Sensor

(fig. 3-13)

The light beam to the initial card position sensor is cut by a card from the input hopper which has reached the registration gate and is ready to be accepted by the punch. The signal is used to deenergize the picker solenoid which triggers the registration gate magnets, thereby allowing the punching operations to start. Hence, as long as this sensor is *off* there is a card in the punch and no further card picking should be attempted until it turns *on* again.

3-33. Step Error Switch

(fig. 3-13)

At the time the card should be in the exact position to have columns 77 and 78 punched, the normally open contacts of step error switch will be closed. Should the card not be in the proper position, the contacts will be open and this information is available at the interface connector for the use of the external equipment in indicating an error.

3-34. Stacker Throad Sensor

(fig. 3-13)

The light beam to the stacker throat sensor is cut by a card which has been ejected, from the punch head. If the card fails to pass through the rollers of the offset : apstan assembly, there will be no signal to the external circuits which indicates the punching operation should be stopped by the error control circuits.

3-35. Stacker Full Sensor

(fig. 3-13'

At the entrance to the card stacker a miniature switch is mounted on the support for the card deflector of the stacker. When the quantity of cards fed to the stacker increases to a certain height, the card deflector is raised and actuates the miniature switch to provide a stacker full signal to the external equipment. This signal should be recognized by the external equipment to issue a command to stop the punching operation.

3-36. Punch Head Timing Signals

(fig. 3-14)

Punch head timing signals are generated by a reluctance pickup mounted in relation to; two specially shaped bosses on the drive pulley of the feed mechanism portion of the punch head. The air gap between the pole of the reluctance pickup and the specially shaped bosses on the pulley is adjusted to provide an output signal of 2 volts peak-to-peak into a 1000 ohm load. When a boss enters the gap of the pickup, a pulse is generated in one direction and when the boss leaves the gap, a pulse in the opposite direction is generated. These pulses are generated at-850 and 265A7 of the punch cycle. Each revolution of the punch drive pulley results in three punch cycles.

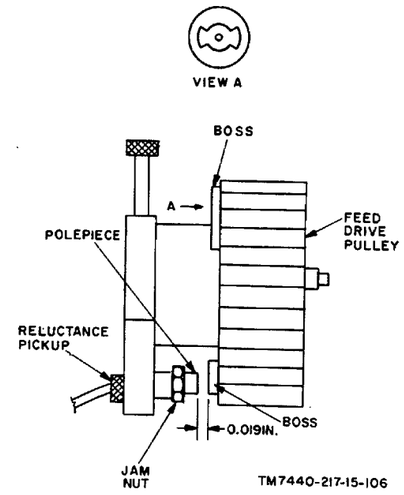


Figure 3-14. Reluctance pickup, functional diagram.

Section III. ELECTRICAL FUNCTIONING OF HIGH SPEED CARD PUNCH

3-37. Logic Diagram

a. Most of the data processing and control functions of the high speed card punch are performed by logic circuits on the printed circuit cards in logic assembly AI. Thus, the electrical operation of each card is represented in Chapter 8 by a logic diagram rather than a conventional schematic diagram. The logic diagram shows all input and output connections of the card, including power connections, but does not show the circuit components which make up the individual logic elements. Refer to the logic signals chart for identification of the logic signals, their mneumonies, and functional names.

b. Most of the logic elements in the high speed card punch are mounted in integrated circuit modules. Thus, detailed circuit components are not applicable.

(Each integrated circuit logic element is considered to be a single electrical component.) For those logic elements that are made up of discrete circuit components, the schematic representation and a description of the circuit operation for each type of logic element is given in paragraph 3-45.

NOTE

For convenience, all cards in logic assembly AI are identified only by their distinguishing reference designations (AI, A2, A3, etc). It should be understood that these designations are prefixed by A1.

3-38. Logic Signal Notation

a. In general, logic signals in the high speed card punch switch between a high level of +4.5 volts and a low level of 0 volts. Some signal lines are considered activated when the level is high while others are considered activated when the level is low. The state indicators (small circles) at the input and outputs of logic elements indicate which lines are activated by a high level (state indicator absent) and which lines are activated by a low level (state indicator present).

LOGIC SIGNALS-MNEMONICS AND FUNCTIONAL NAMES CHART

Mnemonic	*Functional name*
ALARM STOP	ALARM STOP
ASTP	ASTERISK PRESET
AUDIBLE RESET	AUDIBLE RESET
AUDIBLE RESET SW.	AUDIBLE RESET SWITCH
BIT 1	BIT 1
BIT 2	BIT 2
BIT 3	BIT 3
BIT 4	BIT 4
BIT 5	BIT 5
BIT 6	BIT 6
BIT 7	BIT 7
BIT 8 (PAR)	BIT 8 (PARITY)
BP	BAD PARITY
C40	COUNT 40
C 40 PULSE	COUNT 40 PULSE
C 41	COUNT 41
C 64	COUNT 64
CANP	CANCELPULSE
CANCEL	CANCEL
CARD ALARM	CARD ALARM
CCE	CODE CONVERTER ERROR
CCOS	CODE CONVERTER OUTPUT SAMPLE
CCT	CODE CONVERTER TEST
CC TEST	CODE CONVERTER REST
CCTE	CODE CONVERTER TEST ENABLE
CHAD FULL	CHAD FULL
CHAD LAMP	CHAD LAMP
CODE CONV. OUTPUT SAMPLE	CODE CONVERTER OUTPUT SAMPLE
COME	COMPARE ERROR
COMP	COMPARE
COMPARE	COMPARE
COUNT ENABLE	COUNT ENABLE
DATA CONTROL	DATA CONTROL
DATA REQUEST	DATA REQUEST
DB 1 through DB 6	DATA BIT I through 6
DL 1 through DL 44	DATA LINE 1 through 44
DR RESET	DATA REQUEST RESET
DS	DATA STROBE
EJECT SOL	EJECT SOLENOID
EOM END OF MESSAGE	
ESOL	EJECT SOLENOID
ESR EJECT SOLENOID RETURN	
FAULT RESET	FAULT RESET
FDR FIRST DATA REQUEST	
FDR XMIT	FIRST DATA REQUEST TRANSMIT
FDT FEED TIMING	
FEED ENABLE	FEED ENABLE
FELT FEED ENABLE LOCAL TEST	
FEED SOL.	FEED SOLENOID
FEED TIMING	FEED TIMING
FIRST DATA REQUEST	FIRST DATA REQUEST
FP	FEED PULSE
FSOL	FEED SOLENOID
FSR	FEED SOLENOID RETURN
GATE CONTACT CLOSED	GATE CONTACT CLOSED
GATE COVERED	GATE COVERED
GATE PHOTO	GATE PHOTO
GATE SOL	GATE SOLENOID
GEN. RESET	GENERAL RESET
GENERAL RESET	GENERAL RESET
GEN. STOP	GENERAL STOP
GENERAL STOP	GENERAL STOP
GRDY	GREEN READY
GSOL	GATE SOLENOID
GSR GATE SOLENOID RETURN	
HCPR	HEADER CARD PRESET
HOLLERITH I through 12	HOLLERITH I through 12
HOLLERITH (3+5+6+9)	HOLLERITH 3+5+6+9)
HOLLERITH (12+7)	HOLLERITH (12+7)
HOLLERITH (8+4+2)	HOLLERITH (8+4+2)
HOLLERITH (11+0+1)	HOLLERITH (11+0+1)
HOPPER EMPTY	HOPPER EMPTY
HOPPER EMPTY PHOTO	HOPPER EMPTY PHOTO
HOPPER LOW	HOPPER LOW MOTION FAIL
HOPPER LOW PHOTO	HOPPER LOW PHOTO
IDS	INPUT DATA STROBE
IN SYN	IN SYNCHRONIZATION
INTERNAL SELECT	INTERNAL SELECT
ISEL INTERNAL SELECT	
ON LINE PICK	
LOCAL TEST	LOCAL TEST
LOCAL TEST SW.	LOCAL TEST SWITCH
LP	LAMPS
LPD 1-1	LAMP DRIVER
LPD 2-1	LAMP DRIVER
LPD 3-1	LAMP DRIVER
LPD 4-1	LAMP DRIVER
LPD 5-1	LAMP DRIVER
LPD 7-1	LAMP DRIVER
LPD 8-1	LAMP DRIVER
LPD 9-1	LAMP DRIVER
LPD 10-1	LAMP DRIVER
LPD 13-1	LAMP DRIVER
LPD 14-1	LAMP DRIVER
LPD 15-1	LAMP DRIVER
LPD 16-1	LAMP DRIVER
LPD 17-1	LAMP DRIVER
LPD 1-0	LAMP DRIVER
LPD 2-0	LAMP DRIVER
LPD 3-0	LAMP DRIVER
LPD 4-0	LAMP DRIVER
LPD 5-0	LAMP DRIVER
LPD 7-0	LAMP DRIVER
LPD 8-0	LAMP DRIVER
LPD 9-0	LAMP DRIVER
LPD 10-0	LAMP DRIVER
LPD 13-0	LAMP DRIVER
LPD 14-0	LAMP DRIVER
LPD 15-0	LAMP DRIVER
LPD 16-0	LAMP DRIVER
LPD 17-0	LAMP DRIVER
LRST	LOGIC RESET
LRST SW.	LOGIC RESET SWITCH
MC 1 MASTER COUNT 1	
MC 2 MASTER COUNT 2	
MC 4 MASTER COUNT 4	
MC 8 MASTER COUNT 8	
MC 16	MASTER COUNT 16
MC 32	MASTER COUNT 32
MC 64	MASTER COUNT 64
MCCP	MASTER COUNTER COUNT PULSE
MC COUNT PULSE	MASTER COUNTER COUNT PULSE
MCR MASTER COUNTER RESET	
MOTION FAIL	MOTION FAIL
NOT ASSIGNED	NOT ASSIGNED
OFFSET ENABLE	OFFSET ENABLE
OFFSET SOL.	OFFSET SOLENOID
OEN OFFSET ENABLE	
OLST	ON LINE STOP
ON LINE PICK	ONLINE PICK
OPR ALARM	OPERATOR ALARM
OPERATOR ALARM	OPERATOR ALARM
OSOL	OFFSET SOLENOID
OSR OFFSET SOLENOID RETURN	
OSYN	OUT SYNCHRONIZATION
PAE PARITY ERROR	
PARA	PARITY ERROR
PEA 1	PUNCH ERROR A1
PEA 2	PUNCH ERROR A2
PEB 1	PUNCH ERROR B1
PEB 2	PUNCH ERROR B2
PEN PUNCH ENABLE	

PEP	PUNCH ERROR PULSE
PHOTO SUPPLY	PHOTO SUPPLY
P1	PUNCH INHIBIT
PICK PHOTO COVERED	PICK PHOTO COVERED
PICKER RESET PHOTO	PICKER RESET PHOTO
PICK SOL	PICK SOLENOID
PICK START	PICK START
PICK UP PULSE	PICK UP PULSE
POR	POWER ON RESET
POR + LRST	POWER ON RESET AND LOGIC RESET
PP	PUNCH PULSE
PRESET	PRESET
PRST	PRESET
PRR A	PUNCH REGISTER RESET A
PRR B	PUNCH REGISTER RESET B
PSOL	PUNCH SOLENOID
PSR	PUNCH SOLENOID RETURN
PUP	PICK UP PULSE
READY TO CCU	READY TO CCU
RDY TO CCU	READY TO CCU
SELECT	SELECT
SF	SINGLE REED
SHA	SHIFT A
SHB	SHIFT B
SHIFT B	SHIFT B
SHIFT PULSE	SHIFT PULSE
SHIFT RESET	SHIFT RESET
SINGLE FEED	SINGLE FEED
SINGLE FEED SW	SINGLE FEED SWITCH
SP	SHIFT PULSE
STACK FULL SW	STACK FULL SWITCH
STACK PHOTO	STACK PHOTO
STACK PHOTO COVERED	STACK PHOTO COVERED
STACK PHOTO PULSE	STACK PHOTO PULSE
START IH.	START INHIBIT
START SW	START SWITCH
STEP ERROR	STEP ERROR
STEP ERROR STROBE	STEP ERROR STROBE
STOP	STOP
STOP SW	STOP SWITCH
TC	TEST COUNT
TEST COUNT	TEST COUNT
TEST SHIFT B	TEST SHIFT B
TSH B	TEST SHIFT B
WRDY	WHITE READY
2nd ERROR	2nd ERROR
C 40 PULSE	COUNT 40 PULSE
81 DR INH	81 DATA REQUEST INHIBIT
81 DS	81 DATA STROBE

b. All significant logic signals are assigned a functional name or designation. To permit the active state of a signal to be indicated by its functional name, the high level is arbitrarily designated true or logic 1 for signal naming purposes, whereas the low level is arbitrarily designated false or logic 0. Thus, the signal is a true-function if it is active on a high level and a not-function if it is active on a low level. Not-function signals are identified by a not-bar over the functional name (*for example*: data request).

c. In the functional descriptions, the terms high and low are used for +4.5-volt and 0-volt levels. Pulses or levels going from 0 volts to +4.5 volts are called positive pulses or high levels, and those going from +4.5 volts to 0 volts are called negative pulses or low levels.

3-39. Logic Diagram Symbol Notation

a. Typical integrated circuit and discrete circuit logic elements are shown in figure 8-22. Inputs and outputs of integrated circuit logic elements are identified by the wire terminal numbers of the integrated circuit modules in which the elements are located.

b. Two tagging lines are used within each logic symbol for identification purposes.

(1) The first tagging line in each logic symbol identifies the logic element type. The various types of integrated circuit and discrete circuit logic elements are described in paragraphs 3-40 through 3-44.

(2) The second tagging line in each logic symbol identifies the electrical reference designation of the logic element. This reference designation is prefixed by the reference designation of the printed circuit card on which it is located.

3-40. Integrated Circuit Modules

a. The integrated circuit modules used in the high speed card punch are of several types as described in the following paragraphs. However, they are all of standard construction and wired to the printed circuit cards through 10 terminals (1. through 10). Reference designations for the integrated circuit modules are Z1, Z2, Z3, etc.

b. Some of the integrated circuit modules contain only one logic element and others contain two. In those cases where two logic elements are contained in one integrated circuit module, the two elements are shown separately on the logic diagrams and are designated A and B *for example*: Z1A and Z1B). The output signal terminal of the A element in each integrated circuit module is always terminal 2 and the output signal terminal of the B element is always terminal 10.

c. Power supply inputs to the individual logic elements are not shown on the logic diagrams since there is no provision for them in logic symbology.

However, all integrated circuit modules receive power supply inputs of +4.5 volts at terminal 6, and 0 volts at terminal 1.

d. Since the integrated circuits are of a standard construction, not all inputs to AND gates and OR gates are used in each application. Unused gating inputs are always wired to one of the used gating inputs. Thus, more than one terminal may be listed at an input on the logic diagram symbol.

e. Most integrated circuit logic elements can function in more than one way. Thus, every AND gate for high inputs is an OR gate for low inputs and every OR gate for low inputs is an AND gate for high inputs. A non-inverting OR gate becomes a simple buffer if the inputs are wired together and an inverting OR gate becomes an inverter if the inputs are wired together.

f. The logic operation of each integrated circuit module type is described in paragraphs 3-41. The discussion specifies the logic symbols which are used to represent the logic elements.

3-41. Operation of Individual Integrated Circuit Modules

The operation of the individual integrated circuit modules used in the high speed card punch are described below. Logic symbols are given for each type of module, using typical tagging lines.

a. *Type A-1 Module*. Two type A-1 gates are located on each type A-1 module (fig. 3-15). These may be non-inverting AND gates for high inputs (case A) or non-inverting OR gates for low inputs (case B). Open circuit inputs are equivalent to high levels.

b. *Typical A-2 Module*. One type A-2 gate is located on each type A-2 module (fig. 3-16). This may be a non-inverting AND gate for high inputs (case A) or a non-inverting OR gate for low inputs (case B). Open circuit inputs are equivalent to high levels. Terminal 10 is not used on type A-2 modules.

c. *Type N-1 Module*. Two type N-1 gates are located on each type N-1 module (fig. 3-17). These may be inverting OR gates for high inputs (case A) or inverting AND gates for low inputs (case B). The type N-1 gates may also act as simple inverters (case C).

This is accomplished by tying all input terminals together. Open circuit inputs are equivalent to low levels.

d. *Type N-2 Module*. One type N-2 gate is located on each type N-2 module (fig. 3-18). This may be an inverting OR gate for high inputs (case A) or an inverting AND gate for low inputs (case B).

e. *Type N-3 Module.* Two type N-3 gates are located on each type N-3 module (fig. 3-19). These may be inverting OR gates for high inputs (case A) or inverting AND gates for low inputs (case B). The type N-3 gates are used with an expander input supplied by type E-1 OR gates for case A and by type E-1 AND gates for case B. Open circuit inputs are equivalent to low levels.

f. *Type 0-1 Module*. Two type 0-1 gates are located on each type 0-1 module (fig. 3-20). These may be non-inverting OR gates for high inputs (case A) or non-inverting AND gates for low inputs (case B).

The type 0-1 gates may also act as simple buffers (case C). This is accomplished by tying all input terminals together. Open circuit inputs are equivalent to low levels.

g. *Type 0-3 Module*. Two type 0-3 gates are located on each type 0-3 module (fig. 3-21). These may be non-inverting OR gates for high inputs (case A) or non-inverting AND gates for low inputs (case B).

The type 0-3 gates are used with an expander input supplied by type E-1 OR gates for case A and by type E-1 AND gates for case B. Open circuit inputs are equivalent to low levels.

h. *Type FF-1 Module*. One type FF-1 flip-flop is located on each type FF-1 module (fig. 3-22).

(1) In the case A configuration, the flip-flop can be set by either a high level at the S input or a high level at the J input which is clocked by a negative step at the CL input. The flip-flop can be cleared by either a high level at the C input or a high level at the K input which is clocked by a negative step at the CL input. The clocked inputs are inoperative unless the J and K inputs are low.

(2) In the case B configuration, terminals 3, 4, and 5 are tied together to form a T input. When the S and C inputs are low, the flip-flop is toggled

between the set and clear states by negative steps at the T input. Otherwise, the flip-flop is set by a high level at the S input and cleared by a high level at the C input.

(3) Open circuits at the J, K, CL, or T inputs are equivalent to high levels. Open circuits at the S or C inputs cause intermittent erroneous changes of state.

(4) Unused J and K inputs are wired to terminal 1 (O volts). To permanently enable J, K, or CL inputs, these inputs are wired to terminal 6 (+4.5 volts).

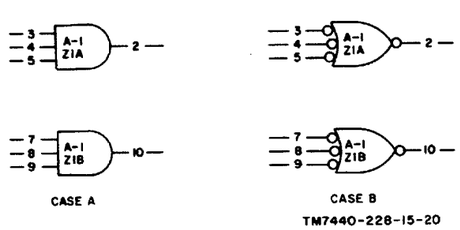


Figure 3-15. Type A-1 module, logic symbols.

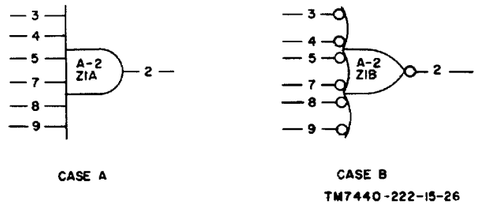
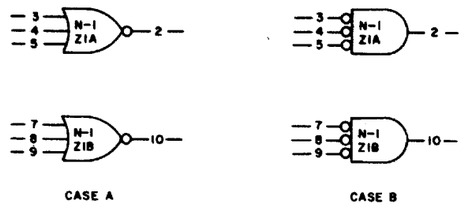


Figure 3-16. Type A-2 module, logic symbols.



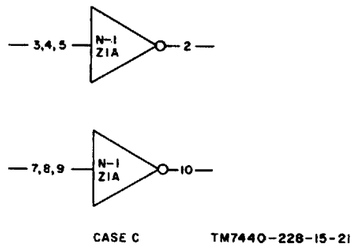


Figure 3-17. Type N-1 module, logic symbols.

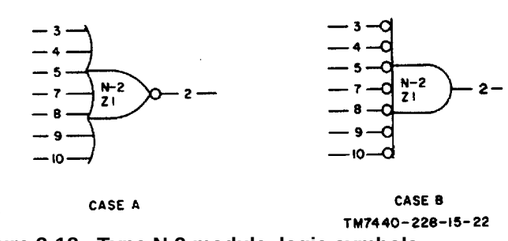


Figure 3-18. Type N-2 module, logic symbols.

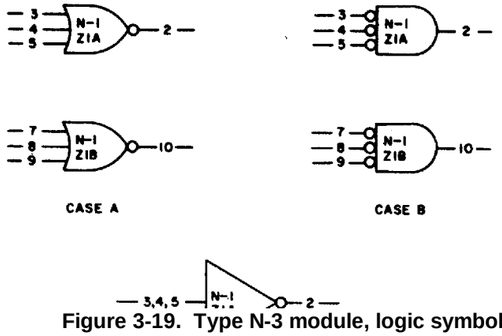


Figure 3-19. Type N-3 module, logic symbols.

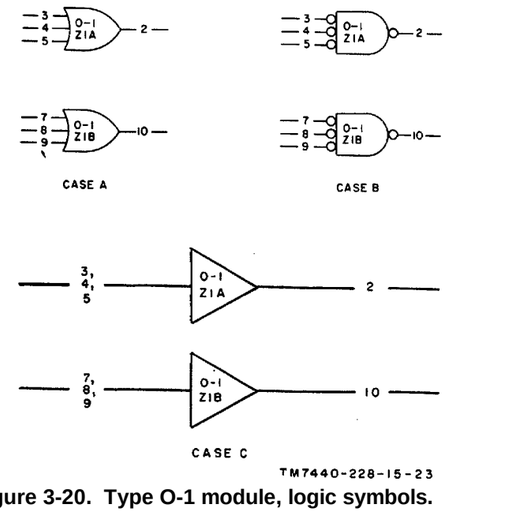


Figure 3-20. Type O-1 module, logic symbols.

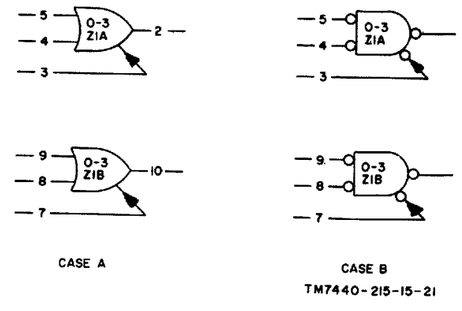


Figure 3-21. Type O-3 module.

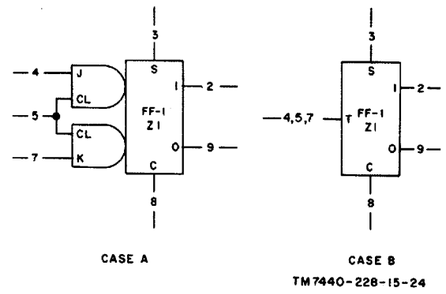


Figure 3-22. Type FF-1 module.

3-42. Integrated Circuit Latch

a. A special combination of N-1 OR gates called a latch (fig. 3-23) is used extensively in the high speed card punch logic circuits. The latch functions as a flip-flop to register the occurrence of momentary signals. The two OR gates which make up the latch are called the set and clear sides of the latch. The 1 output of the latch goes high when the latch is set and the 0 output goes high when the latch is cleared.

b. To set the latch, both inputs to the clear side must be low, and a high level must occur at either of the two inputs to the set side. The resulting low output of the set side on line 0 causes the clear side to produce a high level on the 1 line. This high level maintains an input to the set side so that even if the external input goes low, the latch remains set.

c. To clear the latch, both inputs to the set side must be low and a high level must be applied to either clear side input. This causes the 1 output to go low and the 0 output to go high. Thus, the clear condition is reinforced and remains even after the high level to the clear side goes low again.

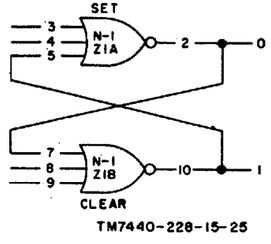


Figure 3-23. Latch logic symbol.

3-43. Microcircuit Logic Elements

a. Lamp driver circuits used in the high speed card punch consists of thick film circuit components encapsulated within a square plastic case. These circuits are type SM-63 microcircuits, and are wired to the printed circuit cards through 10 terminals (1 through 10). Reference designations of the microcircuit modules are Z1, Z2, Z3. etc. Each module contains three separate circuits. These circuits are shown separately on the logic diagrams and are designated as A, B, and C (for example: Z1A, Z1B, Z1C.) The output terminals from the A circuit is always terminal 1; for the B circuit, terminal 3; and for the C circuit, terminal 5 (fig. 3-24).

b. Power supply inputs to the individual microcircuit modules is not shown on the logic diagrams since there is no provision for them in logic symbology; however, all lamp driver (SM-63) microcircuit modules receive power supply inputs of +12 volts at terminal 7, -12 volts at terminal 8, and ground at terminal 10.

c. The lamp driver provides a current return path for indicator lamps. One side of the indicator lamp is connected to + 15 volts ac and the other side is connected to the output terminal of the lamp driver. With no input (O level) to the lamp driver, an internal resistor provides a high resistance path to ground to maintain a warming current on the lamp even though it is not lit. When a high logic level is applied to the input of the lamp driver, the output terminal becomes a low resistance, high current path to ground for the lamp and the lamp lights.

d. Terminal 9 ao all lamp driver modules are wired to the LAMP TEST switch, A3Z3, which applies + 12 volts dc to the lamp driver module when actuated. This voltage switches the lamp driver on to light the lamp.

3-44. Discrete Circuit Logic Elements

a. There are several types of discrete circuit logic elements as described in paragraph 3-45. Each discrete circuits logic element consists of a combination of standard circuit components such as resistors, diodes, etc. Thus, wire terminal numbers for inputs and outputs are not assigned as for integrated circuit logic elements.

b. Reference designations for discrete circuit logic elements are (A), (B), (C), etc. prefixed by the reference designation of the printed circuit card on which they are located.

3-45. Operation of Discrete Circuit Logic Elements

The logic operation of each discrete circuit logic element type is described below. Logic symbols for each type are given, using typical tagging lines. The logic elements are grouped by the card on which they are located.

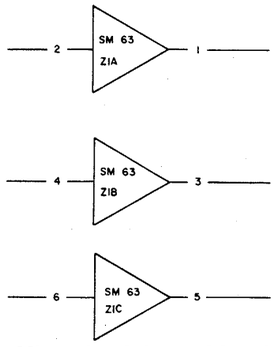


Figure 3-24. Microcircuit lamp driver logic symbol.

a. PC Card A1. The following discrete circuit logic elements are located on PC card Al (fig. 3-25).

(1) Type AMPL-1. The type AMPL-1 amplifier converts push-pull current pulses from a reluctance pick-up into logic pulses on complementary output lines.

(2) Type AMPL-2. The type AMPL-2 amplifier converts a 0-volt input into a -12-volt output which is used to inhibit solenoid drivers. When the input return to +4.5 volts, an open circuit output is produced.

b. PC Card A2. PC card A2 contains two types of solenoid drivers (SOL DR-1 and SOL DR-2). Both of these (fig. 3-26) convert a 0-volt logic level input into a high current ground return output to energize a solenoid whose other side is excited by -48 volts dc. When the solenoid driver inputs are +4.5 volts,. The outputs are open circuit.

c. PC Card A3 through A6. PC Cards A3 through A6 contain a single type of discrete circuit logic element. This is the type SOL DR-3 solenoid driver (fig. 3-27) which operates in the same way as the type SOL DR-1 and SOL DR-2 solenoid drivers on PC card A2 (fig. 3-26). However, the type SOL DR-3 solenoid driver can be inhibited by applying -12 volts to a second input.

d. PC Card A13. The following discrete circuit logic elements are located on PC card A13 (fig. 3-28):

(1) *Type RCVR-1*. The type RCVR-1 interface receiver converts a + 6.2 volt input from the CCU into a +4.5-volt output and a -6.2-volt input into a 0-volt output. The O-volt output is inhibited if a +4.5-volt level is applied to a second (inhibit) input.

(2) *Type INH DR-1*. The type INH DR-1 inhibit driver generates a +4.5-volt inhibit output when activated by 0-volt input. When the input goes to +4.5 volts, the output goes to O volt.

e. PC Card A14. The following discrete circuit logic elements are located on PC card A14 (fig. 3-29):

(1) *Type RCVR-1*. The type RCVR-1 interface receiver is identical to the type RCVR-1 interface receiver on PC card A13 (fig. 3-28).

(2) *Type XMTR-1*. The type XMTR-1 interface transmitter converts a 0-volt input to an open circuit for transmission to the CCU and a +4.5 volt input to a 0-volt output.

(3) *Type XMTR-2*. The type XMTR-2 interface transmitter converts a 0-volt input to a -6.2 volt output for transmission to the CCU and a +4.5 volt input to a + 6.2 volt output.

(4) *Type RCVR-2A*. The type RCVR-2A interface receiver converts an open circuit input from the CCU to a 0-volt output and a 0-volt input to a +4.5-volt output.

(5) *Type RCVR-2B*. The type RCVR-2B interface receiver operates identically to the type RCVR-1 interface receiver on PC card A13 (fig. 3-28) except than, inhibit capability is provided.

(6) *Type PA*. The type PA photoamplifier converts a dark photocell output (low current) to a + 4.5-volt signal and a lighted photocell output (high current) to a 0-volt signal. The + 4.5-volt signal is derived from a photo sub voltage of +4.5 volts received through an external diode.

f. PC Card A15. PC card A15 contains a single type of discrete circuit logic element. This is the type OSC oscillator (fig. 3-30). The type OSC oscillator generates a continuous square wave with a period of 40 µsec.

g. PC Card A19. The following discrete circuit logic elements are located on PC card A19 (fig. 3-31):

(1) Type OS-1. The type OS-1 one shot is triggered by a positive-going step input to produce a positive output pulse of specified width. The width of the output pulse is determined by the size of an external charging resistor connected from the top lead to a + 4.5-volt source.

(2) *Type OS-2*. The type OS-2 one shot is identical to the type OS-1 one-shot except that a negative going output pulse is produced.

h. PC Card A21. The following discrete circuit logic elements are located on PC card ;21 (fig. 3-31.1) in high speed card punch units serial number 198 and up and in serial number 1 through 197 which are modified by MWO 11-7440-217-15/1.

(1) *Type TD-1*. The type TD-1 timing circuit converts a O-volt input to a +4.5 volt output after a delay of 1.5 seconds. A +4.5-volt input will immediately develop a O-volt output.

(2) *Type TD-2*. The type TD-2 timing circuit functions in the same manner as the type TD-1 except the +4.5-volt output delay is adjustable between 30 seconds to 3 minutes. An external positive pulse is applied to aid in swtch1ig at the end of the longer time periods.

(3) *Type RELAY DR-1*. The circuit converts a O-volt logic level input to a high current ground return output to energize a relay whose other side is excited by -48 volts de. When the relay driver input is at +4.5 volts, the output is an open circuit.

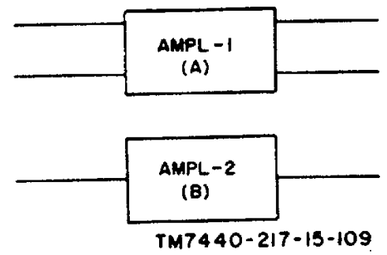


Figure 3-25. PC card A1, discrete circuit logic element symbols.

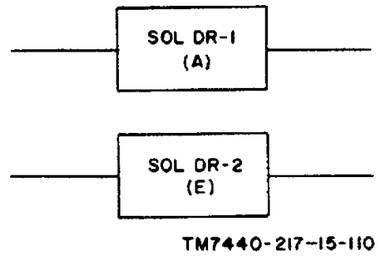


Figure 3-26. PC card A2, discrete circuit logic element symbols.

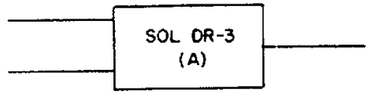


Figure 3-27. PC cards A3 through A6, discrete circuit logic element symbols.

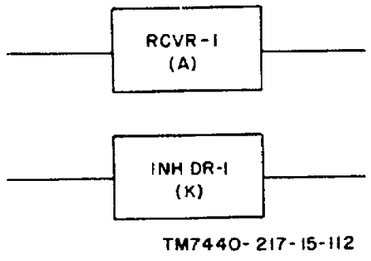


Figure 3-28. PC card A13, discrete circuit logic element symbol.

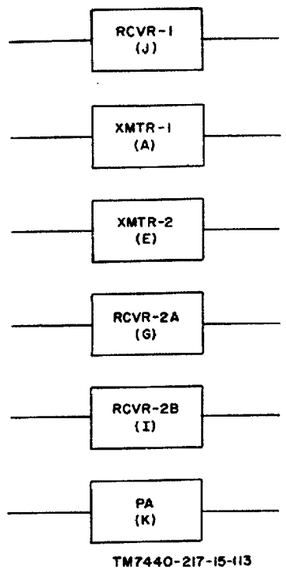


Figure 3-29. PC card A14, discrete circuit logic element symbols.

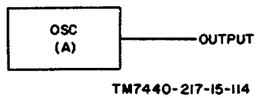


Figure 3-30. PC card A16, discrete circuit logic element

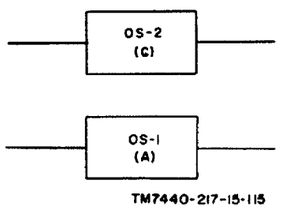


Figure 3-31. PC card A19, discrete circuit logic element symbol.

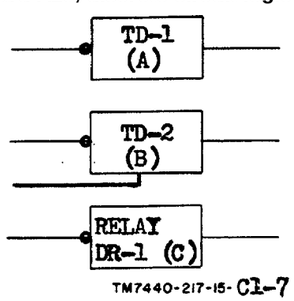


Figure 3-31.1. PC Card A21, discrete circuit logic element symbols.

3-46. Ac Circuits

(fig. 8-5)

The ac input circuit receives the external ac power and distributes the power to the various circuits of the high speed card punch. The 120-volt, single-phase input power is routed through power filters FL1 through FL4 of filter assembly FL1 to power supply terminal board TB1. The filters eliminate high frequency noise from the ac input. The ac power is switched through power supply assembly PS1 to cabinet blower B1 and to the punch drive motor in mechanism assembly A2. Switching control to PS1 is provided by AC POWER pushbutton Z2 on control panel A3. Power supply PS1 produces a 24-volt dc output which, when returned through the closed contacts of AC POWER pushbutton Z2 and sequencing module A12 in the power supply PS1, turns on ac power to mechanism assembly A2 drive motor and cabinet blower B1. When power is turned on, the 24-volt dc output turns on the indicator in AC POWER pushbutton Z2. The power supply also provides 15-volt ac power for illuminating the various indicator lamps on the control panel.

3-47. Dc Circuits

(fig. 8-6)

The dc voltages required by the high speed card punch are generated in power supply PSi. The following regulated voltages are supplied: + 12 volts dc, --12 volts dc, +4.75 volts dc, and -48 volts dc. These voltages are automatically turned on in a specific sequence, as controlled by a sequencing module in the power supply, in order to supply bias voltages to circuit elements in such a manner that no damage is done to these elements. Also, in case of a failure in any one of the dc supplies, or when the equipment is turned off, the power supplies are turned off in a predetermined sequence. Turn on and turn off of the dc power supplies is controlled by the AC POWER pushbutton Z2. The DC POWER indicator DS1 on the control panel indicates when the dc-power supplies have been turned on. The reason for using the same switch to turn on ac and dc power is because the sequence of power turn-on requires ac power to be supplied to the drive motor and blowers before turning on the dc power supplies.

3-48. Power Supply PSI, Block Diagram

The power supply consists of four similar regulator circuits, each containing overvoltage and current limiting circuits, which provide regulated +4.75 vdc, + 12 vdc, --12 vdc, -48 vdc regulated power for the high speed card punch. Also included in the power supply is a sequencing circuit which turns on and off the regulators and the a-c power to the drive motor and fans in a predetermined manner, when the high speed card punch is started or stopped. The sequencing circuit also turns off the regulators and the drive motor and fans if there is a failure in any portion of the power supply. Fuses mounted on the front panel of the power supply protect each regulator assembly, the a-c power lines to the drive motor and fans, and the main a-c power transformer in the power supply. The ac POWER pushbutton switch on the control panel of the high speed card punch is used to turn the power supply on and off. The sequencing circuit lights the lamps in the pushbutton switch when the power supply is on.

3-49. Rectifiers and Voltage Regulators

(fig. 3-32)

a. The power supply receives 120-volt, 50 or 60 hz ac power, which is applied to the primary of the main power transformer. Ac voltages from secondary windings are applied to five full-wave rectifier and filter networks, four of which supply input dc voltages to the four regulator circuits. The fifth rectifier supplies the unregulated 24 volt d-c power required by the sequencing module.

b. The four regulating circuits operate in a similar manner, so only the +4.75 vdc regulator is illustrated in figure 3-32 and described.

(1) A nominal + 10 vdc is supplied from the rectifier and filter to a series regulator circuit in the +4.75 volt regulator. The series regulator, under the control of the regulator control circuit, acts as a variable resistance load which reduces the unregulated 10 volts dc to an accurately regulated +4.75 volts dc. Variations in the output voltage from this value are sensed by the voltage sensor network, which applies a corresponding control voltage to the regulator control circuit. This circuit, in turn, controls the series regulator in a manner which changes the voltage drop across this circuit by the proper amount to maintain the output voltage at + 4.75 volts dc.

(2) As a safety feature, an over-voltage sensor circuit and an overcurrent sensor circuit are included in the regulator circuits. If the output voltage should momentarily rise above 115 percent of the rated output, this is sensed by the over-voltage sensor. A control voltage is then applied to the regulator control circuit to cause the series regulator to produce a sharp drop in the output voltage. This action should return the regulator circuit to the proper output voltage. If the overvoltage condition is due to a failure in the regulator circuit, rather than to a transient condition, it can not be corrected by the over-voltage circuit. In this case, the excessive voltage causes the fuse at the input of the series regulator circuit to blow, protecting the regulator from further damage.

(3) If the output current rises above 120 percent of rated value, this is sensed by the over-current sensor, which provides a control voltage to the regulator control circuit to cause the series regulator to produce a sharp output voltage drop which practically turns off the series regulator. A corresponding severe current drop is produced. This action produces current-limiting during load faults in which the short-circuit currents are less than the rated currents, effectively minimizing power dissipation at these times.

3-50. Power Turn-On, and Turn-Off Sequencing Control

(fig. 3-33)

a. To minimize the initial power drain upon turn-on of the high speed card punch (by means of the AC POWER switch), and to protect the electronic circuits in the high speed card punch from damage due to the improper sequence of application of bias and control voltages when power is initially turned on, the various dc voltages required by these circuits are supplied by the power supply in a specific predetermined sequence. Also, if the high speed card punch is turned off by means of the AC POWER switch, the power supplies are automatically shut down in the opposite sequence to turn-on, with certain specific delays between individual power turn-off being included. In addition, if there is a failure in any of the circuits of the power supply, the complete power supply is automatically shut down in a specific sequence, again protecting the high speed card punch circuits from damage due to improper operating voltages. The sequencing circuit also controls the turn-on and turn-off of the ac power to the drive motor and the fans, assuring that this power is supplied before the various dc voltages are supplied, and turning off this power when the high speed card punch is shut down or when there is a failure in the power supply. The 1, volt ac lamp power for the AC POWER switch and the other indicators of the high speed card punch control panel are also controlled by the sequencing circuits. When power is turned off, all lamps will be dark.

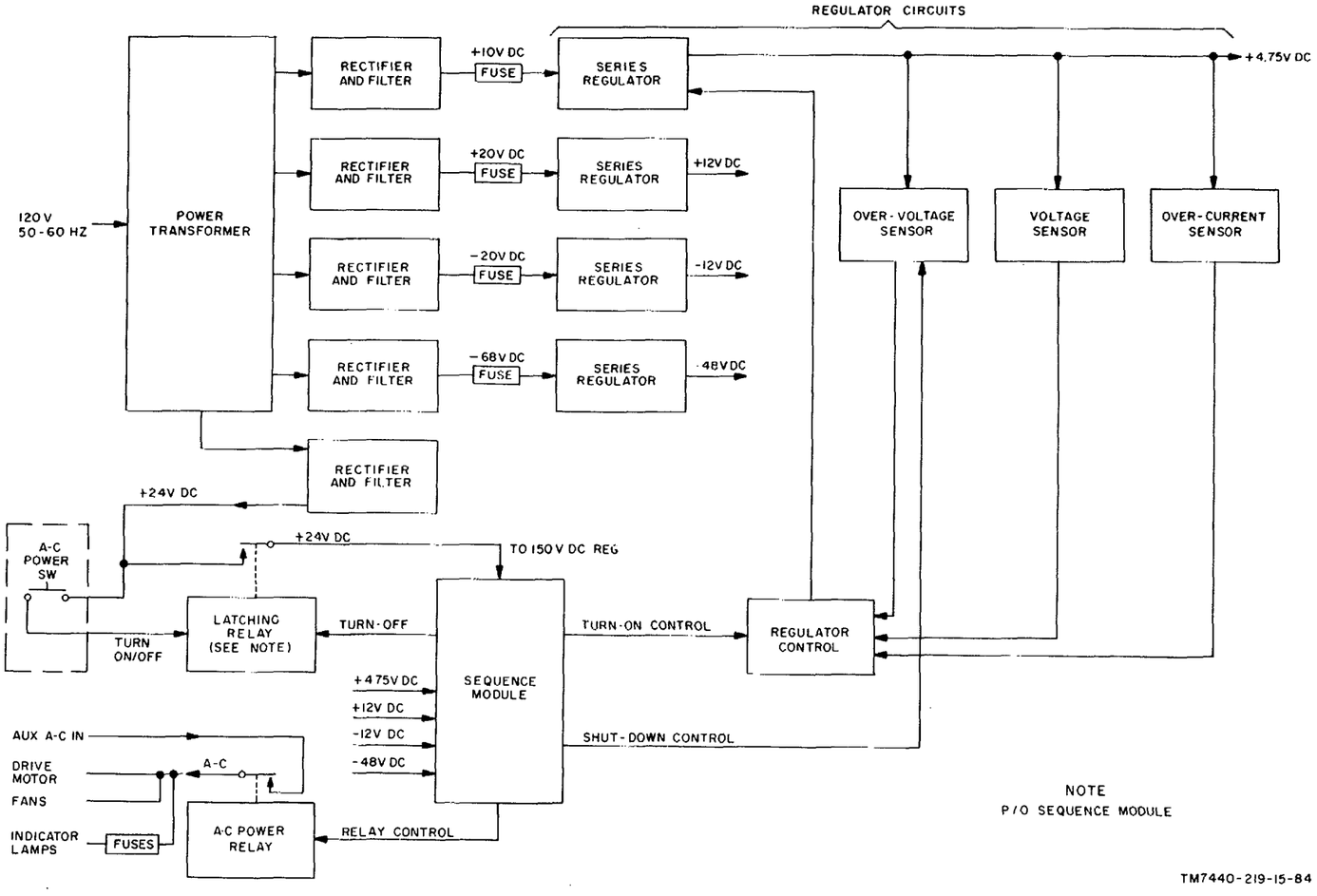


Figure 3-32. Rectifier and regulator ciruits, block diagram.

b. The automatic power sequencing circuits are all contained on sequencing module A12, and consist basically of two types of voltage level sensors. One type senses whether each of the regulated dc output voltages is within 90% of rated output level and the other type senses when the output level of certain of the power supplies falls below 1.8 volts or 10% of rated value, whichever is higher. The 90% of rated value represents the minimum output voltage level at which a regulator is considered on and operating normally. During the turn-on sequence, these sensors determine when a particular regulator is on and providing the proper output voltage amplitude, and then provide the control to turn on the next regulator in the power turn-on sequence. The 90% sensors are also used to sense if there is a less-than-normal output from a regulator, indicating a failure in this regulator. If this occurs the particular sensor involved initiates an automatic turn-off procedure which turns off all the regulators in the proper sequence.

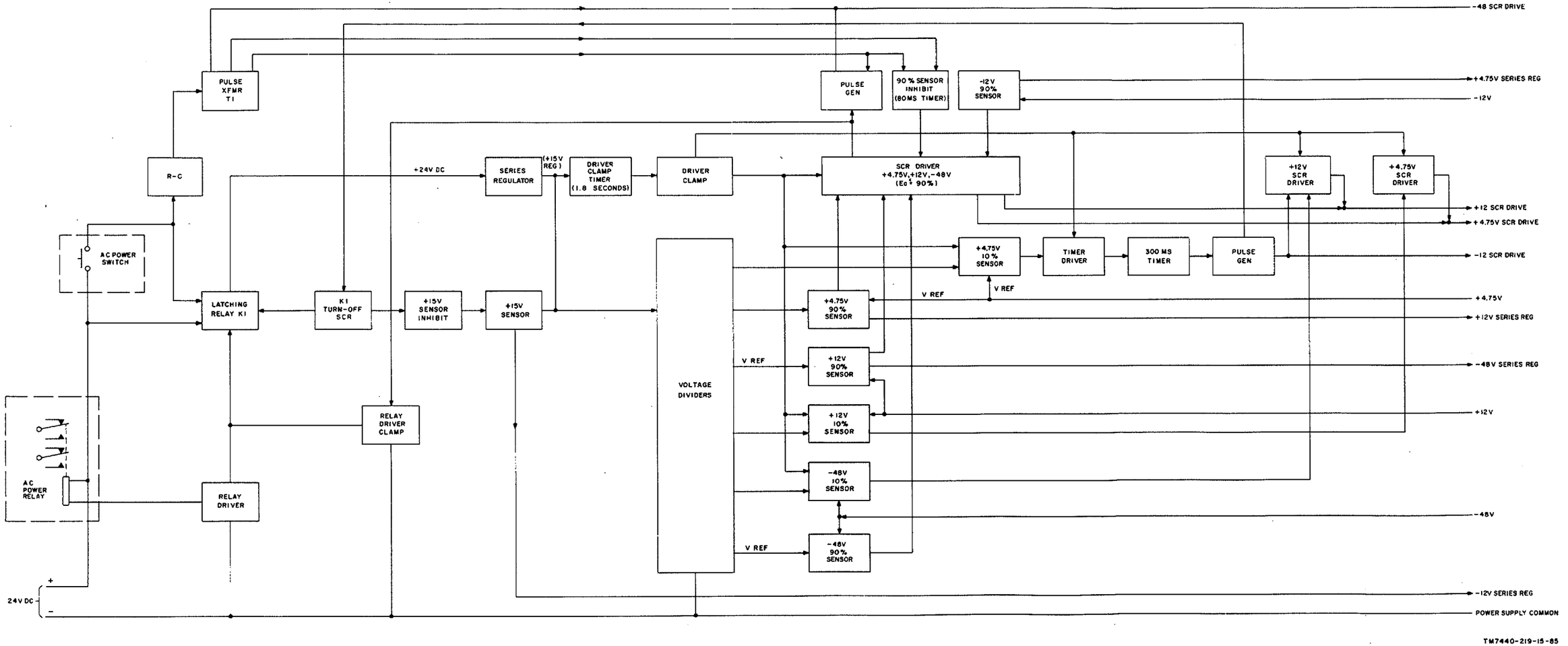


Figure 3-33. Power sequencing circuits, block diagram.

c. The turn-off procedure for each regulator is a two-stage action. First the regulator output voltage is reduced to a value of approximately 10% of rated value (or 1.8 volts, as applicable). The regulator is then considered to be off. At a later stage of the turnoff sequence, a second control action is applied from the sequencing module to the regulator to completely turn off the output voltage.

d. The operating voltage for the sequencing module is supplied by the 24 volt rectifier-filter. This voltage is converted to a regulated 15.0 volts dc, which is used as the bias and collector voltages for the transistors of the sequencing module. A 90% fault sensor monitors the output of this regulator as part of the overall power failure monitoring control. The sequencing module operates in the following manner.

(1) When the AC POWER switch is depressed to start operation of the High Speed Card Punch it momentarily applies the 24 volts dc from the 24 volt dc rectifier filter network to a self-latching relay in the sequencing module. This energizes the relay, which holds itself energized after the AC POWER switch is released. The latching relay applies the 24 volts dc to a relay driver in the sequencing module, which then energizes the ac power relay. This applies the auxiliary ac power to the drive motor, the fans, and to all control panel indicator lamps. The AC POWER switch lights to indicate that the ac power is now on. In addition, the 24 volts dc is applied to the 15.0 volt dc regulator in the sequence module which produces a regulated 15.0 volt de output which is required to operate the other circuits of the sequencing module. This action is the start of the automatic turn-on for the four regulators. The regulators are turned on in the following sequence: -12 volt de, +4.75 volt dc, + 12 volt dc, -48 volt dc.

(2) When the output of the 15.0 volt regulator reaches 90% of rated value (12 volts dc) the +15.0 volt 90% sensor applies a bias voltage to the series regulator of the -12 volt regulator circuit. Until this bias is applied the regulator circuit is disabled and produces no output. A sample of the outputs of all the regulators are applied to individual 90% sensors on the sequencing module. Thus, when the output of the -12 volt regulator now builds up to at least 90% of rated value (-10 volts dc), the -12 volt 90% sensor applies a turn-on bias to the. +4.75 volt regulator, to turn on this regulator. This action continues, with the applicable 90% sensors applying a turn-on bias to the corresponding voltage regulator.

(3) The turn-off sequence is started by again pressing the AC POWER switch. This action applies the 24 volt de power to a pulse generator which produces a pulse which is applied to the overvoltage sensor circuit of the -48 volt regulator to cause this circuit to sharply reduce the output voltage of the -48 volt regulator. When the output voltage drops to 10% of rated value, or less, the regulator is considered to be off. A -48 volt 10% voltage sensor senses that the voltage has dropped to the *off* amplitude and it applies a gate voltage to the overvoltage sensor circuit in the + 12 volt regulator to turn *off* this regulator. As the output voltage of the + 12 volt regulator now drops below 90% of rated value, this is sensed by the + 12 volt 90% sensor. The sensor now removes the series regulator bias from the -48 volt regulator circuit (previously turned *off* to less than 10% of rated output), completely turning off the -48 volt regulator. As the output of the +12 volt regulator continues falling to 10% of rated value, the + 12 volt 10% level sensor senses this condition and applies a gate voltage to the overvoltage sensor circuit of the +4.75 volt regulator. This action turns *off* the +4.75 volt regulator. The action continues in a manner similar to that previously described in the following sequence. The + 4.75 volt 90% sensor turns off the + 12 volt regulator completely. Then the +4.75 volt 10% sensor applies a voltage to the relay driver clamp, which deenergizes the a-c power relay removing the a-c power from the drive motor and fans. At the same time, the voltage from the +4.75 volt 10% sensor is applied to a 300 msec timer. Approximately 300 msec later the timer circuit operates a pulse generator which generates a pulse to turn *off* the -12 volt regulator. The -12 volt 90% sensor than completely turns off the + 4.75 volt regulator. The pulse produced by the pulse generator is also applied to the turn-off control for the latching relay. The turn-off control then de-energizes the relay, interrupting the 24 volt dc power applied to the +15.0 vdc regulator. This completes the sequenced power turn-off procedure.

e. If there is a failure on any of the power supplies, the complete power supply is automatically shut down in a predetermined sequence which is somewhat different from the normal shut-down sequence. A regulator is assumed to have failed if its output voltage drops to 90%, or less, of rated output. If the -48 volt, +12 volt, or +4.75 volt supply fails all of these three supplies are turned off simultaneously and then, after the same 300 msec time delay required for the normal turn-off procedure, the -12 volt supply is turned off, as is the a-c power and the regulator +.15.0 volt supply. If the -12 volt supply has failed, the other supplies are turned off simultaneously and almost immediately, and if the 15 volt regulator in the sequencing module fails, this initiates turn-off of the -12 volt supply to produce complete power shut down. A failure in a supply is sensed by the 90% sensor associated with that supply. The sensor then operates an SCR driver to initiate turn off by *firing* the associated SCR in the applicable regulator. A single SCR driver is controlled by any one of the 90% sensors for the four regulators, and this SCR turns off the -48 volt, +4.75 volt, and +12 volt regulators simultaneously. The -12 volt regulator is then turned off in the normal manner, as previously described.

f. The SCR driver used for turn-off if a failure is detected must be prevented from operating during power turn-on. This is accomplished by the driver clamp timer and driver clamp circuit, which inhibits the SCR driver for a period of 1.8 seconds after the start of power turn-on. The same circuit inhibits the operation of the 10% sensors during turn-on, since these sensors would also interfere with the turn-on sequence. During the normal turn-off sequence the SCR driver must again be inhibited otherwise it would interfere with the normal turn-off sequence. This is accomplished by the 80 msec timer.

3-51. Detailed Circuit Description of Rectifiers and Voltage Regulators
(fig. 8-7)

a. Input Rectifier Circuits. The power supply receives 115-volt, 50 or 60 hz ac power at terminals 1 and 2 of terminal board TB1. A 15-ampere fuse, A1OXF5, is included in the line from the terminal board to the primary of transformer A9T. The secondary of this transformer provides ac voltages to four full-wave rectifiers. The full-wave rectifiers are as follows: Diodes A4CR4 and A4CR3, with filter capacitor A9C6 provides a nominal -68 volt dc input to the -48 volt dc regulator circuit. Diodes A5CR3 and A5CR4 with filter capacitor A9C5 provides a nominal -20 volt dc input to the -12 volt dc regulator circuit, whereas diodes A5CR1 and A5CR2 and filter capacitor A9C4 provides a nominal + 20 volt dc input to the + 12 volt volt dc regulator circuit. Diodes A4CR1 and A4CR2 with filter capacitors A9C2 and A9C3 provide a nominal + 10 volts dc for the +4.75 volt dc regulator. A pair of ac outputs are picked off taps 9 and 7 and 5 and 7 of the secondary of transformer A9T1 to provide 15-0-15 volt ac power for the indicator lamps of the high speed card punch. Fuses A10XF9 and A10XF10, are included in each line to protect the transformer from an overload. The application of the 15 volt ac lamp illumination power is controlled by relay A9K1, as is the ac power to the drive motor and fan. The relay is energized by the sequence module as part of the power turn-on procedure. A second output winding, taps 12 and 13 on the transformer, provides a nominal 23 volt ac input to a full-wave bridge rectifier, A15CR1, CR2, CR3, CR4 and filter capacitor A9C1 provides a nominal 24 volt dc input to the sequence module (para 3-52).

b. +4.5 Volt DC Regulator Circuit

(1) *Voltage Regulation*. The unregulated 10 volt dc output of rectifier A4CR1 and CR2 is applied through fuse ALOXF1 to the series regulator consisting of transistors A4Q1, A4Q2, and A4Q3 connected in parallel. The transistors act as a variable resistance in series with the 10 volts dc to drop this voltage to +4.75 volts at the output of the regulator (junction of A4R1 and R2). The regulator control circuit senses variations in the output voltage from +4.75 volts and adjusts the voltage drop across the series regulator transistors to compensate for these variations, thus maintaining a + 4.75 volt dc output.

(2) The 10 volts dc is applied to the collectors of transistors A4Q1, A4Q2, A4Q3 connected in parallel. The voltage drop across the transistors is controlled by the base voltage applied to the transistors, which is supplied by the regulator control circuit. The outputs of the two transistors are taken from their emitters and coupled through emitter resistors A4R1 and R2, respectively to a junction point and to the regulator output terminals, pin 2 of TB2. The resistors provide emitter degeneration to assure satisfactory current sharing between the two series regulator transistors.

(3) Zener reference diode A1CR6 provides a regulated voltage to a voltage divider consisting of A1R23, A1R24, and A1R25 which provides a fixed bias to the base of A1Q5, part of differential amplifier A1Q5 and Q6. A sample of the output voltage of the regulator is applied to the base of Q6. The wiper arm of potentiometer A1R24 is set so that during the stable condition of the regulator the proper voltage is picked off this voltage divider to operate the regulator circuit to provide a +4.75 volt dc output. Should the output voltage vary from this value, the voltage at the base of Q6 increases or decreases proportionately, producing a corresponding variation in the output voltage of Q6. Since the base of A1Q5 is held at a constant voltage by Zener regulator diode A1CR6, the common emitter of Q5 and Q6 is held at a voltage which only varies with variations in transistor characteristics or variations in bias. However,

since transistors Q6 and Q5 are of the same type, temperature variations, bias voltage variations, aging, and other variations of this type have the same effect on both transistors and there is no net change in the base-to-emitter voltage at Q6. Only a change in the base voltage at Q6'produces a net change in the collector voltage at Q6. The voltage at the collector of Q6 is applied to the base of A1Q1. If there has been an increase in the regulator output voltage, above +4.75 volts, the voltage applied to Q1 decreases, decreasing the voltage at the base of emitter follower A4Q4, which reduces the voltage at the parallel bases of series regulators A4Q1, A4Q2 and A4Q3. The voltage drop across these transistors increases, reducing the output voltage back down to +4.75 volts dc. A similar analysis applies if the output voltage has fallen below + 4.75 volts dc.

(4) The emitter follower stage A4Q4 is used as a current amplifier to provide adequate current amplification for the series regulator.

(5) *Current Limiting*. The sum of the currents at the emitters of series regulators A4Q1, A4Q2, A4Q3 is the output current of the voltage regulator. Parallel connected resistors A1R4 through R9 comprise a summing network which samples this current and provides a proportional voltage at the base of A1Q4. By biasing diode A1CR4 in a forward direction the net base-emitter threshold voltage for A1Q4 is set to cut off A1Q4 during normal operation. The use of diode A1CR4 to establish base bias provides temperature stabilization and permits operation at low signal levels.

(6) If the load current on the series regulator increases to 120 percent of rated value, the voltage drop across current-sensing resistors A1R4 thru R9 increases sufficiently to turn on A1Q4. This causes a sharp voltage drop at the collector of A1Q4, which is connected to the base of A1Q1, producing a corresponding voltage drop at the base of A1Q1 which severely reduces the conduction of series regulators A4Q1, A4Q2 and A4Q3. This action causes a sharp decrease in output voltage, further forward-biasing A1Q4, reinforcing the current-limiting action. As a result, current limiting occurs at lower load currents. This type of current control, where the current reference is a function of the output voltage, results in short-circuit currents that are less than rated currents, which minimizes power dissipation in the series regulator stage during load faults.

(7) *Overvoltage Protection.* Zener reference diode 3-20 Change 5 A1CR5 provides a constant voltage to voltage divider A1R29, A1R30 and A1R31, which provides a fixed bias to the base of A1Q7. Transistor A1Q7 is part of differential amplifier A1Q7 and A1Q8. A sample of the output voltage is applied to the base of A1Q8. The wiper arm of potentiometer A1R30 is adjusted so that with normal output voltage, A1Q8 is cut off because of the emitter bias across common emitter resistor A1R35. With A1Q8 cutoff, the base of A1Q9 is at supply potential and A1Q9 is also cutoff. If the output voltage should exceed the normal value of +4.75 volts by 115 percent (+5.5 volts), the portion of the voltage coupled to the base of A1Q8 causes the transistor to conduct. Voltage drop across the collector load resistor A1R34 lowers the bias on A1Q9 causing A1Q9 to conduct. When A1Q9 conducts, it applies a positive level to voltage divider A15R5 and A15R6 which fires SCR A14CR2. SCR A14CR2 then conducts heavily and drops the output voltage to a low level.

(8) *Overcurrent Protection* Overcurrent protection transistor A1Q4 operates at a relatively small positive voltage level in the 4.75 volt supply, since this is the level of the output voltage being monitored. As a result, because of transistor characteristics the bias levels are insufficient to guarantee that the transistor will actually turn on if an overload condition is reached. To assure that the transistor turns on, it is supplied with a regulated negative bias from emitter follower A1Q3, which is connected to regulator Zener diode A1CR1. The negatives bias supplied is approximately -11.5 volts. This same bias is supplied to the + 12 volt supply but is not required by the negative voltage regulators.

c. Turn-On and Turn-Off: The regulator circuit is automatically turned on and/or turned off by the sequencing module, A12. Turn-on is accomplished by the sequencing module, which turns on a transistor whose collector is connected to pin N of A9J4. Before turn-on by the sequencing module an open circuit exists at pin N and A1Q2 can not conduct. When the transistor in the sequencing module is turned on, it provides a ground at pin N and current now flows through A1CR2 and A1CR3 and transistor A1Q2 is now driven to the conduction state. This produces a base bias for AIQ1 and collector bias for A1Q6. The base bias for AlQ1 causes it to conduct and produce a current source for A4Q3 which then turns on the series regulator, A4Q1, A4Q2, A4Q3. Turn off is accomplished by firing the over-voltage protection SCR A14CR2 thus dropping the output voltage to near zero. Refer to paragraph 3-52 for a description of the operation of the sequencing module. Diodes A1CR2 and A1CR3 provide protection for transistor A1Q2 against excessive back bias.

d. Other Regulator Circuits. The -48 vdc regulator, + 12 vdc regulator, and -12 vdc regulator all operate in a manner similar to the +4.75 volt regulator. The differences are described as follows:

(1) In the -48 volt supply, transistor A3Q4 controls the turn-on in response to the switching action in the sequence module. To turn on the -48 volt supply, a bias level of approximately +15. volts is applied at pin K of A9J4 to the emitter of A3Q4. This supplies a current source to the series regulator A6Q2. Current overload protection is provided by current sensor A6R2 and current overload transistor A3Q1. If there is a current overload, A3Q1 is turned on, reducing the negative voltage level at the collector of A3Q1, turning on A3Q2. This turns off the regulator state, dropping the output voltage, as described for the +4.75 volt regulator. Normal voltage regulation is provided by differential amplifier A3Q6, Q7 which - controls regulator control transistor A3Q3, through voltage splitter A3Q5. Transistor A3Q5 permits lower bias levels to be used than those normally available from the relatively high voltage levels which exist in the -48 volt supply.

(2) For the -12 volt supply, turn-on control from the sequence module consists of supplying a bias of approximately + 15 volts at pin W of A9J4 to transistor A2Q8, turning it on. This supplies the required current source to the -12 volt series regulator. Other circuit operations are the same as for the +4.75 volt supply previously described.

3-52. Detailed Circuit Description of Sequence Module

(fig. 8-8).

The sequence module turns the complete power supply on and/or off in a predetermined manner when the AC POWER switch on the control panel is operated. Also, the failure of any one regulated dc output turns off the remaining outputs in a proper sequence.

a. Input Circuit and Ac Relay Control. The 24 volt dc full-wave rectifier on module A15 supplies unregulated 24 vdc power to the normally-open contacts of relay K1 on the sequence module, and to the AC POWER switch on the high speed cardpunch control panel. When this switch is operated, its contacts are momentarily closed, applying the 24 vdc through diode CR21 and R60 to the coil of relay K1, energizing K1. The relay is then latched on by the 24 vdc through its now closed contacts, through diode CR32 and resistor R60. Thus, this relay stays energized when the AC POWER switch is released. The voltage applied to the coil of relay K1 is also applied to the base of Q1, which turns it on, causing it to conduct current. This action energizes the auxiliary ac power relay, A9K1 (shown on the regulator circuit), applying the auxiliary 115 vac power to the fans, the drive motor, the 15 vac to the AC POWER m and other indicator amps.

b. Voltage Regulator. The unregulated 24 vdc power is coupled through the contacts of energized relay K1 on the sequence module to the 15 volt regulator. The regulator converts the unregulated 24 volt dc power to regulated 15.0 volt dc power. The 24 volts is applied to series regulator Q33, which acts as a variable load in series with the input voltage, varying its internal impedance so as to maintain the output voltage at +15.0 vdc. The series regulator is controlled in the following manner.

(1) The output voltage of the regulator is developed across voltage divider R72, R73 and R74. Capacitor C10 removes high frequency variations on this voltage. Potentiometer R73 is adjusted to obtain the required + 15.0 volt output when the overall control loop is stabilized. Should the output voltage tend to change from + 15.0 volts, the voltage applied to the base of Q35 changes proportionately. The emitter of Q35 is held at a constant voltage by Zener regulator diode CR27 so that only a variation in base voltage can cause a change in collector voltage of Q35. The voltage change at the collector of Q35 is applied to the base of emitter follower Q32, which, in turn, changes the voltage at the base of Q33. This action varies the voltage drop across Q33 proportionately, returning the output voltage to the required level. For example, an increase in the output voltage produces an increase in the voltage at the base of Q35, which results in a subsequent decrease in the voltage at the base of Q32 and Q33. This increases the voltage drop across Q33, lowering the output voltage to the required value. Transistor Q31 is connected from the base to collector of Q32 and acts as a shunt path for base current of Q32. In this manner Q31 tends to maintain a constant current source at the base of Q32, minimizing excessive current variations through the series regulator.

(2) For normal output currents, transistor Q34 is reverse biased by voltage divider R67 and R68 and is cut off. If the output current rises above approximately 500 ma, a sufficient voltage drop is developed across resistor R69 to overcome the back bias on Q34, causing it to conduct. This creates a shunt path for

the output current, limiting the output current to a maximum of 500 ma.

c. Turn-On Sequence. After latching relay K1 has been energized and the voltage regulator then provides the regulated +15.0 vdc output, the regulators are turned on automatically in the following sequence: 12 vdc, +4.75 vdc, + 12 vdc, -48 vdc. The sequencing module performs this turn-on action in the following manner:

(1) *-12 Volt Turn-On*. The + 15.0 vdc output of the +15 vdc regulator in the sequencing module is applied to voltage divider R79 and R80. The voltage at the junction of R79 and R80 is applied to the base of Q36 whereas a reference voltage from Zener diode CR30 is applied to the emitter of Q36. The reference voltage keeps Q36 cut off until the voltage applied to voltage divider R79 and RSO0 reaches a level of at least 12 volts dc. This occurs after the 15 volt regulator has been turned on and reaches 90% of rated output. Conduction of Q36 drives Q37 into conduction, providing the bias voltage required to operate the series regulator in the -12 volt regulator. This turns on this regulator. The collector of Q37 is at approximately -24 volts dc before it is turned on and at approximately + 15 volts dc after it is turned on.

(2) *-12 Volt Output Sense (90%).* A sample of the output of the -12 volt regulator is applied to the base of transistor Q39 of differential amplifier Q38 Q39. Voltage divider R75 and R76 connected across the output of the 15.0 volt dc regulator provide a reference voltage to the base of Q38. The output at the common emitter of Q38 and Q39 keeps Q39 cut off until the -12 volt regulator output reaches at least -10.80 volts. When the output of the -12 vdc regulator exceeds the -10.80 volts, Q39 is driven into conduction. The collector of Q39 is connected to the +4.75 vdc regulator turn-on circuit, to control turn-on of this regulator.

(3) *+4. 75 Volt Turn-On*. When Q39 is driven into conduction, its collector goes from approximately + 15 volts de to -3 volts de causing Q21 to conduct. This, in turn, causes Q18 to conduct, providing the turn-on bias to the series regulator of the +4.75. volt regulator. Before conduction the collector of Q18 is at approximately 15 volts dc and after conduction it is approximately 0.25 volts dc.

(4) *+4.75 Volt Output Sense (90%).* A sample of the output of the +4.75 volt regulator is applied to the emitter of Q4. The base of Q4 receives a regulated reference voltage from voltage divider R9 and R10, supplied by the +15.0 volt regulator. When the output of the +4.75 volt regulator reaches 90% of rated output (4.275 volts), Q4 conducts, causing its collector to go from 0 volts to approximately +4.0 volts. This produces turn-on of the + 12 vdc supply.

(5) *+12 Volt Turn-On*. The conduction of Q4 causes Q5 to turn on, which provides a turn-on bias to the series regulator of the + 12 volt regulator. The collector voltage of Q5 is approximately +24 volts dc prior to turn-on and approximately 0.25 volt dc after turn-on.

(6) *+ 12 Volt Output Sense (90%).* A sample of the output voltage from the + 12 volt regulator is applied to the emitter of Q9. A reference voltage, provided by voltage divider R18 and R19, from the regulated +15.0 volt regulator is applied to the base of Q9. When the output of the + 12 volt regulator reaches 90% of rated value (10.80 volts) Q9 conducts, causing its collector voltage to go from 0 volts to approximately 10 volts. This produces turn-on of the -48 volt supply.

(7) *-48 Volt Turn-On*. The conduction of Q9 causes Q10 to turn on. Conduction of Q10 provides a current flow through voltage divider R16 and R17, causing Q8 to conduct. This supplies emitter current to Q15, turning it on and Q15 then supplies the required bias for the series regulator of the -48 volt supply.

(8) *-48 Volt Output Sense*. A sample of the output voltage of the -48 volt supply is applied to the base of transistor Q29, which acts as the 90% sensor for the -48 volt supply. This sensor is only used in the turn-off sequence when a fault occurs.

d. Turn-Off Sequence. When the AC POWER switch on the unit is pressed in order to turn off power, the sequence module turns off the regulators in the opposite sequence to how they were turned on. This is described in the following paragraphs.

(1) -48 Volt Regulator Power *Reduction. When the AC POWER switch is. depressed, the 24 volts dc from the 24 volt dc rectifier is applied through the momentarily-closed contacts of the switch to the RC pulse-forming network of C7 and R62 and pulse transformer* T1. The primary of T1 forms a pulse which is coupled to the secondary, which applies this pulse to the silicon control rectifier (SCR) overvoltage turn-off diode in the -48 volt regulator. This reduces the output of this power supply to less than 10% of rated output, which, in effect, turns it off. The pulse forming network produces only a short-duration single pulse upon operation of the AC POWER switch and when the switch is released, turn-off has been initiated and continues automatically. The action of this circuit has no effect during the power TM 11-7440-217-15/NAVSHIPS 0967-324-0030/T0 31W4-2G-41 turn-on sequence since the -48 volt supply is the last supply to be turned on, and the pulse forming network will have been discharged before turn-on of the -48 volt supply is accomplished.

(2) *-48 Volt, +12V, +4.75 Volt 90% Sensor Inhibit*. The pulse formed in transformer T1 is coupled through a second output winding to the base of Q12. Transistors Q12 and Q13 comprise a single-shot multivibrator which produces an output pulse with a duration of 80 µsecs. During this time duration that the single-shot is fired, it turns on amplifier Q14, which is normally cut off, which in turn, causes Q20 to conduct. Transistor Q20 acts as a clamp, clamping the base of Q19 to a low level, through diode CR8 during the first 80 msec of the turn-off sequence. This inhibits the operation of Q19 during the sequenced shut-down accomplished by operating the AC POWER switch. Transistor Q19 is only used to turn off the -48 volt, +4.75 volt and +12 volt supplies in case of a regulator failure (e below).

(3) *-48 Volt Output 10% Sensor*. As previously described in (1) above, the operation of the AC POWER switch fires the overvoltage SCR in the -48 volt regulator, reducing the output voltage from this supply. A sample of the -48 volt output voltage is applied to the base of Q30. When the output of the -48 volt supply is normal, the base voltage is sufficiently negative to keep Q30 cut off. As the output of the -48 volt supply is reduced towards zero during turn-off, the base bias will become sufficiently less negative to cause Q30 to conduct which initiates power reduction of the + 12 volt supply.

(4) *+12 Volt Power Reduction and -48 Volt Turn-Off.* Conduction of transistor Q30 applies a negative voltage through diode CR19 to the base of Q27, causing it to conduct. This applies a pulse through diode CR17 of OR gate CR17, CR18 to the SCR in the overvoltage protection circuit of the + 12 volt regulator. This initiates turn-off of this regulator to reduce its output voltage to less than 10% of rated value. The 90% level detector, Q9, across the output of the + 12 volt supply senses that the output of the + 12 volt regulator drops below 90% of rated value and removes the turn-on bias from the series regulator of the -48 volt regulator completely turning of this regulator.

(5) *+ 12 Volt Output 10% Sensor*. A sample of the output of the output of the +12 volt regulator is applied to the emitter of Q28, whereas the base of Q28 receives a reference voltage from voltage divider R50 and R51 connected across the 15.0 volt regulated supply. Transistor Q28 is normally cut off by the high emitter voltage. However, during the turn-off sequence, when the output of the + 12 volt regulator drops to 1.8 volts, Q28 conducts, which initiates reduction of the output voltage of the +4.75 volt supply.

(6) *+4.75 Volt Regulator Output Voltage Reduction and +12 Volt Regulator Turn-Off.* Conduction of Q28 applies a negative voltage through diode CR15 to the base of SCR driver Q26, causing it to conduct and to apply a positive voltage through diode CR 13 of OR gate CR13, CR14 to the SCR overvoltage turn-off diode in the 4.75 volt regulator. This action reduces the output of the 4.75 volt regulator to less than 1.8 volts, thus, in effect, turning it off. The 90% level detector (Q4) across the output of the 4.75 volt supply senses that the voltage is below 90% of rated value. This results in Q5 being cut off, which removes the turn-on bias from the +12 volt regulator. This turns off this power supply completely.

(7) *+4.75 Volt Output 10% Sensor Ac Power Turn-Off.* A sample of the output voltage of the +4.75 volt regulator is applied to the emitter of. Q23. The base of Q23 receives a reference bias from the voltage divider consisting of R44 and R45 connected across the 15.0 volt regulator. The emitter bias keeps Q23 normally cut off. When the emitter voltage drops to 1.8 volts during the turn-off sequence, Q23 is driven into conduction. This produces a voltage drop at the base of Q22, through diode CR 10, causing it to conduct and apply a positive voltage of approximately 15 volts to the base-emitter voltage divider, R2 and R3 of relay control amplifier Q2. Amplifier Q2 now conducts heavily, reducing the base voltage on relay driver Q1 sufficiently to turn off Q1. This removes excitation from the coil of the ac power relay A9K1, turning off ac power for the drive motor, the fans and also the AC POWER lamp and the other indicator lamps. The now unlit AC POWER lamp indicates that the ac drive motor power is turned off.

(8) *-12 Volt Regulator Voltage Reduction and +4.75 Volt T7rn-Off*. The conduction of Q22 also applies +15 volts d-c to the RC timer circuit of R4 and C1. During the time interval that the voltage builds up on C1, transistor Q3 is biased to be cut off and the voltage across C1 is applied to SCR CR33. After approximately 300 msec the voltage across CR33 builds up to 8 + 1 volts dc, at which time CR33 conducts. Conduction of CR33 causes a sharp reduction in base voltage of Q3, driving it into conduction. Capacitor C1 now discharges through Q3 and the

resulting current flow through R8 to the SCR in the overvoltage protection circuit of the -12 volt regulator causes the output voltage of the regulator to drop to less than -2 volts dc. The drop in output voltage of the -12 volt supply below the 90% level is sensed by 90% level sensor (Q38 and Q39) connected across the output of the -12 volt supply. This results in transistor Q21 being turned off, which removes the bias from the series regulator in the +4.75 volt supply, completely turning off this power supply.

(9) *Turn-Off of -12 Volt Supply and Power Turn-Off in Sequence Module*. The previously described discharge of capacitor C1 through transistor Q3 also applies a discharge current through R7 and diode CR2, into SCR CR24 across the coil of relay K1. This voltage drop is also coupled through diode CR29 to the base of Q36. This back-biases Q36, turning it off, which in turn, cuts off Q37. This removes the bias voltage from the series regulator in the -12 volt regulator, completely turning off this power supply. The pulse applied to SCR CR24 *fires* this SCR, shorting out the coil of relay K1, de-energizing this relay. This removes the 24 volt de power from the 15.0 volt regulator, removing all power from the circuits of the sequencing module. This completes the turn-off procedure.

(10) *Transistor Protection*. Those level detector transistors which could be subject to relatively high reverse base-emitter voltages are protected by diodes connected between the base and the emitter. The diodes short out excess reverse base-emitter voltages.

e. *Fault Sensing and Turn-Off*. If the --48 volt, + 12 volt, or +4.75 volt supply fails, the others must be turned off at the same time. After this is accomplished the -12 volt supply is turned off. If the -12 volt supply fails, the other three supplies must be simultaneously turned off within 50 msec after this failure. Turn-off is accomplished by means of the 90% sensors which sense when the output voltage of a regulator has fallen to 90%, of less, of rated output.

(1) Should the +4.75 volt regulator output fall to less than 90% of rated value, this is sensed by the +4.75 volt 90% sensor (Q4) which turns off, and turns off Q6, which in turn turns on Q7. The collector Q7 is reduced to near ground level, applying a negative voltage through diode CR8 to the base of Q19. This turns on Q19, providing a positive voltage through diodes CR6, CR14, CR18 to the -48 volt SCR, the +4.75 volt. SCR, and the +12 volt SCR, turning off these supplies simultaneously. Transistor Q19 is also operated by either the -48 volt 90% sensor (Q29), the +12 volt 90% sensor (Q9, Q10, Q11) or the -12 volt 90% sensor (Q36 and Q17), if any of these power supplies fail. The -48 volt SCR is operated by Q19 *firing* SCR CR34 across pulse forming network C4 and R30. The output pulse is supplied to T1 for application to the SCR in the -48 volt supply.

(2) After the -48 volt, +4.75 volt, and + 12 volt supplies are simultaneously turned off, the -12 volt supply is turned off in the manner previously described. If the +15 volt regulator in the sequence module fails (power output drops to less than 90% of rated output), this is sensed by the +15.0 volt 90% sensor which turns off the bias to the -12 volt series regulator. This turns off this regulator, initiating the previously described shut-down procedure.

f. Over-Ride Timer Circuit for Turn-On Circuit. As previously described, the turn-off circuits include sensors which operate when output voltages are below 1.8 volts dc or 10% of rated output, whichever is higher. In addition the 90% detectors function as fault detectors if the output voltage of any regulator drops below 90% of rated value, as described in e above. Both of these sensors must be inhibited during the power turn-on, since they would interfere with the power turn-on sequence. This is accomplished by the action of driver clamp Q24. When the 24 volt dc is initially applied to the 15.0 volt regulator to produce the regulated 15 volt output, the +15 volt output is applied to the emitter and base of driver clamp Q24, causing it to conduct, producing a positive voltage at its collector. This positive voltage is coupled through diodes CR20, CR16, CR11 and CR9 to the -48 volt 10% sensor (Q30), the +12 volt 10% sensor (Q28), the +4.75 volt 10% sensor (Q23), and the 90% fault sensor line to Q19. It thus blocks diodes CR19, CR15, CR10, and CR8, preventing the 10% and 90% fault sensors from operating and turning off the power supplies. At the same time that Q24 is turned on, the + 15 volts is applied to timer circuit R84 and C12. The RC time constant of this circuit is selected so that the voltage on C12 builds up to a sufficient level to turn on Q16 in approximately 1.8 seconds. Zener diode CR30 establishes the turn-on bias for Q16. When Q16 is turned on it supplies base current for Q25, turning it on. This produces a positive voltage at the base of Q24 which turns off Q24, removing the inhibiting voltage from diodes CR19, CR15. CR10 and Cr8. The 10% sensors and 90% fault sensor, Q19, are no longer inhibited, since after 1.8 seconds, all power has been turned on the fault sensors should now operate.

3-53. Voltage Regulation for + 6.2 Volt and -6.2 Volt Dc Power

Voltage regulator circuits are located on PC card 14 (fig. 8-7) to produce + 6.2 volt and -6.2 volt power for use by the receive and transmit interface circuits. The -6.2 volt power is derived from the -12 volt source by Zener diode VR4 and resistor R71. The +6.2 volt power is derived from the + 12 volt source by Zener diode VR3 in conjunction with resistor R70.

3-54. Power On Reset Control Circuits

When power is turned on to the high speed card punch, a reset signal is generated to clear various latches in logic assembly Al in preparation for a new card feed and punch cycle. The power on reset (+) POR signal is initiated by operation of AC POWER pushbutton on control panel A3. When this pushbutton is pressed, +4.5 volts and -48 volts dc is applied to the power on reset circuit consisting of resistors R32 and R34 and diode CR7 on PC card A2 (fig. 8-11). Because of the power sequencing in power supply PS1, the +4.5 volt supply is activated before the -48 volt supply. Thus, a momentary +4.5 volt level is applied to the (+) POR line.

3-55. Receive Interface Circuits

a. Data bits 1 through 8 are received from the CCU on lines (+)BIT 1 through (+)BIT (PAR). These eight lines are applied to interface receivers on PC card A13 (fig. 8-22) for conversion from the logic levels used in the cables from the CCU to the logic levels used in logic assembly Al of the high speed card punch. In the cables, logic signals switch between an active state of +6.2 volts and -6.2 volts.

The interface receivers provide an impedance match for these signals and convert them to the high speed card punch logic levels of + 4.5 volts and 0 volt.

b. The eight interface receivers are gated by inhibit driver (K). The inhibit driver provides a high (+4.5 volts) disabling voltage to the receivers unless the internal select circuit of the high speed card punch provides a low level on the (-)ISEL line. This low level indicates that the high speed card punch is ready to accept data from the CCU and causes the inhibit driver to supply a low (0-volt) level to the eight interface receivers. This permits data levels on the eight input lines to be passed.

c. The data strobe pulses from the CCU are received on the (+)IDS line to PC card A13 (fig. 8-22).

The positive input pulses switching from -6.2 volts to +6.2 volts are buffered by interface receiver (J) to result in corresponding pulses on data strobe line (+)DS which switch from 0 volts to +4.5 volts. The (+)DS pulses are also inverted by invertor Z6B to produce negative data strobe pulses on the (-)DS line.

d. The remaining interface receivers are located on PC card A14 (fig. 8-23). Receiver circuits (G) and (H) provide level shifting and inversion, converting inputs of 0 volts to outputs of +4.5 volts and open circuit inputs to outputs of 0 volts. One of the inputs is the (-) SELECT signal which is active at a low level and results in the (+) SELECT output which is high when active. The other input is the (+) NOT ASSIGNED signal which is low when the high speed card punch is assigned. This results in a high level on the output (-) NOT ASSIGNED line. The other two interface receivers on PC card A14 provide level shifting, but do not provide inversion. Instead, a +6.2-volt input level results in a +4.5-volt output, and a -6.2-volt input results in a 0-volt output.

3-56. Mode Switch Control Circuits

The operation of the mode switch control circuits is described in paragraphs 3-57 through 3-63.

3-57. Start Switch Control

a. When START switch-indicator Z5 on control panel A3 is pressed, a +4.5-volt connection is transferred from the START SW (NC) line to the START SW (NO) line thereby setting latch Z3 on PC card A17 (fig. 8-26). When the switch-indicator is released, the +4.5-volt connection is transferred back to the START SW (NC) line thereby clearing latch Z3 again. The negative step which occurs at the Z3B output when the switch-indicator is released sets flip-flop Z7. The resulting high level at the 1 output of Z7 sets latch Z12 causing the (+) RDY TO CCU line to go high. This causes the ready line to the CCU to be activated. Also, the (+) RDY TO CCU is passed through OR gates Z15B, Z14A and Z11B to clear flip-flop Z7. Thus, Z7 is cleared approximately 2 µsec after it is set and the high level at the Z7 1 output lasts for only 2 µsec. This 2 µsec pulse is also routed through OR gate Z13A to the (+) FAULT RESET line. Initiating the start mode operation removes any fault condition which may have previously been detected.

b. Flip-flop Z7 is prevented from becoming set if the high speed card punch happens to be in the local test or single feed mode when switch-indicator Z5 is released, or if the high speed card punch is already in the start mode. In the local test mode, the (+) LOCAL TEST signal is passed through OR gates Z15B, Z14A, and Z11B to keep Z7 cleared; in the single feed mode, the (+) SINGLE FEED signal is passed through OR gates Z14A and Z11B to keep Z7 cleared; in the start mode, the (+) RDY TO CCU

signal is passed through OR gates Z15B, Z14A, and Z11B to keep Z7 cleared.

c. The high speed card punch is prevented from entering the start mode if a fault condition exists. In that case, the (+) GENERAL STOP signal is passed through OR gate Z22A to keep latch Z12B cleared. If RESET switch S1 on logic assembly Al is operated at any time, the start operation is switched off by the (+) POR + LRST signal which is passed through OR gate Z22A to clear latch Z12. Normally, start operation is terminated by pressing STOP switch-indicator Z6 on control panel A3. In that case AND gate Z23A supplies a high level for routing through OR gate Z15A to clear latch Z12 only if the high speed card punch is deassigned or deselected by the CCU. However, if the high speed card punch is both assigned and selected, Z23A is unable to clear latch Z12.

3-58. Stop Switch Control

a. When STOP switch-indicator Z6 on control panel A3 is pressed, a +4.5-volt connection is transferred from the STOP SW (NO.) line to the STOP SW (NO.) line, thereby setting latch Z4 on PC card A17 (fig. 8-26). When the switch-indicator is released, the +4.5-volt connection is returned to the (+) STOP SW (NC) line thereby clearing latch Z4 again. The negative step which occurs at the Z4B output when the switch-indicator is released, sets flip-flop Z8.

b. Once flip-flop Z8 is set, the high level at the 1 output conditions AND gate Z19B. If the high speed card punch is in the local test mode, the (+) LOCAL TEST line provides a second conditioning input to Z19B. The AND gate does not become enabled, however, until the end of the card cycle when the master counter reaches count 64 during the code converter test. At that time, the (+) C64 signal enables Z19B to produce a high output which clears latch Z9 in the local test switch control circuit thereby terminating the local test mode. When the (+) C64 signal is passed, the negative step at the Z19B output is passed through OR gate Z11A to clear flip-flop Z8 thereby removing the stop command.

c. Also, once flip-flop Z8 is set, the low level at the O output conditions AND gate Z23A. If the high speed card punch is not in the local test mode, the low level on the (+) LOCAL TEST line provides a second conditioning input to Z19B. If the high speed card punch is in the start mode (ready signal being supplied to CCU) but has been deselected or deassigned by the CCU, the third input Z23A is also low. Thus, Z23A is enabled to produce a high output which is passed through OR gate Z15A to clear latch Z12 thereby terminating the start mode. This signal also clears latch Z8 thereby removing the stop mode so that the start mode can be initiated by operating start switch indicator Z5.

d. Flip-flop Z8 may also be cleared by a pulse on the (+) GENERAL RESET line to OR gate Z11A. This line is controlled by an OR gate on PC card A18 which monitors the same inputs as OR gate Z22A on PC card A16.

3-59. Stop Indicator Control

When the high speed card punch is neither in the start, local test, or single feed modes, it is considered to be in the stop mode and the red indicator in STOP switch-indicator Z6 is lighted. The three other modes are monitored by AND gate Z23B which is enabled when the (+)RDY TO CCU, (+) LOCAL TEST, and (+) SINGLE FEED lines are all low. When this happens, a high level is produced on the (+) STOP line to activate a lamp driver on PC card A20 which lights STOP switch-indicator Z5.

3-60. Local Test Switch Control

a. When LOCAL TEST switch-indicator Z1 on control panel A3 is pressed a +4.5-volt connection is transferred from the LOCAL TEST SW (NC) line to the LOCAL TEST SW (NO.) line thereby setting latch Z1 on PC card A17 (fig. 8-26). The positive step at the Z1B output is converted to a pulse by differentiator C4, R13. The pulse sets latch Z9 to the local test state so that a high level appears on the (+) LOCAL TEST line and a low level appears on the (-) LOCAL TEST line. The differentiated pulse is also routed through OR gates Z13B and Z13A to the (+) FAULT RESET line. Thus, initiating local test operation removes any fault conditions which may have been previously detected. The pulse is also passed through OR gate Z22B to the (+) ON LINE PICK line. This permits card picking by the card pick control circuit.

b. Normally to switch out of local test operation, STOP switch-indicator Z6 is pressed. This results in a high level from AND gate Z19B in the stop switch control circuit to clear latch Z9. Also, latch Z9 may be cleared by a high output from OR gate Z22A. This is generated in case of a fault condition which results in (+) GENERAL STOP signal to Z22A or in case of a power on reset or logic reset either of which results in a (+) POR + LRST signal to Z22A.

c. When LOCAL TEST switch-indicator Z7 is released, latch Z1 is returned to its original state. However, the resulting negative step at Z1B output has no effect on latch Z6 since the latch responds to a positive signal only.

d. Initiation of local test operation by LOCAL TEST switch-indicator Z7 is inhibited by a high level to the Z1B OR gate of latch Z1 if the high speed card punch is in the start mode or in the single feed mode. In the start mode, the (+) RDY TO CCU signal is passed through OR gates Z15B and Z14A to inhibit Z1. If the high speed card punch is in the single feed mode, the (+) SINGLE FEED signal is passed through OR gate Z14A to inhibit Z1. Latch Z1 is also inhibited if the high speed card punch is already in the local test mode. In that case, a (+) LOCAL TEST signal is fed through OR gates Z15B and Z14A to inhibit latch Z1.

3-61. Single Feed Switch Control

a. When SINGLE FEED switch-indicator Z4 on control panel A3 is pressed, a +4.5-volt connection is transferred from the SINGLE FEED SW (NC) line to the SINGLE FEED SW (NO.) line thereby setting latch Z2 on PC card A17 (fig. 8-26). The positive step at the Z2B output is coupled through differentiator C3, R16 to set latch Z6. Thus, a high level is placed on the (+) SINGLE FEED line and a low level is placed on the (-) SINGLE FEED line. The (+) SINGLE) FEED signal is ac coupled by differentiator C2, R12 to OR gate Z13B which activates the (+) FAULT RESET line. Thus, each time a single feed operation is initiated, previous fault conditions are removed. The Z13B output is also passed through OR gate Z22B to activate the (+) ON LINE PICK line. This permits a single card to be picked by the card pick control circuit.

b. Normally, latch Z6 remains set for only one card cycle. When count 64 is reached in the master counter during the code converter test cycle, the (+) C64 signal clears latch Z6. However, latch Z6 is also cleared by OR gate Z22A in case of a general stop (fault) condition or when RESET switch S1 on logic assembly Al is operated. At power turn-on, OR gate Z22A is also activated to clear latch Z6.

c. Initiation of a single feed operation by pressing SINGLE FEED switch-indicator Z4 may be inhibited by a high level from OR gate Z15B to latch Z2. This occurs in case the high speed card punch is in the local test mode (as indicated by the (+) LOCAL TEST line being high) or in the start mode (as indicated by the (+) READY TO CCU line being high).

3-62. Select Control

a. Selection of the high speed card punch by the CCU results in a high level on the (+) SELECT line to inverter Z20A on PC card A17 (fig. 8-26). The resulting low level at the Z20A output enables AND gate Z16A if the high speed card punch has been switched to the start mode as indicated by a low level on the (-) RDY TO CCU line. The resulting high output of Z16A enables AND gate Z19A if the (-) NOT ASSIGNED line is also high. This indicates that the assigned line from the CCU is active. The high output of Z19A indicating that the high speed card punch is ready, assigned, and selected is passed through OR gate Z22B to card pick control circuit as a (+) ON LINE PICK signal. Thus, automatic card picking is initiated for each block by the appearance of the select signal from the CCU.

b. If the high speed card punch is ready and selected, the high level at the Z16A output also sets latch Z27 to produce a high level on the (+) WRDY line. This activates a lamp driver on PC card A20 to light the white indicator in START switch-indicator Z5. Latch Z27 may be cleared, extinguishing the white indicator if any one of four conditions occurs. Three of the four conditions are monitored by OR gate Z26B which is activated at the end of a message by the (+) EOM line going high, in a cancel condition by the (+) CANCEL line going high, and at initial power-turn-on-by the (+) POR line going high. The fourth condition is a stop condition detected by AND gate Z23B. This AND gate is enabled to produce a high (+) STOP output if the high speed card punch is in the stop mode as determined by the stop indicator control circuit. In the stop mode, the (+) STOP signal keeps Z27 cleared so that the white indicator remains extinguished.

c. If the high speed card punch is in the start mode, but is not selected by the CCU so that the white indicator in START switch-indicator Z5 is not lighted, the green indicator in Z5 is lighted instead. This is controlled by AND gate Z16B which is conditioned by low levels on the (+) RDY TO CCU; (+) SELECT, and (+) WRDY lines. When these lines are all low, AND gate Z16B produces a high output on the (+) GRDY line. This activates a lamp driver on PC card A20 to light the green indicator.

3-63. Pick Start Control

The pick start control circuit activates the picker solenoid control circuit each time a new card is to be picked from the hopper in the start, local test, and single feed modes.

a. Card picking requires the formation of a negative step signal on the (-) PICK START line at the

output of OR gate Z1OA on PC card A16 (fig. 8-25). This OR gate is controlled by three AND gates. When any one of the AND gates is enabled, a high output is produced which disables OR gate Z1OA to produce a negative stop on the (-)PICK START line.

b. In the start mode, card picking is controlled by (+)ON LINE PICK, or by (+)DELAYED PICK in units equipped with motor stop assembly A5, input to AND gate Z11A. When the start mode is initiated so that a ready signal is being sent to the CCU, the (+)ON LINE PICK signal from the select control circuit on PC card A17 goes high after the CCU has assigned and selected the high speed card punch. If no error condition exists, the (+)81 DR INH line is low.

This is inverted by inverter Z12A to permit AND gate Z1lA to become enabled as soon as the last condition for the (-)ON LINE PICK signal occurs. This last condition is the selection of the high speed card punch by the CCU. The resulting positive step on the Z31A output causes a negative step on the (-)PICK START line. The (-)PICK START line remains low only until the end of the block. At that time, the high speed card punch is deselected by the CCU and the (+)ON LINE PICK signal goes low, disabling AND gate Z11A. When the CCU is ready for the next block and selects the high speed card punch, the (+)ON LINE PICK signal goes high again so that another negative step is formed at the (-)PICK START output. This process is repeated for each block.

c. For the single feed mode, and for the first card in the start mode, card picking is also controlled by AND gate Z1lA. When the single feed or local test mode is initiated by switch operation, the corresponding switch control circuits place a positive 2-usec pulse on the (+)ON LINE PICK line. This enables Z11A momentarily so that a negative step at the leading edge of the pulse appears at the (-)PICK START output.

d. For picking of subsequent cards in the local test mode, AND gate Z19A is conditioned by the high (+)LOCAL TEST signal which is passed through OR gate Z17A. Each time the card that was picked passes into the stacker, a (+)STACK PHOTO PULSE appears to enable Z19A. This causes a corresponding negative step at the (-)PICK START output.

3-63.1. Motor Stop Control Circuits

a. In high speed card punch units equipped with motor stop assembly A4, the (+)ON LINE PICK signal is applied to the motor stop control circuits on PC card A21 (fig. 8-30.1) developing a ground return path on the (+)RELAY signal which in-turn energizes the solid state relay A4K1 in the motor stop assembly (fig. 8-3.1) to allow starting of the punch mechanism drive motor. The motor stop control circuits will continue to develop the ground return path on the (+)RELAY signal for a minimum of 30 seconds and a maximum of 3 minutes after the end of a message or after the high speed card punch enters the stop mode. Thus the punch mechanism drive motor will continue to run for a period of time after the high speed card punch completes punching cards. The motor stop control circuits will also generate the (+)DELAYED PICK signal used to initiate operation of the pick start control circuit on PC card A16 (fig. 8-25). Should the (+)ON LINE PICK signal be generated when the punch drive motor is not running, the (+)DELAYED PICK signal will be developed 1.7 seconds later after the punch drive motor has reached operating speed. However, if the punch drive motor has already been started, the (+)DELAYED PICK signal is immediately generated when the (+)ON LINE PICK signal makes a negative to positive transition.

b. TQ enable the starting of the punch drive motor and the picking of the first card, the (+)ON LINE PICK signal from the pick start control circuits is applied to inverter Z3A and to the integrating circuit consisting of C4 and R6. The positive pulse from the integrating network will cause latch Z6 to set. The high output from latch Z6B is then applied to the set input of latch Z14B, enabling the active input to the RELAY DR-1 circuit. The output of the RELAY DR-1 is a ground return path applied to the motor stop assembly solid state relay A4K1 (fig. 8-3.1). The relay is then energized to provide the ac path to enable punch drive motor operation. The low level output of latch Z6A on PC card A21 is applied to AND gate Z10A which is further enabled by the low output of latch Z18B, thus a low active input is applied to timing circuit TD-1. After 1.7 seconds, the timing circuit will provide a positive step output which clears latch Z18. The high output from Z18B will now inhibit AND gate Z10A from restarting the timer TD-1 until the punch drive motor stops. The positive step output from latch Z18B is also coupled through an integrating network consisting of C8 and R19, developing a positive pulse which is gated through OR gate Z1lB, AND gate Z7A, and OR gate Z10B to develop the active (+)DELAYED PICK pulse, The (+)DELAYED PICK positive pulse is applied to the pick start control circuits on PC card A16 to allow the first card to be picked after initially starting the punch drive motor.

c. Once the punch drive motor is operating, subsequent cards will be picked by positive steps occurring on the (+)ON LINE PICK line which are gated through inverter Z3A, AND gate Z11A (now enabled by the low output from latch Z18A), OR gate Z11B, AND gate Z7A, and OR gate Z3OB.

d. Stopping of the punch drive motor will occur between 30 seconds and 3 minutes after the end of a message or after the STOP switch A3Z6 has been depressed (unless the (+)ON LINE PICK signal is generated during the delay period). Latch Z6 on PC card A21 will be cleared by the high output of OR gate Z2A. In the on-line mode, a high level pulse will be generated either by a high level on the (+)EOIM line from PC card A17 (fig. 8-26) occurring at an end of message or be a positive pulse appearing on the (+)CANP line from PC card A18 (fig. 8-27) when a message is cancelled. The other input to OR gate Z2A is the (+)STOP signal which will go high whenever the STOP switch A3Z6 on the operator's control panel is lit. The high output of OR gate Z2A will reset latch Z6 and the low output from Z6B provides an active input into timing circuit TD-2. After 30 seconds, dependent upon adjustment of timing circuit TD-2, a high output will be applied to reset latch Z14. The resulting high level from Z14B will then cut off RELAY DR-1 and the (+)RELAY signal becomes an open which inhibits the A4K1 relay in the motor stop assembly, thus stopping the punch drive motor.

e. When the MOTOR CONTROL switch A4S1 is in the CONTINUOUS RUN position, a high level will appear on the (+)MS INHIBIT line at pin D of PC card A21. The high (+)MS INHIBIT signal will hold latch Z14 in the set position enabling the RELAY DR-1 circuit to enable relay A4K1, inhibit AND gate Z7A, and enable AND gate Z7B through inverter Z3B. In this mode, the active high level (+)ON LINE PICK sigma is immediately gated through inverter Z3A, AND gate Z7B, and OR gate Z1OB to develop the (+)DELAYED PICK signal.

3-63.2. Elapsed Time Meter Circuits

a. The motor stop assembly A4 is provided with an elapsed time meter Ml and a meter drive PC cardA4A2 (fig. .8-3.1). The time meter will run and record operating time whenever the punch mechanism drive motor is running

b. When the punch drive motor is not running an open circuit condition exists at terminal E3 of meter driver PC card A4A2 (fig. 8-3.1) from the (+)RELAY line. The -48 VDC applied to the (-) terminal of the meter A4ML is coupled through the meter to terminal El of PC card A4A2 From terminal El, the -48 VDC is coupled through resistor R1 and diode CR1 to both the base and emitter of transistor Q1. Thus, Q1 is cut-off and the time meter cannot operate.

c. When a ground return path appears on the (+)RELAY signal line, a ground is applied to terminal E3 of PC card A4A2 turning on transistor Q,. Thus the -48 VDC RAT is coupled through terminal E4 of PC card A4A2, transistor Q1, and resistor R1 to the (+) terminal of the elapsed time meter M1 enabling the time meter to operate.

3-63.3. Operation of Solid State Relay A4K1
(fig. 8-3.1)

Relay A4K1 is a sealed solid state relay that functions effectively in the same manner as a normal relay however switching occurs when the 120 VAC is at the O-volt crossover point. Terminals 4 and 5 of the relay (fig. 8-3.1) are effectively the coil with -48 VDC applied to terminal 5 and a controlled ground return path applied to terminal 4. With ground present at terminal 4, the electronic circuitry will develop an enabling level when the O-volt crossover occurs to turn-on silicon controlled rectifier (SCR) CR1. With SCR CR1 turned on, an enabling level is applied to G input of triac CR2 which in-turn permits AC conduction through the Tl and T2 terminals. Upon turn off of the relay when terminal 4 becomes an open, the electronic control circuit removes the enabling level to SCR CR1. When the next negative going O-volt crossover occurs, the SCR will turn-off removing the enabling level to the G input of triac CR2 and the triac turns-off. Thus relay terminals 2 and 3 function as relay contacts. The 120 VAC RET signal applied to terminal 1 of the relay A4K1 is used as a ground reference voltage by the SCR and the electronic control circuitry.

3.64. Punch Cycle Control Circuits, Block Diagram

a. The operation of the punch cycle control circuits is synchronized to the punch mechanism shaft rotation by the alternate punch and feed pulses from punch mechanism assembly A2. These pulses are applied to a timing generator which produces a sequence of timing pulses to control the punch cycle operations. The first punch cycle of a new card is initiated by a pickup control circuit. This circuit ensures that the first punch cycle begins with the punch pulse at the 265° point of the timing unit in punch mechanism assembly A2 rather than with the feed pulse at the 850 point.

b. The timing generator supplies a pickup pulse to the pickup control circuit 100 usec after the start of each punch pulse. However, this is done only after a count enable signal is received from the motion control circuits to show that a new card is in position for punching. The first pickup pulse that is produced activates the pickup control circuit to cause the generation of a feed enable signal.

c. The data request pulses and first data request pulses for the CCU are generated by a data request generator. The appearance of the feed enable signal from the pickup control circuit permits the data request generator to produce a data request on the first data request line. Subsequent data requests are generated on the data request line.

d. Data requests are generated in pairs. The odd data request in each pair is initiated by a preset pulse from the timing generator. The preset pulse appears 114 µsec after the leading edge of the punch pulse. The data request remains active until the CCU answers with data accompanied by a data strobe. The data strobe activates the shift pulse control circuit to cause the generation of a shift pulse. This terminates the odd data request. The even data request is initiated as soon as the shift pulse is completed and is terminated on receipt of the next data strobe which causes the generation of another shift pulse.

e. To distinguish between the odd and even shift pulses in each punch cycle, the shift pulses are applied to the odd-even shift control circuit. This circuit produces alternate odd and even shift pulses on separate lines (A and B). These are used to shift the alternate odd and even characters into the punch register.

f. The 41 punch cycles in each card cycle are counted off by a master counter. The count pulses for the master counter are developed by a master count control circuit. During normal operation, the count pulses are derived from compare pulses received from the timing generator 100, µsec after the start of each punch pulse. At the end of each card cycle, a code converter test is automatically performed. For this purpose, the master counter operates as a free-running counter with the count pulse fed back on the test count line to the master count control circuit for application to the master counter count input. During local test operation, punch cycles are controlled by compare pulses from the timing generator in the same way as for normal operation. However, since no data strobe pulses are received from the CCU, the odd-even shift control circuit must generate a test shift B pulse. The test shift B pulses are also counted by the master counter so that the count advances by two for each punch cycle.

g. If the CCU wishes to cancel a message, a cancel pulse is supplied 4 µsec before the first data strobe at the beginning of a card cycle. This is detected by a cancel detector which removes the punch enable signal from the data request generator and the shift pulse control circuit. Also, a cancel pulse is supplied to the shift register to cause punching of the appropriate code in the 81st column.

h. To detect if the high speed card punch is in synchronism with the CCU, the data control line from the CCU is checked by the sync error detector for the presence of a pulse during the 80th character time. Since the 80th character time is the even character of the 40th punch cycle, it is indicated by the count 40 signal from the master counter and by the shift B pulse from odd-even shift control circuit. If an error is detected, a sync error signal is sent to the error control circuits to cause a general stop and the transmission of an alarm stop signal to the CCU.

3-65. Timing Generator

The timing generator is synchronized to the mechanical operation of punch mechanism assembly A2 by the pulses from the timing unit in A2. The timing unit is a reluctance pickup (designated A1L1 on figure 8-9) in which a feed pulse is generated at the 85-degree point in each punch mechanism shaft revolution and a punch pulse of opposite polarity is generated at the 265-degree point (fig. 3-35). Each pulse is approximately 400 µsec wide and, since the shaft revolution time is approximately 9 ms, the pulses occur at approximately 4.5-ms intervals.

a. The two lines at either side of the reluctance pickup coil are designated (+) FP (feed pulse) and { +) PP (punch pulse). Thus, positive feed pulses and negative punch pulses appear on line (+) FP and positive punch pulses and negative feed pulses appear on line (+) PP. The (+) FP and (+ PP lines are routed to PC card Al (fig. 8-10) where they are buffered and inverted by amplifier (A).

b. Each negative feed pulse on line (+) PP is inverted to a positive pulse which clears latch Z11. Alternately each negative punch pulse on line (+) FP is inverted to a positive pulse which is coupled through buffer amplifier Z12B to set latch Z11. Thus, the Z11B output is high between feed pulses and punch pulses and the Z11A output is high between punch pulses and feed pulses.

c. The positive-going transition at the Z11B output of latch Z11 which occurs at the leading edge of each punch pulse is converted into a narrow pulse (2 , µsec) by differentiator C16, R29. The positive pulse activates OR gate Z12A which functions as a single shot with capacitor C15 and resistor R30 determining a pulse width of 100µsec. The 100µsec pulse at the output of Z12A is inverted by inverter Z2B to result in a negative 100 µsec pulse. The positive and negative transitions in the pulse at Z2B output are converted to positive and negative 2-,µsec pulses by differentiator C4, R13. However, since the differentiator is referenced to ground, the negative 2,µsec pulses are from ground to a negative voltage and therefore have no effect on buffer amplifier Z7A which responds only to positive pulses.

d. The positive 2 µsec pulses produced by the differentiator at the trailing edge of the 400 µsec pulse are coupled through buffer amplifier Z10B to AND gate Z10B. This AND gate prevents the pulses from being passed until a card is in position for punching. At that time a high (+) COUNT ENABLE level conditions Z10B to pass the positive 2 µsec pulses from Z10B. Each pulse passed by Z7A is designated (+)PUP (pickup pulse) since it is used to pick up operation of the punch control circuits. Each (+)PUP pulse activates single shot Z8B which produces a positive 14 µsec output pulse. This is inverted by inverter Z6A to form a negative (-)COMPARE pulse. The (-)COMPARE pulse is used to step the master counter.

e. Each negative 14 /sec (-)COMPARE pulse is applied to differentiator C12, R21 which produces a negative 2µsec pulse at the leading edge and a positive 2 µsec pulse at the trailing edge. The positive 2 ,µsec pulse at the trailing edge of each (-)COMPARE pulse activates single shot Z4B which produces a 14 µsec positive pulse. The Z4B output pulse is designated (+)PRRA (punch register reset A) since it is used to reset the A (odd) half of the punch register in preparation for the next character. The (+)PRRA pulse is also coupled through buffer amplifier Z4A to form a (+)PRRB pulse which resets the B (even) half of the punch register.

f. To insure that the punch register is reset when power is first turned on to the high speed card punch

or when RESET pushbutton S1 on logic assembly A1 is pressed, single shot Z4B may also be activated by a (+)GENERAL RESET pulse.

g. The 14µsec (+) PRRA pulse is also applied to differentiator C14, R23. Since this differentiator is referenced to +4.5 volts dc, the positive 2-µsec pulse at the leading edge of each (+) PRRA pulse goes higher than +4.5 volts and has no effect on buffer amplifier Z3A. However, the negative 2-µsec pulse at the trailing edge of the (+) PRRA pulse switches Z3A off for the 12-µsec duration, thru B-23 and C-14. Thus, a negative (-) PRESET pulse appears at Z3A output. The (-) PRESET pulse is routed to PC card A18 to permit punching of column 81.

h. The (-) PRESET pulse is inverted by inverter Z2A to result in a positive pulse which strobes AND gate Z7B to result in a positive (+) PRESET pulse. This pulse is routed to PC card A16 to initiate the data request for the first character in the punch cycle. The (+) PRESET pulse is inhibited by a low (--! C41 signal at the end of the card cycle when the count in the master counter reaches 41. Another conditioning input to AND gate Z7B is the (+) COUNT ENABLE signal.

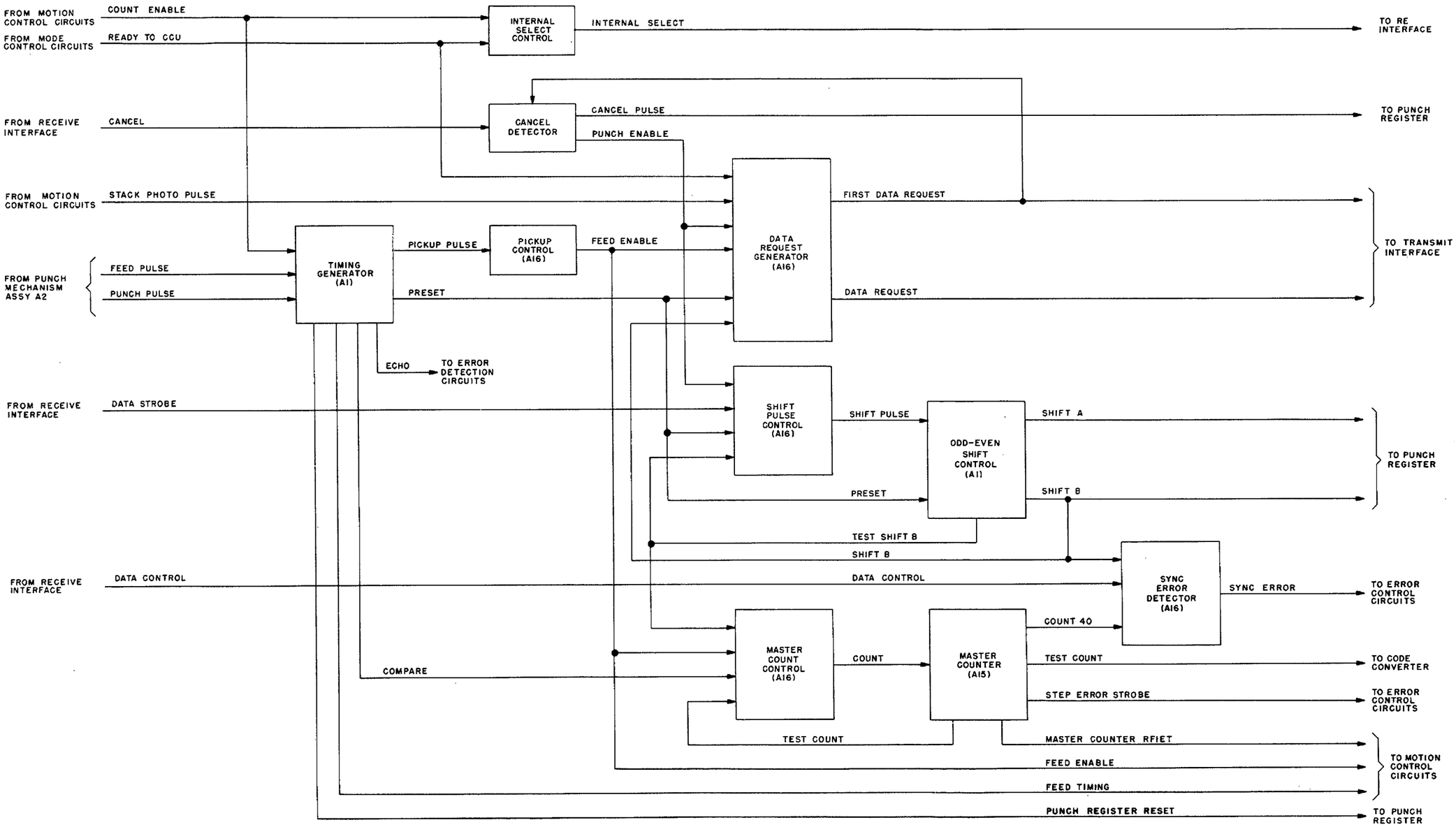


Figure 3-34. Punch cycle control circuits, block diagram.

i. Feed timing operations associated with the feed pulse are derived from the positive-going transition at the Z11A output of latch Z11 This transition is converted into a positive 2 µsec pulse by differentiator C6, R14. This pulse is coupled through buffer amplifier Z10A to feed timing line (+)FDT. The (+)FDT line is routed to PC card A19 to allow activation of the feed solenoid.

j. The positive pulses at the input to Z10A also activates single shot Z8 to result in a positive 1.9 ms output pulse. This is inverted by inverter Z6A to result in a negative 1.9 ms pulse. The positive transition at the trailing edge of the 1.9 ms pulse is converted into a 2ulsec pulse by differentiator C10, R19. The 2 µsec pulse sets latch Z9 which remains set until 428 µsec after the start of the next punch pulse when the (+)PRRA pulse clears the latch. The resulting signal at the Z9A latch output is buffered through amplifier (B) to punch inhibit line (+)PI. This is fed to the punch code solenoid drivers to inhibit punching.

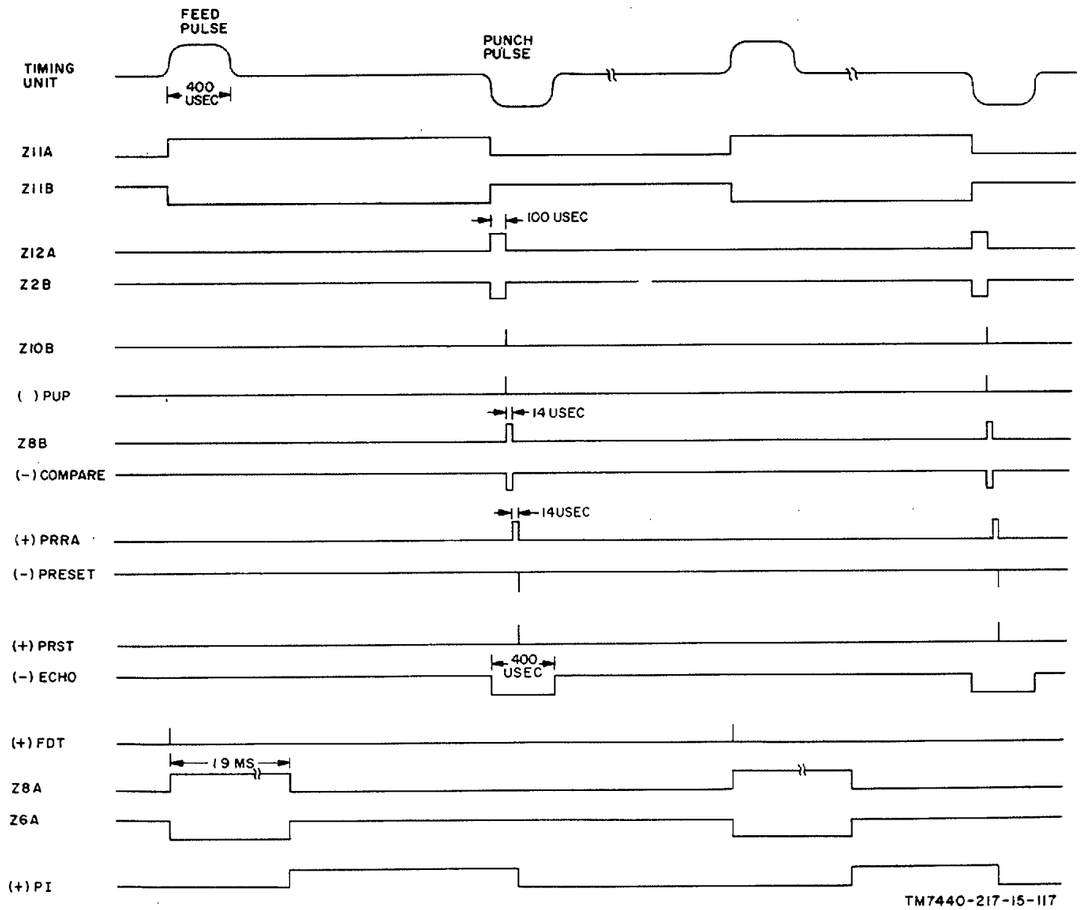


Figure 3-35. Timing generator, timing diagram.

3-66. Pick Up Control

The pick up control circuit ensures that the first punch cycle at the start of each new card begins with the punch pulse at the 265° point of the timing unit rather than with the feed pulse at the 85' point.

a. The pick up control circuits consists of latch Z1 on PC card A16 (fig. 8-25). This latch is initially cleared by the (+)GENERAL RESET signal. When a new card appears in the read station, a count enable signal is supplied to the timing generator. This allows the generation of a (+)PICK UP PULSE 100 µsec after the leading edge of each punch pulse from the timing unit.

b. The first (+)PICK UP PULSE to be generated after the count enable pulse sets latch Z1 which, results in a low level count command at the Z1B output of the latch and a high (+)FEED ENABLE level at the Z1A output of the latch. The latch remains set until the end of the card cycle when a positive pulse appears on master counter reset line (+)MCR.

3-67. Data Request Generator

The data request generator controls the generation of data request and first data request pulses to the CCU (fig. 3-36).

a. The distinction between the first data request and subsequent date requests in each block is made by latch Z9 on PC card A16 (fig. 8-25). This latch is set to the first data request state at the start of each card by the (+) FEED ENABLE signal from the pick up control circuit. The positive step at the leading edge of this signal is coupled by differentiator C1, R1 to the set input of latch Z9. When Z9 is set to the first data request state, the low level at the Z9A output conditions AND gate Z13B to generate a (+)FIRST DATA REQUEST PULSE.

b. Latch Z9 remains in the first data request state only until the first(+)SHIFT PULSE is generated in response to the first data request. The (+)SHIFT PULSE sets Z9 to the not first data request state. In this state the low level at the Z9B output conditions AND gate Z13A to generate (+)DATA REQUEST pulses. The latch remains in this state while 80 data request pulses are generated. At the end of this time, a (+)DR RESET pulse from the error detection circuits on PC card A18 sets Z9 to the first data request state again.

c. The time during each punch cycle in which data request pulses are generated is defined by latch Z20. This latch is set to the data request state by the (+)PRESET pulse (which occurs 14 µsec after the leading edge of the (+)FEED ENABLE signal in the first punch cycle). This results in a low output to condition both AND gates Z13A and Z13B. At the beginning of each punch cycle, AND gate Z13A is also conditioned by the low level at the Z9A output of latch Z9 and by a low level on the (-)READY TO CCU line if the low speed card punch is' in a ready state. Thus, AND gate Z13B becomes enabled as soon as the first (+)PRESET pulse sets latch Z20B.

d. However, the (+)FIRST DATA REQUEST pulse is terminated as soon as a (+)SHIFT PULSE is generated in response to a data strobe from the CCU. The (+)SHIFT pulse sets latch Z9 to the not first data request state thereby disabling AND gate Z13B and at the same time conditioning AND gate Z13A. However, Z13A is disabled as long as the (+)SHIFT PULSE is present. When the (+)SHIFT PULSE line goes low, AND gate Z13A becomes enabled to produce a (+)DATA REQUEST pulse.

This lasts until the next data strobe causes a shift pulse to appear on the (+)SHIFT B line. The (+) SHIFT B pulse clears latch Z20, thereby disabling Z3A and terminating the (+)DATA REQUEST pulse.

e. For subsequent punch cycles, the odd and even data request pulses are both generated by AND gate Z13A with the (+)PRESET pulse defining the start of the odd data request pulse by setting latch Z20, the (+)SHIFT B pulse defining the end of the even data request pulse by clearing Z20, and with the odd (+)SHIFT PULSE defining the separation between the odd and even data request pulses by disabling AND gate Z13.B.

f. The generation of an 81st data request pulse at the end of a card cycle is keyed not to the (+)PRESET pulse derived from the timing unit but to the motion of the card itself. When the leading edge of the card covers the stacker photocell a pulse is received on the (+)STACK PHOTO PULSE line. This is successively inverted by inverter Z8B and AND gate Z8A to set latch Z20. However, Z8A is inhibited in case of a high level on the (+)2ND ERROR line or the (+)81 DR INH line. A high level on either line represents the detection of a parity, code converter, punch, sync, or step error in the error detection circuits.

g. The termination of the 81st data request occurs on receipt of the 81st data strobe. This causes a high level on the (+)81DS from the 81st data strobe detector. The (+)81DS signal is passed through OR gate Z6B to the (+)SHIFT RESET line which clears latch Z20 and also clears odd-even shift control circuit on PC card AI to the odd state in preparation

for the first data request of the next block. However, the (+)SHIFT RESET line is also activated by the leading edge of the (+) FEED ENABLE pulse which appears at the start of each block from the pick up control circuit. In addition, the (+)SHIFT RESET line is also activated by a high level on the (+)GENERAL RESET line.

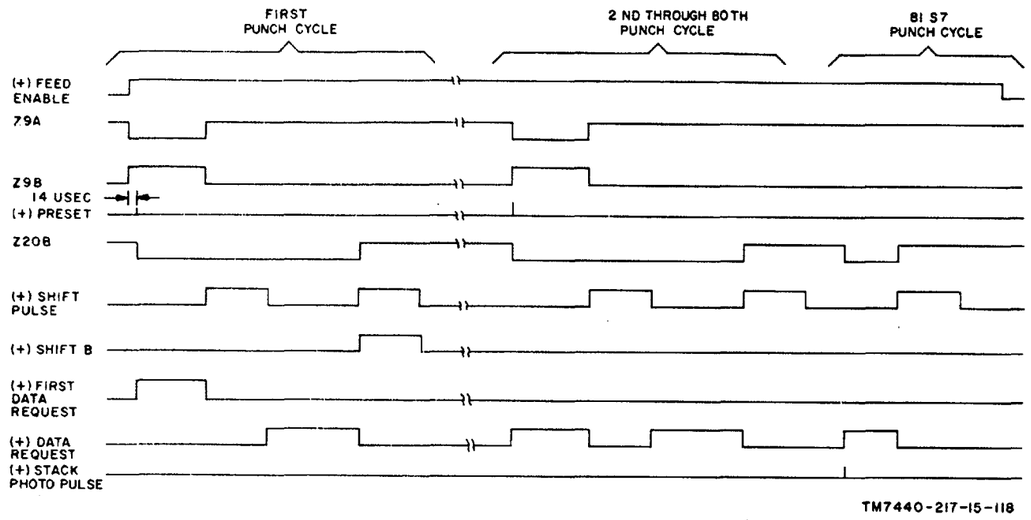


Figure 3-36. Data request generator, timing diagram.

3-68. Shift Pulse Control

Shift. pulses are controlled by OR gate Z17B on PC card A16 (fig. 8-25) which receives shift pulses from three sources, two of which are used during the local test mode.

a. For normal operation, shift pulses are derived by AND gate Z18A from data strobe pulses on line (+)DS. Each data strobe pulse enables Z18A as long as punch enable signal (+)PEN from the cancel control circuits is high. The (+)PEN signal is high only if no cancel condition exists. The positive data pulses passed by Z18A are routed through OR gate Z17B to the (+) SHIFT PULSE line.

b. During the local test mode, no data strobe pulses are received. Instead the two shift pulses each punch cycle are initiated by the preset pulse and by the test shift B pulse, respectively. The first shift pulse is generated by AND gate Z19B which is conditioned by a high level on the (+)LOCAL, TEST line during the local test mode and by a high level on the (--)C41 line as long as the master counter has not reached the 80th count in the card cycle. Thus, once each punch cycle, a (+) PRESET pulse enables Z19B and is passed through Z17B to the (+)SHIFT PULSE line.

c. The second shift pulse is controlled by AND gate Z3B which is conditioned throughout the card cycle by the (+)LOCAL TEST and (+)COUNT ENABLE lines. Thus, each 14 sec (+) TEST SHIFT B pulse produced by the odd-even shift control circuit is passed through Z3B and Z17B to the (+)SHIFT PULSE line.

3-69. Cancel Detector

A cancel command is received from the CCU as a pulse on the cancel line which appears 4 ,µsec prior to the first data strobe. This is detected by flip-flop Z1 on PC card A18 (fig. 8-27).

a. The (+)CANCEL line is applied to the gated set input of the flip-flop. At the time 4 µsec after the start of the (+) CANCEL pulse when the data strobe begins, the first data request is terminated. Thus, the (+)FDR line applied to the clock input of the flip-flop goes low. This negative transition sets the flip-flop. The resulting high level at the 1 output of the flip-flop activates OR gate Z22A disabling punch enable line (+)PEN. Since the flip-flop is not set until 4 usec after the start of the (+)CANCEL pulse, the (+)CANCEL pulse is also applied directly to OR gate Z22A to ensure that the (+)PEN line goes low immediately. This prevents generation of any additional data requests by the data request generator on PC card A16.

b. Flip-flop Z1 remains set until the end of the card cycle. At that time, AND gate Z10A becomes conditioned by a low level on line (-)C41 from the master counter. The AND gate then becomes enabled by a (-)PRESET pulse from the timing generator. This results in a negative pulse from AND gate Z10A which enables AND gate Z6B since a low level is applied to the AND gate from the 0 output of flip-flop Z1. Thus, AND gate Z6B produces a positive pulse on cancel pulse line (+)CANP. This is applied to the punch register to cause a hole to be punched in Hollerith bit 8 in the 81st column, identifying the card as a canceled card. The (+)CANP line is also fed back to the gated clear input to flip-flop Z1. Thus, when the first data strobe of the next block is received, the negative transition on the (+)FDR line clears Z1.

3-70. Master Count Control

Master counter count pulses are generated by OR gate Z6A on PC card A16 (fig. 8-25). This OR gates is activated by count pulses from any one of three sources depending on which of the three count modes is applicable: Normal operation; Code converter test operation; or Local test operation.

a. Normal Operation. In normal operation, OR gate Z6A receives a count pulse from AND gate Z2& once each punch cycle. The low level pick up command at the Z1B output of latch Z1 conditions AND gate Z2A so that the 14-µsec (-) COMPARE pulse occurring 100 µsec after the start of each punch pulse from the timing unit enables the AND gate. This results in an output (+)MC COUNT PULSE at this time once each punch cycle.

b. Test Count Operation. During the code converter test operation at the end of each punch cycle, OR gate Z6A receives a total of 64 pulses at a 40-psec period on the (+)TEST COUNT line from the test count generator. These 64 pulses are passed through to the (+)MC COUNT PULSE line.

c. Local Test Operation. During local test operation, master counter count pulses are generated in the normal way. However, an additional count pulse is derived each punch cycle from the (+)TEST SHIFT B pulse produced by the odd-even shift control circuit on PC card A1. The (+)TEST SHIFT B pulse is a 14-usec pulse following the (+)SHIFT A pulse in each punch cycle. The (+)TEST SHIFT B pulse is fed to AND gate Z3B which is conditioned during the local test mode by a high level on the (+)LOCAL TEST line. The AND gate is also conditioned by the (+)COUNT ENABLE signal to prevent operation when no card is being punched.

3-71. Master Counter

The master counter is a binary counter which counts 40 punch cycles for each card during normal operation, 80 card columns for each card during local test operation, and 64 character codes during code converter test operation.

a. The count input to the master counter on PC card A15 (fig. 8-24) is provided by master counter clock pulses on line (+)MCCP. These positive pulses are differentiated by capacitor C5 and resistor R6. The sharpened pulses are inverted by inverter Z1A to produce negative (-) CODE CONV OUTPUT SAMPLE pulses. The negative pulses are used during the test count to enable the code converter error detector to sample the combined Hollerith output of the code converter.

b. The negative pulses are also inverted by inverting Z1B to produce positive pulses each of which changes the state of flip-flop Z6. Subsequent flip-flops in the master counter are toggled by the negative change of state which occurs at the 0 output of the preceding stage when the preceding stage is set. This gives normal binary counter operation if the set state is understood to be the 0 state for the master counter flip-flops and the clear state is understood to be the 1 state. Thus, each stage changes from a 1 to a 0 or a 0 to a 1 when the previous stage changes from a 1 to a 0. Since the flip-flops are in the 0 state when set, the 1 outputs are designated (-)MC1, (-)MC2, (-)MC4, etc.

c. To insure that all flip-flops are initially in the 0 state, at the start of each card cycle, the (+)GENERAL RESET line is fed through OR gate Z4A to the set input of all flip-flops. The (+)GENERAL RESET signal is also passed through OR gate Z5A to clear test count control flip-flop Z7 and Z8.

d. During normal operation, the master counter remains at the count of 0 until the first compare pulse which is produced by the timing generator. The timing generator is enabled to produce compare pulses only after the card is in position for

punching the first two columns. From that time on, compare pulses are generated 100 usec after the start of each punch pulse from the timing unit. Each compare pulse results in a (+)MCCP pulse to step the master counter. The first compare pulse steps the master counter to 1 and at the same time sets in motion the operations which result in the storage of the first two Hollerith characters in the punch register.

e. The second compare pulse steps the master counter to the count of 2 and causes the third and fourth Hollerith characters to be stored in the punch register. Also during this count, the first two characters are punched. This process continues until count 40 is reached when the 79th and 80th characters are stored in the punch register.

f. The count of 40 is detected by decoder AND gate Z13. This AND gate is conditioned by the low level at the 1 output of flip-flop Z7. To identify the count of 40, Z13 is enabled by the (-)MC32 and (-)MC8 signals which are both low simultaneously for the first time when this count is reached. To prevent the AND gate from being enabled on the count of 41, the AND gate also monitors the 0 output of counter flip-flop Z6. This output goes high on the count of 41 when Z6 is cleared. To disable the AND gate when the (+)MCCP pulse for the next punch cycle appears, the (+)MCCP pulse is passed through OR gate Z3B to AND gate Z13. The (+)C40 output of Z13 is used on PC card A16 to check if the high speed card punch is in sync with the CCU. The (+)C40 output is also used on PC card A15 in generating the step error strobe pulse.

g. On the count of. 41 when the 81st character is entered 'into the punch register and the 79th and 80th characters are punched into the card, AND gate Z16 becomes enabled in the same way as AND gate Z13 for the count of 40. The only difference is that the (-)MC1 line at the 1 output of counter flip-flop Z6 is used in place of the 0 output. Thus, Z16 does not become enabled until the count of 41 when Z6 is cleared. The resulting high level is passed through OR gate Z10B to the (+)C41 line. This line is applied to AND gate Z14A to produce the complement on line (-)C41.

h. The negative and positive steps at the leading and trailing edges of the (-)C41 pulse are converted to negative and positive 2 µsec pulses from a 0 volt reference by differentator C8, R8. The negative 2 µsec pulse has no effect because it is referenced to 0 volts and therefore causes no change at the output of buffer amplifier Z10A. However, the positive 2 µsec pulse at the end of the 41 interval is coupled through buffer amplifier Z10A and OR gate Z4A to set the master counter back to the 0 state. The Z10A output is also fed through OR gate Z4B to activate master counter reset line (+)MCR. This line terminates the count enable signal so that no further compare pulses are produced by the timing generator. In addition, the Z10A output is applied to the clock input of flip-flop Z7 so that the flip-flop becomes set at the trailing edge of the pulse.

i. Once flip-flop Z7 is set, the high level at its 0 output conditions the gated set input to flip-flop Z8. The first negative transition in the 40 µsec square wave at the output of oscillator (A) sets Z8.. The resulting low level at the 0 output of Z8 combines with the low output of the oscillator to enable AND gate Z11A. Thus, a (+)TC test count pulse is produced. This causes the master counter clock control circuit to produce a (+)MCCP pulse to step the master counter to the count of 1 for the test count. Subsequent negative half-cycles of the oscillator output also enable Z11A so 'that the master counter is stepped once every 40 µsec.

j. When the counts of 40 and 41 are reached, AND gates Z13 and Z16 are not enabled because of the high level at the 1 output of flip-flop Z7. Thus, the count continues beyond 41 without setting the counter back to 0. When the count of 64 is reached, AND gate Z14B which monitors the (-)MC64 line is enabled. This line is conditioned by the low level at the 0 output of' flip-flop Z7. The resulting positive step at the Z14B output activates the single shot formed by OR gate Z5B, capacitor C7 and resistor R7. This single shot produces a positive 14 µsec pulse on line (+)64 which starts as soon as the count of 64 is reached. This pulse is coupled through OR gate Z5A to clear both flip-flops Z7 and A8. Thus, the (+)TC pulses are immediately disabled. Thus, the test count does not advance beyond 64. The Z5A output is also passed through OR gate Z4A to set the master counter back to the 0 state. This completes the card cycle. Other card cycles are performed in the same way when operating with the CCU.

k. When operating in the local test mode, the high level on the (+)LOCAL TEST line disables AND gates Z13 and Z16. Thus, the (+)C41 line is not activated at the count of 41, instead the count proceeds until the count of 81 is reached. At that time, AND gate Z17 which monitors (-)MC64, (-)MC16, and (-)MC1 lines is enabled. The resulting high output is passed through OR gate Z10B to activate the (+)C41 line and set the master counter to 0 in the same way as for normal operation at the count of 41. The resulting (-)C41 pulse also initiates a test count sequence in the same way as in normal operation. Also, at the count of 79, AND gate Z21 which monitors the (-)MC64, (-)MC8, (-)MC4, (-)MC2, and (-)MC1 lines is enabled. The positive output is applied to OR gate Z11B to activate the (-)STEP ERROR STROBE line to PC card A18.

3-72. Odd-Even Shift Control

The odd-even shift control circuit distinguishes between the two shift pulses generated each punch cycle to produce shift A and shift B pulses on separate lines. These pulses control shifting of the odd and even character in each punch cycle into the appropriate portion of the punch register (fig. 3-37).

a. The odd-even shift pulses are distinguished by flip-flop Z5 on PC card Al (fig. 8-10). This flip-flop is initially cleared by a (+) SHIFT RESET pulse from PC card A16 (fig. 8-25). The leading edge of the, (+) SHIFT RESET pulse activates differentiating network C5 and R15 which applies a sharp positive pulse to the clear input of flip-flop Z5. The (+) SHIFT RESET pulse is generated on a general reset at the beginning of each card cycle and by the 81st data strobe.

b. Flip-flop Z5 is set at the beginning of each punch cycle by the (+)PRESET pulse which is generated 428 µsec after the start of the 265'§ punch pulse. Once Z5 is set, a high level at its 1 output conditions AND gate Z1A. When the data request initiated by the (+)PRESET pulse is answered by a data strobe from the CCU, the shift generator supplies a (+)SHIFT pulse which enables Z1A. Thus, a (+)SHIFT A pulse which has the same shape as the (+)SHIFT pulse appears at the output of Z1A.

c. The negative-going trailing edge of the (+) SHIFT pulse clears flip-flop Z5 which disables AND gate Z1A. The high level at the 0 output of Z5 conditions AND gate Z1B so that when the next (+)SHIFT pulse is received, it enables Z1B to result in a (+) SHIFT B pulse having the same shape as the (+) SHIFT pulse. The flip-flop remains cleared until the start of the next punch cycle when the (4+ PRESET pulse appears.

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d. Both AND gates Z1A and Z1B are controlled by an AND gate formed by diodes CR4, CR5, and CR6. This AND gate normally supplies a high level to Z1A and Z1B. However, operation is disabled when no card is passing through the punch station. In that case, the low level on the (+)COUNT ENABLE line is passed through diode CR4 to disable Z1A and Z1B. Also, operation is disabled in case of a cancel condition. This results in a low level on punch enable line (+)PEN from the cancel control circuits on PC card A18 (fig. 8-27) to diode CR5. Finally, operation is disabled during the single feed mode. In this case, a low level appears on single feed line (--): F to diode CR6.

e. During local test operation, a (+)TEST SHIFT B pulse is generated to advance the master counter by an extra count once each punch count cycle. The (+)TEST SHIFT B pulse is initiated at the trailing edge of the (+)SHIFT A pulse when flip-flop Z5 is cleared. The positive step at the 0 output of Z5 is converted to a sharp positive pulse by differentiator C9, R18. The sharp positive pulse is used to fire the single shot formed by OR gate Z3B, capacitor C11, and resistor R20. The resulting positive 14 µsec pulse at the Z3B output is used as the (+)TEST SHIFT B pulse.

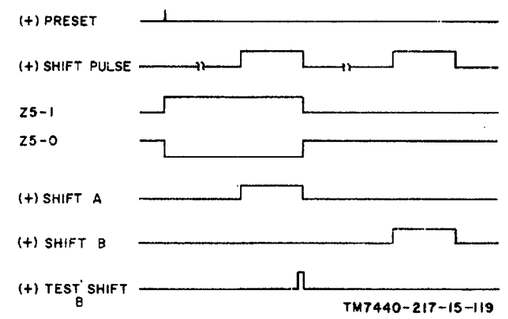


Figure 3-37. Odd-even shift control, timing diagram.

3-73. Sync Error Detector

a. To detect if the high speed card punch is in sync with the CCU, latch Z16 on PC card A16 (fig. 8-25) is initially cleared by a (+) C40 PULSE at the start of the count 40 punch cycle. During this count, the 79th and 80th characters of the block are entered into the punch register. Since the 80th character is an even character, the 80th data strobe results in a (+) SHIFT B pulse. This should be coincident with the EOB pulse on the data control line from the CCU.

b. The coincidence of high levels on the (+) SHIFT B, (+) DATA CONTROL, and (+) C40 lines enables AND gate Z4B to set latch Z16 thereby placing a high level on the (+) IN SYN line. If the count 40 in the master counter end even count in the odd-ever, shift control circuit does not occur when the 80th data strobe is received from the CCU, the (+) IN SYN line remains low until the next (+) C40 PULSE.

However, if the high speed card punch becomes unready, the (-) RDY TO CCU goes high setting latch Z16. Thus, the (+) IN SYNC line goes high without the need of synchronization with the CCU.

c. The (+) IN SYN line is routed to PC card A18 (fig. 8-27) where it conditions AND gate Z5B if an error condition exists. The AND gate is prevented from responding to a sync error condition if the card has been canceled as indicated by a high level at the 1 output of cancel flip-flop Z1. The sync error condition indicated by a low level on the (+) IN SYN line is sampled during the 41st punch cycle by a low level from AND gate Z10A. This AND gate is conditioned at the end the 41st punch cycle by the (-) C41 pulse from the master counter. The end of the punch cycle is marked by the (-) PRESET pulse from the timing generator on PC card AI. The (-) PRESET pulse strobes Z10A to result in a negative pulse which strobes AND gate Z5B.

d. When a sync error is detected, the positive pulse at the output of AND gate Z5B sets latch Z19 to result in a high level on out of sync line (+) 0 SYN. This activates a lamp driver on PC card A20 to light OUT OF SYN indicator DS7 on control panel A3. The positive pulse at the output of AND gate Z5B and the high level on the (+) OUT OF' SYN line are also fed to the error counter on PC card A18 to check for two consecutive sync errors.

3-74. Internal Select Control

Internal selection of the high speed card punch is controlled by AND gate Z3A on PC card A16 (fig. 8-25). This AND gate is conditioned by the (+) READY TO CCU signal when the high speed card punch is in a ready condition. The specific timing for the internal selection is the time duration of the (+) COUNT ENABLE signal which corresponds to the time that a card is in the punch head being punched. During this time, Z3A is enabled to produce a high (+) INTERNAL SELECT signal for PC card A12. The complement is developed by inverter Z7B which inverts the high (+) INTERNAL SELECT signal to produce a low (-) INTERNAL SELECT signal for interface receivers on PC card A13 (fig. 8-22).

3-75. CCU Data Control Principles

a. The basic ASCII code identifies 128 characters. However, the high speed card punch is limited to 64 characters which can be punched. The 128 characters of the basic ASCII code are defined by data bits 1 through 7. Data bit 8, being a parity bit is used only for parity error detection.

b. The 128 characters of the basic ASCII code may be arranged in array shown in table 3-2. This is a matrix consisting of eight columns numbered 0 through 7 and 16 rows numbered 0 through 15. The row number is specified by the binary value of data bits 1 through 4 and the column number is specified by the binary value of data bit 5 through 7 for that character. Thus, the code for the character H is 1001000 in data bits 7 through 1 respectively. The binary value for data bits 1 through 4 (1000) places this character in row 8 and the binary value for data bits 5 through 7 (100) places this character in column 4.

c. The 64 characters which can be punched by the high speed card punch fall in four columns of the basic ASCII matrix. These four columns are numbered 2, 3, 4, and 5. If a character code is received from the CCU in columns 6 or 7 (identified by the code 110 or 111 in data bits 7, 6, and 5), the character is punched as though it were in columns 4 or 5 instead of 6 or 7. This process is called fold-over. For example, if the character "a" (row 2, column 6) is received, it is converted into the character "A" (row 2, column 4) by the fold-over of column 6 into column 4. A similar technique is used to fold over column 7 into column 5. Any characters which are received from the CCU that happen to be in column 0 or 1 are considered invalid and are converted to an asterisk character (row 10, column 2).

d. The selection of a character in columns 2, 3, 4, and 5 is effectively determined by data bits 5 and 6. This is possible since the characters in each of columns 2, 3, 4, and 5 uses a different combination of data bits 5 and 6. Data bit 7 can, therefore, be disregarded with no loss to character selection. However, data bit 7 is needed to identify characters in columns 6 and 7 so that they can be folded over and to identify characters in columns 0 and 1 so that they can be marked invalid by being punched as an asterisk.

e. The CCU data control circuits receive the eight parallel data bits from the interface receivers and reduce them to six bits which may be used for code conversion to Hollerith. The operations of fold-over and conversion of invalid characters to asterisks is performed as part of this process.

3-76. CCU Data Control Circuits

The CCU data control circuits convert parallel data bits I through 7 from the interface receivers into parallel data bits 1 through 6 for the ASCII to Hollerith code converter. As part of this conversion, characters received in columns 6 and 7 of the basic ASCII matrix (table 3-2; are folded over to columns 4 and 5, and invalid characters received in columns 0 and 1 of the basic ASCII matrix are converted to asterisk.

Table 3-2. BASIC ASCII MATRIX CHART

Data bits 4	3	2	1	Row No.	Data bits 7 6 5	0 0 0	0 0 1	0 1 0	0 1 1	1 0 0	1 0 1	1 1 0	1 1 1
					Column No.	0	1	2	3	4	5	6	7
0	0	0	0	0		NULL	DLE	SP	0	@	P	`	P
0	0	0	1	1		SOH	DC1	!	1	A	Q	a	q
0	0	1	0	2		STX	DC2	"	2	B	R	b	r
0	0	1	1	3		ETX	DC3	#	3	C	S	c	s
0	1	0	0	4		EOT	DC4	$	4	D	T	d	t
0	1	0	1	5		ENQ	NAK	%	5	E	U	e	u
0	1	1	0	6		ACK	SYNC	&	6	F	V	f	v
0	1	1	1	7		BEL	ETB	'	7	G	W	g	w
1	0	0	0	8		BS	CAN	(	8	H	X	h	x
1	0	0	1	9		HT	EM	)	9	I	Y	i	y
1	0	1	0	10		LF	SS	*	:	J	Z	j	z
1	0	1	1	11		VT	ESC	+	;	K	[	k	ø{
1	1	0	0	12		FF	FS	,	<	L	\	l	|
1	1	0	1	13		CR	GS	-	=	M	]	m	ø}
1	1	1	0	14		SO	RS	.	>	N	^	n	~
1	1	1	1	15		SI	US	/	?	O	_	o	DEL

INVALID CHARACTERS — FOLDOVER CHARACTERS

a. To accomplish fold-over, data bit 6 is derived by simply inverting data bit 7. This is a valid operation, since for columns 2 through 5 of the basic ASCII matrix, data bit 6 is always the opposite of data bit 7 value as columns 4 and 5, using data bit 7 instead of 6 means that columns 6 and 7 will be treated as though they were columns 4 and 5. Thus, for both columns 6 and 7, the simulated data bit 6 value will be 0 which is identical to that for columns 4 and 5. The distinction between 6 and 7 is then the same as that between 4 and 5. In each case, the odd-numbered column is identified by a 1 for data bit 5 and the even numbered column is identified by a 0 for data bit 5. The only data bit which distinguishes between columns 4, 5 and 6, 7 is the original data bit 6'which has no direct effect on the simulated data bit 6 used for code conversion.

b. The inversion of data bit 7 to obtain data bit 6 is accomplished by AND gate Z11B on PC card A13 (fig. 8-22). This AND gate receives the data bit 7 as a high level from interface receiver (H). If the high speed card punch is operating with the CCU, the (-) ISEL signal from the internal select circuit is low providing a conditioning input to AND gate Z11B. Thus, Z11B is enabled or disabled depending on whether data bit 7 is a 0 or a 1, respectively. If data bit 7 is a 0, Z11A produces a high output on the (+) DB6 data bit 6 line.

c. AUTODIN subscriber card reader send equipment will normally transmit ASCII codes 1111011 and 1111101 to represent the plus-zero (ø) and minus-zero (Ø) characters respectively (table 3-2). ASCII codes 1011011 and 1011101 for the opening bracket ([) and closing bracket (]) are inhibited in reader equipment. When the plus-zero or minus-zero characters are received, fold-over takes place as described in the above paragraphs. As a result AND gate Z26B on PC card A1A11 (fig. 8-20) is enabled when either ASCII code 1111011 (plus-zero) or 1011011 (opening bracket) is received. In a similar manner AND gate Z27B on PC card A1A11 is enabled when the minus-zero or closing bracket characters are received. Interconnection between PC Card A1A11 and A1A9 then enables punching of 12-10 and 11-10 card codes for these characters.

3-77. Invalid Detector

a. If an invalid character in columns 0 or 1 of the ASCII matrix is received, the inversion of data bit 7 results in a 1 for data bit 6 since data bit 7 is a 0 for these two columns. This is-the correct value for data bit 6 to obtain as asterisk since the correct code for an asterisk is 0101010 in data bits 7 through 1. To ensure that data bits 1 through 5 also assume the correct states to represent an asterisk, a definite determination must be made that the received character is invalid. This determination is based on the fact that all invalid characters fall in columns 0 and 1 of the ASCII matrix and these two columns are distinguished from the others by having both data bits 6 and 7 0's.

b. Thus, invalid characters are detected by AND gate Z2B which is enabled when the outputs of both interface receivers (G) and (H) are low. The resulting high output of Z2B is applied with the high (+)DB6 line to AND gate Z4A. Thus, a high level is produced on asterisk preset line (+)ASTP. The (+)ASTP signal is fed to the code converter input circuits to force simulated 1 values for data bits 2 and 4.

c. To inhibit 1's which may be received for data bits 1, 3, and 5, the corresponding data bit lines from interface receivers (A), (C), and (E) are applied to AND gates Z14B, Z14A, and Z1A, respectively. All three AND gates are controlled by the output of AND gate Z2B after inversion by inverter Z6A. Thus, if a received character is invalid, Z6A produces a low output which inhibits AND gates Z14B, Z14A, and Z1A thereby forcing low levels on the (+)DB1, (+)DB3, and (+)DB5 lines, respectively. Otherwise Z6A produces a high output which conditions Z14B, Z14A, and Z1A so that the data bit outputs are directly controlled by the interface receivers.

3-78. Code Converter Block Diagram

(fig. 3-38)

a. Input Selection. Before converting the ASCII data to Hollerith, the six ASCII data bits must be selected from either the CCU data control circuits or the master counter. The master counter inputs are used only for the test code operation at the end of each card and for local test operation. Therefore, they are disabled by an internal select signal when a card is being punched under control of the CCU.

b. ASCII Decoding. To convert the 64 characters encoded in six ASCII data bits at the input to the code converter into the equivalent characters encoded in 12 Hollerith data bits, it is first necessary to decode each of the 64 ASCII characters. This is accomplished in two stages.

(1) First, the characters represented by the 6 ASCII data bits are converted to a two-bit octal code in which each octal digit is represented by eight-lines only one of which is activated at any time. The two-bit octal code can be represented by the 8x8 matrix shown in table 3-3. This matrix is obtained by rearranging the 64 characters in columns 2 through 5 of the basic ASCII matrix of table 3-1. However, the same principle is used. Thus, rows 0 through 7 are defined by the binary values of data bits 1, 2, and 3; and columns 0 through 7 are defined by binary values of data bits 4, 5, and 6. For example, the code for the character H is 001000 in data bits 6 through 1. Therefore, this character appears in row 0 (000 for data bits 3, 2, and 1) and column 1 (001 for data bits 6, 5, and 4).

Table 3-3. IDENTIFICATION OF CHARACTERS IN 8 X 8 ASCII MATRIX

Row No.	Bits (3, 2, 1)	Columns (Bits 6, 5, 4)							
		G00 (000)	G10 (001)	G20 (010)	G30 (011)	G40 (100)	G50 (101)	G60 (110)	G70 (111)
G000	000	@	H	P	X	SP	(	0	8
G01	001	A	I	Q	Y	!	)	1	9
G02	010	B	J	R	Z	"	*	2	:
G03	011	C	K	S	¢	#	+	3	;
G04	100	D	L	T	\	$	,	4	<
G05	101	E	M	U	¬	%	–	5	=
G06	110	F	N	V	↑	&	.	6	>
G07	111	G	O	W	←	'	/	7	?

NOTE: Encircled characters show character printed.

(2) Each of the 64 positions in the octal decode matrix is specified by a different combination of the two octal digits representing the row and column. When the ASCII code for a specific character is received it is converted to the corresponding octal code specified in table 3-2 by an ASCII to octal converter. This code is represented by 16 lines corresponding to the eight possible column values and the eight possible row values. One column line and one row line are activated for each character.

(3) The second step of ASCII to Hollerith conversion is then performed by routing the 16 lines column and row octal lines to a decoder matrix which has 64 output lines corresponding to the 64 possible characters. Each possible combination of a column and row value results in the activation of a different output line.

c. Hollerith Encoding. Once the 64 ASCII characters are decoded onto 64 separate lines, the conversion to a 12-bit Hollerith code can be performed. This is done in three stages.

(1) First the 64 characters are encoded as two octal digits represented by eight lines each. (Physically, there are seven lines. The eighth condition is the absence of the other seven). The two octal digits (designated F and G) for each character can be represented by the matrix in table 3-4. The circuit which converts the 64 separate lines to the octal row and column code defined by table 3-4 is called an encode matrix. This circuit activates a different combination of a column line and a row line for each of the 64 characters.

(2) The particular array used in the encode matrix was chosen because in it the characters are arranged in a sequence corresponding to their Hollerith codes. This can be seen in table 3-5 which is identical to table 3-4 except that the Hollerith code for each character is given instead of the character symbol.

(2) The second step in encoding the 64 characters to Hollerith code involves converting the F and G octal digits to six-bit binary form. This is accomplished by an octal to binary converter which encodes the F octal digit onto three binary lines (F1, F2, and F4) and encodes the G octal digit onto another three binary lines (G1, G2, and G4).

(3) The final conversion from six-bit binary to 12-bit Hollerith code is made by a binary to Hollerith converter. This circuit generates the specific Hollerith codes for each character in the encoder matrix as specified in table 3-5.

Rows	Columns							
	F0	F1	F2	F3	F4	F5	F6	F7
G0	SP	1	2	3	4	5	6	7
G1	8	9	:	#	@	'	=	"
G2	ø	/	S	T	U	V	W	X
G3	Y	Z	\	,	%	¬	>	?
G4	-	J	K	L	M	N	O	P
G5	Q	R	¢	$	*	)	;	^
G6	&	A	B	C	D	E	F	G
G7	H	I	↑	.	<	(	+	!

NOTE: Encircled characters show character printed.

Figure 3-38. Code converter, block diagram.

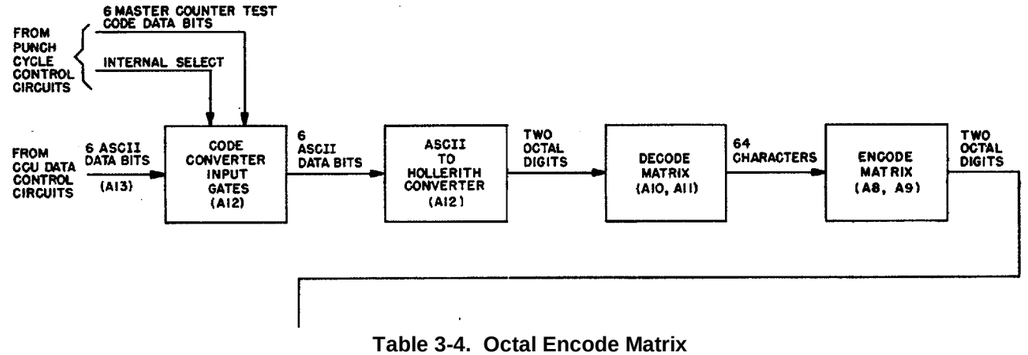


Table 3-4. Octal Encode Matrix

Table 3-5. Hollerith Encoder Matrix

Rows	Columns							
	F0	F1	F2	F3	F4	F5	F6	F7
G0	0	1	2	3	4	5	6	7
G1	8	9	8–2	8–3	8–4	8–5	8–6	8–7
G2	10	10–1	10–2	10–3	10–4	10–5	10–6	10–7
G3	10–8	10–9	10–8–2	10–8–3	10–8–4	10–8–5	10–8–6	10–8–7
G4	11	11–1	11–2	11–3	11–4	11–5	11–6	11–7
G5	11–8	11–9	11–10	11–8–3	11–8–4	11–8–5	11–8–6	11–8–7
G6	12	12–1	12–2	12–3	12–4	12–5	12–6	12–7
G7	12–8	12–9	12–10	12–8–3	12–8–4	12–8–5	12–8–6	12–8–7

3-79. Code Converter Input Gates

a. The six data bits from the CCU data control circuits are received on line (+)DB1 through (+)DB6 at a set of six OR gates on PC card A12 (fig. 8-21). These data bits are disabled by the CCU data control circuits when the high speed card punch is not operating with the CCU.

b. For test code operation and local test operation, the eight data bits are received on lines (-)MC1, (-) MC2, (-)MC4, (-) MC8, (-)MC16, and (-)MC32 from the master counter. However, since the master counter outputs are not to be used when a card is being punched under control of the CCU, the six input data bits are applied to AND gates which are all disabled when a high level appears on the (+)INTERNAL SELECT line. When the (+)INTERNAL SELECT line is low, the six data bits are inverted by the AND' gates and applied to the OR gates for use instead of the (+)DB1 through (+)DB6 lines which are then low.

c. When an invalid character is received by the CCU data control circuits, these circuits place a high level on the (+)ASTP asterisk preset line. The high level is fed to OR gates Z14A and Z6A to ensure a 1 for data bits 2 and 4 as required for an asterisk character.

3-80. ASCII to Octal Converter

The six ASCII data bits from the code converter input gates are converted to octal form by the ASCII to octal converter. One octal digit determines the row in the decode matrix and the second octal digit determines the column.

a. Before the siz ASCII data bits are converted to octal, they are applied to inverters Z17A, Z17B, Z10A, Z10B, Z15A, and Z15B on PC card A12 (fig. 8-21). Thus, the six ASCII data bits are available in complementary form. As shown in table 3-2, the row number is the binary equivalent of data bits 1, 2, and 3 and the column number is the binary equivalent of data bits 4, 5, and 6. Thus, the ASCII to octal conversion is a straight forward binary to octal conversion in which each of the two groups of binary bits is decoded onto eight lines by eight AND gates.

b. For example, when data bits 1, 2, 3 are 101, the binary value is 5. Thus, AND gate Z5A is enabled by low levels on the true function lines for data bits 1 and 3 and a low level on the not-function line for data bit 2. This AND gate is then enabled to pass a low level and all other AND gates controlling row selection are inhibited.

3-81. Decode Matrix

The decode matrix decodes the octal digits from the ASCII to octal converter onto 64 output lines representing the 64 characters specified by the 64 possible combinations of the two octal digits.

a. The matrix consists of 64 AND gates, each of which monitors a different combination of the two octal digits. The 64 AND gates are located on identical PC cards A10 and All (fig. 8-19 and 8-20). PC card All contains 32 AND gates which decode the characters in the first four columns. PC card A10 contains 32 AND gates which decode the characters in the last four columns.

b. The AND gate which receives a low row level and a low column level is enabled. The output of the AND gate is a high level representing the selected character. All other AND gates representing the remaining 63 characters are inhibited since any row-column combination can satisfy only one AND gate at a time.

c. For example, if data bits 1 through 6 are 101010 respectively, representing the character S, the ROW 3 and COLUMN 2 lines are both activated by negative pulses (table 3-2). The only AND gate which monitors both these lines is AND gate Z19B on PC card All. Thus, only that AND gate is enabled.

3-82. Encode Matrix

The encode matrix encodes the 64 characters, from the decode matrix, into two octal digits (F and G). Table 3-4 shows the F and G binary equivalents of the 64 characters.

a. The matrix consists of 64 OR gates, each of which monitors a different character. The 64 OR gates are located on identical PC cards A8 and A9 (8-17 and 8-18). PC card A8 contains 32 OR gates which encode the characters in the first four columns. PC card A9 contains 32 OR gates which encode the characters in the second four solumns.

b. In general, each of the 64 characters from the decoder matrix is routed directly to two OR gates, one of which defines the row of the output octal code, and the other of which defines the column. For example, as shown in table 3-3, the character M is defined by the intersection of row G4 and column F4. Thus, the line representing this character is routed to OR gate Z18B, on PC card AS, which controls the line representing row G4. On addition, the line representing this character is routed to OR gate Z14A which controls the line representing column F4. Those characters which fall in row G0 and column F0 are routed to only one OR gate since there are no output lines for G0 and F0. The G0 and F0 selections are identified by the remaining G or F selections being inactive.

3-83. Octal to Binary Converter

To convert octal data bits G1 through G7 from the encoder matrix to binary form, data bits G1 through G7 (001 to 111) are passed through one or more OR gates on PC card A7 (fig. 8-16) to provide the binary equivalent of each octal bit. The octal data bits are also inverted to provide binary bits in complementary form. Assigning values of 1, 2, and 4 to OR gates Z27A, Z19B, and Z19A provides binary values from 1 to 7 for octal data bits G1 through G7. For example data bit G5 (101) is passed through OR gate to Z28A to activate OR gate Z27A and is also applied directly to Z19A. The binary represented by OR gates Z27A and Z19A is 1 + 4 = 5 which is the equivalent binary value of data bit G5. The F octal-to-binary conversion is performed in the same way as the G octal-to-binary conversion differing only in the designations of the OR gates used in the circuit.

3-84. Binary to Hollerith Converter

The six binary bits in complementary form, from the G and F octal to binary converter, are converted to the Hollerith code by the binary to Hollerith converter. Binary bits G1, G2, and G4 control selection of Hollerith bits 8 through 12. Binary bits Fl, F2, and F4 control selection of Hollerith bits 1 through 7.

a. Hollerith bits 1 through 9 are controlled by 1l corresponding AND gates on PC card A7 (fig. 8-16). Each AND gate monitors a specific combination of F and G binary bits, and is enabled when the required coding, for a particular row on the card, is selected. Hollerith bits 0, 11, and 12 are each controlled by an OR gate. Each OR gate is activated when any of two or three input conditions are satisfied. This gating is based on table 3-5.

b. For example, assume it is necessary to punch Hollerith bits 12 and 4 for the character D. Control of Hollerith bit 4 is accomplished by AND gate Z17B. As shown in table III, the character D is coded by octal F4 and G6. The binary equivalent is 100 for F and 110 for G. Thus, the binary Fl, F2, and F4 lines, from the F octal to binary converter, are monitored by AND gate Z17B. When inputs are simultaneously low, the AND gate is enabled, resulting in a high output on the (+) HOLLERITH 4 line.

Similarly, the binary U2 and G4 lines, from the G octal to binary converter, are monitored by AND gate Z14B. This AND gate also monitors the output of OR gate Z18B which supplies a low input unless either AND gate Z11A and Z11B is enabled. Since the condition for neither Z11A or Z11B are satisfied, Z14B is enabled to produce a high output which activates OR gate Z18A. This results in a high level on the (+) HOLLERITH 12 line.

3-85. Punch Register

The punch register stores the Hollerith characters in pairs for simultaneous punching. The storage is provided by 24 flip-flops for the 12 Hollerith bits in each of the two characters to be stored. The 24 flip-flops are distributed equally over four identical PC cards A3, A4, A5, and A6. The odd characters are stored in A3 and A4 and the even characters are stored in A5 and A6. For each odd character, Hollerith bits 12, 11, 0, 1, 2, and 3 are stored on PC card A3 and Hollerith bits 4 through 9 are stored on PC card A4. Similarly for each even character, Hollerith bits 12, 11, 0, 1, 2, and 3 are stored on PC card A5 and Hollerith bits 4 through 9 are stored on PC card A6.

a. At the beginning of each punch cycle, the six flip-flops on each PC card (fig. 8-12 through 8-15) are cleared by punch register reset signal (+) PRR from the punch timing generator. Punch register Hollerith data bits are applied to the gated set

inputs of the six flip-flops from the ASCII to Hollerith code converter. However, the data bits are not stored until a shift pulse is received. The (+) SHIFT A pulse from the punch timing circuits is used to store the 12 Hollerith bits for each odd character in the cards A3 and A4. The (+) SHIFT B pulse is used to store the 12 Hollerith bits for each even character in PC cards A5 and A6. In each case, the negative transition of the end of the shift pulse is passed through OR gate Z1B to set phase flip-flops which receive set conditioning inputs.

b. The punch register outputs are taken from the 0 outputs of the flip-flops and fed to corresponding solenoid drivers which control the punch interposer solenoids. Thus, the interposer for each Hollerith data bit, whose register flip-flop is set, is withdrawn so that a hole is punched in the corresponding card position.

c. To control punching of a special bit in the 81st column of a card, the special control signals are applied to the direct set inputs of flip-flops Z3, Z7, and Z11 on PC card A4. These flip-flops control Hollerith bits 4, 8, and 9, respectively, Thus, a hole is punched in the corresponding Hollerith bit when the flip-flop receives a preset command. Hollerith bit 4 is punched in case of a parity or punch error, Hollerith bit 8 is punched in case of a cancel card, and Hollerith bit 9 is punched in case of a header card.

d. Punching Hollerith bit 4 in case of a parity or punch error is controlled by the punch error pulse on line (+) PEP. This pulse is generated by AND gate Z6A on PC card A18 (Fig. 8-27). A punch or parity error results in a low level at the Z20B output of latch Z20 in the error counter circuit. This low level conditions AND gate Z6A. Another conditioning input to Z6A is a low level at the 1 output of cancel flip-flop Z1 indicating that the card is not being canceled. However, AND gate Z6A is not enabled until the last punch cycle when the master counts reaches the count of 41. At that time, a low level on line (-) C41 from the master counter conditions AND gate Z10A to pass the (-) PRESET pulse from the timing generator. The resulting negative pulse at the Z10A output enables AND gate Z6A to set the Hollerith bit 4 flip-flop for column 81.

e. Similarly, punching Hollerith bit 8 in case of a canceled card is controlled by AND gate Z6B which produces a positive pulse on cancel pulse line (+) CANP if cancel flip-flop Z1 is set. Thus, the low level at the 0 output of Z1 provides a conditioning input to AND gate Z6B again, AND gate Z6B is not enabled until the time for punching column 81 when a negative pulse is received from AND gate Z10A.

f Punching Hollerith bit 9 in case of a header card is controlled by AND gate Z7A which produces a positive pulse on header card present line (+) HCPR when flip-flop Z2 is set. The header card is identified by the receipt of a start of message (SOM) pulse from the CCU on the data control line. The SOM pulse is received 4 µsec before the start of the first data strobe. This is 4 µsec before the end of the first data request. Thus, the (+) DATA CONTROL line is applied to the gated set input to flip-flop Z2 and the first data request on line (+) FDR is applied to the clock input. The negative transition on the (+) FDR line at the end of the first data request, sets the flip-flop. The 0 output of the flip-flop allows AND gate Z7A to be enabled by the negative pulse from AND gate Z10A at the time for punching column 81. Flip-flop Z2 remains set only until the first data request for the next card. At that time, the high level on the (+) FDR line conditions AND gate Z3A. This AND gate is also conditioned by the high level at the 0 output at cancel flip-flop if the card is not canceled. The third input to AND gate Z3A is the (+) PRESET pulse which causes the AND gate to produce a corresponding output pulse. This pulse is passed through OR gate Z11A to clear Z2.

3-86. Motion Control Circuits, Block Diagram
(fig. 3-39)

a. The motion control circuits operate the solenoids which control the motion of the card from the hopper to the stacker. When new card is to be picked from the hopper, a pick start command is received from the mode control switch circuits. This activates the picker solenoid control circuit which energizes the picker solenoid in mechanism assembly A2. The card is then picked from the hopper transferred to the punch station. To ensure that the picking operation is properly performed, the picker solenoid remains energized until a gate photocell (G) at the entrance to the punch station is covered by the card.

b. To allow the card to enter the punch station, the gate solenoids must be activated. This is accomplished by the gate solenoid control circuit which becomes activated when the card has been picked as indicated by the pick photocell at the hopper being uncovered by the motion of the picker arm. The gate solenoids remain energized until the card is leaving the punch station. At that time, the trailing edge of the card passes the gate photocell so that this photocell becomes uncovered.

c. Once the card has reached the registration position in the punch station, punch cycles can be initiated by the punch cycle control circuits. This is made possible by the count enable control circuit which produces a count enable signal when the gate photocell is covered and the gate is open as sensed by gate contacts which normally are open.

d. The feeding of the card through the punch station is controlled by a feed solenoid which steps the card two columns at a time at the appropriate position of the punch mechanism shift. The feed solenoid is activated at the start of a new card cycle by feed enable and feed timing signals from the punch cycle control circuits, and remains activated until the end of the card cycle, as indicated by the count 41 signal from the master counter in the punch cycle control circuits.

e. The card is removed from the ,punch station at the end of the last punch cycle by the eject solenoid. This is operated by the eject solenoid control circuit which is also activated by the count 41 signal from the punch cycle control circuits and by the feed timing signal.

f. Once a card has been ejected from the punch station, no other control is required to bring the card to the stacker. However, if the card is a canceled card, a single feed card, or if an error card, the card is offset as it is loaded into the stacker. This function is performed by the offset mechanism which is activated by the offset control circuit. The offset control circuit monitors the various signals which indicate the conditions for which the card must be offset.

g. Two types of motion failure are automatically detected. One is a pick failure which occurs if more than 200 ms is required for the card to reach the gate photocell after the picker solenoid is energized. This type of failure is sensed by the pick failure detector. The other type of failure is an eject failure which occurs if the card has not covered the stacker photocell at the entrance to the stacker within 110 ms after the eject solenoid has become activated. This type of failure is sensed by the eject failure detector.

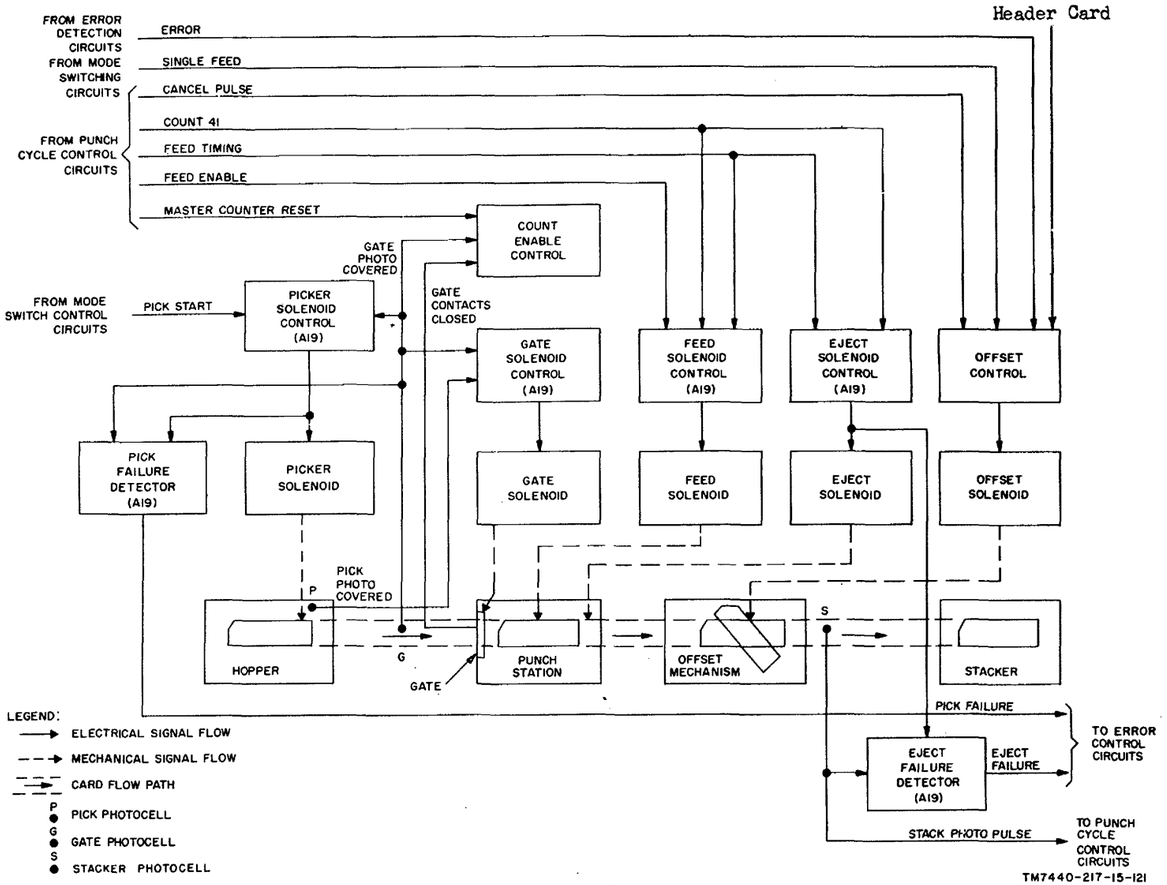


Figure 3-39. Motion control circuits, block diagram.

3-87. Photocell Amplifiers

The outputs of the photocells in punch mechanism assembly A2 are converted to logic levels by photocell amplifiers on PC card A14 (fig. 8-23). Each photocell acts as an open circuit when it is dark. When lighted, the photocell acts as a short to couple current from the +4.5-volt supply to the corresponding photocell amplifier. This results in a 0-volt output which is inverted to produce a high output for four of the five signals. For the stacker photocell, no inversion is used so that the output on the (+) STACK PHOTO COVERED line is high when the photocell is dark.

3-88. Picker Solenoid Control

The picker solenoid in punch mechanism assembly A2 is activated each time a pick start signal is received from the pick start control circuit. Normally, the solenoid remains energized until the newly picked card reaches the gate at the entrance to the punch station.

a. Each negative step on the (-) PICK START, line, sets flip-flop Z20 on PC card A19 (fig. 8-28). This results in a low level on the (-) PICK SOL line which is fed to PC card A2 (fig. 8-12) to activate solenoid driver (B). The solenoid driver grounds the (+) PSOL line to picker solenoid K1 in punch mechanism assembly A2 allowing the solenoid to be energized by -48-volt power through resistors R35 and R36 on PC card A2.

b. The picker solenoid remains energized until flip-flop Z20 on PC card A19 becomes cleared. This normally occurs when the gate photocell is covered by the newly picked card. The resulting low level on the (-) GATE COVERED line is inverted to a high level by inverter Z14B and passed through OR gate Z16B to clear flip-flop Z20.

c. However, if a malfunction prevents successful card picking, the pick failure detector circuit produces a positive pulse at the output of AND gate Z15B which is passed through OR gate Z16B to clear Z20.

d. Flip-flop Z20 is also cleared when power is first turned on to the high speed card punch or when RESET switch S1 on logic assembly A1 is operated. In either case a positive pulse appears on the (+) POR & LRST line to OR gate Z16B.

3-89. Gate Solenoid Control

The gate solenoids in punch mechanism assembly A2 are activated each time the pick photocell becomes uncovered after a card has been picked. The solenoids remain energized to keep the card track clear until the gate photocell becomes uncovered after the card has left the registration position.

a. The gate solenoids are controlled by latch Z10 on PC card A19 (fig. 8-28). This latch is initially cleared at the beginning of each card cycle by a (+) GENERAL RESET signal. When a new card is picked, the picker arm uncovers the pick photocell so that the (-) GOOD PP covered line goes high. The positive transition on this line is coupled through differentiator C8, R24 to set latch Z10B. The resulting low level on the (-) GATE SOL. line activates solenoid driver (E) on PC card A2 (fig. 8-11). The solenoid driver connects a high current ground to the (+) GSOL line, allowing current to flow from the -48-volt supply through gate solenoids A1K1 and A1K2 in punch mechanism assembly A2 (fig. 8-11).

b. The gate solenoids remain energized until the gate photocell has become uncovered. At that time, a high level on the (-) GATE COVERED line clears latch Z10, returning the (-) GATE SOL. line to a high level.

3-90. Count Enable Control

The count enable control circuit generates a count enable signal to permit the timing generator to step the master counter after a card has reached the registration position. The count enable signal lasts until 41 punch cycles have been counted in the master counter.

a. The count enable signal is controlled by latch Z5 on PC card A19 (fig. 8-28). This latch is initially cleared by a positive pulse on the (+) GEN RESET line. When a new card is picked and enters the registration gate, the gate photocell becomes covered. This results in a (-) GATE COVERED signal which is inverted to a high level by inverter Z14B. This enables AND gate Z12B if the gate is open as a result of energizing the gate solenoids. The open state of the gate is sensed by gate contacts. The contacts provide a high (+) GATE CONTACT CLOSED signal which is applied across voltage divider R19, R20 to AND gate Z12B. The positive step at the AND gate output is converted to a pulse by differentiator C7, R23. The pulse sets latch Z5 so that the (+) COUNT ENABLE line goes high.

b. The (+) COUNTER ENABLE line remains high until the master counter has reached the count of 41. At that time a (+) MCR master counter reset signal is received to clear Z5 and cause the (+) COUNT ENABLE signal to go low again. When the

next card is picked and enters the registration gate, Z5 is set again and the process is repeated.

3-91. Feed Solenoid Control
The feed solenoid in punch mechanism assembly A2 is activated at the beginning of each card cycle and remains activated until the complete card has been processed.

a. The feed solenoid is controlled by latch Z9 on PC card A19 (fig. 8-28). This latch is initially cleared by a (+) GENERAL RESET signal. When a new card is picked, the (+) FEED ENABLE line from PC card A16 (fig. 8-25) goes high at the beginning of the first punch pulse from the punch mechanism timing unit. This conditions AND gate Z1B which is also conditioned by a high level on the (-) C41 line from the master counter. The feed pulse following this first punch pulse results in a positive (+) FEED TIMING pulse from PC card Al (fig. 8-10). This enables Z1B resulting in a high output which sets latch Z9.

b. Once latch Z9 is set, the low level on the (-) FEED SOL. line is routed to PC card A2 (fig. 8-11) where it activates solenoid driver (D). The solenoid driver connects a high current ground to the (+) FSOL line, allowing current to flow from the -48volt supply through feed solenoid A1K4 in punch mechanism assembly A2.

c. The feed solenoid remains energized until the end of the card cycle. At that time, the (-) C41 line goes low, disabling AND gate Z1B. At the same time, the complement, (+) C41, conditions AND gate Z1A so that the next (+) FEED TIMING pulse enables Z1A to clear latch Z9. Thus, the feed solenoid is deenergized.

3-92. Eject Solenoid Control
The eject solenoid in punch mechanism assembly A2 is activated at the end of each card cycle to eject the card from the punch station.

a. The eject solenoid is controlled by latch Z13 on PC card A19 (fig. 8-28). This latch is initially cleared by a (+) GENERAL RESET signal. When a card cycle is complete, the gated (+) FEED TIMING pulse at the output of AND gate Z1A which clears feed control latch Z9, also sets latch Z13. The resulting low level on the (-) EJECT SOL. line activates solenoid driver (C) on PC card A2 (fig. 8-11). The solenoid driver connects a high current ground to the (+) ESOL line allowing current to flow from the -48volt supply through eject solenoid A1K3 in punch mechanism assembly A2.

b. The gated (+) FEED TIMING pulse which clears latch Z13 on PC card A19 (fig. 8-28) also activates single shot (B). Latch Z13 is set in either of two ways. When the (-) GATE COVERED line goes high due to the gate photocell being uncovered, the output of OR gate Z18B goes high, thereby setting latch Z13. Also, after 110 ms, the negative transition at the single shot output is converted to a sharp negative pulse by differentiator C6, R18. The negative pulse is inverted by inverter Z14A to produce a positive pulse which is coupled through OR gate Z18B to set latch Z13. This also deactivates the eject solenoid.

3-93. Offset Control
A command is generated to offset a card in case any one of a number of error conditions is detected as the card is being punched, in case a cancel command has been received from the CCU, in case the card is being processed in the single feed mode, or in case the card is the first card of a message.

a. The conditions for initiating offset are monitored by offset enable latch Z16 on PC card A18 (fig. 8-27). This latch is set by a positive pulse from OR gate Z9A if any of the general stop error conditions occurs. The latch is also set by OR gate Z10B if the card is canceled as indicated by a positive pulse on cancel pulse line (+) CANP, if the card is being processed in the single feed mode as indicated by a high level on the (+) SINGLE FEED line, or if the card being punched is the first in a message as indicated by a high level on header card present line (+) HCPR.

b. When latch Z16 is set, a high level is produced on the (+) OFFSET ENABLE line to AND gate Z19B on PC card A19 (fig. 8-28). This gate becomes enabled by a high level from latch Z13 when the card is ejected from the punch station. When AND gate Z19B is enabled, the positive step output triggers single shot (C) to result in a (-) OFFSET SOL pulse which activates solenoid driver (A) on PC card A2 (fig. 8-11). The solenoid driver provides a high current ground return to energize the offset solenoid in punch mechanism assembly A2. Current for the solenoid is provided from the -48 volt supply through resistors R37 and R38.

c. Latch Z16 on PC card A18 (fig. 8-27) remains set until a reset command is received from OR gate Z11A in the error detection circuits. Normally, this occurs when the first data request is generated for the next card.

3-94. Pick Fail Detector
A pick failure is indicated if more than 200 ms is required for the card to reach the gate photocell after the picker solenoid is energized. Energizing of the picker solenoid is indicated by the positive step which appears at the 1 output of flip-flop Z20 on PC card A19 (fig. 8-28) when the picker solenoid is energized. This positive step is coupled through capacitor C9 to fire single shot (A). The resulting positive 200-ms pulse is coupled through capacitor C12 to AND gate Z15B. Thus, the AND gate cannot be enabled until the 200-ms interval has expired. At the end of this interval, if the high speed card punch is not in a stop condition and the gate photocell is still not covered, the AND gate is enabled. The absence of a stop condition in the high speed card punch is indicated by a low level on the (+) STOP line. The (+) STOP line goes high only if the high speed card punch is neither in the start, local test, or single feed mode. When the gate photocell becomes covered, the (-) GATE COVERED line to inverter Z14B goes low. The resulting high output disables AND gate Z15B. If AND gate Z15B is not disabled when the 200-ms interval expires, the high output clears latch Z6 to cause a high (+) MOTION FAIL signal.

3-95. Eject Fail Detector An eject failure is indicated if the card has not passed the stacker photocell within 110 ms after the eject solenoid has become activated.

a. The time 110 ms after the eject solenoid has become activated is marked by a positive pulse which is produced at the output of inverter Z14A on PC card A19 (fig. 8-28) to set eject solenoid control latch Z13. The positive pulse enables AND gate Z19A to clear latch Z6 if the other input to Z19A controlled by OR gate Z18A is high. This occurs only if an eject failure exists.

b. To prevent an eject failure, the stacker photocell must have been covered by the card leaving the punch station and then become uncovered as the card enters the stacker. When the stacker photocell is covered, a high level on the (+) STACK PHOTO COVERED line clear latch Z17. This latch is set at the end of the card cycle just prior to ejection by the (+) C41 pulse from the master counter. When the (+) STACK PHOTO COVERED line goes high, Z17 supplies a low level to OR gate Z18A.

c. If the stacker photocell has become uncovered again by the time AND gate Z19A is sampled, the other input to OR gate Z18A is also low and the OR gate produces a low output which disables AND gate Z19A. However, if the stacker photocell has not become uncovered in time, the high (+) STACK PHOTO COVERED signal is passed through OR gate Z18 to allow AND gate Z19A to become enabled. The high output of Z19A sets latch Z6 which produces a high (+) MOTION FAIL. Alternately, if the stacker photocell is uncovered at the time of sampling but was not covered at any time since the end of the card cycle, latch Z17 supplies a high level which is coupled through OR gate Z18A to condition AND gate Z19A.

3-96. Parity Error Detector
The parity error detector checks the parity of the eight parallel data bits received from the CCU for each character. If sum of all eight data bits is even, a parity error signal is generated.

a. To check the parity of the eight data bits for each character, the data bits are grouped in pairs and applied from the data receivers to four parity detectors on PC card A13 (fig. 8-22). Each of the four parity detectors consists of two AND gates and an OR gate as shown in table 3-6.

Table 3-6. PARITY DETECTOR COMPONENTS

Data Bits	Parity Detector		
1 and 2	Z5A	Z10B	Z15B
3 and 4	Z5B	Z10A	Z15A
5 and 8	Z2A	Z7B	Z12B
6 and 7	Z2B	Z7A	Z12A

b. The parity detector for bits 1 and 2 is typical of the others. In this parity detector, AND gate Z5A detects if data bit lines (+) DB1 and (+) DB2 are both low, that is, if data bits 1 and 2 are both 0's. Similarly, AND gate Z10B detects if data bit lines (+) DB1 and (+) DB2 are both high, that is, if data bits 1 and 2 are both I's. If the sum of the two data bits is even (both I's or both 0's), AND gate Z5A or Z10B is enabled to produce a high output which activates OR gate Z15B. This results in a low output from Z15B if the sum of the two data bits is even. However, if the sum is odd (one a 0 and the other is a 1), neither AND gate Z5A nor Z10B is enabled and OR date Z15B produces a high output.

c. The outputs of the two parity detectors associated with data bits 1 through 4 are fed to another parity detector formed by AND gates Z13B and Z8A and OR gate Z3A. This parity detector operates in the same way as the others. Thus, if the sum of data bits 1 and 2 is even and the sum of data bits 3 and 4 is also even, ANID gate Z13B is enabled and a low output is

produced by OR gate Z3A. This indicates that the sum of bits 1 through 4 is even. Similarly, if the sum of data bits 1 and 2 is odd and the sum of data bits 3 and 4 is also odd, AND gate Z8A is enabled and a low output is produced by OR gate Z3A. This again indicates that the sum of data bits 1 through 4 is even. However, if the sum of data bits 1 and 2 is odd but the sum of data bits 3 and 4 is even or vice-versa, neither Z13B nor Z8A is enabled, and a high output is produced by OR gate Z3A. This indicates that the sum of data bits 1 through 4 is odd.

d. The outputs of the two parity detectors associated with data bits 5 through 8 are applied to a parity detector consisting of AND gates Z13A, Z8B, and OR gate Z3B. This parity detector operates in a manner similar to that described for data bits 1 through 4 so that a high output is produced by OR gate Z3B only if the sum of data bits 5 through 8 is odd.

e. The parity, indications produced by OR gates Z3A and Z3B for data bits 1 through 4 and 5 through 8, respectively, are applied to a final parity detector formed by AND gates Z9B, Z4B, and OR gate Z9A. If the parity indications produced by Z3A and Z3B are the same (both high or both low), AND gate Z9B or Z4B is enabled and OR gate Z9A produces a low output. This indicates that the sum of data bits 1 through 8 is even and that a parity error exists. If the sum is odd, neither Z9B nor Z4B is enabled and a high output is produced by Z9A.

f The state of the output of OR gate Z9A is meaningful only when data bits are present at the input lines. Therefore, this output is applied to AND gate Z11A which is sampled in the middle of the data bit time for each character by a negative pulse on the (-) DS line from the data strobe receiver. If a parity error exists, Z11A is enabled and a positive pulse is placed on parity error line (+) PAE.

g. The (+) PAE pulse is routed to PC card A18 (fig. 8-27) where it sets latch Z14. This results in a high level on parity error line (+) PARA. The (+) PARA level activates a lamp driver on PC card A20 (fig. 8-29) which lights PARITY ERROR indicator DS5 on control panel A3. The (+) PAE is also fed to the error counter on PC card A18 (fig. 8-27) to check for two consecutive parity errors.

3-97. Echo Comparator

The echo comparator compares each Hollerith bit at the output of the punch register with the corresponding bit sensed by the echo contacts in punch mechanism assembly A2. Comparison is performed by 24 comparator circuits corresponding to the 24 Hollerith bits stored in the punch register. The 24 comparator circuits are located on PC cards A3 through A6 together with the corresponding punch register flip-flops.

a. The operation of the comparator circuit for punch register flip-flop Z3 on PC card A3 (fig. 8-12) is typical of the others. The comparator circuit is formed by AND gates Z4B, Z6A, and OR gate Z2B. The 0 output of flip-flop Z3 is applied to both AND gates so that if the flip-flop is set, Z6A is conditioned by a low level and if the flip-flop is cleared, Z4B is conditioned by a high level.

b. The echo signal for flip-flop Z3 is (+} PEC12A (punch echo contact for bit 12 column A). This signal, (+) PEC12A, is returned through the normally closed echo contacts to the -4.7 volt source generated on PC card Al (fig. 8-10). When the echo contacts are closed the -4.7 volt potential charges C1 to 4.7 volts through R32, R1 to the +4.5 volt source. When the contacts are closed indicating that no hole is punched and flip-flop Z3 is in the cleared condition both AND gates, Z4B and Z6A, are disabled. When the echo contacts open, indicating a hole is punched, the +4.5 volt source is reflected to the inputs of AND gate Z4B and Z6A. If Z3 is in the set condition, both AND gates again will be disabled. Either case represents a no error condition and OR gate Z2B or OR gate Z1A will produce a low level out on the punch error A line, (+) PEA 1. Any condition other than the above two conditions will generate an error condition and result in a high level being fed through OR gate Z2B to extended OR gate Z1A to the punch error control circuits.

c. The other comparators operate in the same manner. In each case, an error results in a high output on punch error line (+) PEA1 from PC card A3 or the corresponding line line from PC card A4, A5, or A6. The four punch error lines are combined in AND gate Z4A on PC card A18 (fig. 8-27). AN'D gate Z4A (fig. 8-27) is enabled only if no punch error exists. The high level pulse from Z4A resets latch Z14 or Z17 on PC card A21 (fig. 8-30.1)This latch becomes set every 9 MS by the (+) 265 pulse. Therefore, if a punch error exists, Z4A, (fig. 8-27) is disabled and produces a low output which does not reset latch Z14, resulting in a low level on the (+) GOOD ECHO line. This low level conditions AND gate Z7B on PC card A18 (fig. 8-27). The AND gate is strobed once each punch cycle by the (-) COMPARE pulse from the tinting generator on PC card A1 (fig,.8-10), If a punch error exists when Z7B is strobed, a positive punch error pulse is produced.

d. The punch error pulse sets latch Z18 to result in a high level on compare error line (+) COME. This activates a lamp driver on PC card A20 (fig. 8-29) which lights PUNCH ERROR indicator DS4 on control panel A3. The positive pulse at the output of Z7B is also fed to the error counter circuits to check for two consecutive errors.

3-98. Code Converter Error Detector

The code converter error detector checks the operation of the code converter during test code operation at the end of each card cycle. To check the coding of the 64 test Hollerith characters generated by the code converter during the test code cycle, the 12 Hollerith bits are divided into four groups. A summation is then made of data bits occurring for all 64 characters in each of the four Hollerith groups. Since 64 characters are known, the sum of data bits in each of the four Hollerith data groups is known. The sum of data bits in each group is divided by three and then checked. If the sum of data bits is incorrect for any of the four Hollerith groups, a code converter error is presumed to exist.

a. To provide a basis for test code summation, the 12 Hollerith data bits at the output of the code converter are combined in four groups by OR gates on PC card A7 (fig. 8-16). Each of the four OR gates (Z1A, Z5B, Z2A, and Z2B) monitor two or more of the 12 Hollerith data bit lines. Thus, each character results in one or more of the OR gates being activated depending on which Hollerith data bits were activated for that character.

b. The four Hollerith group signals are fed to PC card A12 (fig. 8-21) where they are passed through AND gates Z19A, Z19B, Z20A, and Z20B when a negative pulse is received on (-) CODE CONVERTER OUTPUT SAMPLE line. This occurs once for each of the 64 characters in the test code sequence. During the sample time for each character, each of the four AND gates receiving a low level on the Hollerith group line which it is monitoring, is enabled to produce a positive output pulse corresponding to the (-j CODE CONVERTER OUTPUT SAMPLE pulse.

c. The pulses produced by each of the four Hollerith groups AND gates are counted by a divide by 3 counter. For example, the pulses produced by AND gate Z19B are counted by the counter consisting of flip-flops Z26 and Z22. Before operation is begun flip-flop Z26 is set and flip-flop Z22 is cleared by the (+) MC RESET signal from the master counter. Thus, the initial count preset into the counter is as follows:

Z26	Z22
1	0

d. Both flip-flops Z26 and Z22 are clocked by each negative transition at the output of AND gate Z19B. The first transition clears Z26 which is conditioned by the clear state of Z22 and sets Z22 which is conditioned by the set state of Z26. Thus, the count in the counter following the first negative clock transition is as follows:

Z26	Z22
0	1

The second clock transition is unable to set Z26 which is conditioned by the clear state of Z22. However, this clock transition does clear Z22 which is conditioned by the clear state of Z26. Thus, the count in the counter following the second clock transition is as follows:

Z26	Z22
0	0

e. The third clock transition is able to set Z26 only since this is conditioned by the clear state of Z22. However, Z22 remains cleared because setting of Z22 is conditioned by the set state of Z26. Thus, the count in the counter following the third clock transition is as follows:

Z26	Z22
1	0

f This is identical to the original state of the counter. Thus, the counter is recycled every three counts. The counters for the other three Hollerith groups operate in a similar manner. The only difference is in the particular code in which each counter is preset. This depends on the number of pulses expected for each Hollerith group during the entire 64 character sequence. The preset code is chosen so that after each counter receives its expected number of counts the second stage of the counter will be set. The state of the second stage of each of the four counters is monitored by AND gate Z18A which is enabled when low levels are present at the output of flip-flops Z21, Z22, Z23, and Z24. The results in a high output on the (+) CC TEST line indicates satisfactory completion of a code converter test. If an error exists, one or more of the counters will fail to end up in the right state and the (+) CC TEST line will remain low at the end of the test.

g. the (+) CODE CONVERTER TEST line is routed to PC card A15 (fig. 8-24) where it conditions AND gate Z2A if an error condition exists. The AND gate is strobed at the end of the 64-count conversion test by the (-) C64 line from the master

counter. If an error condition exists, AND gate Z2A produces a positive pulse on the (+) CCE line which is routed to PC card A18 (fig. 8-27). In PC card A18, the (+) CCE pulse sets latch Z15 to result in a high level on code converter error line (+) CCE. This line activates a lamp driver on PC card A20 to light CODE CONV ERROR indicator DS2 on control panel A3. The (+) CCE pulse and level are also fed to the error counter circuit on PC card A18 to check for the occurrence of two successive code converter errors.

3-99. Error Control Circuits, Block Diagram (fig. 3-40).

a. Five types of error result in a general stop and an alarm stop after the second successive card in which an error occurred enters the stacker. These five types include a parity error detector detected by the parity error detector, code converter error detected by the code converter error detector, a punch error detected by the echo comparator and a sync error detected by the punch cycle control circuits. The fifth type of error is a step error which is detected by the card length deck circuit. This circuit checks the step signal which is produced by card mechanism assembly A2 when the card is in the position to have columns 77 and 78 punched. These columns are marked by a step error strobe signal from the punch cycle control circuits. If the signals do not coincide, a step error exists.

b. The five types of error signals are applied to an error counter which is automatically reset to the count of 0 during any card cycle in which no error is detected. However, if errors occur in two successive card cycles, the general stop control circuit is activated. The general stop signal removes the start condition in the mode switch control circuits and also causes an alarm stop signal to be sent to the CCU by the transmit interface circuits.

c. A general stop and alarm condition also is produced after a card in which a card alarm condition has occurred enters the stacker. The card alarm conditions are a hopper empty or stacker full. These conditions are sensed by a card alarm circuit.

d. If a hopper low or chad full condition occurs, the operator alarm detector is activated to produce an operator alarm signal for the CCU. The chad full condition causes a general stop when the message is completed, except in the local test mode, in which case, the general stop is caused immediately.

e. If either type of motion failure occurs (pick failure or eject failure), the motion failure detection produces a motion failure which causes a general stop immediately.

f In case of a card alarm, chad alarm or motion failure, the start inhibit control circuit produces a start inhibit signal. This is routed to the mode switch control circuit to prevent the initiation of the start mode.

3-100. Step Error Switch Check Circuit

a. In normal operation, the step error switch becomes closed only during the time interval that the card is in position for punching columns 77 and 78. The closing of the switch provides a -48 volt level on the (-) STEP SWITCH line resulting in a low level input to AND gate Z4A on PC card A21 (fig. 8-30.1) The other input to gate Z4A is conditioned by flip-flop Z8.The output of Z8 becomes low on every (+) COUNT ENABLE and high on the (-) STEP ERROR STROBE. The 1-1 STEP ERROR STROBE pulse occurs approximately 4.5 MS after the ( ) FDT pulse and is approximately centered within the (-) STEP SWITCH pulse. The closing of the switch contacts enable AND gate Z4A resulting in a high level output of Z12 latch. This high level output pulse lasts only until the latch is reset by the (+) FDT pulse 9 MS later. The high level from Z12A. becomes inverted by inverter Z16B and the trailing edge differentiated by C3 and R5. The resulting high level pulse becomes inverted by inverter Z16B and applied as a low level pulse to the input of AND gate Z19A. The other input to AND gate Z4A is high due to the (-) STEP ERROR STROBE occurring approximately 4.5 MS previously. The output of the AND gate is inhibited and no step error occurs. The output of Z12 latch is also applied to AND gate Z15A, since its output is high the AND gate is inhibited and no strp error occurs. No step error occurs provided that the step error switch closes, even momentarily, during the time interval that columns 77 and 78 are being punched. However, if the switch does not close. the output of latch Z15A remains low enabling AND gate Z15A with the (-) STEP ERROR STROBE pulse which results in a low pulse on the (-) STEP ERROR line. Also if the switch closes at any' time prior to punching columns 77 and 78, a (-) STEP ERROR pulse is generated due to the enabling of AND gate Z19A.

b. Any low level pulse generated on the (-) STEP ERROR line in inverted by inverter Z5A on PC card A18 (fig. 8-27), and results in the setting of latch Z13 and also the enabling of the error counter circuits to check for two consecutive errors.

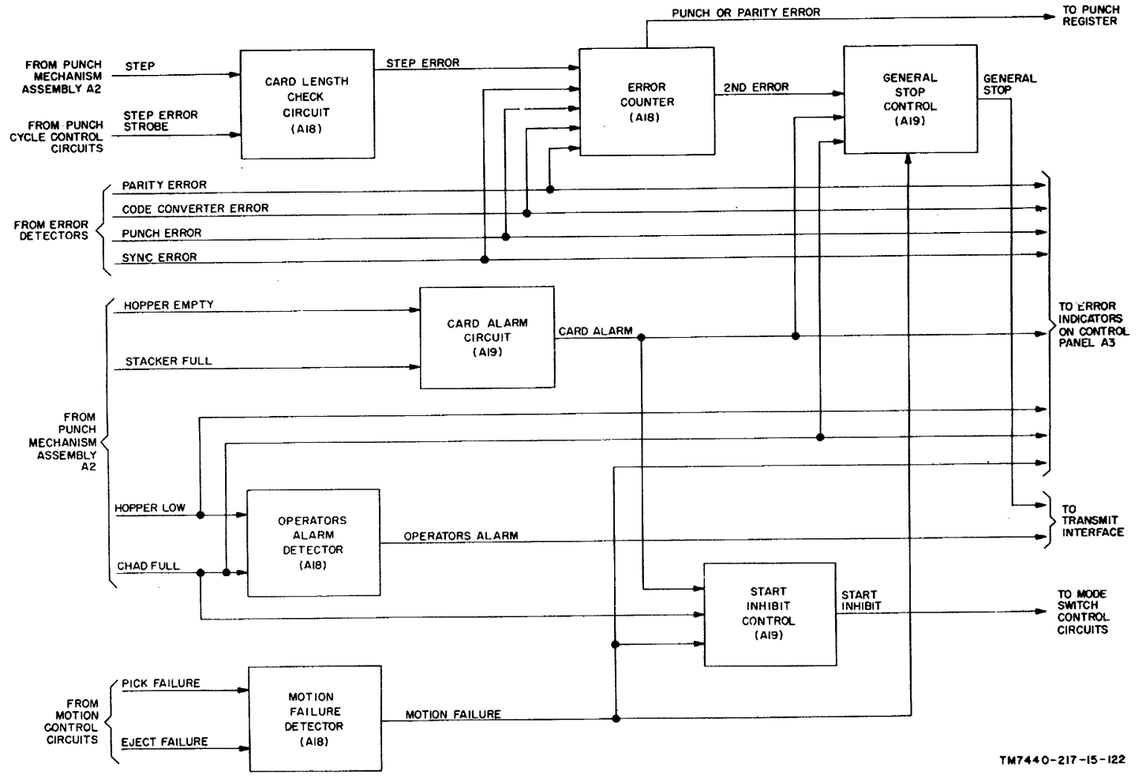


Figure 3-40. Error control circuits, clock diagram.

The output of latch Z13 also provides a high level on the (+) STEP ERROR line which activates lamp driver Z3 on PC card A20 (fig. 8-29).

3-101. Error Counter

The error counter checks for the occurrence of a step error, punch error, parity error, code converter error, or sync error in two successive cards.

a. The first occurrence of each of the error types is monitored by OR gate Z23A on PC card A18 (fig. 8-27). A step error is indicated by a high level on the (+) STEP line. A punch error or a parity error is indicated by a high level at the output of latch Z20. This latch is set by a positive pulse from AND gate Z7B in case of a punch (echo contact compare) error and by a positive pulse on line (+) PAE in case of a parity error. A code converter error is indicated by a high level on code converter error line (+) CCE and a sync error is indicated by a high level on out of sync line (+) SYN.

b. Whenever any of the error conditions occurs OR gate Z23A is activated to produce a low level which conditions AND gate Z22B. This AND gate does not become enabled until master count 64 at the end of the test code sequence following the last punch cycle. At that time a pulse is received on the (-) C64 line. The AND gate is also conditioned by a low level at the 1 output of flip-flop Z21. Thus, if the flip-flop is cleared, Z22B produces a positive output pulse at the end of which the flip-flop becomes set. This registers the occurrence of the first error.

c. The second error is detected by OR gates Z9A and Z9B which monitor pulse signals instead of levels from the various individual error circuits. An output is produced at the output of Z9A only at the time the error is detected. This pulse is applied to AND gate Z3B which passes the pulse only if flip-flop Z21 is set indicating that one error has been detected. Thus, the detection of the second error results in a positive output pulse from AND gate Z3B to set latch Z27. This results in a high level on the (+) 2nd ERROR line to PC card A19 where an alarm stop is generated.

d. If a second error does not occur in the card cycle following the first, flip-flop Z21 is cleared by the (+) DR RESET pulse. This pulse is produced at the end of each card cycle when the 81st data strobe is received from the CCU. Thus, the next error sets flip-flop Z21 so that another check can be made for an error in the following card cycle.

e. On the occurrence of the first error, the positive pulse at the Z22B output sets latch Z26. The latch places a high level on the (+) 81 DR INH line which is routed to PC card A16 to prevent the generation of the 81st data request at the end of the block to the CCU. This causes the card to be canceled.

3-102. Card Alarm Detector

A card alarm condition exists when either the hopper is empty or the stacker is full. A hopper empty condition is detected by the hopper empty photocell and results in a high level on the (+) HOPPER EMPTY line to OR gate Z8B or PC card A19 (fig. 8-28). Similarly, a stacker full is detected by the stacker full sensing switch and results in a +4.5 volt connection from punch mechanism assembly A2. In either case, OR gate Z8B is activated and places a high level on the (+) CARD ALARM line. This high level activates a lamp driver on PC card A20 which lights CARD ALARM indicator DS8 on control panel A3.

3-103. Operator Alarm Detector

a. An operator alarm condition exists when either the hopper is low or the chad bag is full. A hopper low condition is detected by the hopper low photocell in punch mechanism assembly A2 and results in a high level on the (+) HOPPER LOW line to OR gate Z15A on PC card A19 (fig. 8-28). Similarly, a chad bag full condition is sensed by a sensing switch and results in a ground connection on the (-) CHAD FULL line. This is inverted by inverter Z11B to result in a high level on the (+) CHAD LAMP line to OR gate Z15A.

b. Visual indication of a hopper low condition is provided by HOPPER LOW indicator DS10 on control panel A3. Similarly, visual indication of a chad bag full condition is provided by CHAD ALARM indicator DS9. These indicators are lighted by lamp drivers on PC card A20 when the (+) HOPPER LOW and (+) CHAD LAMP lines go low.

3-104. Start Inhibit Control

A start inhibit signal is generated in case of either a card alarm, chad alarm, or motion failure. These conditions are monitored by OR gate Z8A on PC card A19 (fig. 8-28). This OR gate is activated to produce a high (,) START INH output if either the (+) CARD ALARM line goes high, the (+) CHAD LAMP line goes high, or the output of AND gate Z12A goes high. One input to AND gate Z12A is the (+) MOTION FAIL line which prevents AND gate Z12A from becoming enabled unless a motion failure has occurred. Another condition for enabling AND gate Z12A is provided by OR gate Z16A which is activated only if a card is at either the entrance to the gate or to the stacker. At the entrance to gate, the low level on the (-) GATE COVERED line is inverted by Inverter Z14B to result in a high level which is applied to OR gate Z16A. Similarly, at the entrance to the stacker, a high level on the (+) STACK PHOTO COVERED line is applied to OR gate Z8B.

3-105. General Stop Control

The general stop control circuit causes a general stop of high speed card punch operation immediately on detection of a card motion failure (pick or eject failure). In case of a card alarm (hopper empty or stacker full) or a second successive card with a parity error, code converter error, punch (echo) error, sync error, or step (card length check) error, the general stop is produced only after the card has entered the stacker. In case of a chad full condition, the general stop is produced only at the end of the message except during the local test mode in which case the general stop is caused immediately. A general stop is also caused during the local test mode, by a single occurrence of any one of the error conditions which normally requires two successive failures for a general stop. The conditions causing a general stop are assembled by OR gate Z1A on PC card A21 (fig. 8-30). One input to OR gate Z1A is provided by AND gate Z5A, which becomes activated by (+) SELECT, (-) RDY TO CCU and inverted (+) STACK FULL. The other input to OR gate Z1A is provided by the (+) FAULT STOP line which is generated by OR gate Z7A on PC card A19 (fig. 8-28).

a. One input to OR gate Z7A is provided by OR gate Z7B which is activated by AND gate Z15B in case of a pick failure and by AND gate Z19A in case of an eject failure. The third input to Z7B is provided by AND gate Z3B which is enabled only when the (+) STACK PHOTO PULSE is generated. This pulse occurs once at the end of each card cycle. Thus, AND gate Z3B controls those conditions which are permitted to cause a general stop only after the end of the card cycle. These conditions are determined by OR gate Z4A which is activated by either a (+) CARD ALARM signal or a (+) 2nd ERROR signal.

b. A second input to OR gate Z7A is provided by AND gate Z11A which maintains a constant low level output due to a solid (+) 4.5 volt input.

c. The third input to OR gate Z7A is provided by AND gate Z3A which is enabled only when the (+) FELT signal is high. The (+) FELT signal is generated by OR gate Z4B on PC card A21 (fig. 8-21) and occurs only when (+) FEED ENABLE, (+) STOP and (+) WRDY are low. When (+) FELT is high the two possible failure conditions which cause an immediate general stop are monitored by OR gate Z4B. One is a chad bag full condition as indicated by a high level on the (+) CHAD LAMP and the other is the first occurrence of any one of the error conditions monitored by the error counter. The first occurrence of such an error is indicated by a high level on the (+) 81 DR INH line.

d. The (+) GEN STOP line is routed to PC card A17 (fig. 8-26) where it is routed through OR gate Z22A to switch off the mode control circuits thereby disabling which eber mode is in progress. The Z22A output is also used to clear latch Z12 which places a low level on the (+) RDY TO CCU line for transmission to the CCU. The (+) RDY TO CCU line is also deactivated by the (+) LOCAL TEST line whenever the local test mode is selected. Latch Z12 is not set until the start mode is initiated again. At that time, a positive pulse from start flip-flop Z7 sets the latch. The output of OR gate Z22A also sets latch Z18, the output of which is used as a test point.

3-106. EOM Detector

(fig. 3-41)

The EOM detector monitors the 81st data strobe and produces an EOM pulse coincident with this data strobe. The 81st data strobe is detected by AND gate Z2B on PC card A16 (fig. 8-25). This AND gate is disabled throughout the 80 text characters of each block by the (+) COUNT ENABLE signal. This signal goes low following the 80th character before the appearance of the 81st data strobe. When the 81st strobe appears as a low level on line (-) DS, AND gate Z2B is enabled. This results in a high level output on line (+) 81 DS for the duration of the data strobe. The (+) 81 DS signal is fed to AND gate Z4A. This AND gate is enabled during the 81st data strobe time only if an EOM pulse is received during this time from the CCU on the data control line. The EOM pulse appears as a high level on the (+) DATA CONTROL line which enables Z4A to produce a (+) EOM output.

3-107. Error Reset Circuits

Resetting of the various error detector circuits on PC card A18 (fig. 8-27) is controlled by OR gates Z11A and Z12A.

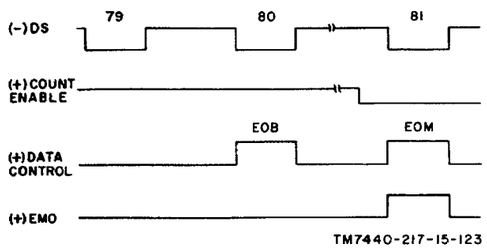


Figure 3-41. EOM detection timing diagram.

a. The conditions for activating OR gate Z12A are either an 81st data strobe on line (+} 81DS which indicates the successful completion of a card or a general reset on line (+) GEN RESET. A general reset occurs in case of power turn-on to the high speed card punch, operation of RESET pushbutton S1 on logic assembly AI, or initiation of a new switch mode (start, local test, or single feed).

b. The conditions for activating OR gate Z11A are similar. Thus, both inputs to OR gate Z12B which controls general reset are also applied to OR gate Z11A. The third input to OR gate Z11A is provided by AND gate Z3A which is conditioned by the 0 output of flip-flop Z1 when no cancel has been initiated. The other condition for enabling Z3A are the coincidence of a first data request as indicated by a high level on the (+) FDR line and a preset pulse from the timing generator on PC card A1 (fig. 8-10). The preset pulse is received on line (+) PRST.

3-108. Audible Alarm Reset Control

If the high speed card punch is assigned by the CCU, the audible alarm reset control circuit generates a (+) AUDIBLE RESET signal when AUDIBLE RESET pushbutton Z1 on control panel A3 is pressed. This signal is fed through the transmit interface circuits to the CCU to reset the audible alarm.

a. Closure of the AUDIBLE RESET pushbutton Z1 contacts transfers a high level to the AUDIBLE RESET SW (N. 0.) line which is fed to debouncing latch Z24 on PC card A17 (fig. 8-26). The resulting positive level at the Z24B output of the latch is routed to PC card A14 for transmission to the CCU. This signal lasts until the pushbutton is released when the latch is reset.

b. To prevent generation of the (+) AUDIBLE RESET signal when the high speed card punch is not assigned by the CCU, a high level on the (+) NOT 3-38 ASSIGNED line from the receive interface circuits prevents Z5 from being activated by the pushbutton.

3-109. Transmit Interface Circuits

Logic control signals generated by the high speed card punch for the CCU are coupled through interface transmitters on PC card A14 (fig. 8-23) to the CCU. Four of these interface transmitters (A through D) provide inversion to convert +4.5 volt inputs to 0 volts and 0 volt inputs to an open circuit (which becomes +6.2 volts because of biasing at the CCU). Because of the logic inversion, the ready and audible reset signals which are true-functions (+) in the high speed card punch become not-functions (--) in the cables to the CCU. The reverse is true of the operator alarm and alarm stop signals. The (+) FIRST DATA REQUEST and (+) DATA REQUEST signals are coupled through other interface transmitters which do not perform inversion but shift inputs of +4.5 volts to + 6.2 volts and inputs of 0 volts to -6.2 volts.

3-110. Detailed Operation of Discrete Circuit Logic Elements

The detailed operation of the discrete circuit logic elements on each PC card is described in paragraphs 3-111 through 3-117. The component make-up of each type of logic element is shown in figures 3-42 through 3-56. Only one example of each logic element is given in these figures. The corresponding components in the other logic elements of the same type are given in charts following the individual logic element descriptions.

3-111. Detailed Operation of Discrete Circuit Logic Elements on PC Card A1

a. Type AMPL-1 (fig. 3-42). 'The type AMPL-1 amplifier receives alternate positive and negative current pulses from a reluctance pickup which is connected across capacitor C1. Resistive loading with respect to ground is provided by resistors R1 and R2. In the absence of input pulses, a short circuit exists across capacitor C1 through the external pickup coil. Both transistors Q1 and Q2 normally are biased into conduction by the 0 volt level received through RI and R2. The circuit outputs in the quiescent state are biased at 0 volts by the current flowing from the -12 volt source through resistors R5 and R6, and diodes CR1 and CR2. When the current flow in the pickup coil causes the voltage at the Q1 base to go negative, Q1 is cut off and the positive pulse at the collector is coupled through capacitor C2 to the output. Alternately, when the current flow in the pickup coil causes the voltage at the Q2 base to go negative, a positive pulse is coupled through capacitor C3 to the second output.

b. Type AMPL-2 (fig. 3-43). The type AMPL-2 amplifier produces a -12 volt inhibit signal when activated by a 0 volt input. The 0 volt input is coupled through resistor R9 to drive transistor Q3 into conduction. Transistor Q3 couples +4.5 volts dc through resistor R11 to drive transistor Q4 into conduction. This results in the required -12 volt output at the collector of Q4. When the input to Q3 goes to +4.5 volts, Q3 is cut off and the bias network formed by resistor R12 and diode CR3 establishes a -12 volt potential at the base of Q4. This keeps Q4 cut off so that an open circuit appears at the Q4 collector.

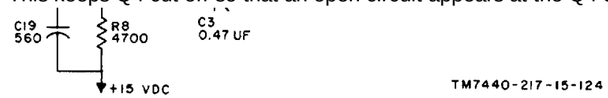


Figure 3-42. Type AMPL-1 amplifier, schematic diagram.

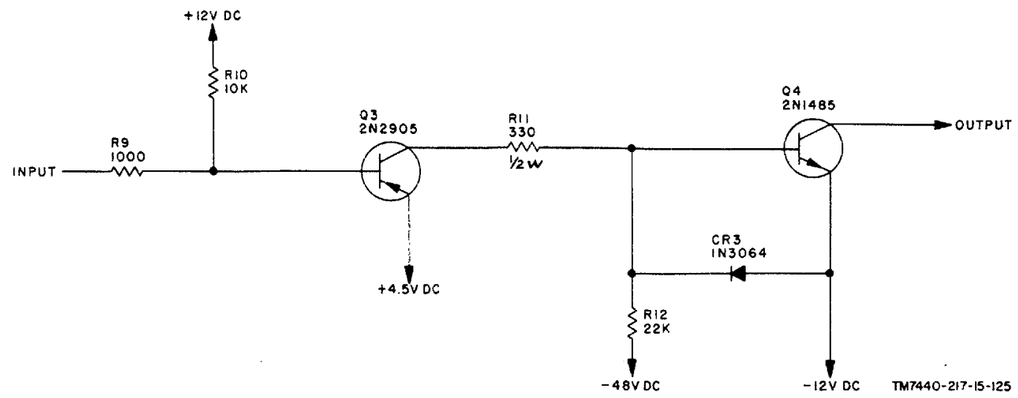


Figure 3-42. Type AMPL-1 amplifier. schematic diagram.

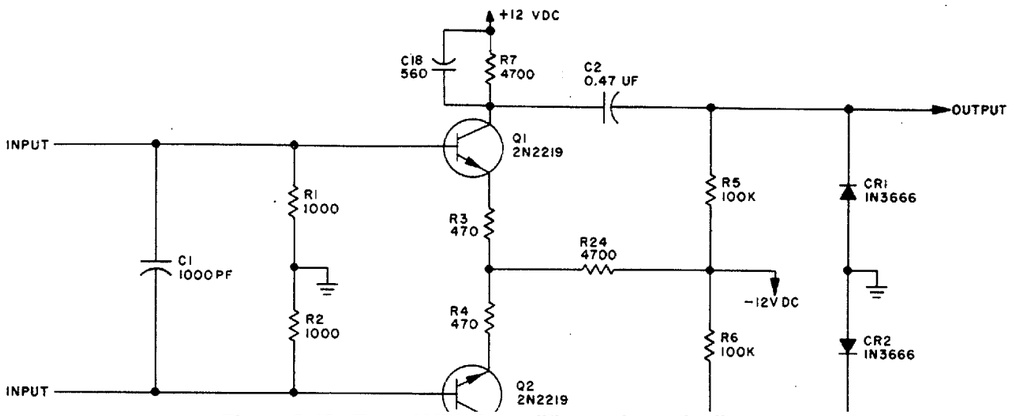


Figure 3-43. Type AMPL-2 amplifier. schematic diagram.

3-112. Detailed Operation of Discrete Circuit Logic Elements on PC Card A2

a. Type SOL DR-1 (fig. 3-44). The type SOL DR-1 (A) solenoid driver is activated by a 0 volt input to resistor R2. This results in a negative voltage at the junction of voltage divider R2, R3, to drive transistor Q1 into conduction. Conduction of Q1 causes a 0 volt level to appear at the Q1 collector. This is coupled through resistor R4 to drive transistor Q3 into conduction. The resulting -12 volt signal at the Q3 collector is coupled through resistor R7 to drive transistor Q2 into conduction. The Q2 collector is connected through the external solenoid winding to the -48 volt supply. Thus, the solenoid draws current from the -48 volt return line (ground) through Q2. If the input to the solenoid driver goes to +4.5 volts, all operations are reversed and Q2 is cut off so that the solenoid is deenergized. Capacitor C1 slows down the rise and fall times of the Q2 output and diode CR1 sets the bias for the base of Q2 at +0.7 volt when Q3 is cut off. SOLDR-I(A) through (D) are identical except for part reference designations (table 3-7).

Table 3-7. SOLDR-I COMPONENTS (PC CARD A2)

SOL DR-I	Components											
(A)	R1	R2	R3	R4	RS	R6	R7	Q1	Q2	Q3	CR1	C1
(B)	R8	R9	R10	R11	R12	R13	R14	Q4	Q5	Q6	CR2	C2
(C)	R15	R16	R17	R18	R19	R20	R21	Q7	Qs	Q9	CR3	C3
(D)	R22	R23	R24	R25	R26	R27	R28	Q10	Q11	Q12	CR4	C4

b. Type SOL DR-2 (fig. 3-45). The type SOL DR-2 solenoid driver is activated by a 0 volt input to the base of transistor Q13. This cuts off transistor Q13 allowing the -12 volt supply to drive transistor Q14 into conduction. The Q14collector is connected through the external solenoid winding to the -48 volt supply. Thus, the solenoid draws current from the -48 volt return line (ground) through Q14. If the input to the solenoid driver goes to +4.5 volts, Q13 is driven into conduction and Q14 is cut off. Thus, the solenoid is deenergized. Capacitor C5 slows down the rise and fall times of the Q14 output.

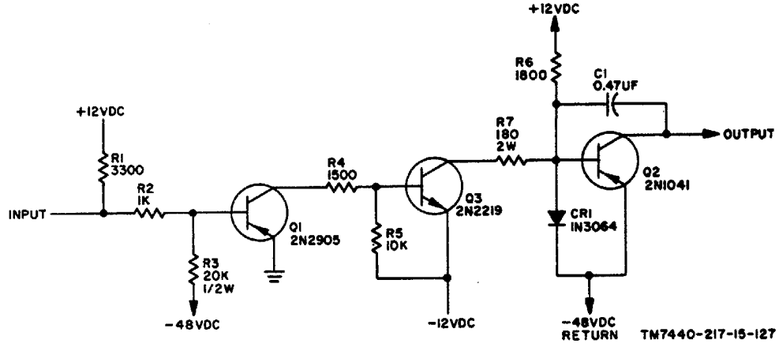


Figure 3-45. Type SOL DR-1 (A) solenoid driver, schematic diagram.

3-113. Detailed Operation of Discrete Circuit Logic Element on PC Card A3 through A6

The type SOL DR-3 (A) solenoid driver on PC cards A3 through A6 (fig. 3-46) is activated by a 0 volt input to transistor Q1. The collector of transistor Q2 is connected through the external solenoid winding to the -48 volt supply. The return line of this supply (ground) is connected to the emitter of Q2. Thus, Q2 is driven into conduction. If the input to the solenoid driver goes to +4.5 volts, Q1 is driven into conduction and supplies a +4.5 volt level to cut off Q2. Thus, the external solenoid is deenergized. Alternately, the solenoid may be kept deenergized by applying a -12 volt level to the inhibit input. This keeps Q2 cut off. Solenoid drivers SOL DR-3(A) through (F) are identical except for part reference designations (table 3-8).

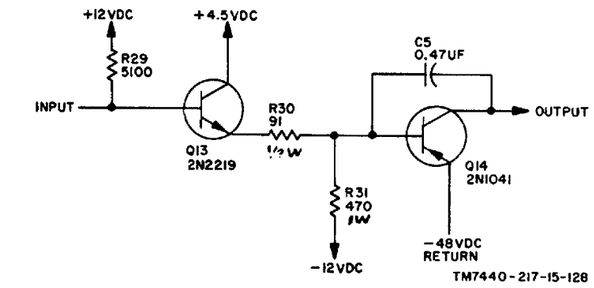


Figure 3-44. Type SOL DR-2 (A) solenoid driver, schematic diagram.

Table 3-8. SOL DR-3 COMPONENTS (PC CARDS A5 THROUGH A6)

SOL DR-3	Components				
(A)	R7	R8	R9	Q1	Q2
(B)	R10	R11	R12	Q3	Q4
(C)	R13	R14	R15	Q5	Q6
(D)	R16	R17	R18	Q7	Q8
(E)	R19	R20	R21	Q9	Q10
(F)	R22	R23	R24	Q11	Q12

3-114. Detailed Operation of Discrete Circuit Logic Elements on PC Card A13

a. Type RCVR-1. (fig. 3-47) The type RCVR-1 (A) interface receiver converts a +6.2 volt input from the CCU to +4.5 volts and a -6.2 volt input to 0 volts. A +6.2 volt input causes transistor Q1 of difference amplifier Q1, Q2 to go into conduction and causes transistor Q2 to go into cutoff. The negative voltage at the collector of Q1 is coupled through resistor R4 to drive transistor Q3 into cutoff. Thus, the output assumes the +4.5 volt level supplied through resistor R9. If, however, the input to the circuit is -6.2 volts, the base of Q1 assumes a negative potential established through resistors R2 and R3. Thus, Q1 is driven into cutoff and Q2 into conduction. The positive level at the collector of Q drives Q3 into conduction so that the output goes to 0 volts. The output may also be driven to 0 volts by applying +4.5 volts to the inhibit input. This is coupled through isolation diode CR1 and resistor R1 to the base of Q3, keeping Q3 in conduction. Interface receivers RCVR-1(A) through (J) are identical except for part reference designations (table 3-9). A type RCVR-1 interface receiver is also contained on PC card A14 (fig. 8-23); reference designations for this circuit are also included in the following chart.

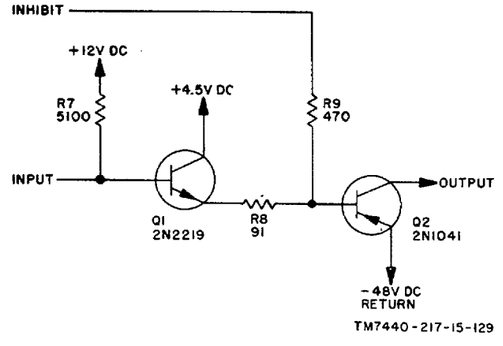


Figure 3-46. Type SOL DR-3 Solenoid driver, schematic diagram.

Table 3-9. INTERFACE RECEIVER RCVR-1 COMPONENTS (PC CARDS A13 and A14)

PC card	RCVR1	Components												
A13	(A)	R1	R2	R3	R4	R5	R6	R7	R8	R9	Q1	Q2	Q3	CR1
A13	(B)	R10	R11	R12	R13	R14	R15	R16	R17	R18	Q4	QS	Q6	CR2
A13	(C)	R19	R20	R21	R22	R23	R24	R25	R26	R27	Q7	Q8	Q9	CR3
A13	(D)	R28	R29	R30	R31	R32	R33	R34	R35	R36	Q10	Q11	Q12	CR4
A13	(E)	R37	R38	R39	R40	R41	R42	R43	R44	R45	Q13	Q14	Q15	CR4
A13	(F)	R46	R47	R48	R49	R50	R51	R52	R53	R54	Q16	Q17	Q18	CR5
A13	(G)	R55	R56	R57	R58	R59	R60	R61	R62	R63	Q19	Q20	Q21	CR6
A13	(H)	R64	R65	R66	R67	R68	R69	R70	R71	R72	Q22	Q23	Q24	CR7
A13	(J)	R73	R74	R75	R76	R77	R78	R79	R80	R81	Q25	Q26	Q27	CR8
A14	(J)	R72	R50	R51	R52	R53	R54	R57	R55	R56	Q18	Q20	Q19	CR7

b. Type INH DR-i (fig. 3-48). The type INH DR-1 inhibit driver is activated by a +4.5-volt logic input to produce a high power +4.5-volt output to simultaneously drive the inhibit inputs of eight type RCVR-1 interface receivers. When the input goes to +4.5 volts, transistor Q29 is driven into conduction and draws current to the output from the +4.5-volt source. When the input goes to 0 volts, Q29 is cut off and the output is set at 0 volts through resistor R85.

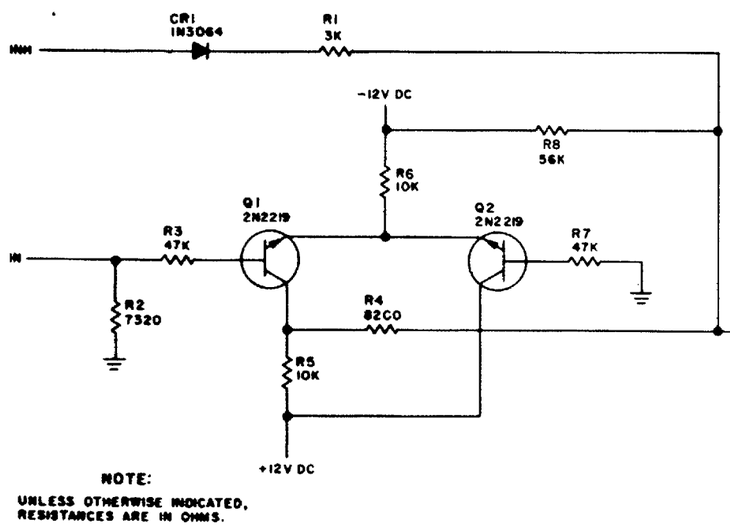


Figure 3-47. Type RCVR-1 (A) interference receiver.

3-115. Detailed Operation of Discrete Circuit Logic Elements on PC Card A14 a. Type RCVR-1 Interface Receiver. The Type RCVR-1 Interface receiver is identical to the RCVR1 circuit on PC card A13 (para 3-114, table 3-9, and fig. 8-22).

b. Type XMTR-1 Interface Transmitter (fig. 3-49). Inputs from the high speed card punch logic circuits switching between 0 volts and +4.5 volts are coupled through biasing network R1, R2, R3 to the base of inverter 01 of XMTR-1(A). When the input is 0 volts, Q1 is cut off and supplies an open circuit to the CCU which provides a connection through a load resistor to +6.2 volts. When the input is +4.5 volts, Q1 is driven into conduction, resulting in a 0-volt output to the CCU. Interface transmitters XMTR-I(A) through (D) are identical except for part reference designations (table 3-10).

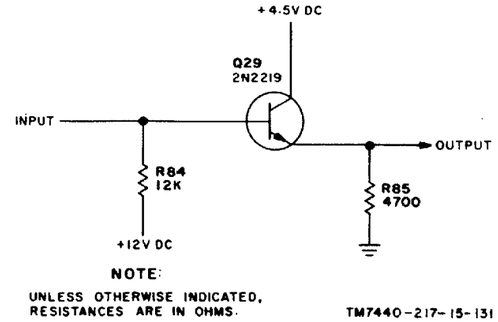


Figure 3-48. Type INH DR-1 inhibit driver.

Table 3-10. Interface Transmitter XMTR-1 Components (pc card A14)

XMTR-1	Components			
(A)	R1	R2	R3	Q1
(B)	R4	R5	R6	Q2
(C)	R7	R8	R9	Q3
(D)	R10	R11	R12	Q4

c. Type XMTR-2 Interface Transmitter (fig. 3-50). Inputs from the high speed card punch logic circuits switching between 0 volts and +4.5 volts are received at bias network R13, R14, R15 (XMTR-2(E)). When the input voltage is +4.5 volts, the bias network drives transistor Q5 into conduction. Loading for Q5 is provided by resistors R16 and R17. The drop in voltage at the junction of R16 and R17 turns on transistor Q6 to result in a +12-volt level at the Q6 collector. This drives transistor Q7 into conduction and transistor Q8 into cutoff. Thus, the +6.2-volt supply voltage is drawn through Q7 and resistor R20 to the circuit output. When a 0-volt level is applied to the biasing network at the input to Q5, Q5 goes into cutoff. The resulting +12-volt output of Q5 cuts off Q6 so that a -12 volt level appears at the Q6 collector. This voltage drives Q7 into cutoff and Q8 into conduction. Thus, the -6.2 volt supply is drawn through Q8 and resistor R21 to the circuit output. Interface transmitters XMTR-2 (E) and (F) are identical except for part reference designations (table 3-11).

Table 3-11. Interface Transmitter XMTR-2 Components (PC Card A 14)

XMTR-2	Components														
(E)	R13	R14	R15	R16	R17	R18	R19	R20	R21	R22	QS	Q6	Q7	Q8	C1l
(F)	R23	R24	R25	R26	R27	R28	R29	R30	R31	R32	Q9	Q10	Q11	Q12	C2

d. Type RCVR-2A. (fig. 3-51) The type RCVR-2A interface receiver converts a 0-volt input from the CCU to +4.5 volts and an open circuit from the CCU to 0 volts. When the transmitting source becomes an open circuit, the input signal becomes +6.2 volts as established by the load network formed by resistors R33, R34, and R35, and zener diode VR1 (RCVR2A (G)). This drives transistor Q13 into conduction to result in a 0 volt output at the Q13 collector. When the input signal goes to 0 volts, Q1 is cut off and a +4.5 volt output is developed through resistor R36. Interface receivers RCVR-2A(G) and (H) are identical except for part reference designations (table 3-12).

Table 3-12. InterfaceReceiverRCVR-2A Components(PCCardA14). I

RCVR-2A	Components					
(G)	R33	R34	R35	R36	VR1	Q13
(H)	R37	R38	R39	R40	VR2	Q14

e. Type RCVR-2B (I) (fig. 3-52). The type RCVR2B (I) interface receiver operates in the same way as the type RCVR-1 interface receiver on PC card A13. The only difference is that no inhibit input is provided for the type RCVR-2B (I) interface receiver.

e. Type PA (fig 3-53). The type PA photocell amplifier is controlled by the output of a photocell connected to the +4.5 volt supply. When the photocell is dark, it acts as an' open circuit. Thus, transistor Q21 of photocell amplifier PA (K) is biased on by -12 volts through resistor R58. The output voltage is then determined by a +4.5 volt photo supply input to the emitter of Q21. The +4.5 volt photo supply input is coupled through an external diode so that the actual supply voltage is approximately +4.0 volts. When the photocell is lit, the current flowing through the photocell builds up a 16-volt drop across resistor R58 so that a +4.0 volt level at the base of Q21 drives Q21 into cutoff. This results in a 0-volt output at the Q21 collector. Photocell amplifiers PA(K) through (0) are identical except for part reference designations (table 3-13).

Table 3-13. PA Photocell Amplifier Components (PC Card A14)

PA amplifier	Components			
(K)	R58	R59	C3	Q21
(L)	R60	R61	C4	Q22
(M)	R62	R63	C5	Q23
(N)	R64	R65	C6	Q24
(0)	R66	R67	C7	Q25

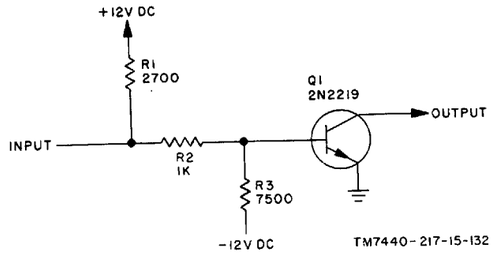


Figure 3-49. Type XMTR-1(A) interface transmitter, schematic diagram.

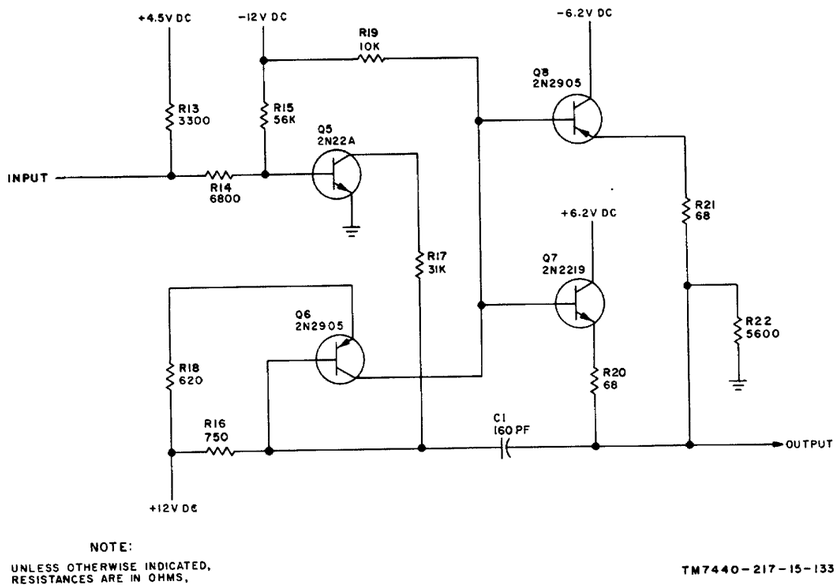


Figure 3-50. Type XMTR-2(E) interface transmitter, schematic diagram.

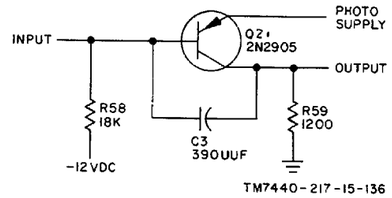


Figure 3-51. Type RCVR-2(A) interface receiver, schematic diagram.

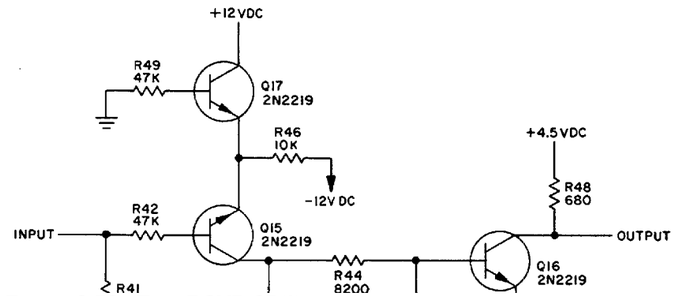


Figure 3-52. TypeRCVR-2B(I) interface receiver, schematic diagram

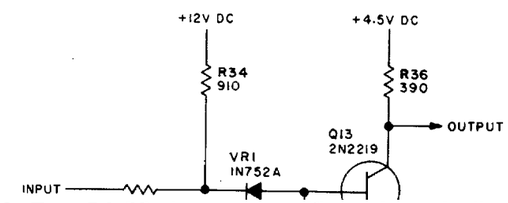


Figure 3-53. Type PA-(K) photocell amplifier, schematic diagram.

3-116. Detailed Operation of Discrete Circuit Logic Element on PC Card A15

The type OSC oscillator on PC card A15 (fig. 3-54) generates a square wave output with a period of 40 µsec. Oscillations at the required frequency are initiated in the tank circuit formed by capacitors C1 and C2, and inductors L1 and L2. The oscillations are reinforced by coupling them to the emitter input of transistor Q1 which operates as a grounded base amplifier. The amplified oscillations appear at the Q1 collector with the same polarity to provide positive regenerative feedback. The sine wave signal at the junction of C1 and C2 is coupled through capacitor C3 to the base of transistor Q2. Diode CR1 clips off the negative half cycle of the sine wave. The positive extreme of the positive half cycle is clipped off by Q2 which operates as an overdriven amplifier. This results in the required square wave output.

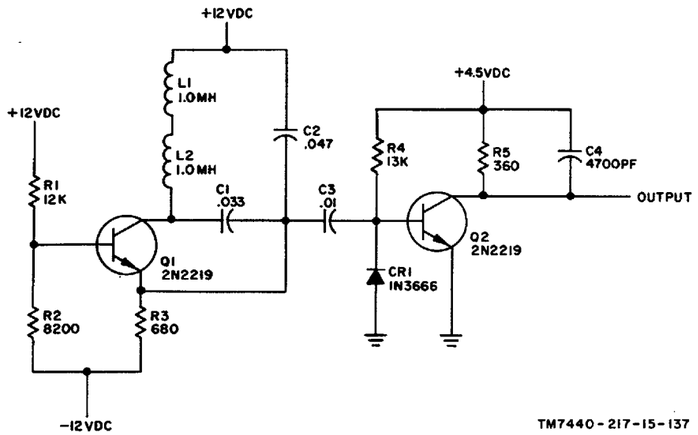


Figure 3-54. Type OSC oscillator, schematic diagram.

3-117. Detailed Operation of Discrete Circuit Logic Elements on PC Card A19

a. Type OS-1. The type OS-1 one shot on PC card A19 (fig. 3-55) is activated by a narrow positive input pulse to produce a positive output pulse whose width is determined by an external timing resistor. The positive-going input pulse is coupled through diode CR3 to drive transistor Q1 of OS-1(A) into conduction. The 0 volt step at the Q1 collector is coupled through diode CR2 and capacitor C1 to cut off transistor Q3. Thus, a +4.5 volt level appears at the circuit output as established by the voltage divider formed by resistors R5, R4 and R3. The +4.5 volt output is fed back as an input to Q1 to maintain the output pulse level. This continues until capacitor C1 is charged through an external timing resistor to the +4.5 volt supply. When the voltage at the junction of C1 and the external timing resistor is sufficiently positive to drive Q3 into conduction, the positive output pulse is terminated. OS-1(A) and OS-1 (B) are identical except for part reference designations (table 3-14).

Table 3-14. OS-i One Shot Components (PC Card A9)

OS-1	Components											
(A)	R1	R2	R3	R4	R5	Q1	Q2	Q3	C1	CR1	CR2	CR3
(B)	R6	R7	R8	R9	R10	Q4	Q5	Q6	C2	CR4	CR5	CR6

b. Type OS-2. The type OS-2 one shot on PC card A19 (fig. 3-56) operates the same as the type OS-1 except that the output is taken from the collector of the input transistor to result in a negative going output pulse.

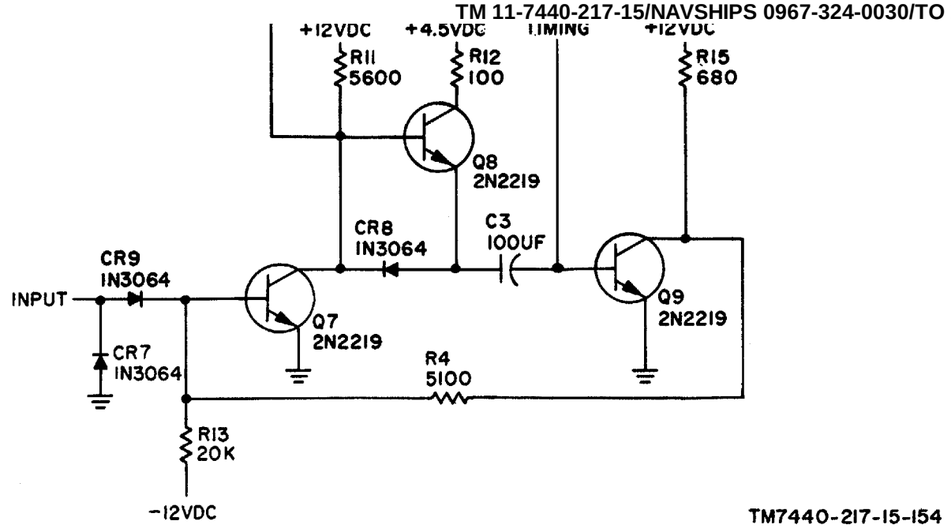


Figure 3-55. Type OS-1 (A) one shot, schematic diagram.

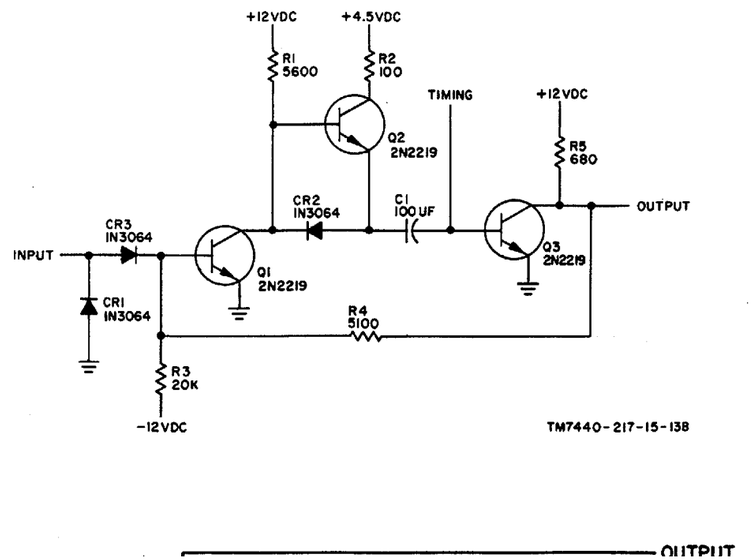


Figure 3-56. Type OS-2 one shot, schematic diagram.

3-118. Detailed Operation of Discrete Circuit Logic Elements on 'PC Card A21

a. Type TD-1. The time delay type TD-1 circuit on PC card A21 (fig. 8-30.1) is activated by a low level input to develop a positive pulse output 1.7 seconds later. Initially, with a +4.5volt input applied across load resistors R7 and R8, transistor Q1 is conducting, timing capacitor C5 is discharged, and unijunction transistor Q2 is not conducting. The time delay is triggered by a negative input pulse switching from +4.5 volts to 0 volt, which is applied across resistors R7 and R8 to cut-off transistor Q1. With Q1 cutoff, C5 is allowed to charge through R9. If the input signal is still low after 1.7 seconds, the voltage across C5 becomes sufficiently high to fire Q2. This results in a +4.5-volt output established by resistors Ri0 and R11. Once Q2 is fired, the current drawn from capacitor C5 to the Q2 emitter discharges C5 quickly until not enough current is available to maintain conduction through Q3. Thus, Q3 is cut-off and the output pulse is terminated.

b. Type TD-2. The time delay type TD-2 circuit on PC card A21 (fig. 8-30.1) is activated by a low level input to develop a positive pulse output between 30 seconds and 3 minutes later. Initially, with a +4.5-volt input applied across load resistors R12 and R13, transistor Q3 is conducting, timing capacitor C6 is discharged, and unijunction transistor Q4 is not conducting. The time delay is triggered by a negative input pulse switching from +4.5-volts to 0 volt, which is applied across resistors R10 and R11 to cut-off transistor Q3. With Q3 cut-off, C6 is allowed to charge through R14 and potentiometer R15. Potentiometer R15 allows the time delay to be adjusted between 30 seconds and 3 minutes. If the input signal is still low after 30 seconds to 3 minutes, the voltage across C6 becomes sufficiently high to fire Q4. This results in a +4.5volt output established across resistors R16 and R18. Once Q4 is fired, the current drawn from capacitor C6 to the Q4 emitter discharges C6 quickly until not enough current is available to maintain conduction through Q4. Thus, Q4 is cut-off and the output pulse is terminated. Since the charge voltages on capacitor C6 rises very slowly, an external positive pulse is applied through capacitor C7 and resistor R17 to cause positive switching at end of the longer timer periods.

c. Type RELAY DR-1. The type RELAY DR1 relay driver circuit on PC Card A21 (fig. 8-30.1) is activated by a 0 volt input to transistor Q5 across resistor R21. The collector of transistor Q6 is connected through R24 to an external relay winding which is also connected to the -48-vol,t supply. The return line of this supply is connected to the emitter of Q6. Thus Q6 is driven into conduction and the relay is energized. If the input to the relay driver goes to +4.5 volts, Q5 is driven into conduction and supplies a +4.5volt level to cut-off Q6. Thus, the external relay is deenergized.

CHAPTER 4
MAINTENANCE INSTRUCTIONS

Section I. GENERAL

4-1. Scope of Maintenance

a. This chapter includes instructions for performing preventive and corrective maintenance procedures on all major assemblies, subassemblies, and components (except printed circuit cards) of the high speed card punch. Refer to chapter 5 for information on troubleshooting and repair of printed circuit cards.

b. Maintenance of the high speed card punch includes the following:

(1) Preventive maintenance (para 4-3 through 4-12).
(2) Troubleshooting (para 4-13 through 4-15).
(3) Removal and replacement (para 4-16 through 4-49).
(4) Repairs and adjustments (para 4-50 through 4.66).

4-2. Tools, Materials, and Test Equip ment Required

a. Tools and Test Equipment. Refer to appendix C, Maintenance Allocation Chart for a list of the tools and test equipment required for maintenance of the high speed card punch.

b. Materials. The following maintenance materials are required in addition to the maintenance materials furnished as part of the tool kits listed in appendix C:

(1) Lint free cleaning cloth, NSN: 8305-00-2673015.
(2) Fine sandpaper (0000), NSN: 5350-00-235 0124.
(3) Primer, zinc chromate, FED SPEC TT-P-664, NSN: 8010-00-936-3372 (pt).
(4) Lacquer, semigloss, blue (No. 25184 per FED STD 595), NSN: 8010-00-721-9753 (pt).
(5) Enamel, semigloss, gray, (No. 26492 per FED STD 595), NSN: 8010-00-087-0109 (qt).
(6) Enamel, semigloss, black, (No. 27038 per FED STD 595), NSN 8010-00-844-4792 (qt).
(7) Oil, punch (MDS Part No. 102020-90), NSN: 9150-00-426-1937 (pt).
(8) Trichlorotrifloroethane (Freon TF), MIL-C 81302B, Type II, NSN: 6850-00-984-5863 (5 gal), or NSN: 6850-00-033-8851 (1 gal).
(9) Trichloroethane, FED SPEC O-T-620, Type I, NSN: 6810-00-292-9625 (qt), or NSN: 6810-00664-0387 (gal).
(10) Sealing Compound, retaining, (LOCTITE Grade E), NSN: 8030-00-081-2328 (50 cc).
(11) Adhesive (RTV-108), NSN: 8040-00-843-0802 (3 oz).
(12) Coater, filter, NSN: 4130-00-860-0042 (pt).
(13) Compound, silicone (heat sink), Dow Coming 340, NSN: 6850-00-181-6995 (2 oz), or NSN: 6850-00-927-9461 (5 oz).
(14) Resistor, fixed (1,000 ohms, 1/2-watt, 5%o), RC20GF102J, NSN: 5905-00-195-6806.

Section II. PREVENTIVE MAINTENANCE

4-3. Scope of Preventive Maintenance

a. Preventive maintenance is the systematic care, inspection, and servicing of the high-speed card punch to maintain it in serviceable condition, prevent breakdowns, and assure maximum operational capability. Preventive maintenance includes the inspection, testing, and replacement of parts, subassemblies, or units that inspection and tests indicate would probably fail before the next scheduled periodic service.

b. The preventive maintenance checks and services charts outline functions necessary to maintain the high speed card punch in good operating condition. The charts indicate what to check, how to check, and the normal conditions; the References column lists the illustrations or paragraphs that contain detailed maintenance procedures.

4-4. Daily Preventive Maintenance Checks and Service Chart

Sequence No.	*Item to be inspected*	*Procedure*	*References*
1	Exterior surfaces	Clean the following: a. Overall cabinet and covers b. Mechanism panel While cleaning, check for broken, missing or loose hardware or parts.	Para 4-7.
2	Mechanism sensors	Check operation of hopper low, hopper empty, and stacker full sensors.	Fig. 3-13.
3	Indicators	Depress lamp test switch: all lamps should light.	Fig. 2-1.
4	Chad bag	Remove, empty and replace chad bag.	
5	Oil reservoirs	Check oil level in punch and feed mechanism, inspect for oil leakage.	Para 4-9b
6	Punched cards	Check for registration and card damage.	Para 4-84.
7	Punch die plate	Check knurled die plate screws to insure that they are secure.	Fig. 2-3.
8	PC cards	Check for secure seating; press loose cards firmly into connector.	Fig. 4-2.

4-5. Fifty-Hour Preventive Maintenance Checks and Services Chart

Perform the following maintenance procedures after each fifty hours of operation or after 50,000 cards have been punched (whichever occurs first):

Sequence No.	*Item to be inspected*	*Procedure*	*References*
1	Punch and feed mechanism	Clean and service.	Para 4-9.
2	Belts	Check all drive belts and picker belts for wear.	Para 4-81,4-88, 4-96, 4-97, and 4-98.
3	Cabinet air filter	Remove, clean and replace.	Para 4-10.
4	Vacuum line air filter	Clean and replace.	Para 4-8.
5	Internal cabinet	Clean internal cabinet, logic assembly, power supply assembly and mechanism panel Check vacuum and pressure lines for secure connections.	Para 4-7.
6	Blower Assy. B1	Inspect the blower wheels for dirt buildup. If dirty, disassemble and clean.	Para 4-7

4-6. One-Hundred Hour Preventive Maintenance

Perform the following maintenance procedures after each 100 hours of operation:

a. Drain, flush, and replace the oil in the feed and punch mechanisms as described in paragraph 4-9.
b. Clean and flush the picker throat port holes as described in paragraph 4-9.1.

4-6.1. Five-Hundred Hour Preventive Maintenance

After each 500 hours of operation, perform the maintenance procedures as described in paragraph 4-110.

4-7. Cleaning and Touchup

a. External Cleaning. Use a vacuum cleaner and a lint-free cloth to clean all external areas.

b. Punch Mechanism. Use a soft brush or low pressure air to clean the dirt, lint, and card dust from the card punch mechanism.

c. Internal Cleaning. Use a vacuum cleaner and a lint-free cloth to clean the cabinet and logic section internally. Clean the cabinet air filter as described in paragraph 4-10.

d. Ball Bearings. All ball bearings used in the high speed card punch are sealed and cannot be cleaned or lubricated. Wipe the exterior of ball bearings with a lint-free cloth. Replace any ball bearings that do not spin freely.

e. Touchup Painting Instructions. Remove rust and corrosion from metal surfaces by lightly sanding them with sandpaper. Brush two coats of paint on bare metal to protect it from further corrosion.

4-8. Cleaning Vacuum Line Air Filter (fig. 46.1)

a. Unscrew the jar (1) and empty it of card dust.
b. Unscrew the element (2) from the air filter.
c. Thoroughly clean the element with a vacuum cleaner. When the element appears excessively soiled or damaged, replace it with a new element.
d. Air dry the element with air from a low-pressure air source; be sure the element is completely dry.
e. Replace the element and jar.

4-9. Punch and Feed Mechanism Cleaning and Oil Servicing Procedures

a. Cleaning.

(1) Remove punch head assembly from the chassis (para 4-31).

NOTE

If the card punch has had 100 hours of operation since the last oil change, change the oil in both the punch head assembly and the feed mechanism as described in c below.

(2) Remove die plate support assembly (35, fig. 4-8) by unscrewing the two clamp and knob assemblies (12).

NOTE

The clamp and knob assemblies are captive and should not be withdrawn from the feed mechanism (13, fig. 4-8) any more than is necessary to free the die plate support assembly (35).

(3) Remove the feed mechanism (13, fig. 4-8) following the removal and replacement procedures described in paragraph 4-32.

CAUTION

While the feed mechanism is separated from the punch head assembly, be careful not to lose the spring plungers (8, fig. 4-11) and gate springs (9) (Any quick release of tension will cause them to spring out of position). Also care must be taken to insure that the feed arm assemblies (item 23 fig. 4-9) are not bent.

(4) Clean the punch head assembly and the feed mechanism with a soft brush and low air pressure. Use special care to insure no foreign material remains on the machined surfaces of the feed mechanism (13, fig. 4-8) and trunnion clamp bases (27 and 29).

(5) Reassemble the punch head assembly in the reverse order of disassembly.

(6) Replace the punch head assembly in the chassis (para 4-31).

b. Adding Oil.

(1) Place all power controls to OFF.

(2) Remove the screw (35, fig. 4-9) from the feed mechanism filler plug. Add Soroban No. 90 punch oil to the level on the sight gage as determined in paragraph 4-9*c*(15), and replace the filler plug.

(3) Remove the screw (63, fig. 4-8) from the punch head assembly filler plug. Add Soroban No. 90 punch oil to the level determined in paragraph 4-9*c*(15), and replace the filler plug. When checking level of oil, punch head must be installed in the chassis.

c. Changing Oil.

(1) Remove the punch head (para 4-31).

(2) Obtain a suitable container in which to drain the oil.

(3) Remove the drain plug and screen (74, fig. 4-8) from the punch head and thoroughly drain the oil into the container.

(4) Remove the drain plug and screen (52, fig. 4-9) and drain the oil from the feed mechanism.

(5) Clean the drain plugs and screens in (3) and (4) above with Freon TF.

(6) Seal each reservoir air breather with masking tape or with plastic cap (air breather cover used during initial shipping from manufacturer).

(7) Add Freon TF to each reservoir through drain holes, and replace drain plugs.

(8) Shake the assemblies and rotate the mechanisms to insure proper cleaning of internal components.

(9) Remove air breather seals and drain plugs. Thoroughly drain the dirty Freon TF from each assembly.

(10) Repeat (6) through (9) above until Freon TF drained from each reservoir is clear.

(11) Shake the can of Soroban No. 90 oil for at least 1 full minute immediately before refilling each reservoir.

(12) Using the oil filler hole, refill the punch mechanism reservoir with exactly 10 1/2 ounces or 310.5 cubic centimeters of clean Soroban No. 90 oil (use graduated measuring cup 7240-00-138-7984, or equivalent, to fill oil filler can).

(13) Using the oil filler hole, refill the feed mechanism with exactly 1 1/2 ounces or 44.5 cc of Soroban No. 90 oil (use graduated measuring cup 742000-138-7984, or equivalent, to fill oil filler can).

(14) Allow 5 minutes to elapse after filling before making a final oil level check.

(15) Reassemble punch head and replace in equipment (para 4-31). Using tape or a marking pencil, mark off the oil level on the feed mechanism and punch head sight gages.

4-9.1. Picker Throat Assembly Cleaning Procedure (fig. 4-12)

a. Remove lamp sockets (5 and 6).

b. Remove two screws and lockwashers (7 and 8).

c. Remove tube from tube assembly (2) and remove picker throat assembly (9) from picker assembly.

d. Remove tube assembly (2) by removing setscrew (1).

e. Clean and flush the throat assembly (9) with Freon TF, assuring that all the port holes in the picker throat assembly are open and free of dirt and dust.

f. Reassemble in reverse order of disassembly.

4-10. Cleaning Cabinet Air Filter

Remove loose dust and dirt from the cabinet air filter after each 50 hours of operation (a and b below). Wash the filter after each 250 hours of operation (c below).

a. Pry the upper corners of the grill assembly forward slightly and lift the grill assembly upward to remove it from the cabinet. Lift the exposed filter upward slightly and then forward to remove it from the equipment cabinet.

b. Use a hand vacuum cleaner to remove loose dust and dirt from both sides of the filter.

c. Wash the filter as follows:

See WARNING paragraph 4-8.

(1) Immerse the air filter in cleaning compound (trichloroethane) and move it about to free the dirt. When clean, hang it up to dry.

(2) Hold a spray can of RF Super Filter Coat (Research Products Corp) about 12 inches from the dry filter and press the button while moving the can to apply an even thin coat to the filter. Then apply an even thin coat to the opposite side of the filter. Repeat this procedure to apply a total of three thin coats to each side of the filter.

d. To install the clean air filter, reverse the removal procedure (a above).

Section III. TROUBLESHOOTING

4-11. Use of Troubleshooting Data

Troubleshooting information for the high speed card punch is given in the high-speed card punch troubleshooting chart (para 4-12). Refer to paragraphs 4-13 and 4-14 for power supply troubleshooting procedures. When a trouble symptom is observed, the particular trouble or troubles can be corrected by replacing one or more of the components listed in the checks and corrective measures column. First check resistors, capacitors, relays, and other nonplugin electrical or mechanical components before replacing the component. (Voltages and resistance data on transformers, relays, and nonstandard items is given in paragraph 4-15). When PC card trouble is suspected, check the PC card by substituting a new card. Always recheck the high-speed card punch operation after repairs or replacements are performed. Refer to chapter 5 for procedures for troubleshooting faulty PC cards.

4-12. High-Speed Card Punch Troubleshooting Chart

Item No.	*Trouble symptom*	*Probable trouble*	*Check and corrective measures*
1	Alarm indications		
	a. PUNCH ERROR.	*a.* Punch register.	*a.* Replace defective pc card (A3 thru A6).
	b. Some ALARM.	*b.* Solenoid driver.	*b.* Replace pc card A2.
	c. MOTION FAIL.	*c.* One or more of following:	*c.* Correct as follows:
		(1) Motion control.	(1) replace pc card A19.
		(2) Card position photocell A1Q1.	(2) Replace photocell.
		(3) Picker reset photocell A2Q1.	(3) Replace photocell.
		(4) Stacker throat photocell A2Q4.	(4) Replace photocell.
		(5) Card position lamp A1DS1.	(5) Check to be sure lamp shines directly into photo-cell. Reposition lampholder if necessary. Re-place lamp, if defective.
		(6) Picker reset lamp A2DS1.	(6) Same as (5) above.
		(7) Hopper low lamp A2DS2.	(7) Same as (5) above.
		(8) Hopper empty lamp A2DS3.	(8) Same as (5) above.
		(9) Stacker throat lamp A2DS4.	(9) Same as (5) above.
		(10) Registration gate magnets A1K1, A1K2.	(10) Replace defective magnet.
		(11) Eject solenoid AlK3.	(11) Replace solenoid.
		(12) Card feed magnet A1K4.	(12) Replace magnet.
		(13) Picker solenoid A2K1.	(13) Replace solenoid.
		(14) Registration gate control A1S1.	(14) Replace control.
		(15) Resistors A2R1, A2R2.	(15) Replace defective resistor.
		(16) Mechanical assembly vacuum pump.	(16) Repair or replace pump.
		(17) Mechanical assembly vacuum regulator.	(17) Repair or replace regulator.
		(18) Picker drive belt.	(18) Replace belt.
		(19) Vacuum pump drive belt, eject belt, or punch timing belt.	(19) Replace defective belt.

4-12. High Speed Card Punch Troubleshooting Chart

Item No.	Trouble symptom	Probable trouble	Checks and corrective measures
		(20) Punch cycle control.	(20) Replace PC card A16.
		(21) Master counter.	(21) Replace PC card A15.
2	Invalid or no alarm or lamp indication.		
	a. One of indicator lamp pairs inoperative.	*a.* Lamp driver.	*a.* Replace pc card A20.
	b. No STEP ERROR alarm.	*b.* Master counter.	*b.* Replace pc card A1S.
	c. Dc and ac power indicators unlit.	*c.* One or more of following: (1) Heatsink assembly. (2) Power supply PSI cards A1, A2, A3, A12. (3) Power supply PSI capacitors A9C7 thru A9C10. (4) Power supply PSI transformer A9T1. (5) Fuses A10F1 thru A10F6.	*c.* Correct as follows: (1) Replace defective pc card (A4, A5, A6). (2) Replace defective card. (3) Replace defective capacitor. (4) Replace transformer. (5) Replace defective fuse.
	d. Panel lamps inoperative.	*d.* 3 a fuses A10OF9, AIOF10.	*d.* Replace defective fuse.
	e. No CARD alarm for full stacker.	*e.* Stacker full switch A2S1.	*e.* Check stacker full adjustment. If adjustment is proper, replace switch.
	f. No hopper empty indication.	*f.* One or more of following: (1) Hopper empty lamp A2DS3. (2) Hopper empty photocell A2Q3.	*f.* Correct as follows: (1) Check to be sure lamp shines directly into photocell. Reposition lampholder if necessary. Replace lamp, if defective.- (2) Replace photocell.
	g. No hopper low indication.	*g.* Hopper low photocell A2Q2.	*g.* Replace photocell.
	h. Lamps light at half brilliance.	*h.* Lamps DS1 thru DS11, Z2, Z5, Z6, Z7.	*h.* Replace defective lamp.
	i. All sensor lamps unlighted. (front panel indicator lamps will light when the LAMP TEST switch is pressed)	*i.* One or more of following: (1) Card position lamp AIDS1. (2) Picker reset lamp A2DS1. (3) Hopper low lamp A2DS2. (4) Hopper empty lamp A2DS4. (5) Stacker throat lamp A2DS4.	*i.* Correct as follows: (1) Replace lamp. (2) Replace lamp. (3) Replace lamp. (4) Replace lamp. (5) Replace lamp. } See simplified troubleshooting procedure below.
3	Punching troubles.		
	a. One of 24 punch pins inoperative;-	*a.* Punch register.	*a.* Replace defective pc card (A3 thru A6).
	b. Improper or no punching.	*b.* One or more of following: (1) Data control and parity check. (2) Master counter. (3) Interface control. (4) Control panel interface. (5) Power supply PSI heatsink assembly. (6) Power supply PSI cards A1, A2, A3, A12. (7) Reluctance pickup timing unit A1-PU1. (8) Mechanical assembly punch, head. (9) Punch drive belt. (10) Fuses A10F1 thru A10F6. (11) 3 a fuse A10F8.	*b.* Correct as follows: (1) Replace pa card A13. (2) Replace pc card A15. (3) Replace pc card A16. (4) Replace pc card A17. (5) Replace defective pc card (A4, A5, A6). (6) Replace defective card. (7) Repair or replace unit. (8) Replace head. (9) Replace belt. (10) Replace defective fuse. (11) Replace fuse.

CAUTION

Take extreme care during this procedure not to short two pins together or additional damage may occur. All sensor lamps unlighted-troubles (2), (3), (4) and (5). Refer to figure 8-9. Place a 10-ohm resistor across the appropriate terminals on A2TB1, TB2, and TB3 to parallel lamps A2DS1, DS2, DS3 and DS4. When the burned-out bulb is paralleled with the resistor, the remaining bulbs will light. If this does not locate the defective lamp, disconnect connector A2A1P1 and place the 10-ohm resistor across pins A and B of jack A2A1J5 to check lamp A2A1DS1. If this procedure fails to locate the trouble, one or more bulb is burned out, or wiring to power supply is defective.

4-12. High Speed Card Punch Troubleshooting Chart--Continued

Item No.	Trouble symptom	Probable trouble	Checks and corrective measures
		(12) Power supply PSI transformer A9T1.	(12) Replace transformer.
		(13) Power supply PSI capacitors A9C7 thru A9C10.	(13) Replace defective capacitor.
		(14) Timing generator.	(14) Replace PC card A1A1.
	c. Improper column B1 punching.	*c.* Error detection.	*c.* Replace pc card A18.
	d. Cannot place punch in READY condition.	*d.* One or more of following: (1) Switch Z5. (2) Mode switch control.	*d.* Correct as follows: (1) Replace switch. (2) Replace PC card A17.
	e. Cannot manually place punch in STOP condition.	*e.* One or more of following: (1) Switch Z6. (2) Mode switch control. (3) Card position lamp. (4) Card position photocell A1Q1. (5) Picker reset lamp. (6) Picker reset photocell A2Q1. (7) Master counter.	*e.* Correct as follows: (1) Replace switch. (2) Replace PC card A17. (3) Same as 2*f*(1) above. (4) Replace photocell A1Q1. (5) Same as 2*f*(1) above. (6) Replace photocell. (7) Replace PC card A15.
	f. Cannot place punch in LOCAL TEST mode.	*f.* One or more of following: (1) Switch Z7. (2) Mode switch control.	*f.* Correct as follows: (1) Replace switch. (2) Replace PC card A17.
	g. First column of card can be punched at wrong position.	*g.* 77/78 switches A, B(A1S2, A1S3).	*g.* Replace defective switch.
	h. No odd or even column punch.	*h.* Timing generator.	*h.* Replace PC card A1A1.
	i. Character "A" punched in all odd columns; no eject.	*i.* Timing generator.	*i.* Replace PC card A1A1.
	j. Punch one card only.	*j.* Master counter.	*j.* Replace PC card A15.
4	Card feed motion or offset troubles.		
	a. No card movement.	*a.* One or more of following: (1) Punch timing. (2) Motion control. (3) Card position photocell A1Q1. (4) Stacker throat photocell A2Q4. (5) Card feed magnet A1K4. (6) Registration gate control A1S1.	*a.* Correct as follows: (1) Replace pc card A1. (2) Replace pc card A19. (3) Replace photocell. (4) Replace photocell. (5) Replace magnet. (6) Replace control.
	b. Wrong card position.	*b.* Master counter.	*b.* Replace pc card A15.
	c. Cannot step single card thru punch.	*c.* One or more of following: (1) Switch Z4. (2) Mode control.	*c.* Correct as follows: (1) Replace switch. (2) Replace PC card A17,
	d. Pick failure.	*d.* One or more of following: (1) Picker reset, photocell A2Q1. (2) Picker solenoid A2K1. (3) Mechanism assembly vacuum pump.- (4) Picker drive belt. (5) Vacuum pump drive belt. (6) Picker belt set. (7) Picker throat. (8) Mode switch control. (9) Error function. (10) Punch cycle control. (11) Card position photocell A1Q1. (12) Card in punch head. (13) Photocell lamp A1DS1.	*d.* Correct as follows: (1) Replace photocell. (2) Replace solenoid. (3) Repair or replace pump. (4) Replace belt. (5) Replace belt. (6) Replace set. (7) Clean and flush ports. (8) Replace PC card A17. (9) Replace PC card A21. (10) Replace PC card A16. (11) Replace photocell A1Q1. (12) Remove card. (13) Replace lamp.
	e. Cards do not pass through punch head.	*e.* One or more of following: (1) Registration gate magnets A1K1, A1K2. (2) Punch timing belt. (3) Punch drive belt. (4) Reluctance pickup timing unit A1PU1.	*e.* Correct as follows: (1) Replace defective magnet. (2) Replace belt. (3) Replace belt. (4) Repair or replace.

4-12. High Speed Card Punch Troubleshooting Chart-continued

Item No.	Trouble symptom	Probable trouble	Checks and corrective measures
	f. Cards do not leave area of punch head, no ejection.	*f.* One or more of following: (1) Eject solenoid A1K3. (2) Eject belt. (3) Master counter. (4) Punch cycle control.	*f.* Correct as follows: (1) Replace solenoid. (2) Replace belt. (3) Replace PC card A15. (4) Replace PC card A16.
	g. No cards offset in stacker.	*g.* Offset solenoid A2K2.	*g.* Replace solenoid.
	h. Card jam.	*h.* Stacker full switch A2S1.	*h.* Replace switch.
	i. Card feed magnet operative.	*i.* Resistor A2R1.	*i.* Replace resistor.
	j. Erratic card position indication.-	*j.* Resistor.A2R2.	*j.* Replace resistor.
	k. No mechanical operation, belts stationary.	*k.* Drive motor B1.	*k.* Repair or replace motor.
	l. Erratic card picking.	*l.* One or more of following: (1) Mechanism assembly vacuum - regulator. (2) Mechanism assembly vacuum - line (3) Picker belt set.	*l.* Correct as follows: (1) Repair or replace regulator. (2) Repair and adjust line. (3)Replace set.
	m. No card delivery to stacker.	*m.* Offset capstan drive belt.	*m.* Replace belt.
	n. No chad removal.	*n.* Vacuum belt drive pump.	*n.* Repair or replace pump.
	o. No offsetting.	*o.* Error detection, defective offset solenoid.	*o.* Replace pc card A18, replaceoffset solenoid.
	p. Incorrect punching and STEP FAIL on last card.	*p.* Master counter.	*p.* Replace PC card A15.
	q. Card picked, solenoid stays energized.	*q.* Solenoid driver.	*q.* Replace PC card A1A2.
	r. Card picked too soon.	*r.* Error function.	*r.* Replace PC card A21.
5.	Data or transmission troubles.		
	a. No data to CCU or pulses from reluct. P.U. ineffective.	*a.* Punch timing.	*a.* Replace pc card Al.
	b. Code conversion error.	*b.* One or more of following: (1) Octal to Hollerith. (2) Encode matrix. (3) Decode matrix. (4) Code converter input.	*b.* Correct as follows: (1) Replace pc card A7. (2) Replace defective pc card (A8, A9). (3) Replace defective pc card (A10, A11). (4) Replace pc card A12.
	c. False or no error signals.	*c.* Error detection.	*c.* Replace pc card A18.
	d. CCU to HSCP interface signals, one or more absent.	*d.* Receiver/Transmitter.	*d.* Replace pc card A14.
	e. Code conversion test inoperative.-	*e.* Master counter.	*e.* Replace pc card A15.
	f. Loss of timing pulses.	*f.* Reluctance pickup timing unit A1PU1.	*f.* Repair or replace unit.
	g. Error at power up.	*g.* One or more of the following: (1) Error function. (2) Master counter.	*g.* Correct as follows: (1) Replace PC card A21. (2) Replace PC card A15.
6.	Miscellaneous and multiple troubles.		
	a. One of five solenoids inoperative.-	*a.* Solenoid driver.	*a.* Replace pc card A2.
	b. Incorrect dc power sequencing.	*b.* Pc card A12.	*b.* Replace card.
	c. Power supply does not turn on, fuse A10F5 or A10F6 blown.	*c.* One or more of following:	*c.* Correct as follows:
	d. No parity check.	*d.* Data control and parity check.	*d.* Replace pc card A13.
	e. Audible alarm cannot be silenced.	*e.* Switch Z1.	*e.* Replace switch.
	f. Cannot control ac power to punch.	*f.* Switch Z2.	*f.* Replace switch.
	g. Cannot test for indicator fault.	*g.* Switch Z3.	*g.* Replace switch.
	h. Cannot manually reset HSCP logic.	*h.* Switch S1.	*h.* Replace switch.
	i. Ventilating fan inoperative.	*i.* 3 a fuse A10F7.	*i.* Replace fuse.
	j. Drive motor inoperative.	*j.* One or more of the following: (1) 3 a fuse A10F8. (2) Relay A9K1. (3) Motor start switch. (4) Motor. (5) Motor-stop.	*j.* Correct as follows: (1) Replace fuse. (2) Replace relay. (3) Replace switch. (4) Replace motor. (5) Replace PC card A21.

4-12. High Speed Card Punch Troubleshooting Chart-Continued

Item No.	Trouble symptom	Probable trouble	Checks and corrective measures
	k. Drive motor and/or fan inoperative.-	*k.* Relay A9K1.	*k.* Replace relay.
	l. Improper sequencing operation.-	*l.* Capacitor A9C1.	*l.* Replace capacitor.
	m. Excessive ripple or blown fuse A10F5 or A10F6.	*m.* Capacitors A9C2 thru A9C10.	*m.* Replace defective capacitor.
	n. No air flow into cabinets, A10F7 fuse indication.	*n.* Blower motor B1.	*n.* Repair or replace motor.
	o. No so power to punch, device inoperative.	*o.* Ac line filters FL1, FL2.	*o.* Replace defective filter.
	p. No ac power to drive motor, indicators and logic inoperative.	*p.* Ac line filters, FL1, FL3, FL4.	*p.* Replace defective filter.

4-13. Power Supply, PS1, Troubleshooting Procedure

a. If there is a malfunction in any of the regulated supplies in PS1, sequence module PS1A12 in the power supply automatically shuts down the entire power supply. Use the procedure below to determine which portion of the power supply is faulty.

CAUTION

The following procedure describes the use of a manual control card (Saratoga Industries part No. D39244. Before installing the manual control card always be sure to disconnect all dc loads from output terminal board TB2 of the power supply.

(1) Remove input power and disconnect all dc loads from TB2.

(2) Reapply input power and check for correct do output voltages at the test jacks on the front of the power supply (para 4-106). If any of the voltages is not present, check for a blown output fuse. If none of the dc voltages are obtained, check for a faulty ac fuse or power transformer (A9T1).

(3) If the correct voltage is obtained at each test point, it may be assumed that the trouble is in one or more of the disconnected loads. Reconnect the loads (one-by-one, in the following sequence -12V, +4.75, +12V, and -48V), until the faulty load is connected, as indicated by an immediate, automatic shutdown of the power supply. If the trouble is in a faulty load, locate and correct fault in the load.

(4) If the trouble is not in any of the loads, remove the input power and disconnect all loads again. Position all toggle switches of the manual control card, remove sequence module PSIA12 from the power supply and insert the manual control card in its place and reapply input power. Operate the manual control card toggle switches in the following sequence and check for proper dc output after each switch is operated (AC RELAY, -12SR, +4.75SR, +12SR, and -48SR).

NOTE

To manually shut down the power supply when the manual control card is installed, operate the toggle switches of the manual control card in the following sequence: --48SCR, +12SCR, -48SR, +4.75SCR, + 12SR, AC RELAY, --12SCR, +4.75SR, and -12SR.

b. If it is suspected that there may be ripple in the output voltage of any one of the regulated supplies, connect an oscilloscope to the output test jacks at the front of the power supply normally monitored by means of a digital voltmeter (refer to paragraph 4-106). The ac ripple should not exceed the following peak-to-peak values:

Test point monitored	*Maximum ripple (volts) (peak-to-peak)*
+4.75 and COM	0.012
+12 and COM	0.020
-12 and COM	0.020
-48 and COM	0.020

c. If one of the power supplies is completely off, check the front panel fuse associated with this supply. If the fuse is not defective, the cause of trouble is in the corresponding voltage regulator card specified in the following troubleshooting chart.

4-14. Power Supply Troubleshooting Chart

Item No.	Trouble symptoms	Probable trouble	Checks and corrective measures
1	Power supply shuts off but can be made to operate when manual control card is installed.	Sequence module PS1A12 defective.	Replace module PS1A12.
2	+4.75 volt output out of tolerance.	a. Incorrectly adjusted +4.75 volt regulator. b. Defective +4.75 volt regulator. c. Defective rectifier-filter network.	*a.* Adjust +4.75 volt regulator (para 4-106) *b.* Replace module PS1A1. *c.* Replace heatsink component assembly PS1A4.
3	+ 12 volt output out of tolerance.	a. Incorrectly adjusted + 12 volt regulator. b. Defective + 12 volt regulator. c. Defective rectifier-filter network.	*a.* Adjust + 12 volt regulator (para 4-106) *b.* Replace module PSI A2. *c.* Replace heatsink component assembly PS1AS.
4	-12 volt output out of tolerance.	a. Incorrectly adjusted -12 volt regulator. b. Defective -12 volt regulator. c. Defective rectifier-filter network.	*a.* Adjust -12 volt regulator (para 4-106) *h.* Replace module PS1A2. *c.* Replace heatsink component assembly PS1AS.
5	-48 volt output out of tolerance.	a. Incorrectly adjusted 48 volt regulator. b. Defective -48 volt regulator. c. Defective rectifier-filter network.	*a.* Adjust 48 volt regulator as described in paragraph 4-106) *b.* Replace module PS1A3 or A6. *c.* Replace heatsink component assembly PS1A4.
6	Excessive ripple in regulated d c outputs: *a.* +4.75 volt output. *b.* +12 volt output. *c.* -12 volt output. *d.* -48 volt output.	a. Defective filter capacitor A9C2 or C3. b. Defective filter capacitor A9C4. c. Defective filter capacitor A9C5. d. Defective filter capacitor A9C6.	*a.* Replace filter capacitor(s). *b.* Replace filter capacitor. *c.* Replace filter capacitor. *d.* Replace filter capacitor.

4-15. Troubleshooting Reference Data

a. General When using the de resistance data listed below, do not use the resistance measurement as the sole basis for determining that the component is defective. Because of broad winding tolerances during manufacture, resistances of operable components may vary considerably.

b. Transformer Windings. The dc resistances of the windings of transformers PS1A9T1 and PS1A12T1 are listed below. The resistances are measured with all connections removed from the transformer terminals.

Transformer	Winding terminals	Resistance (ohms)
PS1A9T1	1 - 2	0.270 (Max.).
	3 - 7	0.270 (Max.).
	4 - 7	0.021 (Max.).
	5 - 7	0.048 (Max.).
	6 - 7	0.011 (Max.).
	7 - 8	0.011 (Max.).
	7 - 9	0.048 (Max.).
	7 - 10	0.021 (Max.).
	7 - 11	0.270 (Max.).
	12 - 13	0.510 (Max.).
PS1A12T1	1 6	1.250(±15,).
	2 4	0.290 (±15%).
	3 5	0.370 (±15%).

c. Relay and Solenoid Windings.

Relay or solenoid	Resistance (ohms)
Relay PS1A9K1 (fig. 8-7, part)	132
Relay PS1A12K1 (fig. 8-8)	45
Offset solenoid A2K2 (fig. 8-8)	30
Picker solenoid A2K1 (fig. 8-8)	33
Timing unit A2A1L1 (fig. 8-8)	100
Registration gate magnets A2A1K1 and A2A1K2 (fig. 8-8)	135 (ea)
Eject solenoid A2A1K3 (fig. 8-8)	36
Card feed magnet A2A1K4 (fig. 8-8)	13
Punch magnets (26 ea, 13 COL A, 13 COL B) (fig. 8-8)	115 (ea)

d. Additional Reference Data. Illustrations that will help in troubleshooting the card reader are listed below.

Fig. No.	Description
8-1	Color code for marking MIL-STD resistors.
8-2	Color code for marking MIL-STD capacitors.
8-3	High speed card punch, interconnection diagram.
8-4	Control panel, schematic diagram.
8-5	Ac circuits, schematic diagram.
8-6	Dc circuits, schematic diagram.
8-9	High speed card punch mechanism assembly A2, schematic diagram.

Section IV. REMOVAL AND REPLACEMENT

CAUTION

The high speed card punch is a very intricate mechanical device which must operate within very precise limitations; therefore, many of the components are fitted and matched. Repair of the punch head and feed mechanism assemblies requires a high degree of mechanical ability and a number of special tools and test devices (para 4-43 through 4-108). On-site maintenance personnel should not attempt to repair these assemblies. Failure to observe this caution may result in serious damage to the card punch.

4-16. General

The following paragraphs describe the removal and replacement of major assemblies, subassemblies, and components of the high speed card punch. These paragraphs also describe the disassembly and reassembly of major assemblies and subassemblies when pot in the order of index numbers on exploded views, or when special tools and procedures are required. Use these procedures in conjunction with the troubleshooting, repair, and adjustment procedures described in paragraphs 4-11, 4-44, and 4-45, respectively.

a. Removal and Disassembly. Disassemble the high

WARNING

120 VAC is present on Power Supply PS1 Sequencer PC Card A12. Do not remove PC Card PS1A12 prior to removing AC voltage to the high speed card punch unit.

speed card punch only to the extent necessary to inspect, clean, lubricate, and replace a defective part, or to adjust the assembly that is in need of maintenance. Open the front or rear door of the high speed card punch enclosure (43, fig. 4-1) as necessary to gain access to assemblies to be removed.

b. Reassembly and Replacement.

(1) Inspect all removed parts for evidence of excessive wear or damage. Install only parts that are unquestionably serviceable.

(2) Check to be sure that mating gears and mechanical linkages are engaged properly before tightening the mounting screws or nuts.

CAUTION

When securing parts in place, be careful not to tighten the mounting screws or nuts excessively.

(3) Apply sealing compound, retaining, FSN 8030-081-2328 to the areas indicated by the note on figure 4-1.

4-17. Removal and Replacement of High Speed Card Punch Mechanism

a. Removal. Disconnect all tubes, hoses, and cables from assembly A2. Remove nuts (2, fig. 4-1), lockwashers (3), flatwashers (5), and screws (4).

CAUTION

Mechanism assembly is heavy 1. Use at least two men to remove assembly A2 and support rack (6, fig. 4-1). Slide mechanism assembly A2 with support rack (6) out from rear of cabinet. If further disassembly is required, remove hardware 7, 8, 8.1, 9, 10, and brackets 11, 11.1 to free punch assembly A2 (12, fig. 4-1).

b. Replacement. Replace the high speed card punch mechanism in the reverse order in a above.

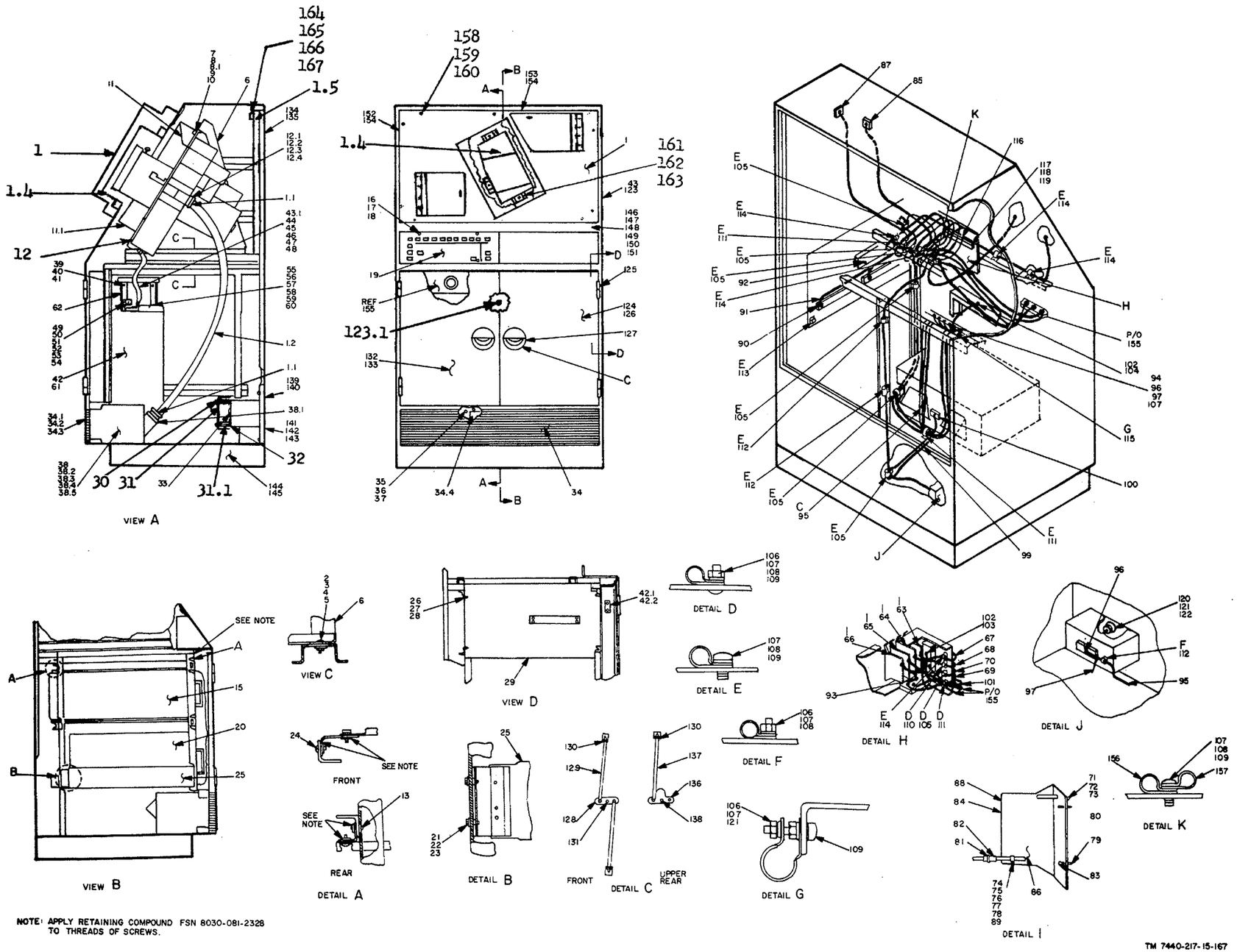


Figure 4-1. High-sped card punch, component location diagram.

LEGEND FOR FIGURE 4-1

1 Panel cover assembly
1.1 Hose clamp
1.2 Air duct
1.4 Sound cover assembly
1,5 Shield, noise, rear
2 Hex nut, 3/8 inch
3 Lockwasher, 3/8 inch
4 Screw, panhead, 3/8 in. dia., 7/8 inch long
5 Washer, flat, 3/8 inch
6 Mechanism frame
7 Hex nut, 5/16 inch
8 Lockwasher, 5/16 inch
8.1 Washer, flat, 5/16 inch
9 Screw, panhead, 5/16 inch dia., 7/8 inch long
10 Washer, flat, 5/16 inch
11 Hopper bracket
11.1 Stacker bracket
12 Mechanism assembly A2
12.1 Screw, panhead, No. 8-32, 7/16 inch long
12.2 Washer, flat, No. 8
12.3 Lockwasher, No. 8
12.4 Air duct flange
13 Screw, binding head, No. 10-32, 1/2 inch long
14 Not used
15 Logic assembly A1
16 Screw, panhead, No. 8-32, 7/16 inch long
17 Washer, flat, No. 8
18 Lockwasher, No. 8
19 Control panel A3
20 Power supply PS 1
21 Screw, hex head, No. 10-32, 7/16 inch long
22 Washer, flat, No. 10
23 Lockwasher, No. 10
24 Screw, panhead, No. 10-32, 3/8 inch long
25 Slide
26 Screw, panhead, No. 8-32, 1/2 inch long
27 Washer, flat, No. 8
28 Lockwasher, No. 8
29 Interface plate assembly
30 Screw, pan head, No. 10-32
31 Shied assemblry
32 Lockwasher, No. 10
33 Filter assembly FL1
34 Grill assembly
34.1 Gill
34.2 Stud, 6-32
34.3 Lock nut, 6-32
34.4 Filter
35 Screw, panhead, No. 8-32, 7/16 inch long
36 Washer, flat, No. 8
37 Lockwasher, No. 8
38 Blower, B1
38.1 Air duct flange
38.2 Capacitor
38.3 Blower wheel, clockwise
38.4 Blower wheel, counterclockwise
38.5 Blower motor
39 Screw, hex head, No. 10-32, 7/16 inch long
40 Washer, flat, No. 10
41 Lockwasher, No. 10
42 Chad bag assembly
42.1 Identification plate
42.2 Drive screw
43 High speed card punch enclosure
43.1 Hose clamp
44 Screw, button head, 8-32
45 Washer, flat, No. 8
46 Lockwasher, No. 8
47 Collar
48 Flange
49 Switch
50 Screw, button head, 6-32
51 Lockwasher, No. 6
52 Washer, flat, No. 6
53 Nut stop
54 Switch mounting bracket
55 Hex nut, self-locking
56 Washer, flat, No. 10
57 Spring
58 Support
59 Washer
60 Screw, cap
61 Chad bag
62 Bracket
63 Connector assembly P1
64 Connector assembly W1P1
65 Connector assembly W2P2
66 Connector assembly P4
67 Cable assembly, control panel
68 Cable assembly W1
69 Cable assembly W2
70 Interface cable assembly
71 Screw, external released body
72 Washer, flat, No. 6
73 Lockwasher, No. 6
74 Hex nut, 4-40
75 Lockwasher, No. 4
76 Washer, flat, No. 4
77 Screw, flat head, 4-40, 5/8 inch long
78 Cable clamp
79 Contact, electrical, male
80 Keying pin
81 Cable strap
82 Name plate
83 Insulator, electrical contact
84 Bracket, contact mounting, 46 pin
85 Connector assembly W2P1
86 Ferrule
87 Connector assembly WIP1
88 Bracket, contact mounting, 92 pin
89 Cable clamp
90 Terminal lug
91 Ferrule
92 Terminal lug
93 Terminal lug
94 Terminal lug
95 Wiring harness
96 Terminal lug
97 Terminal lug
98 Not used
99 Wiring harness
100 Terminal lug
101 Wiring harness
102 Terminal lug
103 Terminal lug
104 Terminal lug
105 Cable clamp
106 Hex nut, 8-32
107 Lockwasher, No. 8
108 Washer, flat, No. 8
109 Screw, panhead, 8-32, 5/8 inch long
110 Cable clamp
111 Cable clamp
112 Cable clamp
113 Cable clamp
114 Cable clamp
115 Cable support clamp
116 Cable bar
117 Hex nut, 10-32
118 Lockwasher, No. 10
119 Washer, flat, No. 10
120 Hex nut, 8-32
121 Lockwasher, No. 8
122 Washer, flat, No. 8
123 Enclosure, weldment
124 Door assembly, right
125 Pin, straight, 3/16 inch dia., 3 inches long
126 Door, right
127 Handle
128 Cam, door
129 Rod, front doors
130 Grommet, nylon
131 Liner, mylar, front door
132 Door assembly, left
133 Door, left
134 Door assembly, rear
135 Door, rear
136 Cam, rear door
137 Rod, rear door
138 Liner, mylar, rear door
139 Mounting plate
140 Support plate
141 Hex nut, 10-32
142 Lockwasher, No. 10
123.1 Rubber bumper
143 Washer, flat, No. 10
144 Base
145 Screw, sheetmetal, No. 10, 1/2 inch long
146 Screw, flat head, 10-32, 3/8 inch long
147 Hex nut, 10-32
148 Lockwasher, No. 10
149 Washer, flat, No. 10
150 Logo trim
151 Logo strip
152 Vertical trim
153 Horizontal trim
154 Mounting clip
155 Motor stop assembly A4, (Reference: see fig.4-13.1)
156 Cable clamp
157 Cable clamp
158 Stud, turnlock fastener
159 Washer, split
160 Receptacle,
161 Bracket, sound cover, No. ATE-C-0754-1
162 Screw, panhead, No. 6-32, 5/16 inch long
163 Receptacle, type B, No. 82-35-302-15
164 Stud, double screw base, No. 402
165 Screw, flathead, 6-32, 1/4 inch long
166 Lockwasher, int. Tooth, No.6
167 Hex nut, 6-32

4-18. Disassembly and Reassembly of Punch Mechanism Assembly A2

Refer to paragraphs 4-30 through 4-42 for disassembly and reassembly instructions for punch mechanism assembly A2.

4-19. Removal and Replacement of Logic Assembly A1

a. Removal. Remove the logic assembly (15, fig. 4-1) as follows:

(1) Powerdown the high speed card punch (par. 2-7,c).
(2) Open the rear door of the enclosure
(3) Remove the bar clamp which holds the cables to the rear surface of the logic assembly.
(4) Open the front doors of the enclose
(5) Release the panel fasteners by rotating the knobs until the arrow is vertical.
(6) Slide the logic assembly forward until the slides lock in place.
(7) Remove the four individual cable clamps located adjacent to TB2.
(8) Remove the four interface connectors which mate with J1 through J4.
(9) Remove the wires attached to the A sides of terminal blocks TB2 and TB3. All connecting cables are now free from the logic assembly.
(10) Depress the slide stop catches (located midway along each of the top and bottom slide assemblies) and remove the logic assembly from the enclosure.

b. Replacement. Replace the logic assembly in the reverse order of removal in a above.

4-20. Disassembly and Reassembly of Logic Assembly A1 (fig. 4-2)

a. Disassembly. Disassemble the logic assembly (15, fig. 4-1) in the order of index numbers in figure 4-2.
b. Reassembly. Reassemble the logic assembly in the reverse order of the index numbers in figure 4-2.

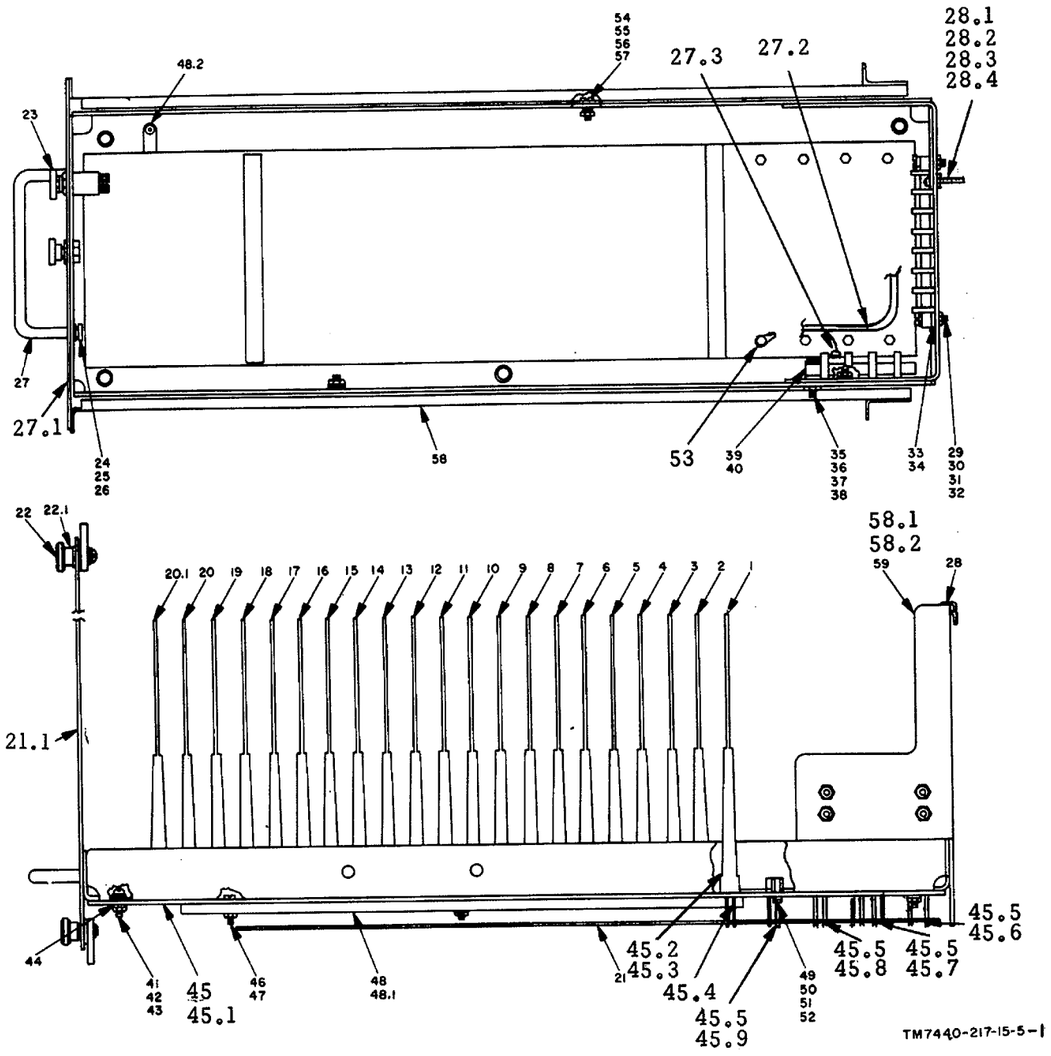


Figure 4-2. Logic assembly A1, component location diagram.

LEGEND FOR FIGURE 4-2

1 PC card A1 (No. A65117)
2 PC card A2 (No. A65081)
3 PC card A3 (No. A52766)
4 PC card A4 (No. A52766)
5 PC card A5 (No. A52766)
6 PC card A6 (No. A52766)
7 PC card A7 (No. A52638)
8 PC card A8 (No. A53721)
9 PC card A9 (No. A53721)
10 PC card A10 (No. A53725)
11 PC card A11 (No. A53725)
12 PC card A12 (No. A52774)
13 PC card A13 (No. A650892
14 PC card A14 (No. A65121)
15 PC card A15 (No. A65085)
16 PC card A16 (No: A65101)
17 PC card A17 (No. A65093)
18 PC card A18 (No. A65109)
19 PC card A19 (No. A65105)
20 PC card A20 (No. SM-54665)
20.1 PC card A21 (No. A651771)(A7601 on units equipped with automatic motor stop assembly)
21 Pin identification overlay
21.1 Maintenance panel assembly
22 Door latch
22.1 Washer, flat, No. 12
23 Push switch S1
24 Screw, panhead, No. 10-32, 3/4 inch long
25 Lockwasher, No. 10
26 Washer, flat, No. 10
27 Bow handle
27.1 Front panel
27.2 Wiring harness

27.3 Terminal lug

28 Plastic trim
28.1 Nut,hex,10-32

28.2 Lockwasher,No.10
28.3 Washer, flat, No.10
28.4 Screw, pan head,10-32, 1 1/2 inches long
29 Nut, hex, No. 8-32
30 Lockwasher, No. 8
31 Screw, panhead, No. 8-32, 3/4 inch long
32 Washer, flat, No. 8
33 Terminal block TB2
34 Marker strip
35 Nut, hex, No. 6-32
36 Lockwasher, No 6
37 Screw, panhead, No. 6-32, 7/8 inch long
38 Washer, flat, No. 6
39 Terminal block TB3
40 Marker strip
41 Nut, hex, No. 10-32
42 Lockwasher, No. 10
43 Screw, panhead, No. 10-32,5/8 inch long
44 Washer, flat No. 10
45 Contact plate

45.1 Contact plate assembly

45.2 Screw, pan head, 6-32, 5/16 inch long

45.3 Insulator

45.4 Pins
45.5 Insulators
45.5 Insulators
45.6 Contact pins (A1J1)
45.7 Contact pins (A1J2)
45.8 Contact pins (A1J3)
45.9 Contact pins (A1J4)
46 Screw, nylon, No. 6-32, 1/2, inch long
47 Nut, hex, nylon, No. 6-32
48 Laminated bus TB1
48.1 Insulating strip
48.2 Rubber grommet
49 Screw, panhead, No. 6-32, 3/8 inch long
50 Lockwasher, No. 6
51 Washer, flat, No. 6
52 Spacer
53 Terminal lug
54 Nut, hex, No. 10-32
55 Lockwasher, No. 10
56 Screw, binding head, No. 10-32, 3/8 inch long
57 Washer, flat, No. 10
58 Slide.
58.1 Chassis assembly
58.2 Chassis assembly
59 Chassis

4-21. Removal and Replacement of Control Panel A3

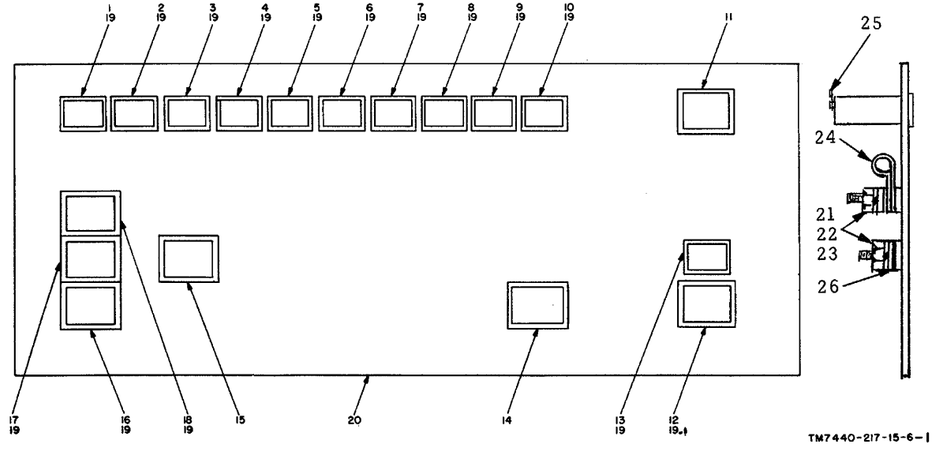
a. Removal. Remove the control panel (19, fig. 4-1) in the order of index numbers 16, 17, and 18.

b. Replacement. Replace the control panel in the reverse order of removal in a above.

4-22. Disassembly and Reassembly of Control Panel A3 (fig. 4-3)

a. Disassembly. Disassemble the control panel (19, fig. 4-1) in the order of the index numbers in figure 4-3.

b. Reassembly. Reassemble the control panel in the reverse order of index numbers in figure 4-3.



1 Indicator light (DS11), (Not Assigned).
2 Indicator light (DS10), (Hopper Low).
3 Indicator light (DS9) (Chad alarm)
4 Indicator light (DS8), (Card alarm)
5 Indicator light (DS7), (Out Sync)
6 Indicator light (DS6), (Motion Fail):
7 Indicator light (DS5), (Parity Error).
8 Indicator light (DS4), (Punch Error)
9 Indicator light (DS3), (Step Fail).
10 Indicator light (DS2), (Code Conv Error).
11 Push switch (Z1), (Audible Reset).
12 Push switch (Z2), (AC power).
13 Indicator light (DS1), (DC Power)
14 Push switch (Z3), (Lamp Test).
15 Push switch (Z4), (Single Feed).
16 Push switch (Z7), (Local Test).
17 Push switch (Z6), (Stop)
18 Push switch (Z5), (Start).
19 Lamp (No.330)
19.1 Lamp(No.382)
20 Panel
21 Nut,hex,10-32
22 Lockwasher,No.10
23 Washer,No.10
24 Cable clamp
25 Terminal lug
26 Terminal lug

Figure 4-3. Control panel A3, component location diagram.

4-23. Removal and Replacement of Power Supply PSI

WARNING

Use two people to remove power supply (20, fig. 4-1) from the high speed card punch enclosure. Use extreme care in handling the power supply (20), to avoid injury to personnel or damage to equipment, since there are no good grasping areas in the rear of these units.

a. Removal. Remove the power supply (20) by sliding out of the enclosure on the slides (25) an(carefully lifting the power supply off the slides.

(Continued on page 4-8.2.)

1 Screw, hex. head, No. 8-32, 3/8 in. ong
2 Lockwasher, No. 8
3 Washer, No. 8
4 Front panel assembly (A 10)
4.1 Front panel
5 Latch

6 Fuseholder (XF1)
7 Fuseholder (XF4)
8 Fuseholder (XF2, XF3, XF9, XF10)
9 Fuseholder (XF5, XF7, XF8)
10 Fuseholder (spare)
11 Fuse, 15 amp, slo blow (F5, F8, and spare)
12 Fuse, 3 amp, slo blow (F7, F9, F10, and spare)
13 Fuse, 15 amp, fast blow (F1 and spare)
14 Fuse, 10 amp, fast blow (F2, F3, F4, and spare)
15 Screw, hex. head, No. 10-32, 5/8 in. long
16 Lockwasher, No 10
17 Washer, No. 10
18 Handle
19 Test point jack (TP2 thru TP5)
20 Test point jack (TP1)
21 Screw, hex. head, No. 6-32, 3/8 in. long
22 Lockwasher. No. 6
23 Washer, No. 6
24 Fuse cover
25 Screw, flat head, No. 6-32, 5/16 in. long
26 Side plate. left hand
27 Side plate, right hand
28 Screw, hex. head, No. 8-32, 3/8 in . long
29 Lockwasher, No. 8
30 Washer, No. 8
31 Sequence module bracket, left hand
32 Sequence module bracket, right hand
33 Card guide
34 Screw, hex. head, No. 4-40, 1/2 in. long
35 Lockwasher No. 4
36 Washer. No. 4
37 Hex, nut No. 4-40
38 Polarization key

39 Electrical receptacle connector (A9J4)
40 Sequence module component board assembly (A12)
41 Screw, hex head, No. 10-32. 4 7/8 in. long
42 Screw, hex. head, No 10-32. 6 3/8 in. long

43 Lockwasher, No. 10
44 Washer, No. 10
45 Capacitor nest
45.1 Insulator
46 Capacitor, 82,000 uf, 15 vdc (A9C2, A9C3)C
47 Capacitor,44,000 uf,25 vdc (A9C4,A9C5)

48 Capacitor, 6700 uf ,100

vdc (A9C6)

49 Capacitor,1500 uf, 75 vdc (A9 C 11

50 Screw, hex. head, No. 6-32, 5/8 in. long
51 Washer, No. 6
52 Lockwasher, No. 6
53 Hex, nut, No. 6-32
54 Screw, pan head, No. 6-32, 3/8 in. long
55 Capacitor, 8400 uf, 20

vdc (A9C 7, A9C 11)

56 Capacitor, 4600 uf, (A9C8 A9C9)

57 Capacitor bracket
58 Capacitor, 1200 uf,6-32

(A9C10)
59 Screw, hex. head, No. 6-32, 3/8 in. long
60 Lockwasher, No.6
61 Washer, No. 6
62 Heatsink assembly (All)
62.1 End plate

62.2 Screw, panhead, 6-32,

1/2 inch long

62.3 Lockwasher, No. 6

62.4 Washer, No. 6

62.5 Side cover
62.6 Heatsink subassembly (A4)

62.7 Screw, panhead, 6-32,

7/8 inch long
62.8 Lockwasher, No. 10

62.9 Washer, No. 6

62.10 Heatsink subassembly (A5)

62.11 Heatsink subassembly (A6)
63 Screw, hex. head, 8-32, 3/8 in. long
64 Lockwasher, No. 8
65 Washer, No. 8
66 Relay bracket.
67 Screw, hex. head, No. 8-32, 1/2 in. long
68 Lockwasher No. 8
69 Washer, No. 8
70 Relay, 24 vdc (A9K1)
71 Grommet
72 Screw, hex. head, No. 6-32, 3/8 in. long

73 Lockwasher, No. 6
74 Washer, No. 6
75 Terminal board bracket
76 Stiffener
77 Screw, hex. head, No. 6-32, 5/8 in. long
78 Screw, hex. head, No. 632, 3/8 in. long
79 Lockwasher, No. 6
80 Washer, No.6
81 Terminal board TB1I
82 Terminal board TB2
83 Component board assembly A15
84 Spacer

84.1 Nut Hex, No. 6-32
84.2 Screw,panhead,6-32,5/16 in. lg.
84.3 Lockwasher,No.6

84.4 Washer, No. 6
85 Screw, hex. head, No. 632, 3/8 in. long
86 Lockwasher. No. 6
87 Washer, No. 6
88 Connector bracket assembly A14
89 Screw, hex. head, No. 4-40 5/16 in. long
90 Lockwasher, No.4

91 Washer, No. 4
92 Component board assembly A1
93 Component board assembly A2
94 Component board assembly A3
95 Electrical receptacle connector A9J1, A9J2, A9J3
96 Polarization key
97 Hex, nut, No. 10-32
98 Lockwasher, No. 10
99 Washer, No. 10
100 Hex nut, 1/4 20
110 Lockwasher, 1/4 in.
102 Washer,1/4 in.

78.1 Hex nut, No. 6-32
78.2 Shield
78.3 Bracket
78.4 Shield assembly
78, 5 Standoff

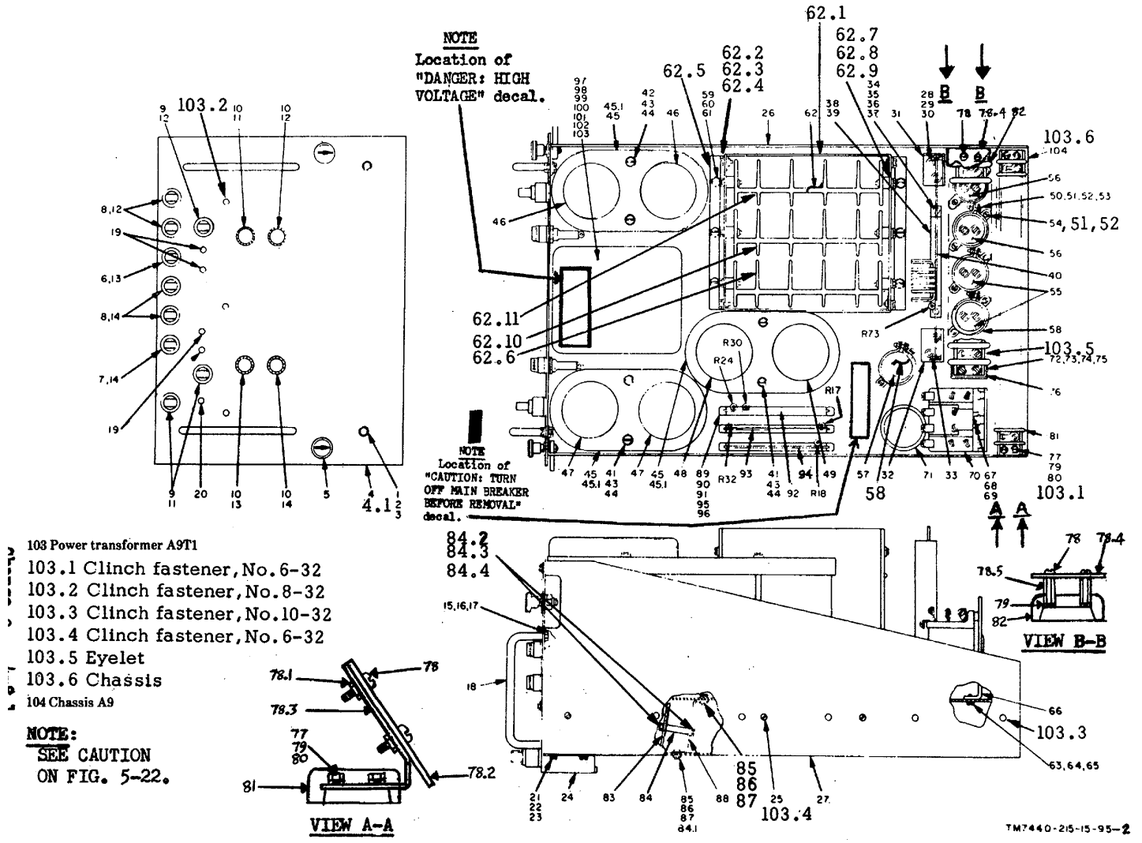


Figure 4-4. Power supply PS1, component location diagram.

(1) Open the circuit breaker supplying power to the equipment. Even with the unit AC POGER switch in the OFF position, 120 VAC is present at the Dower supply.

(2) Depress the power supply assembly slide latches and pull the power supply out to the stops on the slide.

(3) Remove the cable clamp on the rear of the power supply which secure the cables connected to the power supply assembly.

(4) Depress the power supply slide latches and pull the power supply forward until it is free of the slide.

(5) Rotate the power supply assembly 180° in a counter-clockwise direction so that bottom of the chassis is facing up.

(6) Replace the power supply in the slides. Close the power supply far enough to enable the slides to support the assembly. Power can now be applied and the necessary maintenance performed.

(7) To restore the power supply to its operating position, ensure the circuit breaker supplying power to the unit is OFF, then reverse the procedures in (1) through (6) above.

NOTE: When reinstalling the power supply to the operating position, always rotate power supply in a clockwise direction back to the upright position to prevent twisting the power cables.

b. Replacement. Replace the power supply in the reverse order of removal in a above.

4-24. Disassembly and Reassembly of Power Supply PS1 (fig. 4-4)

a. Disassembly. Disassemble the power supply (20, fig. 4-1) in the order of the index numbers in figure 4-4.

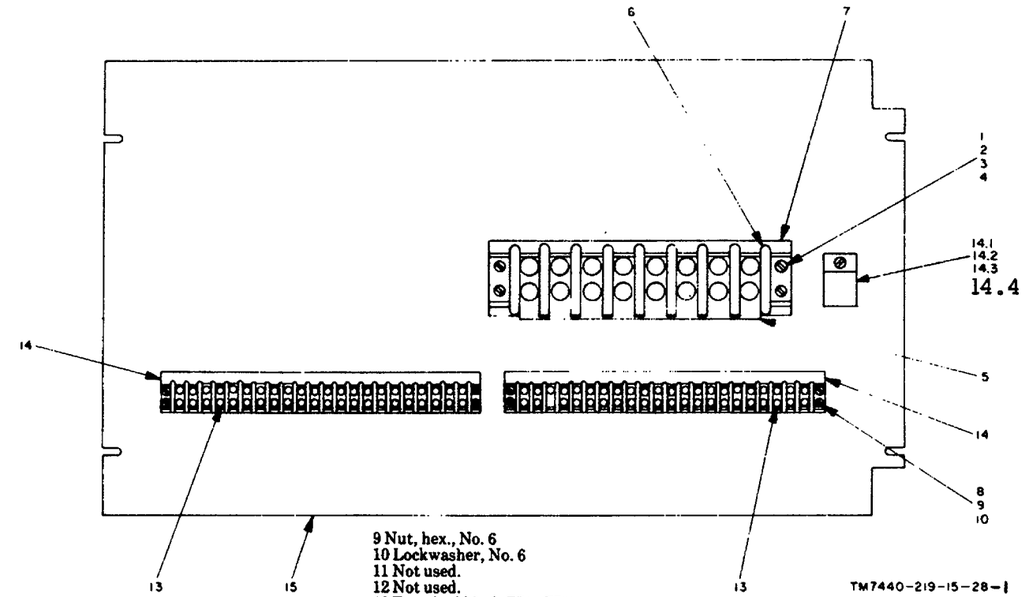
b. Reassembly. Reassemble the power supply in the reverse order of the index numbers in figure 4-4.

4-25. Removal and Replacement of Interface Plate Assembly

a. Removal. Remove the interface plate assembly (29, fig. 4-1) in the order of index numbers 26, 27, and 28.
b. Replacement. Replace the interface plate assembly in the reverse order of removal in a above.

4-26. Disassembly and Reassembly of Interface Plate Assembly (fig. 4-5)

a. Disassembly. Disassemble the interface plate assembly (29, fig. 4-1) in the order of the index numbers in figure 4-5.
b. Reassembly. Reassemble the interface plate assembly in the reverse order of the index numbers in figure 4-5.



1 Screw, panhead, 8-32, 1 in. long
2 Nut, hex., No. 8
3 Lockwasher, No. 8
4 Washer, flat, No. 8
5 Jumper plate
6 Terminal block TB3
7 Marker strip
8 Screw, panhead, 6-32, 5/8 in. long
9 Nut, hex., No. 6
10 Lockwasher, No. 6
11 Not used.
12 Not used.
13 Terminal block TB1, TB2
14 Marker strip
14.1 Screw, panhead, No. 8, 5/8 inch long
14.2 Lockwasher, No. 8
14.3 Washer, flat, No. 8
14.4 Cable clamp
15 Interface plate

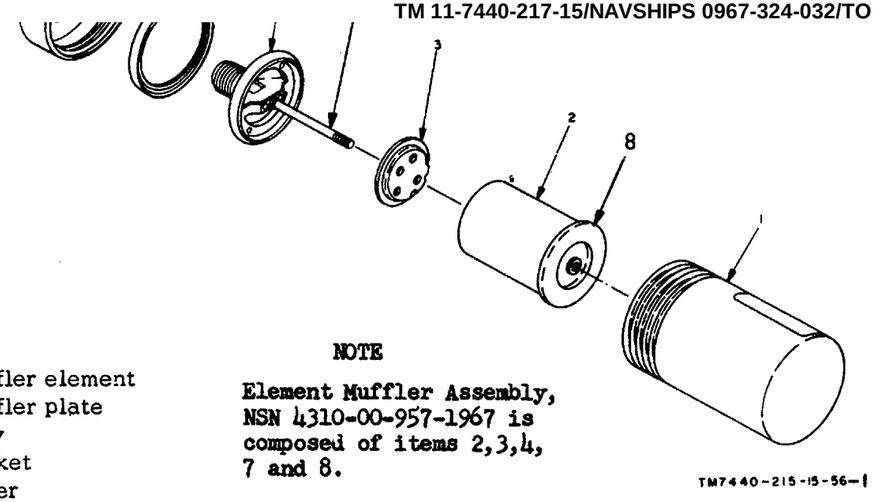
Figure 4-5. Interface plate assembly, component location diagram.

4-27. Removal and Replacement of Filter Assembly FL1

a. Removal. Remove the filter assembly (33, fig. 4-1) in the order of index numbers 30, 31, and 32.
b. Replacement. Replace the filter assembly in the reverse order of removal in a above.

4-28. Disassembly and Reassembly of Filter Assembly FL1 {fig. 4-6)

a. Disassembly. Disassemble the filter assembly (33, fig. 4-1) in the order of the index numbers in figure 4-6.
b. Reassembly. Reassemble the filter assembly in the reverse order of the numbers in figure 4-6.

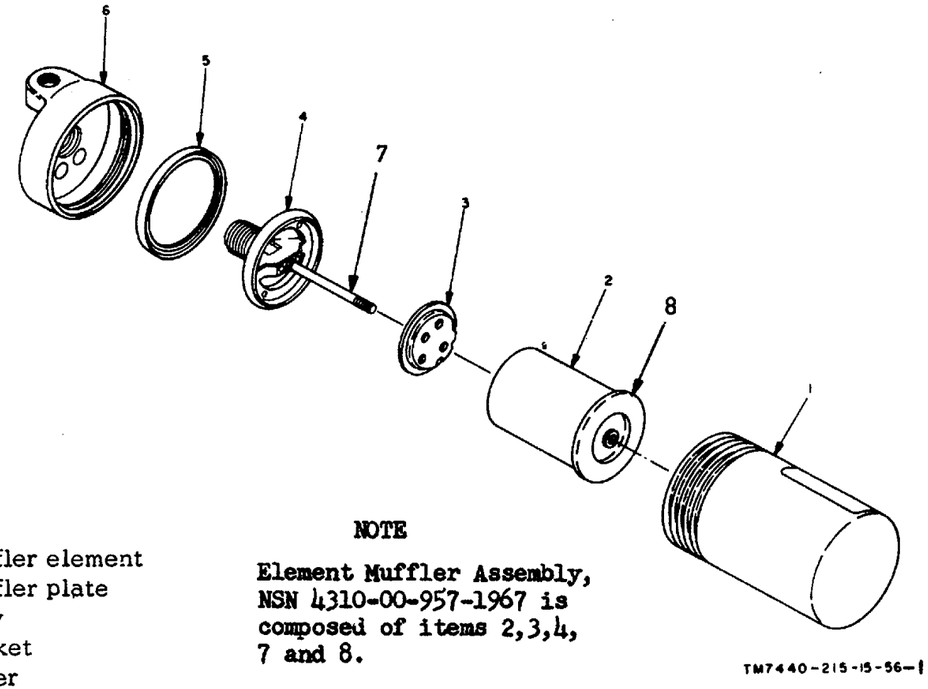


1 Jar
2 Muffler element
3 Muffler plate
4 Body
5 Gasket
6 Cover
7 Stud
8 End cap

NOTE

Element Muffler Assembly, NSN 4310-00-957-1967 is composed of items 2,3,4, 7 and 8.

Figure 4-6. Filter assembly FL1, component location diagram,



1 Jar
2 Muffler element
3 Muffler plate
4 Body
5 Gasket
6 Cover
7 Stud
8 End cap

NOTE

Element Muffler Assembly, NSN 4310-00-957-1967 is composed of items 2,3,4, 7 and 8.

Figure 4-6.1. Vacuum line air filter, exploded view.

4-29. Removal and Replacement of Chad Bag Assembly

a. Removal. Remove the chad bag assembly (42, fig. 4-1) in the order of index numbers 39, 40, and 41.

b. Replacement. Replace the chad bag assembly in the reverse order of removal in a above.

Section V. DISASSEMBLY AND REASSEMBLY OF HIGH SPEED CARD PUNCH MECHANISM

4-30. General

The disassembly and reassembly of the high speed card punch mechanism is accomplished by removal and replacement of major assemblies, subassemblies, and components as described in the following paragraphs. These paragraphs also describe the disassembly and reassembly of major assemblies when not in the order of index numbers on exploded views, or when special tools and procedures are required. Use these procedures in conjunction with the troubleshooting, repair, and adjustment procedures described in paragraphs 4-11, 4-44, and 4-45, respectively.

4-31. Removal and Replacement of Punch Head Assembly

a. Removal.

(1) Remove all electrical connectors on the left side of the punch head.

(2) Relieve the drive belt tension (107, fig. 4-7). Use a 3116" T-handle Allen wrench (NSN 5120-00-134-1141) to loosen all three socket head cap screws (93, fig. 4-7). While holding the mounting bracket (100, fig. 4-7) in an elevated position with a 1/4 " T-handle Allen wrench (NSN 5120-00-134-1140), tighten the lower left socket head cap screw.

(3) Remove the three cap head screws (4.1, fig. 4-7) and picker support bracket (4.4, fig. 4-7).

(4) Remove the mounting nut (2, fig. 4-7) first. Then remove the two other mounting cap head screws (1, fig. 4-7).

(5) Pull the punch head straight out.

NOTE

If replacement of any part of the punch head assembly is necessary, perform the appropriate disassembly and reassembly procedures (c and d below) and replace the punch head assembly.

b. Replacement. Replace the punch head assembly in the reverse order of removal in a above. Be sure that the main drive belt is around the rear pulley (71, fig. 4-8) before replacing the mounting cap head screws. When securing the picker support bracket, tighten the three screws evenly; i.e., tighten each screw only a part of a turn before proceeding to the next.

c. Disassembly.

(1) Drain the oil from the punch head assembly (para 4-9).

(2) Remove the die plate support assembly (35, fig. 4-8) by unscrewing the two clamp and knob assemblies (12).

NOTE

The clamp and knob assemblies are captive and should not be withdrawn from the feed mechanism (13, fig. 4-8) any farther than necessary to free the die plate support assembly (35).

(3) Remove feed mechanism (13, fig. 4-8) following procedures outlined in paragraph 4-32. Disassembly of the feed mechanism is described in paragraph 4-33.

(4) Remove the eject and idler assembly (22, fig. 4-8) by removing screw (21) and idler housing pin (39).

CAUTION

Disassembly of the punch head assembly beyond this point is only authorized at depot. Special tools and gages required for disassembly and reassembly are only available at depot. Injury to personnel is likely if spring tensions are incorrectly released. Disassembly of the eject and idler assembly is described in paragraph 4-34.

WARNING

The fumes of FREON TF are toxic. Provide thorough ventilation whenever used. DO NOT use near an open flame.

NOTE

The punch head must be drained of oil and flushed twice with FREON TF before packing for shipment to authorized repair facility.

(5) Remove gate mount and cable assembly (33, fig. 4-8) in order of index numbers 31 and 32. Disassembly of the gate mount and cable assembly is described in paragraph 4-35.

(6) Disassemble the remainder of the punch head assembly (punch head) in the order of index numbers 18, 19, 23 through 30, 34, and 38 through 126 in figure 4-8.

d. Reassembly. Reassemble the punch head assembly in the reverse order of disassembly in c above. During reassembly of the punch head, perform the adjustments described in paragraphs 4-47 through 4-62. After reassembly of entire punch head assembly, perform the adjustments described in paragraphs 4-73 through 4-84.

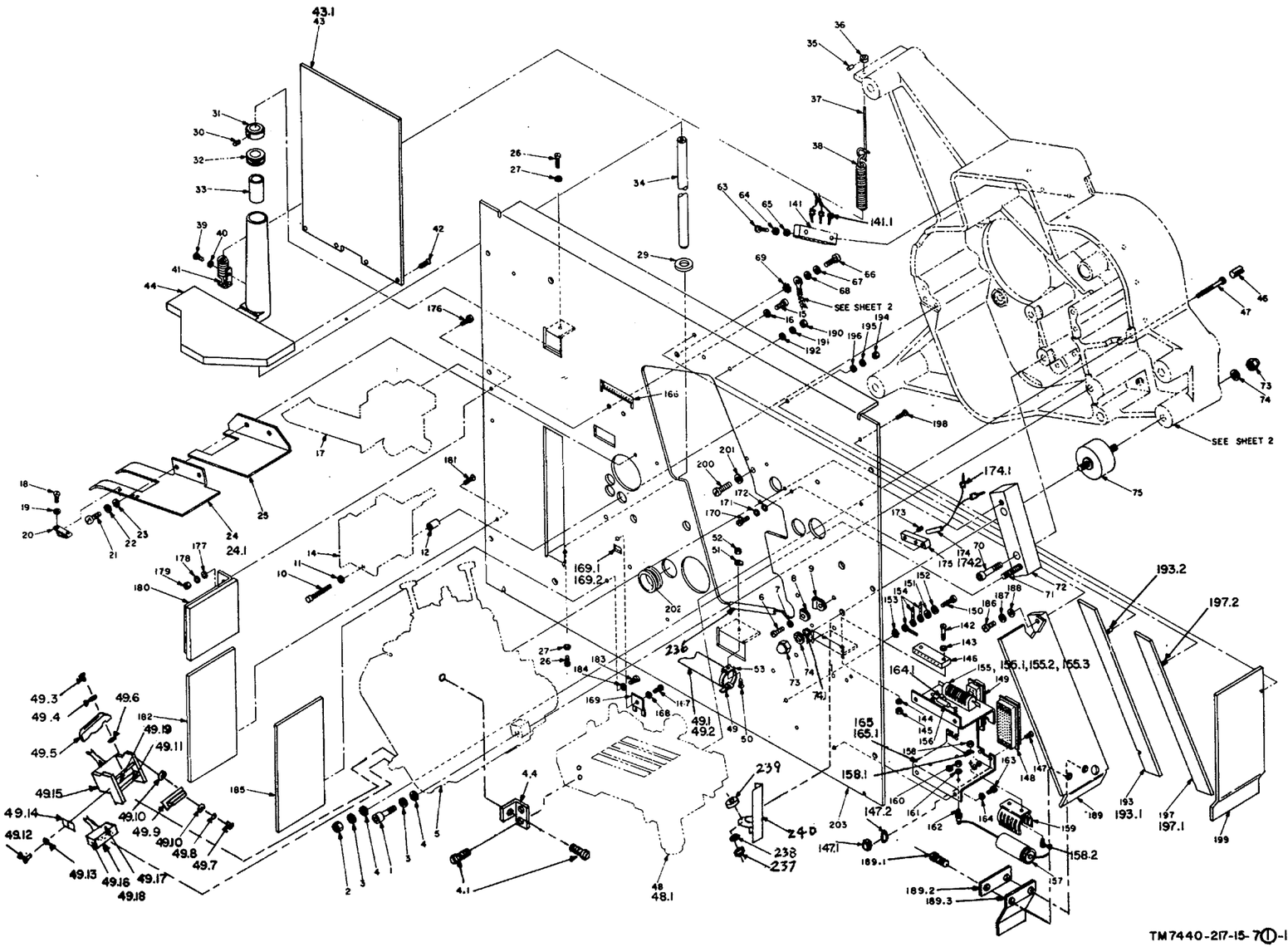


Figure 4-7. Punch head assembly, exploded view. (Part 1 of 3)

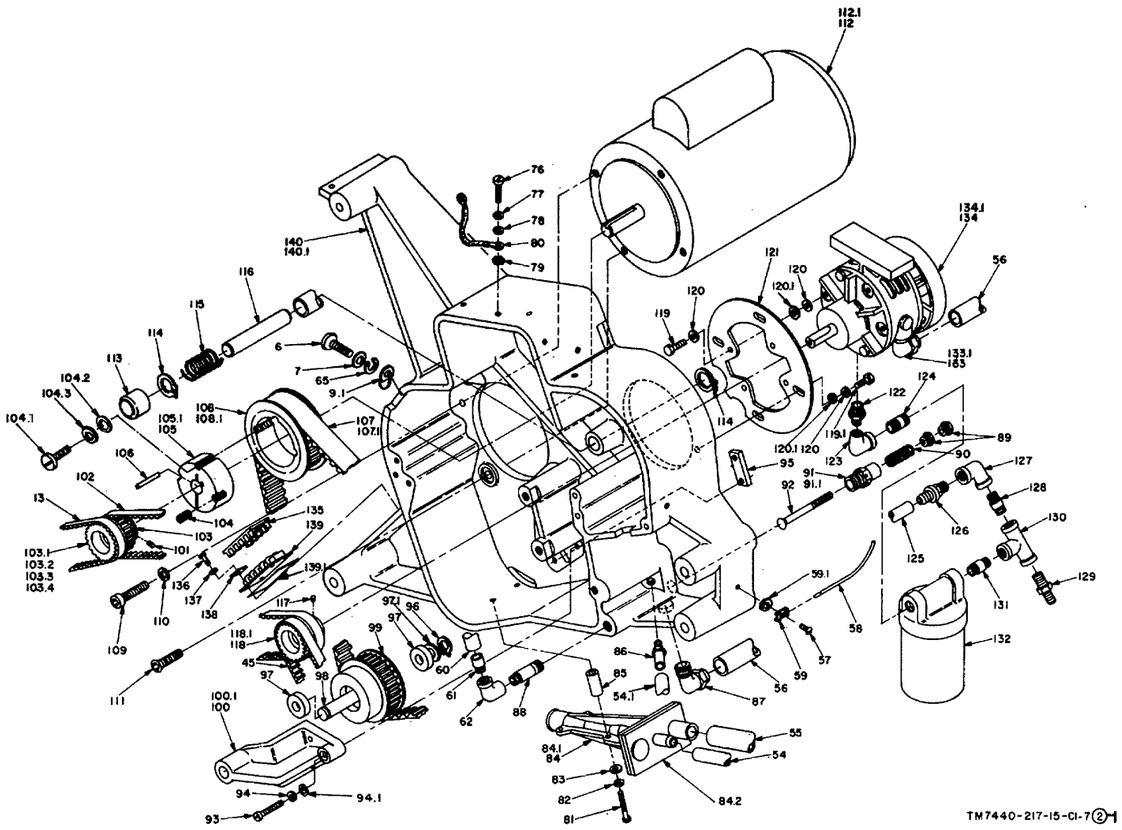


Figure 4-7. Punch head assembly, exploded view. (Part 2 of 3)

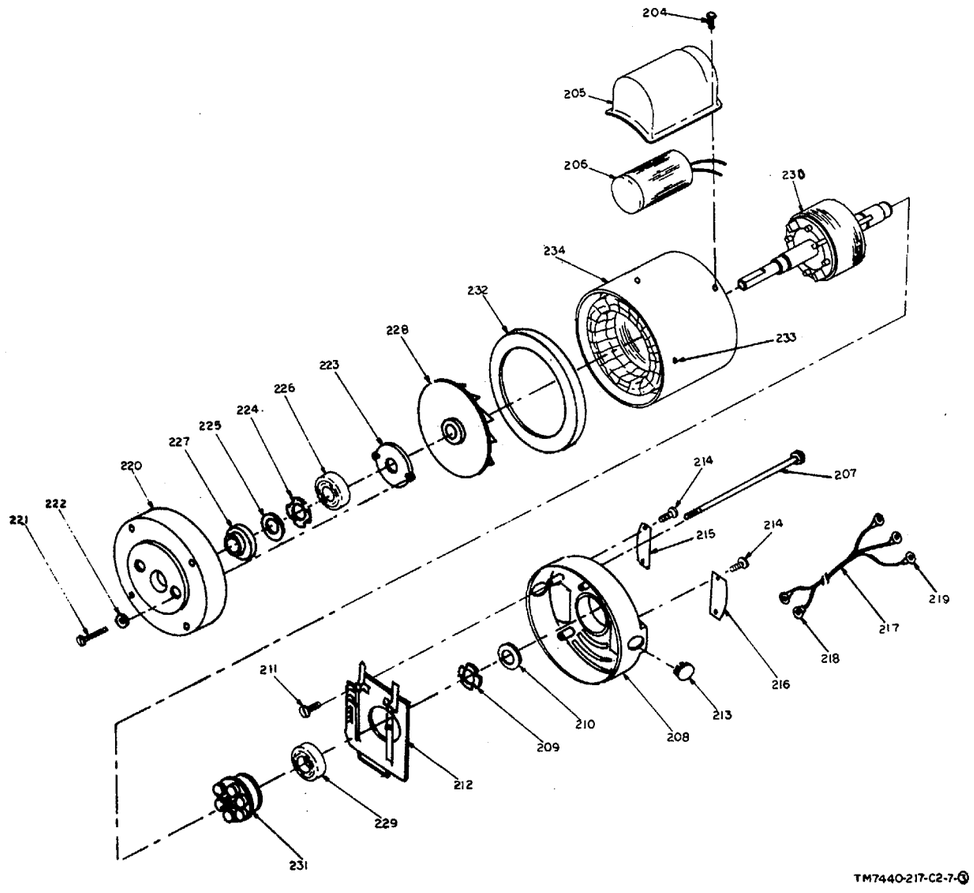


Figure 4-7. Punch head assembly, exploded view. (Part 3 of 3)

LEGEND FOR FIGURE 4-7

1 Screw, cap, socket head, 5/16-8, 1 1/2 in. long
2 Hex nut, 5/16-18
3 Lockwasher, 5/16
4 Washer, 5/16
4.1 Screw, cap, socket head,10-32, 1/2 inch long
1/2 inch long
4.2 Not used

4.3 Not used
4.4 Picker support bracket
5 Punch head assembly (fig. 4-8)
6 Screw, binding head,No.6., 1/4 in. long
7 Lockwasher, No. 6
8 D washer
9 Cable clamp
9.1 Cable tie
10 Screw, cap, socket head, No. 10-32, 1 1/2 in. long

11 Lockwasher, No.10
12 Spacer
13 Capstan drive belt
14 Capstan drive assembly (fig. 4-14)
15 Screw, cap, socket head, No. 10-32, 5/8 in. long
16 Lockwasher, No. 10
17 Offset idler assembly (fig. 4-13)
18 Screw, binding head, No. 4.40, ¼in. long
19 Lockwasher, No.4
20 Card guide spring
21 Screw, binding head, No. 10-32, 1/2 in. long
22 Lockwasher, No. 10
23 Washer, No. 10
24 Top card guide

24.1 Card guide assembly
25 Bottom card guide
26 Screw, cap, hex head, No. 10-32,3/8in. long
27 Lockwasher, No. 10
28 Not used

29 Bumper
30 Setscrew, cup point, No.6-32, 1/8 in. long
31 Climax collar
32 Bumper
33 Bearing
34 Shaft
35 Setscrew, cup point, No. 6-32,1/8 in. long
36 Climax collar
37 Hanger
38 Spring
39 Screw, binding head, No. 6-32 1/4 in. long
40 Lockwasher, No. 6
41 Clip retainer
40 Lockwasher, No. 6
42 Screw, flat Head, No. 6-32, 1/2 in. long
43 Backer plate
43.1 Elevator assembly

44 Elevator
45 Timing belt
46 Roll pin
47 Screw, cap, socket head, No. 10-32, 1 3/4 in. long
48 Picker assembly (fig. 4-12)
48.1 Laminated shim

49 Cable tie
49.1 Harness assembly

49.2 Wiring assembly
49.3 Screw,buttonhead,6-32

49.4 Lockwasher,No.6
49.5 Clamp-bracket

49.6 Washer, flat, No. 6
49.7 Screw1 4-40
49.8 Lockwasher,No.4

49.9 Connector (A2P1)
49.10 Washer, flat, No.4
49.11 Connector (A2P3)

49.12 Screw, 4-40
49.13 Washer, flat, No. 4.

49.14 Clamp
49.15 Connector bracket
49.15 Connector bracket
49.16 Screw, lock
49.17 Connector hood
49.18 Connector (A2P4)

49.19 Connector (A2P2)
50 Screw, flat head, No. 8-32, 1/2 in. long
51 Lockwasher, No. 8
52 Hex nut, No.632
53 Cable tie clamp
54 Hose,3/8 in. id,19 in. lg.
54.1 Tubing, 5/16 in. id, 8 3/4 inches long

55 Tygon tubing, 5/8 in. id, 19 inches long

56 Polyethylene tubing, 1/2 in. o.d , 13 inches long

57 Screw, binding head, No. 6-32,1/4 in. long
58 Cable tie

59 Cable tie clamp

59.1 Washer, flat, No. 6

60 Tygon tubing, 1/2 in. id, 3 3/4 inches long

61 Nipple
62 Elbow, 1/4 in.
63 Screw, binding head, No. 6-32, 5/8 in. long
64 Lockwasher, No. 6
65 Washer, No. 6
66 Screw, binding head, No.6-32,3/8 in. long

67 Washer, No. 6
68 Lockwasher, No. 6
69 Lockwasher, external tooth, No. 6
70 Screw, cap, socket head, 5/16-18,1 1/4 in. long
71 Punch mount stud assembly
72 Punch mount
73 Acorn nut, 3/8-24
74 Lockwasher. 3/8
74.1 Wasner,3/8 in.

75 Chassis shock mount
76 Screw, binding head, No. 6-32, 5/8 in. long
77 Lockwasher, No. 6
78 Washer, No. 6
79 Lockwasher, external tooth. No. 6
80 Bonding strap
81 Screw, binding head, No. 10-32, 1 1/2 in. long
82 Lockwasher, No. 10
83 Washer No.10
84 Exhauster assembly

84.1 Nozzle, mixer
84.2 Inlet plate
85 standoff

86 Restrictor, air
87 Elbow, hose fitting
88 Nipple 1/4 in., 1 1/2 in. long
89 Valve locknut
90 Compression spring
91 Relief valve body

92 Valve release

93 Screw, cap, socket head, 1/4-20, 1 1/4 in. long
94 Lockwasher, 1/4
94.1 Washer,flat,1/4 in.
95 Nut plate
96 Retaining ring
97 Idler bearing

97.1 Shim

98 Idler shaft
99 Idler pulley

100 Mounting bracket
100.1 Idler assembly
101 Setscrew
102 Pump drive belt
103 Retaining ring

103.1 Drive pulley 60 cycle

103.2Drive pulley, 50 cycle

103.3 Pulley
103.4 Pulley hub
104 Setscrew

104.1 Bolt
104.2 Flat washer
104.3 Lockwasher
105 60-cycle motor pulley bushing

105.1 50 cycle motor bushing

106 Woodruff key
107 Punch drive belt, 60 cycle

107.1 Punch drive belt,50 cycle
108 60-cycle pulley

108.1 50 Cycle pulley

109 Screw, cap, socket head, 3/8-16, 1 in. long
110 Lockwasher, 3/8
111 Screw, flat head, 3/8-16, 1 in. long
112 Motor
112.1 Motor assembly

113 Gasket
114 Retaining ring
115 Compression spring
116 Chad tube
117 Setscrew
118 60-cycle pulley

118.1 Retaining ring
119 Hex bolt, 1/4-20, 5/8 in. long
119.1 Hex bolt, 1/4-20

120 Lockwasher, 1/4
120.1 Washer ,1/4 in.

121 Pump mounting plate
122 Reducing coupling, 3/8 in. to 1/4 in.
123 Elbow
124 Nipple,1/4 in., 1 n. long
125 Plastic hose,3/8 in, id, 8 inches long
126 Hose fitting
127 Elbow
128 Nipple, 4 in., 1 in. long
129 Hose fitting
130 Tee
131 Nipple 1/4 in., 1 in., long

132 Air filter (vacuum line)
133 Hose fitting elbow
134 Vacuum pump
134.1 Vacuum pump assembly
135 Terminal block cover
136 Screw, binding head, No. 6-32, 5/8 in. long
137 Lockwasher, No. 6
138 Straddle plate

139 Terminal block
139.1 Insulator strip

140 Chassis
140.1 Chassis
141 Connector A2TB2
141.1 Pins, contact
142 Screw, binding head, No.632,5/8 in. long
143 Washer, No. 6
144 Lockwasher, No. 6

145 Hexnut,No.6-32
146 Connector A2TB3
147 Screw
147.1 Nut, hex, 4-40

148 Connector A2J2
149 Connector A2J1
150 Screw, binding head, No. 6-32 5/8 in. long
151 Washer, No. 6
152 Lockwasher, :No 6
153 Lockwasher, external tooth, No. 6
154 Lug terminal
155 Resistor A2R1, 70 ohms +3%, 50 w
155.1 Nut, hex, 4-40

155.2 Lockwasher,No.4

155.3 Screw, 4-40
156. Resistor A2R2, 180 ohm, ⊬5 %, 1 W

157 Capacitor A2C1, 150 uf
158 Nut, hex, 4-40

158.1 Lockwasher, No.4

158.2 Screw, 4-40
159 Capacitor mounting clip

160 Hex nut
161 Lockwasher
162 Terminal stud
163 Screw
164 Lockwasher
164.1 Grommet
165 Bracket
165.1 Connector bracket assembly

166 Connector A2TB1

167 Screw, binding head, No. 6-32, 5/16 in. long
168 Lockwasher,No.6
169 Spring connector dip
169.1 Connector A2J3
169.2 Contact, electrical
170 Screw

171 Lockwasher
172 Washer
173 Setscrew
174 Hopper low photocell assembly A2DS2

174.1 Contact
174.2 Photocell
175 Photocell mounting
176 Screw, flathead, No. 6-32, 1/2 in. long
177 Washer, No.6
178 Lockwasher, No. 6
179 Hex nut, No. 6-32

180 Cargo bumper assembly
181 Screw, binding head, No. 6-32, 3/8 in. long

182 Card edge guide

183 Screw, binding head, No. 6-
184 Lockwasher, No. 6
188 Washer, No. 10

189 Card input guide

189-1 Screw, binding head, 6-32,1/4 in. lg.

189.2 Double relief spring
189.3 Relief spring
190 Hex nut, No. 8-32
191 Lockwasher, No.8
192 Washer No. 8
193 Input glide assembly
193.1 Card glide
193.2 Stud, 8-32

194 nut, 8-32
195 Lockwasher, No.8
196 Washer, No. 8
197 Input glide assembly
197.1 Card glide
197.2 Stud, 8-32

198 Screw,, binding heal, No. 6-32,, 3/Smi. long
199 Card input support
200 Screw, binding head, No. 6-32, 1/4 in. long
201 Bumper
202 Grommet
203 Panel

204 Machine screw
205 Condenser housing

206 Condenser C1
207 Stud
208 Shield, FE

209 Spring load

210 Bearing shim
211 Machine screw
212 Switch plate
213 Hole plug
214 Machine screw

LEGEND FOR FIGURE 4-7 (cont'd)

215 Terminal cover
216 Nameplate
217 Wiring harness
218 Terminal lug
219 Terminal lug
220 Shield, FE
221 Machine screw
222 Lockwasher
223 Bearing clamp
224 Spring load
225 Bearing shim
226 Ball bearing
227 Clamp collar
228 Fan
229 Ball bearing
230 Rotor assembly
231 Cutout switch
232 Baffle
233 Stator pin
234 Frame
235 Not used
236 Bumper guard
237 Nut, hex
238 Lockwasher
239 Damper
240 Damper bracket

NOTE

It may be necessary during operation of the card punch to remove pieces of torn cards from the punch head. This may necessitate separation of the feed and punch mechanisms. It is important that the procedure in paragraph 4-32 be followed to insure that when the punch and feed mechanisms are reassembled, the timing and eject belt clearances remain the same.

4-32. Removal and Replacement of Feed Mechanism

NOTE

Feed mechanism should be removed only after the punch head has been removed from the A2 assembly.

a. Removal

(1) Remove belt guard (20, fig. 4-8) by removing hex nut (15) and two screws and washers (16 and 17).

(2) Place a mark with pencil across the feed drive shaft pulley (8, fig. 4-9) and the small trunnion base (27, fig. 4-8).

(3) Place a mark with pencil at the point where the main sprocket (58, fig. 4-8) and the feed drive shaft pulley are the closest.

(4) Remove belt (40) by loosening screw (21) to relieve tension placed on belt by eject and idler assembly (22).

CAUTION

To prevent damage to the feed mechanism and feed arm assemblies, care must be taken to remove feed mechanism exactly as outlined in (5) through (14) below. In addition, while the feed mechanism is separated from the punch head assembly, care must be taken to insure that the feed arm assemblies (23, fig. 4-9) are not bent or damaged.

(5) Remove the two clamp and knob assemblies (12, fig. 4-8) from the feed mechanism.

(6) Remove the die plate support assembly (35).

(7) Remove the card guide and support assembly (37) by removing the two capscrews (36).

(8) Disconnect plug from jack J5 (25, fig. 4-9) on the feed mechanism.

(9) Remove screw (1, fig. 4-8), "D" washer (2), and cable clamp (3) from the trunnion stop block (8).

(10) Remove screw (4) and connector clamp (5) from the bail/plate assembly (125).

(11) Remove clamp/knob assembly (23) from the small trunnion clamp base (27).

(12) Remove cap socket screw (7) from the trunnion stop block, and cap socket screw (10) from the large trunnion clamp (11).

(13) Remove clamp/knob assembly (6) from the trunnion stop block, and clamp/knob assembly (9) from the large trunnion clamp. Remove the trunnion stop block and the large trunnion clamp.

(14) Insuring the machined surfaces of the feed mechanism (13) remain in contact with the trunnion clamp bases (27 and 29), carefully rotate the feed mechanism in a counter clockwise direction (when facing the feed mechanism from the pulley end) to disengage the feed arm assemblies (23 and 62, fig. 4-9) from the tangs on the lower card guide (5, 4-11). When the feed arm assemblies have been freed, remove the feed mechanism from the punch head assembly.

b. Replacement.

(1) Seat the feed mechanism (13, fig. 4-8) in position on the punch head assembly but turned in a counterclockwise direction when facing the feed mechanism from the pulley end. Lift the lower card guide (5, fig. 4-11) to a position that permits the tangs on the lower card guide to fit into position in the feed arm assemblies (29 and 62, fig. 4-9) and then carefully rotate the feed mechanism in a clockwise direction.

(2) Tap the feed drive shaft (76, fig. 4-9) so that the feed mechanism seats against the large trunnion clamp base (29, fig. 4-8).

(3) Tap feed mechanism on the front and rear ends to insure proper seating in trunnion base.

(4) Insert and tighten clamp/knob assembly (23, fig. 4-8).

(5) Place trunnion stop block (8) and large trunnion clamp (11) on their respective trunnion bases.

(6) Insert cap screws (7 and 10) and tighten until snug.

(7) Replace card guide and support assembly (37).

(8) Replace die plate support assembly (35).

(9) Using previously placed pencil marks (para. *a*(3) above), line up the main sprocket (58) with the feed drive shaft pulley (8, fig. 4-9).

(10) Replace belt on the main sprocket and feed drive shaft pulley.

(11) Using previously placed pencil marks (para. a(2) above), line up the feed drive shaft pulley with the small trunnion base (27, fig. 4-8), and tighten screw (21).

(12) Replace the remaining components in the reverse order of removal procedures described in a above. When replacing the belt (40, fig. 4-8), perform the adjustments described in paragraphs 4-80 and 4-81.

(13) Perform the brake spring adjustment as described in paragraph 4-62.

1 Screw, binding head, No. 4-40, 1/4 in. long
2 D washer
3 Cable clamp
3.1 Screw, binding head, 6-32, 1/4 inch long
3.2 D washer
3.3 Lockwasher, No. 6
3.4 Cable clamp
4 Screw, binding head, No. 8-32, 1/4 in. long
5 Connector clamp
6 Clamp/knob assembly
6.1 knob
6.2 Clamp
7 Screw, cap, socket head, No. 10-32, 1 in. long
8 Trunnion stop block
8.1 Threaded insert
8.2 Trunnion cap
9 Clamp/knob assembly
9.1 Knob
9.2 Clamp
10 Screw, cap, socket head, No. 10-32, 3/4 in. long
11 Large trunnion clamp (cap)
12 Clamp and knob assembly
12.1 Clamp
12.2 Knob
13 Feed mechanism (fig. 4-9)
14 0 ring packing
15 Hex nut
16 Screw, binding head, No. 6-32, 1/4 in. long
17 Washer, flat, No. 6
18 Hex nut, sprocket retaining
19 Not used
19.1 Washer, flat
20 Belt guard
21 Screw, cap, socket head
22 Eject and idler assembly (fig. 4-10)
22.1 Eject subassembly
23 Clamp/knob assembly
23.1 Knob
23.2 Clamp
24 Barrel nut
25 Reluctance pick up
26 Screw, cap, socket head
27 Small trunnion clamp base
27.1 Trunnion assembly
28 Screw, cap, socket head
29 Large trunnion clamp base
29.1 Large trunnion assembly
29.2 Threated insert
30 Trunnion shim
31 Screw, cap, socket head, No. 6-32, 7/8 in. long
32 Lockwasher, No. 10
33 Gate mount and cable assembly (fig. 4-11)
34 Gate mount shim
35 Die plate support assembly
36 Screw, cap socket head, No. 6-32, 1/2 in. long
37 Card guide and support assembly
37.1 Connector assembly
37.2 Screw, machine, 2-56, 1/4 in. long
37.3 Contact block
37.4 Connector
37.5 Contact pin
37.6 Boot
37.7 Card guide support
37.8 Card edge guide
37.9 Short upper brake
37.10 Med. lower brake
37.11 Clamp
37.12 Screw, socket head, 4-40, 5/16 in. long
37.13 Spring, edge guide
38 Setscrew. 10-32, 5/8 in. long
38.1 Setscrew, 8-32, 3/4 in. long
39 Idler housing pin
40 Belt
41 Screw, cap, socket head, No. 6-32, 1/2 in. long
42 Screw, cap, button socket head, No. 6-32, 1/2 in. long
43 Side cover
44 Side cover gasket
45 Side cover gasket
46 Screw, cap button socket head, No. 6-32, 5/8 in. long
47 Leaf spring and spacer assembly
48 Screw, cap, socket head, No. 6-32, 1/2 in. long
49 Latch and spacer assembly
50 Screw, cap, socket head, No. 4-40, 1/4 in. long
51 Screw, cap, socket head, 6-32, 3/8 in. long
52 Lockwasher, No. 6
53 Screw, cap, button socket head, No. 6-32, 1/2 in. long
54 Connector cover
55 Connector mounting cover gasket
56 Screw, cap, socket head, No. 10-32, 1/2 in. long
57 Sprocket bushing
58 Main sprocket
59 Sprocket clamping
60 Breather
61 O ring packing
62 Shaft oil seal
63 Screw, machine
64 Oil filler port
65 Oil filter
66 Lint trap
67 Screw, cap, socket head, 6-32, 1/2 in. long
68 Front housing
68.1 Pin, 1/16 x 5/16 in. long
69 Front housing gasket
70 Hex nut, selflocking
71 Drive pulley
72 Shim
73 Drive pulley spacer
74 Magnet tip drain plug
75 0 ring packing
76 Oil filter screen
77 Shaft oil seal
78 Screw, cap, socket head, No. 6-32, 1/2 in. long
79 Rear housing cover
80 Rear housing gasket
81 Screw, cap, socket head, No. 6-32, 5/8 in. long
82 Window
83 Main frame cover gasket
84 Main frame cover
85 Screw, binding head, No. 4-40, 1/2 in. long
86 Magnet connector assembly
87 Magnet assembly
87.1 Magnet assembly
87.2 Magnet frame
87.3 Coil
87.4 Screw, cap, socket head, clamp mounting
87.5 Clamp
87.6 Magnet frame
88 Screw, cap, socket head, 6-32, 1/2 inch long
89 Interposer guide
89.1 Pin, 0.125 in. dia. 3/8 in. long
90 Interposer guide spacer, 0.002 in. thick
90.1 Interposer guide spacer, 0.003 in. thick
90.2 Interposer guide spacer, 0.0015 in. thick
90.3 Interposer guide spacer, 0.0025 in. thick
90.4 Interposer guide spacer, 0.002 in. thick
90.5 Interposer guide spacer, 0.003 in. thick
91 Screw, cap, socket head, No. 4-40, 3/4 in. long
92 Echo checking contact assembly
93 Screw, cap, socket head, No. 4-40, 1/4 in. long
94 Magnet cable clamp plate
95 Screw, cap, socket head, support mounting
96 Screw, cap, socket, roller cage retaining plate
97 Roller cage retaining plate
98 Movable roller guide spring
98.1 Shim, spring, 0.009-in (C3817CT9)
99 Guide rollers
100 Movable roller guide
100.1 Nylon ball
101 Movable roller guide support
101.1 Movable guide assembly

102 Rotor key
103 Seal disc
104 Screw, cap, socket head
105 Pump housing cover
106 Pump rotors
107 Pump spacer
108 Screw, cap, socket head, roller guide mounting
108.1 Screw, cap, socket head, pump housing mounting
109 Roller guide shim, 0.002 in.
109.1 Roller guide shim, 0.0025 in.
109.2 Roller guide shim, 0.003 in.
110 Stationary roller guide
110.1 O ringseal
111 Main shaft bearing
112 Pump housing
113 O ring oil seal
114 Woodruff key
115 Main shaft cams spacer
116 Punch bail cam
117 Main shaft cams spacer
118 Main shaft cams spacer
119 Long woodruff key
120 Shim, 0.002 in. thick
121 Main shaft
122 Oil level window
122.1 Spacer
122.2 Spring washer
123 Main shaft bearing
124 Screw, cap, socket head, 10-32, 1 1/4 in. lg.
124.1 Screw, cap, socket head, 10-32, 5/8 in. lg.
125 Bail/plate assembly
125.1 Shim, main frame
125.2 Pin, 0.125 in. dia., 1/2 inch long
126 Main frame
127 Frame, plate and guide assembly
128 Frame-bail and roller guide assembly
129 Frame-bail and guide assembly
130 Frame-bail capstan assembly
131 Main frame and magnet assembly
132 Punch cover assembly
133 Punch bail assembly

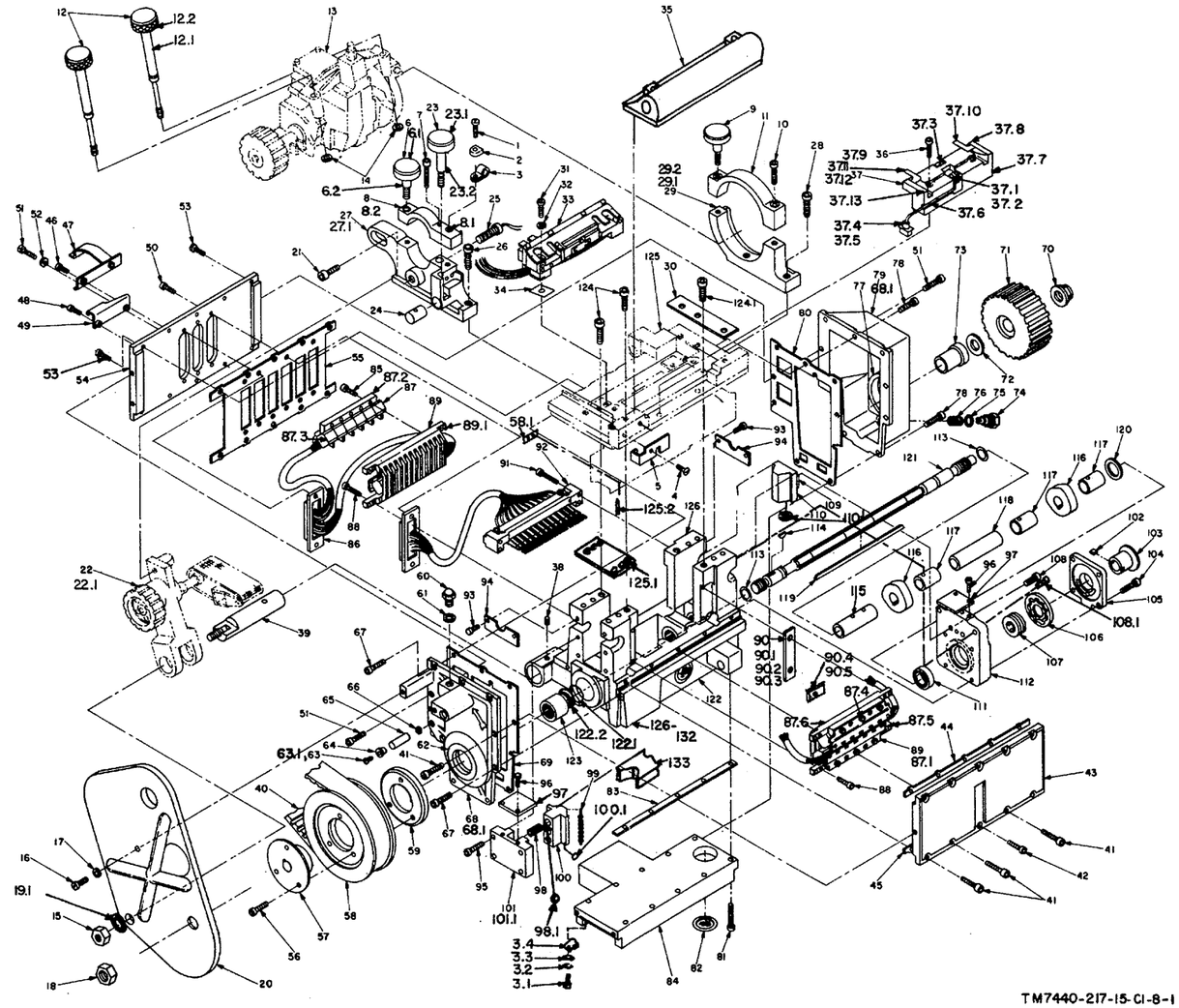


Figure 4-8. Punch head assembly, exploded view.

4-32.1 Removal and Replacement of
Frame, Plate and Guide Assembly

a. Removal. Remove the frame, plate and guide assembly (127,fig.4-8) as follows:

(1) Remove the feed mechanism (13) according to paragraph 4-32.

(2) Remove the trunnions (27.1,29.1, fig.4-8),gate mount and cable assembly (33),card guide and support assembly (37 and eject and idler assembly (22) in the order of index numbers 6 through 37.13.

b. Replacement. Replace in the reverse order of removal in a above.

4-32.2 Disassembly and Reassembly of
Punch Cover Assembly

a. Disassembly. Disassemble the punch cover assembly (132,fig.4-8) as follows:

(1) Remove front housing (68) and gasket: (69) in the order of index numbers 15 through 20,40,56 through 59,41,51, and 62 through 69.

(2) Remove rear housing cover (79) and gasket (80) in the order of index numbers 51,and 70 through 80.

(3) Remove side cover (54) and gasket (55) in the order of index numbers 46 through 55.

(4) Remove cover (43) and gaskets (4· and (45) in the order of index numbers 41 through 45.

b. Reassembly. Reassemble in the revert order of disassembly in a above.

4-32.3 Disassembly and Reassembly of
Die Plate Support Assembly

a. Disassembly. Disassemble the die plate support assembly (35,fig.4-8) in the order of index numbers 55,39,37,38, 40,and 41 of figure 4-8.1.

b. Reassembly. Reassemble in the revere order of disassembly in a above.

4-32.4 Disassembly and Reassembly of
Echo Checking Contact Assembly

a. Disassembly. Disassemble echo checking contact assembly (92,fig.4-8) in the order of index numbers 30 through 36 of figure 4-8.1.

b. Reassembly. Reassemble in the reverse order of disassembly in a above.

4-32.5 Disassembly and Reassembly of
Main Frame and Magnet Assembly

a. Disassembly. Disassemble the main frame and magnet assembly (131,fig.4-8) as follows:

(1) Remove the two magnet assemblies (87) by removing ten screws (85) from each.

(2) Remove the echo checking contact assembly (92) by removing four screws (91).

(3) Remove interposer guide shims (90 through 90.5).

b. Reassembly. Reassemble in the reverse order of disassembly in a above.

4-32.6 Disassembly and Reassembly of
Frame-Bail Capstan Assembly

a. Disassembly. Disassemble frame-bail capstan assembly (130,fig.4-8) as follows:

(1) Loosen two setscrews (49,fig. 4-8.1). Then loosen two setscrews (52) toy relieve tension on spring (48).

(2) Remove bail/plate assembly (125, fig.4-8) and main plate shim by removing screws (124) and (124.1).

(3) Remove roller cage retaining plates (97) by removing two screws (96) from each

(4) Remove two bail springs (48,fig. 4-8.1) of bail spring seats (47) and (51).

b. Reassembly. Reassemble in the reverse order of disassembly in a above.

4-32.7 Disassembly and Reassembly of
Frame-Bail and Roller Guide Assembly

a. Disassembly. Disassemble the frame-bail and roller guide assembly (129,fig.4-8 as follows:

(1) Remove movable guide assemblies (101.1 ,fig.4-8) in the order of index numbers 95,and 98 through 101.

(2) Remove stationary roller guide (110 from pump housing (112) in the order of index numbers 108.1,112,108 through 110.1 and 99.

b. Reassembly. Reassemble in the reverse order of disassembly in a above.

4-32.8 Disassembly and Reassembly of
Punch Bail Assembly

a. Disassembly. Disassemble the punch bail assembly (133,fig.4-8) as follows:

(1) Remove two rollers (12,fig,4-8.1) and thirty spring rollers (13) by removing nylon setscrew (14) and bail pin (16).

b. Reassembly. Reassemble in the reverse order of disassembly in a above.

4-32.9 Disassembly and Reassembly of
Bail Interposer Assembly

a. Disassembly. Disassemble the bail interposer assembly (5,fig.4-8.1) as follows:

(1) Remove block and pins assembly (17) by removing four screws (19).

(2) Separate the punch bail interposer assembly in the order of index numbers 4,6,2,3,1,and 7 through 11.

b. Reassembly. Reassemble in the reverse order of disassembly in a above.

4-32.10 Disassembly and Reassembly of
Punch Frame Bearing and Shaft Assembly

a. Disassembly. Disassemble punch frame bearing and shaft assembly (126, fig.4-8) as follows:

(1) Disassemble in the order of index numbers 111 through 126.

b. Reassembly. Reassemble in the reverse order of disassembly in a above.

4-32.11 Disassembly and Reassembly of Block and Pins Assembly

a. Disassembly. Disassemble block and pins assembly (17,fig.4-8.1) in the order of index numbers 53,54,22 through 29,46,49,50,52,and 43 through 45 of figure 4-8.

NOTE
Items 21,23.1 and 37 are a matched set. Upon replacement, the serial number of these three items must be the same.

b. Replacement. Replace in the reverse order of disassembly in a above.

LEGEND FOR FIGURE 4-8.1

1	Punch bail
2	Bail spacer
3	Bail spacer
4	Screw
5	Bail interposer assembly
6	Bail mounting screw
7	Interposer
8	Interposer
9	Interposer
10	Interposer
11	Interposer spring
12	Roller, large
13	Spring, roller
14	Nylon setscrew, 1/4 X20,1/4 in. long
15	Bail and interposer
16	Bail pin
17	Block and pins assembly
18	Pins assembly (note1)
19	Screw, cap, socket head, No. 6- 40, 1/4 inch long

20 Plate, block assembly
21 Guide block
22 Punch pin
23 Punch pin
23.1 Bail cap
24 Screw, cap, socket head, No. 4-40, 3/8 inch long
25 Punch pin stop
26 Punch pin seal compressor
27 Pin stop shim
28 Oiler retainer
29 Punch pin seal
30 Nut, hex, No. 4-40
31 Screw, flat head, No. 4-40, 1/2 in. lg.
32 Clamp plate
33 Contact and connector assembly
34 Contact assembly
35 Damper assembly
36 Support
37 Die plate
38 Pin, roll
39 Screw, cap, socket head, No. 4-40, 1/4 inch long
40 Die plate support
41 Insulator
42 Main plate
43 Screw, cap, socket head
44 Set block
45 Set block
46 Spring support
47 Spring seat
48 Bail spring
49 Setscrew, socket head, No. 10-32, 3/8 inch long
50 Jam plug
51 Bail spring seat
52 O-ring packing
53 Screw, cap, socket head, bail plate assembly mounting
54 Screw, cap, socket head, bail plate assembly mounting
55 Cap plug

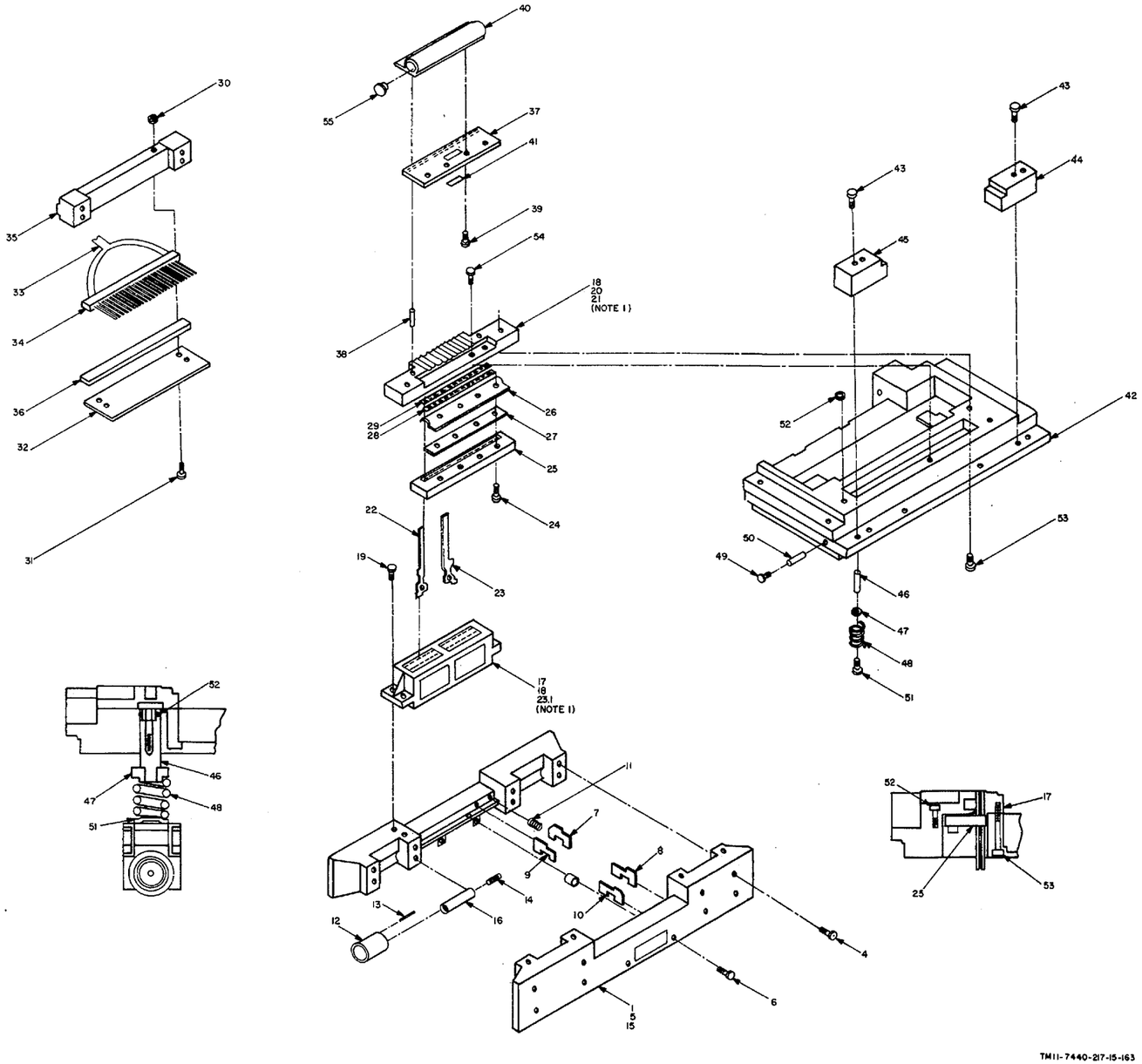


Figure 4-8.1. Punch/bail assembly, exploded view.

LEGEND FOR FIGURE 4-9

1 Housing breather
1.1 O ring
1.2 Screw, button head, 4-40, 1/4 inch long
1.3 Screw, flat head,4-40, 7/16 inch long
1.4 Shim, card glide
1.5 Shim, card glide support
1.6 Upper card glide
1.7 Screw, cap, socket head, 4-40,1/4 inch long
1.8 Was her, flat, No. 4
1.9 Support block
1.10 Guide spring
1.11 Spring clamp
1.12 Screw, cap, socket head, spring clamp mounting
1.13 Card edge guide
1.14 Screw, cap, socket head, 4-40,3/8 inch long
1.15 Screw, button head,4-40, 5/16 inch long
1.16 Card guide
1.17 Card guide
2 Screw, cap, socket head, 6-32, 3/8 inch long
3 Screw, cap, socket head,6-32, 3/8 inch long
4 Spring cover
5 Spring cover gasket
6 Drive shaft assembly nut
7 Oil seal
8 Drive shaft pulley
9 Screw, cap, socket head, housing cover
9.1 Screw, cap, socket head,8-32, 1 1/2 inches long
10 Retaining ring
11 Upper drive shaft spacer
12 Clamp shaft cam
13 Woodruff key
14 Drive shaft bearing
15 O ring
16 Front feed housing cover
17 Housing cover gasket
17.1 Housing cover gasket
18 Screw, cap, socket head, clamp arm retaining
19 Clamp arm assembly
20 Screw, cap, socket head, 1/4-28, 1/2 in. long
21 Not used
22 Setscrew
23 Feed arm assembly (note 2)
24 Screw, connector bracket
25 7 pin connector A2A1J5
26 Connector mounting bracket
27 Clamp arm shaft oil seal
28 Screw, cap, socket head,
30.1 Pin, straight, headless
29 Screw, tap, socket head, housing assembly
30.1 Upper feed housing
30.2 Screw, pan head
30.3 Cable clamp
30.4 O ring
31 Screw, pan head
32 Initial position sensor lamp assembly
32.1 Lamp AIDS1
32.2 Spring
32.3 Terminal stud
32.4 Lamp holder
32.5 Shim
33 Roller shaft
34 Clamp shaft roller bearing
34.1 Roller (small)82Feedshaft
35 Oil filler port screw
36 Oil filler port
37 Oil filter
38 Oil filler lint trap
39 Armature shaft retaining setscrew, 8-32,3/16 inch long
40Retainingring
41 Feed magnet armature
42 Armature spring
43 Armature shaft
44 Screw, cap, socket head, magnet mounting
44.1 Stop, armature
45 Magnet spacer
45.1 Magnet spacer
45.2 Magnet spacer
46 Feed magnet A2A1K4
46.1 Terminal stud
47 Armature spring support pin
48 Feed shaft oil seal
49 Roller bearing
50 Stationary spring seat
51 Feed arm shaft spring
52 Magnetic tipped drain plug
52.1 O ring
53 0il filter screen
54 Screw, cap, end plate mounting
54.1 Screw, cap, socket head, end plate mounting
55 End plate
56 End plate gasket
57 Screw. cap, socket head,.1/4-28, 1/2 in, long
58 Not used
59 Screw, cap, socket head, clamp arm retaining
60 Clamp arm assembly
61 Feed arm shim, 0.0015 inch thick (note 1)
61.1 Feed arm shIm,0.002 inch thick (note 1)
61.2 Feed arm shim,0.0025 inch thick (note 1)
61.3 Feed arm shim,0.003 inch thick (note 1)
61.4 Feed arm shim,0.005 inch thick(note 1)
61.5 Feed arm shim,0.006 inch thick (note 1)
61.6 Feed arm shim,0.007 inch thick (note 1)
61.7 Feed arm shim,0.008 inch thick (note 1)
61.8 Feed arm shim,0.009 inch thick(note 1)
61.9 Feed arm shim,0.010 inch thick (note 1)
61.10 Feed arm shim, 0.01l inch thick (note 1)
61.11 Feed arm shim,0. 012 inch thick (note 1)
61.12 Feed arm shim,0.013 inch thick (note 1)
61.13 Feed arm shim,0.014 inch thick (note 1)
61.14 Feed arm shim,0.015 inch thick (note 1)
62 Feed arm assembly (note 2)
63 Setscrew, clamp shaft spring
64 Oil level window
65 Feed shaft oil seal
65·1 Screw, cap socket head, 4-40, 3/8 inch long
65.2 Screw, cap, socket head, 4-40,1/2 inch long
66 Lower feed housing
67 Clamp arm shaft
67.1 Clamp spring
67.2 Roller bearing
67.3 Roller bearing
68 Nut, drive shaft assembly
69 Pump rotor key
70 Lower drive shaft spacer
72 Woodruff key
72.1 Offset key
73 Feed cam
74 Shaft assembly shim,0.002 in. thick,0.938 in. inside dia.
75 Pump rotor spacer
76 Driveshaft
76.1 Feed shaft and cam assembly
77 Drive shaft bearing
77.1 Screw, cap, socket head, 4-40,1 inch long
77.2 Screw, cap, socket head, 8-32,7/8 inch long
78 Housing and bearing assembly (lower half)
78.1 Middle feed housing assembly
78.2 Pin, straight, headless
79 Roller shaft
80 Short roller
80.1 Short roller
80.2 Short roller
80.3 Short roller
80.4 Short roller
80.5 Short roller
80.6 Roller and pin assembly (large)
81 Feed arm shaft roller
82 Feed shaft
83 Housing and bearing assembly (upper half)
84 Shaft assembly housing
85 Feed subassembly
86 Assembly housing cover

4-33. Disassembly and Reassembly of Feed Mechanism

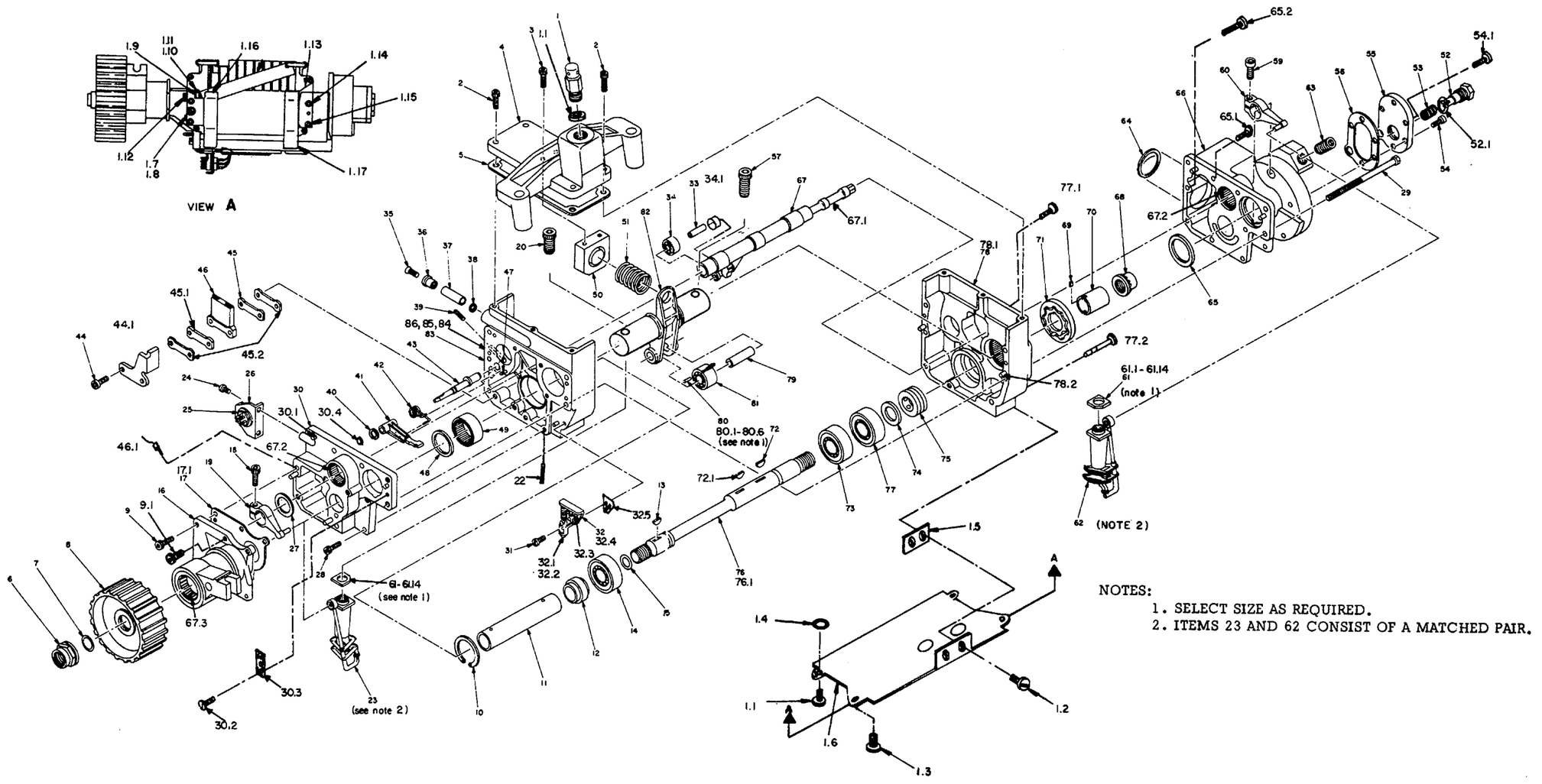
a. Disassembly.

(1) Drain the oil from the feed mechanism (para. 4-9).

(2) Remove the two clamp and knob assemblies (12, fig. 4-8) from the feed mechanism by removing the "0" ring packing (14).

(3) Disassemble the feed mechanism (13, fig. 4-8) in the order of the index numbers in figure 4-9.

b. Reassembly. Reassemble the feed mechanism in the reverse order of disassembly in a above. During reassembly perform the adjustments described in paragraphs 4-64 through 4-71.



NOTES:
1. SELECT SIZE AS REQUIRED.
2. ITEMS 23 AND 62 CONSIST OF A MATCHED PAIR.

Figure 4-9. Feed mechanism, exploded view.

4-34. Disassembly and Reassemblv of Eject and Idler Assembly

a. Disassembly. Disassemble the eject and idler assembly (22, fig. 4-8) in the order of the index numbers in figure 4-10.

b. Reassembly. Reassemble the eject and idler assembly in the reverse order of disassembly in a above.

CAUTION: Drive Sprocket (#34) is pressed onto Eject Pivot (#39) and cannot be removed at a field level maintenance facility. Repair of this assembly can only be accomplished at a depot facility.

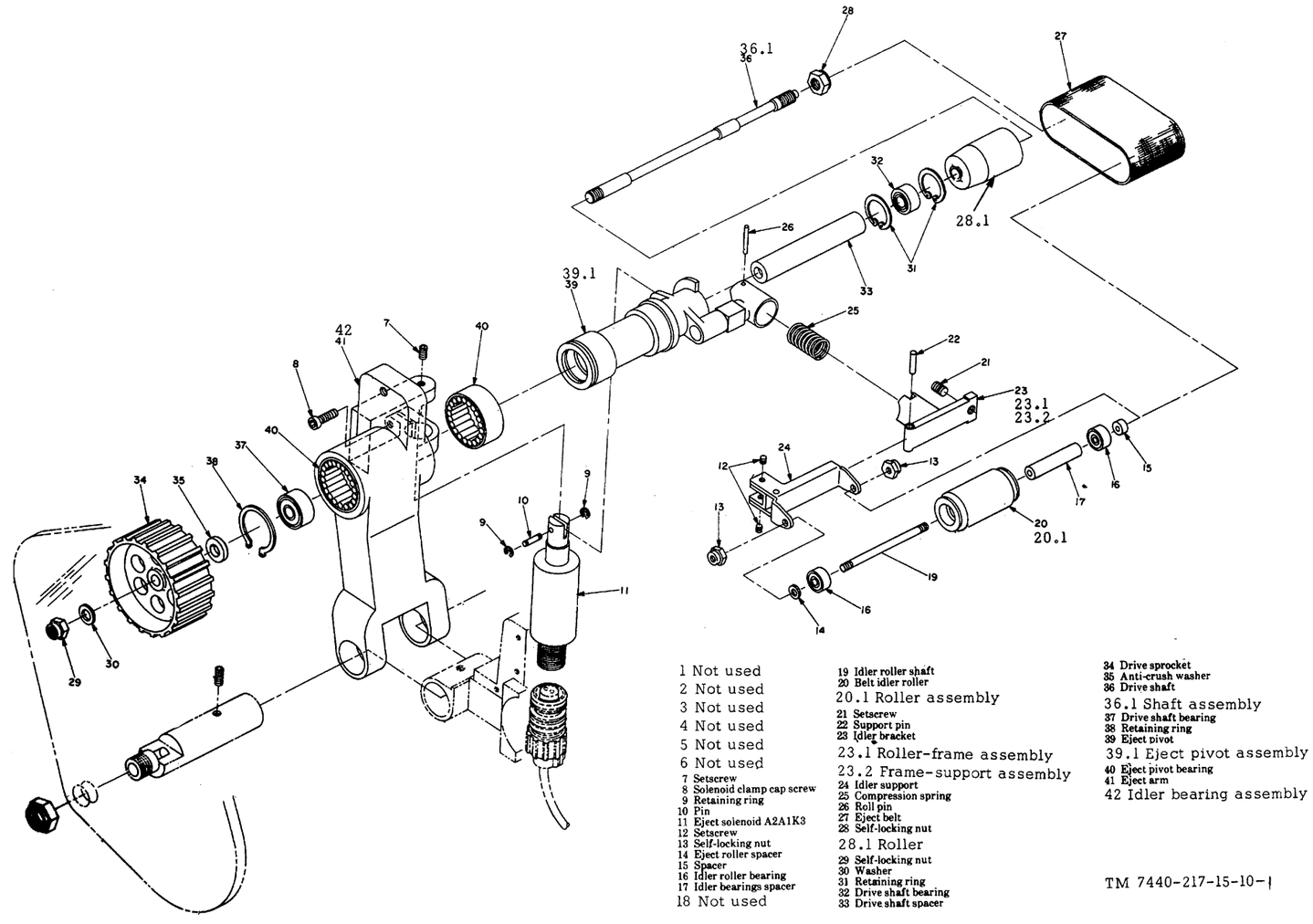


Figure 4-10. Eject and idler assembly, exploded view.

4-35. Disassembly and Reassembly of Gate Mount and Cable Assembly

a. Disassembly. Disassemble the gate mount and cable assembly (33, fig. 4-8) in the order of the index numbers in figure 4-11.

b. Reassembly. Reassemble the gate mount and cable assembly in the reverse order of disassembly in a above.

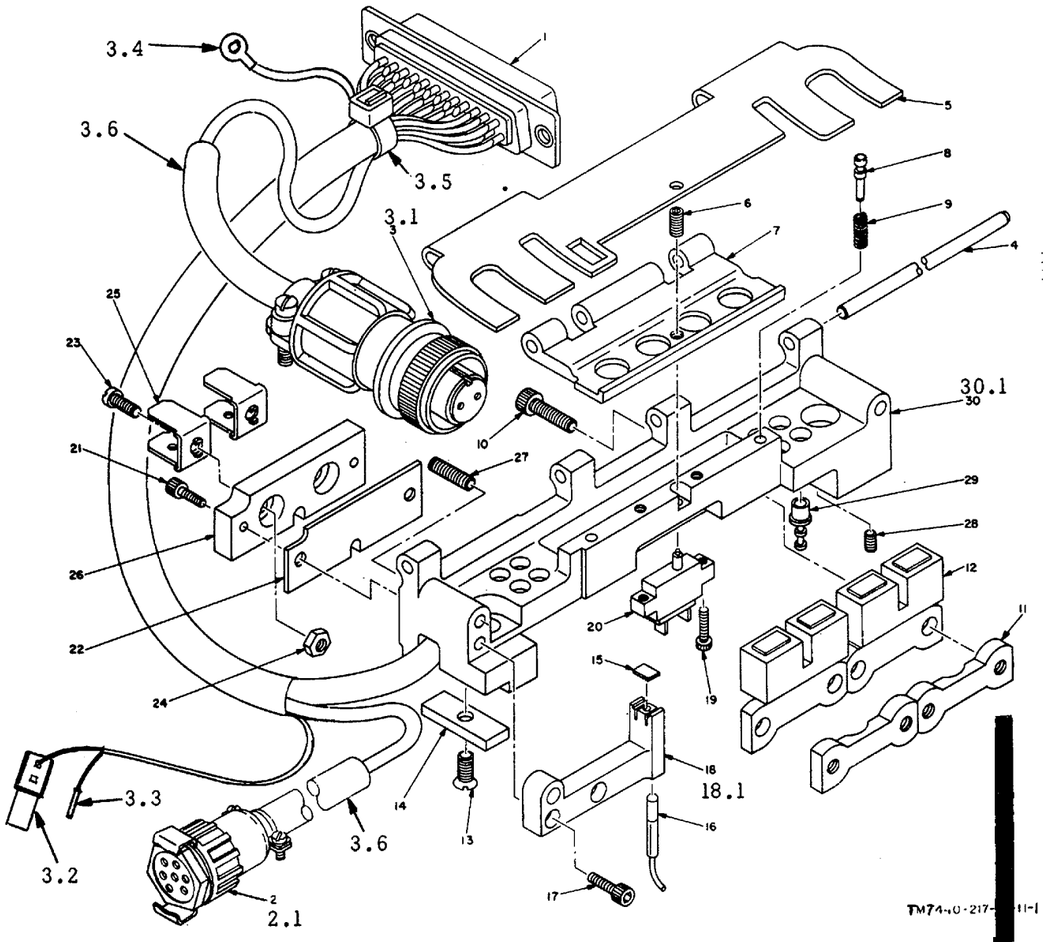


Figure 4-11. Gate mount and cable assembly, exploded view.

LEGEND FOR FIGURE 4-11

1 Connector (A2A1J41
2 Feed magnet and initial position- sensor lamp connector(A2A1J5)
2.1 Connector hood
3 Eject solenoid connector (A2A1P2)
3.1 Connector hood
3.2 Connector (A2A1P3)
3.3 Electrical contact
3.4 Terminal lug
3.5 Tie wrap
3.6 Sleeve
4 Gate armature shaft
5 Lower card guide
6 Setscrew, socket head, flat point
7 Gate
8 Spring plunger
9 Gate spring
10 Screw, cap, socket head
11 Magnet clamp
12 Magnet A2A1K1, A2A1K2
13 Screw, flat head
14 Gate wire clamp
15 Glass cover
16 Card position photocell A2A1Q1
17 Screw, cap, socket head
18 Photocell mount
18.1 Photocell assembly
19 Screw, cap, socket head
20 Switch module A2A1SI (registration gate)
21 Screw, cap, socket head
22 Insulator
23 Screw, fillister head
24 Hex nut
25 Terminal
26 Pick-up terminal board
27 Setscrew, socket head, flat point
28 Setscrew, socket head, fiat point
29 Insulated terminal
30 Gate mount
30.1 Gate mount assembly

4-36. Removal and Replacement of Picker Assembly

a. Removal. Before removal of the picker assembly is possible, removal of the items and assemblies described in (1) through (5) below is necessary to provide access to two of the three picker assembly mounting screws and to permit removal of the hoses connected to the assembly.

(1) Remove the punch head, assembly

(1.1) Remove hose (51, fig. 4-7) from pump 134.

(1.2) Loosen setscrew (1, fig. 4-12).

(2) Remove all pump mounting screws (119.1, fig. 4-7). Slide pump carefully out of the way while removing hose (2, fig. 4-12) and throat tube from picker (9, fig. 4-12). Access to the two hidden picker assembly mounting screws (47, fig. 4-7) is now available.

(3) Loosen setscrew(55i fig. 4-12). Setscrew 55 is located under middle of rear picker belt.

(4) Remove items 4, 5, and 6 ,fig. 4-12). Remove the electrical pins which are plugged into the front of TB3 with removal tool 5120-885-7309.

(5) Loosen the three picker assembly mounting screws (47, fig. 4-7), wiggle the assembly slightly to allow the vacuum tube (56, fig. 4-12) to be freed of the assembly.

b. Replacement. Reassemble the picker assembly as follows:

(1) Before replacing picker assembly, assure that spacers (46, fig. 4-7) are placed on screws (47, fig. 4-7) between casting and picker assembly. Hold picker assembly near mounting surface and slide tube (56,fig. 4-12) into the Dicker assembly, then tighten screw(55, fig. 4-12).

(2) Place picker drive belt over pulley 49, fig. 4-12).

(3) Tighten screws(47, fig. 4-7).

(4) Replace vacuum pump and slide tube (2, fig. 4-12) into picker assembly. Hand-tighten pump mounting bolts 119.1, fig. 4-7). Tighten setscrew(1, fig. 4-12)

(5) Perform picker drive belt and pump belt adjustment (para 4-96); tighten pump mounting bolts 119.1 (fig. 4-7).

(6) Replace punch head (para 4-31).

(7) Perform checks in para 4-85, L-86, 4-95, and 4-97.

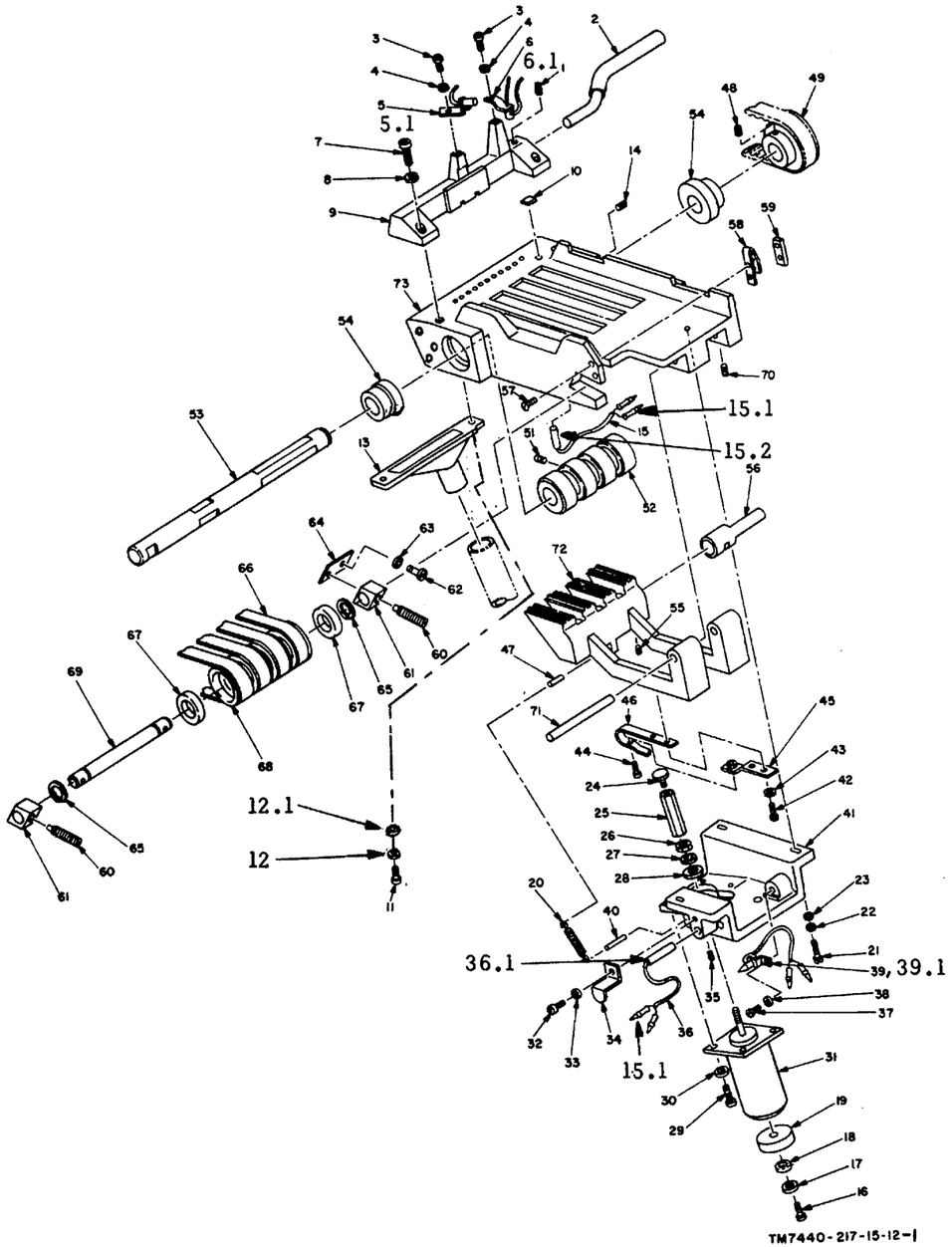


Figure 4-12. Picker assembly, exploded view.

LEGEND FOR FIGURE 4-12

1 Setscrew, No. 6-32, 3/16 in. long
2 Tube assembly
3 Screw, binding head, No. 4-40, 1/4 in. long
4 Lockwasher, No. 4
5 Lamp socket moduleA2DS2
5.1 Lamp A2DS2
6 Lamp socket A2DS3
6.1. Lamp A2DS3
7 Screw, cap, socket head, No. 10-32, 1/2 in. long
8 Lockwasher, No. 10
9 Picker throat
10 Cover glass
11 Screw, binding head, No. 8-32, 3/8 in. long
12 Lockwasher, No.8
12.1 Washer No 8
13 Air transmitter casting module
14 Setscrew, No. 4-40, 1/8 in long
15 Photocell assembly AIQ3

15.1 Electrical contact
15 2 Photocell
16 Screw, binder head, No. 8-32, 3/8 in. long
17 Lockwasher, No. 8
18 Washer, No. 8
19 Solenoid stop
20 Extension spring
21 Screw, binding head, No. 6-32, 5/8 in. long
22 Lockwasher, No. 6
23 Washer, No. 6
24 Bumper
25 Plunger
26 Hex nut
27 Washer, No. 6
28 Nylon washer
29 Screw, binding head, No. 6-32, 3/8in. long
30 Lockwasher, No. 6
31 Picker solenoid A2K1
32 Screw, binding head, No. 6-32, 3/8 in. long
33 Lockwasher, No. 6
34 Photocell shield
35 Setscrew, No. 4-40, 1/8 in. long
36 Picker reset photocell assembly A2QI

36.1 Photocell
37 Screw, binding head, No. 4-40 1/4 in. long
38 Lockwasher.No.4
39 Picker reset lamp socket module A2DS1
39.1 Lamp A2DSI
39 Picker reset lamp socket module A20S1
40 Pin, 3/32 dia, 5/8 in. long
41 Picker solenoid mount
42 Screw, binding head, No. 440, 3/8 in. long
43 Lockwasher No.4
44 Screw binding head, No. 4-40, 1/2 in. long
46 Blocker clamp
47 Pin 3/32 dia 3/8 in. long
48 Setscrew, No. 10-32, 1/4 in. long
49 Drive pulley
50 Not used
51 Setscrew, flap point, No. 8-32, 3/16 in. long
52 Picker pulley
53 Picker drive shaft
54 Flanged bearing
55 Setscrew
56 Vacuum tube
57 Screw, flat head, No. 4-40, 5/16 in. long
58 Spring
59 Nut plate
60 Plunger
61 Slider
62 Screw, binding head, No. 4-40, 3/8 in. long
63 Lockwasher, No. 4
64 Position plate
65 Retaining ring
66 Drive belt set
67 Bearing
68 Idler pulley
69 Idler shaft
70 Setscrew
71 Pivot shaft
72 Picker belt pusher
73 Punch picker frame

4-37. Disassembly and Reassembly of Picker Assembly

a. Disassembly. Disassemble the picker assembly (48, fig. 4-7.) in the order of the index numbers in figure 4-12.

b. Reassembly. Reassemble the picker assembly in t he reverse order of disassembly. Perform the checks and adjustments described in paragraphs 4-87, 4-88, 4-89, and 4-90.

4-38. Removal and Replacement of Offset Idler Roller

a. Removal. Remove the offset idler roller assembly (17, fig. 4-7) in the order of index numbers 15 and 16.

b. Replacement. Replace the offset idler roller assembly in the reverse order of removal in a above. After replacement, perform the checks and adjustments described in para 4-100, 4-101, and 4-102. In addition, adjust plate (55, Fig. 4-13) so that roller (26, fig. 4-13) contacts guide plate(43, fig. 4-7) correctly without causing it to rub against panel(203, fig. 4-7)0 Perform Elevator and Stacker Platform Adjustment", paragraph 4-103.1.

4-39. Disassembly and Reassembly of Offset Idler Roller Assembly

a. Disassembly. Disassemble the offset idler roller assembly (17, fig. 4-7) in the order of the index numbers in figure 4-13.

b. Reassembly. Reassemble the offset idler roller assembly in the reverse order of reassembly in a above. When reassembling the spring (16) on pivot frame (20), wind spring approximately 1/2 to 3/4 turn so that pivot frame is rotated clockwise when viewed from top.

¾ ¾ ¾ ¾ ¾ ¾ ¾ ¾ ¾ ¾ ¾ ¾ ¾ ¾ ® **NOTE**

Disconnect appropriate wires from TB-1 prior to removal of index numbers 15 and 16.

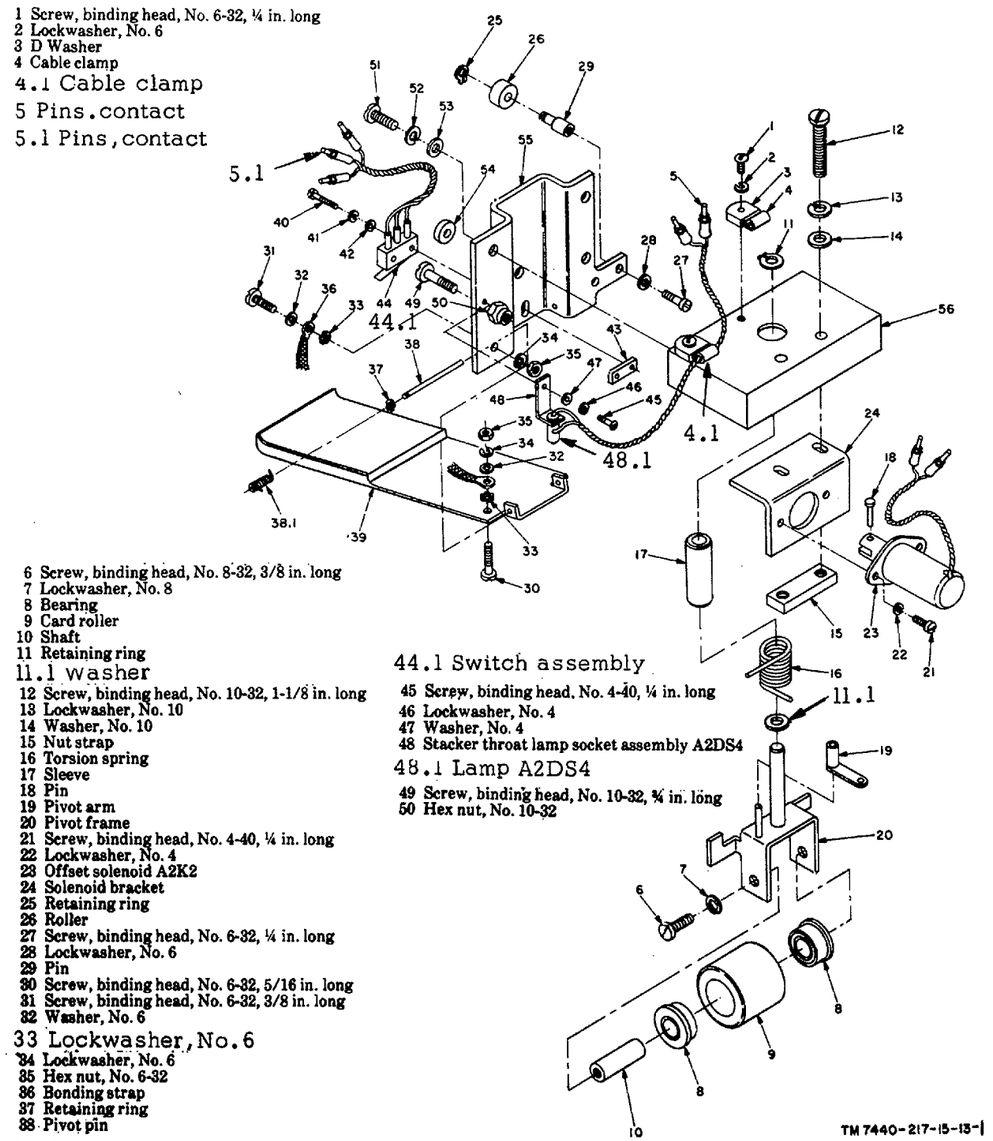


Figure 4-13. Offset idler roller assembly, exploded view.

4-39.1. **Removal and Replacement of Motor Stop Assembly A4**

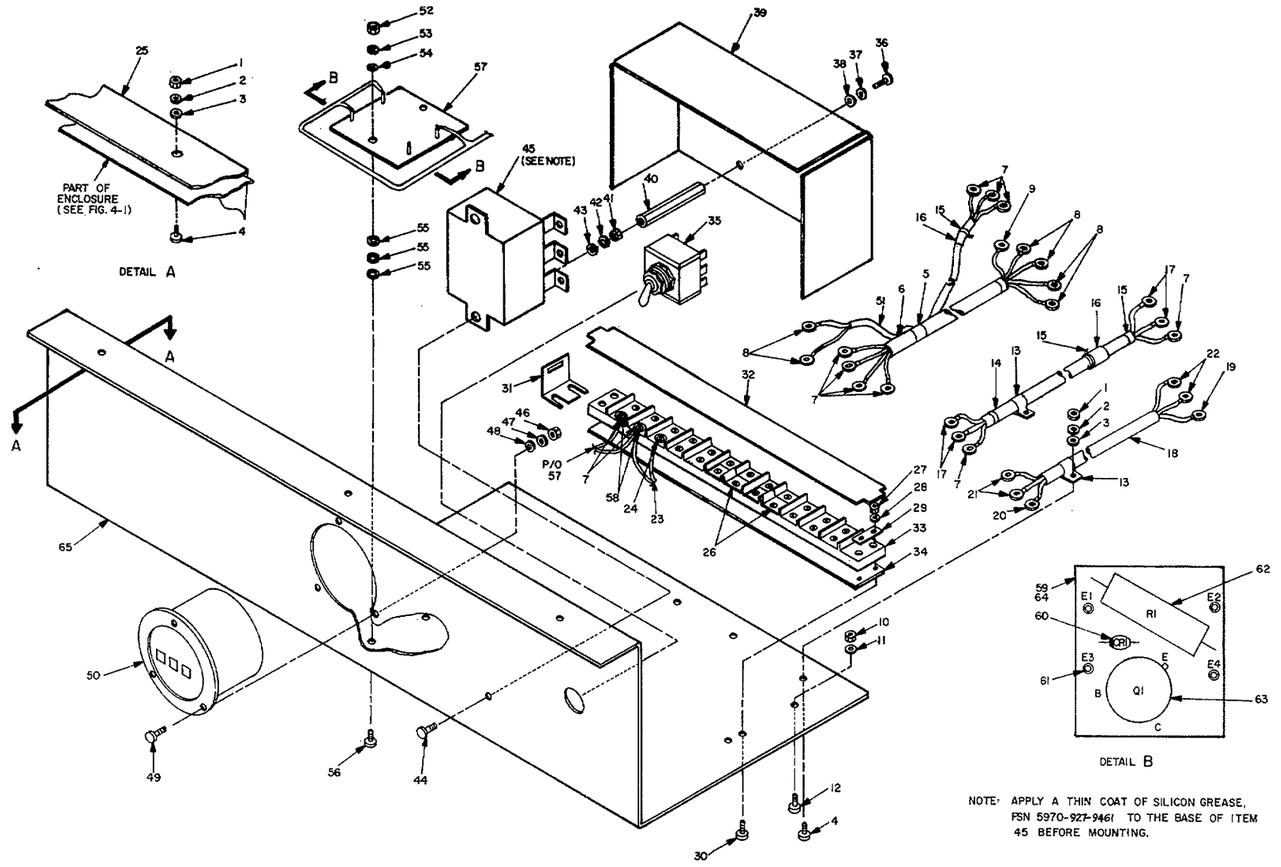
a. Removal. Disconnect cable assemblies (16, 14; and 18, fig. 4-13.1) remove motor stop bracket assembly (20) from the cabinet in order of index numbers 1 through 4.

b. Replacement. Replace the motor stop assembly in the reverse order of removal -in a above.

4-39.2 **Disassembly and Reassembly of the Motor Stop Assembly**

a. Disassembly. Disassemble the motor stop assembly in the order of the index numbers in figure 4-13.1.

b. Reassembly. Reassemble the motor stop assembly in the reverse order of disassembly above.



1	Nut, hex, 8–32	18	Cable assembly	33	Terminal block TB1	50	Elapsed time meter M1
2	Washer, lock, No. 8	19	Terminal lug	34	Plate, terminal identification	51	Cable assembly
3	Washer, flat, No. 8	20	Terminal lug	35	Switch, DPDT, S1	52	Nut, hex, 6–32
4	Screw, panhead, 8–32, ½ in. lg.	21	Terminal lug	36	Screw, panhead, 8–32, ⅜ in. lg.	53	Washer, lock, No. 6
5	Cable clamp, ⅜ in.	22	Terminal lug	37	Washer, lock, No. 8	54	Washer, flat, No. 6
6	Cable assembly	23	Wiring harness	38	Washer, flat, No. 8	55	Washer, fiber, No. 6
7	Terminal lug	24	Terminal lug	39	Protective cover	56	Screw, panhead, 6–32, ⅝ in. lg.
8	Terminal lug	25	Motor stop bracket assembly (consists of items 26 through 65).	40	Standoff, hex, 8–32, 1½ in. lg.	57	Meter driver assembly, wired
9	Terminal lug	26	Jumper	41	Nut, hex, 8–32	58	Terminal lug
10	Nut, hex., 6–32	27	Nut, hex., 6–32	42	Washer, lock, No. 8	59	PC card assembly A2
11	Washer, lock, No. 6	28	Washer, lock, No. 6	43	Washer, flat, No. 8	60	Diode A2CR1
12	Screw, panhead, 6–32, ⅜ in. lg.	29	Straddle plate	44	Screw, panhead, 8–32, ⅝ in. lg.	61	Terminal, standoff A2E1–E4
13	Cable clamp, ½ in.	30	Screw, panhead, 6–32, ⅝ in. lg.	45	Relay K1	62	Resistor A2R1
14	Cable assembly	31	Bracket	46	Nut, hex, 6–32	63	Transistor A2Q1
15	Cable strap	32	Protective cover	47	Washer, lock, No. 6	64	Printed circuit board
16	Cable marker			48	Washer, flat, No. 6	65	Motor stop bracket
17	Terminal lug			49	Screw, panhead, 6–32, 7/16 in. lg.		

Figure 4-13.1. Motor stop assembly A4, exploded view.

4-40. Removal and Replacement of Offset Capstan Assembly

a. Removal. Remove the offset capstan assembly (14, fig. 4-7) in the order of index numbers 6 through 13.

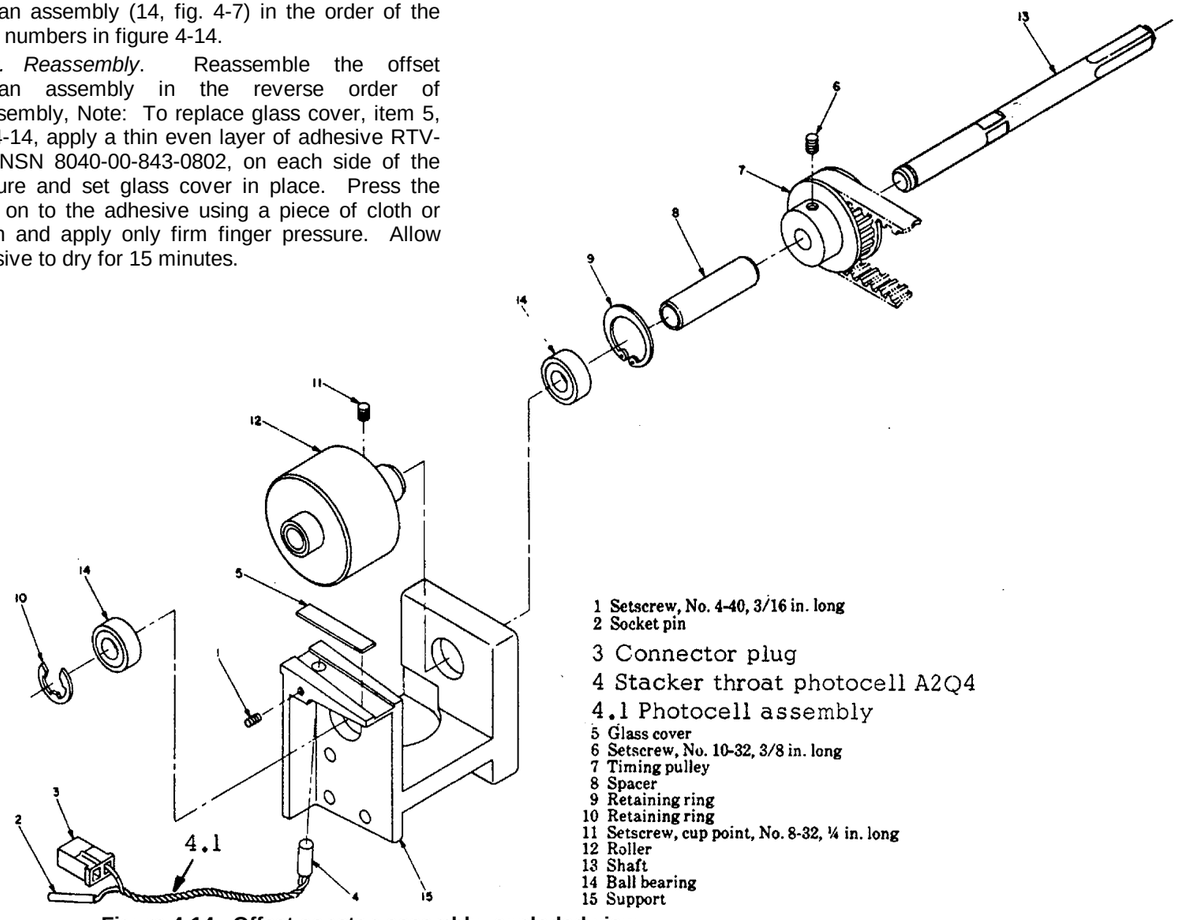
b. Replacement. Replace the offset capstan assembly in the reverse order of removal in a above. Be sure to place spacers 12 (fig. 4-7) between the capstan assembly and chassis (140). Prior to tightening screws 10 (fig. 4-7), align assembly 14 so it does not interfere with elevator 44.

After replacement, perform the adjustment described in paragraphs 4-94 and 4-98.

4-41. Disassembly and Reassembly of Offset Capstan Assembly

a. Disassembly. Disassemble the offset capstan assembly (14, fig. 4-7) in the order of the index numbers in figure 4-14.

b. Reassembly. Reassemble the offset capstan assembly in the reverse order of disassembly, Note: To replace glass cover, item 5, Fig. 4-14, apply a thin even layer of adhesive RTV-108, NSN 8040-00-843-0802, on each side of the aperture and set glass cover in place. Press the glass on to the adhesive using a piece of cloth or cotton and apply only firm finger pressure. Allow adhesive to dry for 15 minutes.



1 Setscrew, No. 4-40, 3/16 in. long
2 Socket pin
3 Connector plug
4 Stacker throat photocell A2Q4
4.1 Photocell assembly
5 Glass cover
6 Setscrew, No. 10-32, 3/8 in. long
7 Timing pulley
8 Spacer
9 Retaining ring
10 Retaining ring
11 Setscrew, cup point, No. 8-32, ¼ in. long
12 Roller
13 Shaft
14 Ball bearing
15 Support

Figure 4-14. Offset capstan assembly, exploded view.

4-41.1. Removal and Replacement of Vacuum Pump

a. Removal.

(1) Remove the punch head assembly (para. 4-31).

(2) Loosen four bolts (119.1, fig. 4-7) on vacuum pump mounting plate to facilitate belt removal in next step.

(3) Remove the picker timing belt (45, fig. 4-7) and the pump drive belt (102) from the pump timing pulley (118).

(4) Remove plastic hose (56) from the vacuum pump (134).

(5) Remove plastic hose connecting exhauster assembly (84, fig. 4-7) to chad bag.

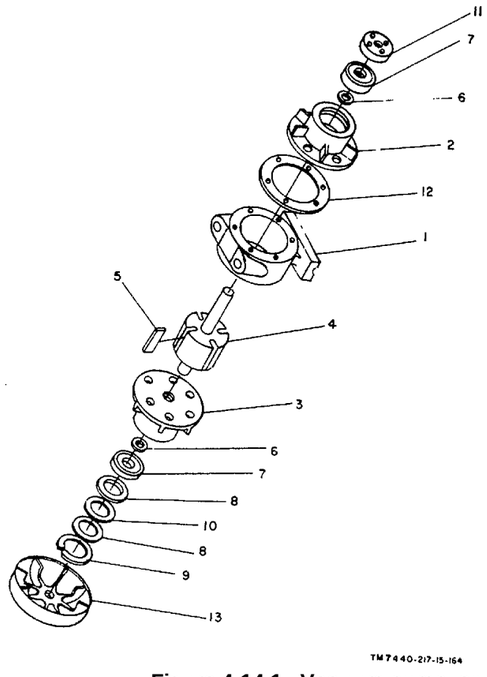
(6) Remove hardware 81, 82, 83, and 85 to free exhauster assembly (84) from chassis (140).

(7) Remove plastic hose (55, fig. 4-7) from exhauster assembly (84), then remove rubber hose (54) from tee (130).

(8) Remove four bolts (119.1) on vacuum pump while supporting pump. Pull pump out carefully while working hose (2, fig. 4-12) and metal tube loose from punch chassis (140, fig. 4-7).

b. Replacement. Replace the vacuum pump in the reverse order of removal in a above.

4-41.2. Disassembly and Reassembly of Vacuum Pump



1 Body
2 End plate, drive
3 End plate, dead
4 Rotor assembly
5 Vane (carbon)
6 Deflector
7 Bearing
8 Belleville spring
9 Retaining ring
10 Washer
11 End cap
12 Body spacer gasket
13 Cooling fan

Figure 4-14.1. Vacuum pump, exploded view.

NOTE

When the vacuum pump becomes unable to sustain a vacuum of 6 inches of mercury, disassemble and rebuild it with new carbon vanes and bearings. Standard tools are required, including a 6-inch bearing puller and a bearing press.

a. Disassembly.

(1) Remove vacuum pump (para 4-41.1).

(2) Remove four screws (119, fig. 4-7), washers (120), and pump mounting plate (121).

(3) Remove washers (120 and 120.1) located between mounting plate and pump.

(4) Remove air filter, hoses, and fittings from pump.

(5) Remove plastic cooling fan (13, fig. 4-14.1) as follows: Hold pump shaft with wrench while rotating fan on shaft and pulling out on fan at the same time.

(6) Remove retaining ring (9, fig. 4-14.1), Belleville spring (8), washer (10), and second Belleville spring (8). Note how springs and washers are positioned.

(7) Use adjustable face spanner wrench, NSN 5120-00-288-8746 or equivalent, to unscrew end cap (11) in CCW direction.

(8) Remove all bolts from end plates (2 and 3).

(9) Use bearing puller to remove end-plate (3) containing bearing (7) and deflector (6) as follows: Hook bearing puller in vent holes of end-plate (3) and tighten bolt of puller against shaft of rotor assembly. Make certain that puller is centered, otherwise bearing will be damaged.

(10) Remove carbon vanes (4), noting position of edges against body (1).

(11) Use procedure in (9) above to remove endplate (2) containing bearing (7) and deflector (6).

(12) Remove body spacer gasket (12). (Some pumps do not have this spacer.)

NOTE

Normally, bearings (7) should be replaced when the pump is disassembled. However, if bearings are not available, do not remove them.

(13) Remove bearings (7) with bearing press.

(14) Remove rotor assembly (4) from body (1).

b. Reassembly.

NOTE

After complete disassembly of pump, the vanes and bearings should be replaced even if they appear in good condition.

(1) Attach end-plate (3, fig. 4-14.1) to body (1) with six bolts.

CAUTION

End-plate (3) can be identified by the retainer ring groove. End-plate (3) must be attached to the side of body (1) that has the serial number

plate.

(2) Insert short shaft of rotor (4) through body (1) into plate 3.

(3) Push deflector (6) onto shaft of end-plate (3).

(4) Use bearing press and correct size sleeve (same size as inner race of bearing) to push bearing (7) into plate (3) and onto rotor shaft. When bearing is seated properly, shoulder on shaft should be nearly even with the outside of bearing. Be careful not to deform bearing.

(5) Insert new vanes (5) into rotor (4), making sure that the high portion of the vanes are on the leading edge of rotation (see arrow on body (1) for rotational direction).

(6) Replace gasket (12) (if used), end-plate (2), and attach with bolts at the 11 o'clock and 5 o'clock positions (other bolts are replaced later when the mounting plate is attached).

(7) Slide deflector (6) on shaft (on side of end-plate 2) and use bearing press to push bearing (7) into endplate (2) and onto shaft. See directions in (4) above.

(8) Screw end cap (11) a short distance into endplate (2).

(9) Rotate shaft in direction of arrow. Shaft should rotate freely. If not, check positioning of bearings on shaft. Rotor assembly (4) will bind if side-stress exists on bearings (7).

NOTE

Belleville springs (8) must face in opposite directions-the curved sides must face each other. Washer (10) is to be placed between them.

(10) Replace Belleville springs (8) and washer (10).

(11) Replace retaining ring (9).

(12) Tighten end-cap (11), but do not apply excessive force on bearing (7). Shaft should rotate freely.

(13) Replace washers (120, fig. 4-7) and washers

120.1. Locate pump mounting plate on pump as shown in figure 4-7, and fasten with four bolts.

(14) Replace fittings, hose and air filter in reverse order of disassembly.

(15) Replace vacuum pump (para 4-41.1) and operate for 30 minutes. Clean filter as described in paragraph 4-8.

4-42. Removal and Replacement of Remaining Assemblies and Components

a. Removal. Remove the remaining assemblies and components of the high speed card punch mechanism in the order of the index numbers in figure 4-7, noting the following:

(1) Remove setscrews (104) from setscrew holes. (2) Place one of the setscrews into the threaded semicircular hole in line with the slot in the bushing (105).

(3) Tighten the setscrew to release the pulley (108)

from the bushing (105) and the pulley, bushing and key (106).

(4) Remove screws (109 and 111) and lockwashers (110) and separate motor (112) from chassis (140).

(5) Disassemble motor (112) in the order of index numbers (204 through 222).

b. Replacement. Replace the remaining assemblies and components of the high speed card punch mechanism in the reverse order of removal in a above. After replacement of the top and bottom card guides (24 and 25) perform the adjustment described in paragraph 4-103. After replacement of the elevator assembly (26 through 48) perform the adjustments described in paragraphs 4-104, 4-105, and 4-106. After all replacements are completed perform the adjustments described in paragraphs 4-96, 4-98, and 4-100.

Section VI. REPAIR AND ADJUSTMENTS

CAUTION

See caution notice (para 4-16).

4-43. General

This section contains repair instructions, and adjustment procedures and tolerance requirements for the high speed card punch.

4-44. Repair

Repair normally consists of removing and replacing a defective part as described in the removal and replacement or disassembly procedures given in sections IV and V.

4-45. Adjustments

In normal operation, adjustments are required only when replacing a worn or damaged part. Such adjustments, and those required when assembling the unit are described in following paragraphs. Card registration will remain within tolerance indefinitely in ordinary use. The sequence of adjustments is that used in factory assembly and adjustment of the units; beginning with the buildup of the punch mechanism assembly, the feed mechanism assembly, eject assembly, the mounting of the three assemblies to form the punch head, adjustment of the punch head in the card punch deck and adjustment of components of the deck. For instructions on removal and replacement of individual parts, refer to sections IV and V.

4-46. Punch Mechanism Assembly

Internal adjustments are described in paragraphs 4-47 through 4-54. The remaining adjustments, made after side plates are installed, are in paragraphs 4-55 through 4-62.

CAUTION

The punch head is a high precision device. Operations involving the repair, replacement of parts or adjustments to the punch head mechanism itself, should not be attempted by anyone without special training and experience. In addition, in the manufacture of the punch heads many parts are carefully matched and hand fitted. Proper assembly and adjustment requires a number of special tools, jigs, and fixtures. Repairs, replacements or adjustments which require disassembly of any parts of the punch head itself should be attempted only by persons with the proper tools. Failure to observe this precaution is likely to result in permanent damage to the punch head.

NOTE

In the following adjustment procedures a range of values is commonly given to allow the technician to determine whether readjustment is needed. In making the actual adjustment a nominal value midway between the limits will prove most satisfactory.

4-47. Stationary Roller Guide

(fig. 4-15)

a. Requirement. Bail guide surfaces must be flush with interposer guide end slots within ±0.001 inch and symmetrical between ends.

b. Method of Checking. Check with the roller

guides, interposer guides, and bail assembly fastened in the main frame and blocked upright on a surface plate. Using a height indicator, compare the height of the bail guide surface and the end slot of the interposer guide at one end of the main frame and roller guide assembly. Turn the assembly 180° on the surface plate (end-for-end) and repeat the measurement at the other end.

c. Adjustment. The stationary roller guide shim (109, fig. 4-8) is available in several thicknesses (0.001, 0.002, and 0.003 inch; part number A13446 T1, T2, and T3 respective). Appropriate thickness must be selected to meet the requirement.

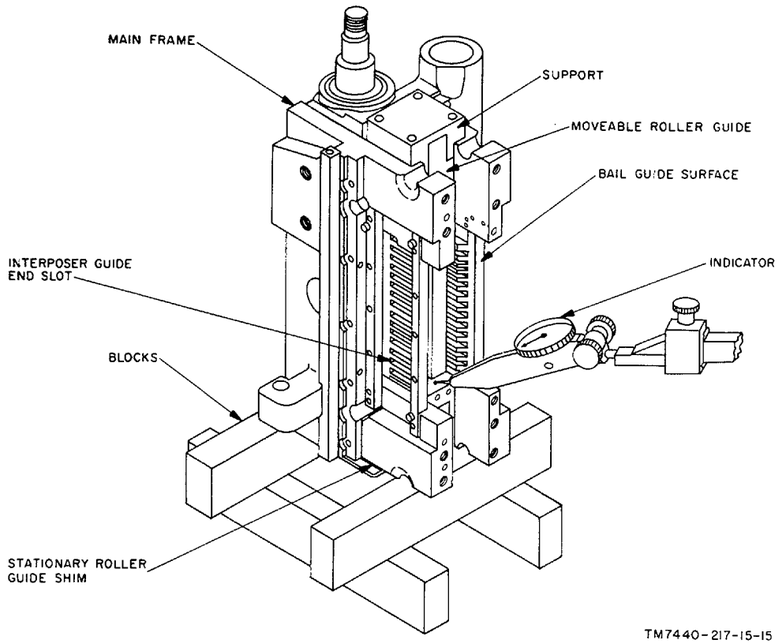


Figure 4-15. Stationary roller guide requirements.

4-48. Moveable roller Guide

a. Requirement. Roller guide springs must exert 150 to 160lbs. Force on the bail when compressed as in final assembly.

b. Method of checking. During preliminary assembly of the roller guides, interposer guides, and bail assembly in the main frame for adjustment and checking of the stationary roller guide (para 4-32), measure the gap (fig. 4-15) between the moveable roller guide and the support with a feeler gauge. Disassemble the parts and place the moveable roller guide support and springs in a spring tester 9 fig. 4-16). Place feeler gauges in the gap and compress the guide and support to obtain the gap recorded during assembly. At the point where the same gap is obtained, measure the force of compression.

c. Adjustment. To increase the force, add 0.009-in. (98.1, fig 4-8) shims beneath the springs in the moveable roller guide.

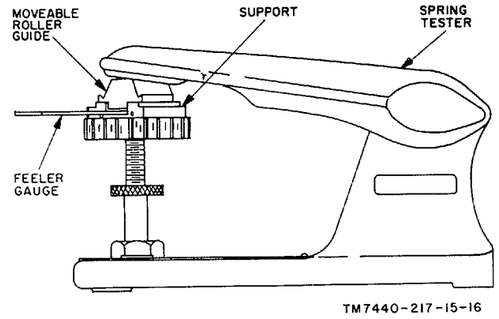


Figure 4-16. Moveable roller guide requirement

4-49. Punch Pin Play

(fig. 4-16)

a. Requirement. Punch pin play must be 0.006 to 0.007 inch.
b. Method of Checking. Mount a stop plate on the guide block and punch pin assembly. Place a piece of soft shim stock between the pins and plate to protect the cutting edges. Invert the assembly on a surface plate. Place an indicator probe on the bottom surface of the punch pin to be checked. Grasp the shank of the pin below the guide block with needlenose pliers ground to fit the shank. Move the pin vertically and note the pin movement indicated. Repeat for each punch pin.
c. Adjustment. Adjustment is made by changing the thickness of the laminated shim between the guide block and the punch pin stop. Increase the thickness of the shim (part no. B13451A) to increase the play.

4-50. Punch Bail Spring Compression Adjustment

a. Requirement. With a 0.770 spacing between the main plate and punch bail and interposer assembly (fig. 4-18), each spring is compressed to apply a 38 to 40 inch pound pressure against the punch bail and interposer assembly.

b. Method of Checking. Check during adjustment, using spring gauge tester.

c. Adjustment. Place the punch bail and main plate assembly in the spring gauge tested as indicated in figure 4-18. Compress the punch bail spring with the spring gage fixture until there is a 0.770 inch space between the main plate and the punch bail and interposer assembly. Use vernier calipers to.

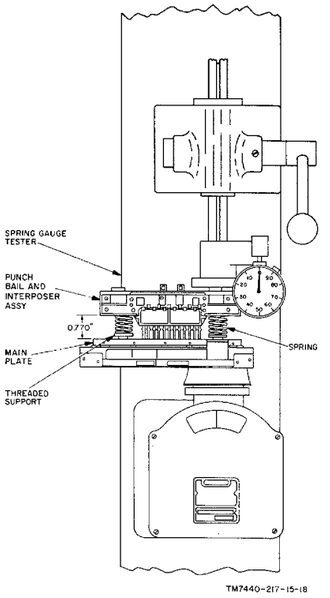


Figure 4-18. Punch bail spring requirement.

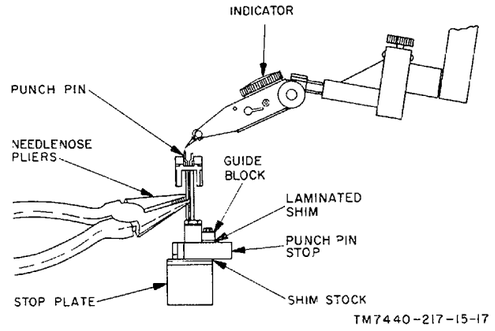


Figure 4-17. Punch pin play requirement.

accurately measure this space; then turn the screw heads of the threaded supports (fig. 4-22) until 38 to 40 inch pounds is indicated on the spring gauge.

4-51. Punch Pin End Play

a. Requirement. Punch pin end play must be 0.0005 to 0.0015 inch.
b. Method of Checking. Place the main frame with bail, interposers, pins, and guide plate installed, in the holding fixture on the surface plate (fig. 4-19).
Place the indicator probe on the lowest surface of the punch pin to be checked. Grasp the shank of the pin with needlenose pliers ground to fit, and move the pin to the upper and lower limits.
c. Adjustment. Adjustment is made by adding or removing shims (125.1, fig. 4-8) (part no. A13303) between the main frame and main plate, at both ends of the main plate.

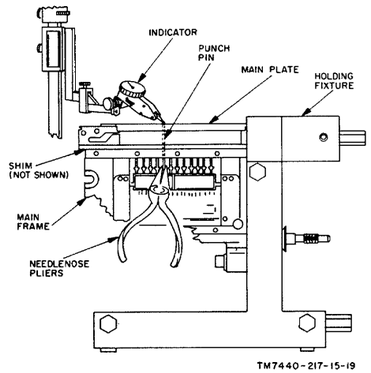


Figure 4-19. Punch pin end play requirement.

4-52. Checking Echo Contacts

a. Requirement. The normally closed echo contacts must open at 50 percent of punch pin travel.
b. Method of Checking.

(1) Place a magnetic base indicator probe on the guide block and place the indicator probe on the lowest surface of the punch pin to be checked as shown in figure 4-20.

(2) Remove PC cards A3, A4, A5, and A6 from Logic Assembly A1.

(3) To enable energizing of the interposer magnet for the punch pin to be checked, connect leads of 0-50 volt variable dc power supply as indicated in Table 4-1.

(4) Connect leads of multimeter as indicated in Table 4-1 to check continuity of the echo contact for the corresponding punch pin.

(5) Increase the output voltage of the dc power supply until the interposer is energized and manually rotate the punch mechanism and determine the amount of pin movement required for contacts to open and the amount of overtravel.

c. Adjustment. Loosen the echo contact assembly attaching screws and raise or lower each end of the contact block. Adjust the assembly to have all the contacts open within a range of 0.000 to 0.020 inch travel of the punch pins, and a 0.025 to 0.030 inch overtravel of the punch pins after all contacts have opened.

TABLE 4-1. PUNCH MAGET AND ECHO CONTACT CONNECTIONS

Note. PC Cards A1A3, A1A4, A1A5, and A1A6 must be removed from the logic assembly prior to making the connections listed below .

Punch pins	DC power supply connections for energizing punch solenoids		Multimeter connections for checking echo contacts	
1A	XA3-Z	XA3-N	XA3-10	XA1-U
2A	XA3-Y2a22	XA3-P	XA3-8	XA1-U
3A	XA3-S	XA3-R	XA3-6	XA1-U
4A	XA4-AA	XA4-L	XA4-9	XA1 U
5A	XA4-W	XA4-K	XA4-7	XA1-U
6A	XA4-X	XA4-M	XA4-5	XA1-U
7A	XA4-Z	XA4-N	XA4-10	XA1-U
8A	XA4-Y	XA4-P	XA4-8	XA1-U
9A	XA4-S	XA4-R	XA4-6	XA1-U
10A	XA3-X	XA3-M	XA3-5	XA I-U
11A	XA3-W	XA3-K	XA3-7	XA1-U
12A	XA3-AA	XA3-L	XA3-9	XA1-U
1B	XA5-Z	XAS-N	XAS0	XA1-U
2B	XAS-Y	XAS-P	XAS-8	XA1-U
3B	XAS-S	XAS-R	XAS-6	XA1-U
4B	XA6-AA	XA6-L	XA6-9	XA1-U
5B	XA6-W	XA6-K	XA6-7	XA1-U
6B	XA6-X	XA6-M	XA6-5	XA1-U
7B	XA6-Z	XA6-N	XA6-10	XA1-U
8B	XA6-Y	XA6-P	XA6-8	XA1-U
9B	XA6-S	XA6-R	XA6-6	XA1-U
10B	XAS-X	XAS-M	XA5-5	XA1-U
11B	XAS-W	XAS-K	XA5-7	XA1-U
12B	XAS-AA	XAS-L	XA5-9	XA1-U

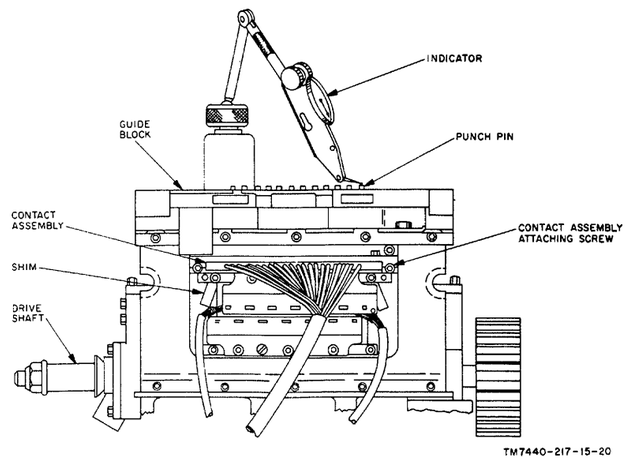


Figure 4-20. Checking echo contact and magnet air gap requirement.

4-53. Magnet Air Gaps

(fig. 4-20)

a. Requirement. The code magnets must actuate the interposers at 24v maximum, and release at 5v minimum (static operation).

b. Method of checking.

(1) Remove PC cards A3, A4, A5, and A6 from Logic Assembly A1.

(2) To individually energize the interposer magnets, connect the leads of 0-50 volt dc variable power supply as indicated in table 4-1

(3) Begin with applying 5 volts dc and increase the voltage slowly while measuring the voltage applied. Note the voltage indicated at the point of actuation of the interposer.

(4) Reduce the voltage slowly and note the voltage at the point the interposer is released.

c. Adjustment. Adjustment is made by adding or removing interposer guide spacer thickness between the interposer guides and the main frame. Increasing thickness raises required voltages for those magnets near the spacer. Interposer guide spacers (90, fig.4-8) are available in 0.001, 0.002, 0.003 and 0.004 inch thickness (part numbers A13351T1, T2, T3, and T4 respectively).

4-54. Armature Shaft Position Adjustment

a, Requirement. The centerline of the armature shaft (fig.4-21) must be 0.010 inch below the top surface (lands) of the punch pin guide block.

b. Method of Checking. Place the punch mechanism, with registration gate installed, on the surface plate.

Use an indicator to measure the difference in height between the top surface (lands) of the punch pin guide block and the armature shaft. The armature shaft is 1/8-inch in diameter, therefore the centerline is 1/16 inch below the highest point on the periphery. Check both ends of the shaft.

c. Adjustment Add or remove gate mount shims (34, fig 4-8) (part number 13416A) beneath each end of the registration gate assembly (33, fig. 4-8) .

Refer to figure 4-22 for location of gate mount shims on the main plate.

4-55. Gate Position Adjustment

NOTE

The following procedure is a preliminary adjustment. A final check and additional adjustment as outlined in paragraph 4-84 may be required using following procedure as guideline to provide proper vertical punch registration of columns 1 and 2 of the card. Positioning of the gate should also provide minimum damage (marking) of the leading edge of the card by the registration gate.

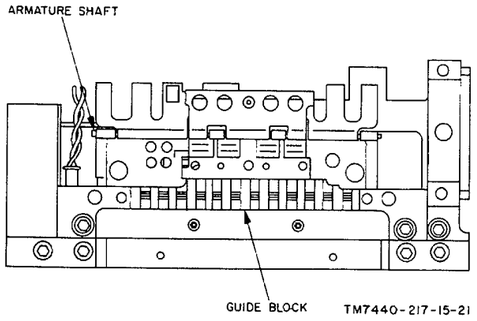


Figure 4-21. Armatrue shaft requirement.

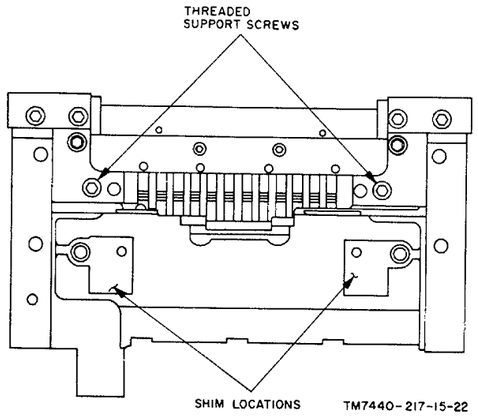


Figure 4-22. Gate mount shim locations.

a. Requirement. The face of the registration gate (fig. 4-23) must be 0.280 inch from the rear of the closest column of punch pins, and parallel to the punch pins.

b. Method of Checking. Measure the distance from the face of the gate to the rear of the adjacent pin at each end of the gate, using a vernier (NSN 5210-01-010-4522).

c. Adjustment. Loosen the registration gate attaching screws (fig. 4-25) and rotate the adjustment screws (fig. 4-24) at each end of the gate mount. Hold the assembly against the adjustment screws while tightening the attaching screws.

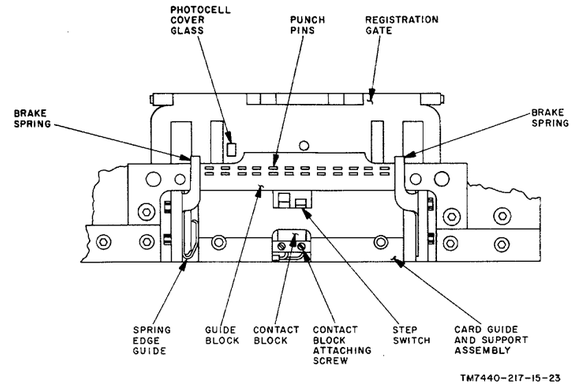


Figure 4-23. Registration gate position reuqirements.

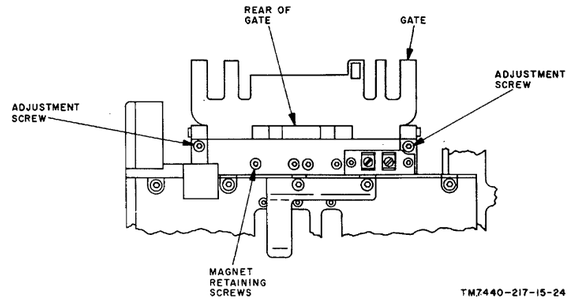


Figure 4-24. Gate position requirement.

4-56. Gate Switch Adjustment

a. Requirement. The gate switch contacts must close when the top surface of the gate is in 0.002 inches below the top surface (lands) of the guide block.

b. Method of Checking. Use a multimeter to check the continuity between pins 3 and 4 of A2A1J4 for indication of opening and closing of the contacts. Place a 0.002 inch shim on the top surface of the gate. Place a flat edge (fig. 4-26) on the shim and top surface (lands) of the guide block, the contacts must then be closed. Repeat the procedure with a 0.0015 inch shim; the contacts should be open.

c. Adjustment. Rotate the adjustment screw in the gate (fig. 4-25) clockwise to raise the gate at the point of actuation; or counterclockwise to lower the position.

NOTE

Gate shall energize when approximately 25-30 volts dc is applied to pins 5 and 6 of AlJ4, and release at approximately 5 volts dc when adjustments are made in paragraphs 4-57 and 4-59.

4-57. Gate Magnet Position Adjustment

(figs. 4-24 and 4-25.)

a. Requirement. There must be no residual air gap when the magnets are energized.

b. Method of Checking

(1) Place a 0.001-inch brass feeler gauge under the rear of the gate (fig. 4-24) between one polepiece (fig. 4-25) and the gate.

(2) Apply 48vdc through a 150 ohm resistor to pins 5 and 6 of A1J4, to energize the magnets.

(3) When the magnets are energized and the gate is down, feel for drag on the gauge.

(4) Repeat steps (1), (2), and (3) for each of the four polepieces. Drag on the gauge indicates correct adjustment.

c. Adjustment. Loosen the four magnet retaining screws (fig. 4-24) to permit movement of the magnets. Energize the magnets as in (b) above. While the magnets are energized, tighten the magnet retaining screws.

4-58. Initial Position Photocell Adjustment

a. Requirement. The photocell cover glass (fig. 4-23) must be flush with the top surface (lands) of the guide block.

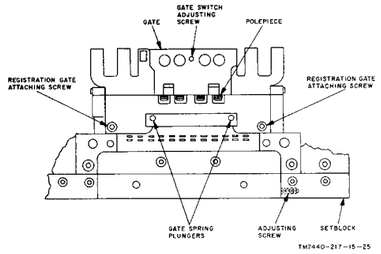


Figure 4-25. Gate magnet requirement.

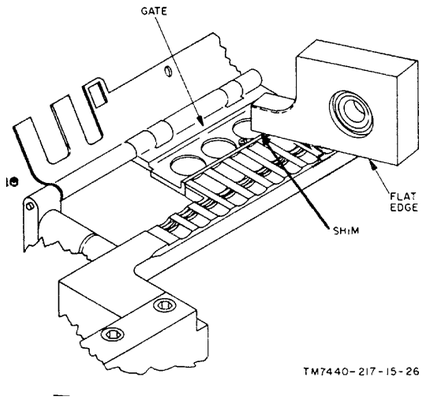


Figure 4-26. Gate switch adjustment details

b. Method of Checking. With the registration gate installed in the punch mechanism, sight across the guide block to determine that the glass is not above the guide block.

c. Adjustment.

(1) Loosen the two photocell attaching screws (fig. 4-27) sufficiently for the holder to be moved.

(2) Raise the holder to its highest position.

(3) Install the registration gate in the punch mechanism.

(4) Use a blunt wood or plastic tool and press the holder down flush with the top surface of the guide block while sighting across the guide block (fig. 4-23).Do not position the cover glass below the flush position, because passing cards must wipe the glass for the self cleaning action.

(5) Without disturbing the position of the holder, remove the gate from the punch and tighten the attaching screws. Reinstall the gate and re-check the adjustment.

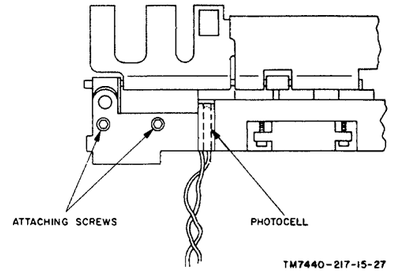


Figure 4-27. Initial position photocell adjustment details

4-59. Gate Springs

a. Requirement. 200-400 grams of force are required on the gate for operation of the switch.

b. Method of Checking. Use a multimeter to check continuity between pins 3 and 4 of A1J4, for indication of opening and closing of the contacts. Press down on the top surface at the face of the gate (fig. 4-24) with a spring scale, and note the reading of the spring scale at the point of contact operation.

c. *Adjustment*. To increase pressure, stretch the springs under the plungers (fig. 4-25), with the fingers. To decrease pressure, shorten the springs by clipping off one turn.

4-60. Spring Edge Guide

(fig. 4-23)

a. *Requirement.* A force of 180 to 220 grams is required to lift the spring edge guide off the stop.

b. Method of Checking. Press against the spring edge guide with a push type gram scale. Note the reading of the scale when the edge guide moves away from the stop.

c. Adjustment. Adjustment is made by carefully bending the spring with the fingers to increase or decrease tension.

4-61. Card Guide and Support Assembly

(fig. 4-28)

a. Requirement. The distance between the inboard side of the adjacent trunnion base and the inboard side of the fixed edge guide must be 1.125 inches.

b. Method of Checking. Install punch head in special fixture and position as shown in figure 4-28. Using the height indicator and special 0.688 inch block compare the height of the mounting plate and the fixed edge guide surfaces. With the punch head mounted in the special fixture, the distance between the trunnion base and the fixed edge guide will be 1.125 inches when the fixed edge guide is 0.688 inch above the arm of the special fixture.

c. Adjustment. Loosen the attaching screws of the assembly, so that it can be moved slightly in place. Adjust the self-locking screw in the end of the adja-

cent set block to move the assembly toward or away from the trunnion base. After the correct distance is obtained, adjust the opposite set block self locking screw. Do not tighten this screw. Leave sufficient clearance so that the assembly can be removed or replaced. Seat the assembly securely and tighten the attaching screws.

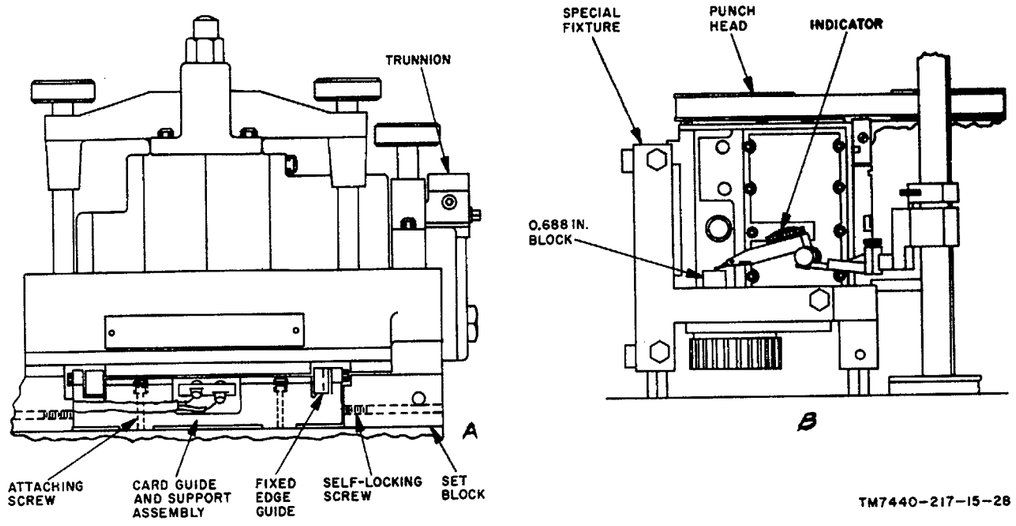


Figure 4-28. Card guide and support assembly requirement.

4-62. Brake Springs
(fig. 4-23)

a. Requirement.

(1) Each brake spring must exert 40 to 60 grams drag on moving cards.

(2) The outer brake spring must act on the cut corner of a card 1/8 to 1/16 inch before the leading edge contacts the registration gate.

(3) The inner brake spring must act on the square corner of a card 1/16 to 1/32 inch before the leading edge contacts the registration gate.

b. Method of Checking. Cut a blank (unpunched) strip lengthwise from a standard Hollerith card. Place the strip under the brake spring with the card guide and support assembly mounted in place on the main frame. Pull on the end of the strip with a spring scale and note the force in grams required to pull the card through the brake. Note the distance of the leading edge from the registration gate when the spring acts on a card. Repeat for the opposite side.

c. Adjustment. Remove the brake spring, and carefully bend it with the fingers a small amount to increase or decrease the force. Shape the spring so that it contacts the card at the required point.

4-63. Feed Mechanism Assembly

Adjustments to the feed mechanism are described in paragraphs 4-64 through 4-71.

4-64. Feed Armature Spring Tension
(fig. 4-29)

a. Requirement. The feed armature must actuate when 150 to 160 grams of force is applied midway between the magnet poles (3/8 inch from pivot).

b. Method of Checking. Mount the feed mechanism on the special fixture. Apply pressure to the armature with a spring scale 3/8 inch from the pivot. Note the force required to actuate the armature.

c. Adjustment. Remove the spring and carefully bend it a small amount to increase or decrease tension, as necessary to meet the requirement.

4-65. Clamp Arm Shaft Torsion Quill
((fig. 4-30)

NOTE

Before taking the adjustment in paragraph 4-65, apply 6 volts do to pins C and D of connector J5 on feed mechanism. Turn main drive pulley on punch mechanism until audible click is heard and latch is down.

a. Requirement. The clamp arm shaft torsion quill mus' be set at 40 to 42 inch-pounds.

b. Method of Checking. Measure the torque during adjustment.

c. Adjustment. Loosen the two set screws in the torsion quill clamp. Place the torque wrench on the end of the quill, and apply 40 to 42 inch-pounds torque in a clockwise direction. While holding the wrench at this reading, tighten the two set screws

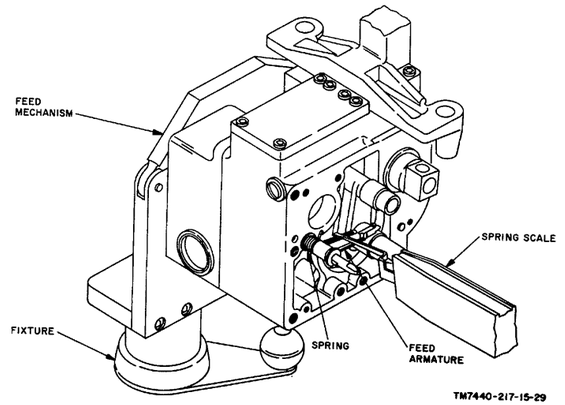


Figure 4-29. Feed armature spring requirement.

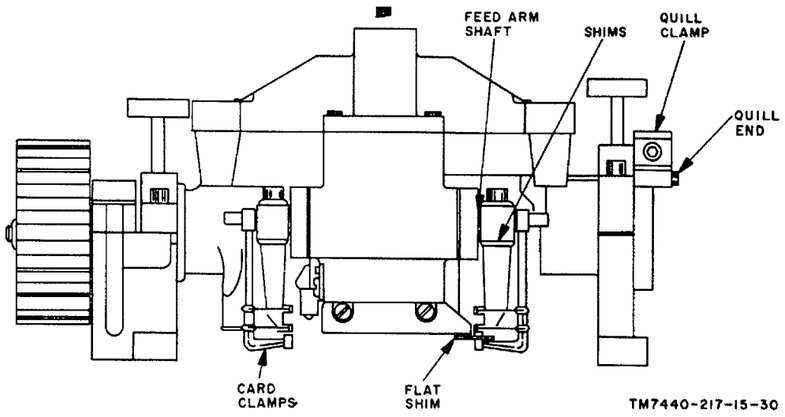


Figure 4-30. Feed assembly requirements.

4-66. Feed Armature Eccentric
(fig. 4-31)

a. Requirement. The feed arm clamps must lift 0.005 to 0.007 inch as cam is rotated to each lobe when feed magnet is not energized.

b. Method of Checking. Place the partially assembled feed mechanism on a suitable block on a surface plate. Place an indicator probe on the end of a clamp arm assembly. Manually rotate the drive shaft and note the movement at the end of the clamp arm.

c. Adjustment. Loosen the two set screws. Turn the end of the armature shaft to obtain the required indication. Tighten the set screws.

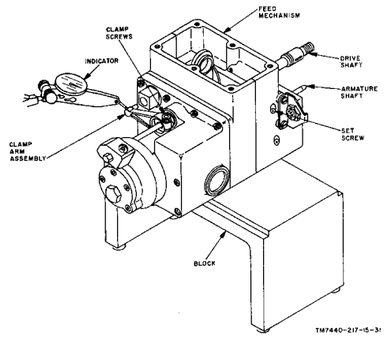


Figure 4-31. Feed armature eccentric adjustment.

4-67. Feed Magnet Air Gap
(fig. 4-32)

a. Requirement. The feed magnet must actuate at 10 to 12 volts dc maximum and release at 5 to 6 volts minimum (static operation). This is equivalent to an air gap of approximately 0.009 to 0.010 inch.

b. Method of Checking. Connect a variable dc power supply to the feed magnet. Set the power supply at 1.0 volt de and increase the voltage slowly while measuring the voltage applied. Note the voltage at the point of actuation of the armature. Reduce the voltage slowly and note the voltage at the point the armature is released.

c. Adjustment. Loosen the two magnet attaching screws. Place a 0.009 inch shim between the polepieces and the armature. Hold the armature against the stop in the actuated position, and apply 10 to 12 volts dc to the magnet terminals while tightening the attaching screws. After adjustment, recheck the requirement.

4-68. Feed Arm Length
(fig. 4-30)

a. Requirement. The distances from the center of the feed shaft to the nearest card clamp must be equal within .0005 inch, and of a length (approximately 2.000 inches) such that card registration is correct per EIA Standard RS-292.

b. Method of Checking.

(1) Use a suitable block to mount the assembly on a surface plate.

(2) Place a flat shim in the card clamps.

(3) Place an indicator probe on the highest point of the feed arm shaft (top of shaft is 0.375 inch above its centerline) and determine the height of centerline.

(4) Place the probe on the top surface of the shim, and determine the height of the card clamp.

c. Adjustment. Adjust by changing the thickness of the shims (22 and 61, fig. 4-9) between the feed arm assembly and the feed shaft. Fiften shim thicknesses are available from 0.001to 0.015-in. thick in 0.001 in. steps (part nos. A13230T1 through A13230T15 respectively).

(fig. 4-33)

4-69. Upper Card Glide

a. Requirement. The upper card glide must be within 0.0005 below to 0.0015 above the surface of the fixed clamp at the end of the feed arm.

b. Method of Checking. With the card glide up, rotate the drive shaft so that the arms are in the dwell position with the clamps open. Place a straight edge across the glide with the ends adjacent to the clamps. Use feeler gauges to measure the gap between the upper card glide and the surface of the fixed clamp.

c. Adjustment. Adjust by adding or removing laminations of laminated shim (part no. C13417AT1) beneath the card glide.

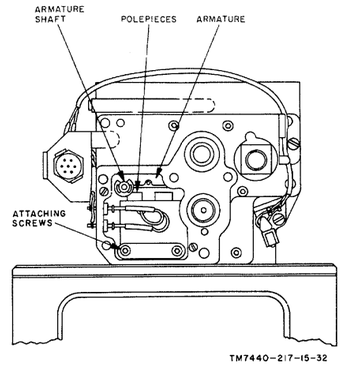


Figure 4-32. Feed magnet air gap requirement

Figure 4-33. Upper card requirement.

4-70. Clamp Pressure
(fig. 4-30)

NOTE:
Add insert .007" metal shim into feed arm clamp (23, fig. 4-9) in a clamping position, using a push-pull gauge, pull shim from clamp. Four to six pounds (½ pound) pull is required to move shim. Repeat on other clamp adjustments can vary as low as2 ¼pounds. The reading you get on one side should be the same on the other side.

a. Requirement. During operation, the clamps must grip the standard 80 column card stock (0.007 inch thickness) with a torque of 19-20 inch pounds on the lower arm, and 16-17 inch pounds on the upper arm.

b. Method of Checking. Accurate checking of the clamp pressure is best accomplished by verifying the adjustment. A rough check may be made by checking the gap between the clamps when the feed magnet is deenergized (latch up). The upperarm should have a 0.015 to 0.016 inch gap and the lower arm shall have a 0.015 to 0.016inch gap. The actual gap depends on the adjustment, and when the adjustment is properly made, will normally fall within this range.

c. Adjustment. Energize the feed magnet and rotate the driveshaft until the clamp grips a card.

Loosen both clamp screws, and place a scrap of standard punch card between the jaws of the lower arm only. Apply a torque of 19-20 inch pounds to the clamp arm assembly in a direction to clamp the card, and tighten the clamp arm screw. Remove the scrap of card from the lower arm, and place it between the jaws of the upper arm. Adjust the upper arm to obtain 16-17 inch pound torque, deenergize feed magnet and rotate the driveshaft to latch the feed mechanism. Check feed arm gap as in b above.

4-71. Spring Edge Guide
(fig. 4-33)

a. Requirement. A force of 180 to 220 grams is required to lift the spring edge guide from the stop.

b. Method of Checking. Press against the spring edge guide with a push type spring scale to move the spring away from the stop. Note the reading of the scale at the point when the spring moves from the stop. (Remove cover guide for this operation.)

c. Adjustment. Adjust by carefully bending the spring with the finger to increase or decrease tension, as necessary to meet the requirement.

4-72. Punch and Feed Assembly

Adjustments of paragraphs 4-73 through 4-84 are made with the feed mechanism mounted on the punch mechanism.

4-73. Fixed Edge Guides
(fig. 4-34)

a. Requirement. The fixed edge guide of the feed mechanism must be from 0.000 to 0.002 inch below the corresponding punch mechanism edge guide.

b. Method of Checking. Mount the assembled head in the holding fixture and place it on the surface plate. Determine the relationship of the two edge guides with the height gauge by placing the indicator probe on the card contacting surfaces.

c. Adjustment. Loosen the two attaching screws on the feed edge guide and position it for the correct indication. Tighten the screws.

4-74. Trunnion Clamp

(fig. 4-35)

a. Requirement. The solid (fixed) clamp of the feed arms must be 0.009 to 0.012 inch above the highest surface (lands) of the punch pin guide block and the height fixed clamp of both feed arms must be equal within 0.001 inch.

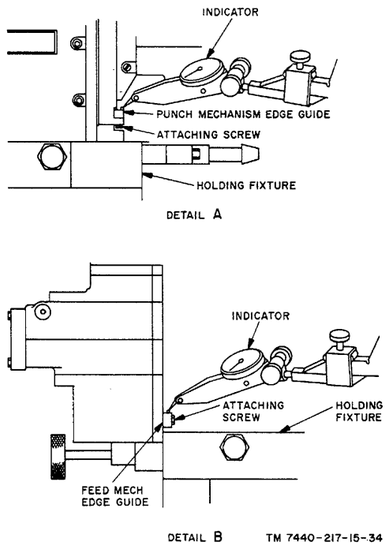


Figure 4-34. Fixed edge guide requirement

b. Method of Checking. Turn the feed drive shaft so that the feed clamp arms are in the maximum forward position (toward picker). Place a 0.010 inch feeler flat on the surface of the guide block and slide it toward the clamp. The feeler must go under the solid (top) clamp with a slight drag. A 0.009 inch feeler must clear the clamp, and a 0.013 inch feeler must not go under the clamp.

c. Adjustment. Adjustment is made by adding or removing trunion shims (30, fig. 4-8, part no. A13424CT2) located under the trunion clamp bases.

4-75. Throat Clearance
(fig. 4-35)

a. Requirement. The clearance at the entrance between the upper card glide and the guide block must be 0.011 inch.

b. Method of Checking. Insert a 0.011 feeler gauge in the throat. A slight drag indicates correct adjustment.

c. Adjustment. Loosen the two upper guide block screws and move the upper card glide in the direction required. Tighten the screws and recheck clearance.

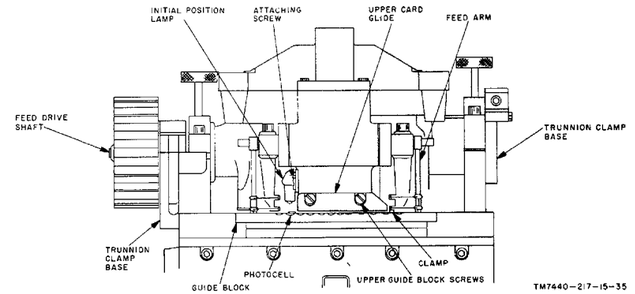


Figure 4-35. Throat requirementS.

4-76. Initial Position Lamp
(fig. 4-35)

a. Requirement. The beam from the initial position lamp must illuminate the initial position photocell.

b. Method of Checking. (When punch head is not installed in the unit)

(1) Apply 2.5 volts dc to pins A and B of A1P1, to light the lamp.

(2) Connect a 6-volt dry cell and a 500-ohm resistor in series with pins 11 and 12 of A1J4 in order to apply a potential to the phototransistor while limiting the dissipation to approximately 20 mw. Pin 12 must be connected to the positive terminal of the dry cell.

(3) Measure the voltage across the 500-ohm resistor with a vacuum tube voltmeter. Each 1/2 volt indicates 1 ma of current through the phototransistor. With the initial position lamp (2, Fig. 22) lighted and no card in the initial position, the voltmeter must indicate a minimum or 1 volt (2 ma) and a maximum of 3 volts (6 ma).

b.1. Method of Checking. (When Punch Head Installed in Unit).

(1) Remove drive motor fuse.
(2) Apply AC POWER.
(3) Connect oscilloscope ground to pin 1, card AIA14.
(4) Connect oscilloscope probe to pin 22, card AIA14.
(5) With no card inserted between initial position lamp (fig. 4-35) and sensor, voltage should be approximately 3.6 volts.
(6) With card inserted between lamp and sensor, the voltage should be approximately 0.4 volt.

c. Adjustment. The position of the lampholder can be adjusted by loosening the attaching screw. The

lamp is held in position in the lampholder by a spring, and can be rotated to center the filament by turning the bulb with a pair of tweezers. The leads are of sufficient length to permit a few degrees of rotation in either direction.

4-77. Step Error Switch Contact Adjustment

a. Requirement. In the no card position, a gap of 0.006 (± 0.001) inch should be present between the contacts. When both contacts are depressed 0.017 inch from the no card position, the gap should remain 0.006 ± .001 inch (simulating a card in the punch position). When the long contact is depressed 0.017 inch and the short contact is released, the contacts should close.

b. Method of Checking. Manually place a punched card in position for punching columns 77 and 78 and observe the position of the step error switch in relationship to the trailing edge of the card.

c. Adjustment. Adjust the contact leaves by carefully bending them until they meet the requirements in a above.

NOTE

Step error switch is in correct position when small leaf is 29/64" from the "B" row of punch pins.

4-78. Eject Belt Tracking (fig. 4-36)

a. Requirement. The eject belt must track with 1/32 wrench clearance between the belt and the belt guide on eject pivot.

b. Method of Checking. Turn the eject drive -rocket and measure the clearance as the belt racks.

c. Adjustment. Turn the adjusting screw in the idler bracket, which changes the axis of the belt idler.

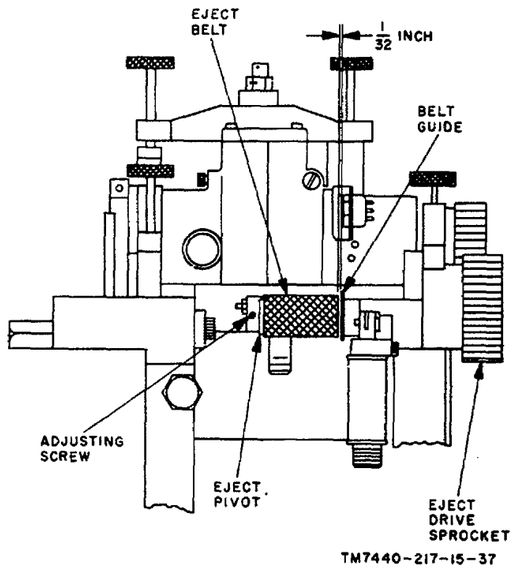


Figure 4-36. Eject belt tracking requirement.

4-79. Eject Roller Leveling Adjustment (fig. 4-37)

a. Requirement. The eject belt idler roller must be level with the punch mechanism assembly.

b. Method of Checking. Place the punch assembly on the surface plate with the eject mechanism installed and the eject belt removed. Use the indicator probe at each end of the idler roller to determine that the roller is level.

c. Adjustment. Adjust the two setscrews in the idler support. As one screw is backed off, tighten the opposite screw by the same amount to eliminate play.

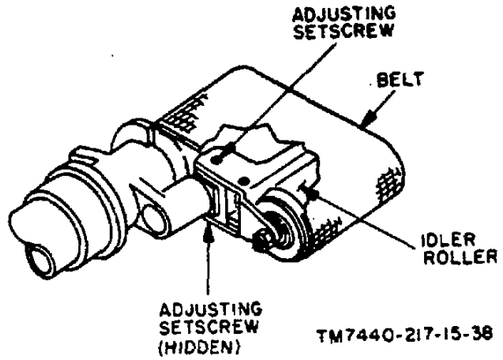


Figure 4-37. Eject roller leveling requirement.

4-80. Feed Mechanism-Punch Mechanism Timing (fig. 4-38)

a. Requirement. The two smaller holes in the feed pulley and one of the three capscrews on the punch pulley must be in line with the centers of the two shafts. The capscrew must be toward the top of the pulley.

b. Method of Checking. Check with the timing belt installed and adjusted for tension as in paragraph 4-81. Turn the punch pulley with a 5/8-inch socket wrench in the direction of the cast arrow to line up the holes and capscrew as described in a above. Observe whether the pulleys line up as indicated.

c. Adjustment.

(1) To adjust for an amount less than the pulley tooth spacing, loosen the three capscrews in the punch pulley. The rim can then be turned a few degrees in either direction for fine adjustment. Retighten the three capscrews.

(2) To adjust for an amount greater than one pulley tooth, remove the drive belt and line up the pulleys. Then replace the drive belt and make a final adjustment, if necessary, as described in (1) above.

4-81. Timing Belt Tension (fig. 4-38)

a. Requirement. The timing belt must deflect 1/8inch at the center of the longest run when 1-pound force is applied at that point.

b. Method of Checking. Apply one pound of force to the belt at the center of the longest run and measure the deflection.

c. Adjustment. Loosen the eject assembly arm adjusting screw. The slotted hole for this screw allows the arm and eject pulley to be moved in or out to adjust belt tension. After adjustment, retighten the screw and recheck the requirement. Recheck timing (para 4-80).

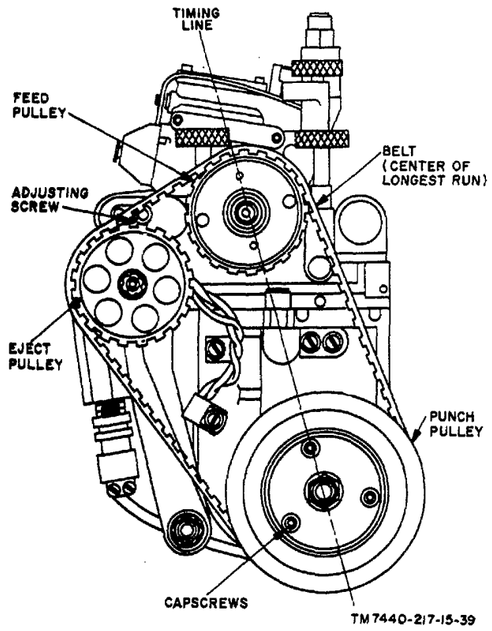


Figure 4-38. Feed mechanism-punch mechanism timing.

4-82. Eject Solenoid (fig. 4-39)

a. Requirement. The eject belt must clear the upper card glide by 0.014 inch when the solenoid is deenergized, and by 0.000 to 0.002 inch when the solenoid is energized. Eject solenoid shall energize between 6-13 volts dc.

b. Method of Checking. When the solenoid is deenergized, insert two thickness from a standard Hollerith card between the eject belt and the upper card. glide. There must be a slight drag on the cards. Insert a 0.001 inch feeler gauge between the eject belt and the upper card glide in place of the cards. Place the solenoid in the actuated position. There should be a drag on the feeler gauge.

c. Adjustment. Adjust for the energized position requirement by loosening the solenoid clamp screw and turning the solenoid in the clamp. Tighten the solenoid clamp screw. Adjust for the deenergized position requirement by turning the set screw in the eject arm.

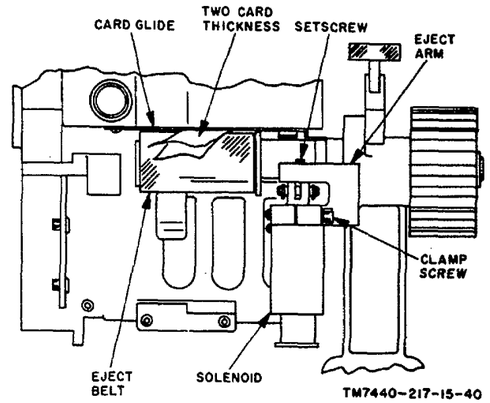


Figure 4-39. Eject solenoid requirement.

4-83. Reluctance Pickup Air Gap

a. Requirement. The reluctance pickup shall provide as a minimum, an output which may vary between + 1 and -1 volt; and as a maximum, an output which may vary between + 1.6 and -1.6 volt (output measured across 1000-ohm load).

b. Method of Checking. With the punch installed in the deck, connect a 1000 ohm (1/4 watt) resistor across pins AA and Z on card A1A1 and connect oscilloscope across resistor. Operate the punch at nominal speed and observe that the output of the reluctance pickup meets the requirements in a above.

c. Adjustment

(1) Remove the adjusting screw (fig. 4-38) and the timing belt and swing the eject assembly away from the punch and feed assembly.

(2) Loosen the jam nut (fig. 4-40) on the reluctance pickup.

(3) Place a 0.019-inch feeler gauge between the polepiece of the pickup and the boss on the rear of the feed drive pulley.

(4) Turn the pickup body for a slight drag on the gauge, tighten the jam nut, and recheck with the feeler gauge.

(5) When reassembling, check the timing and timing belt tension (para 4-80 and-4-81).

(6) Recheck the requirement and readjust as necessary.

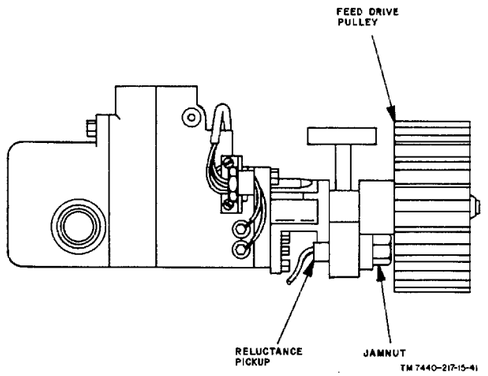


Figure 4-40. Reluctance pickup air gap requirement.

4-84. Operational Registration

Check To verify previously described adjustments affecting registration, mount the punch head in a fully adjusted panel. (Adjustments to components of the panel are described in subsequent paragraphs). Provide appropriate operating power and test signals and punch a deck of standard Hollerith cards with a test pattern.

a. Requirement. Punch card tolerances must conform to standard requirements.

b. Method of Checking. Inspect punch cards using a loupe and a card gauge. Inspect the leading edge of cards for damage caused by the registration gate. Inspect the first punched column for registration. The maximum cumulative error at column 80 is ± 0.017 inch. The maximum laterial error is 0.010 inch.

c. Adjustment.

(1) In case of registration gate damage or improper registration of the first column, recheck all registration gate adjustments.

(2) If the gate is not parallel to the punch pins, the registration gate will damage the leading edge of the card.

(3) Improper brake spring adjustment can cause gate damage and/or poor registration.

(4) If the gate is a wrong distance from punch pins, improper registration of the first column will occur.

(5) Improper adjustment of the guides will introduce lateral errors.

(6) Cumulative feed error at column 80 can be eliminated by changing the length of the feed arms (para 4-68). Increasing the length of the feed arms by adding 0.001 inch shims will increase the cumulative feed (at column 80) by 0.0035 inch; decreasing the feed arm length decreases the cumulative feed similarly. Any required change in feed arm length will require corresponding adjustment to those measurements dependent on feed arm length (upper card glide and trunnion clamp base shims must be changed by same amount that feed arms shim is changed). The feed arm clamp pressure must also be rechecked and readjusted if necessary. Any adjustment of the leading edge guide will also require rechecking of the trailing edge guide (para 4-71).

4-85. Punch Panel Adjustments

Adjustments to the punch panel include adjustments to the picker mechanism, tension of drive belts, and stacker adjustments. The punch head mounts on a shock mounted casting without adjustment. The picker mechanism frame also mounts on the casting, with alignment provided by shims installed at assembly. Therefore, the picker mechanism of a punch panel may be removed and replaced without adjustment, provided the original shims are left in place. The adjustment is described, however, in the following paragraph. All the following adjustments are made to a fully assembled panel, with the punch head mechanism installed, except when noted.

WARNING

Disconnect power and observe standard safety precautions for electrical and mechanical equipment when performing the following procedures. Be especially careful to keep fingers and hands away from belts and pulleys whenever power is not disconnected. Never reach behind the punch head mechanism, where there are several pulleys and drive belts, unless you are sure that power is disconnected.

4-86. Picker Alignment

a. Requirement. When the leading edge of a card is against the registration gate (fig. 4-41), and the rear side of the card is against the punch head inner edge guide, there must be a clearance of 0.003 to 0.006 inch between the card and the picker inner edge at the throat; and 0.003 to 0.006 inch at the rear of the inner edge guide. The card must pass smoothly from the picker to the punch, with no binding at the entrance to the punch.

b. Method of Checking. When checking, use a punch head, known to have a correctly adjusted registration gate and inner edge guide, mounted in the panel. Slide a standard 80 column card through the picker throat until it contacts the registration gate in the punch head and the inner edge guide. Allow the gate and guide to position the card. Check the clearance between the inner edge of the card and the picker inner edge guide at both ends. Observe that the card does not bind when passing into the punch mechanism.

c. Adjustment.

(1) Remove the picker assembly (para 4-36).

(2) Add or remove shims at the three points where the picker frame is attached to the casting. Use the same shim thickness at the two mounting points that are close to the picker throat in order to keep the picker plate perpendicular to the panel. Clearance is provided at the mounting holes so that the throat end of the picker can be raised or lowered slightly before mounting screws are tightened.

(3) Replace the picker assembly (para 4-36).

(4) Check the picker drive belt adjustment (para 4-96).

4-86.1. Adjustment of Picker Throat Clearance

a. Requirement. A .010 inch thickness oil feeler gauge should slide under the plate on the throat mounting blocks with some slight resistance. This clearance should be present on both sides of the plate.

b. Method of Checking. With the .010 inch oil feeler gauge, check picker throat clearance by placing the gauge under the plate on the throat mounting blocks. Check clearance on both sides of the plate. Clearance should be such that the feeler gauge slides under the plate with some slight resistance.

c. Adjustment.

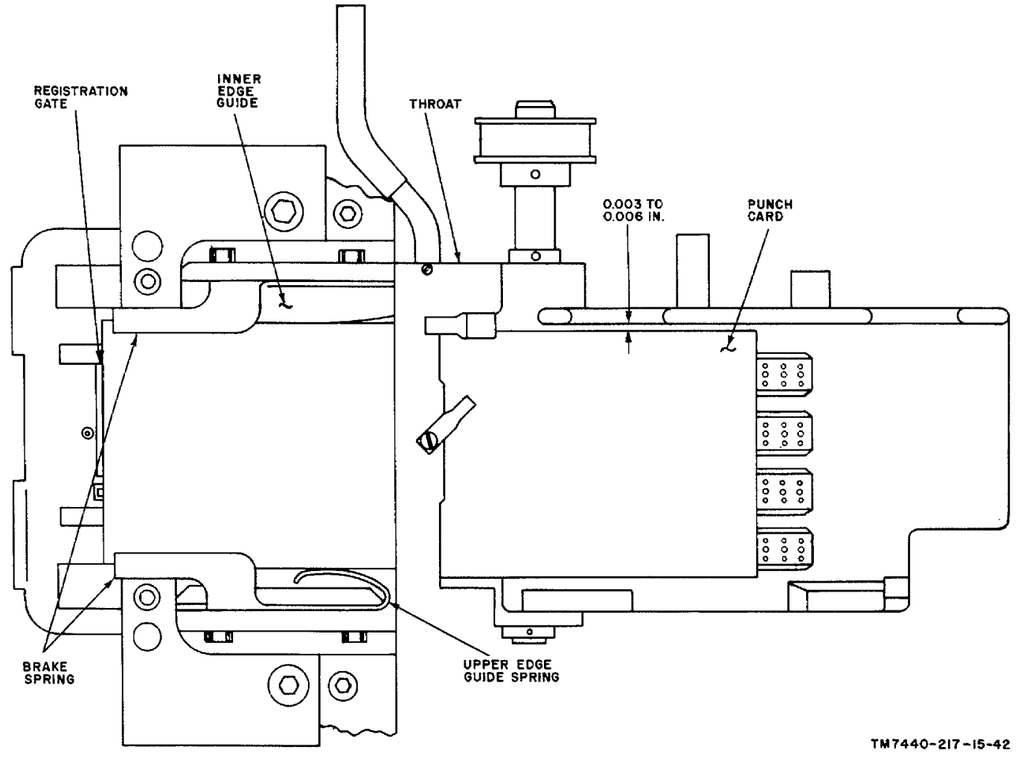


Figure 4-41. Picker alignment requirement.

(1) Adjustment procedure for pickers with adjustment screws: (a) If clearance is improper, adjust clearance by first loosening the two Allen screws which hold the throat mounting block secure.

(b) Adjust the clearance by turning the remaining four 1/16 inch Allen screws on the throat mounting block.

(c) After adjusting, secure the throat mounting block.

(2) Adjustment procedure for picker throat clearance on pickers without Allen adjustment screws.

(a) Loosen the two Allen screws on the picker throat mounting block.

(b) Vary the throat clearance by placing shims under the throat mounting block. To increase clearance, place shim stock (1/2 inch square) behind each of the mounting screws in the block (area closest to picker belts). If clearance is to be decreased, the shim stock must be placed in front of the mounting screws (area closest to the mouth of the head).

(3) Check throat clearance; insure that the clearance is even throughout.

(4) Tighten the throat mounting Allen screws.

4-87. Picker Belt Tracking (fig. 4-42)

a. Requirement. During operation, the picker belts must track without binding.

b. Method of Checking. After reassembling the picker (para 4-36), check belt tracking before mounting the picker on panel. Turn the drive pulley manually to feel any binding due to misalignment of pulleys.

c. Adjustment. When reassembling each picker belt pulley on the shaft, center the pulley in the picker frame before tightening the setscrews. Center each idler pulley by loosening the screw and moving the strap which positions the inboard spring loaded plunger.

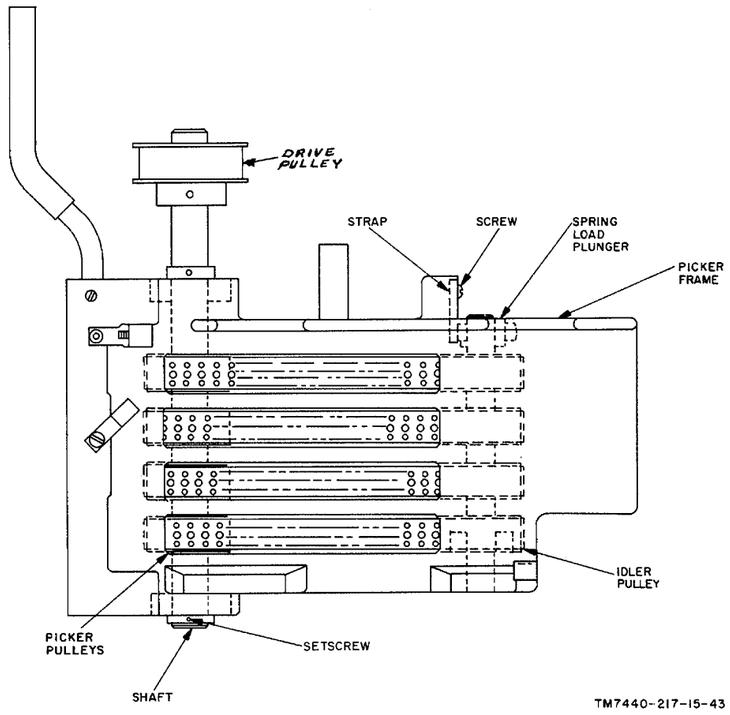


Figure 4-42. Picker belt requirement.

4-88. Picker Belt Tension (fig. 4-43)

a. Requirement. The picker belt tension springs in the plungers must be set between 6 and 8 pounds at both ends of the idler shaft. The tension at both ends must be equal (within 1/4 pound).

b. Method of Checking. Place the probe of a push-type spring scale against a spring loaded plunger and press until a small movement of the slider block is noted, so as to relieve some belt tension. Read the spring scale at this point. Repeat the procedure at the opposite end of the shaft (see note under fig. 4-43)

c. Adjustment. Use an allen wrench to turn the spring loaded plunger screws in the slider blocks. Clockwise rotation increases tension, counterclockwise rotation decreases tension. Place a drop of sealing compound, retaining (grade E Locktite) on the plunger screws to prevent loss of adjustment.

NOTE

The picker assembly must be removed from the panel for checking due to the length of the measuring scale.

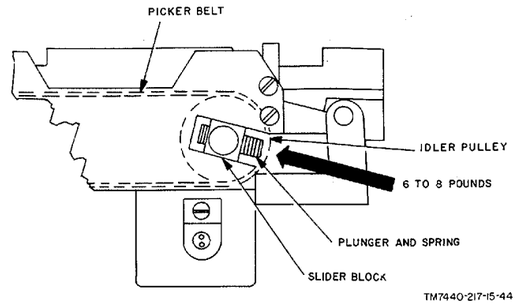


Figure 4-43. Picker belt tension requirement.

4-89. Picker Belt Pusher Adjustment (fig. 4-44)

a. Requirement. The picker belt pusher must hold the picker belts level within 0.005 inch. The outer belt must be level with inner belt within + 0.000 to - 0.005 inch.

b. Method of Checking. Place a straight edge across the picker slots and manually operate the picker solenoid. Use feeler gauges to check the requirement.

c. Adjustment. When components of the picker are disassembled (para 4-37), carefully twist the arms of the belt pusher manually. After assembly, recheck requirement.

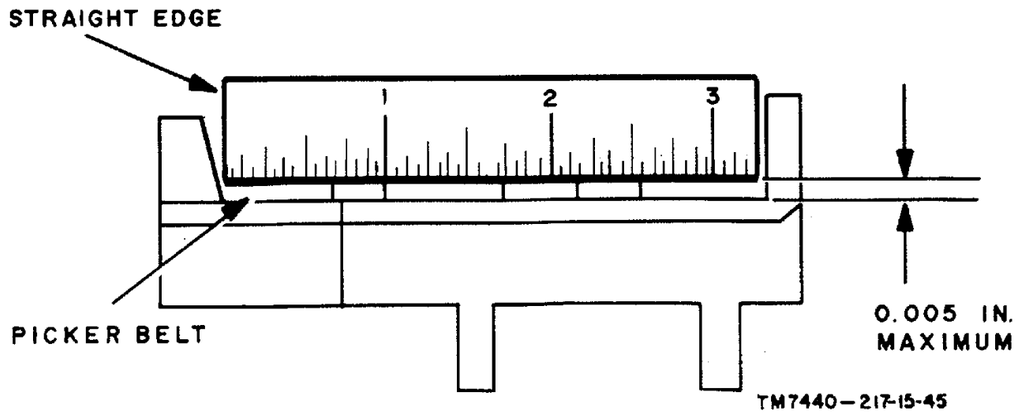


Figure 4-44. Picker belt pusher requirement.

4-90. Picker Solenoid Adjustment (fig. 4-45)

a. Requirement. The stroke of the solenoid must be from 0.040 to 0.070 inch, and operation of the picker solenoid must raise the belts so that they protrude 0.010 to 0.030 inch through the slots in the picker frame. When rest, the belts must fall below the picker frame card-contacting surface from 0.015 to 0.030 inch.

b. Method of Checking. When the solenoid is deenergized, check the clearance the bottom of the solenoid and the solenoid stop to determine the stroke. Manually operate the solenoid and measure the height of the four belts above the picker frame slots. Release the solenoid and measure the height of the four.-belts below the picker frame slots.

c. Adjustment.

(1) Adjust the solenoid stroke by adding or removing nylon washers (28, fig. 4-12) under the solenoid plunger.

(2) Loosen the jam nut and rotate the long nut to extend or shorten the plunger, thus changing the belt travel.

(3) The entire solenoid and bracket can then be moved to the left or right on the picker frame by loosening the mounting screws. This will change the belt lift without affecting the solenoid stroke (due to angle on surface of belt pusher which contacts solenoid plunger).

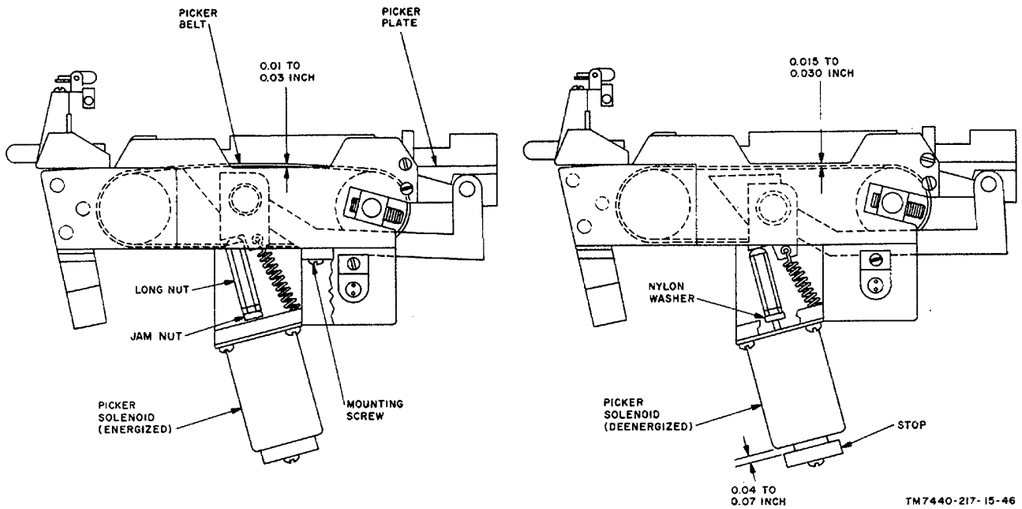


Figure 4-45. Picker solenoid requirement.

4-91. Picker Reset Lamp Adjustment (fig. 4-46)

a. Requirement. The light pattern of the picker reset lamp must be horizontal, must illuminate the photocell when the picker is deenergized, and must be interrupted by the shutter halfway in its travel when the picker is energized.

b. Method of Checking. (When picker assembly is not installed on the panel.) Apply 48 volts dc at pins 64 (+) and 60 (-) of J2. Observe the light pattern visually as it falls on the cover glass of the picker reset photocell. Manually operate the picker solenoid and observe that the shutter interrupts the light on the cover glass.

b.1. . Method of Checking. (When picker assembly is installed on the panel.)

(1) Connect oscilloscope ground to pin 1, card A1A14.

(2) Connect oscilloscope probe to pin 21, card A1A14.

(3) Apply AC POWER.

(4) Actuate picker solenoid manually.

(5) Voltage should be approximately 3.6 volts when the solenoid is not actuated.

(6) Voltage should be approximately 0.4 volts when the solenoid is actuated.

(7) If the voltages are not correct, adjust the position of the shutter as described in c below.

c. Adjustment. Turn the lamp in its socket until the pattern of the beam is horizontal. Loosen the lamp socket attaching screw and position the lamp to center the beam on the photocell. If necessary carefully bend the socket attaching lug. Adjust the shutter position by turning the adjusting screw.

4-92. Hopper Empty Lamp Adjustment (fig. 4-46)

a. *Requirement. The light pattern of the hopper* empty lamp must illuminate the photocell when no card is in the hopper.

b. Method of Checking. (When picker assembly is not installed in the card punch.) Apply 48 volts dc at pins 64(+) and 60(-) of J2, to light the photocell exciter lamps. Observe the light pattern visually as it falls on the cover glass of the hopper empty photocell.

b.1. . Method of Checking. (When the picker assembly is installed in the unit and AC power can be applied.)

(1) Connect oscilloscope ground to pin 1, card A1A14.

(2) Connect oscilloscope probe to pin 19, card A1A14.

(3) Apply AC POWER.

(4) Voltage should be approximately 3.6 volts when the hopper empty photocell is not covered.

(5) Voltage should be approximately 0.4 volts when the photocell is covered.

(6) The CARD ALARM indicator should also illuminate when the photocell is not covered and extinguish when the photocell is covered.

c. Adjustment. Loosen the lamp socket attaching screw and position the lamp to center the beam on the photocell. If necessary, carefully bend the socket attaching lug.

4-93. Hopper Low Lamp Adjustment (fig. 4-46)

a. Requirement. The light pattern of the hopper low lamp must illuminate the photocell when the level of cards falls below the sensor level in the hopper.

b. Method of Checking. Apply 48 volts dc at pins 64 (+) and 60 (-) of J2, to light the photocell exciter lamps. Observe the light pattern visually as it falls on the cover glass of the hopper low photocell.

NOTE

The above method of checking is used only when AC power cannot be applied to the unit.

b.1. . Method of Checking. (When the picker assembly is installed on the panel and AC power can be applied to the card punch.)

(1) Connect oscilloscope ground to pin 1, card A1A14.

(2) Connect oscilloscope probe to pin 20, card A1A14.

(3) Apply AC POWER.

(4) With cards not covering the hopper low photocell, the voltage should be approximately 3.6 volts.

(5) With cards covering the hopper low photocell, the voltage should be approximately 0.4 volts.

(6) The HOPPER LOW indicator should also illuminate when the card level falls below the photocell and extinguish when the cards are covering the photocell.

c. Adjustment. Loosen the lamp socket attaching screw and position the lamp to center the beam on the photocell. If necessary, carefully bend the socket attaching lug.

4-94. Stacker Lamp Adjustment (fig. 4-47)

a. Requirement. The light pattern of the stacker must illuminate the photocell when no card is passing the offset capstan.

b. Method of Checking. Apply 48 volts dc at pins 64 (+) and 60 (-) to light the photocell exciter lamps. Observe the light pattern visually as it falls on the cover glass of the offset capstan photocell exciter lamps.

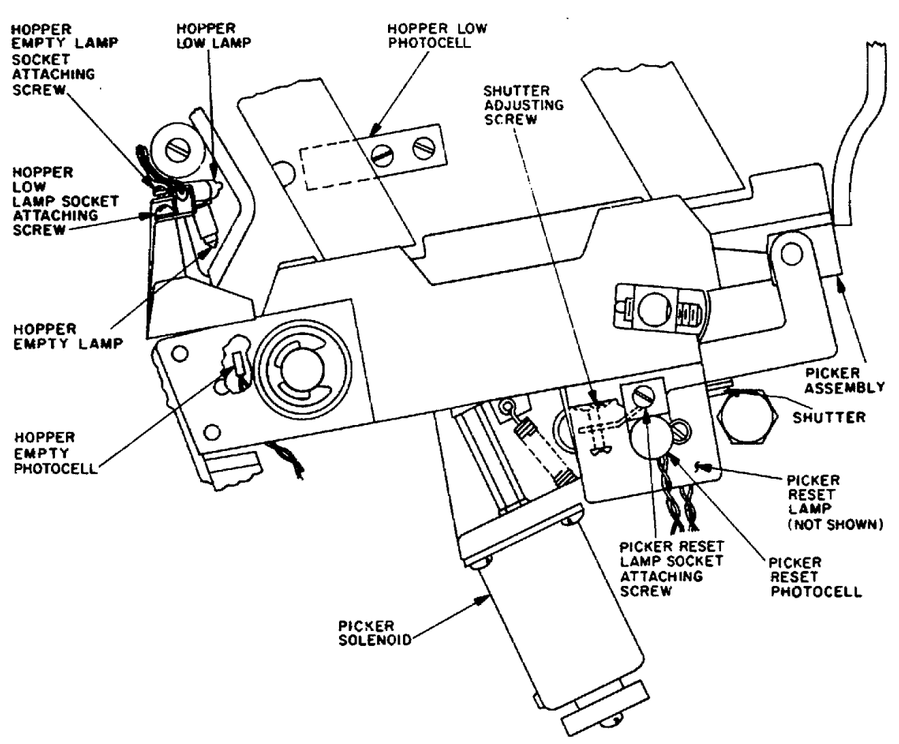


Figure 4-46. Picker reset hopper empty and hopper low lamp requirements.

Observe the light pattern visually as it falls on the cover glass of the offset capstan photocell.

NOTE

Even if most of the beam from the lamp hits the photocell, operation of the photocell is not assured. The electrical check which follows is therefore required.

(1) Connect oscilloscope ground to pin 1, card A1A14.
(2) Connect oscilloscope probe to pin 23, card A1A14.
(3) Apply AC power.
(4) Use card to intercept beam of stacker lamp.
(5) Voltage should be approximately 3.6 volts if light beam is not broken.
(6) Voltage should be approximately 0.4 volts if beam is broken.
(7) If photocell is not actuated, adjust as described in c below.

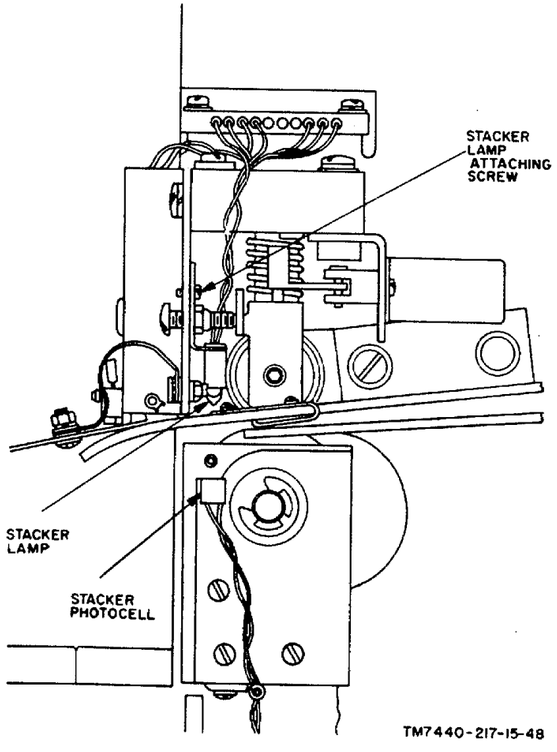


Figure 4-47. Stacker lamp requirement.

c. Adjustment. Loosen the lamp socket attaching screw and position the lamp to center the beam on the photocell. If necessary, carefully bend the socket attaching lug. It may also be necessary to rotate the bulb in its socket to compensate for bulb lens irregularities or to try a new bulb.

4-95. Hopper Guide Adjustment (fig. 4-48)

a. Requirement. The card input support must be positioned so that the lower end, adjacent to the picker frame, is one card length (7 3/8 in + 0.010 to 0.030) from the face of picker throat block.

b. Method of Checking. A standard 80 column card is 7 3/8 inches long and can be used to check the adjustment. Place the card in position so that forward edge touches the throat block and covers the vacuum holes in the picker frame. Check the clearance with feeler gauges.

c. Adjustment. Loosen the card input support mounting screws and position the support to meet the requirement.

4-96. Picker Drive Belt and Pump Belt Tension Adjustment (fig. 4-49)

a. Requirement. The pump belt must be tensioned to 10 to 20 pounds, with perceptible slack in the picker drive belt. These adjustments are non-critical. It is desirable that the picker drive belt be loose enough so that it will deflect about 1/2 inch when touched lightly, yet not be so loose that it can slip on the toothed pulleys. The belt is usually in satisfactory adjustment after routine assembly. A correctly tensioned pump belt deflects slightly with moderate pressure applied midway between the pulleys.

b. Method of Checking. Disconnect power. Feel tightness of the belts with the fingers.

c. Adjustment. Loosen the four screws that attach the pump mounting plate to the castings. Pull the pump away from the drive motor manually, apply about 10 to 20 pounds of tension, and tighten the screws. The pump can also be moved toward or away from the picker drive pulley a slight amount, to adjust the amount of slack in the picker drive belt.

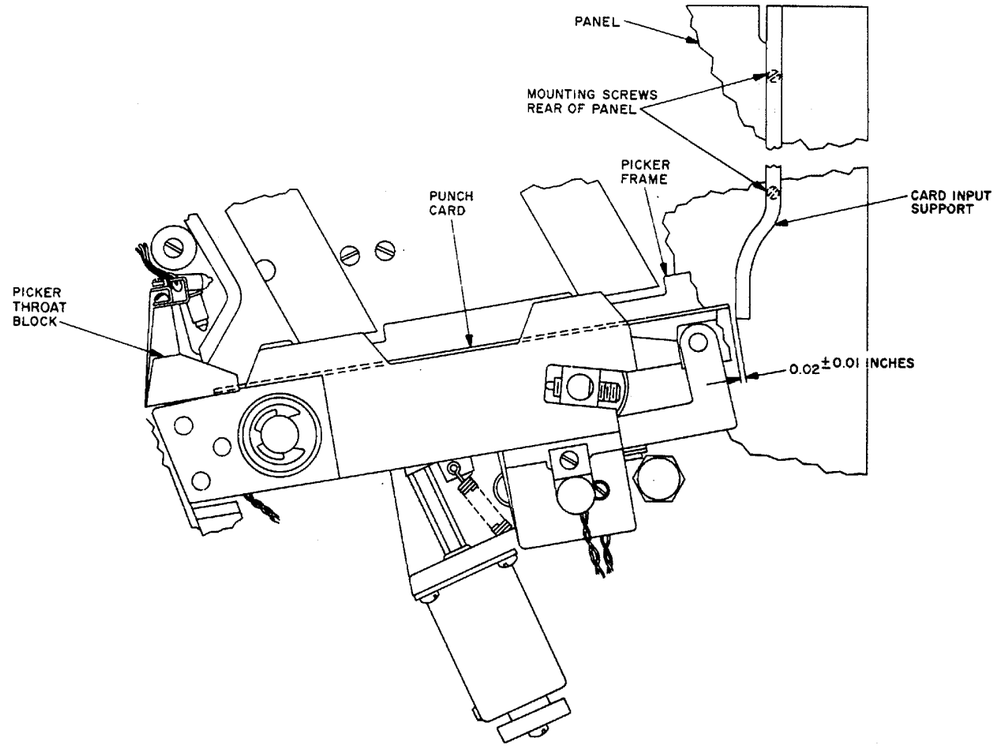


Figure 4-48. Hopper guide requirement.

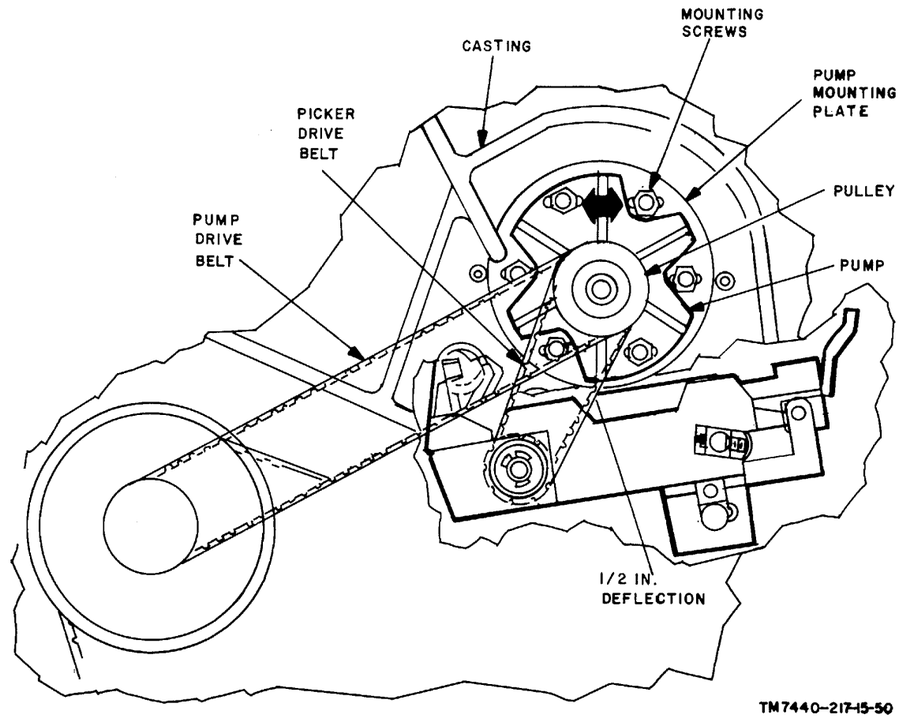


Figure 4-49. Picker drive and pump belt tension requirement.

4-97. Punch Belt Tension (fig. 4-50)

a. Requirement. The punch belt must be tensioned at approximately 50 pounds, or tightly to prevent more than ± 1/8 inch of whip while running.

b. Method of Checking. With power disconnected, feel the tautness of the belt. Moderate finger pressure should be required to deflect the belt. Observe the belt through opening in the panel during operation, and visually estimate the amount of whip.

c. Adjustment. With power disconnected, loosen the socket head cap screws of the idler casting. These screws are accessible through a hole in the panel. Place a screwdriver in the adjacent hole, with the blade on the idler casting above the idler shaft. Press upward on the screwdriver handle so as to apply leverage on the idler casting, and tension the punch drive belt. At the same time, feel the punch drive belt to observe tautness. When the belt no longer feels slack, and moderate finger pressure is required to deflect the belt 1/8 in. at longest run, tighten the three idler adjusting screws and recheck the adjustment.

4-98. Offset Drive Belt Tension (fig. 4-51)

a. Requirement. The offset drive belt should be loose enough so that it will deflect 1/8" when touched, yet not be so loose that it slips on the toothed pulleys.

b. Method of Checking. Disconnect power before checking. Feel for slack in belt with fingers.

c. Adjustment. Normal assembly usually results in automatically obtaining the correct adjustment. However, a limited range of adjustment is permitted by the clearance in the mounting holes of the capstan assembly. Loosen the attaching screws and move the offset drive assembly toward or away from the drive motor as required.

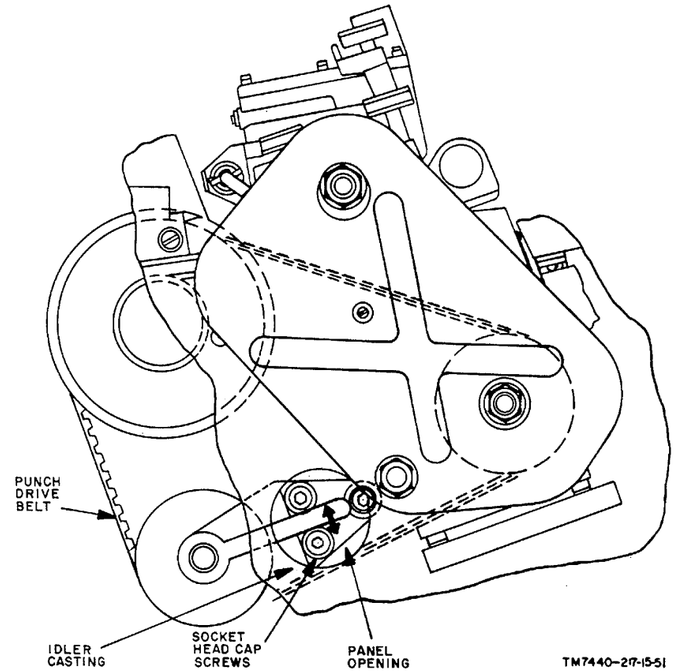


Figure 4-50. Punch belt tension requirement.

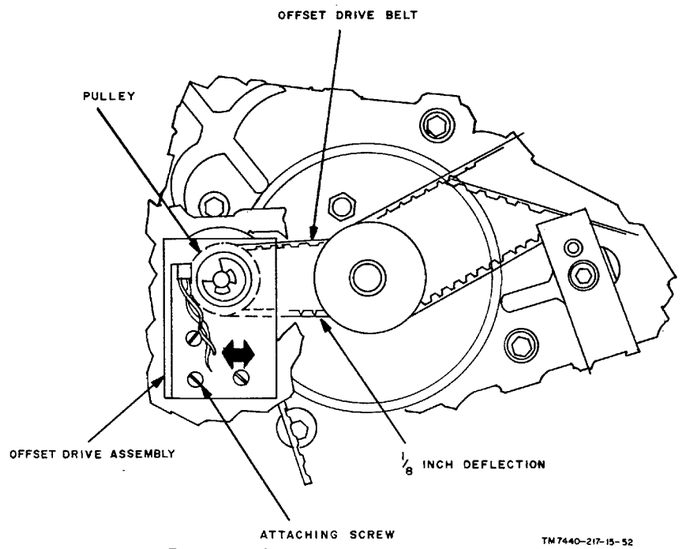


Figure 4-51. Offset drive belt tension requirement.

Figure 4-52 is deleted.

4-99. Vacuum and Pressure Checks (fig. 6-12 and 6-13)

a. Requirements. The high speed card punch should pick and punch the data cards with acceptable registration and no unit error indications.

b. Method of Checking.

(1) Remove, empty, and reinstall the chad bag.

(2) Clean and replace vacuum line air filter.

(3) Clean and flush picker throat port holes.

NOTE

Make sure that hoses are not crimped and there are no leaking air lines and/or leaking hose connections. Inspect the vacuum pump.

(4) Shut off power to the card punch and remove plugs in the tee fittings provided for the vacuum and pressure gauges. Tee fitting for the vacuum gauge is located in the rear chassis of the A2 assembly in back of the vacuum relief valve (fig. 6-12). Tee fitting for the pressure gauge is located in the pressure line going from the air filter to the nozzle mixer (fig. 6-13).

(5) Install vacuum and pressure gauges, using 9/16" open end wrench. Take care not to overtighten, as gauges will be removed after checking and adjusting.

(6) Apply power to the high speed card punch.

(7) With all cards removed from the hopper, check vacuum and pressure. Record these values.

(8) Place about 50 cards in the hopper and check vacuum and pressure. Record these values.

(9) Start processing cards in LOCAL TEST mode.

Record vacuum and pressure readings.

(10) When checking is complete, shut off power to the high speed card punch.

c. Adjustment. If the unit develops problems picking or processing data cards, vacuum and pressure should be measured and compared with those readings recorded in (7), (8), and (9) in paragraph b above.

(1) When either vacuum or pressure goes up, and the other reading goes down, there may be a blocked line, clogged air filter, or blocked ports under the picker belts.

(2) When both readings fall off from the normal, a faulty vacuum pump is indicated. Refer to paragraph 4-41.1.

(3) Check for leaking air lines, and/or leaking hose connections.

d. Restoration. After checks are completed, remove both gauges and replace plugs in the tee fittings.

CAUTION

Do not leave the gauges in the card punch. Vibration of the machine will seriously damage them.

4-100. Offsetting Idler Adjustment (fig. 4-53)

a. Requirement. When the offset solenoid is not energized, the offset idler roller must be parallel to the offset capstan, thus transporting the processed cards to the elevator in a straight line. When the solenoid is energized, the card must be offset in the elevator so that the card can be identified visually.

b. Method of *Checking. During operation, check to see* if the cards form a straight stack in the elevator, with the deck stacked against the rear surface of the elevator. Offset cards should project approximately 1/4 to 3/4 inch from the stacker. Damage to the forward inboard corner of the card is also an indication of improper adjustment.

c. Adjustment. Adjust the idler stop screw so that cards are transported to the stacker in a straight line when the offset solenoid is not energized. Turn the screw counterclockwise to move cards toward the panel, or clockwise to move cards away from the panel. In the same way, manually operate the solenoid and adjust the offset stop screw to obtain proper offsetting. Turn the screw counterclockwise to increase the projection of offset cards, and turn it clockwise to lessen the projection.

4-101. Offsetting Solenoid Adjustment (fig. 4-53)

a. Requirement. When the solenoid is operated, the idler yoke must contact the idler stop screw before the solenoid plunger bottoms in the solenoid case.

b. Method of Checking. Check during the process of adjustment (c below).

c. Adjustment. Loosen the two solenoid bracket mounting screws so that the solenoid bracket can be moved. Manually operate the idler yoke so that it contacts the stop in the fully operated position. While holding this position, push the body of the solenoid toward the idler until the solenoid plunger bottoms in the solenoid. At this point, pull the solenoid housing away from the idler approximately 0.005 inch; or just enough so that the plunger does not bottom on full operation. Tighten the support attaching screws in this position.

4-102. Card Guides Adjustment (fig. 4-54)

a. Requirement. The upper and lower card guides must be positioned approximately 1/4 inch apart at the punch side and the leading edge of a card leaving the punch head must enter between them without touching either guide. The stacker ends of the guides must be positioned approximately 1/16 inch apart and the upper surface of the lower card guide must be level to 0.005 inch above the point where the offset drive and idler contact.

b. Method of Checking. Measure the distances between the card guides. Observe the travel of a card as it passes through the punch head and on through the card guides.

c. Adjustment. Loosen the two attaching screws on the guides and position the guides as required.

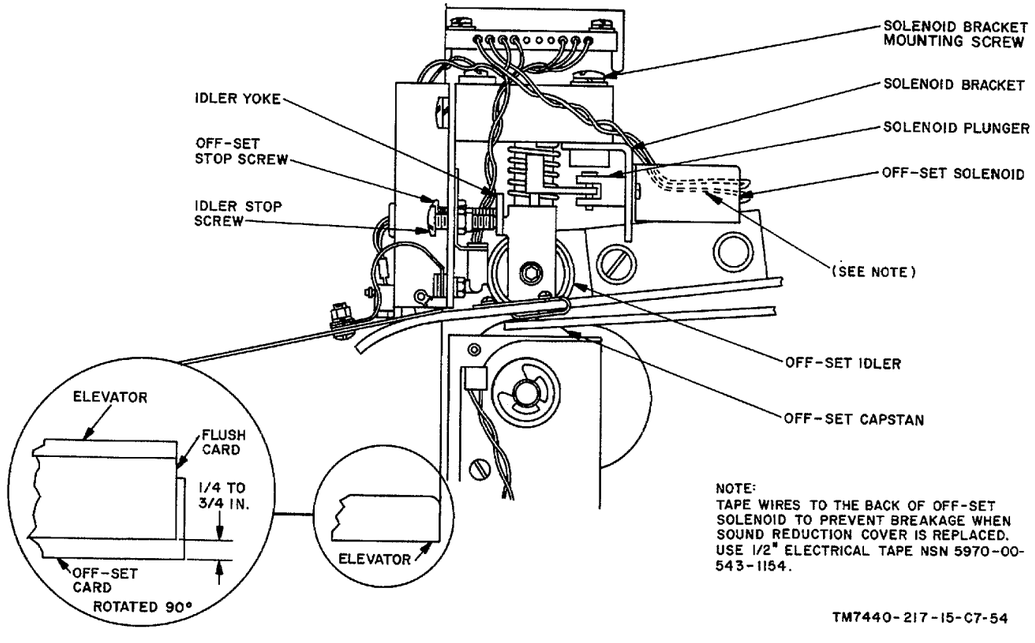


Figure 4-53. Offsetting idler and solenoid requirement.

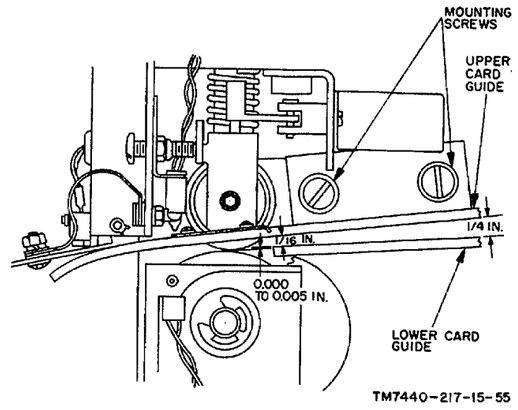


Figure 4-54. Card guide requirement.

4-103. Elevator Stop Adjustment (fig. 4-55)

a. Requirement. The up stop on the elevator rod must be set so that the top of the empty stacker platform does not strike the chassis mount nut. This places the top of the platform approximately 2 inches below the top of the offset drive roller.

b. Method of Checking. Observe the position of the empty stacker elevator platform.

c. Adjustment. Loosen the set screw in the elevator stop and slide the stop on the elevator rod.

4-103.1. Elevator and Stacker Platform Adjustment (fig. 4-53, 4-55)

a. Requirement. The elevator and stacker platform must be positioned parallel to the chassis panel (203, fig. 4-7) and not rub against the panel.

b. Method of Checking. Observe the position of the stacker platform while moving it up and down.

c. Adjustment. Loosen screws (51, fig. 4-13) and position plate (55) so that roller (26) guides the platform correctly.

4-104. Elevator Spring Tension Adjustment (fig. 4-55)

a. *Requirement. The stacker platform must rest at the* upper limit of travel when the stacker is empty and must be depressed proportionately as cards enter stacker, so that cards never hit below the bumper and the stacker full switch does not operate before the stacker is full.

b. Method of Checking. Observe operation of the stacker with various amounts of cards in the stacker, and when empty to assure that the platform moves freely and without binding. Observe operation of the stacker during card processing.

c. Adjustment. Loosen the setscrew in the spring collar and tighten or loosen the spring.

4-105. Stacker Full Sensor Adjustment (fig. 4-55)

a. Requirement. When the stacker contains 1000 or more cards, the stacker full switch must operate to provide a contact closure across pins U and Y of J1. The contacts must be open when there are less than 1000 cards in the stacker.

b. Method of Checking. Check the continuity across the appropriate terminals for indication of open or closed contacts. Place less than 1000 punched cards in the stacker. The switch should not operate. Add additional cards to check the operate requirement.

c. Adjustment. Loosen the two attaching screws on the switch and position the switch to obtain the desired response.

4-106. Adjustment of Power Supply Output Voltages

a. Requirement. The adjustment of the power supply output voltages is an electrical adjustment which is made with four potentiometers to produce proper dc output voltages at specific test points within the power supply. These adjustments are made with the power supply connected into the card punch and power on.

b. Method of Checking. Connect a digital voltmeter, Digitec 251-1, or equivalent to the following test points at the front panel of the power supply. The dc voltages measured should fall within the tolerances specified.

Digital Voltmeter Connection	*DC Voltage*
+4.75 and COM	+4.75 ± 0.05
-12V and COM	-12.00 ± 0.06
+ 12V and COM	+12.00 ± 0.06
-48V and COM	-48.00 ± 0.24

c. Adjustment. If any of the voltages specified in b above are out of tolerance, the corresponding potentiometer should be adjusted to bring the voltage into tolerance. The potentiometers are listed as follows:

DC voltage monitored	*Potentiometer to be adjusted*	*Item No. (fig. 4-4)*
+4.75	R24 card A1	92
+12	R17 card A2	93
-12	R32 card A2	93
-48	R18 card A3	94

4-107. Adjustment of Power Supply +15.0 volt Regulated Supply

a. Requirement. After the power supply output voltage adjustments are performed, the performance of the regulated supply located on card A12 in the power supply should be checked.

CAUTION

When taking voltage measurements on power supply PS1 sequence module A12, use insulated test connectors to avoid possible short circuits between test points and copper runs.

b. Method of Checking. Connect a digital voltmeter between the test points TP6(+) and TP12(common) located on card A12 in the power supply (40, fig. 4-4). The test points are clearly labeled on the card. The power supply should be operating in the normal manner in the card punch, with normal system power turned on. The voltage measured should be +15.0±0.1 volts de.

c. Adjustment. If the voltage from test point TP6 to TP12 is not within tolerance, adjust potentiometer R73 on card A12 (40, fig. 4-4).

4-108. Adjustment of Power Supply Over-voltage Limit

a. Requirement. After the +4.75 output voltage has been checked and adjusted (para 4-106), the over-voltage limit circuit for the +4.75 volt output should be checked to make certain that the trip point of 5.5 volts dc is not exceeded.

b. Method of Checking.

(1) Disconnect wire connection from PS1TB2, pin 2.

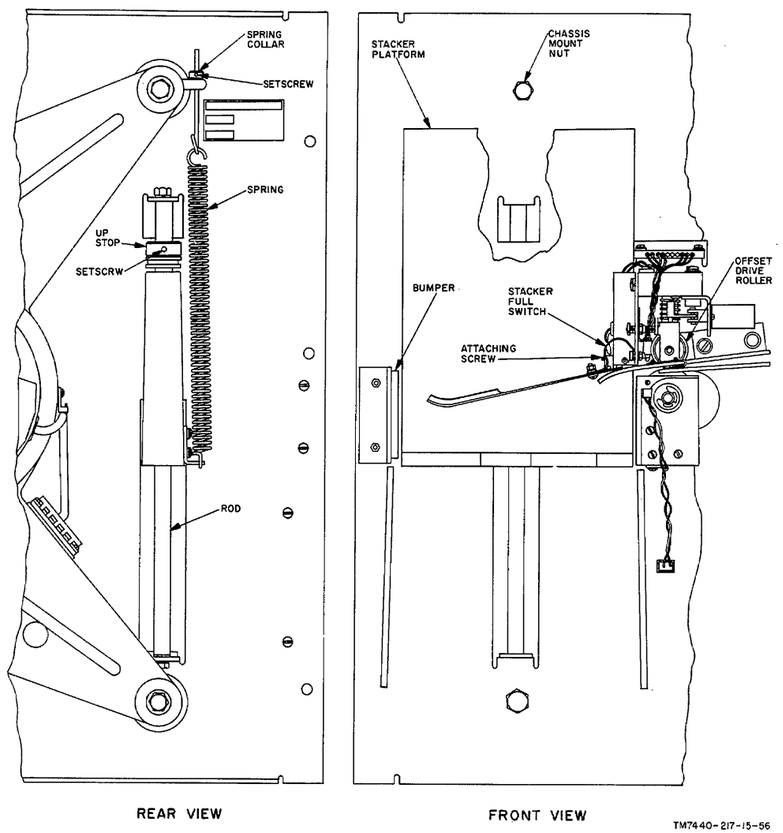


Figure 4-55. Elevator stop, elevator spring, and stacker full sensor requirements.

(2) Connect a digital voltmeter to the test point labeled 4.75(+) on the power supply front panel and the COM test point.

(3) Slowly adjust potentiometer PSlAlR24 to obtain an increase in the +4.75 volt output, while observing the digital voltmeter. Continue to increase the voltage while observing the voltmeter until the meter indication suddenly drops to zero volts. The maximum voltmeter indication (which occurs immediately before the voltage drops to zero) is termed the "trip point" and should be 5.40 volts dc (±0.05).

c. Adjustment.

(1) If the trip point voltage is out of tolerance, adjust potentiometer PS1A1R30. Repeat the check and adjustment until the trip point voltage is within the specified tolerance.

(2) Adjust PS1A1R24 to meet the requirements of paragraph 4-106.

(3) Disconnect the digital voltmeter.

(4) Reconnect the wire connection to PS1TB2, pin 2.

4-109. Adjustment of Motor Stop Assembly A4 Motor Turn-off Delay

a. Requirement. The length of time the driver motor continues to run after completion of a message is adjustable from approximately 30 seconds to over 3 minutes. The appropriate time delay is based on expected traffic frequency and other operational factors. Subscriber terminals receiving heavy traffic should use the longer periods of adjustment to eliminate frequent stopping and starting of the punch drive motor.

b. Method of Checking.

(1) Place the motor stop assembly MOTOR CONTROL switch (A4S1) in the AUTOMATIC STOP position.
(2) Apply power to the high speed card by depressing the AC POWER switch-indicator (A3Z2).
(3) Press the STOP switch-indicator (A3Z6).
(4) Press the SINGLE FEED switch-indicator (A3Z4) and note the time required for the punch drive motor to stop after the card was fed to the stacker.

c. Adjustment.

(1) Adjust potentiometer A1A21R15 (fig.5-28) for the desired time delay. Rotating the potentiometer clockwise, increases delay time while counterclockwise rotation decreases the time delay.
(2) Repeat check of adjustment as outlined in *b* above and readjust until proper time delay -is obtained.

4-110. Inspection/Replacement for Drive Motor Start Switch (fig. 4-7, parts 2 and 3; figs 4-56, 4-57 and 4-58)

a. Five-Hundred Hour Check. The drive motor switch plate must be inspected for discoloration and pitting of switch contact after every 500 hours of operation. To accomplish this check, the motor is removed from the frame assembly and partially disassembled. Detailed procedure is described below.

CAUTION

Complete disassembly and reassembly of the drive motor should not be attempted at lower maintenance categories. This is necessary because special tools are required and correct positioning of the cutout switch (item 231) is critical. Field repair of the drive motor will be limited to replacement of the switch plate (item 212) and the condenser (item 206).

b. Motor Removal and Disassembly.

(1) Disconnect or turn off power to the high speed card punch (HSCP) unit.
(2) Remove the punch head assembly in accordance with procedures outlined in paragraph 4-31.
(3) Remove the offset idler roller assembly in accordance with procedures outlined in paragraph 4-38.
(4) Loosen the four screws C119.1) holding the vacuum pump (134). Then, remove belts (13, 102 and 107) from the drive motor pulleys (fig. 4-7, part 2).
(5) Remove the two machine screws (214) which secure the terminal cover (215) and remove the terminal cover. Identify for replacement and remove the two input power wires from L1 and L2 (fig. 4-57 and 4-58).
(6) With the motor supported from the rear of the chassis, remove the four (4) screws (109 and 111) and remove the motor.

(7) Make an index mark between the motor frame (235) and the end caps (208 and 220) to permit proper positioning during later reassembly.

(8) Remove the four studs (207) securing the end caps to the motor frame.

(9) Remove the rear end cap (.208) by placing a flat screwdriver in the two slots on the rear end cap and evenly prying the end cap away from the frame.

(10) Once the end cap is clear of the rear bearing (229), swing the end cap around to enable observation of the switch plate (212). (Refer to fig. 4-56)

(11) Inspect the switch plate and switch contacts for excessive pitting or burning. If the switch plate and switch contacts are satisfactory with only moderate discoloring and slight pitting, proceed with subparagraph d below. If damage is noted, proceed with subparagraph *c* below.

c. Switch Plate Replacement. Replace the switch plate (212) as follows:

(1) Check the wire markings of wires attached to the switch plate to insure that they are marked as shown in figures 4-57 and 4-58. If not, mark them.
(2) Remove the three mounting screws (211) which secure the switch plate to the end cap and remove the switch plate.
(3) Disconnect all wires between the switch plate (212) and motor (235).

(4) Remove wire T5 from the old switch plate and place it in the same position on the new switch plate (fig. 4-58).

(5) Check the buss straps between L1, 2 and 3, and between L2 and 4 on the new switch plate and verify that they are the same as on the old plate. Connect wire T8 from the motor to L2 of the switch plate. (Refer to fig. 8-9, Drive Motor A2B1 Schematic Diagram.)

(6) Place the new switch plate on the end cap so that the mounting hole between the switch contacts is over the mounting hole nearest to the center of the end plate and the contacts on the switch plate can be seen by the installer. Replace the three mounting screws (fig. 4-58).

(7) Reconnect the remaining wires from the motor to the switch plate as shown in figure 4-57.

(8) Inspect installation against that shown in figure 4-56.

d. Motor Reassembly and Replacement. Reassemble the drive motor and replace the assemblies by reversing the above.

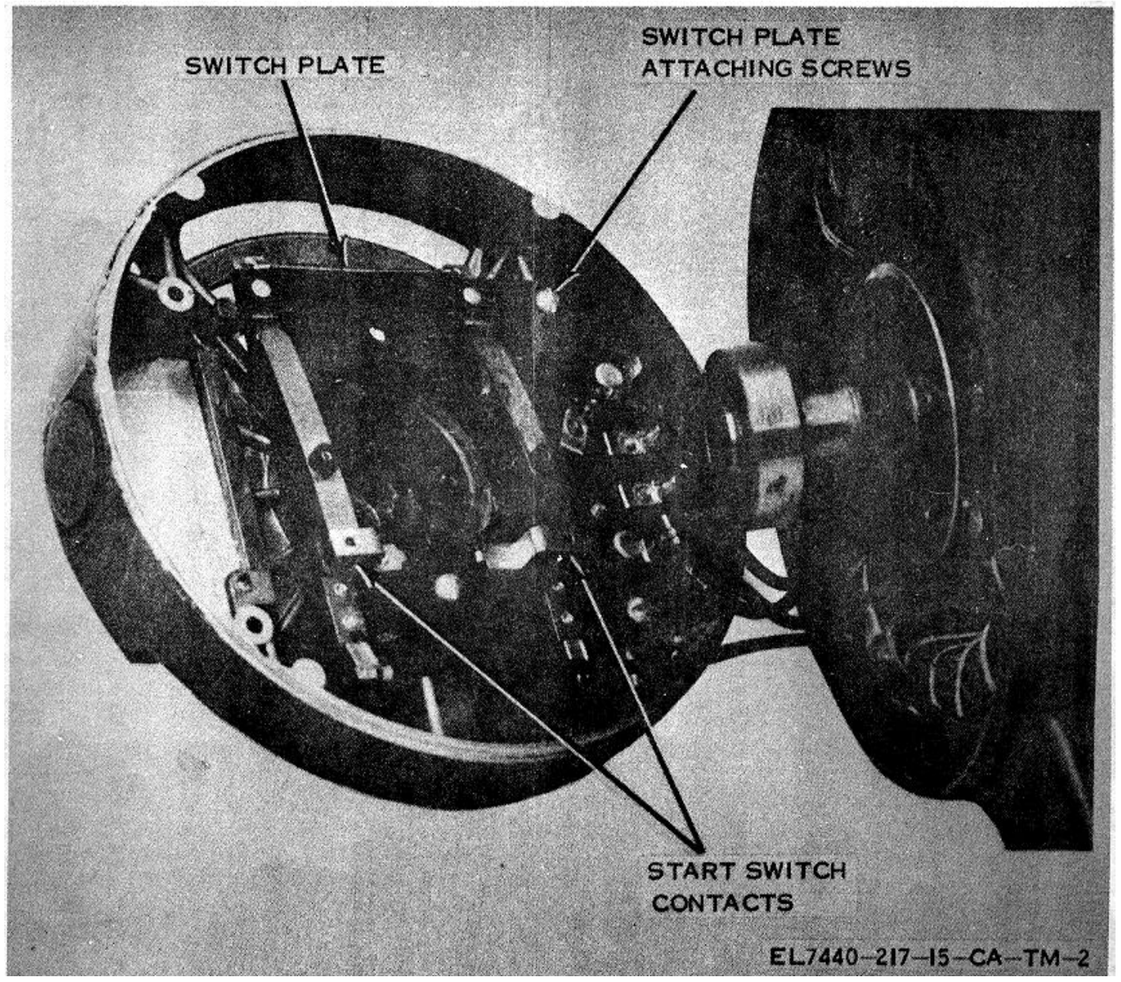
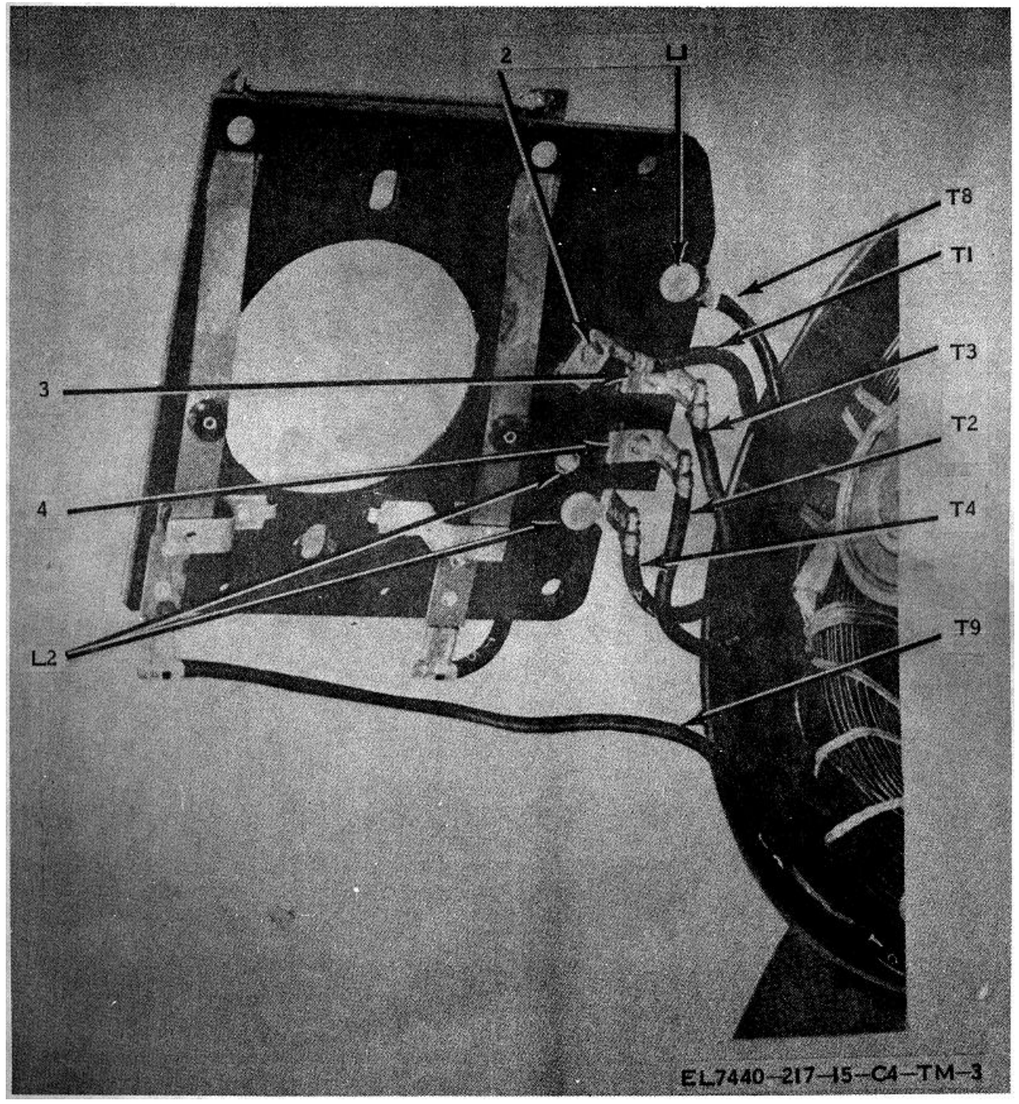
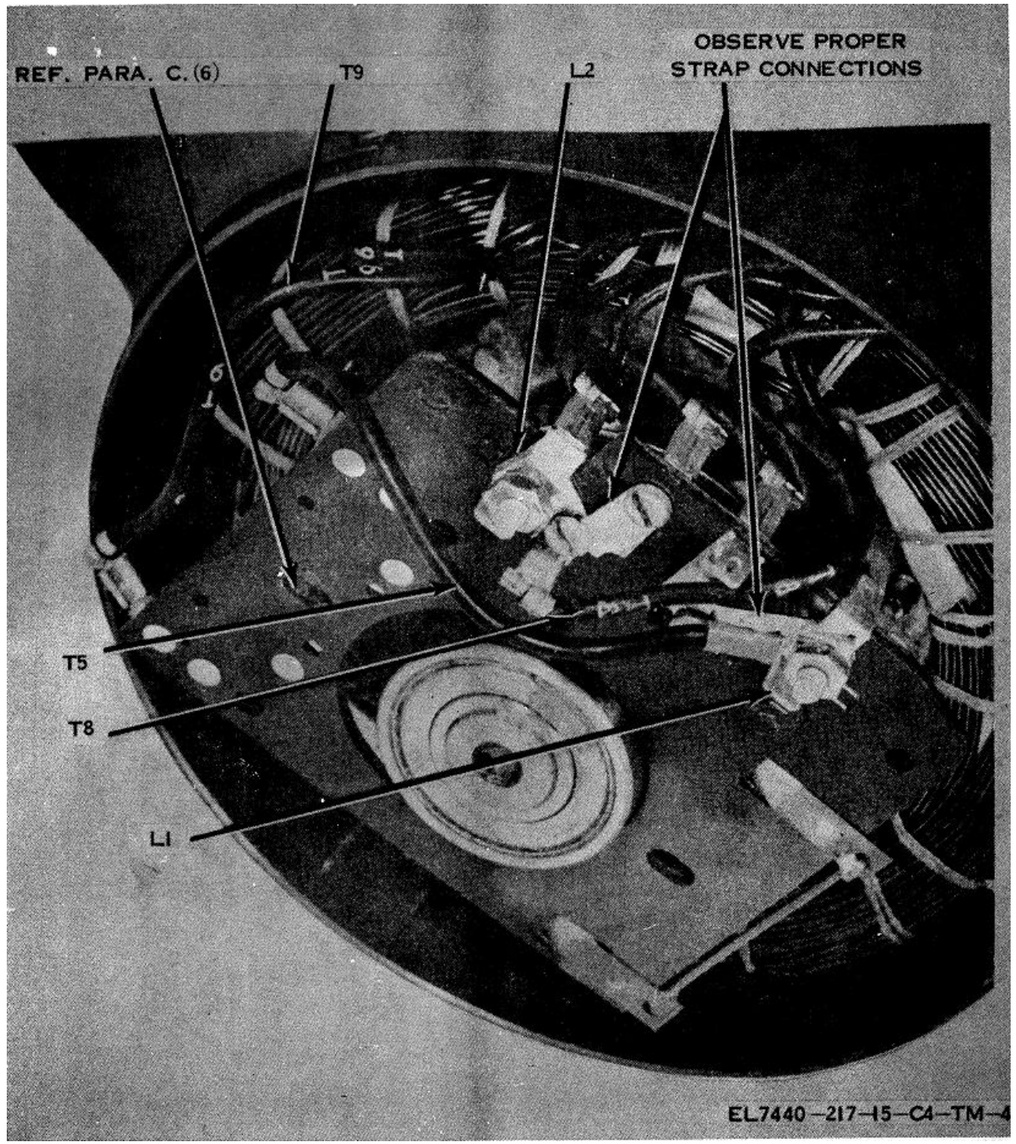


Figure 4-56. Drive motor switch plate mounting.



Refer to figure 8-9 for wire and terminal identification.

Figure 4-57. Drive motor switch plate connections (rear).



Refer to figure 8-9 for wire and terminal identification.

Figure 4-58. Drive motor switch plate connections (front).

CHAPTER 5
PRINTED CIRCUIT CARD MAINTENANCE INSTRUCTIONS

Section I. GENERAL

5-1. Scope of PC Card Maintenance

a. This chapter includes instructions for performing corrective maintenance procedures on PC cards. Procedures for isolation of a malfunction to a PC card of the high speed card punch are described in chapter 4. The instructions in this chapter are used to isolate the malfunction to a defective part of the PC card, and to replace the defective part.

b. PC card maintenance includes:

(1) Testing a suspected PC card (para 5-3).

(2) Troubleshooting techniques (para 5-4 through 5-25).

(3) Replacement of defective parts (para 5-26 and 5-27).

5-2. Tools and Test Equipment Required

Refer to the Maintenance Allocation Chart (app C) for a list of the tools and test equipment required for maintenance of the printed circuit cards.

Section II. TESTING AND TROUBLESHOOTING

5-3. Testing Procedure

If a PC card is suspected of being defective, install it in a high speed card punch which is known to be otherwise operable. Then operate the card punch with the CCU to see if each possible type of character con be punched. If all characters are correctly punched and the controls and indicators on control panel A3 operate normally, the PC card being checked is considered good. If a malfunction occurs, refer to the troubleshooting instructions (para 5-4 through 5-25).

5-4. Troubleshooting Techniques

The first step in servicing a defective PC card is to perform a visual inspection (para 5-5). If this does not help in localizing the fault, signal tracing (para 5-6) and signal substitution techniques (para 5-7 through 5-25) are required.

5-5. Visual Inspection

Carefully inspect the PC card for evidence of overheating, corrosion, or loose connections.

5-6. Signal Tracing

a. Place the PC card on an extender board and, with power off, install it in an operable high speed card punch. Operate the highspeed card punch to simulate the condition under' which the malfunction was observed. Then use standard signal tracing techniques to isolate the defective part. A thorough knowledge of the operation of the high speed card punch circuits as given in chapter 3 is required to effectively use signal tracing techniques.

b. The voltages and waveforms at most test points may be observed with the oscilloscope. In general, signals at inputs and outputs of integrated circuit logic element modules switch between +4.5 volts dc (high)and 0 volt dc (low).Determine whether the voltage at a specific terminal is high or low at any time by studying the operating conditions at that time. For voltages at inputs and outputs of discrete component logic circuits, refer to paragraph 3-45.

c. For the location of parts on PC cards, refer to paragraph 5-9. For the location of terminals on integrated circuit logic element modules, see figure 5-1. This figure applies to all types of integrated circuit logic elements used in the high speed card punch.

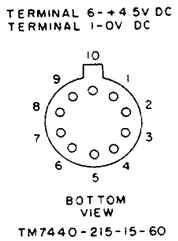


Figure 5-1. Location of terminals on integrated circuit modules.

5-7. Signal Substitution

In some cases, isolation of a malfunction within a complex logic circuit can be simplified by using signal substitution techniques. Specifically, any point (or points) at the input to a logic element may be grounded, thereby making the operation of the logic elements easily predictable. This method cannot normally be used to insert a high level (+4.5 volts) without physically disconnecting the signal input from the logic element. Therefore, signal substitution is not recommended for high level inputs.

Section III. PRINTED CIRCUIT CARD TEST DATA CHARTS

5-8. Printed Circuit Card Test Data Charts

a. The test data charts contained in this section may be used when troubleshooting printed circuit cards to determine the type of signal which should be present under certain conditions. This should prove as an aid in localizing a malfunction to a particular circuit on the suspected defective card.

b. For all cards installed in logic assembly A1, ground is available on pin 1 or A of the printed circuit card connector. Pin 2 or B of each PC card connector supplies +4.5 volts dc to the printed circuit cards. By using a short lead terminated at both ends with alligator clips, these pins can be used as a source of ground (0 volts) or active (+4.5 volt) signals for troubleshooting the printed circuit cards.

c. Test data charts are arranged to show the point of test (*Test point column*) to which the meter, oscilloscope, or other test equipment is connected; the conditions under which the measurement should be made (*Test conditions* column); and the results which should be obtained if the circuit being tested is good (*Normal indication* column). It-should be noted that the *Normal indication* column gives the expected results for the specified test conditions, and not necessarily the results for normally operating equipment.

d. Unless otherwise specified, all test data in the charts assumes the printed circuit board is connected to an otherwise operable equipment, with the equipment operating as part of a terminal configuration.

5-9. Printed Circuit Card A1 Test Data Chart (fig. 5-3 and 8-10)

Test point	Test condition	Normal indication
XA1-1	Any power on condition.	Alternate 4.50 msee 0 volt and +4.5 volt de levels.
XA1-10	Any power on condition.	0 to +4.5 volt 1c positive pulses, 2µ sec wide occurring alt 9 msee intervals.
XA 1-5	Power on and not assigned. *a.* MASTER RESET switch A1S1 pressed and held. *b.* MASTER RESET switch A1S1 released.	 *a.* 0 volt de level as long as MASTER RESET switch is pressed. *b.* 0 to ·4.5 volt de level within 4.5 msee after releasing MASTER RESET switch.
XA1-9	Power on with cards loaded in hopper and: *a.* MASTER RESET switch A1S1 pressed. *b.* LOCAL TEST switch	*a.* MASTER RESET switch A1S1 pressed. *a.* 0 volt dc. *b.* 2 µ sec wide ·4.5 volt de level within occurring at 9 msee intervals
XA1-8	Power on with cards loaded in hopper (using positive transition on pin XA1-E as an external trigger for oscilloscope) and: *a.* MASTER RESET switch A1S1 pressed. *b.* LOCAL TEST switch A3Z7 pressed.	 *a.* +4.5 volts de while MASTER RESET switch is pressed returning to 0 volt de level after releasing switch. *b.* Train of 14 µ sec wide +4.5 volts de positive pulses occurring 402 µ secs after start of sweep.
XA1-11	Power on with cards loaded in hopper and: *a.* MASTER RESET switch A1S1 pressed. *b.* LOCAL TEST switch A3Z7 pressed.	 *a.* 0 volt de. *b.* Train of 0 to +4.5 volt de positive pulse per card.
XA1-13	Power on with cards loaded in hopper and: *a.* MASTER RESET switch A1S1 pressed. *b.* LOCAL TEST switch A3Z7 pressed.	 *a.* 0 volt de. *b.* Train of 0 to +4.5 de positive pulses.

5-10. Printed Circuit Card A2 Test Data Chart

(fig. 5-4and 8-11)

CAUTION

PC Card A2 has -48 volts dc present on several pins. When making tests, use extreme care to insure test probes do not short two adjacent pins which can damage PC card components.

CAUTION

To eliminate the possibility of damage, SOL. DR-2 circuits should not be operated with an open input (XA2-X).

Test point	Test condition	Normal indication
Typical SOL. DR-1 output (XA2-8)	PC card A19 from removed logic assembly A1 *a.* (fig. 4-2), ground applied to XA2-X, power applied, and:	
	a. Open or +4.5 volts de applied to input (XA2-6).	*a.* -48 volts de level.
b.	*b.* Ground applied to input 9XA2-6).	*b.* 0 volt de level
SOL. DR-2 output (XA2-F)	PC card A19 removed from logic assembly A1 (fig. 4-2) power on, and:	
	a. Ground applied to input (XA2-X).	*a*. 0 volt de level.
	b. +4.5 volts de applied to input (XA2-X).	*b.* -48 volts de level.
XA2-Z	Power on.	+4.5 volt de positive pulse developed during power on sequence of power supply.

5-11. Printed Circuit Cards A3, A4, A5, and A6 Test Data Charts

CAUTION

PC Card A3 has -48 volts dc present on several pins. When making tests, use extreme care to insure test probes do not short two adjacent pins which can damage PC card components.

Test point	Test condition	Normal indication
Typical SOL. DR-3 output (XA3-AA)	PC cards A1 and A7 removed from logic assembly A1(fig. 4-2), power on, and:	
	a. +4.5 applied volts to input (XA3-3).	*a*. -48 volts de.
	b. Ground applied to input (XA3-3).	*b.* -48 volts de.
	c. Ground applied to inputs (XA3-3) and XA3-33) and +4.5 volts de applied to inputs (XA3-12 and XA3-23). Then +4.5 volts de removed and ground applied to input (XA3-23).	*c.* 0 volt de.
PC Cards A4, A5, and A6 (figs 5-5, 8-13, 8-14, and 8-15)	Install in PC card A3 position and perform tests specified for PC card A3 above.	

5-12. Printed Circuit Card A7 Test Data Chart

(fig. 5-6 and 8-16)

Test point	Test condition	Normal indication
	PC Cards A8 and A9 removed from logic assembly A1 (fig. 4-2), ground applied to all "G" inputs unless otherwise indicated below, power on, and:	XA7-16, -R, -V and -Z indicate +4.5 volts Other output pins show 0 volts dc.
XA6-15	*a.* +4.5 volts dc applied to input (XA6-4F).	*a* +4.5 volts dc.
XA6-U	*b.* +4.5 volts dc applied to input (XA6-E).	*b* +4.5 volts dc.
XA6-Y	*c.* +4.5 volts dc applied to input (XA6-4).	*c* +4.5 volts dc.
XA6-T	*d.* +4.5 volts dc applied to input (XA6-6).	*d* +4.5 volts dc.
XA6-X	*e.* +4.5 volts dc applied to input (XA6-H).	*e* +4.5 volts dc.
XA6-w	*f.* +4.5 volts dc applied to input (XA6-5).	*f* +4.5 volts dc.
XA6-AA	*g.* +4.5 volts dc applied to input (XA6-D).	*g* +4.5 volts dc.
XA6-S	*h.* +4.5 volts dc applied to input (XA6-K).	*h* +4.5 volts dc.
XA6-21	*i.* +4.5 volts dc applied to input (XA6-f:) and (XA6-K).	*i* -+4.5 volts dc.
XA6-14	*j.* +4.5 volts dc applied to input (XA6-7).	*j* +4.5 volts dc.
XA6-P	*k.* +4.5 volts dc applied to input (XA6-8).	*k* +4.5 volts dc.
XA6-23	*L* +4.5 volts dc applied to input(XA6-9).	*l* +4.5 volts dc.
XA6-16	*m.* Conditioned as indicated in steps *a, j*, or *k* above.	*m* 0 volt de.
XA6-R	*n.* Conditioned as indicated in steps *b, d*, or *h* above.	*n* 0 volt de.
XA6-V	*o.* Conditioned as indicated in steps *i* or *g* above.	*o* 0 volt de.
XA6-Z	*p.* Conditioned as indicated in steps *c, e, f*, or *I* above.	*p*. 0 volt de.

5-13. Printed Circuit Cards A8 and A9 Test Data Chart

Test point	Test condition	Normal indication
PC Card A8 (fig. 5-6 and 8-17)		
Typical F line decode gate E-1 (Z11A and Z11B) (XA8-H)	Power on, not assigned, and:	
	a. MASTER RESET switch A1S1 pressed.	*a*. 0 volts dc.
	b. LOCAL TEST switch Z3Z7 pressed.	*b*. Train 0 to +4.5 de pulsed per line.
	c. Further isolation can be provided with PC cards A10 and A11 removed from logic assembly A1 (fig. 4-2), then:	*c*. Observe following:
	(1) Ground applied to inputs (XA9F, XA8-E, XA8-L, and XA8-10).	(1) 0 volts dc.
	(2) +4.5 volts de applied to any one input and ground applied to the other inputs (XA8-1, XA8-E, XA8-L, and XA8-10).	(2) +4.5 volts dc.
PC Card A9 (Fig. 5-7 and 8-18).	Install PC card A9 in PC card A8 position and perform tests specified above for PC card A8.	

5-14. Printed Circuit Cards A10 and A11 Test Data Chart

Test point	Test condition	Normal indication
PC Card A10 (fig. 5-8 and 8-19)		
Typical decode gate ZIA (Ch SP) (XA10-Z)	Power on with cards loaded in hopper and: *a.* MASTER RESET switch A1S1 pressed. *b.* LOCAL TEST switch A3Z7 pressed. *c.* Further isolation can be provided with PC cards A11 and A12 removed from logic assembly A1 (fig. 4-2) and: (1) +4.5 volts dc applied to either input (XA10-X or XA10-W). (2) Ground applied to both inputs (XA10-X and XA10-W).	*a.* 0 volt dc. *b.* One 0 to +4.5 volt dc positive pulse per card. *c.* Observe following: (1) 0 volt dc (2)+4.5 volts dc.
PC Card A11 (fig. 5-8 and 8-20)		
	Install PC Card A11 in PC Card A10 position and perform tests specified above for PC Card A10.	

5-15. Printed Circuit Card A12 Test Data Chart
(fig. 5-9 and 8-21)

Typical octal encode gate (Bits 1, 2, & 4) output (Z1A) (XZ12-AA)	Power on with cards loaded in hopper, and: *a.* MASTER RESET switch A1S1 pressed. *b.* LOCAL TEST switch A3Z7 pressed.	*a.* +4.5 volts dc. *b.* Ten +4.5 volt to 0 volt dc negative pulses per card.
Typical octal encode gate (bits 8, 16, & 32) output (Z4A) (XA12-C)	Power on with cards loaded in hopper, and: *a.* MASTER RESET switch A1S1 pressed. *b.* LOCAL TEST switch A3Z7 pressed.	*a.* +4.5 volts dc. *b.* A minimum of one +4.5 volt to 0 volt negative pulses per card.
XA12-20	Power on with cards loaded in hopper, and: *a.* MASTER RESET switch A1S1 pressed. *b.* LOCAL TEST switch A3Z7 pressed.	*a.* 0 volts dc. *b.* +4.5 volts dc pulses 90 msec wide.

5-16. Printed Circuit Card A13 Test Data Chart
(fig. 5-10 and 8-22)

Typical data bit gate (Z14B) output. (XA13-E)	PC Card A16 and Jack J4 removed from logic assembly A 1 (fig. 4-2), power on, and: *a.* Ground applied to input (XA 13-16) and -6.2 volts de applied to input (XA13-5). *b.* Ground applied to input (XA13-16) and +6.2 volts dc applied to inputs (XA 13-5 and XA13-7).	*a.* 0 volt dc *b.* +4.5 volts dc.
XA13-20	PC card A14 and Jack J4 removed from logic assembly Al (fig. 4-2), power on, and: *a.* Ground applied to input (XA 3-Y) and -6.2 volts applied to input (XA 13-21). *b.* Ground applied to input (XA13-Y) and +6.2 volts applied to input (XA 13-21).	*a.* 0 volt dc. *b.* +4.5 volts dc.
XA13-H	PC card A16 and Jack J4 removed from logic assembly A1 (fig. 4-2), power on, and: *a.* Ground applied to input (XA13-AA), and +6.2 volts dc applied to inputs (XA13-22 and XA13-23). *b.* Ground applied to input (XA13-AA), -6.2 volts dc applied to input (XA13-22) and +6.2 volts dc applied to input (XA13-22).	*a.* 0 volts dc. *b.* +4.5 volts dc

5-17. Printed Circuit Card A14 Test Data Chart
(fig. 5-11 and 8-23)

Test point	Test condition	Normal indication
Typical XMTR-1 output (XA14-5)	PC card A16 removed from logic assembly A 1 (fig. 4-2), power on, and: *a.* +4.5 volts dc applied to input (XA14-4). *b.* Ground applied to input (XA14-4).	*a.* 0 volt dc. *b.* Open circuit (+6.2 volts dc may be reflected from receiver in CCU).
Typical XMTR-2 output (XA14-N)	PC card A16 removed from logic assembly A1 (fig. 4-2), power on, and: *a.* +4.5 volts dc applied to input (XA14-M). *b.* Ground applied to input (XA14-M).	*a.* +6.2 volts dc. *b.* -6.2 volts dc.
Typical RCVR-2A output (XA14-10)	Jack J4 removed from logic assembly Al (fig. 4-2), power on, and: *a.* Ground applied to input (XA14-9). *b.* Open applied to input (XA 14-9).	*a.* +4.5 volts dc. *b.* 0 volt de.
RCVR-2B output (XA14-W)	Jack J4 removed from logic assembly Al (fig, 4-2), power on, and: *a.* +6.2 volts dc applied to input (XA14-T). *b.* -6.2 volts dc applied to input (XA14-T).	*a.* +4.5 volts de. *b.* 0 volt de.
RCVR-I output (XA14-V)	PC card A17 and Jack J4 removed from logic assembly A I (fig. 4-2), power on, and: *a.* +4.5 volts dc applied to input (XA14-L) and 6.2 volts dc applied to input (XA14-U). *b.* +4.5 volts dc applied to input (XA14-L) and -6.2 volts dc applied to input (XA 14-U).	*a.* +4.5 volts dc. *b.* 0 volt dc.
Typical PA output (XA14-23)	Power on with cards loaded in device, and: *a.* MASTER RESET switch AIS1 pressed. *b.* Stacker photocell (fig. 448) manually covered.	*a.* 0 volts dc. *b.* +4.5 volts dc.

5-18. Printed Circuit Card A15 Test Data Chart
(fig. 5-12and 8-24)

Test point	Test condition	Normal indication
Typical binary counter flip-flop output (XA15-7)	Power on with cards loaded in hopper, and: *a.* MASTER RESET switch A1S1 pressed. *b.* LOCAL TEST switch A3Z7 pressed.	*a.* +4.5 volts dc. *b.* 0 to +4.5 volt dc pulse(s). (Number of pulses generated depends on binary value of flip-flop being checked.)
XA 15-8	Power on with cards loaded in hopper, and: *a.* MASTER RESET switch AIS1 pressed. *b.* LOCAL TEST switch A3Z7 pressed.	*a.* +4.5 volts dc. *b.* One +4.5 volt to 0 volt dc pulse per card.
XA15-16	Power on, and: *a.* MASTER RESET switch AISI pressed and held. *b.* MASTER RESET switch A1S1 released.	*a.* +4.5 volts de. *b.* 0 volt dc.
XA15-17	Power on, reset condition with cards loaded in hopper. *a.* MASTER RESET switch A1S1 pressed. *b.* LOCAL TEST switch A3Z7 pressed.	*a.* 0 volt dc. *b.* One: 0 volt to +4.5 volt dc positive pulse per card.

5-19. Printed Circuit Card A16 Test Data Chart
(fig. 5-13 and 8-25)

Test point	Test condition	Normal indication
XA16-4	PC cards A 13, A 14, and A 19 removed from logic assembly AI (fig. 4-2), ground applied to inputs (XA 16-15 and XA16-16), power on. and:	
	a. +4.5 volts de applied to input (XA16-D).	*a.* +4.5 volts dc.
	b. Ground applied to input (XA16-D).	*b.* 0 volt dc.
XA16-7	PC card A 15 removed from logic assembly A1 (fig. 4-2), power on, and:	
	a. Ground applied to input (XA16-8).	*a.* +4.5 volts dc.
	b. +4.5 volts dc applied to input (XA 16-8).	*b.* 0 volt dc.
XA16-11	PC cards A17 and A19 removed from logic assembly A1 (fig. 4-2), power on, and:	
	a. Ground applied to inputs (XA16-15 or XA16-M).	*a.* +4.5 volts dc.
	b. +4.5 volts dc applied to inputs (XA16-15 and (XA16-M).	*b.* 0 volt dc.
XA16-14	Power on with cards loaded in hopper, and:	
	a. MASTER RESET switch A1S1 pressed.	*a.* +4.5 volts dc.
	b. SINGLE FEED switch A3Z4 pressed.	*b.* One +4.5 volt to 0 volt negative pulse.
XA16-20	Power on with cards loaded in hopper. and:	
	a. MASTER RESET switch AISI pressed.	*a.* 0 volt dc.
	b. LOCAL TEST switch A3Z7 pressed.	*b.* Train of 0 volt to +4.5 volt dc positive pulses.
XA16-23	Power on with cards loaded in hopper, and:	
	a. MASTER RESET switch A1S1 pressed.	*a.* 0 volt dc.
	b. LOCAL TEST switch A3Z7 pressed.	*b.* Train of 0 volt to +4.5 volt dc positive pulses.
XA16-P	Power on and;	
	a. MASTER RESET switch A1S1 pressed and held.	*a.* +4.5 volts dc.
	b. MASTER RESET switch A1S1 released.	*b.* 0 volt dc.
XA 16-U	Power on with cards loaded in hopper, and:	
	a. MASTER RESET switch A1S1 pressed.	*a.* 0 volt dc.
	b. LOCAL TEST switch A3Z7 pressed.	*b.* Train of 0 volt to +4.5 volt dc positive pulses.

5-20. Printed Circuit Card A17 Test Data Chart
(fig. 5-14 and 8-26)

Test point	Test condition	Normal indication
XA17-5	Power on, reset condition with cards loaded in hopper, and:	
	a. STOP switch A3Z6 pressed.	*a.* +4.5 volts de.
	b. START with A3Z5 pressed.	*b.* 0 volt dc.
XA17-6	Power on, assigned, and:	
	a. AUDIBLE RESET switch A3Z1 pressed and held.	*a.* +4.5 volts dc.
	b. AUDIBLE RESET switch A3Z1 released.	*b.* 0 volt dc.
XA17-10	Power on, reset condition with cards loaded in hopper and:	
	a. LOCAL TEST switch A3Z7 pressed.	*a.* 0 volt dc.
	b. STOP switch A3Z6 pressed.	*b.* +4.5 volts dc.
XA17-17	Power on with cards loaded in hopper and:	
	a. MASTER RESET switch A1S1 pressed.	*a.* 0 volt dc.
	b. START switch A3Z5 pressed.	*b.* +4.5 volts dc.
XA 17-S	Power on with cards loaded in hopper and:	
	a. MASTER RESET switch A1S1 pressed.	*a.* +4.5 volts de.
	b. SINGLE FEED switch Z3Z4 pressed.	*b.* +4.5 volts to 0 volt dc negative pulse.
XA17-Z	Power on with cards loaded in hopper and:	
	a. MASTER RESET switch A1S1 pressed.	*a.* +4.5 volts dc.
	b. LOCAL TEXT switch A3Z7 pressed.	*b.* 0 volt dc.

5-21. Printed Circuit Card A18 Test Data Chart
(fig. 5-15 and 8-27)

Test point	Test condition	Normal indication
XA18-9	Power on with cards loaded in hopper and:	
	a. MASTER RESET switch A1S1 pressed.	*a.* 0 volt dc.
	b. SINGLE FEED switch A3Z4 pressed.	*b.* 0 volt to +4.5 volts positive pulse.
XA18-11	PC card A15 removed from logic assembly A1 (fig. 4-2), power on, and:	
	a. Ground applied to input (XA18-22) and MASTER RESET switch A IS I pressed.	*a.* 0 volt dc.
	b. +4.5 volts applied dc to input (XA18-22).	*b.* +4.5 volts dc.
XA18-17	PC Card A13 removed from logic assembly A1 (fig. 4-2), power on, and:	
	a. Ground applied to input (XA 18-Z) and MASTER RESET switch A 1S I pressed.	*a.* 0 volt dc.
	b. +4.5 volts dc applied to input (XA18-Z).	*b.* +4.5 volts dc.
XA18-18	PC card A16 removed from logic assembly A1 (fig. 4-2), power on, and:	
	a. 4.5 volts dc applied to input (XA18-12) and MASTER RESET switch AISI pressed.	*a.* 0 volt dc.
	b. Ground applied to input (XA18-12).	*b.* +4.5 volts dc.
XA18-C	Power on, and:	
	a. MASTER RESET switch A1SI pressed and held.	*a.* +4.5 volts dc.
	b. MASTER RESET switch A1S1 released.	*b.* 0 volts dc.
XA18-K	PC Card A16 removed from logic assembly A1 (fig 4-2), power on, and:	
	a. + 4.5 volts dc applied to input (XA 18-23) and MASTER RESET switch AISI pressed.	*a.* 0 volts dc.
	b. Ground applied to input (XA18-23).	*b.* +4.5 volts de.
XA18-AA	PC Card A21 removed from logic assembly A1 (fig. 4-2), power on, and:	
	a. +4.5 volts dc applied to input (XA18-Y) and	*a.* 0 volts dc.
	b. Ground applied to input (XA18-Y).	*b.* +4.5 volts dc.

5-22. Printed Circuit Card A19 Test Data Chart
(fig. 5-16 and 8-28)

Test point	Test condition	Normal indication
XA19-13	Power on with chad bag empty and at least 300 cards loaded in hopper and:	
	a. MASTER RESET switch A1S1 pressed.	*a.* +4.5 volts dc.
	b. The Chad Bag full switch manually closed by applying downward pressure on the chad bag.	*b.* 0 volt dc.

Test point	Test condition	Normal indication
XA19-18	Power on with cards loaded in hopper, and:	
	a. MASTER RESET switch A1S1 pressed.	*a.* +45 volts dc.
	b. SINGLE FEED switch A3Z4 pressed.	*b.* +45 volt to 0 volt dc negative pulse.
XA1922	Power on with cards loaded in hopper, and:	
	a. MASTER RESET switch A1S1 pressed.	*a.* +4.5 volts de.
	b. LOCAL TEST switch A3Z7 pressed.	*b.* One +4.5 volt to 0 volt negative pulse per card.
XA19-T	Power on with cards loaded in hopper, and	
	a. MASTER RESET switch A1S1 pressed.	*a.* +45 volts dc.
	b. LOCAL TEST switch A3Z7 pressed.	*b.* One +4.5 volt to 0 volt de negative pulse per card.
XA19-AA	Power on with cards loaded in hopper, and:	
	a. MASTER RESET switch A1SI pressed.	*a.* 0 volt dc.
	b. LOCAL TEST switch A3Z7 pressed.	*b.* +4.5 volt to 0 volt dc pulse developed between cards.

5-23. Printed Circuit Card A20 Test Data Chart
(fig. 5-17 and 829)

Test point	Test condition	Normal indication
Typical lamp driver (Z1A) output (XA20-U)	PC card A18 removed from logic assembly A1 (fig. 4-2), power on, and:	
	a. Open or +45 volts dc applied to input	*a*. 0 volt de XA20-17).
	b. Ground applied to input (XA20-17).	*b*. 15 volts ac.

5-24. Printed Circuit Card A21 Test Data Chart
(fig. 5.18 and 8-20)

Test point	Test condition	Normal indication
XA21-R	PC card Al and A18 removed from logic assembly Al (fig. 4-2), power on, and:	
	a. Ground applied to input (XA21-S) input and +45 volts dc applied to (XA21-P).	*a*. 0 volt dc.
	b. +45 volts de applied to input (XA21-S).	*b.* +45 volts dc.
XA21-Y	PC cards AT5 and 19 removed from logic assembly A1 (fig. 42), power on, and:	
	a. +45 volts dc applied to input (XA21-Z).	*a*. +4.5 volts dc.
	b. +4.5 volts de applied to input (XA21-21) and ground applied to input (XA21-Z).	*b*. 0 volt dc.

5-25. Power Supply PS1 Test Data Chart
(fig. 4-4, 8-7, and 8-8)

CAUTION

When taking voltage measurements on power supply PSI sequence module A12, use insulated test connectors to avoid possible short circuits between test points and copper runs.

Test point	Test condition	Normal indication
PS1TP2 to PS1TP1 (com)	Power on.	+4.75 volts dc 1%
PS1TP3 to PS1TP1	Power on.	+12.0 volts dc 1%
PS1TP4 to PS1TP1	Power on.	-12.0 volts dc1%
PS1TP5 to PS1TP1	Power on.	-48.0 volts dc 1%
PS1Al2TP14 to PS1A121P12	Power on.	-12.0 volts dc 1%
PSAl12TP5 to PS1A12TP12	Power on.	+12.0 volts dc 1%
PS1AlZP10 to PS1A12TP12	Power on.	+4.75 volts dc 1%
PS1A12TP2 to PS1A1l2TP12	Power on.	-48.0 volts de 1%
PS1A12TP6 to PS1A12TP12	Power on.	+15.0 volts dc 1%

Section IV. PRINTED CIRCUIT CARD REPAIR

5-26. General Parts Replacement Techniques

Most of the parts on a PC card can be replaced easily without special precedures. For PC card soldering techniques, refer to TB SIG 222 (Army), T. O. 00-25-234 (Air Force), or NW 00-15PA (Navy (app A). When replacing integrated circuit logic elements, it is important to unsolder only one terminal at a time, using a solder syringe to remove the solder before unsoldering the next terminal.

5-27. Parts Location

The locations of all replaceable parts on the PC cards of the high speed card punch are shown in figures 5-2 through 5-27.

TERMINAL	FUNCTION	TERMINAL	FUNCTION
1	OUTPUT 1	6	INPUT 3
2	INPUT 1	7	+12 VOLTS DC
3	OUTPUT 2	8	-12 VOLTS DC
4	INPUT 2	9	LAMP TEST
5	OUTPUT 3	10	GROUND

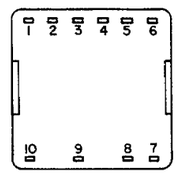


Figure 5-2. Location of terminals on thick film modules.

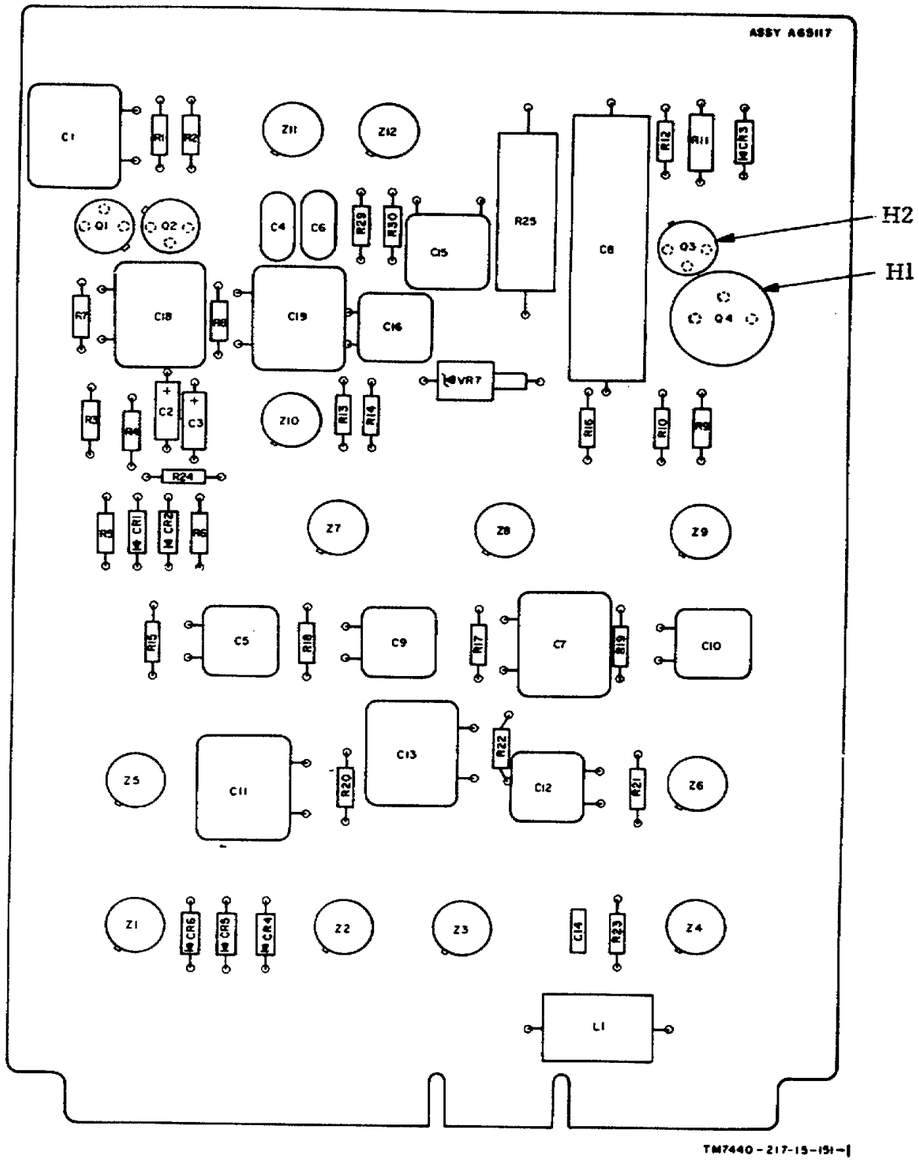


Figure 5-3. PC card No. A65117 (A1)

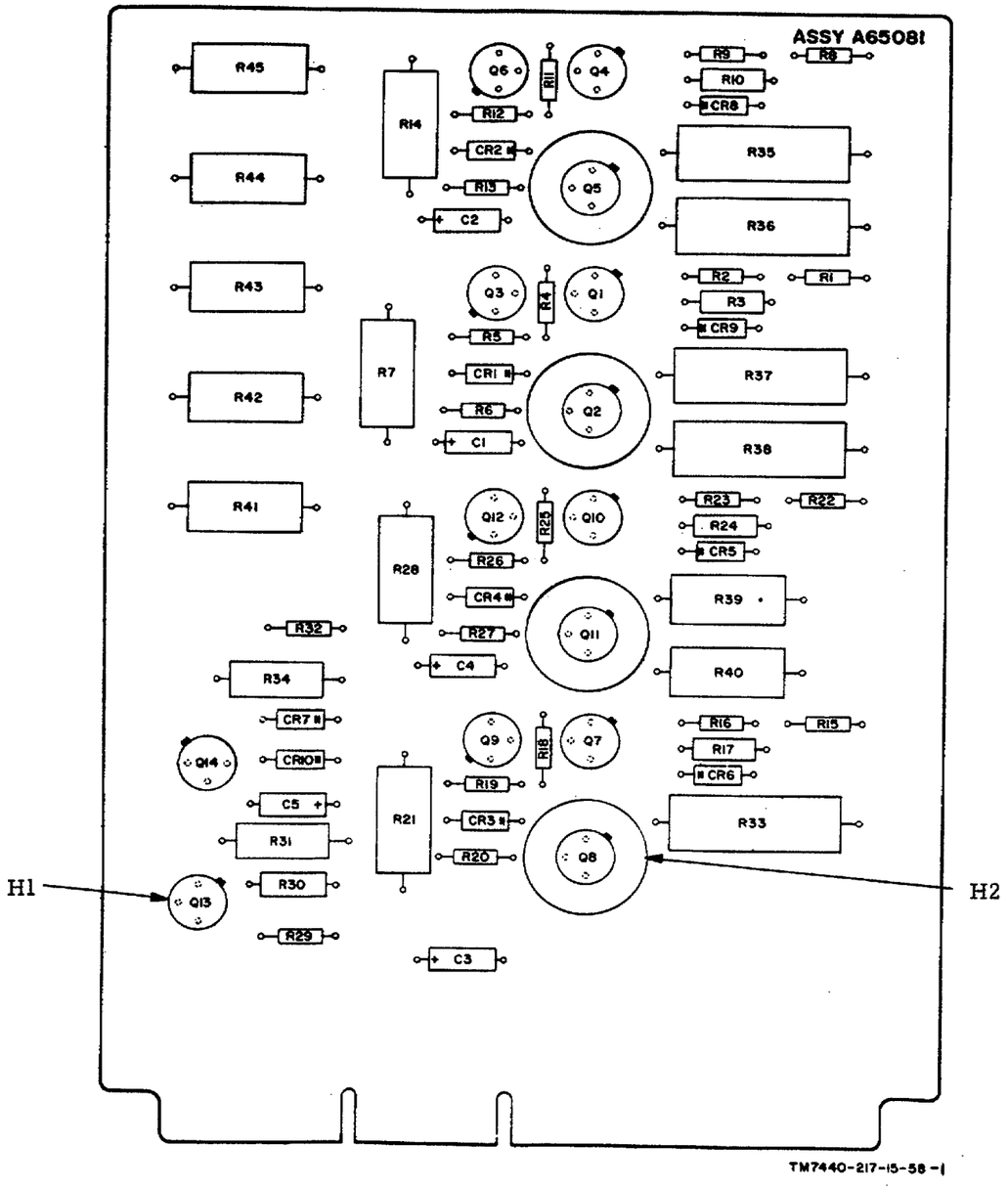


Figure 5-4. PC card No. A65081 (A2).

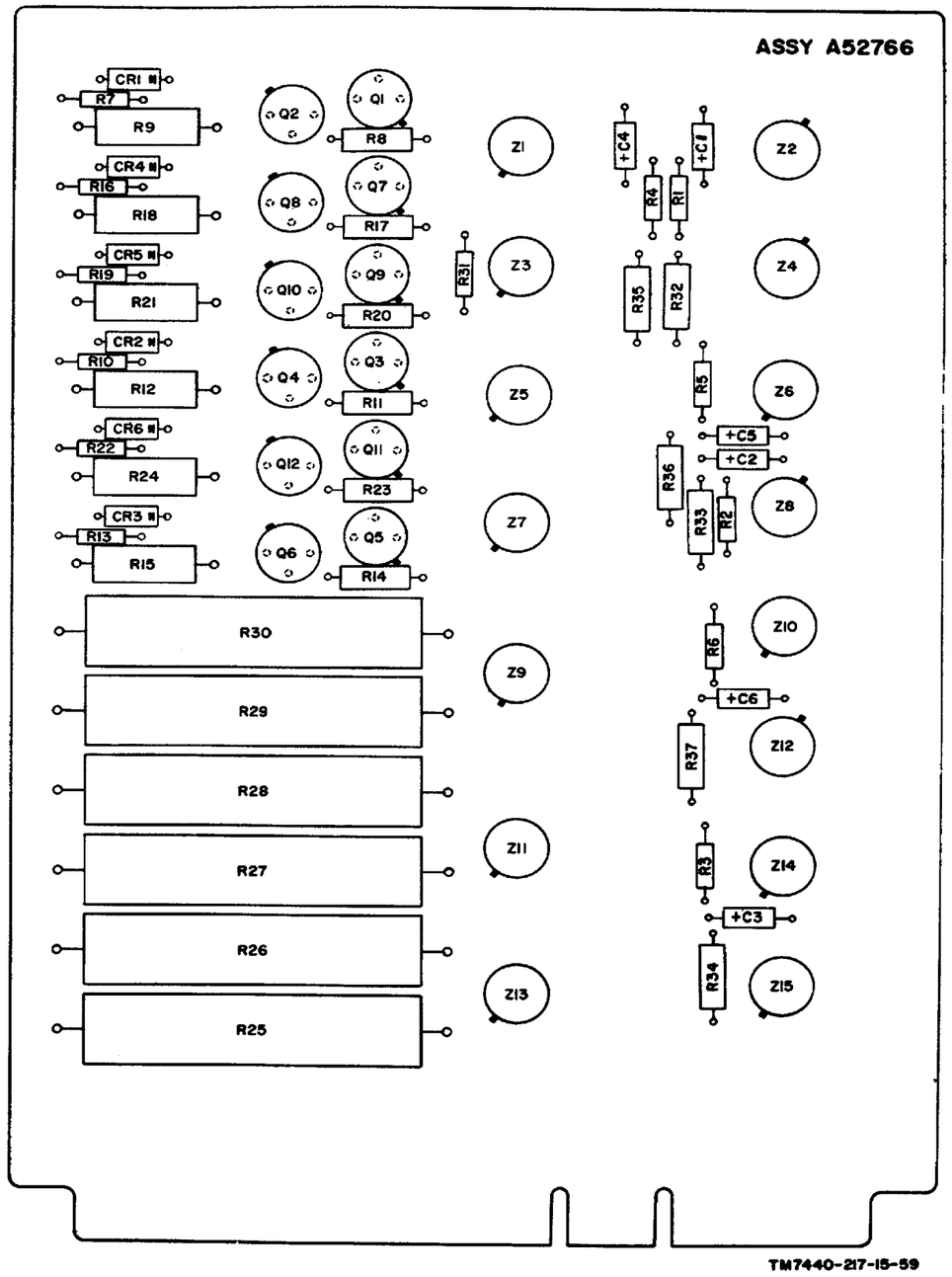


Figure 5-5. PC card No. A52766 (A3, A4, A5, A6).

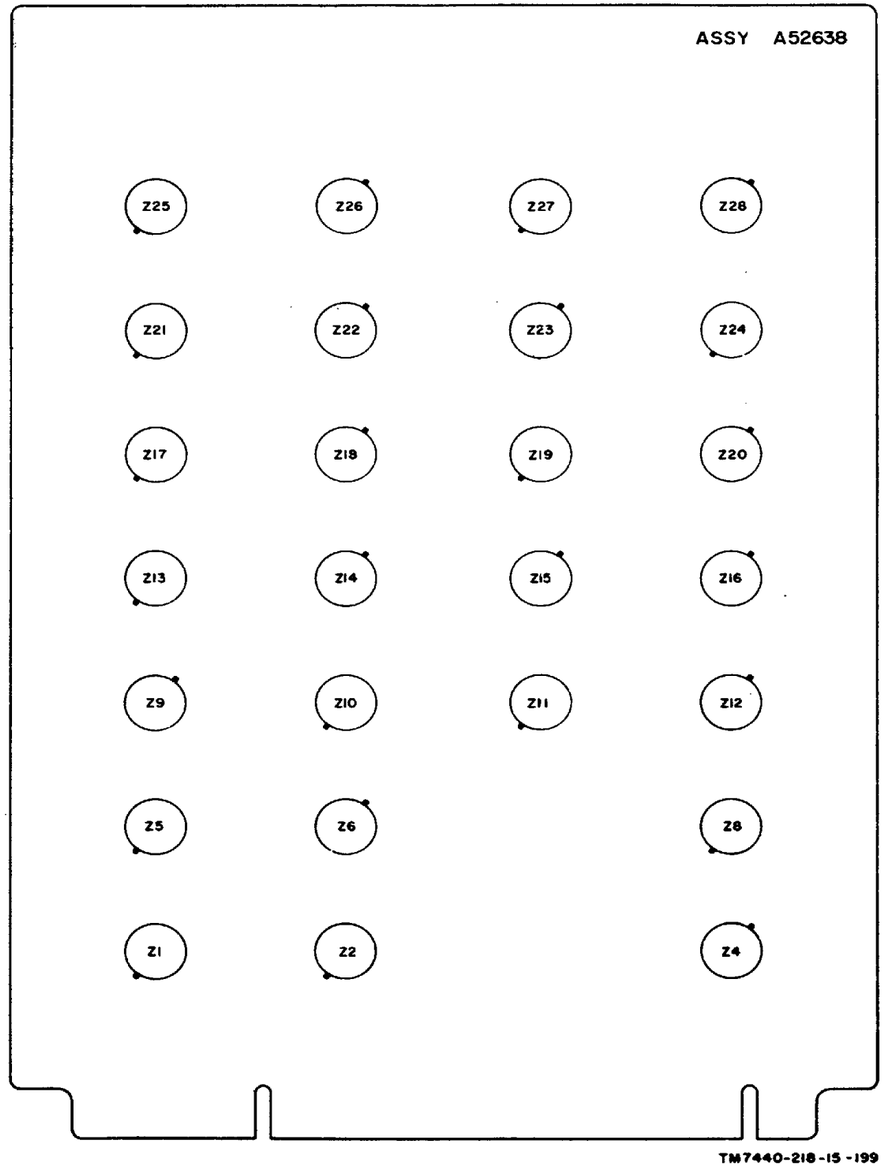


Figure 5-6. PC card No. A52638 (A7).

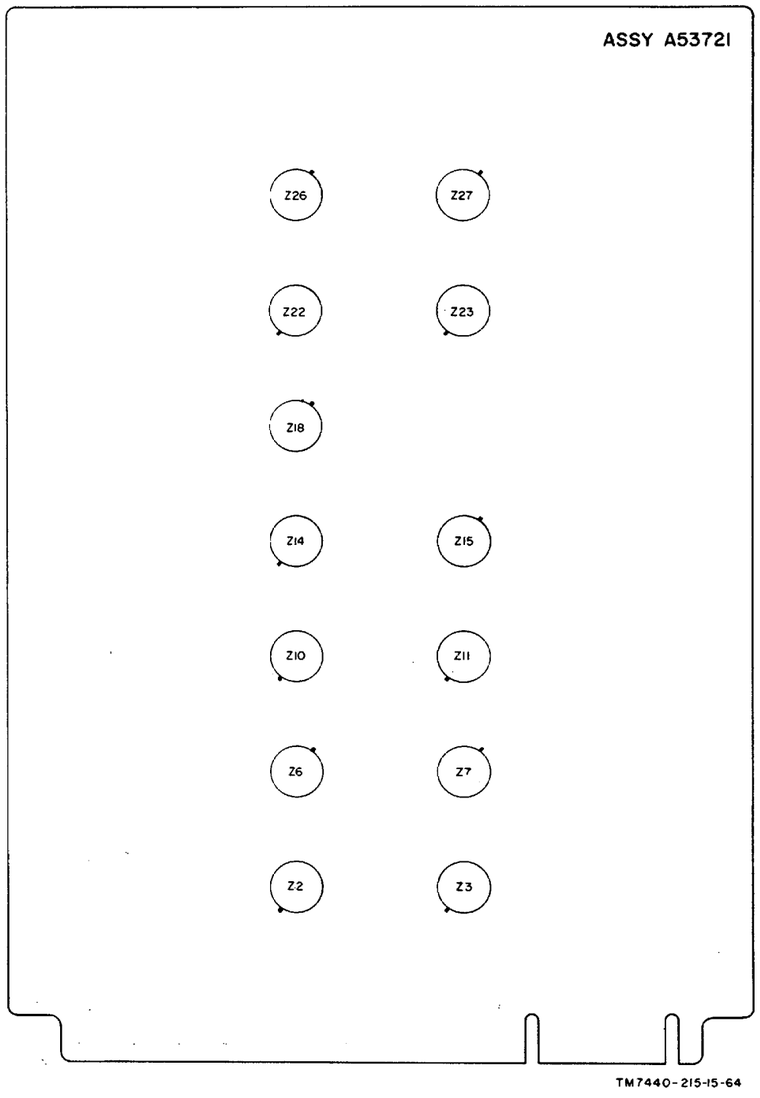


Figure 5-7. PC card No. A53721 (A8, A9).

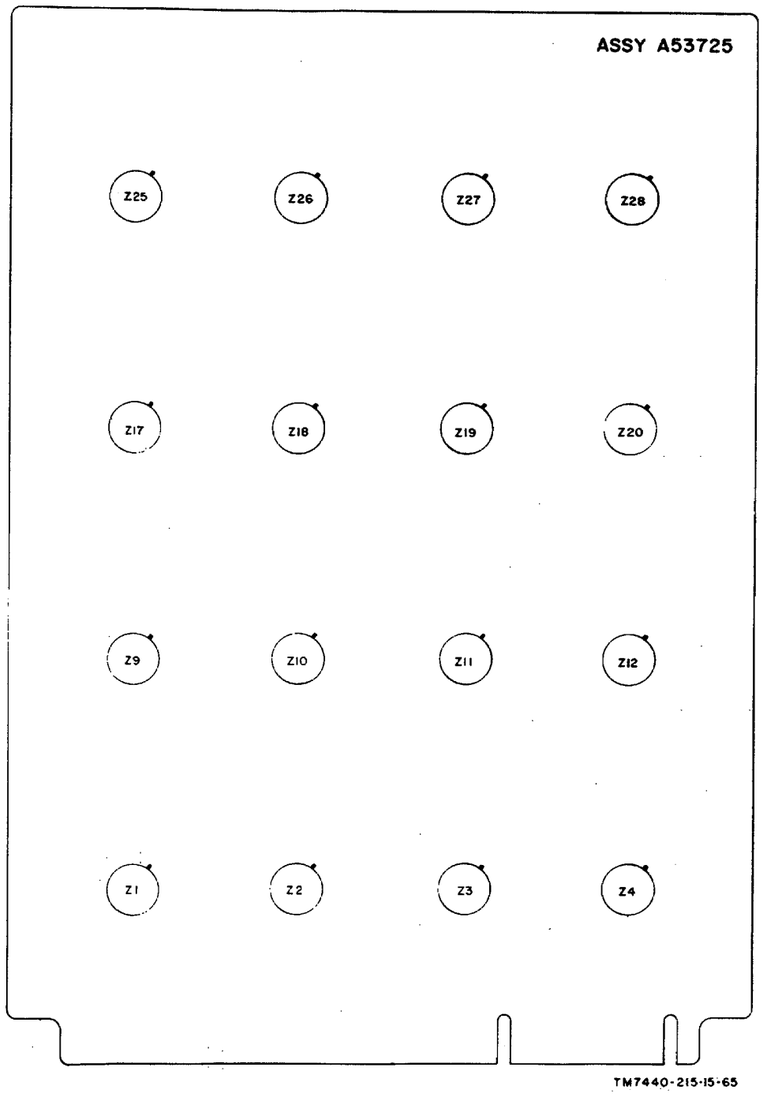


Figure 5-8. PC card No. A53725 (A10, A11).

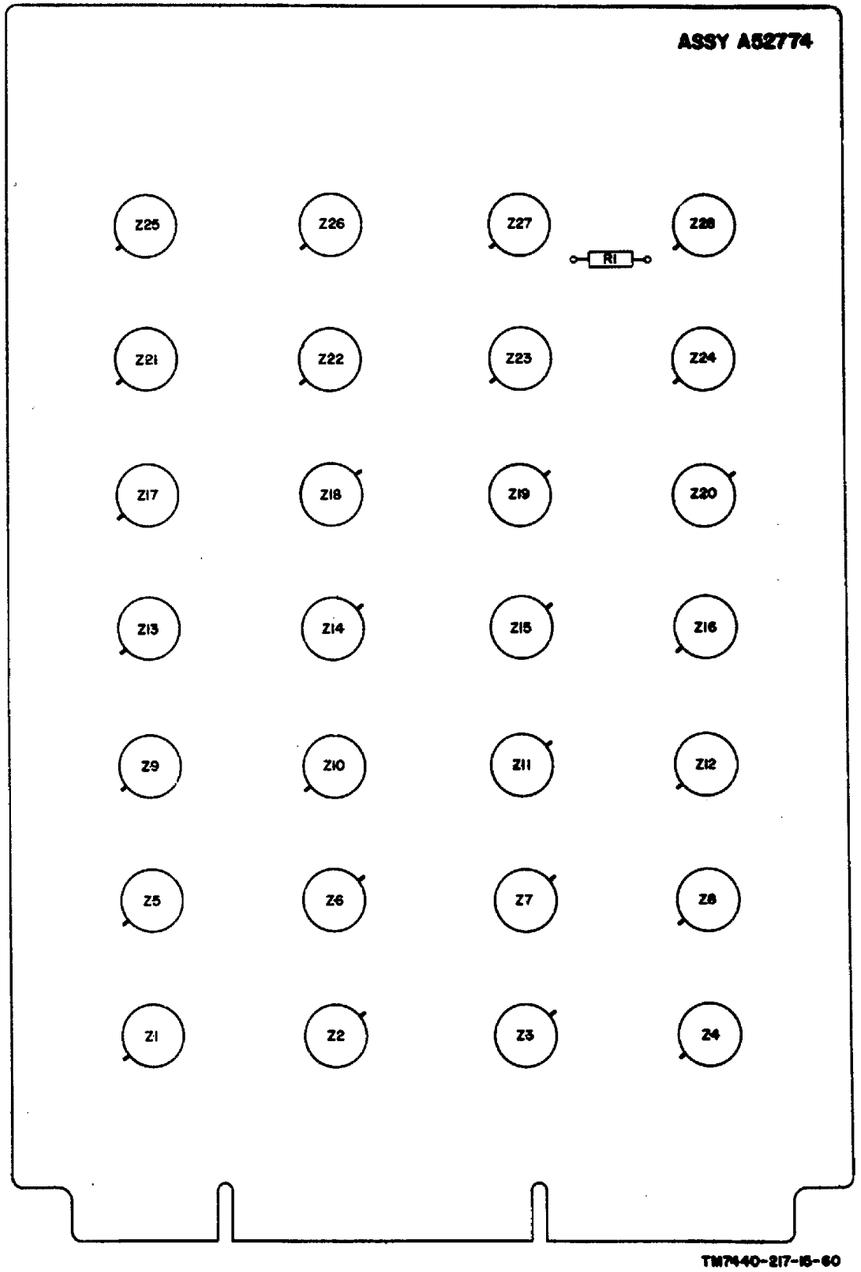


Figure 5-9. PC card No. A52774 (A12).

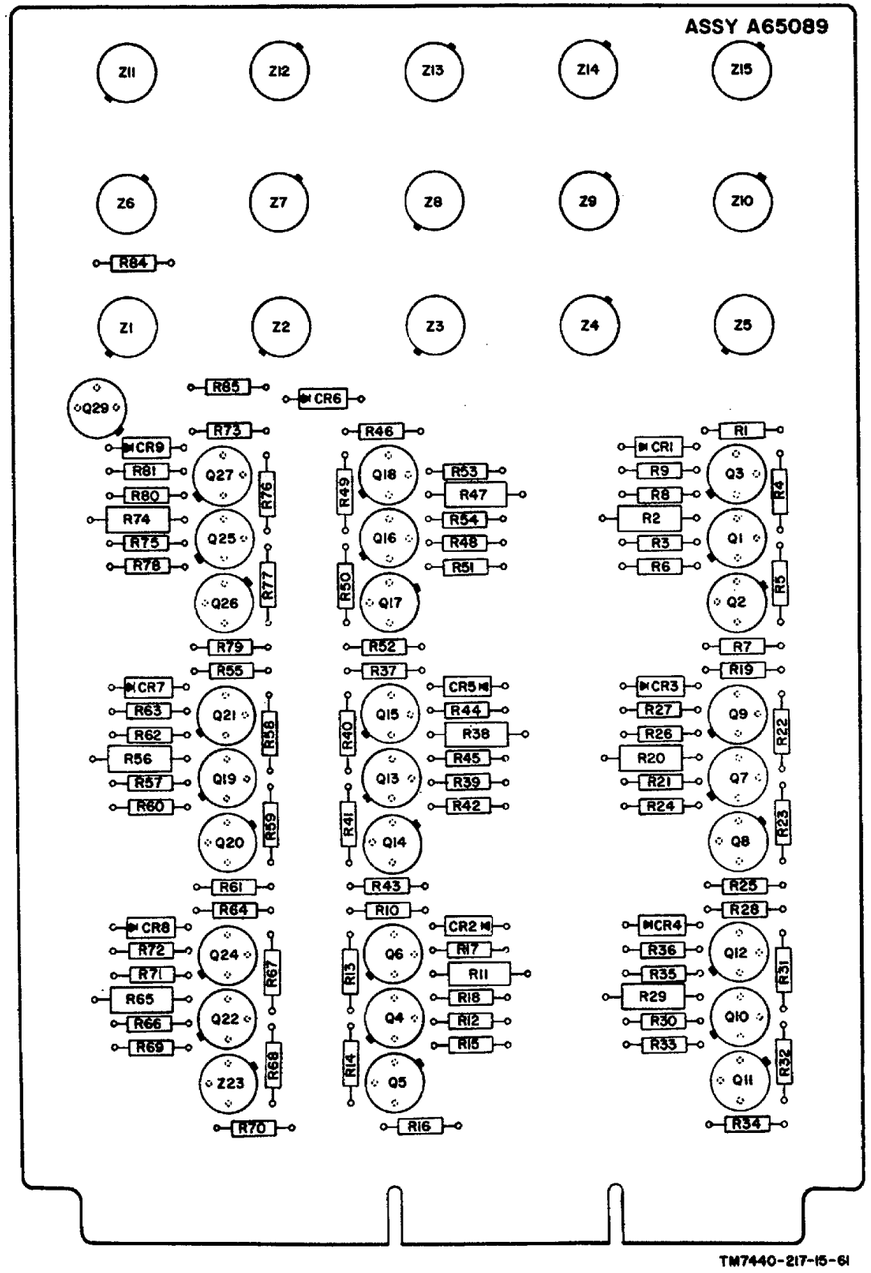


Figure 5-10. PC card No. A65089 (A13).

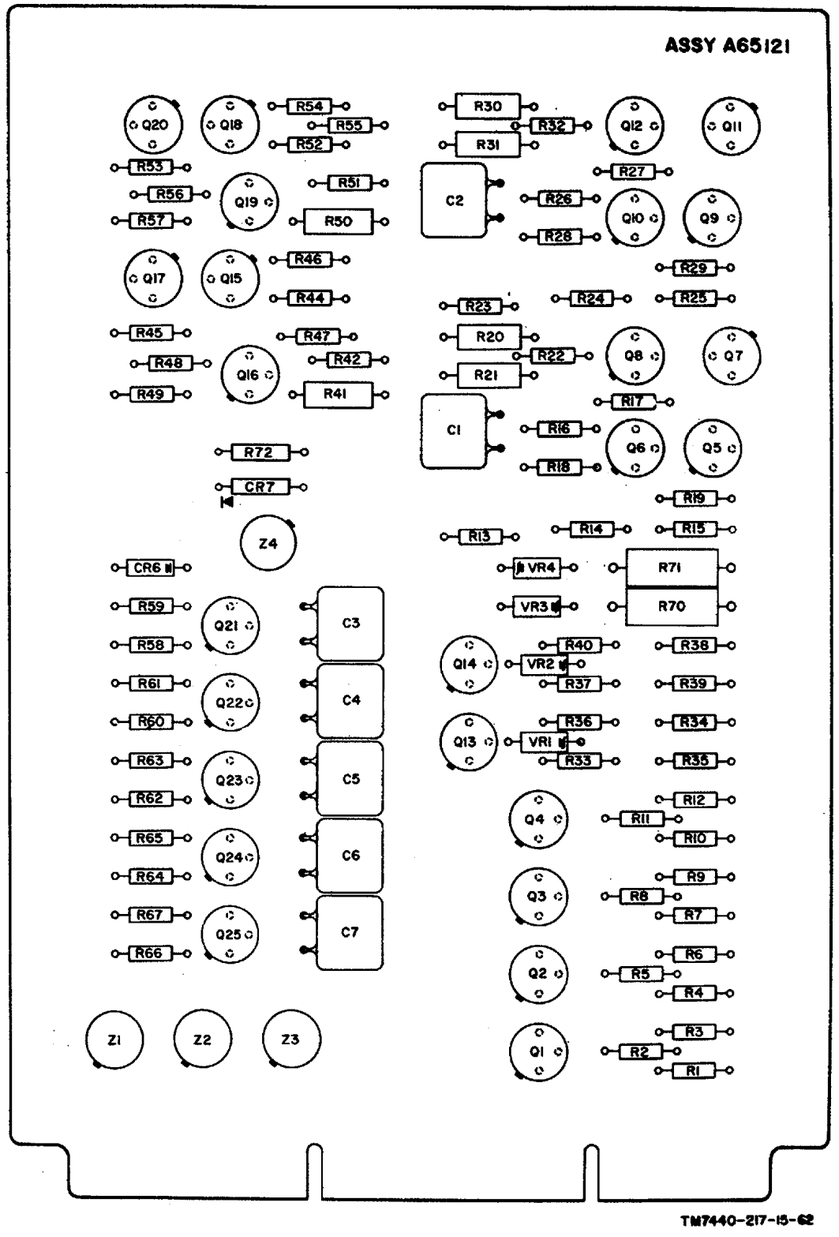


Figure 5-11. PC card No. A65121 (A14).

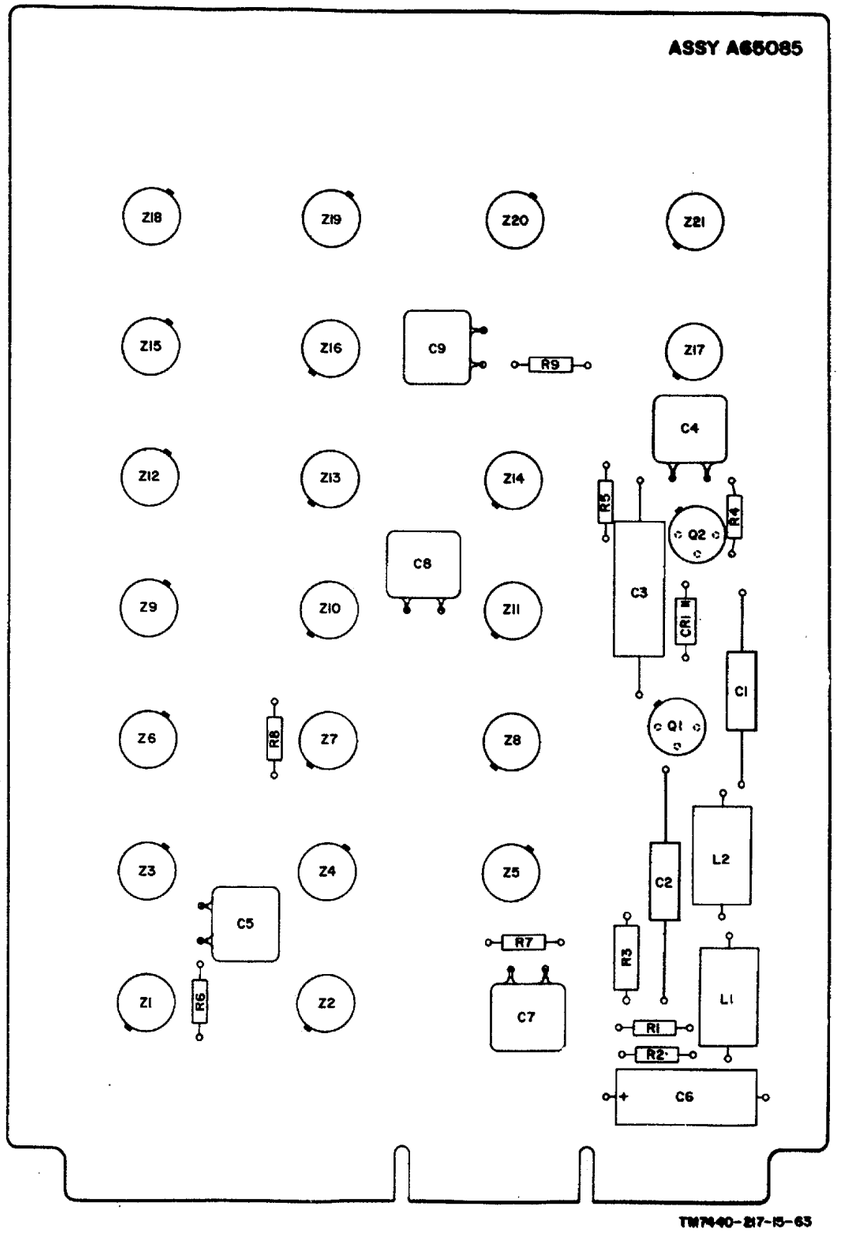


Figure 5-12. PC card No. A65085 (A15).

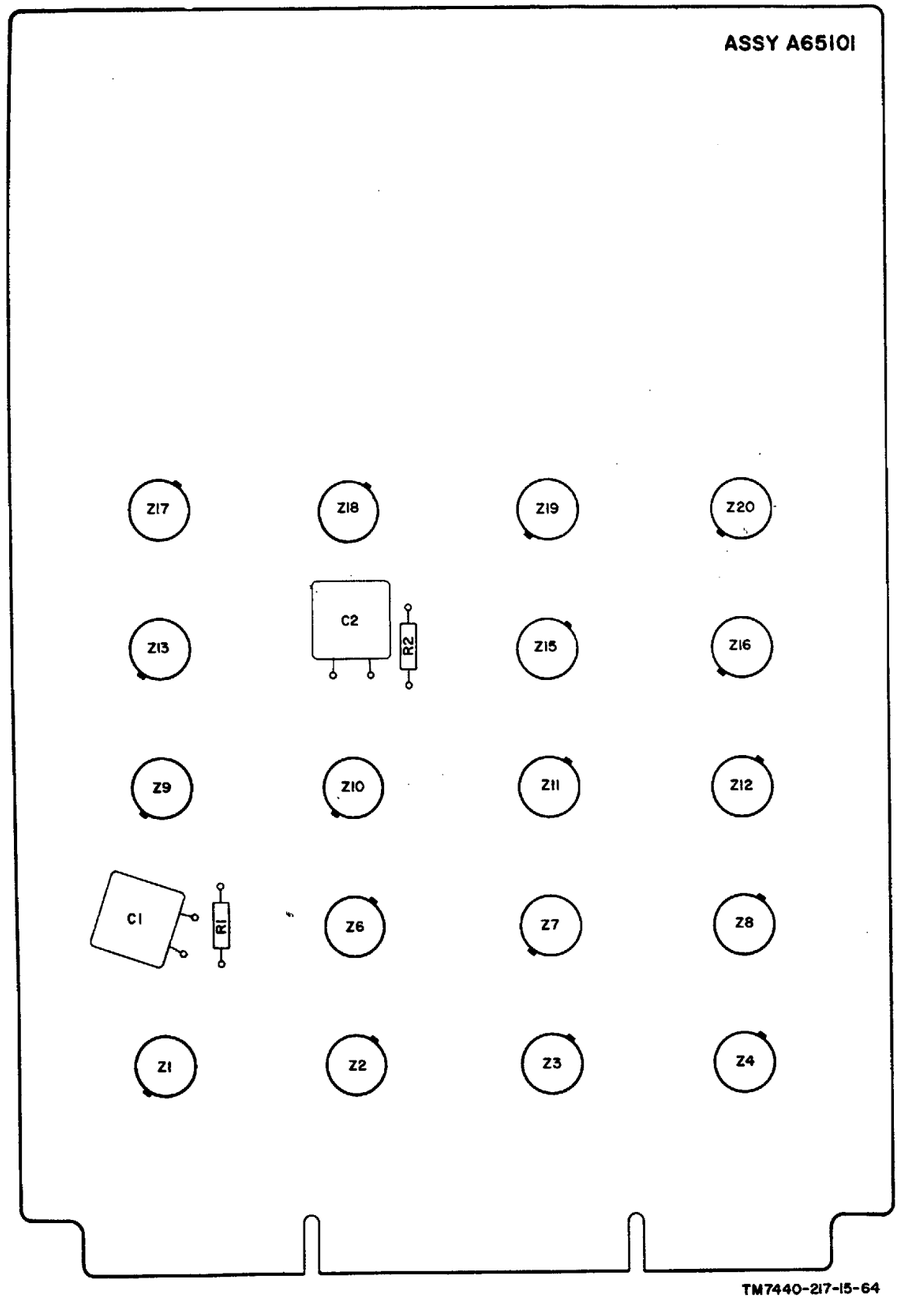


Figure 5-13. PC card No. A65101 (A16).

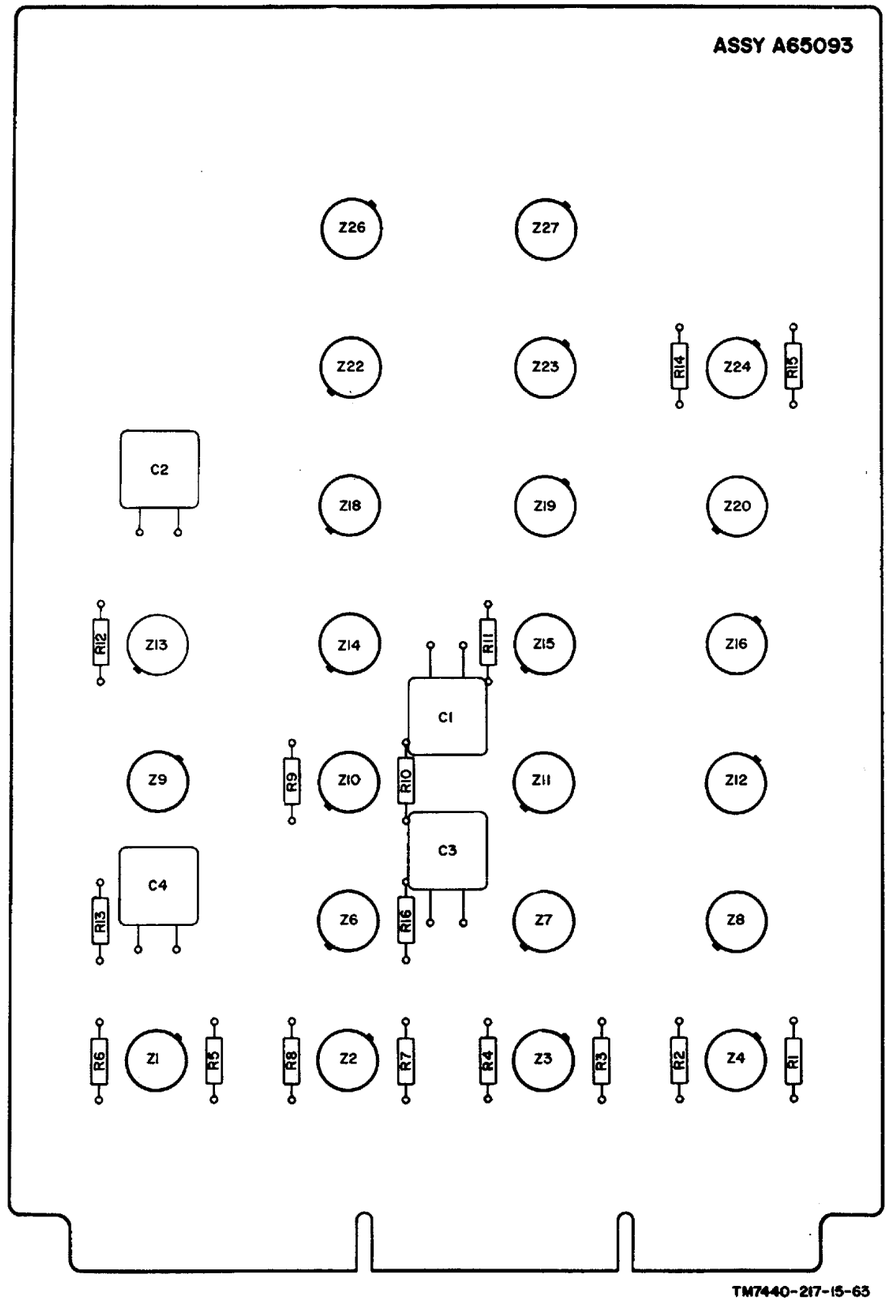


Figure 5-14. PC card No. A65093 (A17).

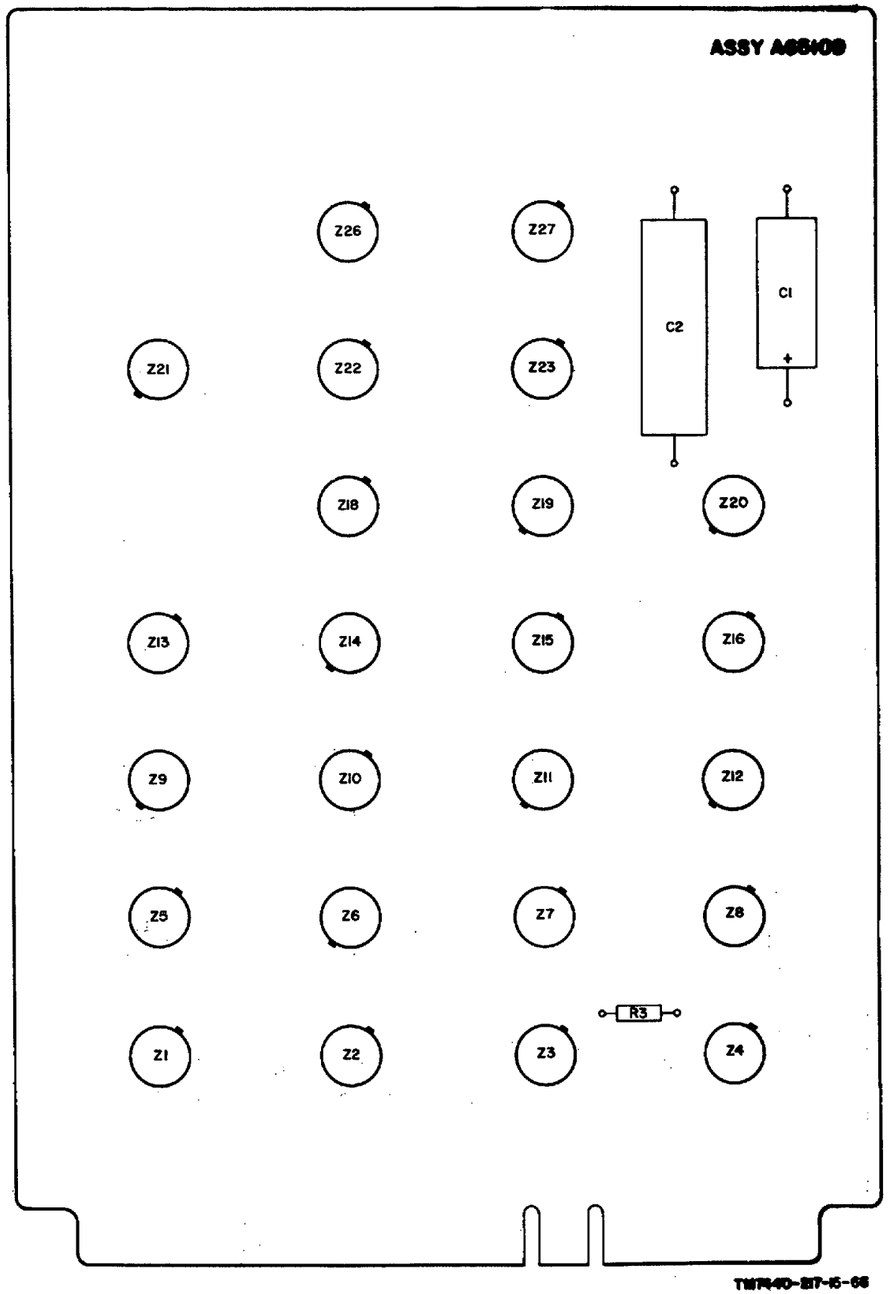


Figure 5-15. PC card No. A65109 (A18).

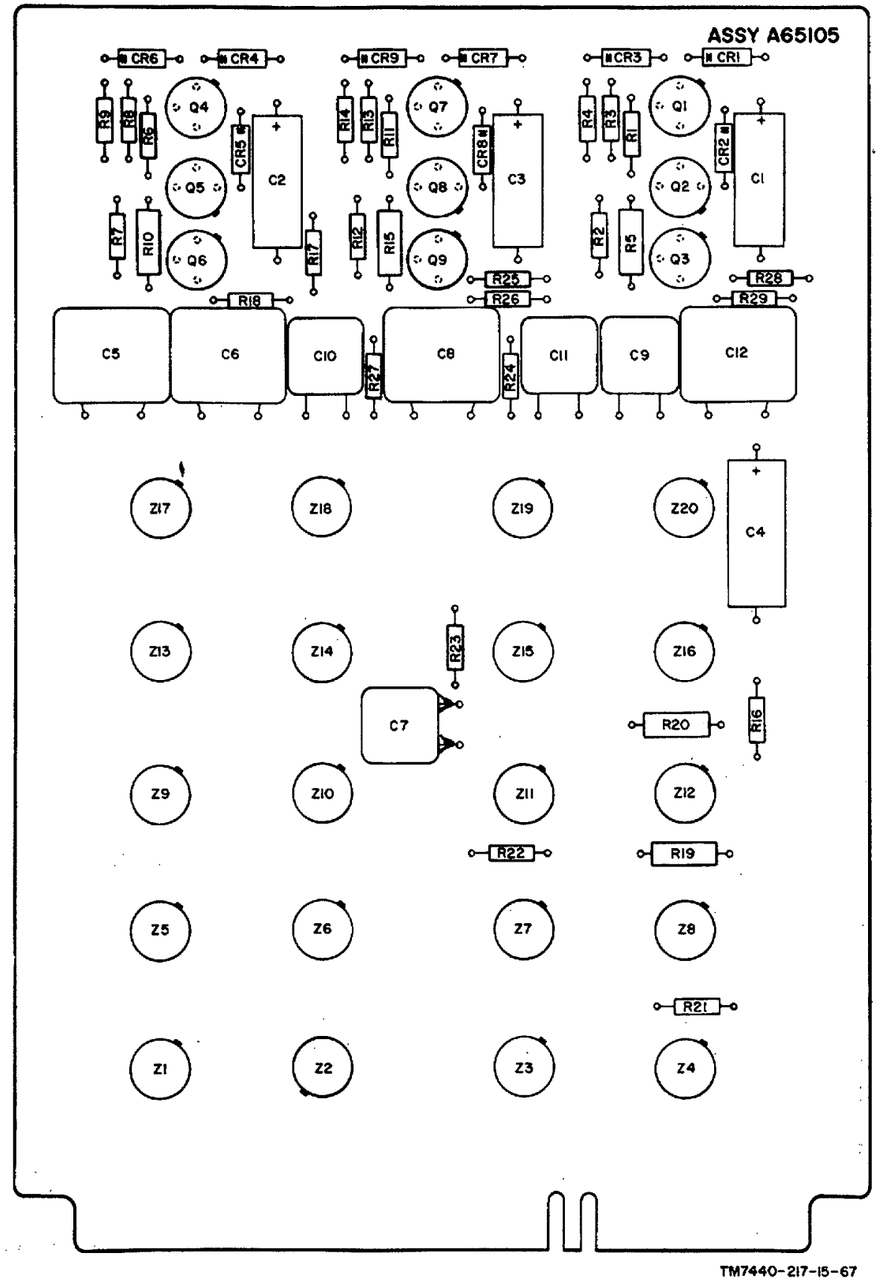


Figure 5-16. PC card No. A65105 (A19).

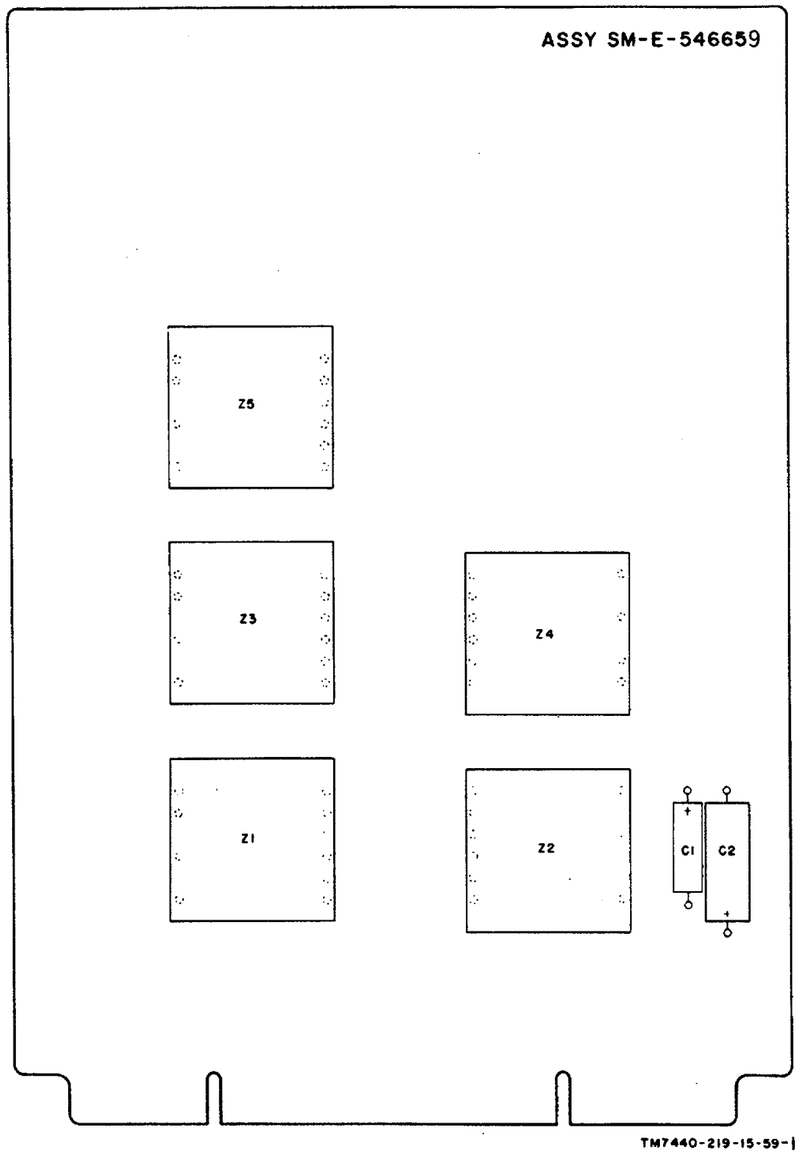


Figure 5-17. PC card No. SM-E-546659 (A20).

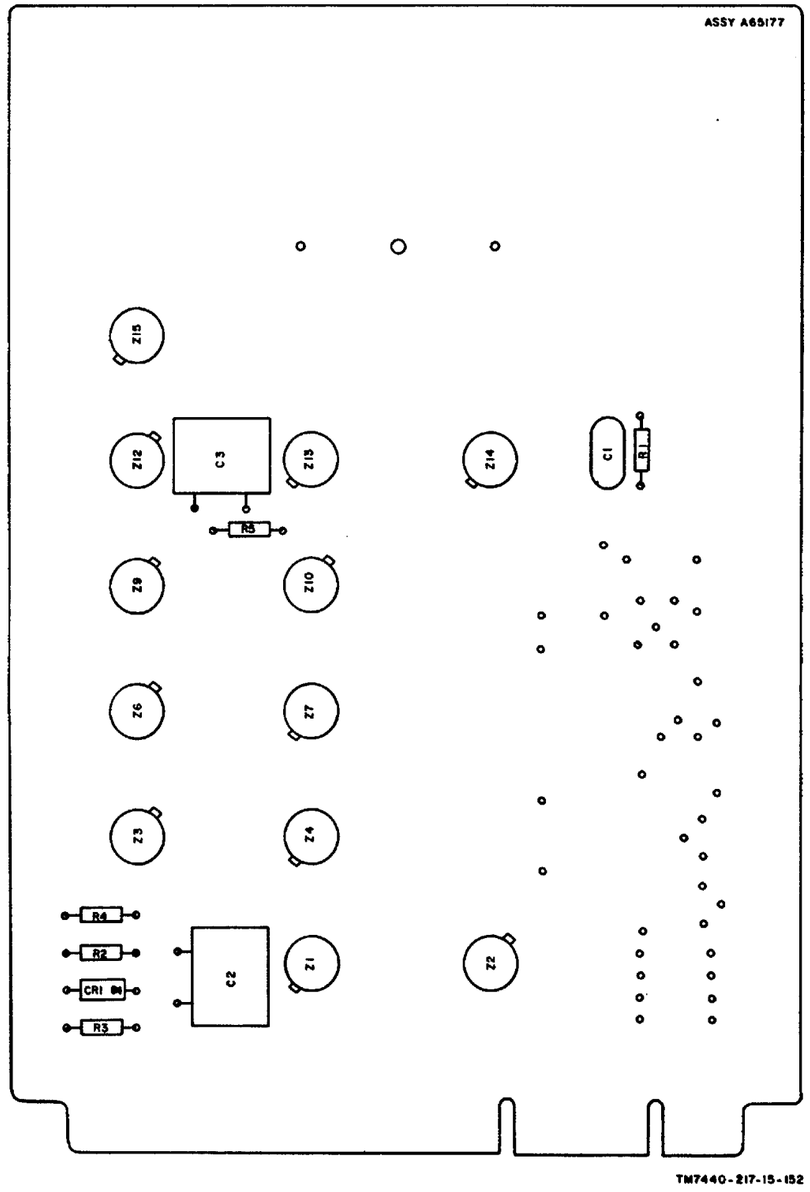


Figure 5-18. PC card No. A65177 (A21).

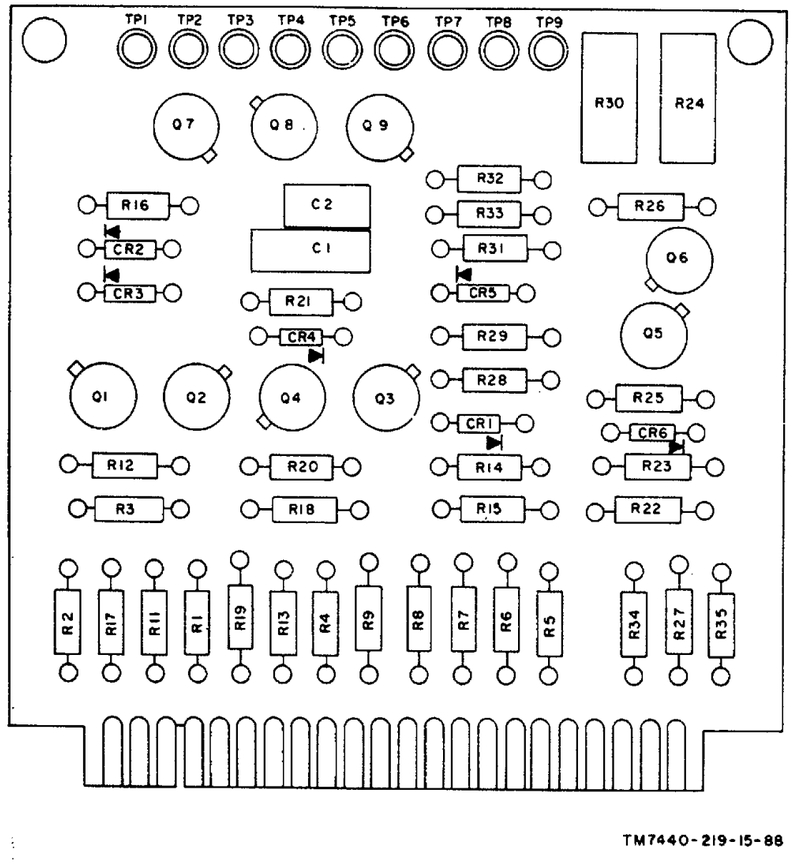


Figure 5-19. Component board assembly (+ 4.75 vdc) A1.

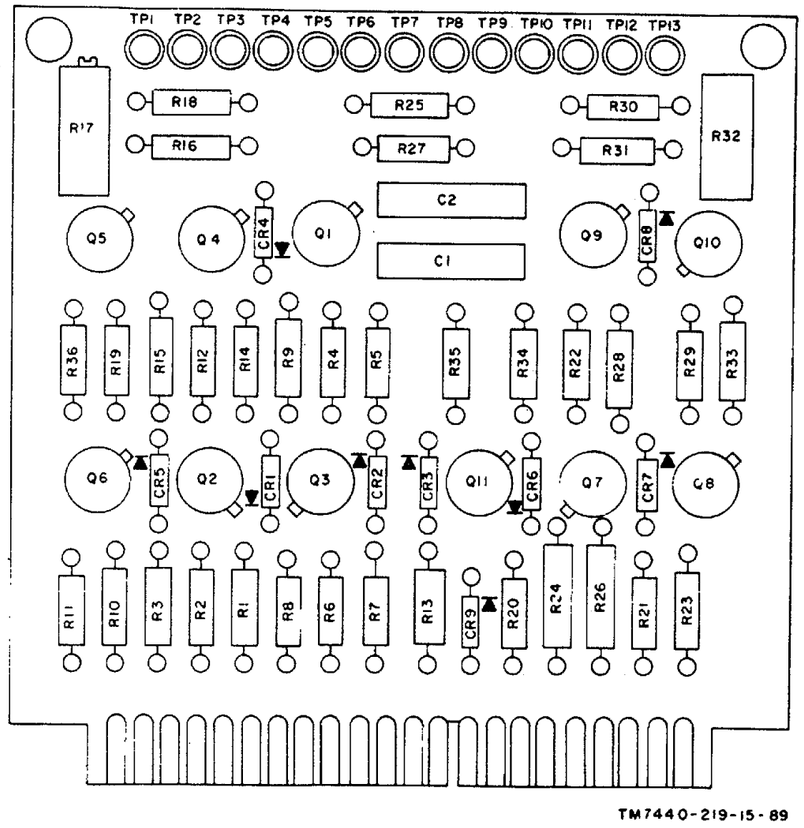


Figure 5-20. Component board assembly (+12 vdc) A2.

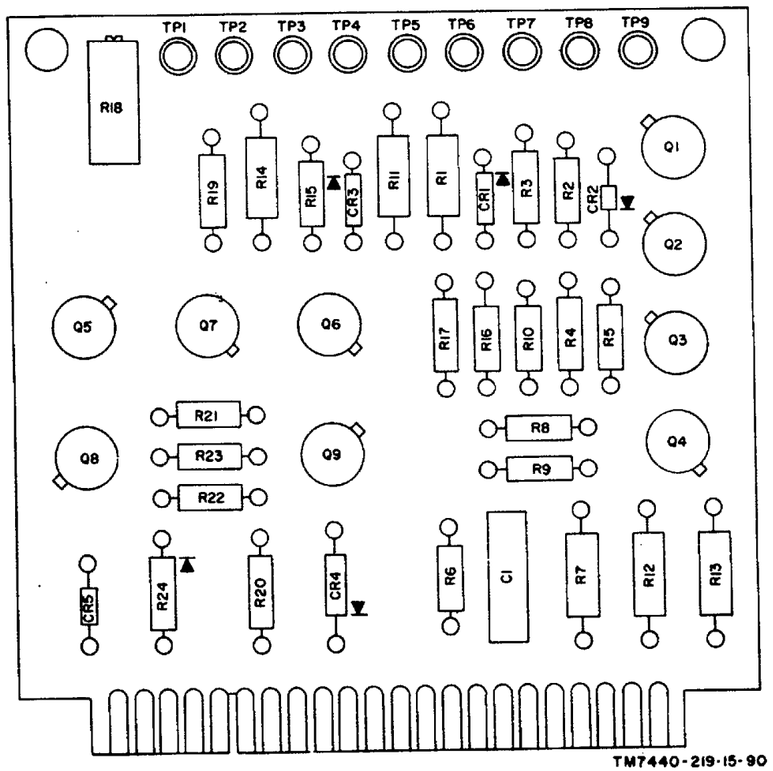


Figure 5-21. Component board assembly (-48 vdc) A3.

CAUTION:
When replacing semiconductor components of heatsink subassemblies A4, A5, or A6, clean the mating surfaces of the semiconductor and the heatsink chassis and apply a light coat of Dow Corning 340 silicone grease to the mating surfaces before mounting the semiconductor.

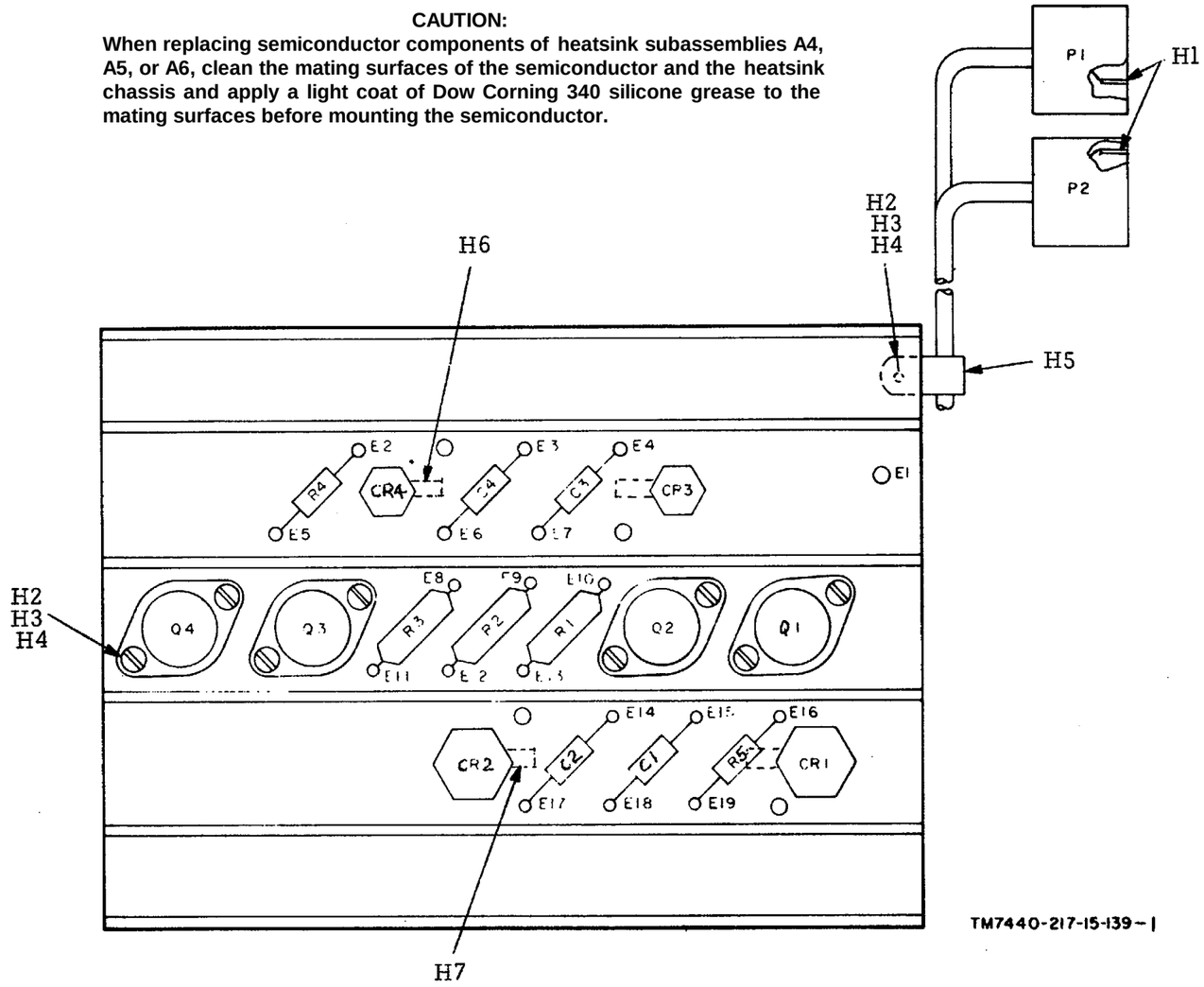


Figure 5-22. Heat sink components assembly A4.

NOTE: See caution on figure 5-22.

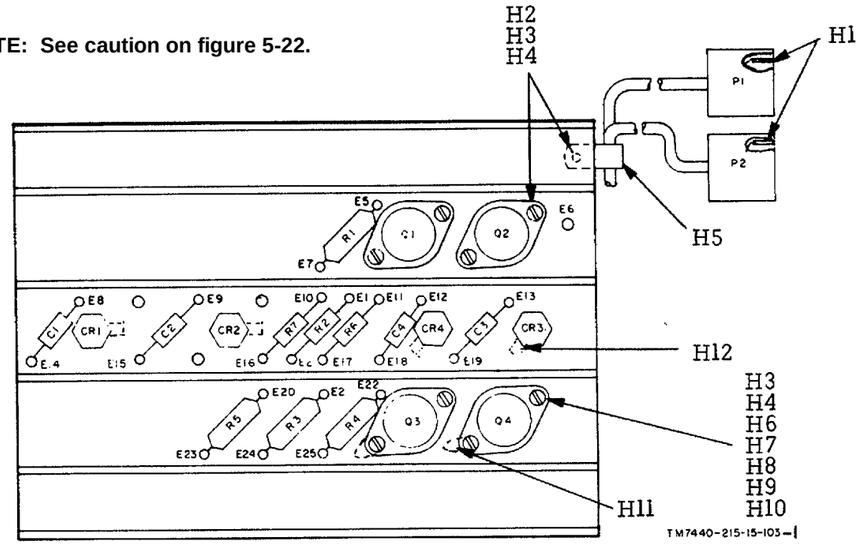


Figure 5-23. Heat sink components assembly A5.

NOTE: See caution on figure 5-22.

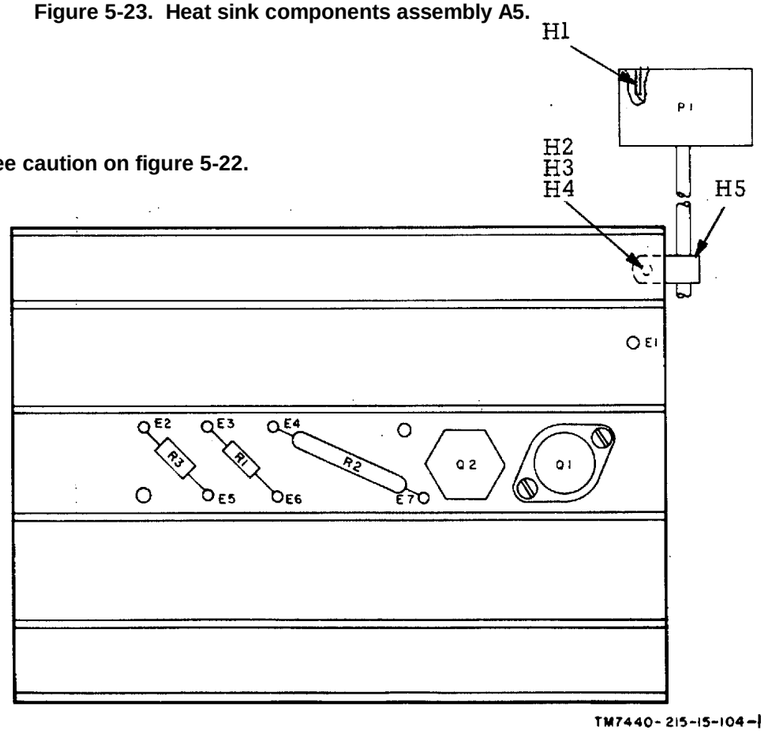


Figure 5-24. Heat sink components assembly A6.

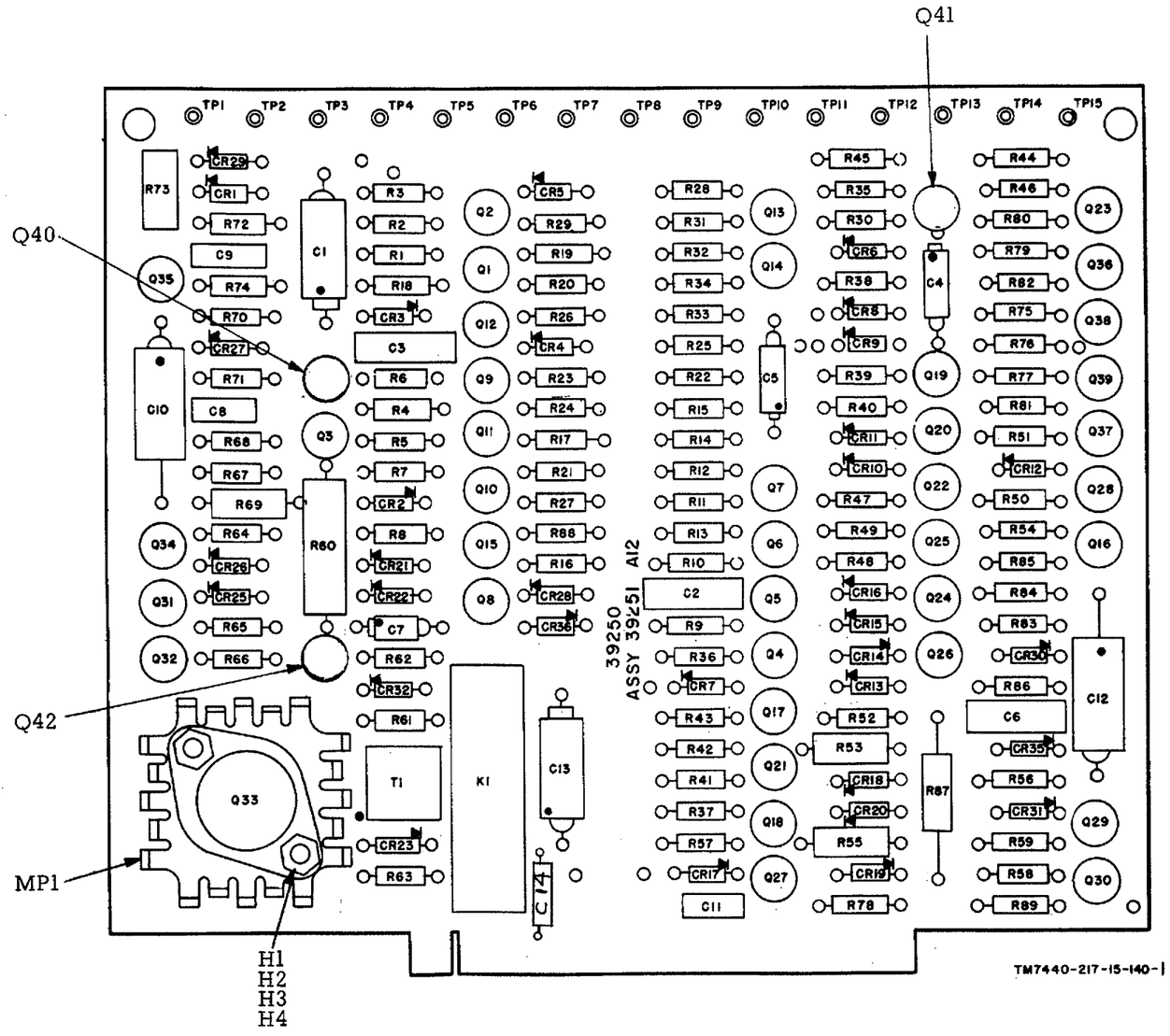
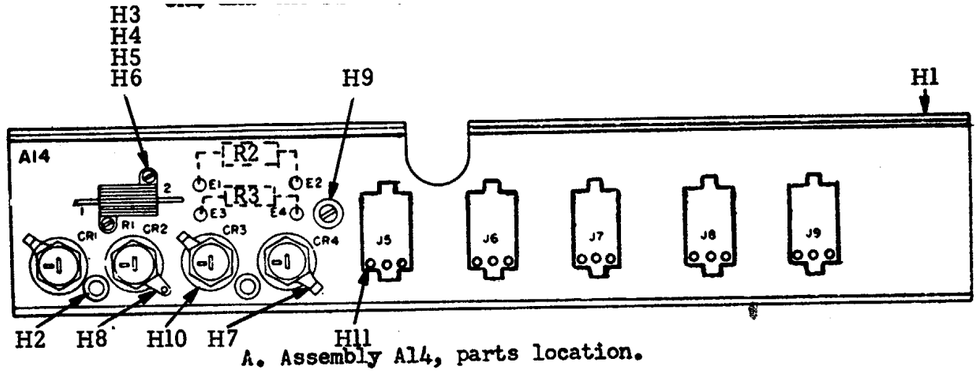


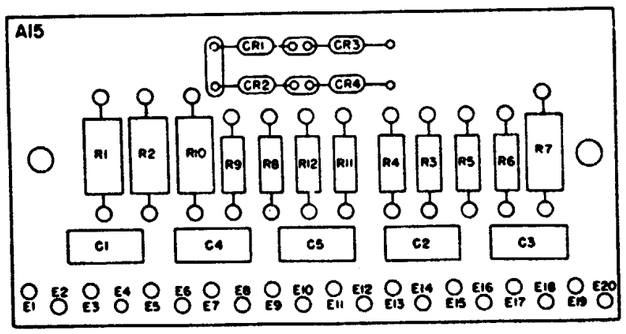
Figure 5-25. Sequence module component board assembly A12.

CAUTION

Insure mica insulators (H10) are placed between CR1, CR2, CR3 CR4 and the PS1A14 chassis.



A. Assembly A14, parts location.



B. Assembly A15, parts location.

Figure 5-26. Component assemblies A14 and A15, parts location diagram.

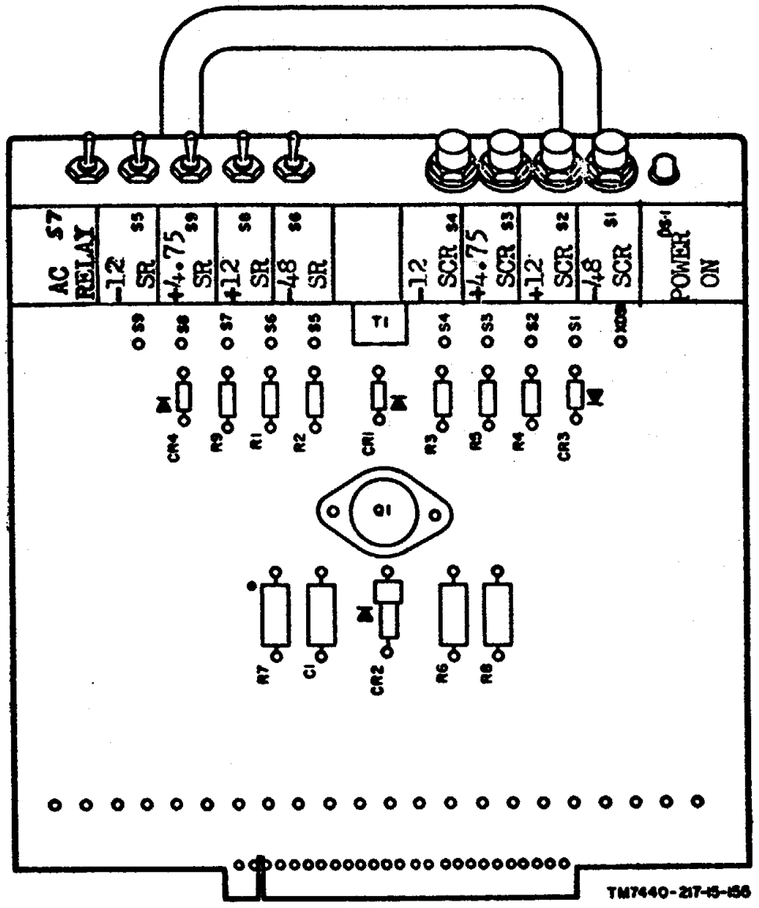


Figure 5-27. Manual control card. (Saratoga No. D39244)

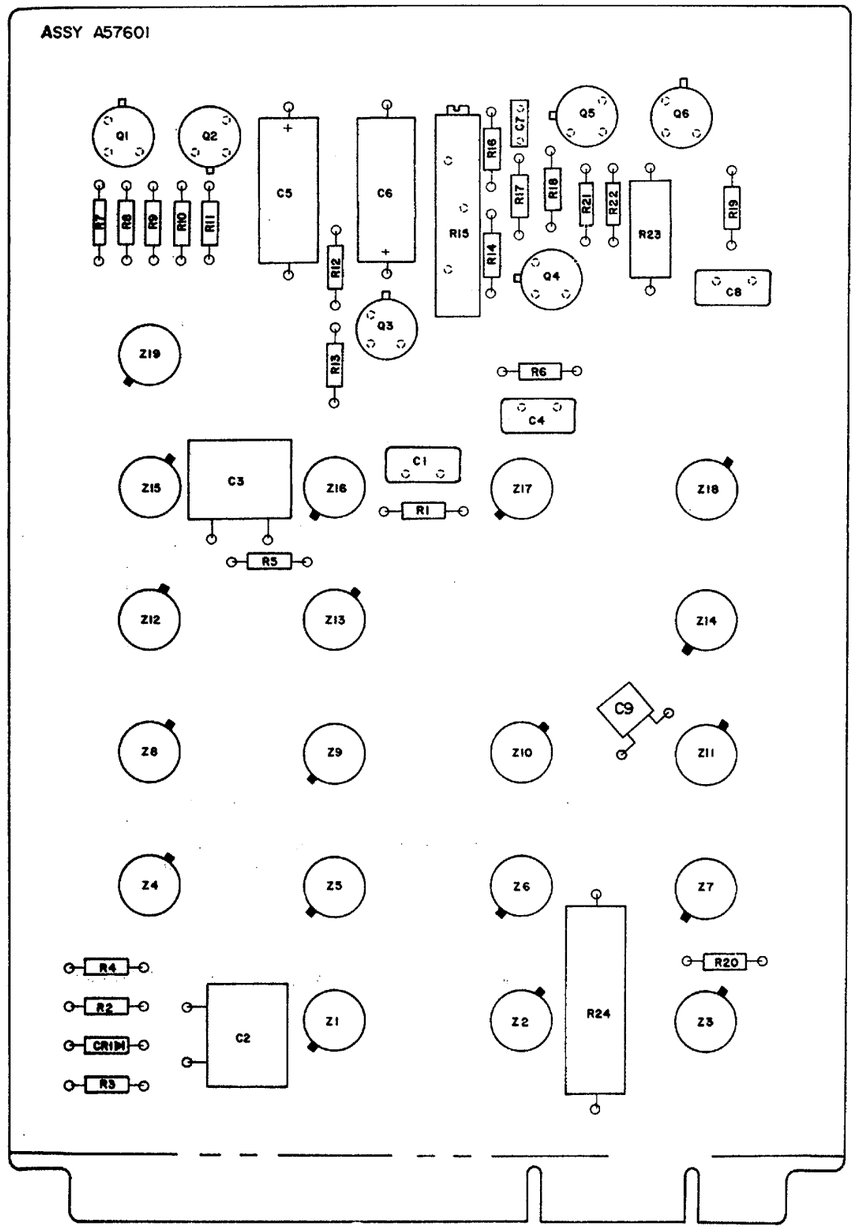


Figure 5-28. PC card No. A57601 (A21) used with motor assembly A4.

CHAPTER 6
DEPOT MAINTENANCE

Section I. DEPOT REPAIR

6-1. General

Complete rebuild of the high-speed card punch may be accomplished by depot maintenance facilities, when authorized by appropriate authority. Rebuild action includes all repairs, rebuild, and replacement necessary to make the equipment equivalent to new equipment and suitable for return to the military supply system for reissue to using organizations.

6-2. Depot Repair

Depot repair includes all repair procedures described in chapters 4 and 5, in addition to the part fabrication and refinishing procedures possible with the metalworking and refinishing equipment available at a depot.

Section II. DEPOT OVERHAUL STANDARDS

6-3. Applicability of Depot Overhaul Standards

Card Punch, High-Speed RO-312/G (high-speed card punch) must be tested thoroughly after repair to insure that it meets adequate performance requirements for return to stock and reissue. Use the tests described in this section to measure the performance of the repaired device. Equipment that is to be returned to stock should meet all of the performance standards given in this section.

6-4. Applicable References

a. Repair Standards. Applicable procedures of the depots performing this test and the general standards for repaired equipment given in TB SIG 355-1, TB SIG 355-2, and TB SIG 355-3 form a part of the requirements for testing this equipment.

b. Technical Publications. The technical publications applicable to the equipment to be tested are listed in appendix A.

c. Modification Work Orders. Perform the work specified by modification work orders pertaining to this equipment before making the tests specified. DA Pam 310-7 lists all available MWO's.

6-5. Test Facilities Required

a. Tools and Test Equipment. In addition to the tools and test equipment listed in appendix C, the following special tools and test equipment are required to perform the depot overhaul standards tests:

Item	*Description*
Frequency counter	Beckman, Model 7350A, or equivalent; accuracy of 5 parts in 10 R per week.
Timer	Standard, model TF-4421 or equivalent.
Regulated power amplifier	CML model N5000A, or equivalent, with 0.5% accuracy.
Plug-in oscillator	CML model SG-13A, or equivalent, with 0.25%c accuracy.
AUTODIN device test set	General Dynamics Electronics Division model 48-201586.
Test cable	Test cable terminated in 48-pin connector on one end and two fanning strips and single No. 8 wire on the other end. Cable is labeled "Card Tape Punch."
Test weight	4.0 pounds ±5%
Test weight	8.0 pounds ±5%
Prepunched card	EIA Standard RS-292
Power supply, regulated	Power Devices, Incorp., 0-50 VDC, 1.5 Ampere, or equivalent.
Margin test PC board (4 required)	Fabricated from A52766 per para below.
Clamp pressure connector	Fabricated from Cannon DBMF-25S-4-406 per para below.
Gauge, push-pull	0-10 lb ±0.1 lb; S.C. D157 9524, or equivalent.

b. Fabrication of Margin Test PC Boards.

Four margin test PC boards are required to adequately test punch operation at the extreme limit of low voltage. These boards are standard high-speed card punch solenoid driver boards part No. A52766 (A1A3, A1A4, AlA5 or A1A6) modified as follows:

(1) Locate the -48 VDC printed wiring trace from pins 4 and D on the board.

(2) Open the wiring by scraping away the printed wiring trace near the connector pins.

(3) Solder an approximate 3-foot length of No. 24 AWG wire to the integrated circuit component side of the printed wiring trace just opened.

(4) Terminate the other end of the wire in a suitable connector to match terminals on external 0-50 VDC, 1.5-ampere power supply to be used.

c. Fabrication of Clamp Pressure Connector. The clamp pressure connector is fabricated from a Cannon connector part No. DBMF-25S-4-406 by soldering wires to pins 9 and 10 only.

(1) Solder approximate 3-foot length of red wire to pin 9 of connector.

(2) Solder approximate 3-foot length of black wire to pin 10 of connector.

(3) Terminate other ends of wires in suitable connectors to match terminals on external 0-50 VDC power supply to be used.

6-6. General Test Conditions and Requirements

Before the tests (para 6-7 through 6-10) are made, the equipment shall meet the mechanical requirements specified in a below. The general test conditions of b below shall be established.

a. Mechanical Requirements.

(1) The high-speed card punch should be assembled for 120 VAC, 60-Hertz operation, and should be adjusted to meet the requirements of paragraphs 4-45 through 4-108.

(2) All applicable parts of the mechanisms should be lubricated per the procedures of paragraph 4-9 before starting the tests of this section.

(3) Feed arm clamp pressure check (c below) must be performed.

b. Test Conditions.

(1) Unless otherwise specified, all tests will be performed under the following test conditions:

Temperature-Ambient, 15° C to 35°
Altitude-Normal ground
Humidity-Room ambient up to 98%
Power-120 VAC, 60 Hertz

(2) Connect the high-speed card punch to the test equipment as shown in figure 6-1.

c. Feed Arm Clamp Pressure Check. To insure proper feed arm clamp pressure, perform the following procedures:

(1) Remove punch head mechanism from high-speed card punch (para 4-31).

(2) Insert special clamp pressure connector (para 6-5c) into A1A2J4 on the punch head.

CAUTION

Do not exceed 6.0 VDC in the following steps.

(3) Adjust an external power supply for 6.0 VDC. Turn off supply and connect the two wires attached to the clamp pressure connector as follows:

(a) Red wire (pin 9 of connector) to positive terminal.

(b) Black wire (pin 10 of connector) to negative terminal.

(4) Turn on power supply to energize card feed magnet.

(5) Insert an approximately 1/4-inch wide strip of card stock (0.007 inch thick) between the jaws of the upper feed arm.

(6) Slowly rotate the driveshaft to obtain maximum clamp pressure by positioning the feed arms 2/3 of the way in their rearward travel.

(7) Using the push-pull gauge, pull the strip of card stock in the normal direction of travel (rearward) and verify that gauge reads 4.0 ± 0.25 pounds when slippage occurs.

(8) Repeat (5) through (7) above for the lower feed arm.

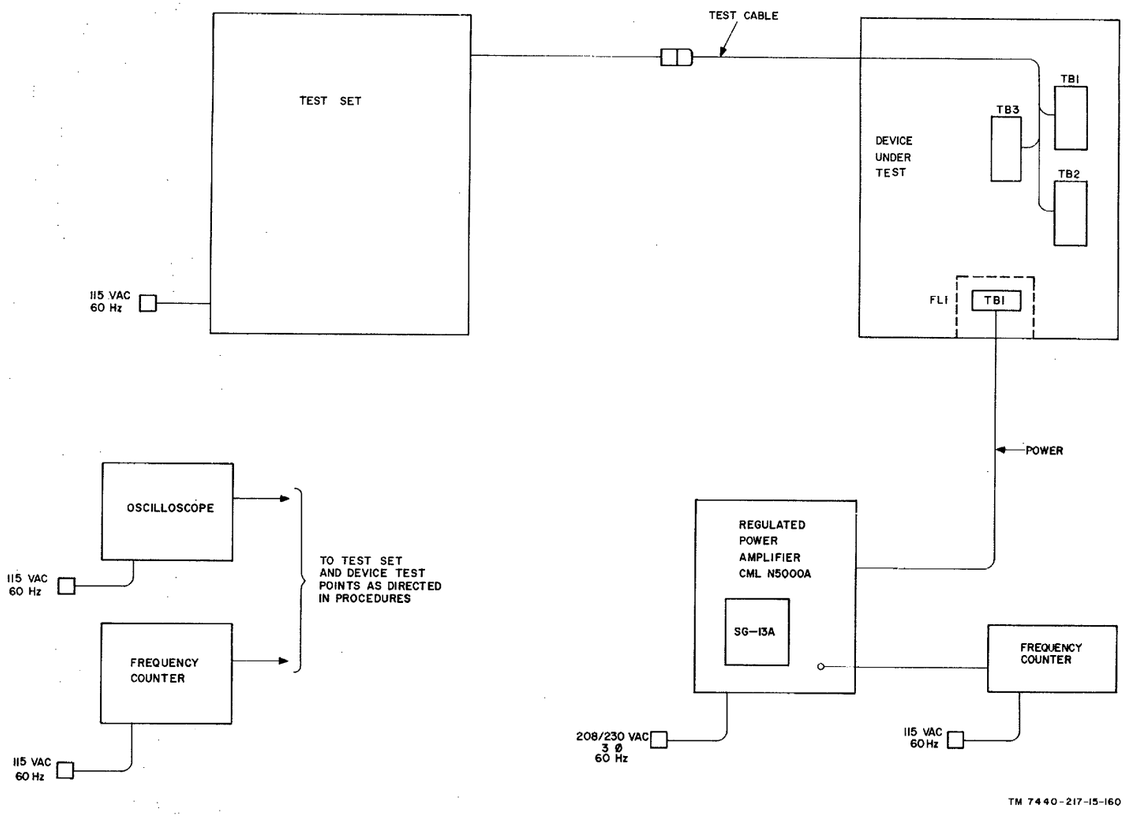


Figure 6-1. Test setup.

(9) Refer to paragraph 4-70 if clamp pressure adjustment is required.

(10) Reinstall punch head mechanism into high-speed card punch.

(11) Check that knurled die plate screws are tight and verify that oil covers 2/3 of oil reservoir window.

6-7. Visual Tests

Disconnect power from the device. Check the general physical condition of the equipment as follows:

a. Exterior and Interior Surfaces. All surface finishes must be free from rust, scratches, or other damage. Surfaces must not be damaged.

b. Cables. The lead connections of all cables must be secure. All cable connectors must be undamaged and cables should not be cracked, frayed, or routed to place. strain on the wires.

c. Hardware. All bolts and screws, such as slide mounting screws, panel mounting screws, motor mounting bolts, and mechanism mounting screws must be tight.

d. PC Cards. Check that all printed circuit cards in logic assembly A1 are mounted securely in the proper connector (para 1-6).

6-8. Operational Tests-Fixed Voltage and Frequency

a. Preliminary Procedure.

(1) Set the switches and controls on the AUTODIN Device Test Set (test set) as follows:

115 VAC circuit breaker to OFF
ASSIGNMENT to NOT ASSIGNED
MODE to AUTO
DEVICE SELECT to CP
CYCLE to CONT
MESSAGE FORMAT to A
PUNCH CONTROL:
LS/HS SELECT to HS
PARITY to GOOD
INPUT SEL to CCU
UK INTERLOCK to OFF

(2) Position the POWER switch on the variable frequency and voltage source (CML N5000A) to ON and allow a 5-minute warmup.

(3) Position the HIGH VOLTAGE switch on the variable frequency and voltage source to ON.

(4) Adjust the OUTPUT LEVEL control on the variable frequency and voltage source to produce ? reading of 120 VAC on the OUTPUT VOLTAGE meter. Adjust the frequency control for 60 CPS.

(5) Position the 115 VAC circuit breaker switch on the test set to ON and verify that the test set AC on lamp lights.

(6) With current limiting control set fully clockwise, check that test set dc power supplies are supplying proper voltage output levels.

+4.75 VDC ±0.1 VDC
+12.0 VDC ±0.1 VDC
-12.0 VDC ±0.1 VDC

(7) Press the AC POWER switch on the high-speed card punch (HSCP) and verify that the switches and indicators light as follows:

AC POWER switch-white
DC POWER indicator-white
STOP switch-red
CARD ALARM indicator-amber
HOPPER LOW indicator-amber
NOT ASSIGNED indicator-amber

(8) If motor stop kit (MWO 11-7440-217301/NAVSHIPS 0967-324-0180/TCTO 31W42G-501) has been incorporated into the HSCP being tested, place MOTOR CONTROL switch on motor stop assembly to CONTINUOUS RUN and verify that punch mechanism motor is operating. Leave switch in CONTINUOUS RUN position.

(9) Verify that the blower in the HSCP cabinet is operating.

(10) Press the high-speed card punch AC POWER switch and verify the following results:

(a) No HSCP switches or indicators are illuminated.
(b) Punch mechanism drive motor is not operating.
(c) Blower in cabinet is not operating.

(11) Remove the two 15 VAC LAMP fuses from the power supply.

(12) Press the AC POWER switch on the HSCP and, verify the following results:

(a) High-speed card: punch DC POWER indicator lights, but all other switches and indicators are out.
(b) Punch mechanism drive motor is operating.
(c) Blower in HSCP cabinet is operating.

(13) Press the high-speed card punch AC POWER switch and replace the 15 VAC LAMP fuses.

(14) Remove the 120 VAC 10 A DRIVE MOT fuse from the power supply.

(15) Press the AC POWER switch on the HSCP and verify the following:

(a) AC POWER switch, STOP switch, DC POWER indicator, HOPPER LOW, CARD ALARM, and NOT ASSIGNED indicators are lit.

(b) Blower in cabinet is operating.

(c) Punch mechanism drive motor is not operating.

(16) Press the AC POWER switch and replace the DRIVE MOT fuse.

(17) Remove the 120 VAC 3 A FAN fuse from the power supply.

(18) Press AC POWER switch and verify the following:

(a) AC POWER switch, STOP switch, DC POWER indicator, HOPPER LOW, CARD ALARM, and NOT ASSIGNED indicators are lit.

(b) Punch mechanism drive motor is operating.

(c) Blower in cabinet is not operating.

(19) Press AC POWER switch and replace the FAN fuse.

(20) Remove the 120 VAC PWR SUP INPUT fuse from the power supply.

(21) Press the AC POWER switch on the HSCP and verify the following:

(a) No switches or indicators on the HSCP are illuminated.

(b) Punch mechanism drive motor is not operating.

(c) Blower in cabinet is not operating.

(22) Replace the PWR SUP INPUT fuse and remove the +4.75 V fuse.

NOTE

Following depression of the AC POWER switch (23), below, the drive motor may run and the blower may operate, and switches and indicators may light momentarily until the power supply shuts off. The conditions of (23) (a) through (c) below, should be observed within 7 seconds after the AC POWER switch is pressed.

(23) Press the AC POWER switch on the HSCP and observe the following:

(a) No switches or indicators on the HSCP are illuminated.

(b) Punch mechanism drive motor is not operating.

(c) Blower in cabinet is not operating.

(24) Replace +4.75 V fuse in the power supply.

(25) Remove the +12 V, -12 V, and -48 V fuses from the power supply, one at a time, repeating (23) above each time.

(26) With all fuses installed in the power supply, press the AC POWER switch. Verify that the switches and indicators light as listed in (7) above, the punch mechanism drive motor runs, and the blower in the cabinet operates.

(27) Allow a 15-minute warmup before proceeding with the tests.

b. Lamp Test. Press the LAMP TEST switch on the control panel of the HSCP and verify that the following indicators light:

Switch/Indicator	*Color*
NOT ASSIGNED	Amber
HOPPER LOW	Amber
CHAD ALARM	Amber
CARD ALARM	Red
OUT OF SYN	Red
MOTION FAIL	Red
PARITY ERROR	Red
PUNCH ERROR	Red
STEP ERROR	Red
CODE CONV ERROR	Red
DC POWER	White
AC POWER	White
START	Green and White
STOP	Red
LOCAL TEST	Amber

c. Local Operation.

(1) *Single feed.*

(a) Load approximately 1000 cards into the hopper. Verify that the HOPPER LOW indicator extinguishes.

(b) Press the high-speed card punch SINGLE FEED switch and verify that a card is picked and fed through the punch mechanism. Also verify that CARD ALARM indicator extinguishes.

(c) Press the SINGLE FEED switch approximately ten times and verify that a card is offset stacked each time the switch is pressed.

NOTE

The position of the cards may be marked on the stacker and compared with the cards processed later to verify that they were offset stacked.

(d) Remove all cards from the stacker and verify that they have not been punched or printed.

(2) *Local test.*

(a) Press the high-speed card punch LOCAL TEST switch. Verify that the STOP indicator extinguishes, the LOCAL TEST indicator lights, and cards are being punched.

(b) Allow the high-speed card punch to run for approximately 2 minutes, then press the STOP switch. Verify that STOP switch lights, LOCAL TEST indicator goes out, and cards are no longer being punched.

(c) Remove the processed cards from the stacker and visually verify that the punched information matches that of a prepunched card identical to that of figure 6-2 on a card-by-card basis. Inspect edges of the cards to insure they have not been damaged.

d. Remote Operation.

(1) *Interface lines.*

(a) Press test set LOGIC RESET switch.

(b) Place ASSIGNMENT switch on test set to ASSIGNED position. Verify that NOT ASSIGNED indicator on the high-speed card punch is extinguished and other switches and indicators on the HSCP do not change condition.

(c) Connect oscilloscope channel A input to test set ASSIG test point. Position oscilloscope controls to observe a dc level and verify a reading of 0.5 +0.5 VDC with the ASSIGNMENT switch in the ASSIGNED position.

(d) Place the test set ASSIGNMENT switch to NOT ASSIGNED. Verify a voltage level of 6.0 ± 1.0 VDC.

(e) Place ASSIGNMENT switch to ASSIGNED and verify that voltage level returns to 0.5 ±0.5 VDC.

(f) Connect oscilloscope channel A input to test set RDY test point. Verify a voltage level of 6.0 ± 1.0 VDC.

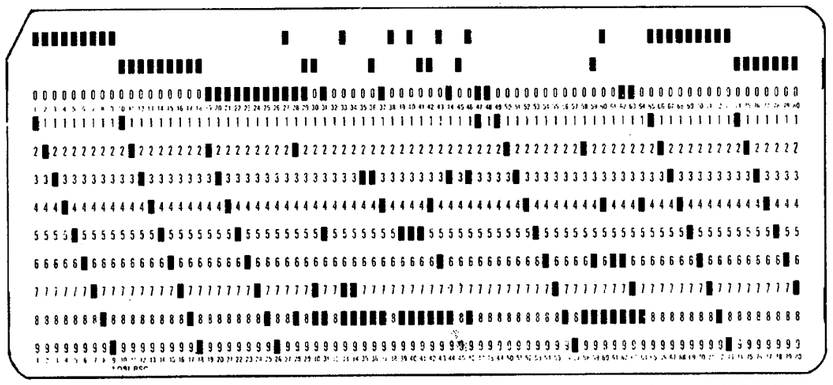
(g) Press the high-speed card punch START switch and verify a voltage level of 0.5. ±0.5 VDC at the RDY test point. Also verify that high-speed card punch START switch turns green, test set RDY indicator lights, and test set ALM STOP lamp goes out.

(h) Connect frequency counter to 1ST DR test point on test set. Adjust counter to count + 6 VDC pulses.

(i) Connect oscilloscope channel A input to SEL test point on test set. Verify a voltage level of 6.0 -± 1.0 VDC.

(j) Press START switch on test set and start timer. Verify a voltage level of 0.5 ±0.5 VDC at the SEL test point. Also verify that highspeed card punch START switch lights white and HSCP starts punching cards.

(k) Press the LOCAL TEST and SINGLE FEED switches on the HSCP. Verify that pressing the switches has no effect.



MWO 7440-217-30-4-1

Figure 6-2. High-speed card punch off-line test pattern.

(l) After 2 minutes, press the STOP switch on the HSCP. Verify that the last card is processed and stacked, and the HSCP stops.

(m) Verify that only the first card processed has been offset stacked a minimum of ¼ inch, and is punched in row 9, column 81. No other cards should be offset stacked.

(n) Count the actual number of cards processed in the 2-minute period. This number should equal frequency counter reading and should be at least 225. Disconnect frequency counter.

(o) Randomly select at least 10 punched cards and visually verify that the punched information matches that of a prepunched card like that shown in figure 6-3.

(p) Inspect the card edges to insure no damage has been caused by the HSCP.

(2) *Polar data and timing*.

(a) Load the hopper with approximately 1000 cards. Replenish as necessary.

(b) Connect oscilloscope channel 'A' input to 1st DR (first. data request) test point on test set. Trigger the oscilloscope internally on the pulse to be observed and adjust the oscilloscope controls to observe a waveform as shown in figure 6-4.

(c) Press the START switch on the HSCP. Press the START switch on the test set and verify that the pulse displayed has the parameters as shown in figure 6-4.

(d) Connect channel 'A' input of the oscilloscope to the DR (data request) test point on the test set. Verify that the pulse displayed has the parameters as shown in figure 6-4.

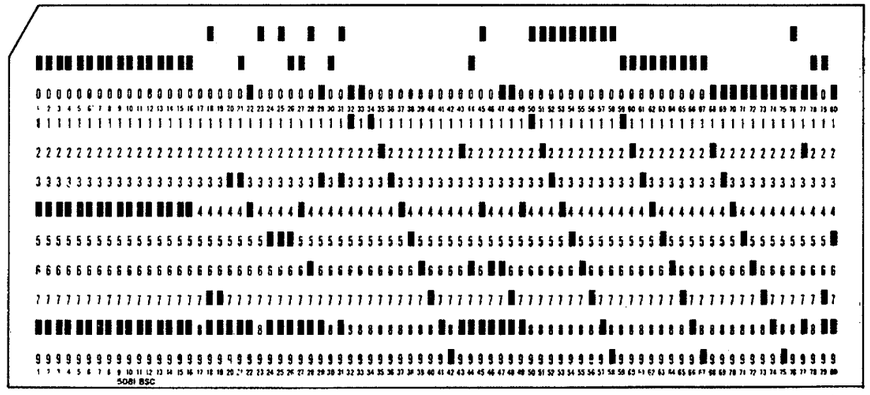
(e) Connect channel 'A' input of the oscilloscope to each of the following test points on the test set and verify that the pulses at each test point have a most positive level of 6.0 +1.0 VDC and a most negative level of -6.0 ±1.0 VDC:

Test set test point	*Measures*
DATA BITS 1	Data bit 1
DATA BITS 2	Data bit 2
DATA BITS 3-	Data bit 3
DATA BITS 4	Data bit 4
DATA BITS 5	Data bit 5
DATA BITS 6	Data bit 6
DATA BITS 7	Data bit 7
DATA BITS P	Parity bit
DA ST	Data strobe
DA CONT	Data control

(3) *Margin test*.

(a) Press AC POWER switch on HSCP to turn off power.

(b) Open front doors on cabinet, extend logic assembly Al and remove the four solenoid driver boards A1A3, A1A4, A1A5 and A1A6. Insert the four margin test PC boards (para 6-5b) in their place.



TM7440-217-15-168

Figure 6-3. High-speed card punch on-line test pattern.

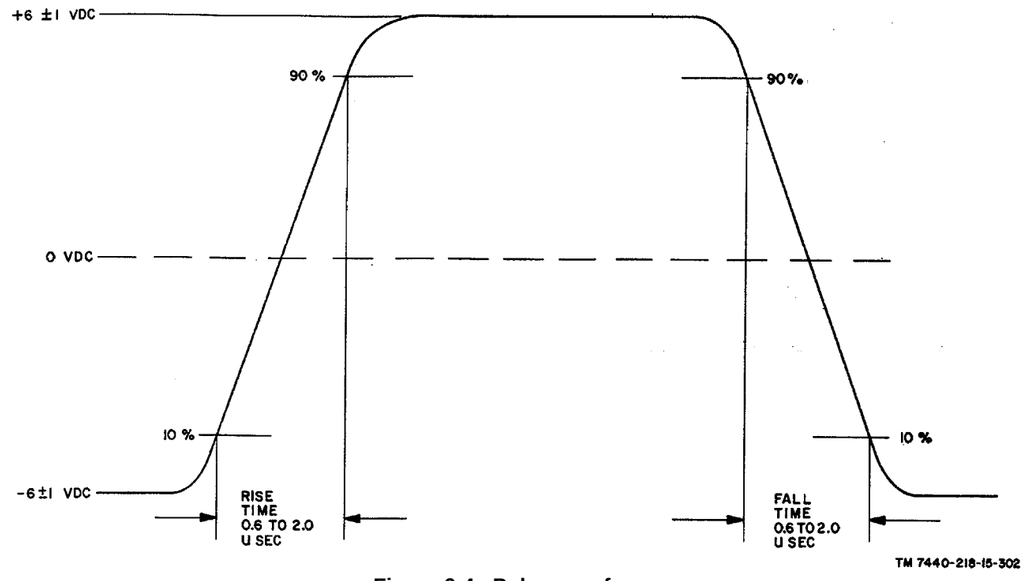


Figure 6-4. Polar waveform.

CAUTION

Connect negative terminal of external power supply to margin test board wires and connect positive terminal of external power supply to 48 VDC return point on power supply PS1.

(c) Connect wires from margin test PC boards to negative terminal of external 0-50 VDC, 1.5-ampere power supply.

(d) Connect positive terminal of external 0-50 VDC, 1.5-ampere power supply to TB2-9 on power supply PS1. (48 volt DC return point).

(e) Press AC POWER switch on HSCP.

(f) Turn on external 0-50 VDC, 1.5ampere power supply and adjust for 40.0 VDC output.

(g) Remove all cards from stacker.

(h) Connect frequency counter to 1st DR test point on test set and adjust to count + 6 VDC pulses.

(i) Press the START switch on the HSCP and test set.

(j) Allow the HSCP to process 4,000 cards continuously. Replenish cards in hopper as necessary and remove and save cards in stacker as necessary.

(k) A total of 4,000 cards should be processed with no punch failures and no interruption of card feeding. Any interruption of card feeding not attributable to a damaged or warped card should be considered a failure. No cards should be offset stacked except the first (header) card.

(l) When the frequency counter indicates 4,000 cards have been punched, press STOP switch on HSCP.

(m) Either visually verify that all cards punched conform to the punch pattern shown in figure 6-3, or run the cards through a Reader, Punched Card RP-152/G connected to a Page Printer RP-157/G through a Common Control Unit C-8120(P)/G operating in the I/O mode. Examine the page printout for the sequence of characters given in table 6-1. Inspect cards to insure they have not been damaged in the transport.

(n) Place ASSIGNMENT switch on test set to NOT ASSIGNED and verify that NOT ASSIGNED indicator on HSCP lights amber.

(o) Press LOCAL TEST switch on HSCP and verify the following:

1. LOCAL TEST switch lights amber.
2. STOP switch goes out.

3. Test pattern is punched on cards.

(p) After approximately 30 seconds press STOP switch on HSCP.

(q) Remove cards from stacker and visually check that punched information matches a prepunched card as shown in figure 6-2. Inspect cards to insure they have not been damaged in the transport.

(r) Turn off the external 0-50 VDC, 1.5ampere power supply and press AC POWER switch on HSCP.

(s) Remove four margin test PC boards and reinstall solenoid driver boards A1A3, A1A4, A1A5 and A1A6.

(t) Press AC POWER switch to turn high-speed card punch on.

Table 6-1. Sequence of Characters-On-Line Card Punch Test

Column	Character	Column	Character	Column	Character
1	*	28	+	55	F
2	*	29	,	56	G
3	*	30	–	57	H
4	*	31	.	58	I
5	*	32	/	59	J
6	*	33	0	60	K
7	*	34	1	61	L
8	*	35	2	62	M
9	*	36	3	63	N
10	*	37	4	64	O
11	*	38	5	65	P
12	*	39	6	66	Q
13	*	40	7	67	R
14	*	41	8	68	S
15	*	42	9	69	T
16	*	43	:	70	U
17	---------	44	;	71	V
18	!	45	<	72	W
19	"	46	=	73	X
20	#	47	>	74	Y
21	$	48	?	75	Z
22	%	49	@	76	0
23	&	50	A	77	1
24	'	51	B	78	2
25	(	52	C	79	3
26	)	53	D	80	—
27	*	54	E		

NOTE: Encircled characters show character printed by AUTODIN printing equipment

e. Alarm Conditions.

(1) *Parity error*.

(a) Connect oscilloscope channel A input to the ALM STP test point on the test set and verify a 0.5 ± 0.5 VDC level.

(b) Position the test set PARITY switch to BAD. The PARITY lamp should light.

(c) Press the START switch on the HSCP. Verify that the test set RDY lamp lights.

(d) Press the test set START switch. Two cards should be processed.

(e) Verify the following results:

1. PARITY ERROR indicator on HSCP lights as soon as first card is processed.
2. BLK REP lamp on test set lights during processing of second card.
3. AUD ALM and ALM STOP indicators on test set light after second card is processed.
4. STOP indicator on HSCP lights.
5. The two cards processed are offset stacked and punched with a hole in row 4, column 81.
6. Oscilloscope indicates a voltage level of 6.0 + 1.0 VDC.

(f) Connect oscilloscope channel A input to the AUD RES test point on the test set. Adjust oscilloscope controls to view a 5 usec wide negative going pulse. Use the pulse being viewed as an external trigger.

(g) Press the AUDIBLE RESET switch on the HSCP. Verify that the AUD ALM lamp on the test set goes out. Press the AUDIBLE RESET switch as necessary to verify that the audible reset pulse is 5 µsec minimum in duration, with an amplitude of 6.0 ±1.0 VDC at its high level (starting and ending level), and 0.5 ±0.5 VDC at its low level during the pulse time.

(2) *Out of sync.*

(a) Position the test set PARITY switch to GOOD. The PARITY lamp should go out.

(b) Press and hold the test set DATA CONT pushbutton and then press the START switch on the HSCP.

NOTE

The DATA CONT pushbutton switch must be held depressed until the highspeed card punch stops processing cards. Then the pushbutton should be released.

(c) Verify the following results:

1. Two cards are processed and offset stacked.
2. The test set ALM STOP and BLK REP indicators light.
3. The OUT OF SYN and STOP indicators on the HSCP light.
4. PARITY ERROR indicator on HSCP goes out.

(d) Press the START switch on the HSCP. Verify that the OUT OF SYN indicator extinguishes and cards start to be punched and printed. Cards should correspond to figure 6-2.

(e) Press the STOP switch on the highspeed cardpunch.

(f) Press LOGIC RESET switch on test set.

(3) Code converter error.

(a) Place ASSIGNMENT switch on test set to NOT ASSIGNED.

(b) Press AC POWER switch on HSCP. Verify that HSCP is not operating and all lamps on the control panel are extinguished.

(c) Remove circuit card A8 from logic assembly AI, then press AC POWER switch on the HSCP. (Removal of circuit card A8 will produce a code converter error.) (d) Press LOCAL TEST switch on HSCP and verify the following:

1. LOCAL TEST switch lights during processing of one card, then extinguishes.
2. STOP control extinguishes during processing of one card, then lights.
3. CODE CONV ERROR indicator lights.
4. The processed card is offset stacked.

(e) Press LOCAL TEST switch again and verify the following:

1. CODE CONV ERROR indicator extinguishes.
2. LOCAL TEST switch lights during processing of one card, then goes out.
3. STOP switch goes out during processing of one card, then lights.
4. CODE CONV ERROR indicator lights.
5. One card is processed and offset stacked.

(f) Position the ASSIGNMENT switch on test set to ASSIGNED. Press the LOGIC RESET switch on test set, then press both START switches and verify the following:

1. CODE CONV ERROR indicator lights after first card is processed.
2. BLK REP indicator on test set lights during processing of second card.
3. ALM STOP indicator on test set lights after the second card is processed.
4. Two cards are processed and offset stacked, then the HSCP stops.

(g) Press the START switch on the HSCP again and verify the following:

1. CODE CONV ERROR indicator extinguishes, then lights when the first card is processed.
2. All indications of (f)2 through 4 above are obtained.

(h) Press AC POWER switch on HSCP and reinstall circuit card A8.

(4) *Punch error.*

CAUTION

Serious damage may result if pin XA5-5 is jumpered to any pin except XA5-7.

(a) Install a jumper wire between pin 5 of XA5 and pin 7 of XA5.

(b) Press AC POWER switch on highspeed card punch.

(c) Press test set LOGIC RESET switch.

(d) Press START switch on HSCP.

(e) Press START switch on test set and verify the following:

1. PUNCH ERROR indicator lights red as soon as first card is processed, and remains illuminated.
2. BLK REP indicator on test set lights during processing of second card.
3. ALM STOP indicator lights after second card is processed.
4. HSCP stops after processing and offset stacking two cards.
5. Both cards processed are punched in row 4, column 81.

(f) Position the ASSIGNMENT switch on test set to NOT ASSIGNED.
(g) Press LOGIC RESET switch on test set and verify that BLK REP lamp goes out.
(h) Press LOCAL TEST switch on HSCP and verify the following:
1. One card is processed and offset stacked.
2. PUNCH ERROR indicator lights.
3. LOCAL TEST indicator extinguishes and STOP indicator lights.
4. Processed card is punched in row 4, column 81.
(i) Press LOCAL TEST switch again and verify the following:
1. PUNCH ERROR and STOP indicators go out, then light. again as first card is processed.
2. One card is processed and offset stacked. Card is punched in row 4, column 81.
(j) Press AC POWER switch on HSCP.
(k) Disconnect jumper wire between XA5-5 and XA5-7.

(5) *Loss of Motion*.
(a) Press the AC POWER switch on the high-speed card punch.
(b) Press the test set LOGIC RESET switch.
(c) Press the START switches on the HSCP and test set and allow cards to be processed.
(d) Press cards in hopper firmly downward so that a card does not become picked.
(e) When a card is not picked, verify the following:
1. Test set ALM STOP indicator lights.
2. STOP and MOTION FAIL indicators on HSCP light.
(f) Cover stacker photocell (fig. 3-13) with a card. Press START switch and SINGLE FEED switches. Verify that HSCP does not process cards.
(g) Press RESET switch on front of HSCP logic assembly Al. Verify that MOTION FAIL indicator stays on.
(h) Uncover stacker photocell and press START switch on IISCP. Verify that HSCP starts to process cards.
(i) Press RESET switch on front of logic assembly Al. Verify that cards are processed without interruption.
(j) Cover the stacker photocell again and verify the following:
1. Test set ALM STOP indicator lights.
2. STOP and MOTION FAIL indicators on HSCP light.
(k) Remove card from over stacker photocell.
(l) Place ASSIGNMENT switch on test set to NOT ASSIGNED.
(m) Press LOCAL TEST switch on HSCP and verify that MOTION FAIL indicator goes out and HSCP starts processing cards.
(n) Simulate a pick fail by firmly pressing the cards in the hopper downward while cards are being processed. Verify that HSCP stops processing cards with MOTION FAIL and STOP indicators illuminated.
(o) Press LOCAL TEST switch and verify cards are processed.
(p) Cover the stacker photocell and verify the following:
1. Test set ALM STOP indicator lights.
2. STOP and MOTION FAIL indicators on HSCP light.

NOTE
STEP ERROR indicator may also light.

(q) Remove card covering stacker photocell.

(6) Step fail.
(a) Prepare step fail cards by cutting approximately one column width off one end of each of two blank cards.
(b) Empty the hopper. Place five good cards in the hopper, then place the two short step fail cards in the hopper. Load approximately 200 good cards on top of the step fail cards.
(c) Press the LOCAL TEST switch and verify the following:
1. Six cards are processed.
2. The sixth card is offset stacked.
3. STEP FAIL indicator is illuminated.
(d) Press the LOCAL TEST switch again and verify that only one card is processed and .offset stacked. Verify that the STEP FAIL indicator extinguishes and then lights again.
(e) Empty the hopper. Place five good cards in the hopper with the two short step fail cards on top of them. Place approximately 200 good cards on top of the step fail cards.
(f) Press LOGIC RESET switch on test set and place ASSIGNMENT switch to ASSIGNED.
(g) Press the START switch on the test 6-6 set and the START switch on the HSCP. Verify the following:
1. STEP FAIL indicator lights when sixth card is processed.
2. HSCP stops after the sixth and seventh cards are processed and offset stacked.
3. ALM STOP and BLK REP indicators on test set light.
(h) Place ASSIGNMENT switch on test set to NOT ASSIGNED.

(7) *Chad alarm.*
(a) Press AC POWER switch on-HSCP.
(b) Remove chad from chad bag and place the 4-pound test weight in the bag. Replace chad bag.
(c) Press AC POWER switch and verify that CHAD ALARM indicator does not light.
(d) Press AC POWER switch, remove chad bag, and replace 4-pound test weight with an 8-pound weight. Replace chad bag.
(e) Press AC POWER switch and verify that CHAD ALARM indicator lights.
(f) Place ASSIGNMENT switch on test set to ASSIGNED and press LOGIC RESET switch.
(g) Lift chad bag until CHAD ALARM indicator extinguishes. Press the START switch on the HSCP and allow cards to be processed.
(h) Release the chad bag and verify that CHAD ALARM indicator lights and HSCP continues to process cards.
(i) Press the EOM switch on the test set. Verify that the HSCP stops immediately.
(i) Press AC POWER switch on HSCP and remove the 8-pound weight from the chad bag.
(k) Reinstall chad bag, press AC POWER switch and verify that CHAD ALARM indicator is extinguished.

(8) *Hopper low and hopper empty*.
(a) By adding or removing cards, insure that there are approximately 300 cards in the high-speed card punch hopper.
(b) Press START switch on high-speed card punch.
(c) Connect channel A input of the oscilloscope to the OP ALM test point on the test set. Verify that oscilloscope indicates a voltage level of 0.5 O0.5 VDC.
(d) Press START switch on test set. Highspeed card punch should start processing cards.
(e) When the test set OP ALM indicator lights, press the HSCP STOP switch. Verify the following results:
1. HOPPER LOW indicator on LSCP is lit.
2. Oscilloscope indicates 6.0 +1.0 VDC.
(f) Connect frequency counter to 1st DR test point on test set. Adjust frequency counter to count +6 VDC pulses.
(g) Press the high-speed card punch START switch.
(h) Press the test set START switch and allow the HSCP to process all cards in the hopper. When the last card is removed from the hopper, verify the following results:
1. High-speed card punch stops.
2. ALM STOP and OP ALM indicators on test set light.
3. CARD AL.4RM, HOPPER LOW, and STOP indicators on high-speed card punch light.
4. Frequency counter indicates between 139 and 241.

(9) *Stacker full.*
(a) Load the stacker with 900 cards.
(b) Load the hopper with approximately 500 cards and verify that the HOPPER LOW indicator is extinguished.
(c) Reset the frequency counter.
(d) Press the START switch on the highspeed card punch and verify that the CARD ALARM indicator goes out.
(e) Press the test set START switch and allow cards to be processed until the stacker becomes full. When the stacker becomes full, verify the following results:
1. High-speed card punch stops when the stacker full switch is activated.
2. CARD ALARM and STOP indicators on HSCP light.
3. ALM STOP indicator on test set lights.
4. Frequency counter reads 100 or greater. (Stacker must contain at least 1,000 cards.) (f) Remove all cards from the stacker.
(g) Press the SINGLE FEED switch on the HSCP and verify that the card alarm indicator is extinguished.

(10) *Cancel.*
(a) Position the test set CYCLE switch to SING.
(b) Press the test set LOGIC RESET switch.
(c) Press the high-speed card punch START switch.
(d) Connect channel A input of oscilloscope to CNCL test point on test set. Verify a

voltage reading of -6.0 ± 1.0 VDC.

(e) On the test set, press and hold the CNCL pushbutton and press the START switch.

(f) Verify that a pulse is displayed having a most positive voltage level of +6.0 +1.0 VDC and a most negative level of -6.0 + 1.0 VDC.

(g) Also verify that the high-speed card punch START switch is green, and a single card has been processed and offset stacked. The card should be punched in row 8 of column 81.

(h) Press the high-speed card punch STOP switch.

(i) Press high-speed card punch AC POWER switch.

f. Motor Stop Test.

NOTE

This test is only applicable to highspeed card punches having MWO 117440-217-30/1/NAVSHIPS 0967-3240180/TCTO 31W4-2G-501 (motor stop kit) incorporated.

(1) Place ASSIGNMENT switch on test set to NOT ASSIGNED.

(2) Place MOTOR CONTROL switch on HSCP motor stop assembly to AUTOMATIC STOP position.

(3) Adjust potentiometer A21R15 maximum counterclockwise.

(4) Press AC POWER switch on HSCP. Verify drive motor does not start.

(5) Press SINGLE FEED switch. Drive motor should start and one card should be processed. Verify drive motor continues to run for up to 30 seconds, then shuts off.

(6) Press LOCAL TEST switch. Verify drive motor starts, and cards are processed.

(7) Press STOP switch on HSCP. Verify cards are not being processed and drive motor continues to run for up to 30 seconds, then shuts off.

(8) Place ASSIGNMENT switch on test set to ASSIGNED. Place CYCLE switch to SING and press LOGIC RESET switch.

(9) Press START switch on HSCP.

(10) Press START switch on test set and verify the following:

(a) Drive motor of HSCP starts.

(b) Single card is processed and offset stacked.

(c) Drive motor continues running for up to 30 seconds, then shuts off.

(11) On test set, press and hold CNCL pushbutton and press the START switch. Verify the following:

(a) Drive motor of HSCP starts.

(b) Single card is processed and offset stacked.

(c) Drive motor continues running for up to 30 seconds, then shuts off.

(12) Place ASSIGNMENT switch on test set to NOT ASSIGNED.

(13) Adjust potentiometer A21R15 fully clockwise.

(14) Press LOCAL TEST switch and verify that drive motor starts and cards are processed.

(15) Press STOP switch on HSCP. Verify that card processing stops and drive motor continues running for more than 5 minutes, then shuts off.

(16) Place MOTOR CONTROL switch to CONTINUOUS RUN and press AC POWER switch on high-speed card punch.

6-9. Operational Tests-Variable Voltage and Frequency

a. Preliminary Procedure.

(1) Position the switches on the test set as follows:

115 VAC circuit breaker to OFF
ASSIGNMENT to ASSIGNED
MODE to AUTO
DEVICE SELECT to CP
CYCLE to CONT
PUNCH CONTROL:
LS/HS SELECT to HS
PARITY to GOOD
INPUT SEL to CCU
UK INTERLOCK to OFF

(2) Connect frequency counter to 1st DR test point on test set. Adjust frequency counter to count +6 VDC pulses.

b. Operation With Static Variations of Frequencies and Voltages (50 Hz).

(1) Convert the high-speed card punch for 50-Hertz operation by performing the instructions for 50 Hertz conversion in TM 11-7440-239-15/NAVSHIPS 0967-324-0110/TO 31W4-4-1-111.

(2) Position variable frequency and voltage controls on CML N5000A to the first (132 VAC, 50 CPS) position indicated on the chart below (positions indicated by an 'X').

Test Voltage (VAC)	Test Frequency (CPS)		
	47.5	50	52.5
132		X	
120	X	X	X
96		X	

(3) Reset frequency counter to 0 count.

(4) Press the high-speed card punch START switch.

(5) Press the START switch on the test set and start the timer.

(6) Allow the HSCP to process cards for 1 minute, then press the STOP switch and stop the timer.

(7) Record the time (X) in seconds.

(8) Record the frequency counter reading, indicating the cards (Y) processed during the 1-minute period.

(9) Using the following formula, verify that the high-speed card punch processed cards at the minimum rate of 112 cards per minute, or the Y≥Z:

$$Z = \frac{112\ X}{60}$$

(10) randomly select at least ten cards from those punched above. Verify the printing and punched code accuracy by comparing them to the standard prepunched card, (fig. 6-3).

(11) Select one card and place card on the 80-column card gauge (FSN: 5895-980-8692, IBM No. 9157401) as shown in figure 6-5.

(12) With card in place, determine that hole spacing and hole size correspond to the colored rectangles on card gauge plate. If the holes are misaligned, a silver color will show through the hole. When measured with a pocket comparator, the silver area which shows through the hole should not exceed 0.017 inch in the horizontal plane, nor 0.010 inch -in the vertical plane. Hole size should be 0.055 ±0.001 x 0.125 ±0.001 inch.

(13) Repeat (3) through (12) above for all remaining settings of voltage and frequency as indicated by an 'X' in the chart of (2) above.

c. Dynamic Variable Voltage at 50 Hertz.

(1) Adjust the variable voltage and frequency source for 50 Hertz and 120 VAC. Reset frequency counter to 0 count.

(2) Press the START switch on the highspeed card punch.

(3) Press the test set START switch and start the timer. The HSCP will start processing cards.

(4) Vary the OUTPUT LEVEL adjust on the CML N5000A from a nominal 120 VAC to

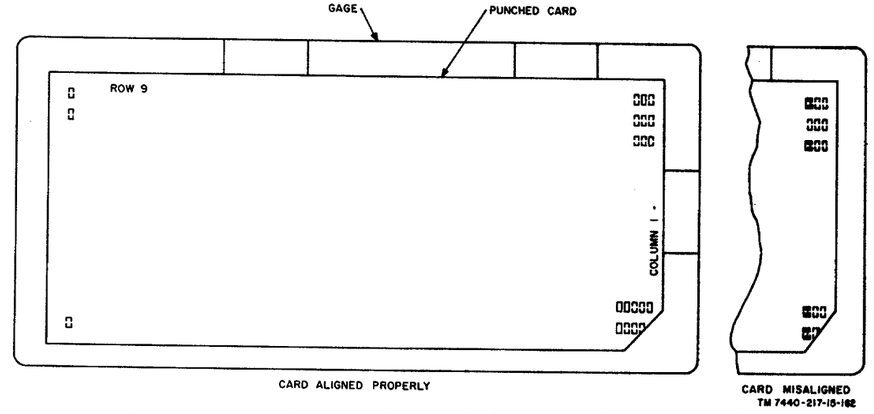


Figure 6-5. 80 column card gauge being used with HSCP cards.

a minimum of 96 VAC, then to a maximum of 132 VAC, and return to 120 VAC. This cycle should be completed in not less than 45 seconds nor more than 90 seconds.

(5) At the end of the cycle, press the HS-CP STOP switch and stop the timer.

(6) Record the time (X) in seconds.

(7) Record the frequency counter reading, indicating the cards (Y) processed during the period.

(8) Using the following formula, verify that the high-speed card punch processed cards at the minimum rate of 112 cards per minute, or that $Y \geq Z$:

$$Z = \frac{112\ X}{60}$$

(9) Randomly select at least ten cards from those punched above. Verify the printing and punched code accuracy by comparing them to the standard prepunched card, (fig. 6-3).

(10) Select one card and place card on the 80-column card gauge (FSN: 5895-980-8692, IBM No. 9157401) as shown in figure 6-5.

(11) With card in place, determine that hole spacing and hole size correspond to the colored rectangles on card gauge plate. If the holes are misaligned, a silver color will show through the hole. When measured with a pocket comparator, the silver area which shows through the hole should not exceed 0.0.17 inch in the horizontal plane, nor 0.010 inch in the vertical plane. Hole size should be 0.055 ±0.001 x 0.125±0.001 inch.

d. Operation With Static Variations of Frequencies and Voltages (60 Hz).

(1) Convert the high-speed card punch for 60-hertz operation by reversing the instructions for 50-hertz conversion in TM 11-7440-239-15/ NAVELEX 0967-324-0110/TO 31W4-4-1-111.

(2) Position variable frequency and voltage controls on CML N5000A to the first (132 VAC, 60 CPS) position indicated on the chart below (positions indicated by an 'X').

Test Voltage (VAC)	Test Frequency (CPS)		
	57	60	63
132.....		X	
120.....	X	X	X
96.....		X	

(3) Reset frequency counter to 0 count.

(4) Press the high-speed card punch START switch.

(5) Press the START switch on the test set and start the timer.

(6) Allow the HSCP to process cards for 1 minute, then press the STOP switch and stop the timer.

(7) Record the time (X) in seconds.

(8) Record frequency counter reading, indicating the cards (Y) processed during the 1-minute period.

(9) Using the following formula, verify that the high-speed card punch processed cards at the minimum rate of 112 cards per minute, or that $Y \geq Z$:

$$Z = \frac{112\ X}{60}$$

(10) Randomly select at least ten cards from those punched above. Verify the printing and punched code accuracy by comparing them to the standard prepunched card (fig. 6-3).

(11) Select one card and place card on the 80-column card gauge (FSN: 5895-980-8692, IBM No. 9157401) as shown in figure 6-5.

(12) With card in place, determine that hole spacing and hole size correspond to the colored rectangles on card gauge plate. If the holes are misaligned, a silver color will show through the hole. When measured with a pocket comparator, the silver area which shows through the hole should not exceed 0.017 inch in the horizontal plane, nor 0.010 inch in the vertical plane. Hole size should be 0.055 ± 0.001 x 0.125 ± 0.001 inch.

(13) Repeat (3) through (12) above for all remaining settings of voltage and frequency as indicated by an 'X' in the chart of (2) above.

e. Dynamic Variable Voltage at 60 Hertz.

(1) Adjust the variable voltage and frequency source for 60 hertz and 120 VAC. Reset frequency counter to 0 count.

(2) Press the START switch on the high-speed card punch.

(3) Press the test set START switch and start the timer. The HSCP will start processing cards.

(4) Vary the OUTPUT LEVEL adjust on the CML N5000A from a nominal 120 VAC to a minimum of 96 VAC, then to a maximum of 132 VAC, and return to 120 VAC. This cycle should be completed in not less than 45 seconds nor more than 90 seconds.

(5) At the end of the cycle, press the HS-CP STOP switch and stop the timer.

(6) Record the time (X) in seconds.

(7) Record the frequency counter reading, indicating the cards (Y) processed during the period.

(8) Using the following formula, verify that the high-speed card punch processed cards at the minimum rate of 112 cards per minute, or that $Y \geq Z$:

$$Z = \frac{112\ X}{60}$$

(9) Randomly select at least ten cards from those punched above. Verify the printing and punched code accuracy by comparing them to the standard prepunched card (fig. 6-3).

(10) Select one card and place card on the 80-column card gauge (FSN: 5895-980-8692, IBM No. 9157401) as shown in figure 65.

(11) With card in place, determine that hole spacing and hole size correspond to the colored rectangles on card gauge plate. If the holes are misaligned, a silver color will show through the hole. When measured with a pocket comparator, the silver area which shows through the hole should not exceed 0.017 inch in the horizontal plane, nor 0.010 inch in the vertical plane. Hole size should be 0.055 ±0.001 x 0.125 - ±0.001 inch.

6-10. Shutdown

a. Press AC POWER switch on high-speed card punch.

b. Position 115 VAC circuit breaker on test set to OFF.

c. Position the CML N5000A HIGH VOLTAGE switch to OFF; then place the POWER switch to OFF.

d. Remove connection between high-speed card punch and CML N5000A.

e. Remove connection between high-speed card punch and test set.

Section III. PUNCH HEAD PERFORMANCE STANDARDS

6-11. Applicability of Punch Head Performance Standards

Punch Head, AP/2, 125 CPM (Part No. 110638901) of the Card Punch, High Speed RO-312/G must be tested thoroughly after repair to insure that it meets adequate performance requirements for return to stock and reissue. Use the tests described in this section to measure the performance of the repaired punch head. Punch heads that are to be returned to stock should meet all the performance standards given in this section.

6-12. Applicable References

a. Repair Standards. Refer to paragraph 6-4a.

b. Technical Publications. The technical publications applicable to punch head to be tested are listed in appendix A.

c. Modification Work Orders. Perform the work specified by modification work orders pertaining to the punch head before making the tests specified. DA Pam 310-7 lists all available MWO's.

6-13. Test Facilities Required

a. *Tools and Test Equipment*. In addition to the tools and test equipment listed in appendix C, the following special tools and test equipment are required to check the punch head performance standards:

AP/2 Test panel (Mohawk Data Sciences)	See fig. 6-7 and c below.
AP/2 Test stand (Mohawk Data Sciences)	See fig. 6-7 and c below.
Variable voltage/variable frequency power source (CML Model N5000A with 0.5% accuracy; with plug-in oscillator, CML model SG-13A with 0.25% accuracy or equivalent).	See fig. 6-7.
Frequency counter, Beckman, Model 7350A, or equivalent; accuracy of 5 parts in 10s per week	See fig. 6-7
Oscilloscope, duel trace, AN/iSM-3090, or equivalent	Check and measure waveforms.
D.C. Test Box P-259 (Mohawk Data Sciences)	See fig. 6-6 and b below.
Associated Research ACHypot, Model No412, or equivalent (calibrated for 0.5 milliamps of current to cause leakage light to glow)	Check insulation resistance of echo switch assembly.
Gauge, 80column card, IBM part No. 9157401 (NSN 58950-980-8692)	Check punched cards.

b. D.C. Test Box. D.C. Test Box P-259 (Mohawk Data Sciences) is required to check the punch lead in a static mode in two stages of assembly.

(1) When punch head is partially assembled, the D.C. Test Box is used to apply potential to various magnets while setting required clearances.

(2) When punch head is completely assembled, the D.C. Test Box is used to check echo check switches, code magnets, fence magnet, eject magnet, lamp and photo cells in a nominal and marginal voltage condition.

c. *AP/2 Test Panel and Stand*. The AP/2 Test Panel and Stand (Mohawk Data Sciences) are required to final test the punch head dynamic mode and is used as follows:

(1) Includes margin testing of gate magnet

voltage, feed magnet voltage, eject magnet voltage, code magnet voltage, and lamp voltage.

(2) Test points are provided for observing code magnet signals on the oscilloscope.

(3) Echo contact signals and reluctance pickup signals are provided.

(4) Meter circuits are provided for monitoring photo cells and variable voltage.

(5) Special test patterns are provided which include long and short RY patterns and Hollerith type pattern. Sixteen column fast eject is provided.

6-14. Echo Switch Assembly Insulation Resistance Check

Before the punch head is tested in the static (bench) and dynamic (operational) modes, the following insulation resistance check is made on the echo switch assembly (Part No. 110640601) in the punch head. Hypot, model No. 412, or equivalent, is used for this check. Static tests are for inprocess checks only (diagnostics).

a. Setup Sequence.

(1) Connect connector (Mohawk No. P-831) to echo switch connector assembly.

(2) Connect metal frame of contact assembly (Part No. 384003401) to metal frame of connector assembly (Part No. 110611901) with jumper wire (Mohawk No. P-832).

(3) Connect Hypot ac plug to 115-volt outlet. Insure that the ac input power switch is in the OFF position.

(4) Place variable control knob of Hypot completely counterclockwise.

(5) Connect black lead of Hypot to the frame of the switch assembly.

(6) Connect red lead of Hypot to connector P-831.

(7) Turn Hypot power switch to the ON position.

b. Test Sequence.

(1) Turn variable control knob of Hypot slowly clockwise (while observing indicator lights) until meter reads 300 volts.

(2) If breakdown light glows, the insulator has broken down and is unacceptable.

(3) If leakage light glows, insulation resistance is less than 600,000 ohms and is unacceptable.

(4) To isolate a fault, remove connector P-831 and move red lead of Hypot from one pin on connector assembly to another until the faulty area is discovered.

(5) If neither light glows after approximately 1 second, insulator is good.

(6) Turn variable control knob of Hypot completely counterclockwise.

(7) Turn Hypot power switch to the OFF position. Disconnect Hypot black and red leads from the frame of the switch assembly and connector P-831.

(8) Remove jumper wire P-832 from connector and contact assemblies.

(9) Remove connector P-831 from the echo switch connector assembly.

(10) Punch head is now ready for the static mode test.

6-15. Punch Head Tests in the Static Mode (fig. 6-6)

The following tests are performed on the AP/2 Punch Head in the static (bench) mode using D.C. Test Box (Mohawk No. P-259).

a. Setup Sequence.

(1) Connect the three cable assemblies from the D.C. Test Box as follows:

(a) Cable marked "Code Magnets" goes to connector J1 on the punch head.

(b) Cable marked "Checking Contact" goes to connector J3 on the punch head.

(c) Cable marked "Fence" goes to connector J4 on the punch head.

(2) Connect D.C. Test Box ac plug to 115-volt outlet. Insure that the ac power input switch is in the OFF position. Set switches on the test box as follows:

(a) Selection switch to PUNCH/MAG.

(b) Odd-even switch to the ON (up) position.

(c) Variable voltage control fully counterclockwise.

(d) Normal/photocell check switch to NORMAL.

(e) Margin/short switch to MARGIN.

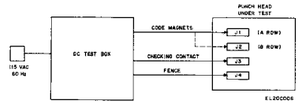


Figure 6-6. Punch head bench test setup (static mode).

b. Magnet Check.

(1) Set D.C. Test Box ac switch to the ON position.

(2) Slowly turn variable voltage control clockwise (increasing dc potential to punch magnets) until all magnets are pulled in. Specification is for all magnets in A row to pull in at 22.5 (±2.5) volts dc as observed on the tester panel meter.

(3) Decrease the potential to the magnets by slowly turning the variable voltage control counterclockwise. Specification is for all magnets in A row to drop out at no less than 5 volts dc as observed on the tester panel meter.

(4) After reducing the variable voltage source to zero, set the D.C. Test Box ac switch to the OFF position.

(5) Remove cable assembly marked "Code Magnets" from connector J1 on the punch head and insert it into connector J2 on the punch head (B row).

(6) Repeat (1), (2), and (3) above to check the B row magnet assemblies.

c. Eject Magnet Check.

(1) Set Selector switch on the D.C. Test Box to EJECT/MAG position.

(2) Using procedure outlined in b(1), (2), (3), and (4) above, check eject magnet for pull-in at 12 (+1) volts de, and dropout at no less than 5 volts dc.

d. Fence Magnet Check. Using procedure outlined in b(1), (2), (3), and (4) above, check fence magnet for pull-in at 27.5 (+2.5) volts dc, and dropout at no less than 5 volts dc.

e. Feed Magnet Check.

(1) Remove feed assembly from punch.

(2) Lock assembly into holding fixture.

(3) Connect D.C. Test Box to punch via cable J4. Turn variable voltage control to zero.

(4) Turn D.C. Text Box on. Place rotary switch to fence/feed position.

(5) Rotate sprocket counterclockwise until high clamp cam is reached.

(6) Increase dc voltage on test box to 7.5 volts. At this time, the armature assembly should release which is indicated by an audible click.

(7) Reduce voltage until armature assembly engages, again indicated by an audible click. This should occur at no less than 3.5 volts.

(8) Reassemble feed magnet assembly on punch and proceed to next step.

f. Lamp Adjustment.

(1) Set variable voltage on the D.C. Test Box to 26 volts dc.

(2) Set normal photocell switch to PHOTOCELL.

(3) Set selector switch to the LAMP position. Reading on panel meter should be 2 volts dc. If not, adjust lamp for required reading.

(4) Set normal photocell switch to NORMAL.

(5) Reduce variable voltage control to zero.

g. Registration check.

(1) Set selector switch on D.C. Test Box to PUNCH/MAG.

(2) Increase variable voltage source to a point where all punch magnets are pulled in (reference level, b (2) above).

(3) Insert an 80-column card into punch stopping at Fence gate.

(4) Turn punch drive pulley over punch head will punch one row (B row).

(5) Set selector switch to PUNCH/FD position.

(6) Increase variable voltage control until Fence gate pulls in (reference level, d above).

(7) Reduce voltage to 20 volts de.

(8) Turn punch drive pulley over until 39 more columns are punched.

(9) Remove card and check hole registration.

(10) Reduce variable voltage to zero.

h. Echo Check.

(1) Set selector switch on D.C. Test Box to PUNCH MAG.

(2) Observe that all contact switch lamps are illuminated.

(3) Adjust variable voltage control clockwise until all punch magnets de-energize.

(4) Slowly turn punch drive pulley over.

(5) Observe punch pins when they clear the guide block, the B row lamps should extinguish.

(6) Reduce variable voltage to zero.

(7) Remove code magnets plug located in connector J2 and replace in connector J1.

(8) Repeat (1) through (5) above and check A row lamps. Reduce variable voltage to zero.

(9) Turn selector switch to FENCE MAG.

(10) Increase variable voltage until Fence gate pulls in at 27.5 (+2.5) volts dc. Reduce voltage level to minimum potential that maintains pull-in.

(11) Insert 80 column card into punch head and push through punch.

(12) Start pulling card out slowly and observe the C.P.S. light. Listen for a faint click when trailing card edge passes first section of switch. At that time the C.P.S. light will illuminate.

(13) Pulling card out farther, a second faint click will be heard. At that time the C.P.S. light should extinguish.

NOTE

This completes the static test of the punch head. The punch head is now ready for the dynamic test on the AP/2 Test Panel.

6-16. Preoperational Test Conditions and Requirements (fig. 6-7)

Before the operational (dynamic) tests are made (para 6-17), the test conditions and requirements specified in a, b, and below shall be established.

a. Install Punch Head.

(1) Place punch head in the AP/2 test stand. Position the drive belt. Install two mounting bolts and one mounting nut.

(2) Connect punch magnet and function cables to the punch head connector.

(3) Check the main assembly and feed assembly oil level windows for proper oil level (1/3 to 12 of the window).

b. Equipment Turn On.

(1) Connect AP/2 test panel interconnect cable to the AP/2 test stand.

(2) Connect punch cooling fan to 115 volts ac, 60 Hz wall receptacle. Activate cooling fan.

CAUTION

Cooling fan must always be in operation when punch head is being tested.

(3) Connect punch motor ac leads to the test stand ac power block.

(4) Connect test panel to ac power (115 volts ac, 60 Hz).

(5) Connect frequency counter to the variable voltage/variable frequency source. Connect frequency counter to ac power (115 volts ac, 60 Hz).

(6) Connect variable voltage/variable frequency source to ac power.

(7) Turn on MAIN POWER BREAKER on the test panel.

(8) Connect test stand to 115 volts ac, 60 Hz. Punch motor will run.

c. Low Voltage/Frequency Start Test.

(1) Adjust variable frequency power source to 47.5 Hz.

(2) Adjust variable voltage power source to 96 volts.

(3) Disconnect the test stand from the wall receptacle and connect to the variable voltage/ variable frequency source. Start and stop the punch motor three times. The motor to show a positive start and come up to speed with no binding or hesitation.

(4) Readjust frequency to 60 Hz, variable voltage to 120 volts.

(5) Depress power on-off switch. The following lights should be illuminated:

Power on-off ..... Green
Start ..... White
Stop ..... Pink

d. Conditioning of Tabulating Cards. The punch cards should be kept in an environment of approximately 750 percent F, with relative humidity varying from no less than 45 percent to no more than 75 percent, with the cards remaining in this environment from 24 to 48 hours before use.

6-17. Punch Head Operational Tests (Dynamic Mode)

a. Registration Gate Photosensor.

(1) Light current check.

(a) Press power on-off switch to ON.

(b) Adjust var dc control fully counterclockwise.

(c) Press photocell light current switch.

(d) Rotate photocell selector switch to REGISTRATION GATE.

(e) Adjust var dc control to 45.5 volts. Observe reading on light dark current meter. Specification is for light current to be a minimum of 2 milliamperes.

(2) Dark current check.

(a) Insert a card through the picker throat into the punch head so that it contacts the registration gate. Light current will drop to zero.

(b) Adjust var dc control to 49.5 volts.

(c) Press photocell dark current switch. Observe reading on the light dark current meter. Specification is for dark current to be a maximum of 0.25 milliampere.

(d) Rotate photocell selector switch to OFF.

b. Registration Gate Margin.

(1) Operate margin.

(a) Rotate var dc control fully counterclockwise.

(b) Depress reg gate switch.

(c) Push and release manual control switch continually while rotating var dc control in the clockwise direction until reg gate contact indicator illuminates with each actuation of the switch. Specification is for the registration gate to operate at less than 40 volts.

(2) Release margin.

(a) Hold manual control switch depressed and rotate var de control counterclockwise slowly until the reg gate contact is extinguished.

(b) Specification is for the registration gate to release above 4 volts.

c. Eject Magnet Margin.

(1) Depress eject switch.

(2) Repeat b(1) and (2) above. Specification is to operate at less than 40 volts and to release above 4 volts.

d. Feed Magnet Margin.

(1) Press Feed switch.

(2) Adjust var dc control to 45 volts.

(3) Depress start switch.

(4) Rotate var dc control counterclockwise slowly until the punch stops or an erratic punch pattern is observed. Specification is for the feed magnet to operate at less than 40 volts.

e. Reluctance Pickup Amplitude.

(1) Connect oscilloscope to the Signal Check test points.

(2) Set test-operate switch to TEST.

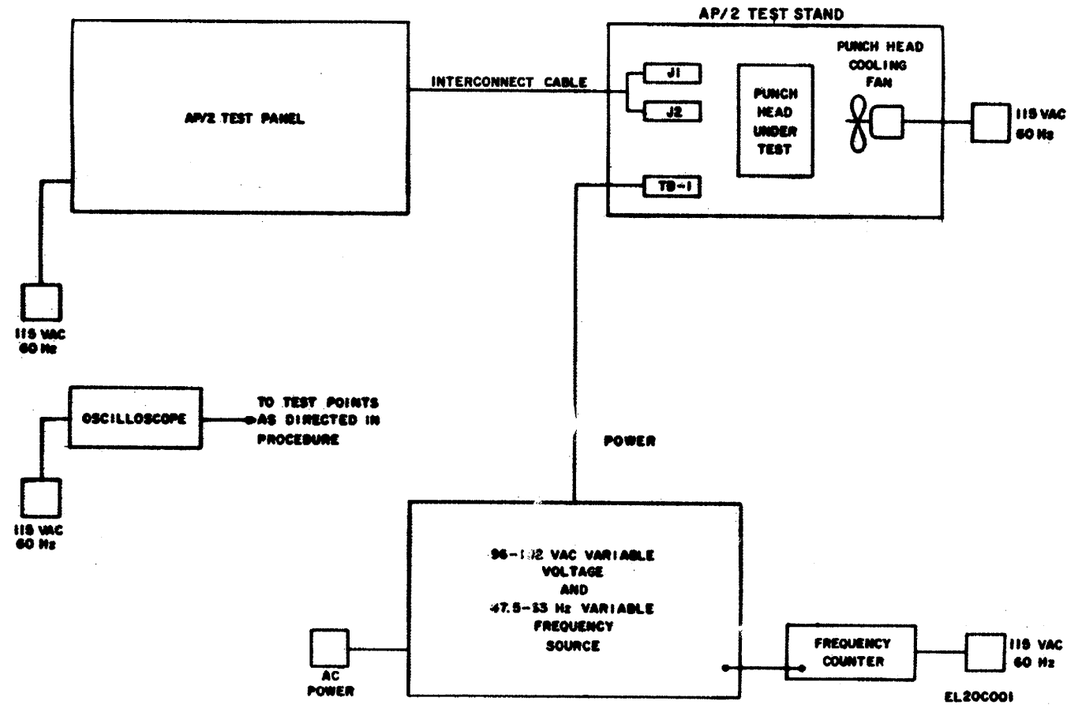


Figure 6-7. Punch head operational test setup

NOTE
Cards cannot be processed in this mode of operation.

(3) Observe the oscilloscope trace and note the peak-to-peak waveform. Specification is for the peak-to-peak amplitude to be 2.2 to 3.0 volts. All positive and negative cycles must be equal in amplitude. Signal-to-noise ratio shall not exceed 10: 1 (fig. 6-8).

(4) Return Test-Operate switch to OPERATE.

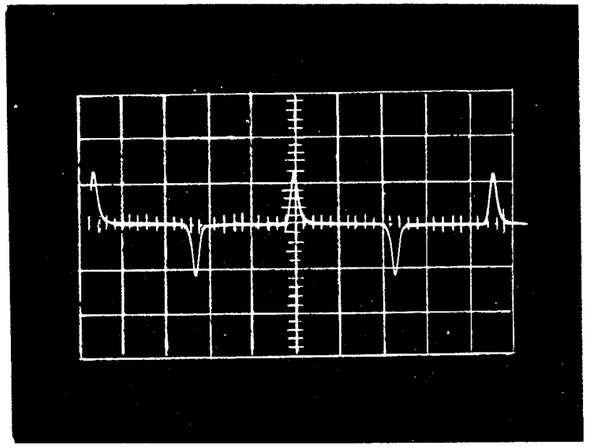


Figure 6-8. Reluctance pickup amplitude, 1 V/CM, 2 MSEC/CM

f. Interposer Pull-In.

(1) Adjust test set for normal Hollerith pattern.

(2) Load approximately 1000 cards in the input hopper.

(3) Connect oscilloscope to CODE MAGNET test point A-12.

(4) Depress start switch.

(5) Observe oscilloscope trace and measure interposer pull-in time. Specification is for pull-in time to be less than 5 milliseconds (fig. 6-9).

(6) Move oscilloscope to each test point, A-11 through A-9 and B-12 through B-9. Repeat (5) above.

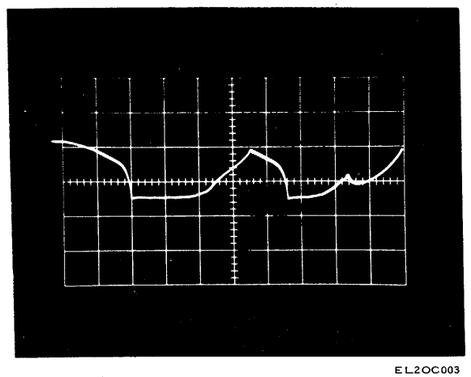


Figure 6-9. Interpose pull-in time, 10V/CM, 2 MSEC/CM.

g. Echo Checks.

(1) Load input hopper with approximately 1000 cards.

(2) Connect channel No. 1 of the oscilloscope to the CHECK CONTACT test point, channel No. 2 to 265° SAMPLE test point, and external trigger to the 85° SAMPLE test point.

(3) Position Echo Check Column switch to column A.

(4) Start punching normal Hollerith pattern.

(5) Rotate card row selector switch to position 12. Check the oscilloscope trace for the timing between the 265° pulses and the echo check contacts. Note the duration and location of the contact bounce. Specification is for the 265° pulse to occur to 0.5 millisecond or later after the start of the echo check pulse. Total pulse width must be 2.0 milliseconds minimum. There shall be no contact bounce during the open or the nonpunch interval. Closing contact bounce shall not exceed 2.5 milliseconds (fig. 6-10).

(6) Rotate card row selector switch to each position, 11 through 9. Move column switch to column B and rotate selector switch through positions 12 through 9. Repeat (5) above.

(7) Place echo check column switch in the OFF position.

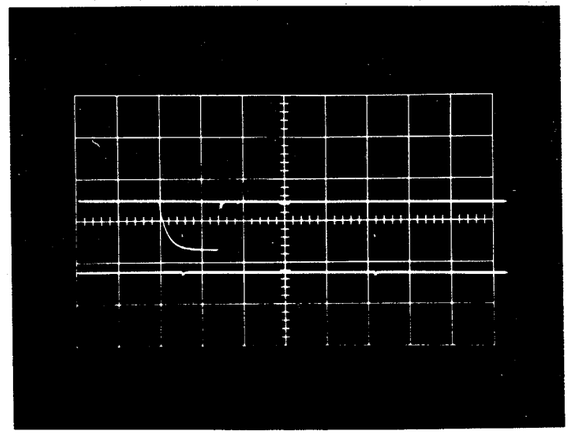


Figure 6-10. Echo check time and contact bounce, 10 V/CM, 2 MSEC/CM

h. Code Magnet Margins.

(1) Low voltage margin.

(a) Depress column A magnet switch. Adjust var voltage to 40 volts.

(b) Start punching cards.

(c) Slowly lower voltage until errors are indicated on the check error lights. Specification is to operate at 40 volts or lower.

(d) Depress column B Magnet switch. Repeat steps (a), (b), and (c) above.

(2) High magnet margin.

(a) Adjust var voltage to 50 volts.

(b) Start punching cards.

(c) Slowly raise voltage until errors are indicated on the check error lights. Specification is to operate at +3 volts or higher.

(d) Depress column A magnet switch. Repeat (a), (b), and (c) above.

i. Card Position Switch Check.

(1) Move the pos ck switch to the up position.

(2) Load approximately 1000 cards and insert one long and one short card in the stack.

(3) Start punching cards.

(4) Specification is for the punch to stop when a card is sensed that is out of tolerance. Noise on contact opening or closing shall not exceed 3 milliseconds (fig. 611).

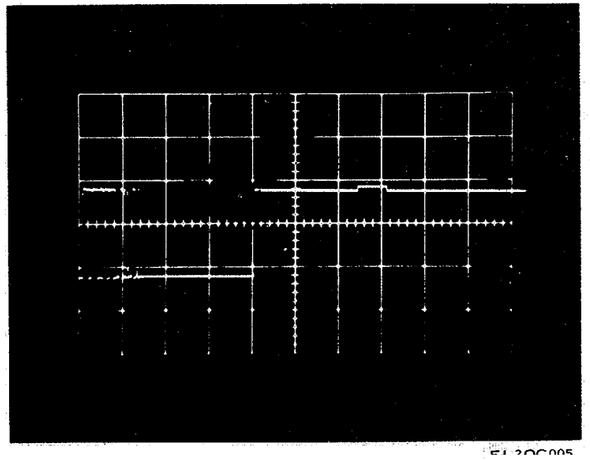


Figure 6-11. Card position switch, 10 V/CM, 2 MSEC/CM.

j. Fast Eject Check.

(1) Position the ry pattern switch to SHORT PATTERN.

(2) Start punching and process approximately 25 cards.

(3) Specification is for a: RY pattern to be punched in the first 16 columns and then for the cards to be ejected.

k. Punching of Columns 81-82.

(1) Position the card full selector to 82.

(2) Select normal Hollerith pattern.

(3) Start punching cards. Process approximately 10 cards. Specification is for normal pattern to be punched in all columns including 81 and 82.

l. Registration Swing.

(1) Load approximately 1000 cards in the input hopper.

(2) Adjust var ac voltage to 120 volts, and var frequency to 60 Hz.

(3) Punch the entire deck until the stacker full indicator is illuminated.

(4) Select five cards from the deck and check for registration and total accumulated feed error. Specification is no punched hold may be over ±0.010 inch from true location on a standard IBM card gauge over the entire 80 column card length.

(5) Readjust Var AC Voltage to 96 volts, and var frequency to 57 Hz. Punch 1000 cards. Repeat (4) above.

(6) Readjust var ac voltage to 132 volts, and var frequency to 63 Hz. Punch 1000 cards. Repeat (4) above.

6-18. Shutdown

a. Position the 115 volts ac circuit breaker on the test panel to OFF.

b. Position the ac switch on the variable voltage/variable frequency power source to OFF.

c. Position frequency counter ac switch to OFF.

d. Insure that the oscilloscope ac switch is positioned to OFF.

e. Shut off cooling fan for punch head.

f. Remove punch head from AP/2 test stand.

Section IV. A2 MECHANISM ASSEMBLY STANDARDS

6-19. Applicability of A2 Mechanism Assembly Standards

The components of A2 Mechanism Assembly (Part No. X14651B) of the Card Punch, High Speed RO-312/G must be tested thoroughly after repair to insure that they meet adequate performance requirements. Standards for the punch head, which is mounted on the A2 assembly, is covered in preceding Section III and will not be included in this section. No punch head will be returned to depot for repair until all the performance standards of the A2 assembly are met.

6-20. Applicable References

a. Repair Standards. Refer to paragraph 6-4a.

b. Technical Publications. The technical publications applicable to the A2 assembly are listed in Appendix A.

c. Modification Work Orders. Perform the work required in Modification Work Order MWO 11-7440-217-50-1 before making the tests specified.

6-21. Test Facilities Required

In addition to the tools and test equipment listed in Appendix C, the A2 Assembly Test Kit is required to check the A2 Mechanism Assembly standards. The A2 Assembly Test Kit contains the following special tools and test equipment:

Item	Quantity	Use
Fixture, alignment, TAD drawing No. ATE-D-0813	1	Picker alignment check
Bar, parallel alignment, TAD drawing No. ATE-B-0814	1	Picker alignment check
Base, dial indicator, magnetic, p/n 599-7743-7 (Brown & Sharpe)	1	Picker alignment check
Swivel, p/n 599-7739-1 (Brown & Sharpe)	1	Picker alignment check
Rod, mounting (TAD fabricated)	1	Picker alignment check
Clamp, swivel, p/n 599-7045 (Brown & Sharpe)	1	Picker alignment check
Gauge, dial micrometer, p/n 599-7034-2 (Brown & Sharpe)	1	Picker alignment check
Reducer, threaded, 3/8" to 1/4" NPT, p/n 4539K52 (McMaster-Carr)	1	Vacuum and pressure check
Gauge, vacuum/pressure, p/n 4004K11 (McMaster-Carr)	2	Vacuum and pressure check
Nipple, pipe, ¼" NPT, 1 1/2" long, p/n 4549K (McMaster-Carr)	2	Vacuum and pressure check
Nipple, pipe, 3/8" NPT. 1 1/2" NSN 4730-00-196-2069	1	Vacuum and pressure check
Tee, pipe, ¼" NPT, p/n 4520K21 (McMaster-Carr)	1	Vacuum and pressure check
Tee, pipe, 3/8" NPT, p/n 4520K22 (McMaster-Carr)	1	Vacuum and pressure check
Elbow, pipe, 90°, ¼" NPT, p/n 4515K31 (McMaster-Carr)	1	Vacuum and pressure check
Plug, pipe, ¼" NPT	2	Vacuum and pressure check
Tape, antiseizing, 1/2" wide, (Teflon) MIL-T-27730A	1 roll	Vacuum and pressure check
Gauge, dial, .075" range (Brown & Sharpe Model No. 8136-311)	2	Picker belt height check
Holder, dial gauge, (TAD fabricated)	1	Picker belt height check
Plunger, dial gauge (TAD fabricated)	2	Picker belt height check
Comparator, pocket, Model No. 25B250 (Jensen Tools)	1	Card registration check
Reticle pairs, widths, decimal inch sizes, p/n 25B125 (Jensen Tools)	1 pr.	Card registration check

NOTE

Items used in the vacuum and pressure check are required only if MWO 11-7440-217-50-1 has not been applied to the equipment.

6-22. Vacuum and Pressure Checks

The vacuum and pressure system in the A2 assembly must meet the requirements specified in paragraph 4-99a. Also, these checks must be made before the punch head is considered defective for return to depot for repair or overhaul.

a. If MWO 11-7440-217-50-1 has been applied to the high speed card punch, the only items needed from the A2 Assembly Test Kit to perform the vacuum and pressure checks are the two vacuum/pressure gauges (p/n 4004K11) listed in paragraph 6-21.

(1) Perform all the steps listed in paragraph 4-99b for checking the vacuum and pressure system.

(2) If the vacuum and pressure readings do not meet the requirements listed in paragraph 4-99a, perform the steps listed in paragraph 4-99c.

(3) When the vacuum and pressure system meets its requirements, perform the restoration steps listed in paragraph 4-99d.

b. If MWO 11-7440-217-50-1 has not been applied to the equipment, all the items listed for the vacuum and pressure check in paragraph 6-21 will be required. Proceed to temporarily install the vacuum and pressure gauge assemblies as described below.

NOTE

Caution must be exercised when installing the components in the vacuum and pressure assemblies. Do not overtighten fittings or stripped threads will result.

(1) *Installation of the vacuum gauge assembly.*

(*a*) Remove all power from the equipment. Open the rear door of the cabinet which will provide access to the back of the A2 assembly.

(*b*) Remove the vacuum relief valve (89 through 92, fig. 4-7) from the chassis assembly using a 3/4" open end or box wrench.

(*c*) Using the teflon pipe tape, single wrap all the male threads (in the opposite direction of the threads) of the reducer bushing (2, fig. 6-12), 2" nipple (3), and vacuum relief valve (5).

(*d*) Connect one end of the 1 ½" nipple to one of the straight through ends of the 3/8" tee (4). Hand tighten, or tighten lightly with slip joint pliers.

(*e*) Connect the vacuum relief valve to the other end of the 3/8" tee.

(*f*) Connect the reducer bushing to the tee end of the 3/8" tee using a 11/16 open end or box wrench.

(*g*) Remove the air filter can (132, fig. 4-7) from its base.

(*h*) Connect the vacuum test assembly to the chassis in the opening for the vacuum relief valve (fig. 6-12). Insure that the tee end of the 3/8" tee is in a vertical position.

(*i*) Connect the vacuum/pressure gauge (1) to the reducer bushing on the test assembly using a 9/16" open end wrench. Gauge should be in a position for easy reading.

(*j*) Reinstall the air filter can.

(2) *Installation of the pressure gauge assembly.*

(*a*) Remove pressure hose and fitting (54 and 129, fig. 4-7) which is connected between the tee fitting (130) on the air filter (132) and the nozzle mixer (84.1). Disconnect hose at nozzle mixer end first to allow for easier removal at air filter end.

(*b*) Using teflon pipe tape, single wrap all the male threads (in the opposite direction of the threads) on the two 1 1/2" nipples (3, fig. 6-13), and hose fitting (129, fig. 4-7).

(*c*) Connect a 1 1/2" nipple on each of the straight through ends of the 1/4" tee (2, fig. 6-13). Hand tighten, or tighten lightly with slip joint pliers.

(*d*) Connect the ¼" elbow (4) to one of the 1 1/2" nipples. Hand tighten or tighten lightly with slip joint pliers.

(*e*) Connect the pressure test assembly, using the other 1 1/2" nipple, to the open tee fitting on the air filter where the pressure hose had been removed.

(*f*) Connect the pressure hose (54, fig. 4-7) to the elbow end of the pressure test assembly utilizing the attached fitting (129). Connect other end of hose to the nozzle mixer.

(*g*) Connect the vacuum/pressure gauge (1, fig. 6-13) to the tee end of the ¼" tee (2) using a 9/16" open wrench. Gauge should be in a position for easy reading.

(3) After the vacuum and pressure test assemblies have been installed, reapply power to the high speed card punch.

(4) Perform all the steps listed in paragraph 4-99b for checking the vacuum and pressure system.

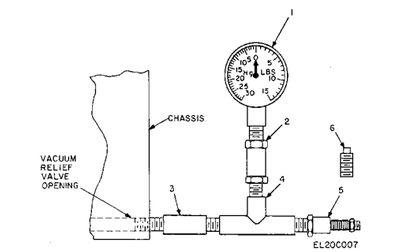


Figure 6-12. Vacuum gauge installation

(5) If the vacuum and pressure readings do not meet the requirements listed in paragraph 4-99a. perform the steps listed in paragraph 4-99c.

(6) When the vacuum and pressure system meets its requirements, disconnect power from the equipment and remove all the items belonging to the A2 Assembly Test Kit.

(7) Reinstall the vacuum relief valve and pressure hose in their original locations.

6-23. Picker Belt Height Check

This check must be made every time the picker belts are replaced, and/or before the picker alignment check (para. 6-24).

a. Assemble the picker belt height gauge assembly as follows:

(1) Remove the 2 dial gauges (1, fig. 6-14), dial gauge holder (2), and 2 dial gauge plungers (3) from the A2 Assembly Test Kit.

(2) Assemble as shown in figure 6-14. Tighten setscrew (4) in each side of the gauge holder to secure dial gauges in place.

(3) Prior to use of the assembly, calibrate it to ± .001 inch on a flat surface.

b. Checking the height of the picker belts.

(1) Place the assembled gauge holder on the picker assembly with the flanged side of the mounting frame facing the panel and resting on the outer picker belts, directly over the vacuum ports on the plunger assembly.

(2) While holding the gauge securely in place, manually energize the picker solenoid. The reading on the gauges should be within .001 inch of each other, and fall between the limits of .020" and .025".

(3) If tolerances are not met, perform the picker solenoid adjustment, paragraph 4-90.

6-24. Picker Alignment Check

This check must be made each time the picker assembly (48, fig. 4-7) is loosened, moved, or removed and replaced. Also, requirements contained in paragraphs 4-86 through 4-92 must be met before this check is made. This check is required before the punch head is considered defective for return to depot for repair or overhaul.

a. Dial Micrometer Assembly.

(1) Remove all items from the A2 Assembly Test Kit used for the picker alignment check (para. 6-21).

(2) Assemble the dial micrometer as follows:

(*a*) Assemble the mounting rod (1) fig. 6-15 and swivel (2).

(*b*) Mount the above assembly on base rod (3) approximately three inches from the top end.

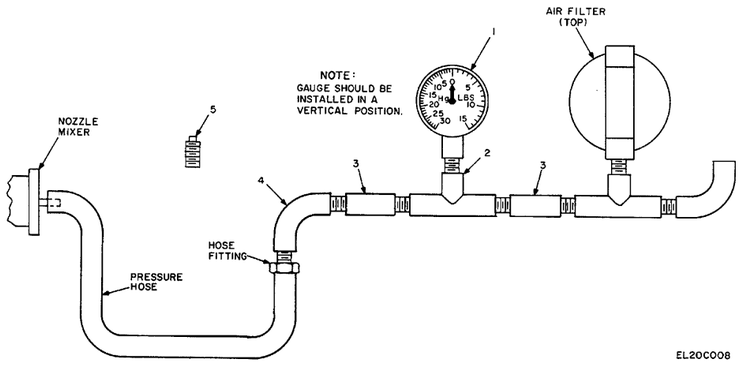
(*c*) Mount swivel clamp (4) on mounting rod approximately 1/2 inch from outer end of rod.

(*d*) Mount dial micrometer (5) onto clamp using back portion of the micrometer.

b. Picker Alignment Procedure.

(1) Remove punch head from the A2 assembly as directed in paragraph 4-31.

(2) Remove front side of card hopper.



1 Vacuum/pressure gauge
2 Tee fitting, ¼" NPT
3 1½" nipple, ¼" NPT
4 Elbow, 90°, ¼" NPT
5 Plug, pipe, ¼" NPT

Figure 6-13. Pressure gauge installation

(3) Remove both pieces of the alignment fixture from the A2 Assembly Test Kit and assemble it as shown in figure 6-16, using the three screws provided in the kit. Tighten screws evenly.

(4) Install the assembled fixture, flat machined side up, in place of the punch head, tightening bolts in the same manner that is prescribed when installing the punch head.

(5) Place the parallel alignment bar (No. ATEB-0814), from the test kit, into the picker assembly on the picker's inboard side, wide face down.

(6) Place the dial micrometer assembly on the flat machined surface of the alignment fixture and position it so that the carbide tip (8, fig. 6-15) of the micrometer is over the parallel bar at the mounting bolts in the front of the picker assembly, and the dial is facing out. Tighten micrometer assembly very tight. Turn magnetic base switch (7) to the ON position.

(7) Calibrate micrometer, by using the adjustment on the base, to give a reading of .5 thousandths of an inch (clockwise from zero) on the dial indicator.

(8) After calibration is complete, turn magnetic base switch to OFF, move the micrometer assembly so that the base of the assembly (6) is at the bottom part of the alignment fixture, and the micrometer carbide tip is over the alignment fixture. Do not disturb the micrometer setting.

(9) Take the parallel bar, and with the narrow side lying on the machined surface of the alignment fixture, move it under the carbide tip. Record the reading.

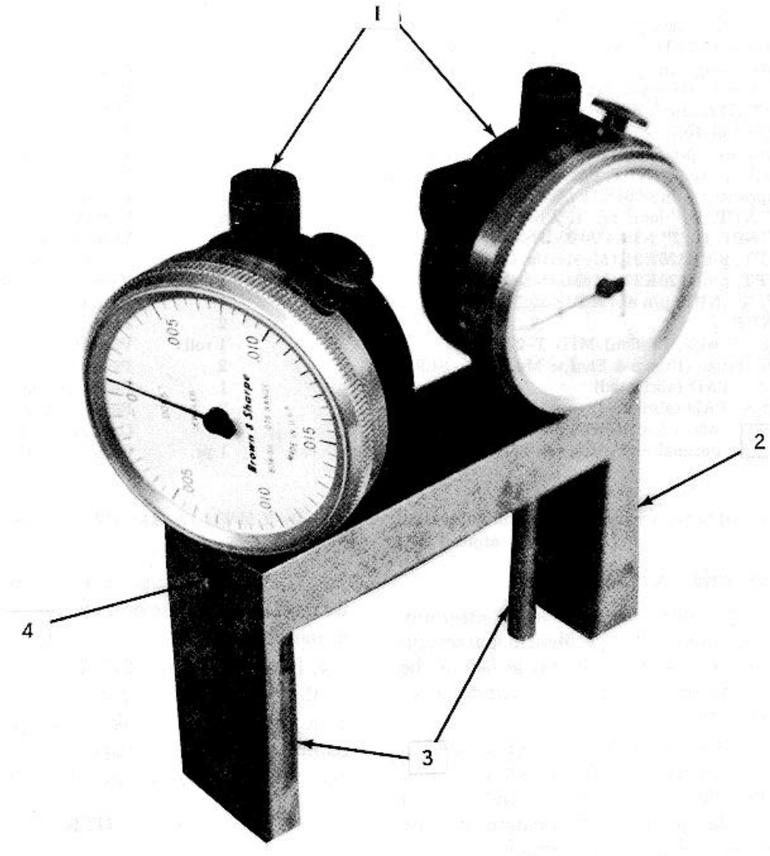


Figure 6-14. Picker belt height gauge assembly.

(10) Repeat step (9) until you have two successive readings which are one-half (.5) thousandths of each other. These readings must be between 1 and 3 thousandths of an inch (clockwise from zero).

NOTE

Front of picker assembly must be in a negative position (towards rear of equipment) with respect to the punch head. If front of picker is in a positive position, punch cards cannot feed into the punch head and will jam.

(11) Repeat steps (5) through (9) for the back of the picker assembly at. the back mounting bolts. The readings should be between 3 to 5 thousandths of an inch (clockwise from zero).

(12) If readings are out of tolerance, install or remove shims from behind the picker assembly by removing the picker assembly as described in paragraph 4-36.

(*a*) Use the same shim thickness at the two mounting points that are close to the picker throat.

(*b*) Thickness of shims to be added or removed is one-half the difference of tolerance error.

(13) After the shims have been installed (or removed), repeat alignment procedure. Continue to add or remove shims until picker is aligned within tolerance.

NOTE

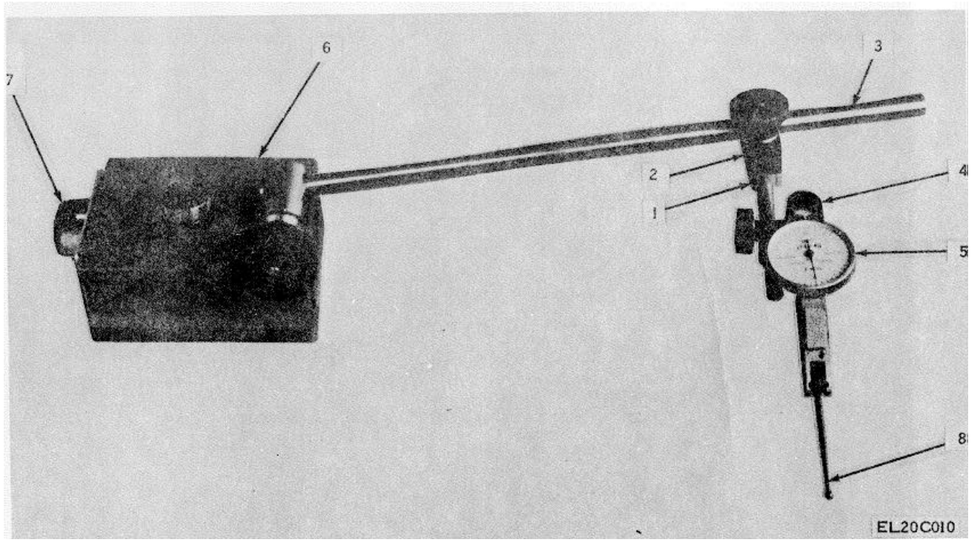
The front to back ratio should not vary more than 4 thousandths of an inch. This is referred to as "card skew."

(14) When the picker assembly is aligned within tolerance, remove the alignment fixture and replace the punch head on the A2 assembly as directed in paragraph, 4-31. Replace front side of card hopper.

6-25. Punch Card Registration Check

The punch card registration check is made only after the vacuum,/pressure system, picker belt height, and picker alignment checks meet their respective requirements.

a. Remove the pocket comparator (fig. 6-17) from the A2 Assembly Test Kit and insert the decimal inch reticle (p/n 25B125).



1	Mounting rod	5	Dial Micrometer
2	Swivel	6	Base, magnetic
3	Base rod	7	Magnetic base switch
4	Swivel clamp	8	Carbide tip

Figure 6-15. Dial micrometer assembly.

b. Provide appropriate operating power and test signals to the high speed card punch and punch a deck of standard Hollerith cards with a test pattern.

NOTE

Cards should be IBM No. 5081, and properly conditioned as directed in paragraph 2-4.

c. Select one card and place it on the 80-column card gauge (NSN 5895-00-980-8692, IBM No. 9157401) as shown in fig.. 6-5. Card should be facing in the same direction as it is punched.

d. With card in place, determine that hole spacing and hole size correspond to the colored rectangles on card gauge plate. Card must be flush against the bottom surface and card stops of the card gauge when making the check.

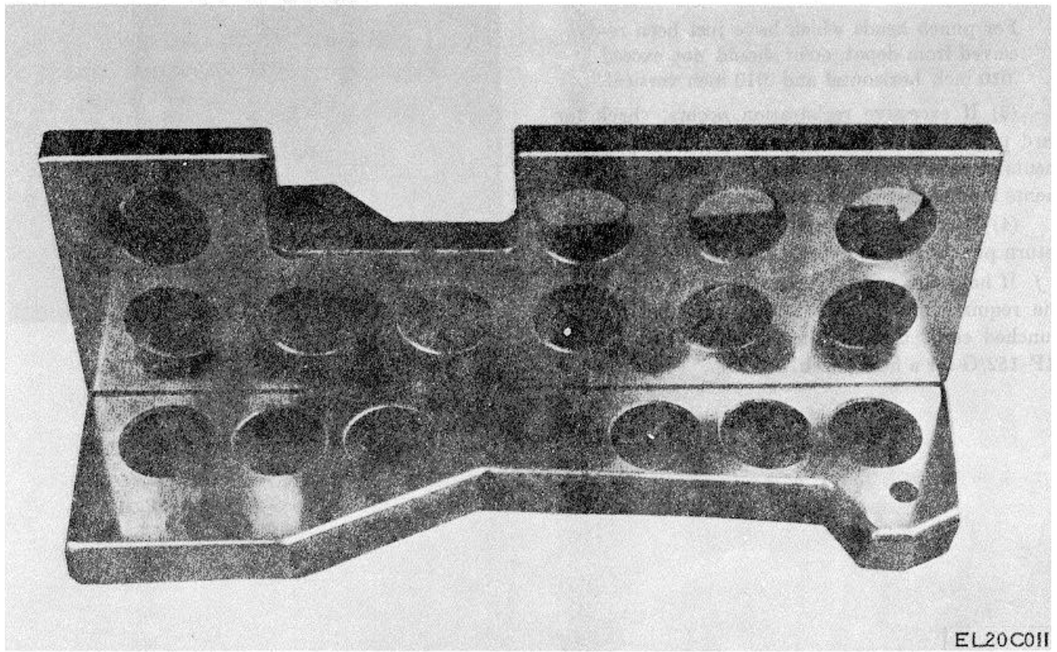


Figure 6-16. Picker alignment fixture (No. ATE-D-0813)

e. If the holes are misaligned, a silver color will show through the holes.

(1) Place the pocket comparator over the column 1 hole, look through it and rotate it until all of the visible gray area is covered. Read error as indicated by the reticle scale.

(2) Error reading in column 1 hole should not exceed .017 inch in the horizontal plane, or .010 inch in the vertical plane.

NOTE

For punch heads which have just been received from depot, error should not exceed .010 inch horizontal and .010 inch vertical.

(3) If excessive registration occurs, check for card pieces in the punch head; also, check adjustments in paragraph 4-84c, and other related adjustments for Direct Support Maintenance.

(4) If excessive registration cannot be corrected, return punch head to depot.

f. If holes are properly aligned, or do not exceed the requirements in e(2) above, run the deck of punched cards through the Punched Card Reader RP-152/G for a final check.

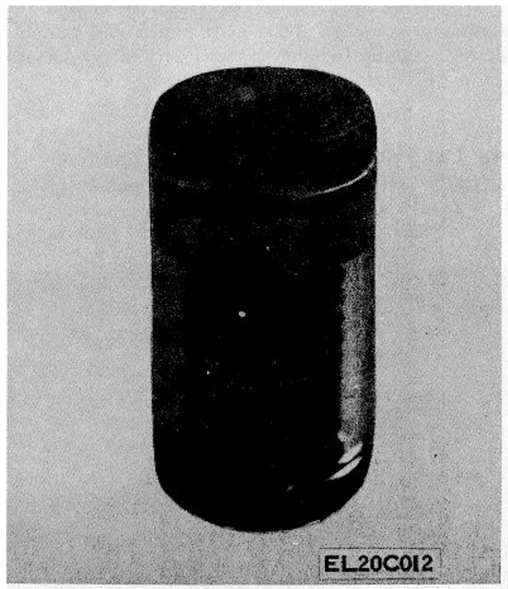
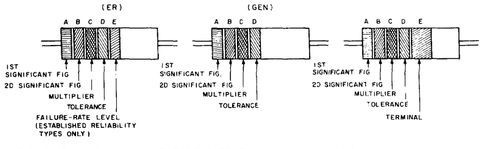


Figure 6-17. Pocket comparator (Jensen Model No. 25B250)

CHAPTER 8
ADDITIONAL ILLUSTRATIONS AND WIRE RUN LIST (TABLE 8-1)



COLOR CODE MARKING FOR COMPOSITION TYPE RESISTORS

COLOR-CODE MARKING FOR FILM-TYPE RESISTORS.

TABLE I
COLOR CODE FOR COMPOSITION TYPE AND FILM TYPE RESISTORS.

BAND A		BAND B		BAND C		BAND D		BAND E		
COLOR	FIRST SIGNIFICANT FIGURE	COLOR	SECOND SIGNIFICANT FIGURE	COLOR	MULTIPLIER	COLOR	RESISTANCE TOLERANCE (PERCENT)	COLOR	FAILURE RATE LEVEL	TERM.
BLACK	0	BLACK	0	BLACK	1			BROWN	M=1.0	
BROWN	1	BROWN	1	BROWN	10			RED	P=0.1	
RED	2	RED	2	RED	100			ORANGE	R=0.01	
ORANGE	3	ORANGE	3	ORANGE	1,000			YELLOW	S=0.001	
YELLOW	4	YELLOW	4	YELLOW	10,000	SILVER	±10 (COMP. TYPE ONLY)	WHITE		SOLDERABLE
GREEN	5	GREEN	5	GREEN	100,000	GOLD	±5			
BLUE	6	BLUE	6	BLUE	1,000,000	RED	±2 (NOT APPLICABLE TO ESTABLISHED RELIABILITY)			
PURPLE (VIOLET)	7	PURPLE (VIOLET)	7							
GRAY	8	GRAY	8	SILVER	0.01					
WHITE	9	WHITE	9	GOLD	0.1					

BAND A — THE FIRST SIGNIFICANT FIGURE OF THE RESISTANCE VALUE (BANDS A THRU D SHALL BE OF EQUAL WIDTH.)

BAND B — THE SECOND SIGNIFICANT FIGURE OF THE RESISTANCE VALUE

BAND C — THE MULTIPLIER (THE MULTIPLIER IS THE FACTOR BY WHICH THE TWO SIGNIFICANT FIGURES ARE MULTIPLIED TO YIELD THE NOMINAL RESISTANCE VALUE.)

BAND D — THE RESISTANCE TOLERANCE.

BAND E — WHEN USED ON COMPOSITION RESISTORS, BAND E INDICATES ESTABLISHED RELIABILITY FAILURE-RATE LEVEL (PERCENT FAILURE PER 1,000 HOURS) ON FILM RESISTORS, THIS BAND SHALL BE APPROXIMATELY 1-1/2 TIMES THE WIDTH OF OTHER BANDS, AND INDICATES TYPE OF TERMINAL.

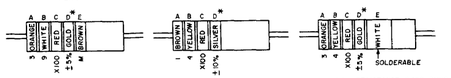
RESISTANCES IDENTIFIED BY NUMBERS AND LETTERS (THESE ARE NOT COLOR CODED.)

SOME RESISTORS ARE IDENTIFIED BY THREE OR FOUR DIGIT ALPHA NUMERIC DESIGNATORS. THE LETTER R IS USED IN PLACE OF A DECIMAL POINT WHEN FRACTIONAL VALUES OF AN OHM ARE EXPRESSED. FOR EXAMPLE:

2R7 = 2.7 OHMS 10R0 = 10.0 OHMS

FOR WIRE-WOUND-TYPE RESISTORS COLOR CODING IS NOT USED. IDENTIFICATION MARKING IS SPECIFIED IN EACH OF THE APPLICABLE SPECIFICATIONS.

EXAMPLES OF COLOR CODING



NOMINAL RESISTANCE 3,900 OHMS
RESISTANCE TOLERANCE ±5%
FAILURE RATE LEVEL M

NOMINAL RESISTANCE 1,400 OHMS
RESISTANCE TOLERANCE ±10%

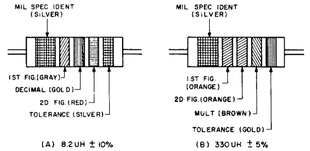
NOMINAL RESISTANCE 3,400 OHMS
RESISTANCE TOLERANCE ±5%
TERMINAL SOLDERABLE

COMPOSITION-TYPE RESISTORS

FILM-TYPE RESISTORS

* IF BAND D IS OMITTED, THE RESISTOR TOLERANCE IS ±20% AND THE RESISTOR IS NOT MIL-STD.

A. COLOR CODE MARKING FOR MILITARY STANDARD RESISTORS.



(A) 8.2UH ± 10% (B) 330UH ± 5%

COLOR CODING FOR TUBULAR ENCAPSULATED R.F CHOKES. AT A, AN EXAMPLE OF OF THE CODING FOR AN 8.2UH CHOKE IS GIVEN. AT B, THE COLOR BANDS FOR A 330UH INDUCTOR ARE ILLUSTRATED

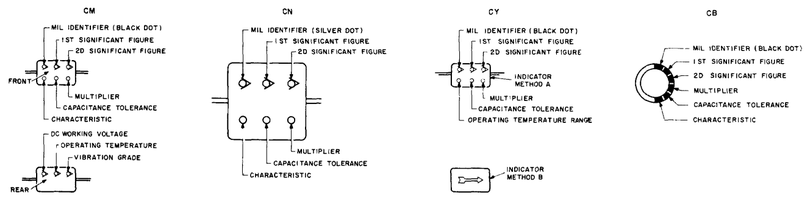
TABLE 2
COLOR CODING FOR TUBULAR ENCAPSULATED R.F CHOKES.

COLOR	SIGNIFICANT FIGURE	MULTIPLIER	INDUCTANCE TOLERANCE (PERCENT)
BLACK	0	1	
BROWN	1	10	1
RED	2	100	2
ORANGE	3	1,000	3
YELLOW	4		
GREEN	5		
BLUE	6		
VIOLET	7		
GRAY	8		
WHITE	9		
NONE			20
SILVER			10
GOLD	DECIMAL POINT		5

MULTIPLIER IS THE FACTOR BY WHICH THE TWO COLOR FIGURES ARE MULTIPLIED TO OBTAIN THE INDUCTANCE VALUE OF THE CHOKE COIL.

B. COLOR CODE MARKING FOR MILITARY STANDARD INDUCTORS.

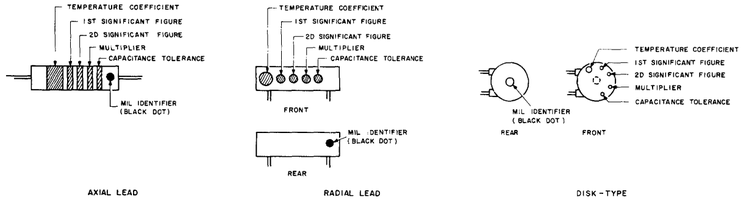
CAPACITORS, FIXED, VARIOUS-DIELECTRICS, STYLES CM, CN, CY, AND CB.



MICA-DIELECTRIC PAPER-DIELECTRIC GLASS-DIELECTRIC, GLASS CASE MICA, BUTTON TYPE

TABLE 3 — FOR USE WITH STYLES CM, CN, CY AND CB.

COLOR	MIL ID	1ST SIG FIG.	2D SIG FIG.	MULTIPLIER	CAPACITANCE TOLERANCE				CHARACTERISTIC				2 DC WORKING VOLTAGE	OPERATING TEMP. RANGE	VIBRATION GRADE
					CM	CN	CY	CB	CM	CN	CB	CM		CY, CM	CM
BLACK	CM,CY CB	0	0	1			±20%	±20%	A					-55° TO +70°C	10-55 HZ
BROWN		1	1	10					B	E	B				
RED		2	2	100	±2%		±2%	±2%	C					-55° TO +85°C	
ORANGE		3	3	1,000		±30%			D		D	300			
YELLOW		4	4	10,000					E					-55° TO +125°C	10-2,000HZ
GREEN		5	5		±5%				F			500			
BLUE		6	6											-55° TO +150°C	
PURPLE (VIOLET)		7	7												
GRAY		8	8												
WHITE		9	9												
GOLD				0.1			±5%	±5%							
SILVER	CN			0.01	±10%	±10%	±10%	±10%							



AXIAL LEAD RADIAL LEAD DISK-TYPE

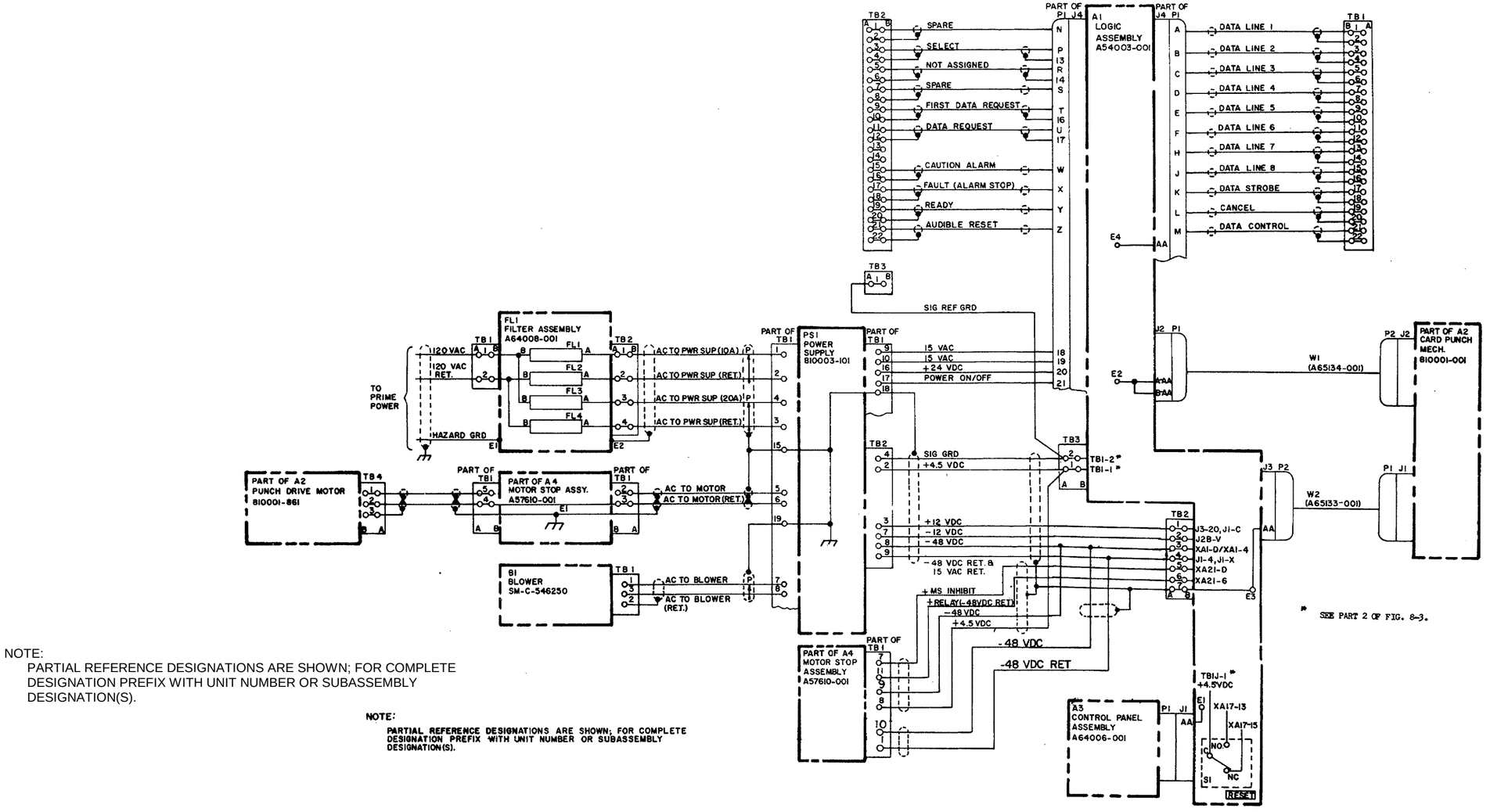
TABLE 4 — TEMPERATURE COMPENSATING, STYLE CC.

COLOR	TEMPERATURE COEFFICIENT*	1ST SIG FIG.	2D SIG FIG.	MULTIPLIER[1]	CAPACITANCE TOLERANCE		MIL ID
					CAPACITANCES OVER 10 UUF	CAPACITANCES 10 UUF OR LESS	
BLACK	0	0	0	1		±2.0 UUF	CC
BROWN	−30	1	1	10	±1%		
RED	−80	2	2	100	±2%	±0.25 UUF	
ORANGE	−150	3	3	1,000			
YELLOW	−220	4	4				
GREEN	−330	5	5		±5%	±0.5 UUF	
BLUE	−470	6	6				
PURPLE (VIOLET)	−750	7	7				
GRAY		8	8	0.01*			
WHITE		9	9	0.1*	±10%	1	
GOLD	+100			0..		±1.0 UUF	
SILVER				0.01			

1. THE MULTIPLIER IS THE NUMBER BY WHICH THE TWO SIGNIFICANT (SIG) FIGURES ARE MULTIPLIED TO OBTAIN THE CAPACITANCE IN UUF.
2. LETTERS INDICATE THE CHARACTERISTICS DESIGNATED IN APPLICABLE SPECIFICATIONS: MIL-C-5, MIL-C-25D, MIL-C-11272B, AND MIL-C-10950C RESPECTIVELY.
3. LETTERS INDICATE THE TEMPERATURE RANGE AND VOLTAGE-TEMPERATURE LIMITS DESIGNATED IN MIL-C-11015D.
4. TEMPERATURE COEFFICIENT IN PARTS PER MILLION PER DEGREE CENTIGRADE
* OPTIONAL CODING WHERE METALLIC PIGMENTS ARE UNDESIRABLE.

ESC-FM 913-73

Figure 8-1. Color code markings for MIL STD resistors, inductors, and capacitors.



NOTE:
PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION(S).

NOTE:
PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION(S).

Figure 8-3. High speed card punch, interconnection schematic diagram (1).

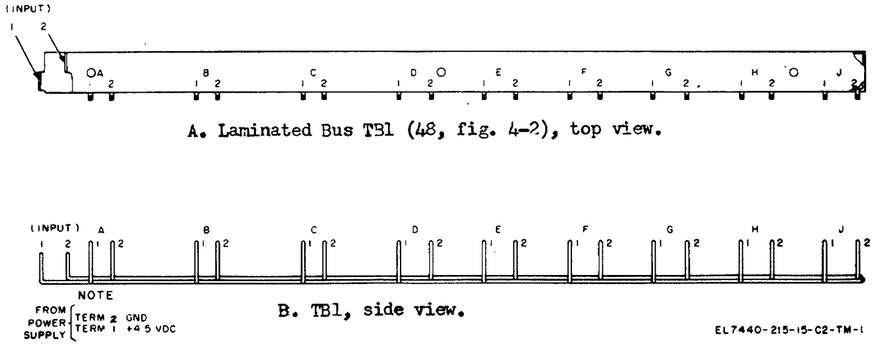


Figure 8-3 . High speed card punch, interconnection schematic diagram (2)

Figure 8-3 . High speed card punch, interconnection schematic diagram. (3)

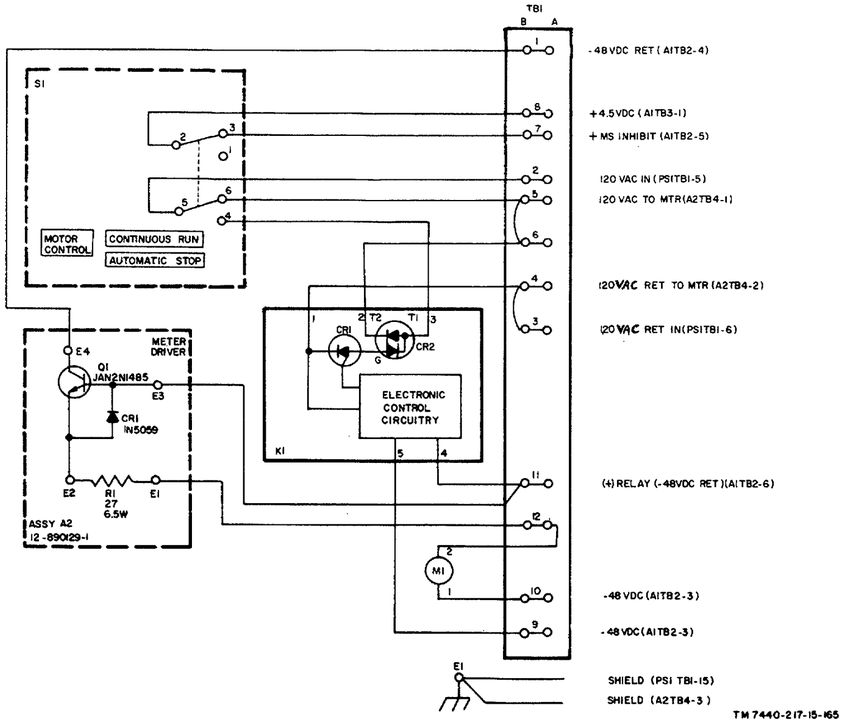
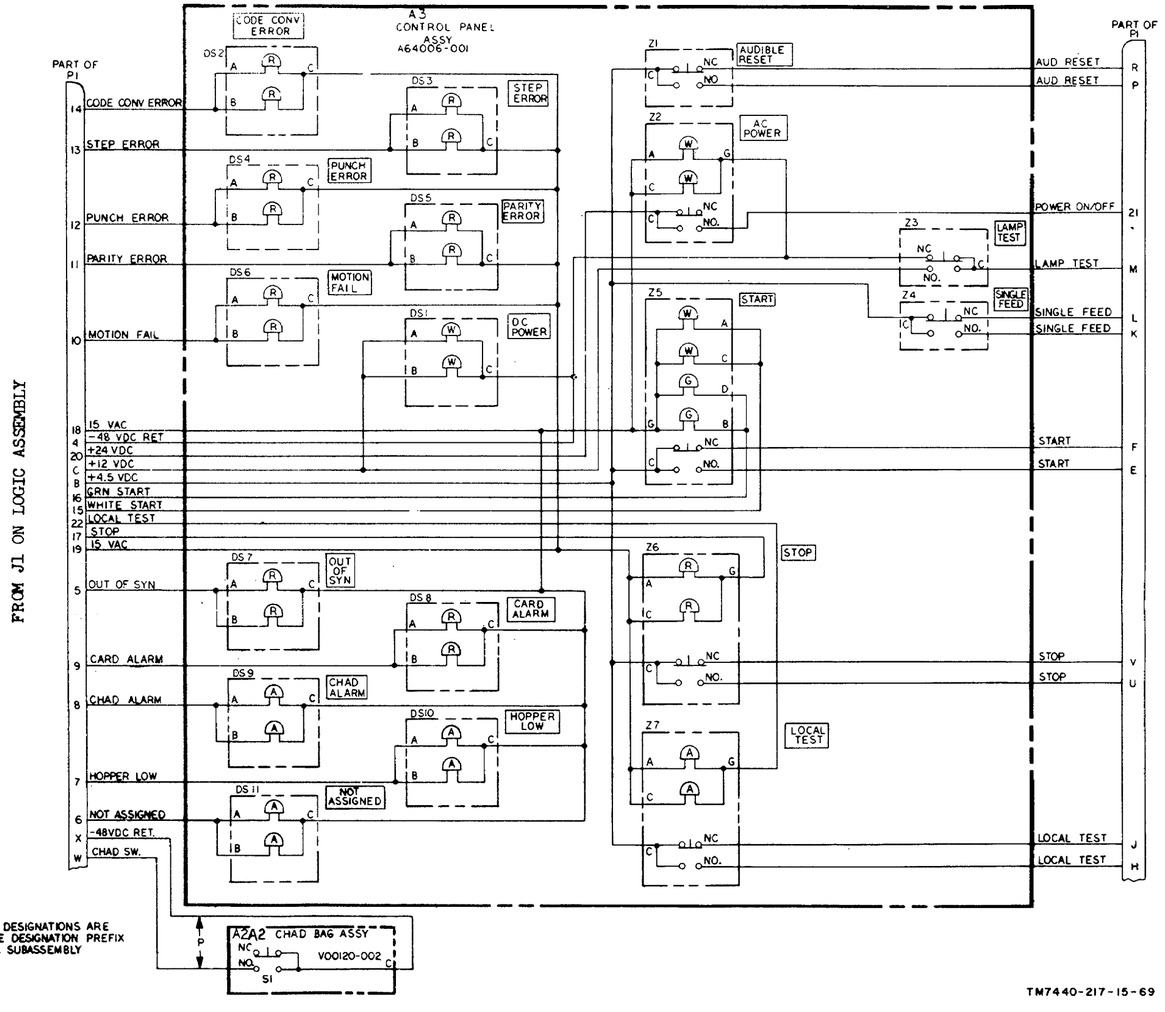


Figure 8-3.1. High speed card punch motor stop assembly A4, schematic diagram.



NOTES:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION(S).

NOTES:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION(S).

Figure 8-4. High speed card punch, control panel schematic diagram.

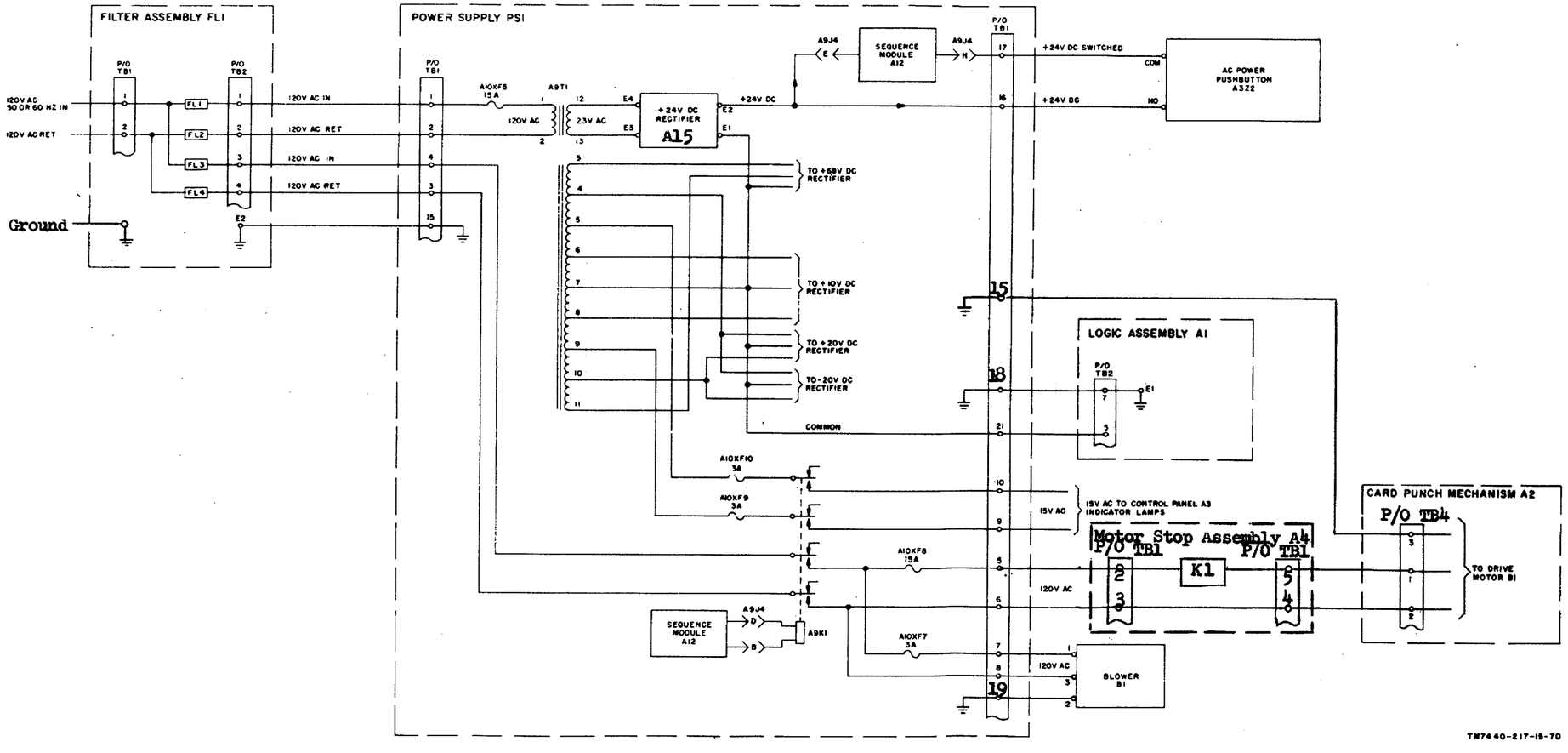


Figure 8-5. Ac circuits, schematic diagram.

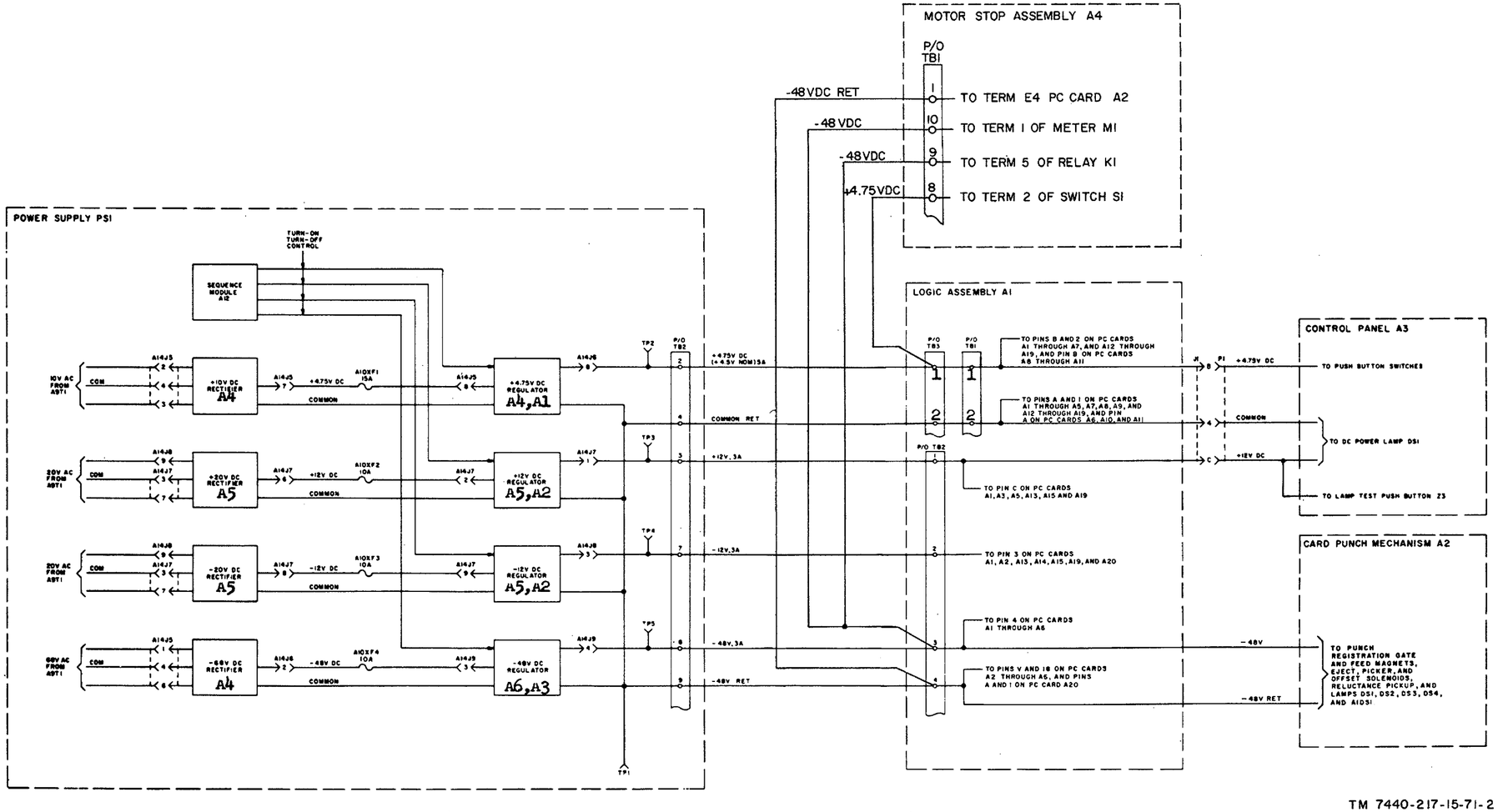


Figure 8-6. Dc circuits, schematic diagram.

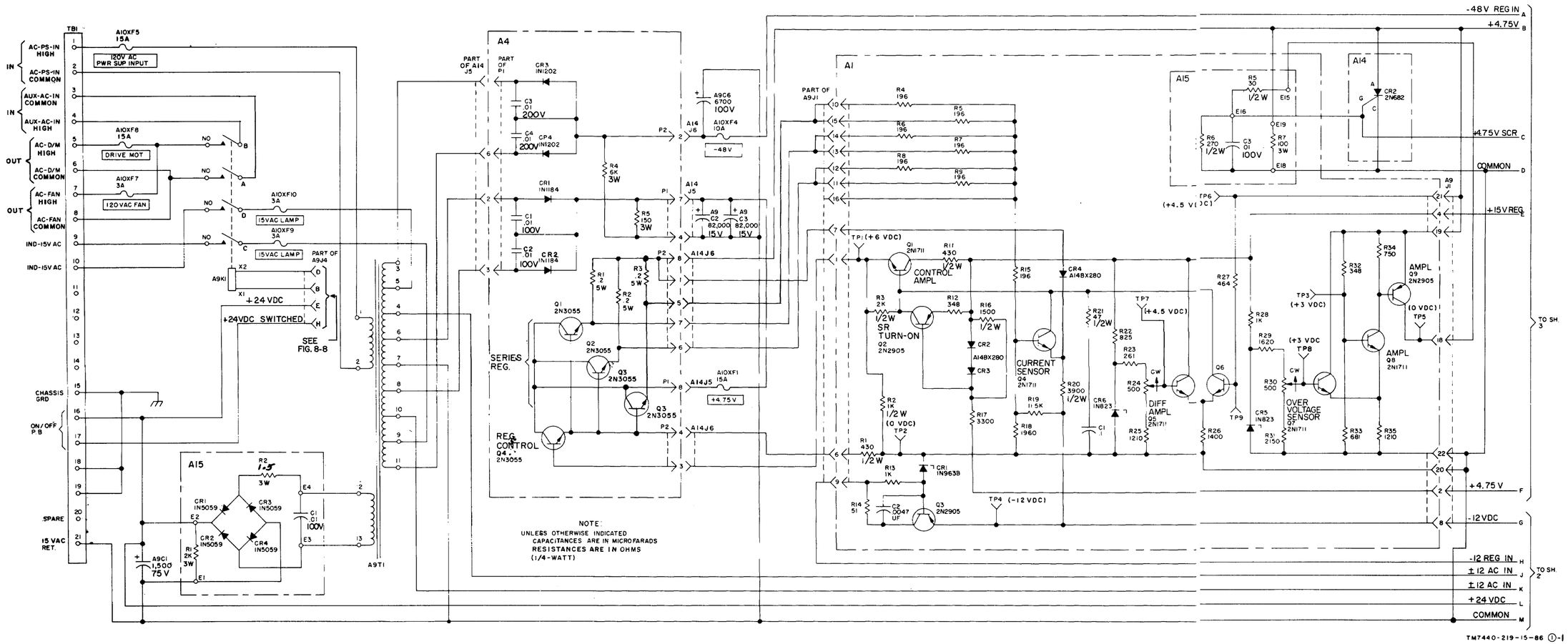


Figure 8-7. Power supply PS1 rectifier and regulator circuits, schematic diagram. (part 1 of 3).

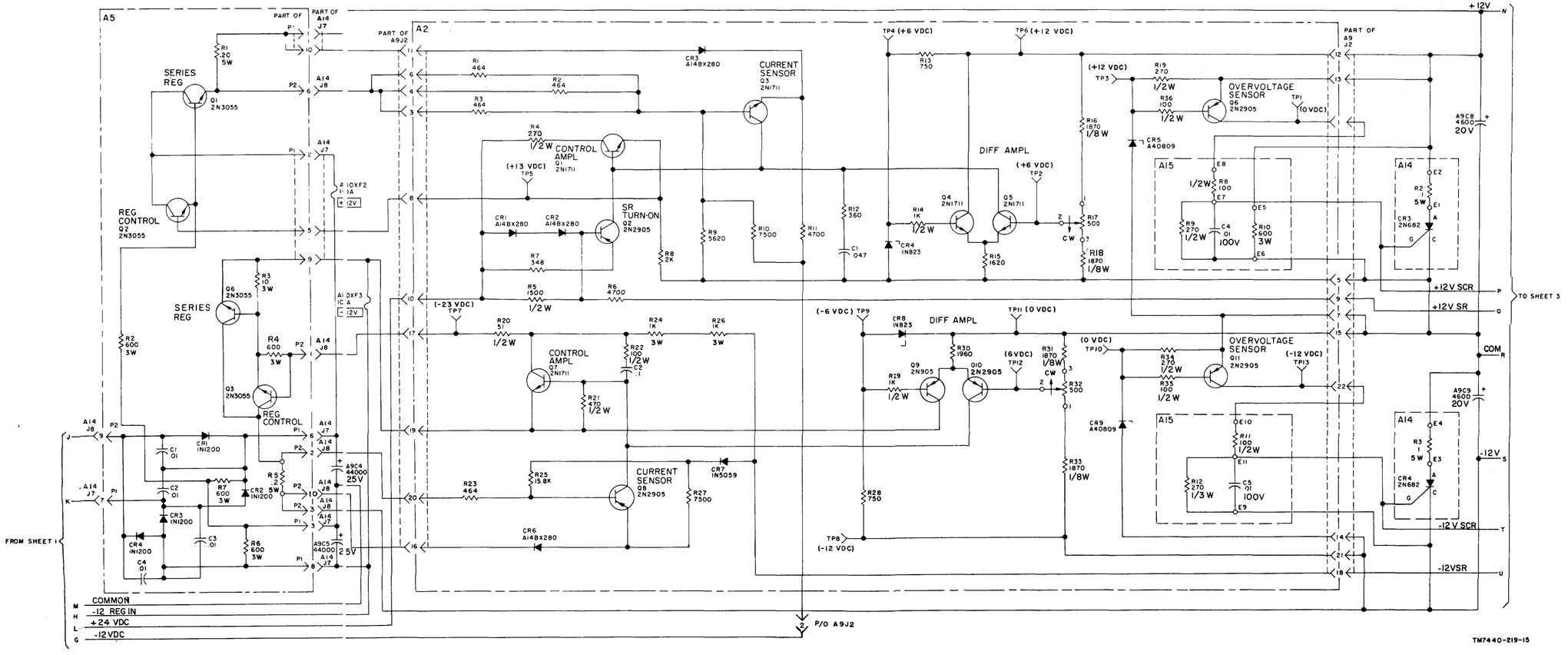


Figure 8-7. Power supply PS1 rectifier and regulator circuits, schematic diagram (part 2 of 3).

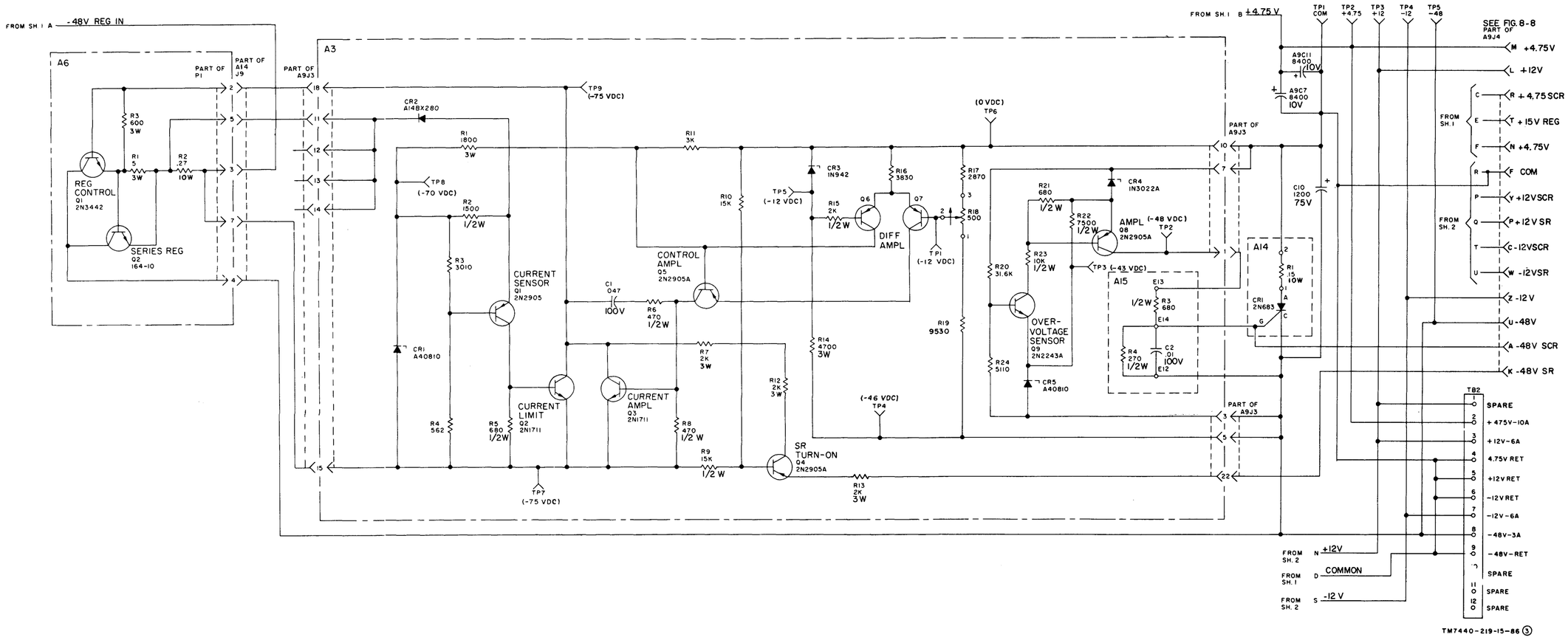
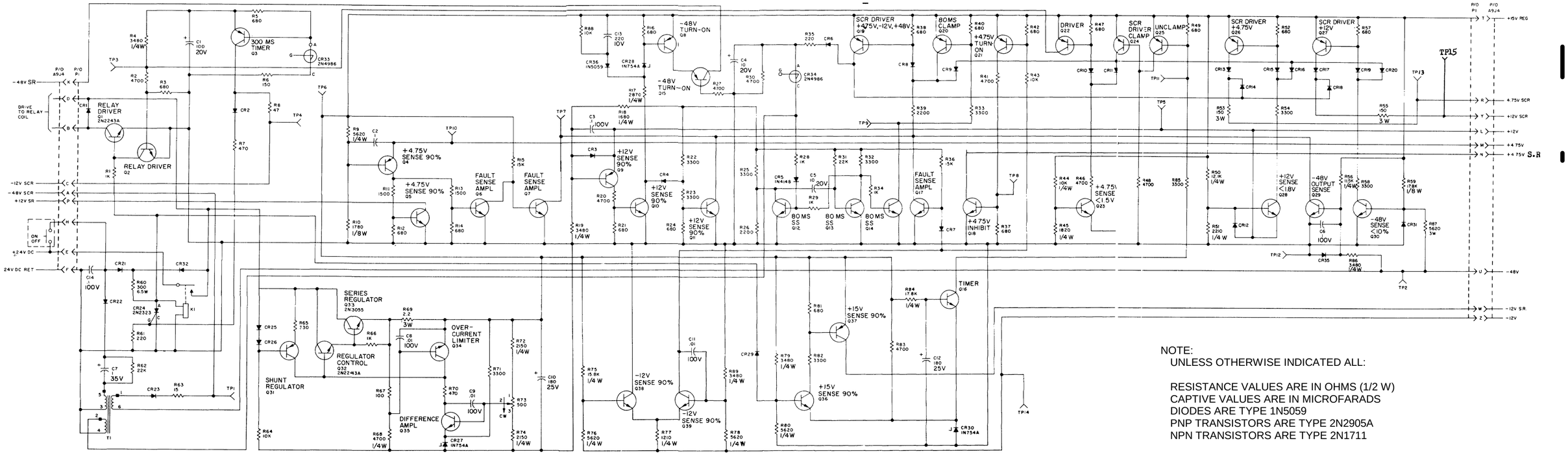


Figure 8-7. Power supply PS1 rectifier and regulator circuits, schematic diagram (part 3 of 3).



NOTE:
UNLESS OTHERWISE INDICATED ALL:

RESISTANCE VALUES ARE IN OHMS (1/2 W)
CAPTIVE VALUES ARE IN MICROFARADS
DIODES ARE TYPE 1N5059
PNP TRANSISTORS ARE TYPE 2N2905A
NPN TRANSISTORS ARE TYPE 2N1711

Figure 8-8. Sequence module A12, schematic diagram.

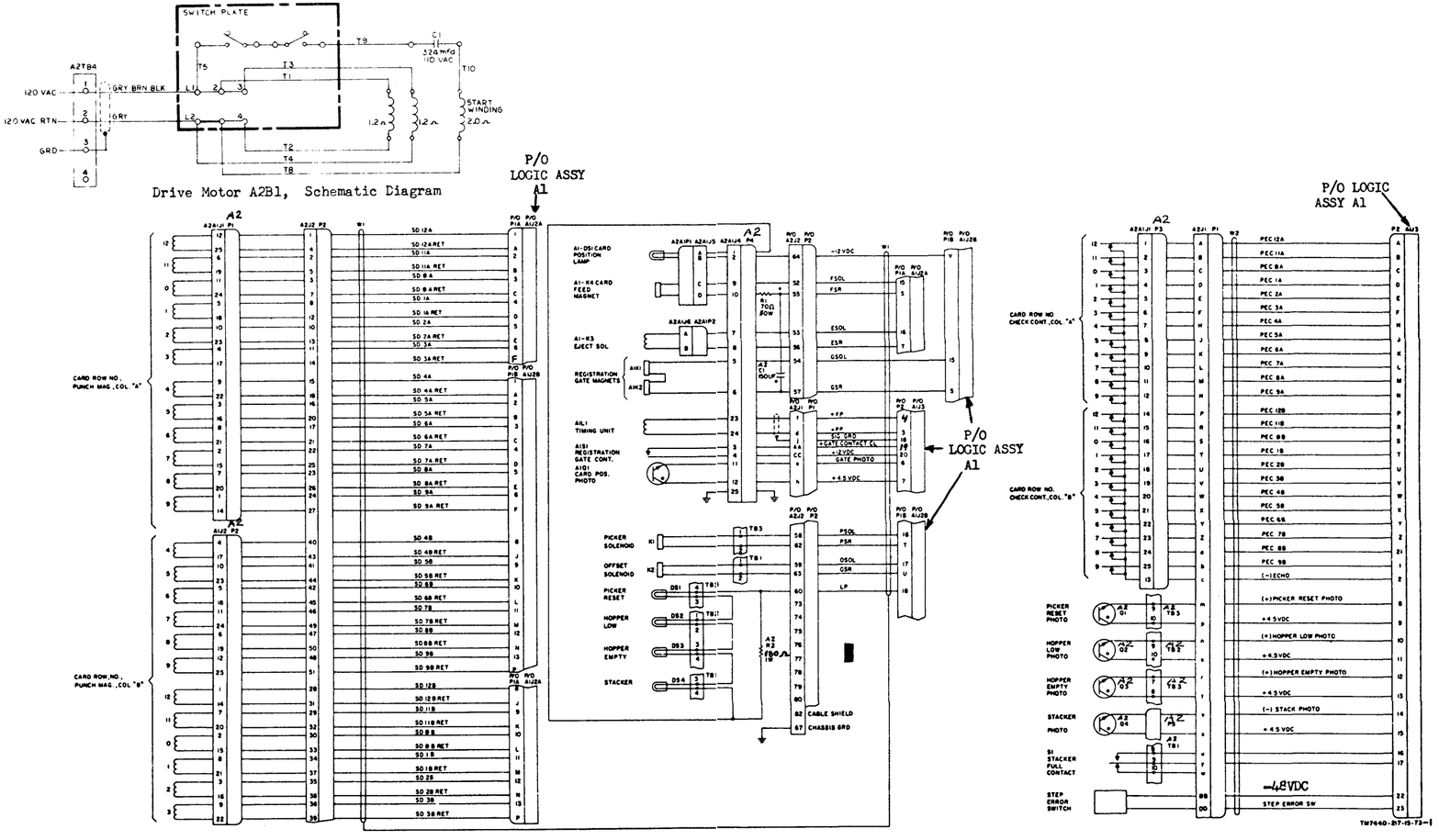
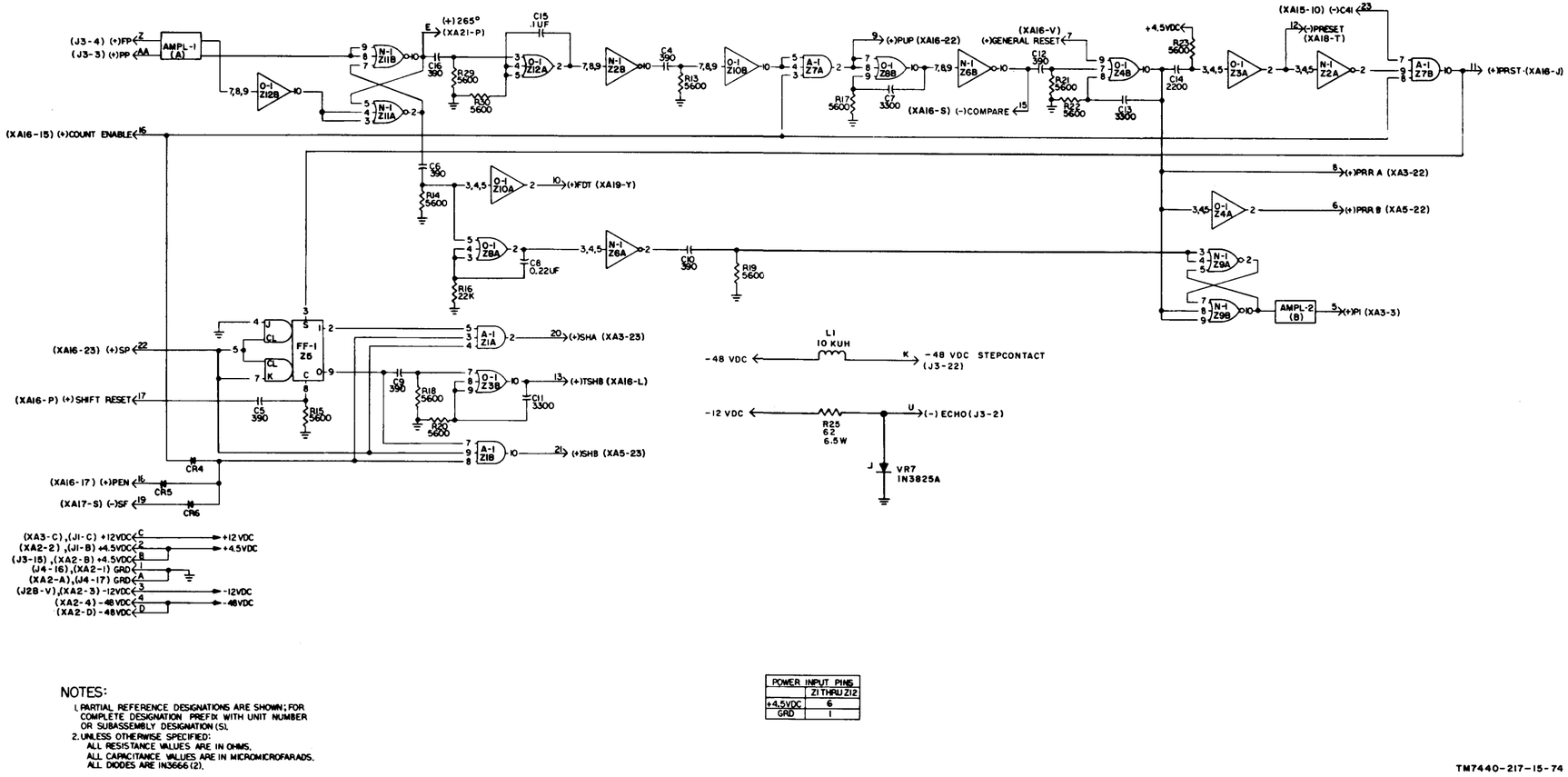


Figure 8-9. Mechanism assembly A2, schematic diagram.



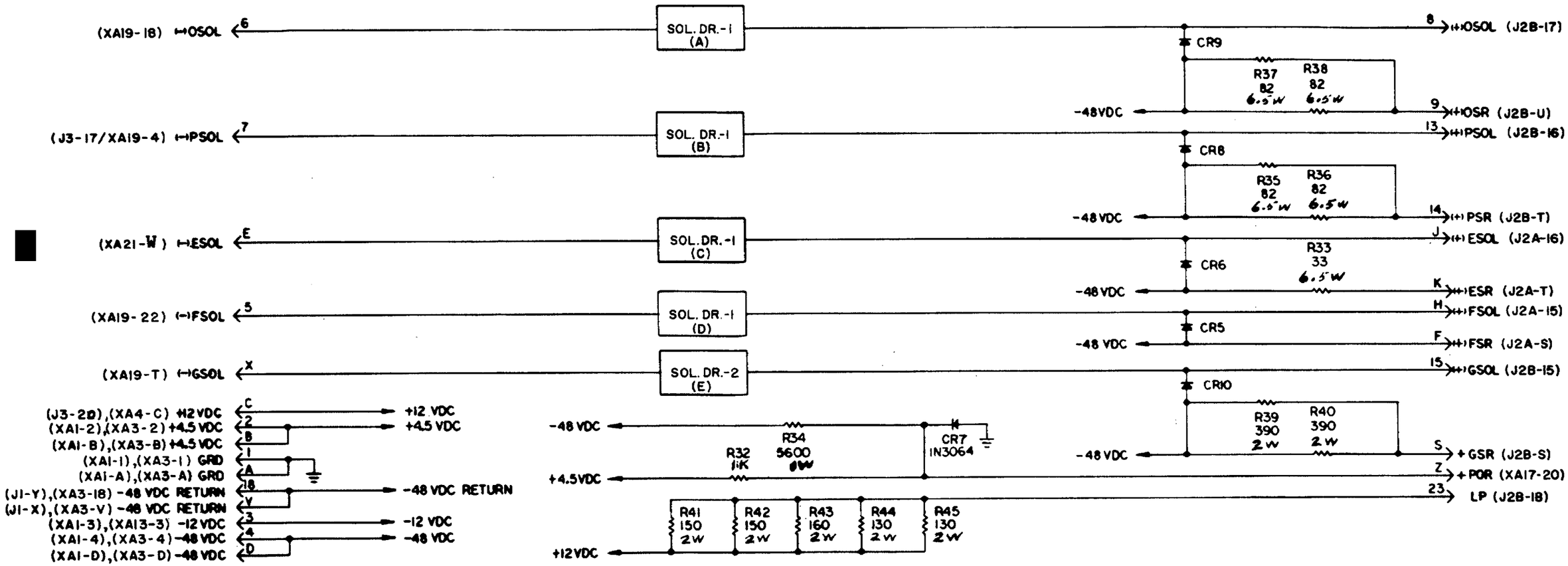
NOTES:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION (S).
2. UNLESS OTHERWISE SPECIFIED:
   ALL RESISTANCE VALUES ARE IN OHMS.
   ALL CAPACITANCE VALUES ARE IN MICROMICROFARADS.
   ALL DIODES ARE IN3666 (2).

POWER INPUT PINS	
	Z1 THRU Z12
+4.5VDC	6
GRD	1

TM7440-217-15-74

Figure 8-10. PC card A1 (No. A65117), schematic diagram.

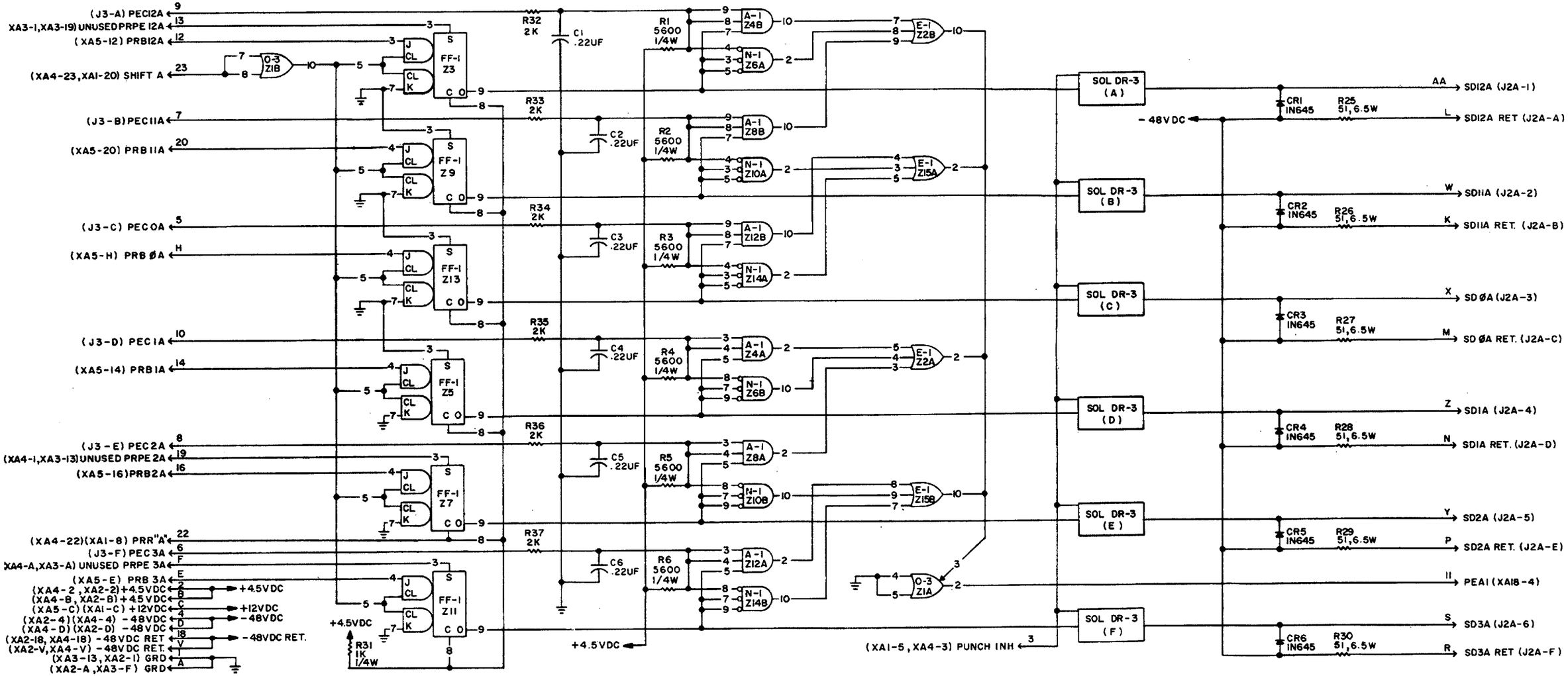


NOTES:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION(S).
2. UNLESS OTHERWISE SPECIFIED:
   ALL RESISTANCE VALUES ARE IN OHMS.
   ALL DIODES ARE IN645.

TM7440-217-15-75

Figure 8-11. PC card A2 (No. A65081), schematic diagram.

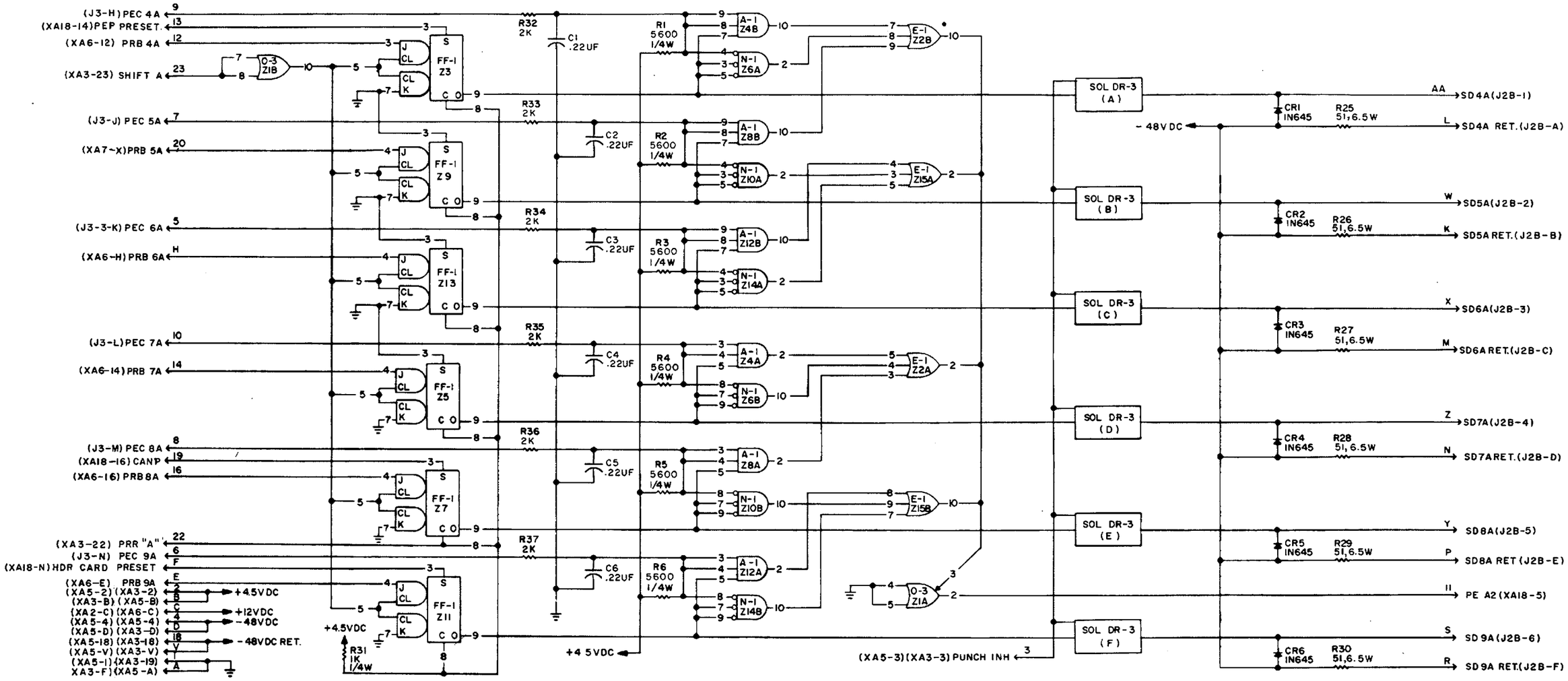


POWER INPUT PINS	
	Z1 THRU Z15
GRD	1
+4.5VDC	6

NOTES:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION (S).
2. UNLESS OTHERWISE SPECIFIED:
   ALL RESISTANCE VALUES ARE IN OHMS.
   ALL DIODES ARE IN3666.

Figure 8-12. PC card A3 (No. A52766), schematic diagram.



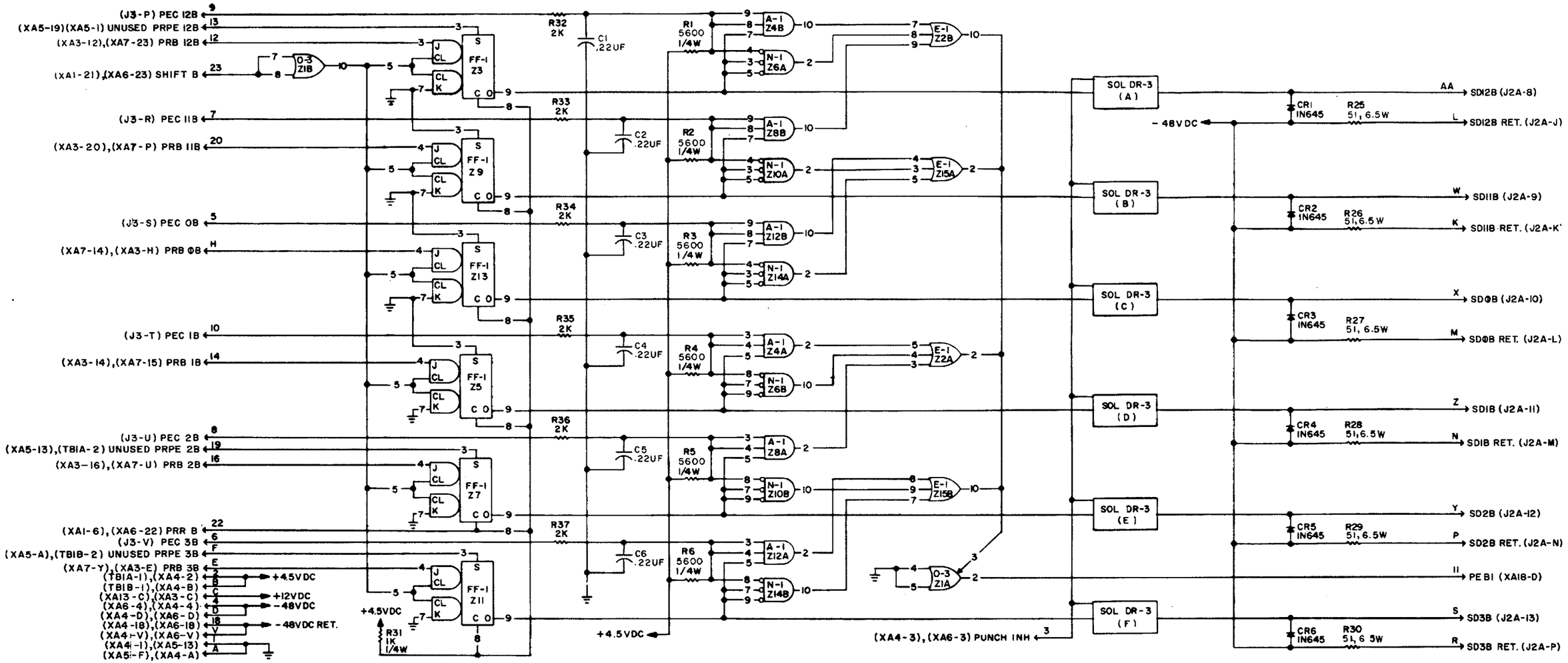
	POWER INPUT PINS
	Z1 THRU Z15
GRD	1
+4.5VDC	6

NOTES:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION (S).
2. UNLESS OTHERWISE SPECIFIED:
   ALL RESISTANCE VALUES ARE IN OHMS.
   ALL DIODES ARE IN3666.

TM7440-217-15-77

Figure 8-13. PC card A4 (No. A52766), schematic diagram.



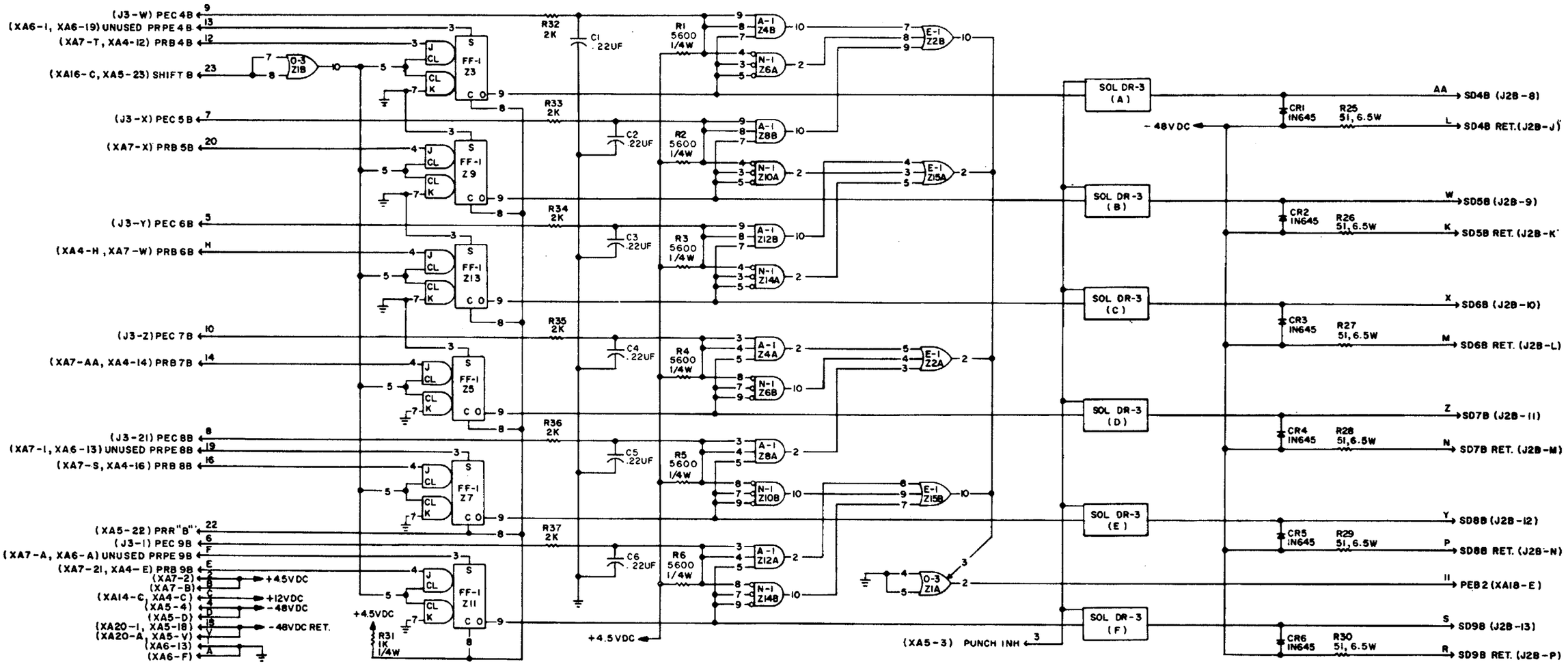
POWER INPUT PINS	
	Z1 THRU Z15
GRD	1
+4.5VDC	6

NOTES:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION (S).
2. UNLESS OTHERWISE SPECIFIED:
   ALL RESISTANCE VALUES ARE IN OHMS.
   ALL DIODES ARE IN3666.

TM7440-217-15-78

Figure 8-14. PC card A5 (No. A52766), schematic diagram.

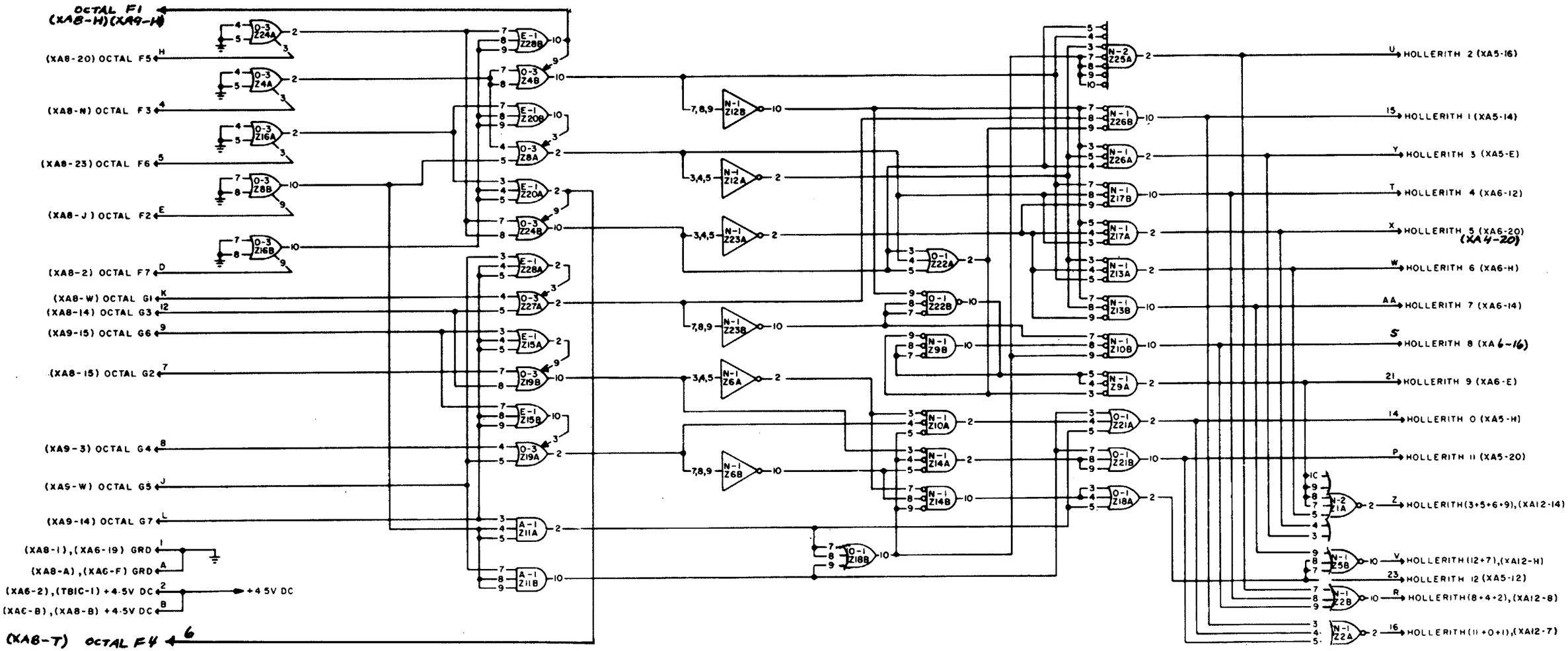


POWER INPUT PINS	
	Z1 THRU Z15
GRD	1
+4.5VDC	6

NOTES:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION (S).
2. UNLESS OTHERWISE SPECIFIED:
   ALL RESISTANCE VALUES ARE IN OHMS.
   ALL DIODES ARE 1N3666.

Figure 8-15. PC card A6 (A52766), schematic diagram.



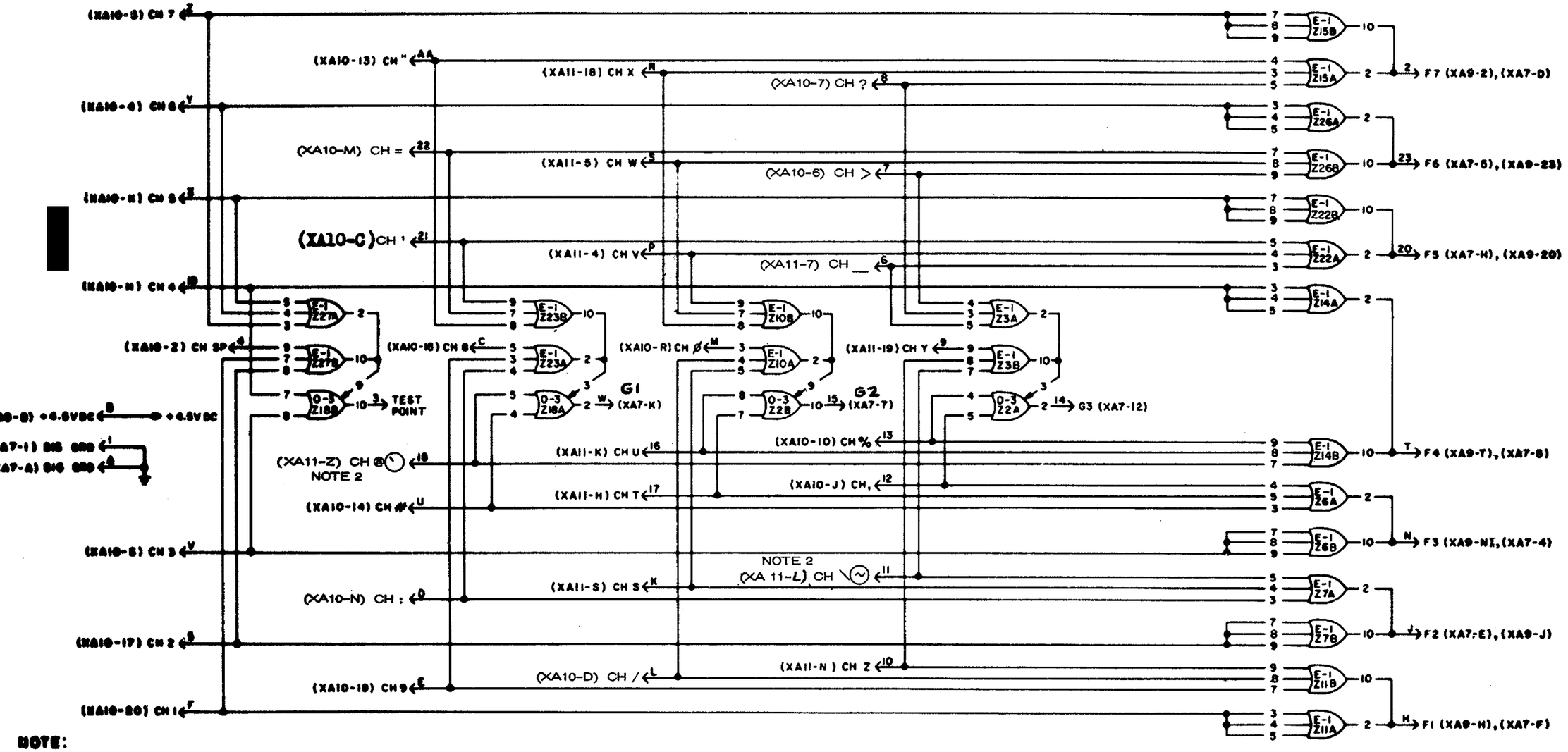
NOTES:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION(S).

POWER INPUT PINS	
	Z1, Z2, Z4, Z5, Z6, Z8 THRU Z28
GRD	1
+4.5V DC	6

TM7440-217-15-80

Figure 8-16. PC card A7 (No. A52638), schematic diagram.



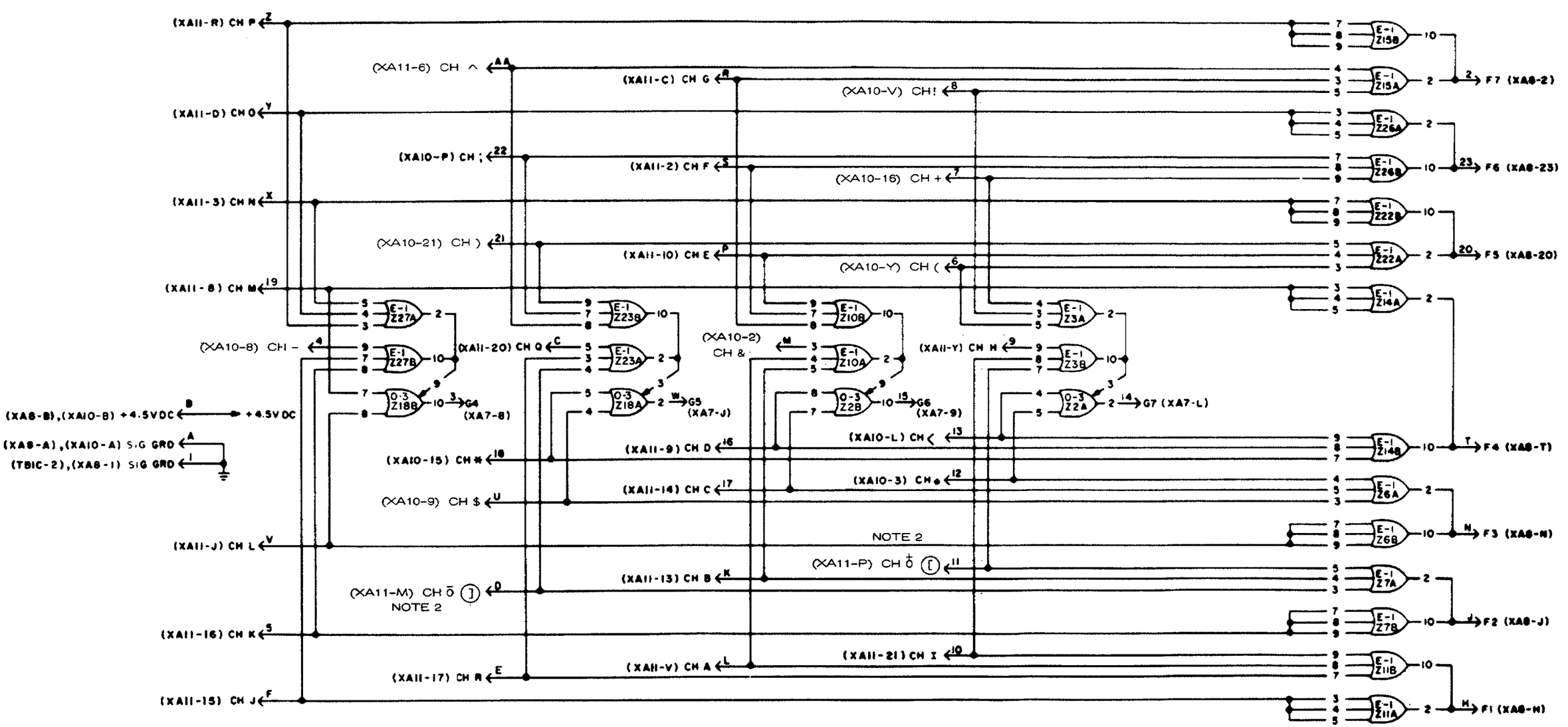
NOTE:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION (S)
2. ENCIRCLED CHARACTERS SHOWS CHARACTER PRINTED ON AUTODIN DSTE PRINTING EQUIPMENT.

	POWER INPUT PINS
	Z2, Z3, Z6, Z7, Z10, Z11, Z14, Z15 Z18, Z22, Z23, Z26, Z27
GRD	1
+4.9V DC	6

TM7440-217-15-81-1

Figure 8-17. PC card A8 (No. A53721), schematic diagram.



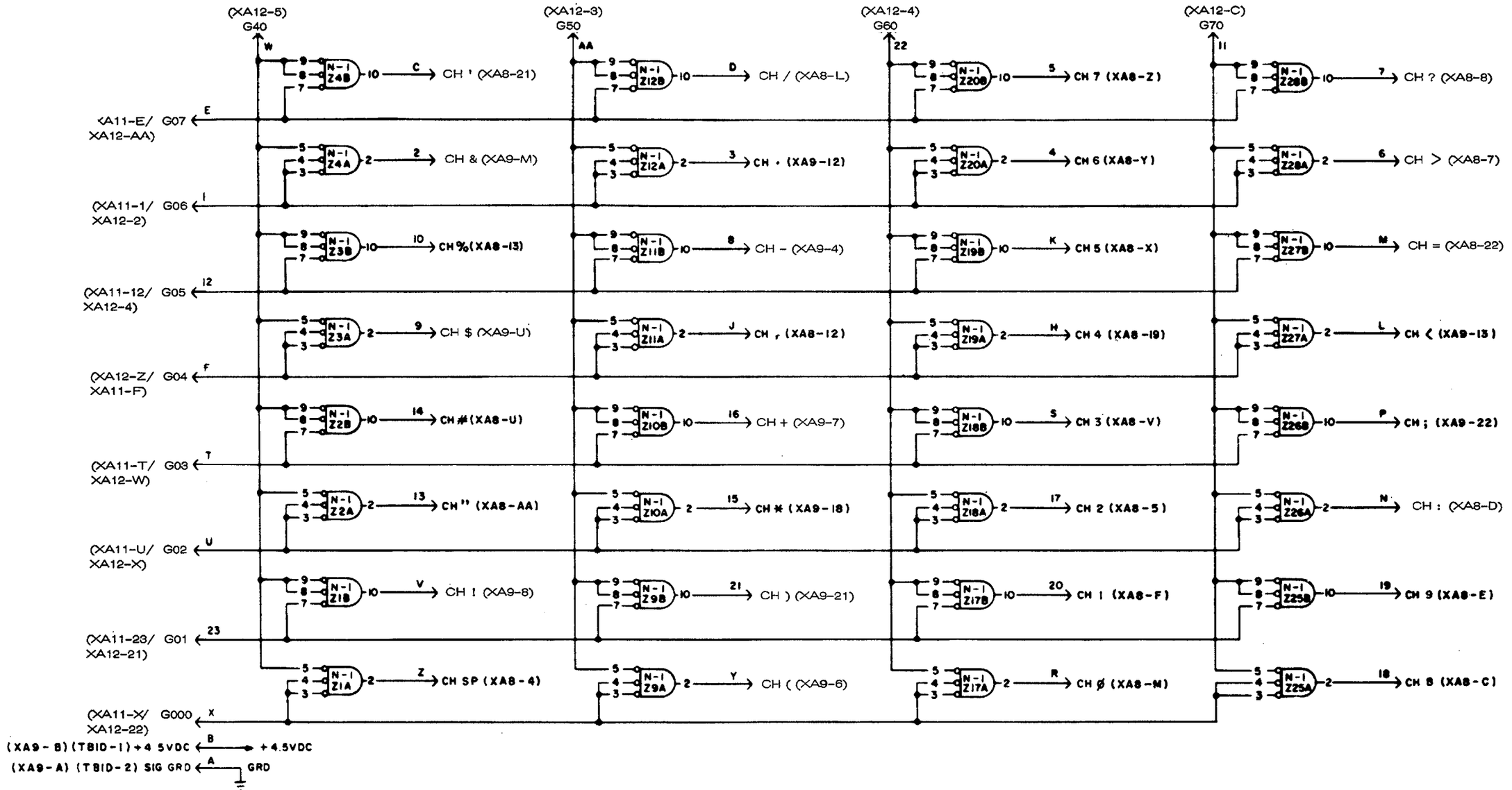
NOTE:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION (S)
2. ENCIRCLED CHARACTERS SHOWS CHARACTER PRINTED ON AUTODIN DSTE PRINTING EQUIPMENT.

	POWER INPUT PINS
	Z2, Z3, Z6, Z7, Z10, Z11, Z14, Z15 Z18, Z22, Z23, Z26, Z27
GRD	1
+4.5V DC	6

TM7440-217-15-82-1

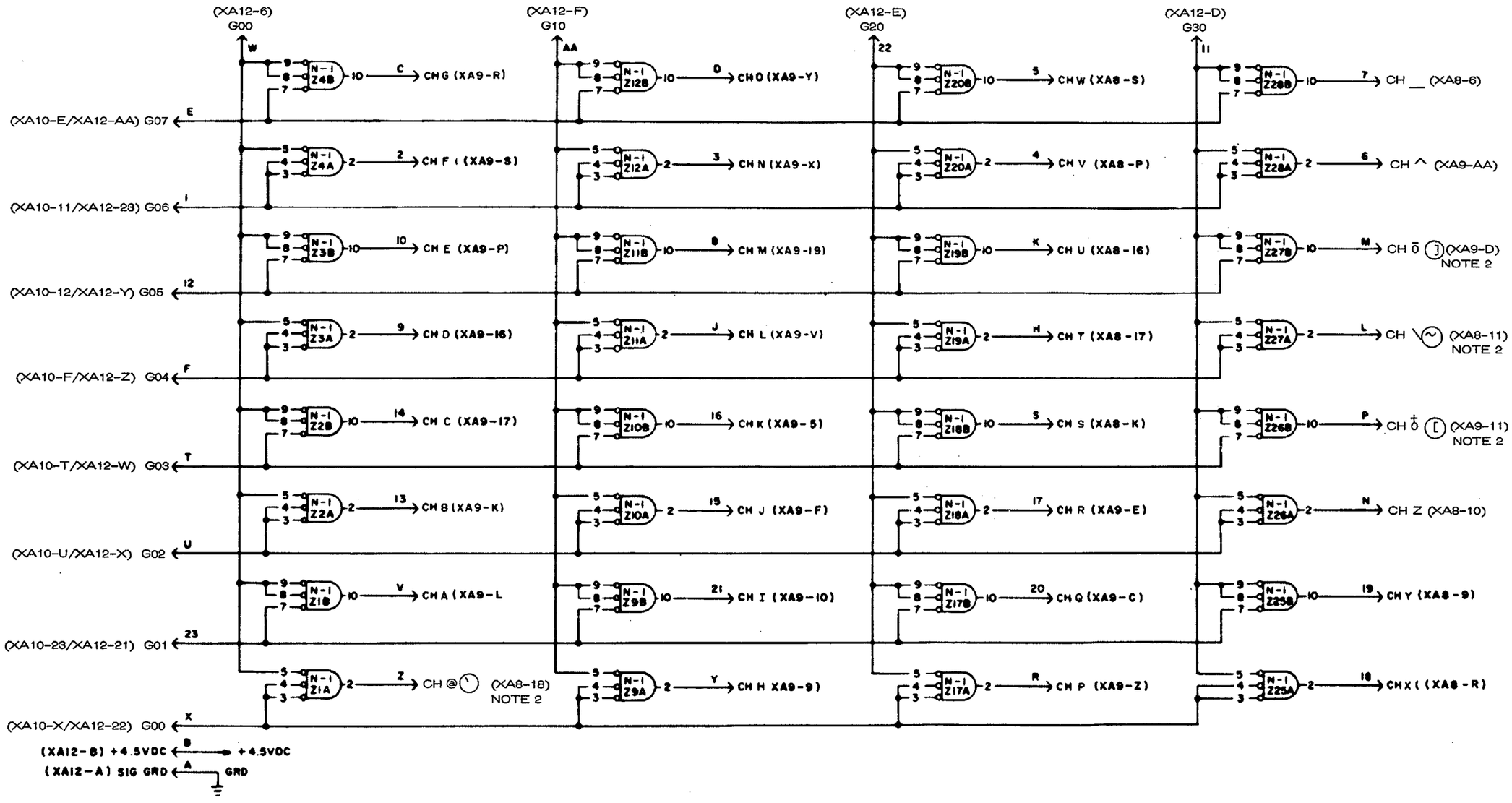
Figure 8-18. PC card A9 (No. A53721), schematic diagram



NOTE:
PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION (S).

TM7440-217-15-83-4

Figure 8-19. PC card A10 (No. A53725), schematic diagram.

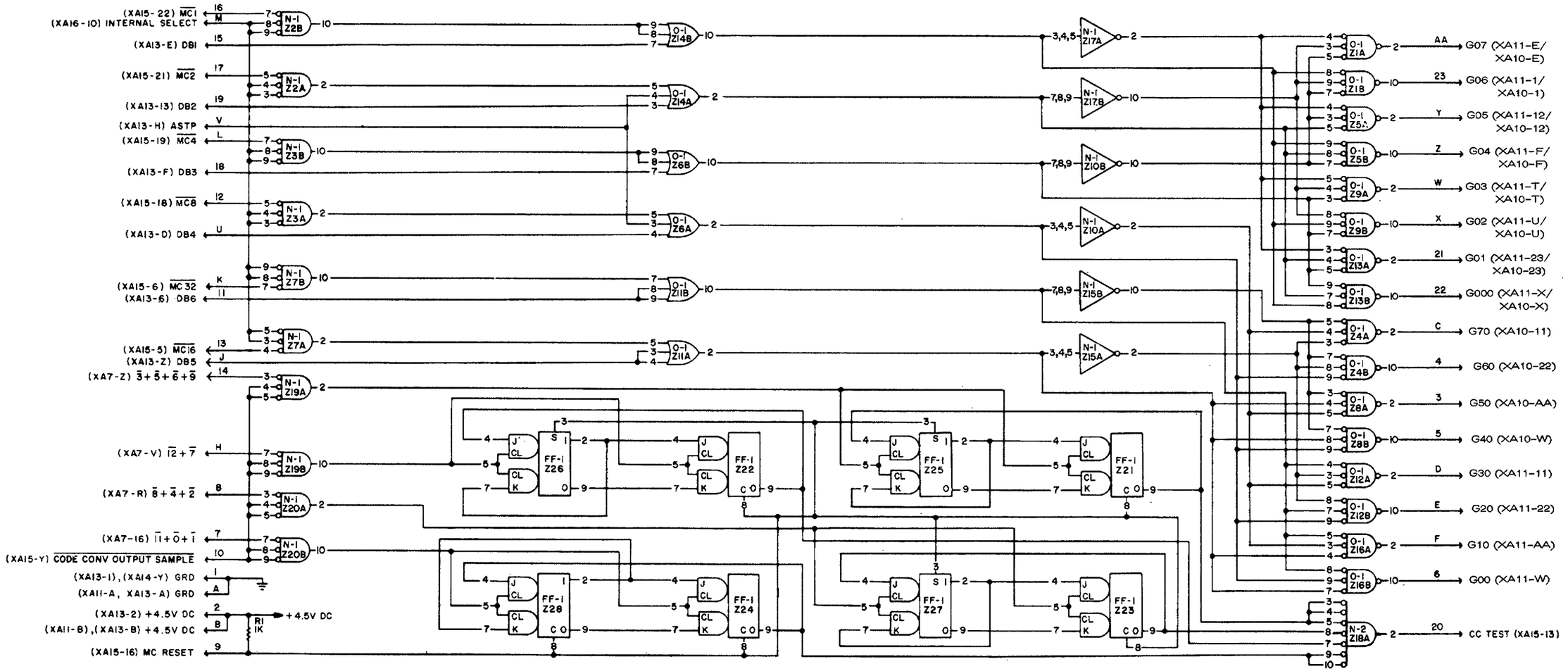


NOTE:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION (S).
2. ENCIRCLED CHARACTERS SHOWS CHARACTER PRINTED ON AUTODIN DSTE PRINTING EQUIPMENT.

TM7440-217-15-84-1

Figure 8-20. PC card A11 (No. A53725), schematic diagram.



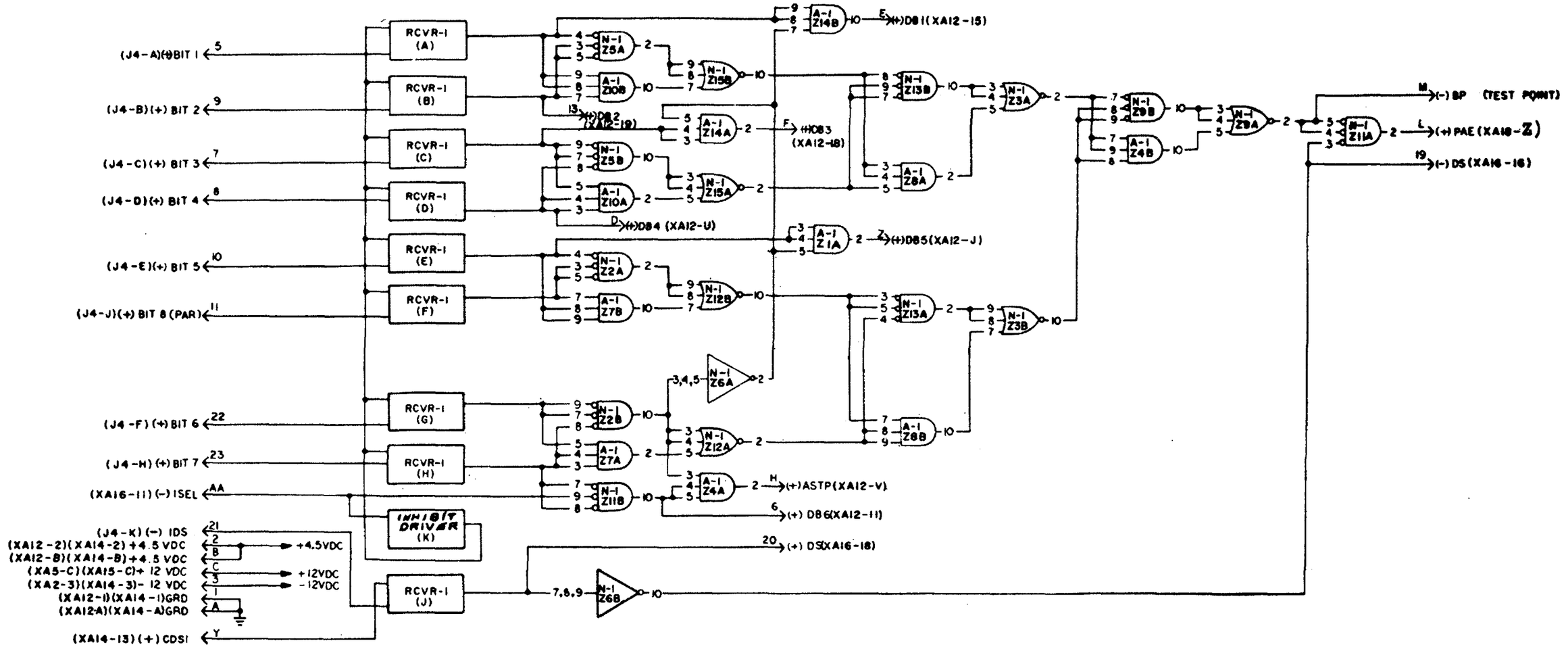
NOTES:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION(S).
2. UNLESS OTHERWISE SPECIFIED: ALL RESISTANCE VALUES ARE IN OHMS.

	POWER INPUT PINS		
	Z1 THRU Z20	Z21 THRU Z24, Z28	Z25, Z26, Z27
GRD	1	183	188
+4.5VDC	6	6	6

TM7440-217-15-85-1

Figure 8-21. PC card A12 (No. A52744), schematic diagram.



NOTES:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION(S).
2. UNLESS OTHERWISE SPECIFIED:
   ALL RESISTANCE VALUES ARE IN OHMS.

POWER INPUT PINS	
	Z1 THRU Z15
GRD	1
+4.5VDC	6

TM7440-217-15-8G

Figure 8-22. PC card A13 (No. A65089), schematic diagram.

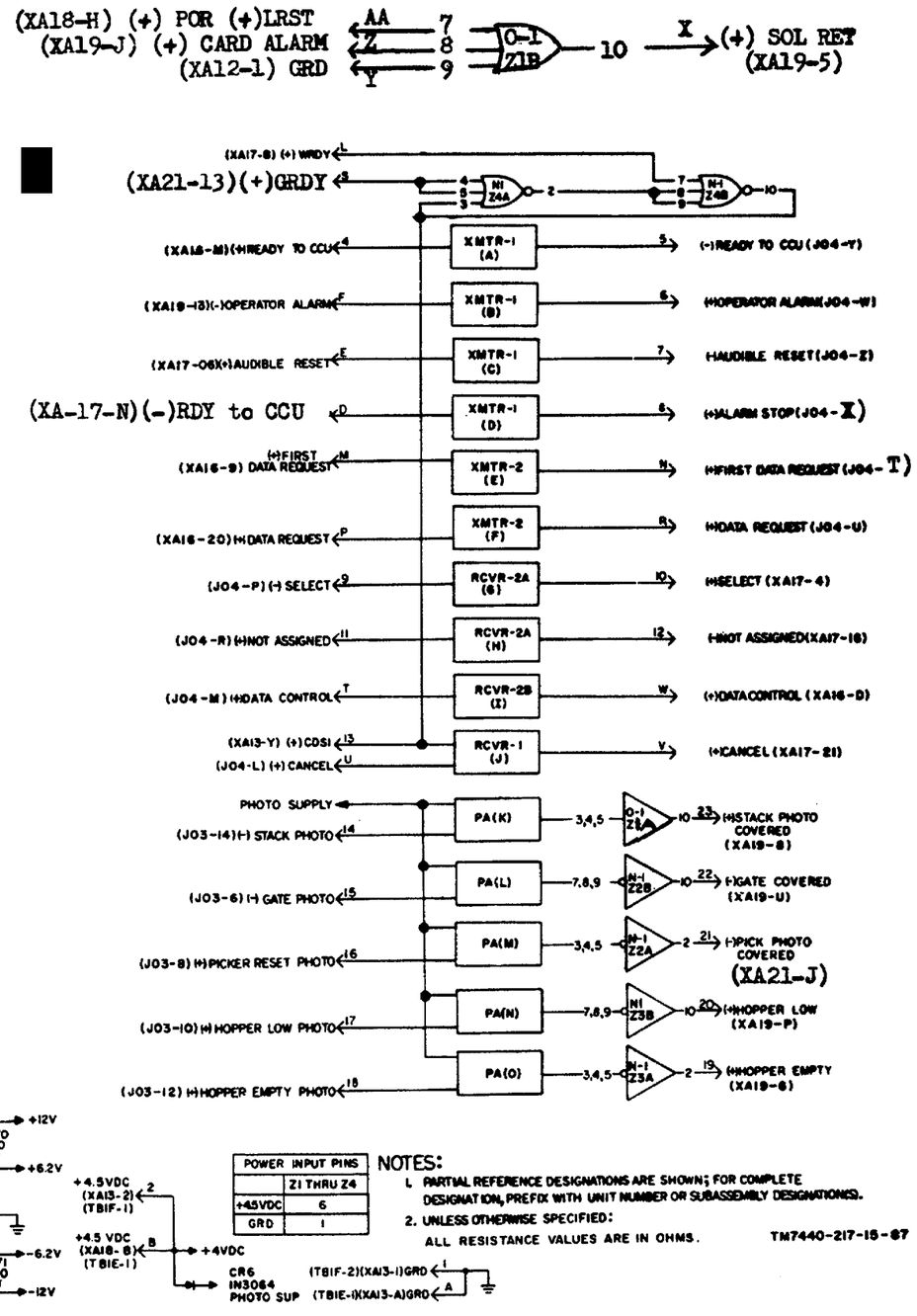
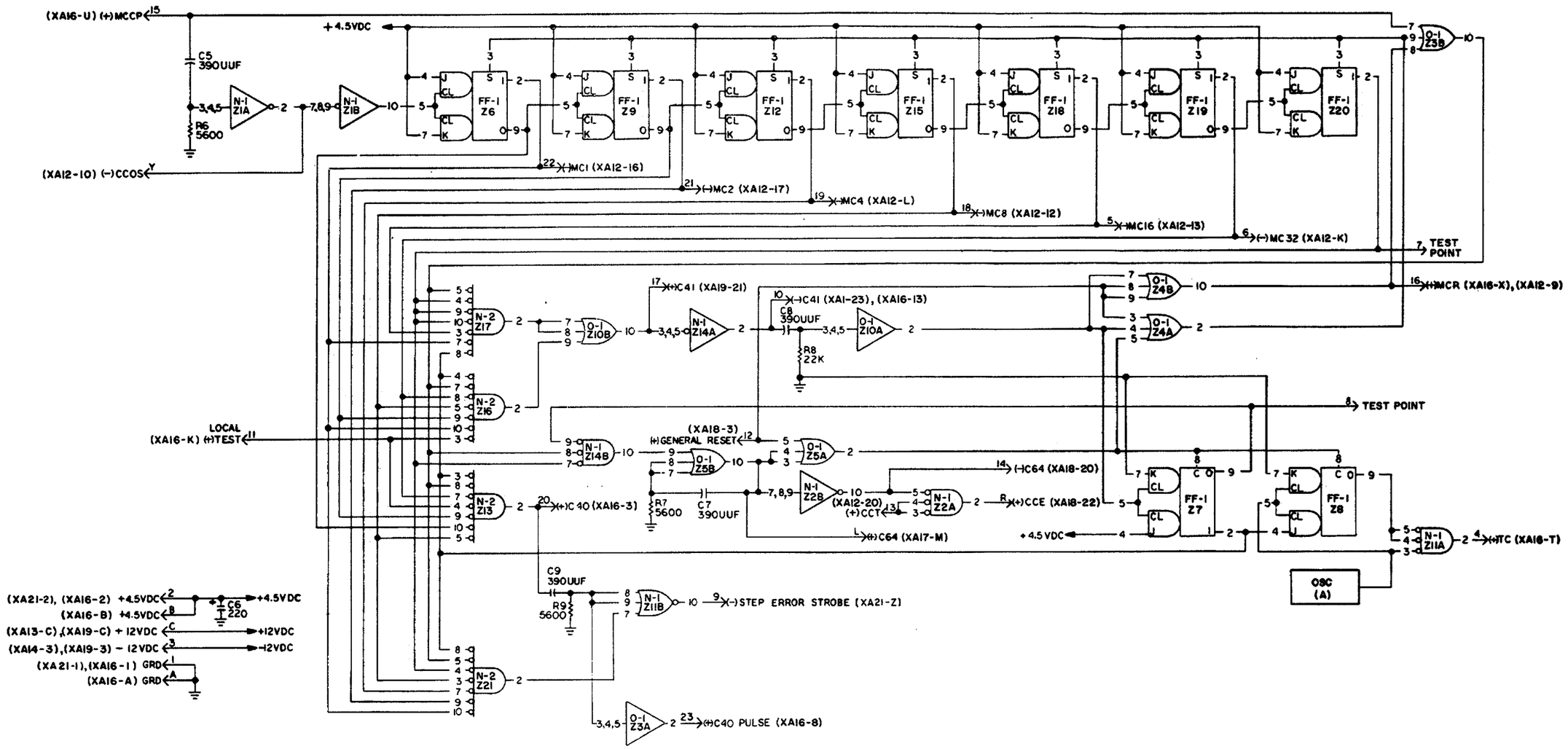


Figure 8-23. PC card A14 (No. 65121) schematic diagram.



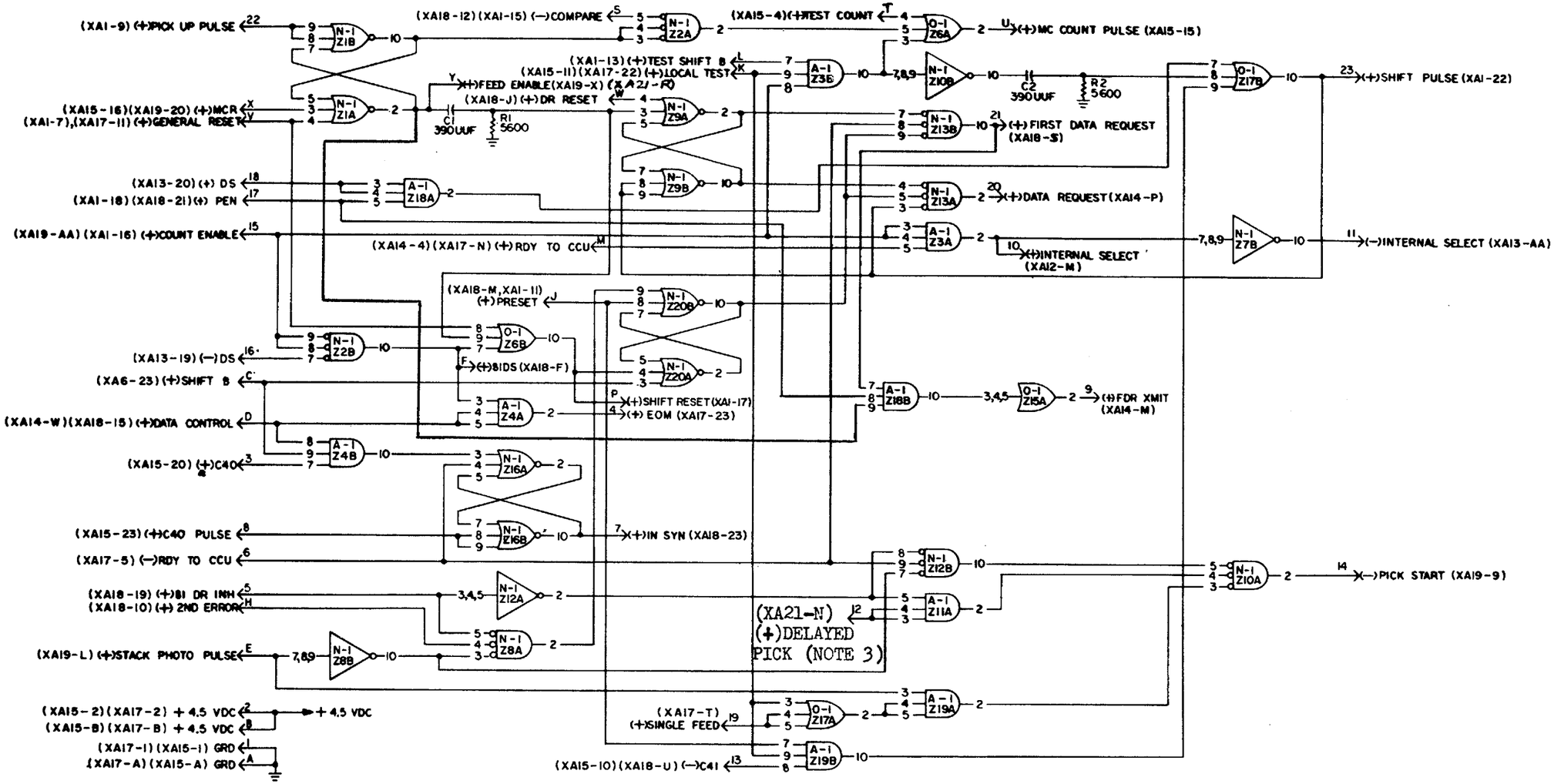
NOTES:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION, PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION(S).
2. UNLESS OTHERWISE SPECIFIED:
   ALL RESISTANCE VALUES ARE IN OHMS.
   ALL CAPACITANCE VALUES ARE IN MICROFARADS.

POWER INPUT PINS			
	Z6,Z9,Z12,Z15,Z18,Z19,Z20	Z1 THRU Z5,Z10,Z11,Z13,Z14,Z16,Z17,Z21	Z7,Z8
+4.5VDC	6	6	6
GRD	1&8	1	1&3

TM7440-217-15-88

Figure 8-24. PC card A15 (No. A65085), schematic diagram.



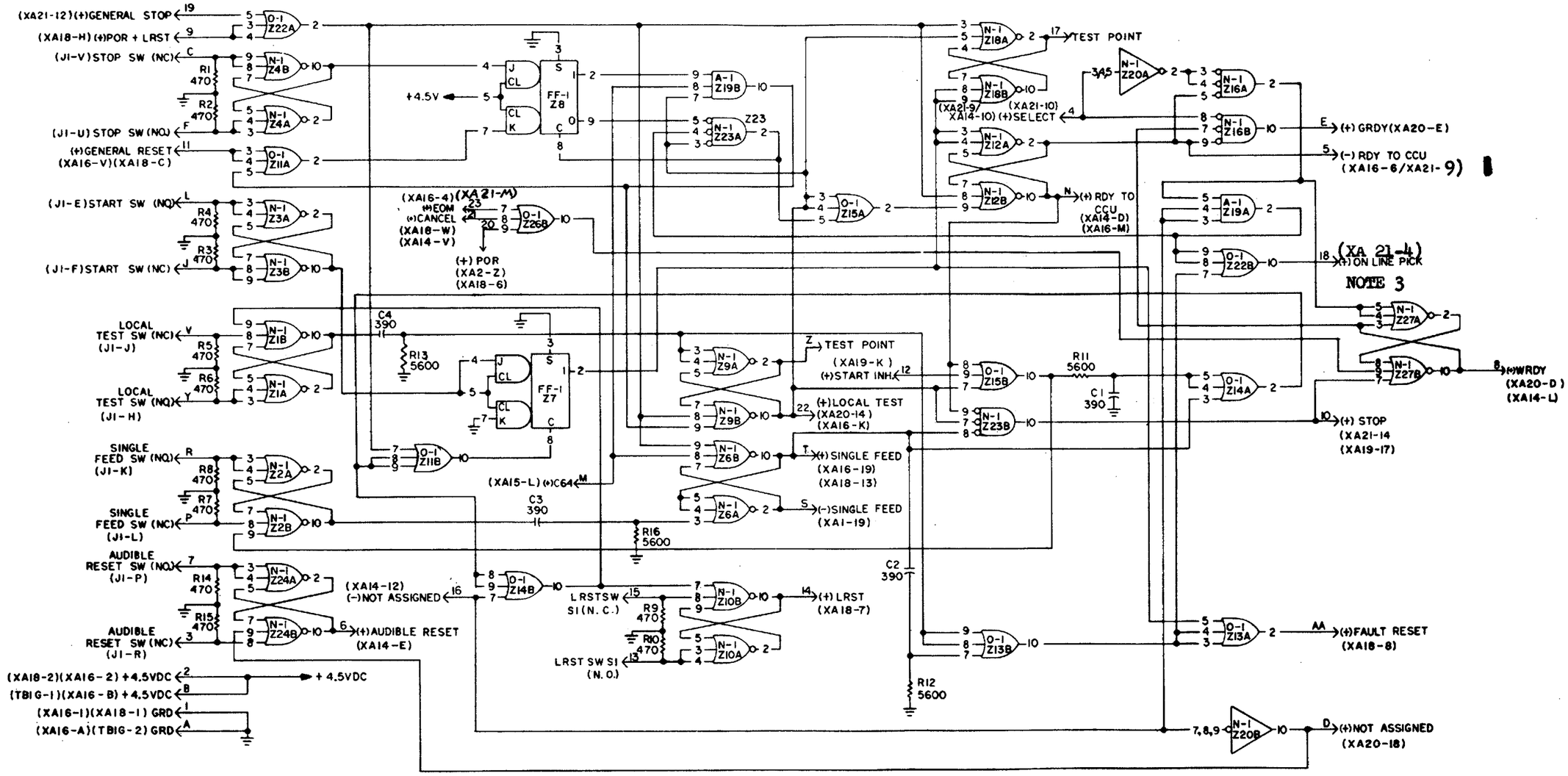
NOTES:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION (S).
2. UNLESS OTHERWISE SPECIFIED ALL RESISTANCE VALUES ARE IN OHMS.
3. IN UNITS NOT EQUIPPED WITH MOTOR STOP ASSEMBLY A4, PIN 12 IS CONNECTED TO XA17-18 (+) ON LINE PICK.

POWER INPUT PINS	
	Z1THRU Z4, Z6 THRU Z13, Z15THRU Z20
GRD	1
+4.5VDC	6

TM7440-217-15-89

Figure 8-25. PC card A16 (No. A65101), schematic diagram.



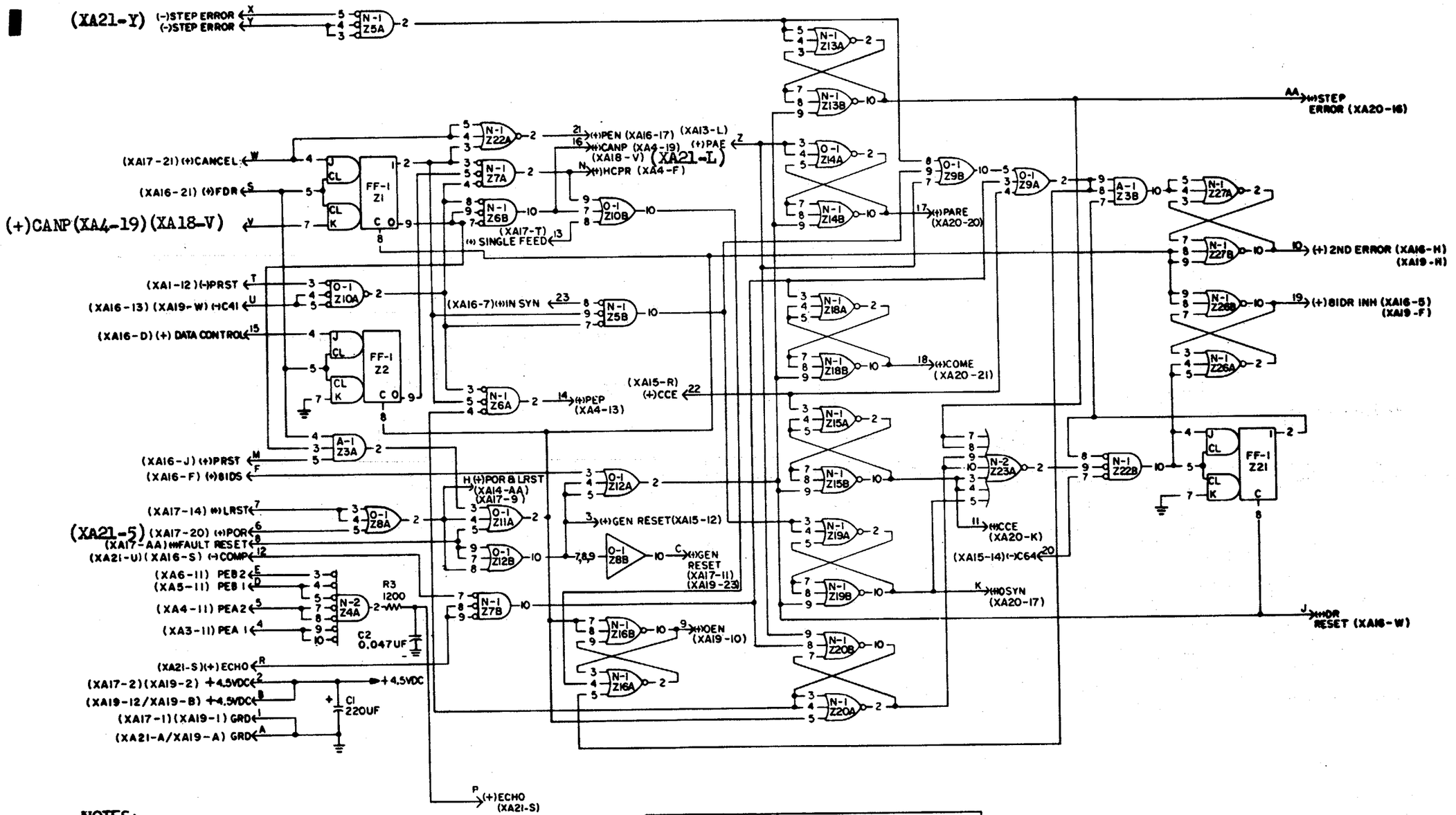
NOTES:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION(S).
2. UNLESS OTHERWISE SPECIFIED:
   ALL RESISTANCE VALUES ARE IN OHMS.
   ALL CAPACITANCE VALUES ARE IN MICROMICROFARADS.
3. IN UNITS NOT EQUIPPED WITH MOTOR STOP ASSEMBLY A4, PIN 18 IS CONNECTED TO XA16-12.

	POWER INPUT PINS
	Z1 THRU Z4, Z6 THRU Z16, Z18, Z19 Z20, Z22, Z23, Z24, Z26, Z27
GRD	1
+4.5VDC	6

TM7440-217-15-90

Figure 8-26. PC card A17 (No. A65093), schematic diagram.



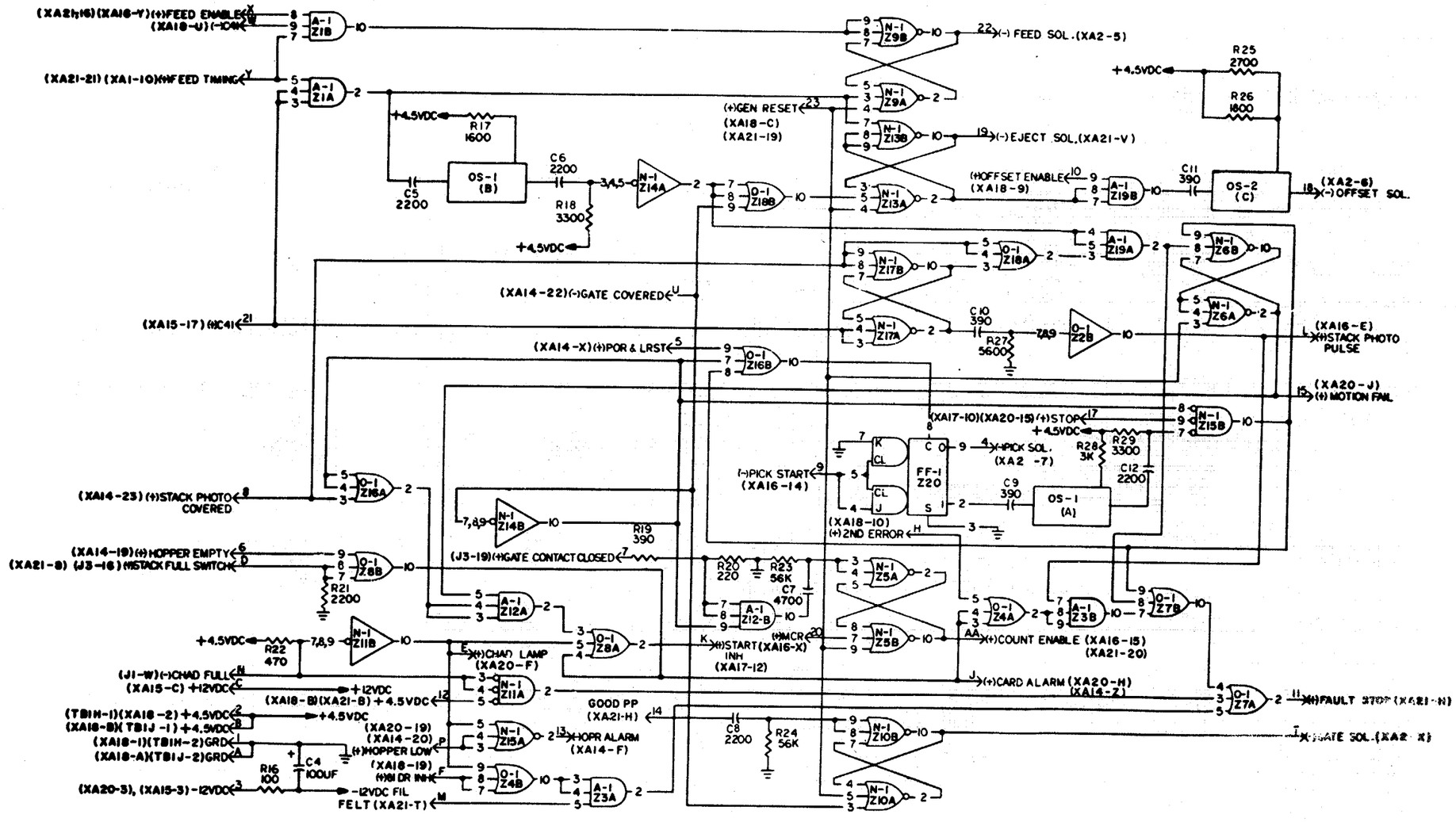
NOTES:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION(S).
2. UNLESS OTHERWISE SPECIFIED: ALL RESISTANCE VALUES ARE IN OHMS

POWER INPUT PINS		
	Z3 THRU Z16, Z18, Z19, Z20, Z22, Z23, Z26, Z27	Z1, Z2, Z21
+4.5VDC	6	6
GRD	1	1&3

TM7440-217-18-91

Figure 8-27. PC card A18 (No. A65109), schematic diagram.

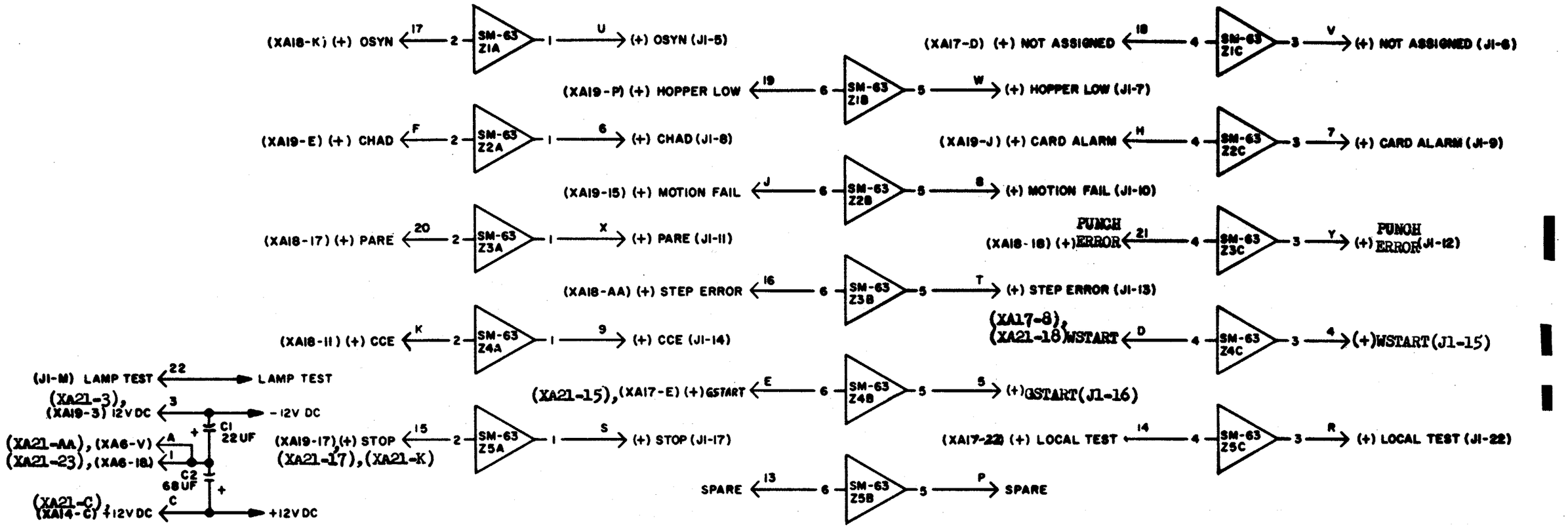


NOTES:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION(S).
2. UNLESS OTHERWISE SPECIFIED:
   ALL RESISTANCE VALUES ARE IN OHMS.
   ALL CAPACITANCE VALUES ARE IN MICROMICROFARADS.

POWER INPUT PINS	
	Z1 THRU Z20
GRD	1
+4.5VDC	6

Figure 8-28. PC card A19 (No. A65105), schematic diagram.



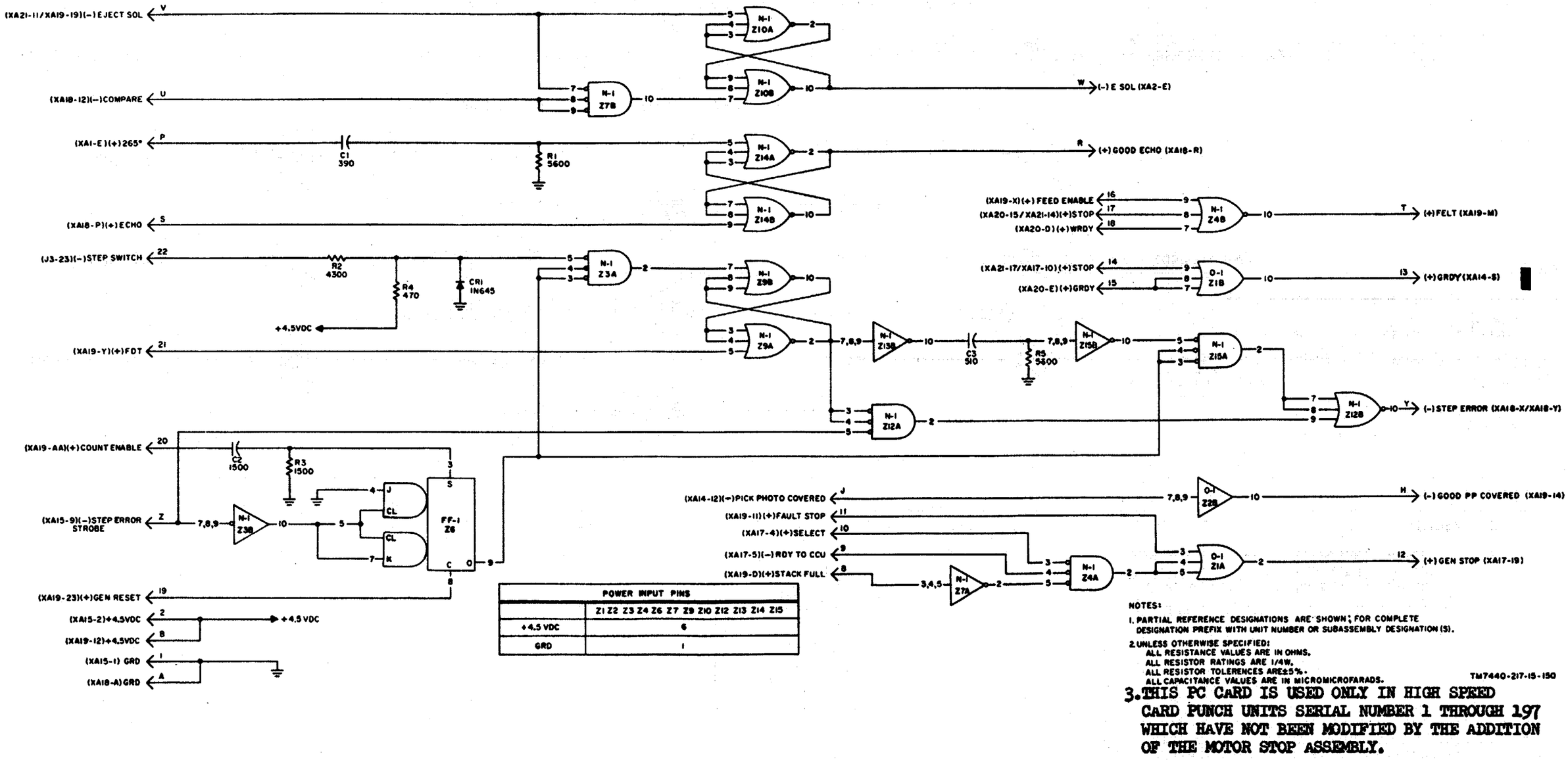
NOTE:

PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION (S)

POWER INPUT PINS	
	Z1 THRU Z5
+12V DC	7
-12V DC	8
GRD	10
LAMP TEST	9

TM7440-217-15-93

Figure 8-29. PC card A20 (No. SM-E-546656), schematic diagram.



POWER INPUT PINS	
	Z1 Z2 Z3 Z4 Z6 Z7 Z9 Z10 Z12 Z13 Z14 Z15
+4.5 VDC	6
GRD	1

NOTES:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NUMBER OR SUBASSEMBLY DESIGNATION (S).
2. UNLESS OTHERWISE SPECIFIED:
   ALL RESISTANCE VALUES ARE IN OHMS.
   ALL RESISTOR RATINGS ARE 1/4W.
   ALL RESISTOR TOLERENCES ARE±5%.
   ALL CAPACITANCE VALUES ARE IN MICROMICROFARADS.

TM7440-217-15-150

3. THIS PC CARD IS USED ONLY IN HIGH SPEED CARD PUNCH UNITS SERIAL NUMBER 1 THROUGH 197 WHICH HAVE NOT BEEN MODIFIED BY THE ADDITION OF THE MOTOR STOP ASSEMBLY.

Figure 8-30. PC card A-21 (No. A65177), schematic diagram.

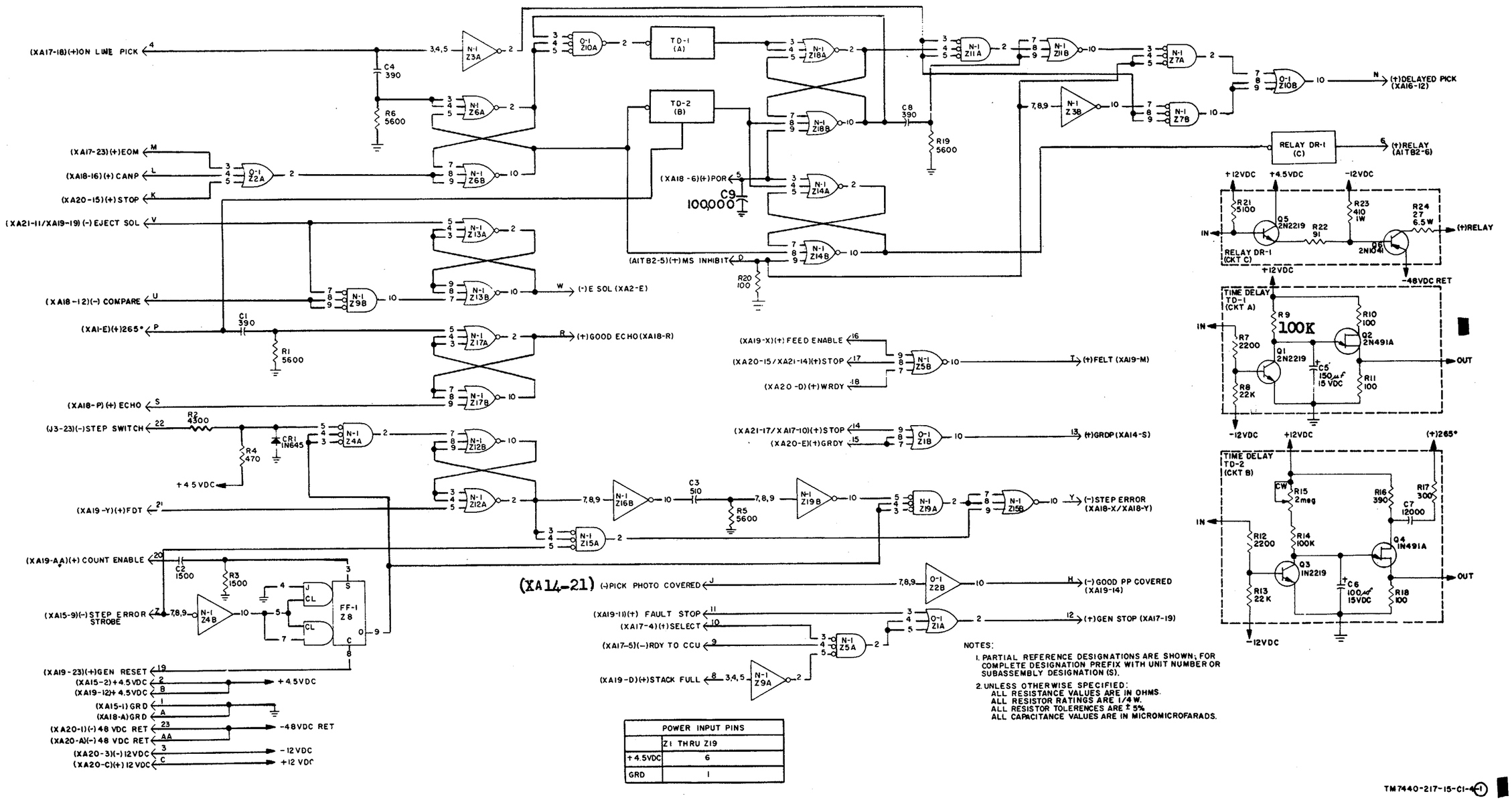


Figure 8-30.1. PC card A21 card (No. A57601), Schematic diagram.

TABLE 8-1. LOGIC ASSEMBLY A1 WIRE LIST

FROM Con-Pin	TO Con-Pin	FROM Con-Pin	TO Con-Pin	FROM Con-Pin	TO Con-Pin
J01-B	XA01-02	J02A-09	XA05-W	J03-U	XA05-08
J01-C	XA01-C	J02A-10	XA05-X	J03-V	XA05-06
J01-E	XA17-L	J02A-11	XA05-Z	J03-W	XA06-09
J01-F	XA7 -J	J02A-12	XA05-Y	J03-X	XA06-07
J01-H	XA17-Y	J02A-13	XA05-S	J03-Y	XA0605
J01-J	XA17-V	J02A-15	XA02-H	J03-Z	XA06-10
J01-K	XA17-R	J02A-16	XA02-J	J03-01	XA06-06
J01-L	XA17-P	J02B-A	XA04-L	J03-02	XA01-U
J01-M	XA20-22	J02B-B	XA04-K	J03-03	XA01-AA
J01-P	XA17-07	J02B-C	XA04-M	J03-04	XA01-Z
J01-R	XA17-03	J02B-D	XA04-N	J03-06	XA14-15
J01-U	XA17-F	J02B-E	XA04- P	J03-07	J03-09
J01-V	XA17-C	J02B-F	XA04-R	J03-08	XA14-16
J01-W	XA19-N	J02B-J	XA06-L	J03-09	J03-07
J01-X	XA02-V	J02B-K	XA06-K	J03-09	J03-11
J01-04	XA02-18	J02B-L	XA06-M	J03-10	XA14-17
J01-05	XA20-U	J02B-M	XA06-N	J03-11	J03-09
J01-06	XA20-V	J02B-N	XA06-P	J03-11	J03-13
J01-07	XA20-W	J02B-P	XA06-R	J03-12	XA14-18
J01-08	XA20-06	J02B-S	XA02-S	J03-13	J03-11
J01-09	XA20-07	J02B-T	XA02-14	J03-13	J03-15
J01-10	XA20-08	J02B-U	XA02-09	J03-14	XA14-14
J01-11	XA20-X	J02B-V	XA01-03	J03-15	XA01-B
J01-12	XA20-Y	J02B-X	J02B-AA	J03-15	J03-13
J01-13	XA20-T	J02B-AA	J02B-X	J03-16	XA19-D
J01-14	XA20-09	J02B-01	XA04-AA	J03-17	XA02-07
J01-15	XA20-04	J02B-02	XA04-W	J03-18	J04-13
J01-16	XA20-05	J02B-03	XA04-X	J03-19	XA19-07
J01-17	XA20-S	J02B-04	XA04-Z	J03-20	XA02-C
J01-18	J04-18	J02B-05	XA04-Y	J03-21	XA06-08
J01-19	J04-19	J02B-06	XA04-S	J03-22	XA01-K
J01-20	J04-20	J02B-08	XA06-AA	J03-23	XA21-22
J01-21	J04-21	J02B-09	XA06-W	J04-A	XA13-05
J01-22	XA20-R	J02B-10	XA06-X	J04-B	XA13-09
J02A-A	XA03-L	J02B-11	XA06-Z	J04-C	XA13-07
J02A-B	XA03-K	J02B-12	XA06-Y	J04-D	XA13-08
J02A-C	XA03-M	J02B-13	XA06-S	J04-E	XA13-10
J02A-D	XA03-N	J02B-15	XA02-15	J04-F	XA13-22
J02A-E	XA03-P	J02B-16	XA02-13	J04-H	XA13-23
J02A-F	XA03-R	J02B-17	XA02-08	J04-J	XA13-11
J02A-J	XA05-t	J02B-18	XA02-23	J04-K	XA13-21
J02A-K	XA05-K	J03-A	XA03-09	J04-L	XA14-U
J02A-L	XA05-M	J03-B	XA03-07	J04-M	XA14-T
J02A-M	XA05-N	J03-C	XA03-05	J04-P	XA14-09
J02A-N	XA05-P	J03-D	XA03-10	J04-R	XA14-11
J02A-P	XA05-R	J03-E	XA03-08	J04-T	XA14-N
J02A-S	XA02-F	J03-F	XA03-06	J04-U	XA14-R
J02A-T	XA02-K	J03-H	XA04-09	J04-W	XA14-06
J02A-X	J02A-AA	J03-J	XA04-07	J04-X	XA14-08
J02A-AA	J02A-X	J03-K	XA04-05	J04-Y	XA14-05
J02A-01	XA03-AA	J03-L	XA04-10	J04-Z	XA14-07
J02A-02	XA03-W	J03-M	XA04-08	J04-13	J04-16
J02A-03	XA03-X	J03-N	XA04-06	J04-13	J03-18
J02A-04	XA03-Z	J03-P	XA05-09	J04-14	J04-17
J02A-05	XA03-Y	J03-R	XA05-07	J04-16	XA01-01
J02A-06	XA03-S	J03-S	XA05-05	J04-16	J04-13
J02A-08	XA05-AA	J03-T	XA05-10	J04-17	XA01-A

TABLE 8-1. LOGIC ASSEMBLY A1 WIRE LIST (cont)

FROM Con-Pin	TO Con-Pin	FROM Con-Pin	TO Con-Pin	FROM Con-Pin	TO Con-Pin
J04-17	J04-14	XA01-21	XA05-23	XA03-P	J02A-E
J04-18	J01-18	XA01-22	XA16-23	XA03-P	J02A-F
J04-19	J01-19	XA01-23	XA15-10	XA03-S	J02A-06
J04-20	J01-20	XA02-A	XA03-A	XA03-V	XA02-V
J04-21	J01-21	XA02-A	XA01-A	XA03-V	XA04-V
TB1A-01	XA05-02	XA02-B	XA01-B	XA03-W	J02A-02
TB1A-02	XA05-19	XA02-B	XA03-B	XA03-X	J02A-03
TB1B-01	XA05-B	XA02-C	XA04-C	XA03-Y	J02A-05
TB1B-02	XA05-F	XA02-C	J03-20	XA03-Z	J02A-04
TB1C-01	XA07-02	XA02-D	XA03-D	XA03-AA	J02A-01
TB1C-02	XA09-01	XA02-D	XA01-D	XA03-01	XA02-01
TB1D-01	XA10-B	XA02-E	XA21-W	XA03-01	XA03-13
TB1D-02	XA10-A	XA02-F	J02A-S	XA03-02	XA04-02
TB1E-01	XA14-B	XA02-H	J02A-15	XA03-02	XA02-02
TB1E-02	XA14-A	XA02-J	J02A-16	XA03-03	XA01-05
TB1F-01	XA14-02	XA02-K	J02A-T	XA03-03	XA04-03
TB1F-02	XA14-01	XA02-S	J02B-S	XA03-04	XA02-04
TB1G-01	XA17-B	XA02-V	XA3-V	XA03-04	XA04-04
TB1G-02	XA17-A	XA02-V	J01-X	XA03-05	J03-C
TB1H-01	XA19-02	XA02-X	XA19-T	XA03-06	J03-F
TB1H-02	XA19-01	XA02-Z	XA17-20	XA03-07	J03-B
TB1J-01	XA19-B	XA02-01	XA03-01	XA03-08	J03-E
TB1J-02	XA19-A	XA02-01	XA01-01	XA03-09	J03-A
XA01-A	J04-17	XA02-02	XA01-02	XA03-10	J03-D
XA01-A	XA02-A	XA02-02	XA03-02	XA03-11	XA18-04
XA01-B	XA02-B	XA02-03	XA13-03	XA03-12	XA05-12
XA01-B	J03-15	XA02-03	XA01-03	XA03-13	XA03-19
XA01-C	XA03-C	XA02-04	XA03-04	XA03-13	XA03-01
XA01-C	J01-C	XA02-04	XA01-04	XA03-14	XA05-14
XA01-D	XA02-D	XA02-05	XA19-22	XA03-16	XA05-16
XA01-E	XA21-P	XA02-06	XA19-18	XA03-18	XA02-18
XA01-K	J03-22	XA02-07	J03-17	XA03-18	XA04-18
XA01-U	J03-02	XA02-07	XA19-04	XA03-19	XA04-01
XA01-Z	J03-04	XA02-08	J02B-17	XA03-19	XA03-13
XA01-AA	J03-03	XA02-09	J02B-U	XA03-20	XA05-20
XA01-01	J04-16	XA02-13	J02B-16	XA03-22	XA04-22
XA01-01	XA02-01	XA02-14	J02B-T	XA03-22	XA01-08
XA01-02	XA02-02	XA02-15	J02B-15	XA03-23	XA04-23
XA01-02	J01-B	XA02-18	XA03-18	XA03-23	XA01-20
XA01-03	J02B-V	XA02-18	JX01-04	XA04-A	XA03-F
XA01-03	XA02-03	XA02-23	J02B-18	XA04-A	XA05-A
XA01-04	XA02-04	XA03-A	XA02-A	XA04-B	XA03-B
XA01-05	XA03-03	XA03-A	XA03-F	XA04-B	XA05-B
XA01-06	XA05-22	XA03-B	XA04-B	XA04-C	XA02-C
XA01-07	XA16-V	XA03-B	XA02-B	XA04-C	XA06-C
XA01-08	XA03-22	XA03-C	XA05-C	XA04-D	XA05-D
XA01-09	XA16-22	XA03-C	XA01-C	XA04-D	XA03-D
XA01-10	XA19-Y	XA03-D	XA04-D	XA04-E	XA06-E
XA01-11	XA16J	XA03-D	XA02-D	XA04-F	XA18-N
XA01-12	XA18-T	XA03-E	XA05-E	XA04-H	XA06-H
XA01-13	XA16-L	XA03-F	XA04-A	XA04-K	J02B-B
XA01-15	XA16-S	XA03-F	XA03-A	XA04-L	J02B-A
XA01-16	XA16-15	XA03-H	XA05-H	XA04-M	J02B-C
XA01-17	XA16-P	XA03-K	J02A-B	XA04-N	J02B-D
XA01-18	XA16-17	XA03-L	J02A-A	XA04-P	J02B-E
XA01-19	XA17-S	XA03-M	J02A-C	XA04-R	J02B-F
XA01-20	XA03-23	XA03-N	J02A-D	XA04-S	J02B-06

TABLE 8-1. LOGIC ASSEMBLY A1 WIRE LIST (cont)

FROM Con-Pin	TO Con-Pin
XA04-V	XA05-V
XA04-V	XA03-V
XA04-W	J02B-02
XA04-X	J02B-03
XA04-Y	J02B-05
XA04-Z	J02B-04
XA04-AA	J02B-01
XA04-01	XA05-01
XA04-01	XA03-19
XA04-02	XA05-02
XA04-02	XA03-02
XA04-03	XA05-03
XA04-03	XA03-03
XA04-04	XA05-04
XA04-04	XA03-04
XA04-05	J03-K
XA04-06	J03-N
XA04-07	J03-J
XA04-08	J03-M
XA04-09	J03-H
XA04-10	J03-L
XA04-11	XA18-05
XA04-12	XA06-12
XA04-13	XA18-14
XA04-14	XA06-14
XA04-16	XA06-16
XA04-18	XA05-18
XA04-18	XA03-18
XA04-19	XA18-16
XA04-20	XA07-X
XA04-22	XA03-22
XA04-23	XA03-23
XA05-A	XA05-F
XA05-A	XA04-A
XA05-B	TB1B-01
XA05-B	XA04-B
XA0S-C	XA13-C
XA05-C	XA03-C
XA05-D	XA04-D
XA05-D	XA06-D
XA05-E	XA07-Y
XAo5-E	XA03-E
XA05-F	XA05-A
XA05-F	TB1B-02
XA05-H	XA07-14
XA05-H	XA03-H
XA05-K	J02A-K
XA05-L	J02A-J
XA05-M	J02A-L
XA05-N	J02A-M
XA05-P	J02A-N
XA05-R	J02A-P
XA05-S	J02A-13
XA05-V	XA04-V
XA05-V	XA06-V
XA05-W	J02A-09
XA05-X	J02A-10
XA05-Y	J02A-12
XA05-Z	J02A-11
XA05-AA	J02A-08
XA05-01	XA04-01
XA05-01	XA05-13
XA05-02	TB1A-01
XA05-02	XA04-02
XA05-03	XA04-03
XA05-03	XA06-03
XA05-04	XA06-04
XA05-04	XA04-04
XA05-05	J03-S
XA05-06	J03-V
XA05-07	J03-R
XA05-08	J03-U
XA05-09	J03-P
XA05-10	J03-T
XA05-11	XA18-D
XA05-12	XA03-12
XA05-12	XA07-23
XA05-13	XA05-19
XA05-13	XA05-01
XA05-14	XA03-14
XA05-14	XA07-15
XA05-16	XA03-16
XA05-16	XA07-U
XA05-18	XA04-18
XA05-1B	XA06-18
XA05-19	XA05-13
XA05-19	TB1A-02
XA05-20	XA03-20
XA06-20	XA07-P
XA05-22	XA01-06
XA05-22	XA06-22
XA05-23	XA01-21
XA05-23	XA06-23
XA06-A	XA06-F
XA06-B	XA07-B
XA06-C	XA14-C
XA06-C	XA04-C
XA06-D	XA05-D
XA06-E	XA07-21
XA06-E	XA04-E
XA06-F	XA07-A
XA06-F	XA06-A
XA06-H	XA04-H
XA06-H	XA07-W
XA06-K	J02B-K
XA06-L	J02B-J
XA06-M	J02B-L
XA06-N	J02B-M
XA06-P	J02B-N
XA06-R	J02B-P
XA06-S	J02B-13
XA06-V	XA20-A
XA06-V	XA05-V
XA06-W	J02B-09
XA06-X	J02B-10
XA06-Y	J02B-12
XA06-Z	J02B-11
XA06-AA	J02B-08
XA06-01	XA06-13
XA06-02	XA07-02
XA06-03	XA05-03
XA06-04	XA05-04
XA06-05	J03-Y
XA06-06	J03-01
XA06-07	J03-X
XA06-08	J03-21
XA06-09	J03-W
XA06-10	J03-Z
XA06-11	XA18-E
XA06-12	XA07-T
XA06-12	XA04-12
XA06-13	XA06-01
XA06-13	XA06-19
XA06-14	XA07-AA
XA06-14	XA04-14
XA06-16	XA07-S
XA06-16	XA04-16
XA06-18	XA20-01
XA06-18	XA05-18
XA06-19	XA07-01
XA06-19	XA06-13
XA06-20	XA07-X
XA06-22	XA05-22
XA06-23	XA16-C
XA06-23	XA05-23
XA07-A	XA06-F
XA07-A	XA08-A
XA07-8	XA06-B
XA07-B	XA08-B
XA07-D	XA08-02
XA07-E	XA08-J
XA07-F	XA08-H
XA07-H	XA08-20
XA07-J	XA09-W
XA07-K	XA08-W
XA07-L	XA09-14
XA07-P	XA05-20
XA07-R	XA12-08
XA07-S	XA06-18
XA07-7T	XA06-12
XA07-U	XA05-16
XA07-V	XA12-H
XA07-W	XA06-H
XAo7-X	XA06-20
XA07-X	XA04-20
XA05-Y	XA05-E
XA07-Z	XA12-14
XA07-AA	XA06-14
XA07-01	XA06-19
XA07-01	XA08-01
XA07-02	TB1C-01
XA07-02	XA06-02
XA07-04	XA08-N
XA07-05	XA08-23
XA07-06	XA08-T
XA67-07	XA08-156
XA07-08	XA09-03
XAo7-09	XA09-15
XA07-12	XA08-14
XA07-14	XA05-H
XA07-15	XA05-14
XA07-16	XA12-07
XA07-21	XA06-E
XA07-23	XA05-12
XA08-A	XA09-A
XA08-A	XA07-A
XA08-B	XA09-B
XA08-B	XA07-B
XA08-C	XA10-18
XA08-D	XA10-N
XA08-E	XA10-19
XA08-F	XA10-20
XA08-H	XA09-H
XA08-H	XA07-F
XA08-J	XA07-E
XA08-J	XA-09J
XA08-K	XA11-S
XA08-L	XA10-D
XA08-M	XA10-R
XA08-N	XA09-N
XA08-N	XA07-4
XA08-P	XA11-04
XA08-R	XA11-18
XA08-S	XA11-05
XA08-T	XA09-T
XA08-T	XA07-06
XA08-U	XA10-14
XA08-V	XA10-S
XA08-W	XA07-K
XA08-X	XA10-K
XA08-Y	XA10-04
XA08-Z	XA10-05
XA08-AA	XA10-13
XA08-01	XA09-01
XA08-01	XA07-01
XA08-02	XA09-02
XA08-02	XA07-D
XA08-04	XA10-Z
XA08-05	XA10-17
XA08-06	XA11-07
XA08-07	XA10-06
XA08-08	XA10-07
XA08-09	XA11-19
XA08-10	XA11-N
XA08-11	XA11-L
XA08-12	XA10-J
XA08-13	XA10-10
XA08-14	XA07-12
XA08-15	XA07-07
XA08-16	XA11-K
XA08-17	XA11-H
XA08-18	XA11-Z
XA08-19	XA10-H
XA08-20	XA07-H
XA08-20	XA09-20
XA08-21	XA01-C
XA08-22	XA10-M
XA08-23	XA07-05
XA08-23	XA09-23
XA09-A	XA08-A
XA09-A	XA10-A
XA09-B	XA10-B
XA09-B	XA08-B
XA09-C	XA11-20
XA09-D	XA11-M
XA09-E	XA11-17
XA09-F	XA11-15
XA09-H	XA08-H
XA09-J	XA08-J
XA09-K	XA11-13
XA09-L	XA11-V
XA09-M	XA10-02
XA09-N	XA08-N
XA09-P	XA11-10
XA09-R	XA11-C
XA09-S	XA11-02
XA09-T	XA08-T
XA09-U	XA10-09
XA09-V	XA11-J
XA09-W	XA07-J
XA09-X	XA11-03
XA09-Y	XA11-D
XA09-Z	XA11-R
XA09-AA	XA11-06
XA09-01	TB1C-02
XA09-01	XA08-01
XA09-02	XA08-02
XA09-04	XA10-08
XA09-05	XA11-16
XA09-06	XA10-Y
XA09-07	XA10-16
XA09-08	XA10-V
XA09-09	XA11-Y
XA09-10	XA11-21
XA09-11	XA11-P
XA09-12	XA10-03
XA09-13	XA10-L
XA09-14	XA07-L
XA09-15	XA07-09
XA09-16	XA11-09
XA09-17	XA11-14
XA09-18	XA10-15
XA09-19	XA11-08
XA09-20	XA08-20
XA09-21	XA10-21
XA09-22	XA10-P
XA09-23	XA08-23
XA10-A	TB1D-02
XA10-A	XA09-A
XA10-B	TB1D-01
XA10-B	XA09-B
XA10-C	XA08-21
XA10-D	XA08-L
XA10-E	XA11-E
XA10-F	XA11-F
XA10-H	XA08-19
XA10-J	XA08-12
XA10-K	XA08-X
XA10-L	XA09-13
XA10-M	XA08-22
XA10-N	XA08-D
XA10-P	XA09-22
XA10-R	XA08-M
XA10-S	XA08-V
XA10-T	XA11-T
XA10-U	XA11-U
XA10-V	XA09-08
XA10-W	XA12-05
XA10-X	XA11-X
XA10-Y	XA09-06
XA10-Z	XA08-04
XA10-AA	XA12-03
XA10-01	XA11-01
XA10-02	XA09-M
XA10-03	XA09-12
XA10-04	XA08-Y
XA10-05	XA08-Z
XA10-06	XA08-07
XA10-07	XA08-08
XA10-08	XA09-04
XA10-09	XA09-U
XA10-10	XA08-13
XA10-11	XA12-O
XA10-12	XA11-12
XA10-13	XA08-AA
XA10-14	XA08-U
XA10-15	XA09-18
XA10-16	XA09-07
XA10-17	XA08-05
XA10-18	XA08-C
XA10-19	XA08-E
XA10-20	XA08-F
XA10-21	XA09-21
XA10-22	XA12-04
XA10-23	XA11-23
XA11-A	XA12-A
XA11-B	XA12-B
XA11-C	XA09-R
XA11-D	XA09-Y
XA11-E	XA12-AA
XA11-E	XA10-E
XA11-F	XA12-Z
XA11-F	XA10-F
XA11-H	XA08-17
XA11-J	XA09-V
XA11-K	XA08-16
XA11-L	XA08-11
XA11-M	XA09-D
XA11-N	XA08-10
XA11-P	XA09-11
XA11-R	XA09-Z
XA11-S	XA08-K
XA11-T	XA10-T
XA11-T	XA12-W
XA11-U	XA10-U
XA11-U	XA12-X
XA11-V	XA09-L
XA11-W	XA12-08
XA11-X	XA12-22

TABLE 8-1. LOGIC ASSEMBLY A1 WIRE LIST (cont)

FROM Con-Pin	TO Con-Pin	FROM Con-Pin	TO Con-Pin	FROM Con-Pin	TO Con-Pin
XA11-X	XA10-X	XA12-11	XA13-06	XA14-T	J04-M
XA11-Y	XA09-09	XA12-12	XA15-18	XA14-U	J04-L
XA11-Z	XA08-18	XA12-13	XA15-05	XA14-V	XA17-21
XA11-AA	XA12-F	XA12-14	XA07-Z	XA14-W	XA16-D
XA11-01	XA12-23	XA12-15	XA13-E	XA14-X	XA19-05
XA11-01	XA10-01	XA12-16	XA15-22	XA14-Y	XA12-01
XA11-02	XA09-S	XA12-17	XA15-21	XA14-Z	XA19-J
XA11-03	XA09-X	XA12-18	XA13-F	XA14-AA	XA18-H
XA11-04	XA08-P	XA12-19	XA13-13	XA14-01	TB1F-02
XA11-05	XA08-S	XA12-20	XA15-13	XA14-01	XA13-01
XA11-06	XA09-AA	XA12-21	XA11-23	XA14-02	XA13-02
XA11-07	XA08-06	XA12-22	XA11-X	XA14-02	TB1F-01
XA11-08	XA09-19	XA12-23	XA11-01	XA14-03	XA15-03
XA11-09	XA09-16	XA13-A	XA12-A	XA14-03	XA13-03
XA11-10	XA09-P	XA13-A	XA14-A	XA14-04	XA16-M
XA11-11	XA12-D	XA13-B	XA12-B	XA14-05	J04-Y
XA11-12	XA10-12	XA13-B	XA14-B	XA14-06	J04-W
XA11-12	XA12-Y	XA13-C	XA05-C	XA14-07	J04-Z
XA11-13	XA09-K	XA13-C	XA15-C	XA14-08	J04-X
XA11-14	XA09-17	XA13-D	XA12-U	XA14-09	J04-P
XA11-15	XA09-F	XA13-E	XA12-15	XA14-10	XA17-04
XA11-16	XA09-05	XA13-F	XA12-18	XA14-11	J04-R
XA11-17	XA09-E	XA13-H	XA12-V	XA14-12	XA17-16
XA11-18	XA08-R	XA13-L	XA18-Z	XA14-13	XA13-Y
XA11-19	XA08-09	XA13-Y	XA14-13	XA14-14	J03-14
XA11-20	XA09-C	XA13-Z	XA12-J	XA14-15	J03-06
XA11-21	XA09-10	XA13-AA	XA16-11	XA14-16	J03-08
XA11-22	XA12-E	XA13-01	XA12-01	XA14-17	J03-10
XA11-23	XA12-21	XA13-01	XA14-01	XA14-18	J03-12
XA11-23	XA10-23	XA13-02	XA14-02	XA14-19	XA19-06
XA12-A	XA13-A	XA13-02	XA12-02	XA14-20	XA19-P
XA12-A	XA11-A	XA13-03	XA02-03	XA14-21	XA21-J
XA12-B	XA13-B	XA13-03	XA14-03	XA14-22	XA19-U
XA12-B	XA11-B	XA13-05	J04-A	XA14-23	XA19-08
XA12-C	XA10-11	XA13-06	XA12-11	XA15-A	XA16-A
XA12-D	XA11-11	XA13-07	J04-C	XAt15-B	XA16-B
XA12-E	XA11-22	XA13-08	J04-D	XA15-C	XA19-C
XA12-F	XA11-AA	XA13-09	J04-B	XA15-C	XA13-C
XA12-H	XA07-V	XA13-10	J04-E	XA15-L	XA17-M
XA12-J	XA13-Z	XA13-11	J04-J	XA15-R	XA18-22
XA12-K	XA15-06	XA13-13	XA12-19	XA15-Y	XA12-10
XA12-L	XA15-19	XA13-19	XA16-16	XA15-01	XA16-01
XA12-M	XA16-10	XA13-20	XA16-18	XA15-01	XA21-01
XA12-U	XA13-D	XA13-21	J04-K	XA15-02	XA21-02
XA12-V	XA13-H	XA13-22	J04-F	XA15-02	XA16-02
XA12-W	XA11-T	XA13-23	J04-H	XA15-03	XA14-03
XA12-X	XA11-U	XA14-A	TB1E-02	XA15-03	XA19-03
XA12-Y	XA11-12	XA14-A	XA13-A	XA15-04	XA16-T
XA12-Z	XA11-F	XA14-B	TB1E-01	XA15-05	XA12-13
XA12-AA	XA11-E	XA14-B	XA13-B	XA15-06	XA12-K
XA12-01	XA14-Y	XA14-C	XA20-C	XA15-09	XA21-Z
XA12-01	XA13-01	XA14-C	XA06-C	XA15-10	XA01-23
XA12-02	XA13-02	XA14-D	XA17-N	XA15-10	XA16-13
XA12-03	XA10-AA	XA14-E	XA17-06	XA15-11	XA16-K
XA12-04	XA10-22	XA14-F	XA19-13	XA15-12	XA16-03
XA12-05	XA10-W	XA14-L	XA17-08	XA15-13	XA12-20
XA12-06	XA11-W	XA14-M	XA16-09	XA15-14	XA18-20
XA12-07	XA07-16	XA14-N	J04-T	XA15-15	XA16-U
XA12-08	XA07-R	XA14-P	XA16-20	XA15-16	XA16-X
XA12-09	XA15-16	XA14-R	J04-U	XA15-16	XA12-09
XA12-10	XA15-Y	XA14-S	XA21-S	XA15-17	XA19-21

TABLE 8-1. LOGIC ASSEMBLY A1 WIRE LIST (cont)

FROM Con-Pin	TO Con-Pin	FROM Con-Pin	TO Con-Pin	FROM Con-Pin	TO Con-Pin
XA15-18	XA12-12	XA16-22	XA01-09	XA18-E	XA06-11
XA15-19	XA12-L	XA16-23	XA01-22	XA18-F	XA16-F
XA15-20	XA16-03	XA17-A	TB1G-02	XA18-H	XA14-AA
XA15-21	XA12-17	XA17-A	XA16-A	XA18-H	XA17-09
XA15-22	XA12-16	XA17-B	XA16-B	XA18-J	XA16-W
XA15-23	XA16-08	XA17-B	TB1G-01	XA18-K	XA20-17
XA16-A	XA15-A	XA17-C	J01-V	XA18-M	XA16-J
XA16-A	XA17-A	XA17-D	XA20-18	XA18-N	XA04-F
XA16-B	XA17-B	XA17-E	XA20-E	XA18-P	XA21-S
XA16-B	XA15-B	XA17-F	J01-U	XA18-R	XA21-R
XA16-C	XA06-23	XA17-J	J01-F	XA18-S	XA16-21
XA16-D	XA14-W	XA17-L	J01-E	XA18-T	XA01-12
XA16-D	XA18-15	XA17-M	XA15-L	XA18-U	XA19-W
XA16-E	XA19-L	XA17-N	XA16-M	XA18-W	XA17-131
XA16-F	XA18-F	XA17-N	XA14-D	XA18-V	XA18-16
XA16-H	XA18-10	XA17-P	J01-L	XA18-W	XA17-21
XA16-J	XA18-M	XA17-P	J01-K	XA18-X	XA21-Y
XA16-J	XA01-11	XA17-S	XA01-19	XA18-Y	XA21-Y
XA16-K	XA17-22	XA17-RT	XA16-19	XA18-Z	XA13-L
XA16-K	XA15-11	XA17-T	XA48-13	XA18-AA	XA20-16
XA16-L	XA01-13	XA17-V	J01-J	XA18-01	XA19-01
XA16-M	XA17-N	XA17-Y	J01-H	XA18-01	XA17-01
XA16-M	A174-04	XA17-AA	XA18-08	XA18-02	XA19-02
XA16-P	XA01-17	XA17-01	XA18-01	XA18-02	XA17-02
XA16-S	XA01-15	XA17-01	XA16-01	XA18-03	XA15-12
XA16-S	XA18-12	XA17-02	XA16-02	XA18-04	XA03-11
XA16-T	XA15-04	XA17-02	XA18-02	XA18-05	XA04-11
XA16-U	XA15-15	XA17-03	J01-R	XA18-06	XA17-20
XA16-V	XA41-07	XA17-03	XA14-10	XA18-07	XA17-14
XA16-V	XA17-11	XA17-04	XA21-10	XA18-08	XA17-AA
XA16-W	XA18-J	XA17-05	XA16-06	XA18-09	XA19-10
XA16-X	XA15-16	XA17-05	XA21-09	XA18-10	XA19-H
XA16-X	XA19-20	XA17-06	XA184-E	XA18-10	XA16-H
XA16-Y	XA19-NX	XA17-07	J101-P	XA18-11	XA20-K
XA16-01	XA15-01	XA17-08	XA	XA18-12	XA21-U
XA16-01	XA17-01	XA17-08	XA14-L	XA18-13	XA17-T
XA16-02	XA17-02	XA17-09	XA16-H	XA18-14	XA04-13
XA16-02	XA15-02	XA17-10	XA21-14	XA18-15	XA16-D
XA16-03	XA15-20	XA17-10	XA19-17	XA18-16	XA04-19
XA16-04	XA17-23	XA17-11	XA18-C	XA18-16	XA418-V
XA16-05	XA15-19	XA17-11	XA16-V	XA18-17	XA20-20
XA16-06	XA17-05	XA17-12	XA18-18	XA18-17	XA20-21
XA16-07	XA18-23	XA17-14	XA18-07	XA18-19	XA16-05
XA16-08	XA15-23	XA17-16	XA14-12	XA18-19	XA19-F
XA16-09	XA14-M	XA17-18	XA16-12	XA18-20	XA15-14
XA16-10	XA12-M	XA17-19	XA21-12	XA18-21	XA1-H17
XA16-11	XA17-20	XA17-19	XA21-12	XA18-21	XA16-17
XA16-12	XA17-18	XA17-20	XA18-06	XA18-23	XA16-07
XA16-13	XA15-10	XA17-21	XA18-W	XA1-A	TB1J-02
XA16-13	XA178-U	XA17-21	XA14-V	XA19-A	XA17-A
XA16-14	XA19-09	XA17-22	XA20-14	XA18-14	XA04-01
XA16-15	XA19-AA	XA17-22	XA21-14	XA19-B	XA18-B
XA16-15	XA01-16	XA17-23	XA16-04	XA19-C	XA15-C
XA16-16	XA13-19	XA18-A	XA19-A	XA19-D	J03-16
XA16-17	XA01-18	XA17-A	XA16-A	XA19-D	XA21-08
XA16-17	XA18-21	XA18-B	XA19-B	XA19-E	XA20-F
XA16-18	XA13-20	XA18-B	XA19-12	XA19-F	XA18-19
XA16-19	XA17-T	XA17-C	XA18	XA19-H	XA18-10
XA16-20	XA14-P	XA18-C	XA19-23	XA19-J	XA14-Z
XA16-21	XA18-S	XA18-D	XA05-11	XA19-J	XA20-H

TABLE 8-1 . LOGIC ASSEMBLY A1 WIRE LIST (cont)

FROM Con-Pin	TO Con-Pin	FROM Con-Pin	TO Con-Pin	FROM Con-Pin	TO Con-Pin
XA19-K	XA17-12	XA20-X	J01-11		
XA19-L	XA16-E	XA20-Y	J01-12		
XA19-M	XA21-T	XA20-01	XA06-18		
XA19-N	JO1-W	XA20-03	XA19-03		
XA19-P	XA20-19	XA20-04	J01-15		
XA19-P	XA14-20	XA20-05	J01-16		
XA19-T	XA02-X	XA20-06	J01-08		
XA19-U	XA14-22	XA20-07	J01-09		
XA19-W	XA18-U	XA20-08	J01-10		
XA19-X	XA16-Y	XA20-09	J01-14		
XA19-X	XA21-16	XA20-14	XA17-22		
XA19-Y	XA01-10	XA20-15	XA19-17		
XA19-Y	XA21-21	XA20-15	XA21-17		
XA19-AA	XA16-15	XA20-16	XA18-AA		
XA19-AA	XA21-20	XA20-17	XA18-K		
XA19-01	TB1H-02	XA20-18	XA17-D		
XA19-01	XA18-01	XA20-19	XA19-P		
XA19-02	XA18-02	XA20-20	XA18-17		
XA19-02	TB1H-01	XA20-21	XA18-18		
XA19-03	XA20-03	XA20-22	J01-M		
XA19-03	XA15-03	XA21-A	XA18-A		
XA19-04	XA02-07	XA21-B	XA19-12		
XA19-05	XA14-X	XA21-H	XA19-14		
XA19-06	XA14-19	XA21-J	XA14-21		
XA19-07	J03-19	XA21-P	XA01-E		
XA19-08	XA14-23	XA21-R	XA18-R		
XA19-09	XA16-14	XA21-S	XA18-P		
XA19-10	XA18-09	XA21-T	XA19-M		
XA19-11	XA21-11	XA21-U	XA18-12		
XA19-12	XA18-B	XA21-V	XA19-19		
XA19-12	XA21-B	XA21-W	XA02-E		
XA19-13	XA14-F	XA21-Y	XA18-Y		
XA19-14	XA20-H	XA21-Y	XA18-X		
XA19-15	XA20-J	XA21-Z	XA15-09		
XA19-17	XA20-15	XA21-01	XA15-01		
XA19-17	XA17-10	XA21-02	XA15-02		
XA19-18	XA02-06	XA21-08	XA19-D		
XA19-19	XA21-V	XA21-09	XA17-05		
XA19-20	XA16-X	XA21-10	XA17-04		
XA19-21	XA15-17	XA21-11	XA19-11		
XA19-22	XA02-05	XA21-12	XA17-19		
XA19-23	XA18-C	XA21-13	XA14-S		
XA19-23	XA21-19	XA21-14	XA21-17		
XA20-A	XA06-V	XA21-14	XA17-10		
XA20-C	XA14-C	XA21-15	XA20-E		
XA20-D	XA17-08	XA21-16	XA19-X		
XA20-D	XA21-18	XA21-17	XA21-14		
XA20-E	XA17-E	XA21-17	XA20-15		
XA20-E	XA21-15	XA21-18	XA20-D		
XA10-F	XA19-E	XA21-19	XA19-23		
XA20-H	XA19-J	XA21-20	XA19-AA		
XA20-J	XA19-15	XA21-21	XA19-Y		
XA20-K	XA18-11	XA21-22	J03-23		
XA20-R	J01-22				
XA20-S	J01-17				
XA20-T	J01-13				
XA20-U	J01-05				
XA20-V	J01-06				
XA20W	J01-07				

TABLE 8-1. LOGIC ASSEMBLY A1 WIRIE RUN LIST (cont)

ADDED CONNECTIONS (cont)

FROM	TO
XA16-12	XA21-N[ab]
XA17-18	XA21-04[b]
XA17-23	XA21-M[b]
XA18-06	XA21-05[b]
XA18-16	XA21-L[b]
XA20-A	XA21-AA[b]
XA20-C	XA21-C[b]
XA20-01	XA21-23[b]
XA20-03	XA21-03[b]
XA20-15	XA21-K[b]
XA21-C	XA20-C[b]
XA21-D	TB2-05[b]
XA21-K	XA20-15[b]
XA21-L	XA18-16[b]
XA21-M	XA17-23[b]
XA21-N	XA16-12[b]
XA21-AA	XA20-A[b]
XA21-03	XA20-03[b]
XA21-04	XA17-18[b]
XA21-05	XA18-06[b]
XA21-06	TB2-06[b]
TB2-05	XA21-D [b]
TB2-06	XA21-06[b]

[a]Pin No. XA16-12 is connected to XA17-18 in high speed card punches not equipped with automatic motor stop feature.

[b]Indicates wiring connections in high speed card punches equipped with automatic motor stop feature.

APPENDIX A
REFERENCES

The following publications apply to operation and maintenance of the equipment covered in this manual:

DA Pam 310-1 ..... Consolidated Index of Army Publications and Blank Forms.

DA Pam 738-750 ..... The Army Maintenance Management System (TAMMS).

DA Pam 750-10 ..... US Army Equipment Index of Modification Work Orders.

SB 38-100 ..... Preservation, Packaging, Packing and Marking Materials, Supplies, and Equipment Used by the Army.

TB SIG 222 ..... Solder and Soldering.

TB 43-0118 ..... Field Instructions for Painting and Preserving Electronics Command Equipment Including Camouflage Pattern Painting of Electrical Equipment Shelters.

TM 11-7440-238-15/NAVELEX 0967-LP-324-0100/TO 31W4-4-1-101 ..... Operator, Organizational, Direct Support, General Support, and Depot Maintenance Manual: Digital Subscriber Terminals AN/FYA-71(V)1 through AN/FYA-71(V)6 and Device Switch Module SA-1616/G.

NW 00-15PA-1 ..... Technical Inspection Manual, Soldering for Electric and Electronic Application (Navy).

TO 00-25-234 ..... General Shop Practice Requirements for the Repair, Maintenance, and Test of Electronic Equipment.

TM 11-7440-239-15/NAVELEX 0967-LP-324-0110/TO 31W4-4-1-111 ..... Operator's, Organizational, DS, GS, and Depot Maintenance Manual: AUTODIN Digital Subscriber Terminals (Station Manual) (NSN 5895-00-110-9860 through 5895-00-110-9865).

TM 740-90-1 ..... Administrative Storage of Equipment.

TM 750-244-2 ..... Procedure for Destruction of Electronics Materiel to Prevent Enemy Use (Electronics Command).

APPENDIX C
MAINTENANCE ALLOCATION

Section I. INTRODUCTION

C-1. General

This appendix provides a summary of the maintenance operations covered in the equipment maintenance manual for Card Punch, High Speed RO-312/ G, and authorizes categories of maintenance for specific maintenance functions on repairable items and components and the tools and equipment required to perform each function. This appendix may be used as an aid in planning maintenance operations.

C-2. Explanation of Format for Maintenance Allocation Chart

a. Group Number. Group numbers correspond to -he reference designation prefix assigned in accordance with ASA Y32.16, Electrical and Electronics Reference Designations. They indicate the relation of listed items to the next higher assembly.

b. Component Assembly Nomenclature. This column lists the item names of components units, assemblies, subassemblies, and modules on which maintenance is authorized.

c. Maintenance Function. This column indicates the maintenance category at which performance of the specific maintenance function is authorized. Authorization to perform a function at any category also includes authorization to perform that function at higher categories. The codes used represent the various maintenance categories as follows:

Code	*Maintenance category*
C	Operator/Crew
H	General Support Maintenance
D	Depot Maintenance

d. Tools and Equipment. The numbers appearing in this column refer to specific tools and equipment which are identified by these numbers in section III.

e. Remarks. Self-explanatory.

C-3. Explanation of Format for Tool and Test Equipment Requirements

The columns in the tool and test equipment requirements chart are as follows:

a. Tools and Equipment. The numbers in this column coincide with the numbers used in the tools and equipment column of the MAC. The numbers indicate the applicable tools for the maintenance function.

b. Maintenance Category. The codes in this column indicate the maintenance category normally allocated the facility.

c. Nomenclature. This column lists tools, test, and maintenance equipment required to perform the maintenance functions.

d. Federal Stock Number. This column lists the Federal stock number.

e. Tools Number. Not used.

SECTION II. MAINTENANCE ALLOCATION CHART

MAINTENANCE ALLOCATION CHART

GROUP NUMBER	COMPONENT ASSEMBLY NOMENCLATURE	MAINTENANCE FUNCTIONS											TOOLS AND EQUIPMENT	REMARKS
		INSPECT	TEST	SERVICE	ADJUST	ALIGN	CALIBRATE	INSTALL	REPLACE	REPAIR	OVERHAUL	REBUILD		
1.0	CARD PUNCH, HIGH SPEED RO-312/G	C											None	External
		H											14,15,16	Internal
			H										1 thru 8 12 thru 16	All on-site tests
				H									9,10,11,14 15,16	Clean and lubricate Lubricate during reassembly
					H								1 thru 8 12 thru 16	Power supply; mechanical adjustment card punch assembly
									H				14,15,16	Replace defective plug-in circuit card assemblies and mechanical subassemblies.
										H			14,15,15	Replace defective external piece parts on card punch assembly; hard-wired electrical components.
	NOTE: OPERATING ORGANIZATIONS PERFORM ON-SITE EQUIVALENT TO H LEVEL MAINTENANCE.									D			1 thru 7 12 thru 22	Defective curcuit card assemblies defective components; punch head assembly.
											D		1 thru 10 12 thru 24	Restore Card Punch, High Speed RO-312/G to serviceable condition.

AMSEL-HR Form 1 Jan 66 MAC-1 6021 (Supersedes edition of 1 Feb 65, which is obsolete) ESC-FM 97-66

SECTION III. TOOL AND TEST EQUIPMENT REQUIREMENTS

TOOL AND TEST EQUIPMENT REQUIREMENTS				
TOOLS AND EQUIPMENT	MAINTENANCE CATEGORY	NOMENCLATURE	FEDERAL STOCK NUMBER	TOOL NUMBER
		RO-312/G (continued)		
1	H,D	MULTIMETER AN/USM-210 (SIMPSON MODEL 260)	6625-019-0815	
2	H,D	OSCILLOSCOPE (HEWLETT-PACKARD MODEL 140A)	6625-957-0509	
3	H,D	DUAL TRACE AMPLIFIER (HEWLETT-PACKARD MODEL H06-1405A)	6625-937-3610	
4	H,D	TIME BASE AND DELAY GENERATOR (HEWLETT-PACKARD MODEL 1421A)	6625-930-9119	
5	H,D	PROBE, VOLTAGE DIVIDER (HEWLETT-PACKARD MODEL CO-7-10003B) - 2 ea. REQ'D	6625-802-8018	
6	H,D	PROBE TIP, COIL SPRING (TECTRONIX NO. 206-0061-00) - 2 ea REQ'D	6625-054-0231	
7	H,D	CART, OSCILLOSCOPE (HEWLETT-PACKARD MODEL 1119B)		
8	H,D	GAGE, VACUUM (GAST MFG. CO. MODEL AE-205)	6685-832-8766	
9	H,D	ADAPTOR, PUNCH HEAD (SOROBAN, INC. NO. 22068FA)	5895-179-8038	
10	H,D	VISE, WORK POSITIONER (WILTON TOOL MFG. CO. NO. 301)	4940-300-9532	
11	H	CLEANER, VACUUM, HAND TYPE (IDEAL MFG. CO., NO. 22-113)	7910-250-8039	
12	H,D	ASSEMBLY, MANUAL CONTROL CARD (SARATOGA IND.,DIV. ESPEY MFG. & ELECT. CO. NO.D39244)	6130-115-2630	
13	H,D	ASSEMBLY, CARD EXTENDER (SARATOGA IND., DIV. ESPEY MFG. & ELECT. CO. NO. D39724)	6130-115-2621	
14	H,D	TOOL KIT, ELECTRONIC EQUIPMENT TK-105/G	5180-610-8177	
15	H,D	TOOL KIT, MISCELLANEOUS TOOLS (AUTODIN)		
16	H,D	TOOL KIT, PUNCHED CARD EQUIPMENT (AUTODIN)		
17	D	ANALYZER ZM-3()/U (CAPACITOR TEST SET)	6625-229-1060	
18	D	TEST SET, TRANSISTOR TS-1836A/U (SIERRA MODEL 219C)	6625-926-6996	
19	D	VOLTMETER, DIGITAL (NON-LINEAR SYSTEMS, INC. MODEL X-1/5)	6625-168-0669	
20	D	RESISTOR, DECADE (GENERAL RADIO CO. MODEL 1434M)		
21	D	MULTIMETER ME-26A/U (HEWLETT-PACKARD MODEL 401B)	6625-360-2493	

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T+T-1

SECTION III. TOOL AND TEST EQUIPMENT REQUIREMENTS

TOOL AND TEST EQUIPMENT REQUIREMENTS				
TOOLS AND EQUIPMENT	MAINTENANCE CATEGORY	NOMENCLATURE	FEDERAL STOCK NUMBER	TOOL NUMBER
		RO-312/G (continued)		
22	D	EXTENDER, PRINTED CIRCUIT BOARD (GENERAL DYNAMICS/ELECTRONICS NO. A65445-001)		
23	D	TEST FACILITY, PRINTED CIRCUIT CARD		
24	O	POWER SUPPLY PP-6291/G (TRYGON T50-15)	6625-051-5896	
		NOTE: DEPOT MAY SUBSTITUTE EQUIVALENT TEST EQUIPMENT.		

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T+T-2

APPENDIX D

ON-SITE, AREA RESUPPLY, AND DEPOT REPAIR PARTS

Section I. INTRODUCTION

D-1. Scope

a. The equipment covered in this appendix is categorized as a "FIXED STATION INSTALLATION." Maintenance functions have been authorized to *site* (ORG thru GSU), *Area Resupply, and depot.*

b. This equipment is used by electronic service organizations organic to the theater headquarters or communications zones to provide theater communications. Those repair parts authorized up to and including general support maintenance are to be stocked by the organization operating this equipment, therefore a separate display of "Organizational" and "Direct Support" maintenance repair parts would be repetitious and are not included in this appendix.

D-2. General

a. The Prescribed Load Allowance (PLA) is not required since this information is adequately defined under "Site Stockage Allowance," Column 7.

b. This list includes all replaceable parts and defines repair parts authorized for maintenance performance at site (ORG and GSU) and depot categories. This list also includes allowances for prepositioned resupply of repair parts based on equipment density per geographical locations. This resupply requirement is established to support each Military Department's concentration of DSTE devices to meet the Defense Communication System operational requirement.

c. The repair parts listing is preceded with a cross-reference index.

D-3. Explanation of Columns

An explanation of the columns is given below:

a. Source, Maintenance, and Recoverability Codes (SMR), Column 1. This column lists the applicable SMR codes for the part as follows:

(1) *Source code (A).* The source code indicator is the letter appearing on the left in the SMR column. It indicates the source from which the item is obtained in accordance with the following:

NOTE

See para D-3 (4) for cross-reference to Air Force SMR codes.

Code	Explanation
P	Applies to repair parts that are stocked in or supplied from the GSA/DSA, or Army supply system, and authorized for use at indicated maintenance categories.
M	Applies to repair parts that are not procured or stocked but are to be manufactured at indicated maintenance categories.
A	Applies to assemblies that are not procured or stocked as such but are made up of two or more units, each of which carries an individual stock number and description and is procured and stocked and can be assembled by units at indicated maintenance categories.
X	Applies to parts and assemblies that are not procured or stocked; the mortality of which normally is below that of the applicable end item; and the failure of which should result in retirement of the end item from the supply system.
X1	Applies to repair parts that are not procured or stocked, the requirement for which will be supplied by the use of next higher assembly or component.
X2	Applies to repair parts that are not stocked. The indicated maintenance category requiring such repair parts will attempt to obtain them through cannibalization; if. not obtainable through cannibalization; such repair parts will be requisitioned with supporting justification through normal supply channels.
C	Applies to repair parts authorized for local procurement. If not obtainable from local procurement, such repair parts will be requisitioned through normal supply channels with a supporting statement of nonavailability from local procurement.
G	Applies to major assemblies that are procured with PEMA funds for initial issue only to be used as exchange assemblies at DSU and GSU category. These assemblies will not be stocked above DSU and GSU category or returned to depot supply category.

(2) *Maintenance code (B).* The maintenance code indicator is the letter appearing in ,the center of the SMR column. It indicates the lowest category of maintenance authorized to install the listed item. The codes are:

Code	Explanation
*C	Operator/Crew
*O	Organizational Maintenance
*F	Direct Support Maintenance
H	General Support Maintenance
D	Depot Support Maintenance

NOTE

***Codes "C" "O" and "F" have not been utilized in this manual. Site maintenance functions have been designated "H" which includes "C" through "F".**

(3) *Recoverability code (C).* The third, or right hand letter in the SMR column indicates whether the item should be returned far recovery or salvage. Recoverability codes and their explanations are as follows:

NOTE

When no code is indicated in the recoverability column, the part will be considered expendable.

Code	Explanation
R	Applies to repair parts and assemblies which are economically repairable at DSU and GSU activities and normally are furnished by supply on an exchange basis.
T	Applies to high dollar value recoverable repair parts which are subject to special handling and are issued on an exchange basis. Such repair parts normally are repaired or overhauled at depot maintenance activities
U	Applies to repair parts specifically selected for salvage by reclamation units because of precious metal content, critical materials, high dollar value reusable casing or castings.

(4) *Cross-reference Army to Air Force SMR code.* The following SMR codes represent a cross reference from Army SMR codes displayed in this appendix to appropriate Air Force SMR codes. This coding has been coordinated with OCAMA symbol OCNDTB.

ARMY SMR CODES	AIR FORCE SMR CODE: SOURCE CODE (AFLCM 65-3)			EXPENDABLE RECOVERABLE (AFM 67-1, VOL. 1, CH:9 ATCH. 5)	REPAIR LEVEL CODE (AFLCR 65-2)	
PH	P	1	-	N	S	-
PHR	P	1	-	T	D	-
PHT	P	1	-	T	D	-
PD	P	1	D	N	S	-
PDR	P	1	-	T	D	-
X1H	X	1	-	-	F	-
X1D	X	1	-	-	D	-
X2H	X	2	-	-	F	-
AH	A	-	-	-	F	-
AHR	A	-	-	-	F	-
C	L	-	P	-	-	-
G	G	-	-	-	-	-
MH	M	-	-	-	H	-
MD	M	-	-	-	D	-

b. Federal Stock Number, Column 2. The Federal stock number for the item is listed in this column.

c. Description, Column 3. This column includes a sequence number, the federal item name, a five-digit Federal supply code for Manufacturer's an indenture code and a part number. The five-digit Federal supply code is followed by the manufacturer's part number. For subsequent appearances of the same item, the manufacturer's code and part number are omitted. The words "same as" followed by the index number assigned to the item when it first appeared in the list will follow the item name, e.g., "RESISTOR, FIXED, COMPOSITION: SAME AS A298." Model column is not used.

See NOTE on the next page.

d. Unit of Issue, Column 4. The unit used as a basis of issue (e.g., ea, pr, ft, yd, etc.) is indicated in this column.

e. Quantity Incorporated in Unit Pack, Column 5. Not used.

f. Quantity Incorporated in Unit, Column 6. The total quantity of the item used in the equipment is given in this column. Subsequent appearances of the same item in the same assembly are indicated by the letters "REF".

g. Site Stockage Allowance, Column 7.

(1) The maintenance allowance columns are divided into subcolumns. The total quantity of items authorized for the number of equipments supported is indicated in each subcolumn opposite the first appearance of each item.

Subsequent appearances of the same item will have no entry in the allowance columns but will have a reference in the description column to the first appearance of the item. Items authorized for use as required, but not for initial stockage, are identified with an asterisk (*) in the allowance column.

(2) The quantitative allowances for Site (ORG thru GSU) maintenance represents one initial prescribed load for the number of equipments supported.

(3) Subsequent changes to Site (ORG thru GSU), allowances will be limited as follows: No change in the range of items is authorized. If additional items are considered necessary, recommendation should be forwarded to Commanding General, U. S. Army Electronics Command, ATTN: AMSEL-ME-NMP-CW, Fort Monmouth, N. J. 07708, for exception or revision to the allowance list. Revisions to the range of items authorized will be made by USAECOM National Maintenance Point based upon engineering experience, demand data or TAERS information.

h. Forty-five Day Area Resupply Allowance Based on Number of DSTE Devices Supported, Column 8.

(1) The allowance column is divided into three subcolumns. The total quantity of items authorized for the number of equipments supported is indicated in each subcolumn opposite the first appearance of each item.

(2) The quantitative resupply allowances for the area resupply, represents one initial prescribed load for the number of DSTE equipments to be supported.

(3) Subsequent changes to Area Resupply allowances will be limited as follows: No change in the range of items is authorized. if additional items are considered necessary, recommendation should be forwarded to Commanding General, U. S. Army Electronics Command, ATTN: AMSEL-ME-NMP-CW, Fort Monmouth. N. J. 07703, for exception or revision to the allowance list. Revisions to the range of items authorized will be made by USAECOM National Maintenance Point based upon engineering experience, demand data, or TAERS information.

i. One-Year Allowances Per 100 Equipments, Contingency Planning Purposes, Column 9. Contingency planning requirements must be computed on a per equipment basis for fixed plant equipment, therefore column 9 will not be utilized. Contingency Plan requirements for this equipment will be satisfied by furnishing 1 load of repair parts per quantities displayed under column 7 Site Stockage Allowance.

j. Depot Maintenance Allowance per 100 Equipments, Column 10. This column indicates the total quantity of each item authorized depot maintenance for 100 equipments. Subsequent appearances of the same item will have no entry in this column, but will have a reference in the description column to the first appearance of the item.

k. Illustrations, Column 11.

(1) *Figure number, column 11a.* The number of the illustration in which the item is shown is indicated in this column.

(2) *Item No. or reference designation, column 11b.* The callout number or reference designation used to reference the item in the illustration appears in this column.

NOTE

1. Effective 30 September 1974, all Federal Stock Numbers listed in the following On-Site, Area Supply, and Depot Parts List were converted to the 13-digit National Stock Number (NSN) System.

2. To obtain the 13-digit NSS by conversion from the 11-digit Federal Stock Number, a National Codification Bureau Code (NCBC) of "00" will be entered following the Federal Stock Classification (FSC) code (first four digits).

3. An example of coding and expansion of the FSN to the NSN in an follow:

- **a. FSN - 6625-553-0142**
- **b. IBCG - 00**
- **c. FSC - 6625**
- **d. NSM - 6625-0-553-0142**

4. All replacement parts will be ordered under the NSN System.

SECTION II INDEX-FIGURE AND ITEM NUMBER CROSS REFERENCE TO INDEX NUMBER

FIG. NO.	ITEM NO. OR REFERENCE DESIGNATION	INDEX NO.	FIG. NO.	ITEM NO. OR REFERENCE DESIGNATION	INDEX NO.
4-1	1	C163		38.2	C970B
	1.1	D031B		38.3	C970C
	1.2	D031A		38.4	C970D
	1.3	C164		38.5	C970E
	1.4	C165		39	B964A
	1.5	C166		40	B964C
	2	B118		41	B964B
	3	B116		42	B964
	4	B115		42.1	D035
	5	B117		42.2	D036
	4	B114A		43	C167
	7	B124		43.1	B984
	8	B123		44	B968
	8.1	B122		45	B969
	9	B121		46	B970
	10	B122		47	B966
	11	B120M		48	B967
	11.1	B114B		49	B971
	12	B126A		50	B973
	12.1	D032		51	B975
	12.2	D034		52	B974
	12.3	D033		53	B972
	12.4	D031D		54	B976
	13	A002B		55	B982
	14.1	A002A		56	B981
	15	A002		57	B978
	16	C003		58	B977
	17	C004M		59	B979
	18	C005		60	B980
	19	C002		61	B965
	20	C212M		62	B983
	21	C979M		63	C104
	22	C980		64	D003
	23	C981		65	C984
	24	C981A		66	D019
	25	C978		67	C103
	26	C115		68	D001
	27	C116M		69	C982
	28	C117		70	D017
	29	C114A		71	C106
	30	C137C		72	C107
	31	C137B		73	C108A
	31.1	C137A		74	C113C
	32	C137		75	C113D
	33	C135		76	C113E
	34	C974		77	C113F
	34.1	C975		78	C113B
	34.2	C976		79	C110
	34.3	C977		80	C113G
	34.4	C970A		81	C112
	35	C971		82	C113
	36	C972M		83	C109
	37	C973		84	C105
	38	C970		85	C983A
	38.1	D031C			

SECTION II INDEX-FIGURE AND ITEM NUMBER CROSS REFERENCE TO INDEX NUMBER (CONTINUED)

FIG. NO.	ITEM NO. OR REFERENCE DESIGNATION	INDEX NO.
4-1	86	C992
	87	D002M
	88	D004
	89	D029A
	90	D026
	91	D018
	92	D028
	93	D027
	94	D029
	95	D037
	96	D038
	97	D039
	99	D043
	100	D045
	101	D046
	102	D047
	103	D048
	104	D049
	105	D050
	106	D051
	107	D053
	108	D052
	109	D054
	110	D059
	111	D064
	112	D073
	113	D081
	114	D085
	115	D089
	116	D094
	117	D095
	118	D096
	119	D097
	120	D098
	121	D099
	122	D100
	123	C168
	123.1	C168A
	124	C169
	125	C170
	126	C171
	127	C172
	128	C173
	129	C174
	130	C175
	131	C176
	132	C177
	133	C179
	134	C185
	135	C187
	136	C189
	137	C190
	138	C192
	139	C193
	140	C194
	141	C195A
	142	C197A
	143	C196M
	144	C205
	145	C206A
	146	C210A
	147	C210B
	148	C210C
	149	C210D
	150	C210
	151	C209
	152	C207
	153	C208
	154	C207A
	156	D077A
	157	D077
4-2	1	B001A
	2	A444
	3	A031M
	4	A110M
	5	A189M
	6	A268M
	7	A003
	8	A378
	9	A393
	10	A408
	11	A426
	12	A347
	13	A569
	14	A752A
	15	A522
	16	A863
	17	A707
	18	A969
	19	A887
	20	B064A
	20.1	B069C
	21	B074A
	21.1	B110
	22	B113M
	22.1	B113A
	23	B117
	24	B079
	25	B008
	26	B080
	27	B078
	27.1	B111
	27.2	B075
	27.3	B076M
	28	B109A
	28.1	B082F
	28.2	B082G
	28.3	B082H
	28.4	B082E
	29	B103

SECTION II INDEX-FIGURE AND ITEM NUMBER CROSS REFERENCE TO INDEX NUMBER (CONTINUED)

FIG. NO.	ITEM NO. OR REFERENCE DESIGNATION	INDEX NO.
4-2	30	B102
	31	B101
	32	B100A
	33	B098A
	34	B099
	35	B109
	36	B108
	37	B107
	38	B106A
	39	B104A
	40	B105
	41	B087M
	42	B086
	43	B084
	44	B085
	45	B092
	45.1	B083
	45.2	B092C
	45.3	B092A
	45.4	B092B
	45.5	B092D
	45.6	B092E
	45.7	B092F
	45.8	B092G
	45.9	B092H
	46	B094
	47	B095
	48	B093
	48.1	B093A
	48.2	B095A
	49	B089
	50	B091
	51	B090
	52	B088
	53	B088A
	54	B082B
	55	B082C
	56	B082A
	57	B082D
	58	B082
	58.1	B077
	58.2	B096
	59	B097
4-3	1	C062A
	2	C092A
	3	C072A
	4	C057A
	5	C052A
	6	C067A
	7	C082A
	8	C087A
	9	C097A
	10	C077A
	11	C030
	12	C019
	13	C047A
	14	C025
	15	C035
	16	C041
	17	C013
	18	C007
	19	C102M
	19.1	C102A
	20	C006
	21	C102C
	22	C102D
	23	C102E
	24	C102B
	25	C111
	26	C113A
4-4	1	C863
	2	C865
	3	C864
	4	C862A
	4.1	C866A
	5	C898M
	6	C885
	7	C890
	8	C886
	9	C891A
	10	C894A
	11	C878B
	12	C881B
	13	C872A
	14	C874A
	15	C926
	16	C928M
	17	C927
	18	C925
	19	C868A
	20	C867A
	21	C921
	22	C923
	23	C922
	24	C920
	25	C938A
	26	C941A
	27	C937A
	28	C946
	29	C948
	30	C947
	31	C945
	32	C949A
	33	C953

SECTION II INDEX-FIGURE AND ITEM NUMBER CROSS REFERENCE TO INDEX NUMBER (CONTINUED)

FIG. NO.	ITEM NO. OR REFERENCE DESIGNATION	INDEX NO.
4-4	34	C916
	35	C918
	36	C917
	37	C915
	38	C919
	39	C914
	40	C620A
	41	C216M
	42	C228M
	43	C218M
	44	C217
	45	C215B
	45.1	C215C
	46	C225
	47	C219
	48	C214
	49	C213
	50	C233
	51	C234
	52	C235
	53	C232
	54	C237
	55	C231
	56	C240
	57	C236
	58	C258
	59	C437
	60	C439
	61	C438
	62	C436A
	62.1	C440B
	62.2	C441
	62.3	C443
	62.4	C442
	62.5	C448A
	62.6	C449A
	62.7	C450
	62.8	C452
	62.9	C451
	62.10	C513A
	62.11	C592A
	63	C934
	64	C936
	65	C935
	66	C933
	67	C930
	68	C932
	69	C931
	70	C929
	71	C924
	72	C963
	73	C965
	74	C964
	75	C962A
	76	C962
	77	C959
	78	C957C
	78.1	C961E
	78.2	C961B
	78.3	C961A
	78.4	C957B
	78.5	C957A
	79	C957
	80	C960
	81	C958
	82	C954
	83	C836M
	84	C832
	84.1	C807A
	84.2	C833M
	84.3	C834
	84.4	C835
	85	C807M
	86	C809
	87	C808
	88	C806AM
	89	C900
	90	C902
	91	C901
	92	C282A
	93	C335
	94	C395
	95	C899
	96	C903A
	97	C969C
	98	C969BM
	99	C969A
	100	C967
	101	C969
	102	C968
	103	C966A
	103.1	C277
	103.2	C278
	103.3	C279A
	103.4	C280
	103.5	C281
	103.6	C276C
	104	C276B
4-5		
	1	C129
	2	C132
	3	C130
	4	C131M
	4	C118
	6	C128A
	7	C133
	8	C120
	9	C122
	10	C121
	13	C119A
	14	C127
	14.1	C134B
	14.2	C134D

SECTION II INDEX-FIGURE AND ITEM NUMBER CROSS REFERENCE TO INDEX NUMBER (CONTIUED)

FIG. NO.	ITEM NO. OR REFERENCE DESIGNATION	INDEX NO.
4-5	14.3	C134C
	14.4	C134A
	15	C134
4-6	1	C156A
	2	C157A
	3	C158A
	4	C160
	5	C142
	6	C140
	7	C145
	8	C148
	9	C147
	10	C146
	11	C144A
	12	C154
	13	C150
	14	C113
	15	C152
	16	C151M
	17	C149
	18	C155
	19	C139
	20	C161
	21	C162
	22	C162A
	23	C162B
4-6.1	1	B892
	2	B893D
	3	B893C
	4	B893E
	5	B891
	6	B890
	7	B893A
	8	B893B
	9	B893
4-7	1	B144
	2	B143
	3	B146
	4	B145
	4.1	B679B
	4.4	B679A
	5	B142C
	6	B986
	7	B987A
	8	B987
	9	B985
	9.1	B680
	10	B686
	11	B687
	12	B805
	13	B993
	14	B684
	15	B716
	16	B717
	17	B715
	18	B139
	19	B141
	20	B138
	21	B134
	22	B136
	23	B135
	24	B137
	24.1	B133
	25	B132
	26	B778
	27	B779
	29	B782
	30	B781
	31	B780
	32	B795
	33	B794
	34	B795
	35	B796
	36	B783
	37	B786
	38	B790A
	39	B792
	40	B793
	41	B791
	42	B788
	43	B787
	43.1	B777
	44	B789
	45	B993
	46	B936
	47	B597
	48	B596A
	48.1	B598
	49	B683
	49.1	B796
	49.2	B799
	49.3	B798A
	49.4	B798B
	49.5	B798
	49.6	B798C
	49.7	B815
	49.8	B816
	49.9	B814
	49.1	B816A
	49.11	B820
	49.12	B861
	49.13	B862
	49.14	B860
	49.15	B797
	49.16	B825
	49.17	B824

SECTION II INDEX-FIGURE AND ITEM NUMBER CROSS REFERENCE TO INDEX NUMBER (CONTINUED)

FIG. NO.	ITEM NO. OR REFERENCE DESIGNATION	INDEX NO.
4-7	49.18	B823
	49.19	B817
	50	B682
	51	B682B
	52	B682A
	53	B681
	54	B705G
	54.1	B705D
	55	B705C
	56	B705E
	57	B901
	58	B944
	59	B900
	59.1	B902A
	60	B705B
	61	B992
	62	B991
	63	B832
	64	B834
	65	B833
	66	B960
	67	B961
	68	B962
	69	B963
	70	B928
	71	B929
	72	B927
	73	B871
	74	B872
	74.1	B873
	75	B897
	76	B959
	77	B962
	78	B961
	79	B963
	80	B958
	81	B938
	82	B941
	83	B940
	84	B937
	84.1	B942
	84.2	B943
	85	B939
	86	B931
	87	B946A
	88	B945
	89	B951
	90	B950
	91	B948
	91.1	B947
	92	B949
	93	B919
	94	B920
	94.1	B919A
	95	B918
	96	B924
	97	B925AM
	97.1	B926
	98	B922
	99	B923
	100	B921M
	100.1	B917
	101	B914
	102	B903
	103	B916
	103.1	B913A
	103.2	B914A
	103.3	B914D
	103.4	B914C
	104	B911
	104.1	B911B
	104.2	B911C
	104.3	B911D
	105	B912
	105.1	B912A
	106	B915
	107	B930
	107.1	B930A
	108	B910
	108.1	B911A
	109	B906
	110	B908
	111	B907
	112	B909
	112.1	B904
	113	B935
	114	B934
	115	B933A
	116	B932
	117	B883
	118	B882
	118.1	B888
	119	B879
	119.1	B875
	120	B877
	120.1	B876
	121	B878
	122	B884
	123	B894
	124	B885
	125	B705F
	126	B887
	127	B895
	128	B885
	129	B887
	130	B886
	131	B885
	132	B889

SECTION II INDEX-FIGURE AND ITEM NUMBER CROSS REFERENCE TO INDEX NUMBER (CONTINUED)

FIG. NO.	ITEM NO. OR REFERENCE DESIGNATION	INDEX NO.
4-7	133	B884A
	134	B883A
	134.1	B874M
	135	B957
	136	B954
	137	B955
	138	B953
	139	B952
	139.1	B956
	140	B896
	140.1	B870
	141	B831M
	141.1	B840M
	142	B828
	143	B829
	144	B830
	145	B827
	146	B826M
	147	B802
	147.1	B801
	147.2	B803
	148	B804
	149	B800
	150	B813A
	151	B813C
	152	B813B
	153	B813D
	154	B813M
	155	B849
	155.1	B850
	155.2	B851M
	155.3	B852
	156	B845
	157	B859
	158	B856
	158.1	B858
	158.2	B857M
	159	B855
	160	B847
	161	B848
	162	B846
	163	B843
	164	B844
	164.1	B854
	165	B853
	165.1	B842
	166	B835M
	167	B810
	168	B811
	169	B809
	169.1	B808M
	169.2	B812A
	170	B864
	171	B865
	172	B865A
	173	B867
	174	B866
	174.1	B868M
	174.2	B869
	175	B863
	176	B708
	177	B709
	178	B710
	179	B707
	180	B706
	181	B705
	182	B704
	183	B998
	184	B999
	185	B997
	186	B579
	187	B581
	188	B580
	189	B578A
	189.1	C001G
	189.2	C001F
	189.3	C001E
	190	B583
	191	B584
	192	B585
	193	B582
	193.1	B586
	193.2	B587
	194	B589
	195	B591
	196	B590
	197	B588
	197.1	B592
	197.2	B593
	198	B595
	199	B594
	200	B989
	201	B988
	202	B990
	203	B131
	204	B909S
	205	B909R
	206	B909Q
	207	B909E
	208	B909C
	209	B9092
	210	B909Y
	211	B909G
	212	B909F
	213	B9093

SECTION II INDEX-FIGURE AND ITEM NUMBER CROSS REFERENCE TO INDEX NUMBER (CONTINUED)

FIG. NO.	ITEM NO. OR REFERENCE DESIGNATION	INDEX NO.
4-7	214	B909V
	215	B909W
	216	B909U
	217	B993A
	218	B995M
	219	B994M
	220	B909D
	221	B909L
	222	B909M
	223	B909K
	224	B9092
	225	B909Y
	225	B909J
	227	B909N
	228	B909P
	229	B909J
	230	B909A
	231	C909H
	232	C909T
	233	B909Z
	23	B909B
	236	C001
	237	C001D
	238	C001C
	239	C001B
	240	C001A
4-8	1	B576B
	2	B576C
	3	B576A
	3.1	B575
	3.2	B576
	3.3	B575A
	3.4	B574
	4	B576E
	5	B576D
	6	B577H
	6.1	B577J
	6.2	B577K
	7	B577G
	8	B562
	8.1	B577L
	8.2	B577F
	40	B577A
	9	B577U
	9.1	B577V
	9.2	B577W
	10	B577T
	11	B577S
	12	B565
	12.1	B567
	12.2	B566
	18	B380
	19.1	B560A
	20	B556A
	21	B577Q
	22	B498
	22.1	B500
	23	B568
	23.1	B569
	23.2	B570
	24	B563
	25	B561
	26	B577D
	27	B577E
	27.1	B577C
	28	B577P
	29	B577R
	29.1	B577NM
	29.2	B577X
	30	B577M
	31	B287
	3.2	B287A
	33	B286
	34	B564A
	35	B555A
	36	B538A
	37	B538
	37.1	B546A
	37.2	B547
	37.3	B552A
	37.4	B548M
	37.5	B549M
	37.6	B550
	37.7	B539
	37.8	B540
	37.9	B545A
	37.10	B541
	37.11	B543
	37.12	B542
	37.13	B544
	38	B450A
	38.1	B450B
	39	B499
	40	B577A
	41	B469
	42	B470A
	43	B468
	44	B474
	45	B475
	46	B467C
	47	B487
	48	B467A

SECTION II INDEX-FIGURE AND ITEM NUMBER CROSS REFERENCE TO INDEX NUMBER (CONTINUED)

FIG. NO.	ITEM NO. OR REFERENCE DESIGNATION	INDEX NO.
4-8	53	B466
	54	B465
	55	B476
	56	B481A
	57	B480
	58	B479
	59	B481
	60	B492
	61	B495
	62	B490A
	63	B485A
	64	B485
	65	B482
	66	B484
	67	B460
	68	B462
	68.1	B497A
	69	B477
	70	B380
	71	B489
	72	B494
	73	B376
	74	B478
	75	B496
	76	B483
	77	B491
	78	B463
	79	B459
	80	B477
	81	B472
	82	B493
	83	B473
	84	B471
	85	B436
	86	B432
	87	B443
	87.1	B435
	87.2	B437
	87.3	B438
	87.4	B442
	87.5	B441
	87.6	B445
	88	B332
	89	B331
	89.1	B333
	90	B453
	90.1	B454
	90.2	B455
	90.3	B456
	90.4	B457
	90.5	B458
	91	B423A
	92	B422
	93	B452
	94	B451
	95	B335
	96	B378A
	97	B377
	98	B364
	98.1	B368
	99	B365
	100	B336
	100.1	B357
	101	B337
	101.1	B334
	102	B356
	103	B353
	104	B355
	105	B354
	106	B357
	107	B349
	108	B339
	108.1	B351
	109	B361
	109.1	B362
	109.2	B363
	110	B338
	110.1	B366
	111	B348
	112	B350
	113	B352
	114	B381
	115	B343
	116	B346
	117	B344
	118	B345
	119	B342
	120	B347M
	121	B341
	122	B358
	122.1	B359
	122.2	B360
	123	B340
	124	B328
	124.1	B329A
	125	B382
	125.1	B379
	125.2	B329
	126	B330
	127	B326M
	128	B325M
	129	B324M
	130	B323M
	131	B322M
	132	B321
	133	B369

SECTION II INDEX-FIGURE AND ITEM NUMBER CROSS REFERENCE TO INDEX NUMBER (CONTINUED)

FIG. NO.	ITEM NO. OR REFERENCE DESIGNATION	INDEX NO.
4-8.1	1	B370
	2	B372
	3	B373
	4	B371A
	5	B383
	6	B374
	7	B390
	8	B391
	9	B392
	10	B393
	11	B385
	12	B386
	13	B387
	14	B388
	15	B389
	16	B394
	17	B406
	18	B408
	19	B407A
	20	B409
	21	B410
	22	B414
	23	B415
	23.1	B413
	24	B417A
	25	B416
	26	B418
	27	B419
	28	B421
	29	B420
	30	B430A
	31	B430
	32	B434A
	33	B429
	34	B431
	35	B427A
	36	B424
	37	B411
	38	B412
	39	B555B
	40	B555C
	41	B555D
	42	B327
	43	B396
	44	B395
	45	B397
	46	B399
	47	B400
	48	B401
	49	B403
	50	B402
	51	B404
	52	B405
	53	B382A
	54	B3B28
	55	B705A
4-9	1	B215M
	1.1	B218M
	1.2	B280J
	1.3	B280K
	1.4	B280L
	1.5	B280L1
	1.6	B280H
	1.7	B280N
	1.8	B280N1
	1.9	B280M
	1.10	B280P
	1.11	B280Q
	1.12	B280R
	1.13	B280S
	1.14	B282
	1.15	B282A
	1.16	B281
	1.17	B283
	2	B2808
	3	B195
	4	B280A
	5	B216M
	6	B228
	7	B213A
	8	B233A
	9	B168
	9.1	B169
	10	B208M
	11	B191M
	12	B183E1
	13	B185A
	14	B183B
	15	B214A
	16	B167M
	17	B177BM
	17.1	B177C
	18	B241
	19	B240M
	20	B280G
	22	B203A
	23	B280FM
	24	B226
	25	B232M
	26	B225M
	27	B178M
	28	B152A
	29	BIS1A
	30	B162A
	30.1	B166M

SECTION II INDEX-FIGURE AND ITEM NUMBER CROSS REFERENCE TO INDEX NUMBER (CONTINUED)

FIG. NO.	ITEM NO. OR REFERENCE DESIGNATION	INDEX NO.
4-9	30.2	B252
	30.3	B251M
	30.4	B227A
	31	B254
	32	B253M
	32.1	B257M
	32.2	B258M
	32.3	B256M
	32.4	B25SM
	32.5	B267A
	33	B271M
	34	B280M
	34.1	B272M
	35	B223
	36	B222M
	37	B220M
	38	B221M
	39	B200B
	40	B202M
	41	B196B
	42	B204A
	43	B200M
	44	B231
	44.1	B230A
	45	B207M
	45.1	B206A
	45.2	B229M
	46	B197A
	46.1	B224M
	47	B205A
	48	B179M
	49	B175M
	50	B194M
	51	B193M
	52	B219M
	52.1	B268A
	53	B217M
	54	B280D
	54.1	B280E
	55	B280CM
	56	B212M
	57	B280G
	59	B243
	60	B242M
	61	B284A
	61.1	B284B
	61.2	B284C
	61.3	B284D
	61.4	B284E
	61.5	B284F
	61.6	B284G
	61.7	B284H
	61.8	B284J
	61.9	B284K
	61.10	B284L
	61.11	B284M
	61.12	B284N
	61.13	B284P
	61.14	B284Q
	62	B280FM
	63	B269B
	64	B211A
	65	B179M
	65.1	B154
	65.2	B153
	66	B150M
	67	B176M
	67.1	B269A
	67.2	B173M
	67.3	B174M
	68	B182A
	69	B185M
	70	B183M
	71	B184M
	72	B183D
	72.1	B183G
	73	B183F
	74	B192A
	75	B183A
	76	B181M
	76.1	B180A
	77	B183B
	77.1	B1S8A
	77.2	B159
	78	B156M
	78.1	B155A
	78.2	B160M
	79	B272B
	80	B274M
	80.1	B275M
	80.2	B276M
	80.3	B277M
	80.4	B278M
	80.5	B279M
	80.6	B272A
	81	B273M
	82	B177AM
	83	B157M
	84	B148A
	85	B147A
	86	B149A
4-10	7	B504
	8	B505
	9	B520
	10	B519
	11	B518A
	12	B528M
	13	B532
	14	B531M

SECTION II INDEX-FIGURE AND ITEM NUMBER CROSS REFERENCE TO INDEX NUMBER (CONTINUED)

FIG. NO.	ITEM NO. OR REFERENCE DESIGNATION	INDEX NO.
4-10	15	B530M
	16	B537
	17	B536
	19	B533
	20	B535
	20.1	B534
	21	B529
	22	B527
	23	B525
	23.1	B523
	23.2	B524
	24	B526
	25	B521
	26	BS1S
	27	B522
	28	B517
	28.1	B516
	29	B517
	30	B507A
	31	B514
	32	B512
	33	B507C
	34	B507
	35	B507B
	36	B508
	36.1	B506
	37	B511
	38	B513
	39	B510
	39.1	B509
	40	B503
	41	B502
	42	B501
4-11	1	B288
	2	B290
	2.1	B290AM
	3	B289
	3.1	B289A
	3.2	B290C
	3.3	B290D
	3.4	B292A
	3.5	B290BM
	3.6	B291
	4	B307
	5	B304
	6	B306
	7	B305A
	8	B319
	9	B320
	10	B303
	11	B302
	12	B301
	13	B318
	14	B317
	1S	B298
	16	B299
	17	B296
	18	B297
	18.1	B295
	19	B316
	20	B315
	21	B312
	22	B313
	23	B312B
	24	B312C
	25	B312A
	26	B311A
	27	B314
	28	B314
	29	B300
	30	B294A
	30.1	B293
4-12	1	B660
	2	B659
	3	B655
	4	B656
	S	B654
	5.1	B712
	6	B670
	6.1	B713
	7	B610
	8	B611
	9	B609
	10	B658
	11	B606
	12	B608
	12.1	B607
	13	B605
	14	B642
	15	B641
	15.1	B643M
	15.2	B644
	16	B62
	17	B630
	18	B629
	19	B627
	20	B631
	21	B601
	22	B603
	23	B602
	24	B634
	25	B632
	26	B633
	27	B633A
	28	B645
	29	B652

SECTION II INDEX-FIGURE AND ITEM NUMBER CROSS REFERENCE TO INDEX NUMBER (CONTINUED)

FIG. NO.	ITEM NO. OR REFERENCE DESIGNATION	INDEX NO.
4-12	30	B653
	31	B651
	32	B675
	33	8676
	34	8674
	35	B667
	36	B666
	36.1	B669
	37	B662
	38	B663
	39	B661
	39.1	B711
	40	B635
	41	B600
	42	B625
	43	B626
	44	B623A
	45	B623
	46	B624A
	47	B665A
	48	B648
	49	B647
	51	B616
	52	B615A
	53	B612
	54	B650
	55	B622
	56	B621A
	57	B679
	58	B677
	59	B678
	60	B646A
	61	B639
	62	B637M
	63	B638
	64	B636
	65	B618M
	66	B640
	67	B649M
	68	B617A
	69	B614A
	70	B620
	71	B619
	72	B604
	73	B599A
4-13	1	B753
	2	B755
	3	B754
	4	B748M
	4.1	B752
	5	B759M
	5.1	B766M
	6	B734
	7	B735
	8	B746
	9	B732
	10	B733
	11	B767
	11.1	B729
	12	B724A
	13	B726
	14	B725
	15	B723
	16	B737
	17	B731A
	18	B736
	19	B730
	20	B728
	21	B744
	22	B745
	23	B743
	24	B722
	25	B739M
	26	B738
	27	B740A
	28	B740B
	29	B740
	30	B772
	31	B773
	32	B774
	33	B776
	34	B776
	35	B775
	36	B771
	37	B742M
	38	8741
	38.1	B730A
	39	B727A
	40	B762
	41	B764
	42	B763M
	43	B761
	44	B765
	44.1	B760
	45	8757
	46	B758
	47	B758A
	48	B756
	48.1	B714
	49	B768
	50	B769
	51	B720
	52	B721
	53	B721A
	54	B747
	55	B719
	56	B718

SECTION II INDEX-FIGURE AND ITEM NUMBER CROSS REFERENCE TO INDEX NUMBER (CONTINUED)

FIG. NO.	ITEM NO. OR REFERENCE DESIGNATION	INDEX NO.
4-13.1	1	D101B
	2	D101D
	3	D101C
	4	D101A
	5	D139
	6	D130
	7	D128
	8	D132
	9	D132
	10	D146
	11	D145
	12	D144
	13	D138
	14	D134
	15	D137
	16	D137A
	17	D135
	18	D040A
	19	D042
	20	D042A
	21	D041A
	22	D041
	23	D127A
	24	D129
	25	D101
	26	D127
	27	D122
	28	D124
	29	D125
	30	D123
	31	D120
	32	D119
	33	D121
	34	D126
	35	D118
	36	D103
	37	D105
	38	D104
	39	D102
	40	D106
	41	D112
	42	D111
	43	D110
	44	D109
	45	D108
	46	D116
	47	D115
	48	D114
	49	D117
	50	D113
	51	D147
	52	D129B
	53	D129C
	54	D129D
	55	D129E
	56	D129F
	57	D129A
	59	D129A
	60	D12SH
	61	D129J
	62	D129K
	63	D1291
	64	D123S
	65	D107
4-14	1	B698
	2	B70CA
	3	B699M
	4	B701
	4.1	B697M
	5	B696
	6	B703
	7	B702
	8	B692
	9	B694M
	10	B695
	11	B690
	12	B689M
	13	B691
	14	B693
	15	B688
4-14.1	1	B8833
	2	B883C
	3	B883D
	4	B883E
	5	B883F
	6	B883G
	7	B883H
	8	B8883J
	9	8883K
	10	B8831
	11	B883M
	12	B883N
	13	B883P
5-22	C1	C453
	C2	C454
	C3	C455
	C4	C456
	CR1	C469
	CR2	C470
	CR3	C471
	CR4	C472
	E1	C494
	E2	C495
	E3	C496
	E4	CS11
	ES	C497
	E6	C498
	E7	C499
	E8	C500
	E9	CS01
	E10	C502
	E11	C503
	E12	C504
	E13	C505
	E14	C506
	E15	C507
	E16	C508
	E17	C509
	E18	C510
	E19	C512
	H1	C459A
	H2	C461
	H3	C462
	H4	C463
	H5	C460M
	H6	C489
	H7	C490
	P1	C457
	P2	C458
	Q1	C473
	Q2	C477
	Q3	C481
	Q4	C485
	R1	C464
	R2	C465
	R3	C466
	R4	C468B
	R5	C467
5-23	C1	C517
	C2	C518
	C3	C519
	C4	C520
	CR1	C535
	CR2	C536
	CR3	C537
	CR4	C538
	E1	C567
	E2	C568
	E5	C571
	E6	C591
	E7	C572
	E8	C573
	E9	C574
	E10	C575
	E11	C576
	E12	C577
	E13	C578
	E14	C579
	E15	C580
	E16	C581
	E17	C582
	E18	C583
	E19	C584
	E20	C585
	E21	C586
	E22	C587
	E23	C588
	E24	C589
	E25	C590
	H1	C527A
	H2	C522
	H3	C523
	H4	C524
	H5	C521
	H6	C549
	H7	C548
	H8	C552
	H9	C553
	H10	C561
	H11	C562
	H12	C563
	P1	C525
	P2	C526
	Q1	C539
	Q2	C543
	Q3	C547
	Q4	C554
	R1	C528
	R2	C530
	R3	C534
	R4	C531
	R5	C529
	R6	C532
	R7	C533
5-24	E1	C613
	E2	C614
	E3	C615
	E4	C616
	E5	C617
	E6	C618
	E7	C619
	H1	C597A
	H2	C599
	H3	C600
	H4	C601
	H5	C598A
	P1	C596
	Q1	C605
	Q2	C606
	R1	C602
	R2	C603A
	R3	C604
5-26 (A14)	CR1	C824
	CR2	C825
	CR3	C826
	CR4	C827
	E1	C811
	E2	C812
	E3	C813
	E4	C814
	H1	C815
	H2	C816
	H3	C818

SECTION II INDEX-FIGURE AND ITEM NUMBER CROSS REFERENCE TO INDEX NUMBER (CONTINUED)

FIG. NO.	ITEM NO. OR REFERENCE DESIGNATION	INDEX NO.
5-26	H4	C819
(A14)	H5	C820
	H6	C821
	H7	C830
	H8	C828
	H9	C829A
	H10	C831
	H11	C831F
	J5	C831A
	J6	C831B
	J7	C831C
	J8	C831D
	J9	C831E
	R1	C817C
	R2	C822A
	R3	C823A
5-26	C1	C841
(A15)	C2	C842
	C3	C843
	C4	C844
	C5	C845
	CR1	C858M
	CR2	C859M
	CR3	C860M
	CR4	C861M
	R1	C853
	R2	C859
	R3	C851A
	R4	C852M
	R5	C856M
	R6	C846M
	R7	C855A
	R8	C854AM
	R9	C847M
	R10	C850
	R11	C857AM
	R12	C848M
5-3	A1	B001A
5-4	A2	A444
5-5	A3	A031M
	A4	A110M
	A5	A189M
	A6	A268M
5-6	A7	A003
5-7	A8	A378
	A9	A393
5-8	A10	A408
	A11	A426
5-9	A12	A347
5-10	A13	A569
5-11	A14	A752A
5-12	AS1	A522
5-13	A16	A863
5-14	A17	A707
5-15	A18	A969
5-16	A19	A887
5-17	A20	B064A
5-18	A21	B063A
5-19	A1	C282A
5-20	A2	C335A
5-21	A3	C395A
5-22	A4	C449A
5-23	A5	C513A
5-24	A6	C592 A
5-25	A12	C620A
5-26	A14	C810M
	A15	C840A
5-28	A21	B069C

Section III. ON-SITE, AREA RESUPPLY, AND DEPOT PARTS LIST

NOTE:

1. Effective 30 September 1974, all Federal Stock Numbers listed in the following On-Site, Area Resupply, and Depot Parts List were converted to the 13-digit National Stock Number (NSN) System.

2. To obtain the 13-digit NSN by conversion from the 11-digit Federal Stock Number, a National Codification Bureau Code (NCBC) of "00" will be entered following the Federal Stock Classification (FSC) code (first four digits).

3. An example of coding and expansion of the FSN to the NSN is as follows:

   a. FSN 6625-553-0142
   b. NCBC 00
   c. FSC 6625
   d. EN 6625-00-553-0142

4. All replacement parts will be ordered under the NSN System.

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
A	H	R	74408515116							A	A001	HIGH SPEED CARD PUNCH UNIT: RO-312/G	EA		1									-15 1-1	
A	H	R								B	A002	LOGIC ASSEMBLY: 58189; A64003-001	EA		1									-15 4-1	15
C	H									*	A002A	SCREW, MACHINE: 96906: MS51960-65	EA		4									-15 4-1	14.1
C	H		53055587323							*	A002B	SCREW, MACHINE: 96906; MS35234-79	EA		6									-15 4-1	13
F	H	T	74409594539							C	A003	CIRCUIT, CARD ASSY 58189: A52638-001	EA		1	1	2	3	1	2	3		3	-15 4-2	7
X1	D									D	A004	PRINTED CIRCUIT BOARD: 58189: A52639-001	EA		1									-15 5-6	
P	D		59627911004							D	A005 M	INTEGRATED CIRCUIT, LOGIC GATE: 18324: C7089K	EA		9								27	-15 5-6	Z1
			59627911004							D	A006 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS AOOS M	EA		REF									-15 5-6	Z25
P	D		59627911082							D	A007 M	INTEGRATED CIRCUIT, LOGIC GATE: 18324; C7090K	EA		153								384	-15 5-6	Z2
			59627911082							D	A008 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-6	Z5
			59627911082							D	A009 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-6	Z6
			59627911082							D	A010 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-6	Z9

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911082							D	A011 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-6	Z10
			59627911082							D	A012 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-6	Z12
			59627911082							D	A013 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS AO07 M	EA		REF									-15 5-6	Z13
			59627911082							D	A014 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-6	Z14
			59627911082							D	A015 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-6	Z17
			59627911082							D	A016 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-6	Z23
			59627911082							D	A017 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A097 M	EA		REF									-15 5-6	Z26
P	D		59627911120							D	A018 M	INTEGRATED CIRCUIT, LOGIC GATE: 18324; C7579K	EA		14								42	-15 5-6	Z4
			59627911120							D	A019 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A018 M	EA		REF									-15 5-6	Z2
			59627911120							D	A020 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A018 M	EA		REF									-15 5-6	Z16

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911120							D	A021 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A018 M	EA		REF									-15 5-6	Z19
			59627911120							D	A022 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A018 M	EA		REF									-15 5-6	Z24
			59627911120							D	A023 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A018 M	EA		REF									-15 5-6	Z27
P	D		59629111001							D	A024 M INTEGRATED CIRCUIT, LOGIC GATE: 18324; C7088K	EA		32								96	-15 5-6	Z11
P	D		59627911048							D	A025 M INTEGRATED CIRCUIT, LOGIC GATE: 18324; C7577K	EA		33								99	-15 5-6	Z15
			59627911048							D	A026 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-6	Z20
			59627911048							D	A027 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-6	Z28
P	D		59627910994							D	A028 M INTEGRATED CIRCUIT, LOGIC GATE: 18324; C7580K	EA		50								129	-15 5-6	Z18
			59627910994							D	A029 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-6	Z21
			59627910994							D	A030 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-6	Z22

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	H	T	74409111073							C	A031 M CIRCUIT, CARD ASSEMBLY: 58189; A52766-001	EA		4	1	2	3	1	2	3		12	-15 4-2	3
X1	D									D	A032 M PRINTED CIRCUIT BOARD: 58189; A52767-001	EA		4									-15 5-5	Z1
			59627911120							D	A033 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A018 M	EA		REF									-15 5-5	
			59627911048							D	A034 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A02S M	EA		REF									-15 5-5	Z2
			59627911048							D	A035 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-5	Z15
P	D		59627911393							D	A36 M INTEGRATED CIRCUIT, LOGIC GATE: 18324; C7091K	EA		50								144	-15 5-5	Z3
			59627911393							D	A037 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z5
			59627911393							D	A038 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z7
			59627911393							D	A039 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z9
			59627911393							D	A040 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z11

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911393							D	A041 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z13
			59629111001							D	A042 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-5	Z4
			59629111001							D	A043 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-5	Z8
			59629111001							D	A044 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-5	Z12
			59627911082							D	A045 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-5	Z6
			59627911082							D	A046 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-5	Z10
			59627911082							D	A047 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-5	Z14
P	D		59056910195							D	A048A M RESISTOR, FIXED, COMPOSITION: 81349; RC07GF562J	EA		65								189	-15 5-5	R1
			59056910195							D	A049A M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R2
			59056910195							D	A050A M RESISTOR,FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R3

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59056910195							D	A051A M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R4
			59056910195							D	A052A M RESISTOR, FIXED, COMPOSITION: SAME AS AO48A M	EA		REF									-15 5-5	R5
			59056910195							D	A053A M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R6
P	D		59056832241							D	A054 M RESISTOR, FIXED, COMPOSITION: 81349; RC07GF512J	EA		29								84	-15 5-5	R7
			59056832241							D	A055 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R10
			59056832241							D	A056 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R13
			59056832241							D	A057 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R16
			59056832241							D	A058 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R19
			59056832241							D	A059 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R22
P	D		59052793516							D	A060 M RESISTOR, FIXED, COMPOSITION: 81349; RC20GF910J	EA		25								75	-15 5-5	RB

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59058366024							D	A061 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									-15 5-5	R11
			59058366024							D	A062 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									-15 5-5	R14
			59058366024							D	A063 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									-15 5-5	R17
			59058366024							D	A064 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									5-5	R20
			59058366024							D	A665 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									-15 5-5	R23
P	D		59052992051							D	A066 M RESISTOR, FIXED, COMPOSITION: 81349; RC32GF471J	EA		26								75	-15 5-5	R9
			59052992051							D	A067 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R12
			59052992051							D	A068 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R15
			59052992051							D	A069 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R12
			59052992051							D	A070 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R21

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59052992051							D	A071 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R24
P	D		59059751144							D	A072A M RESISTOR, FIXED, WIREWOUND: 81349; RW67V510	EA		24								72	-15 5-5	R25
			59059751144							D	A073A M RESISTOR, FIXED, WIREWOUND: SAME AS A072A M	EA		REF									-15 5-5	R26
			59059751144							D	A074A M RESISTOR, FIXED. WIREWOUND: SAME AS A072A M	EA		REF									-15 5-5	R27
			59059751144							D	A075A M RESISTOR. FIXED, WIREWOUND: SAME AS A072A M	EA		REF									-15 5-5	R28
			59059751144							D	A076A M RESISTOR, FIXED, WIREWOUND: SAME AS A072A M	EA		REF									-15 5-5	R29
			59059751144							D	A077A M RESISTOR, FIXED, WIREWOUND: SAME AS A072A M	EA		REF									-15 5-5	R30
P	D		59056816462							D	A078 M RESISTOR, FIXED, COMPOSITION: 81349; RC07OF102J	EA		17								57	-15 5-5	R31
P	D		59051908887							D	A079A M RESISTOR, FIXED, COMPOSITION: 81349; RC20GF202J	EA		27								84	-15 5-5	R32
			59051908887							D	A080A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R33

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59051908887							D	A081A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R34
			59051908887							D	A082A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R35
			59051908887							D	A083A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R36
			59051908887							D	A084A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R37
P	D		59610876047							D	A085 M SEMI-CONDUCTOR DEVICE, DIODE: 81350; JAN1N645	EA		31								90	-15 5-5	CR1
			59610876047							D	A086 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-5	CR2
			59610876047							D	A087 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-5	CR3
			59610876047							D	A088 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-5	CR4
			59610876047							D	A089 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-5	CR5
			59610876047							D	A090 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-5	CR6

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	D		59109384692							D	A091A M CAPACITOR: 81349; M39003/01-2105	EA		24								72	-15 5-5	C1
			59109384692							D	A092AM CAPACITOR: SAME AS A091A M	EA		REF									-15 5-5	C2
			59109384692							D	A093A M CAPACITOR: SAME AS A091A M	EA		REF									-15 5-5	C3
			59109386492							D	A094A M CAPACITOR: SAME AS A091A M	EA		REF									-15 5-5	C4
			59109386492							D	A09SA M CAPACITOR: SAME AS A091A M	EA		REF									-15 5-5	C5
			59109386492							D	A096A M CAPACITOR: SAME AS A091A M	EA		REF									-15 5-5	C6
P	D		59610507499							D	A097 M TRANSISTOR: 81350; JAN2N2219	EA		86								430	-15 5-5	Q1
			59610507499							D	A098 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-5	Q3
			59610507499							D	A099 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-5	Q5
			59610507499							D	A100 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-5	Q7
			59610507499							D	A101 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-5	Q9

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59610507499							D	A102 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-5	Q11
P	D		59618518293							D	A103 M TRANSISTOR: 81349, JAN2N1041	EA		30								145	-15 5-5	Q2
			59618518293							D	A104 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-5	Q4
			59618518293							D	A105 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-5	Q6
			59618518293							D	A106 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-5	Q8
			59618518293							D	A107 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-5	Q10
			59618518293							D	A108 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-5	Q12
X2	D		59709564972							D	A109 INSULATOR, DISK: 07047; 10079	EA		131									-15 5-5	
			74409111073							C	A110 M CIRCUIT, CARD ASSEMBLY: SAME AS A031 M	EA		REF									-15 4-2	4
										D	A111 PRINTED CIRCUIT BOARD: SAME AS A032	EA		REF									-15 5-5	
			59627911120							D	A112 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS AO18 M	EA		REF									-15 5-5	Z1

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911048							D	A113 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-5	Z2
			59627911048							D	A114 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-5	Z15
			59627911393							D	A115 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z3
			59627911393							D	A116 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z5
			59627911393							D	A117 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z7
			59627911393							D	A118 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z9
			59627911393							D	A119 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z11
			59627911393							D	A120 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z13
			59629111001							D	A121 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-5	Z4
			59629111001							D	A122 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-5	Z8

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59629111001							D	A123 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-5	Z12
			59627911082							D	A124 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-5	Z6
			59627911082							D	A125 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-5	Z10
			59627911082							D	A126 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-5	Z14
			59056910195							D	A127A M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R1
			59056910195							D	A128A M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R2
			59056910195							D	A129A M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R3
			59056910195							D	A130A M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R4
			59056910195							D	A131A M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R5
			59056910195							D	A131S M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R6

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59056832241							D	A133 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R7
			59056832241							D	A134 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R10
			59056832241							D	A135 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R13
			59056832241							D	A136 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R16
			59056832241							D	A137 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R19
			59056832241							D	A138 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R22
			59052793516							D	A139 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									-15 5-5	R8
			59052793516							D	A140 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									-15 5-5	R11
			59052793516							D	A141 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									-15 5-5	R14
			59052793516							D	A142 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									-15 5-5	R17

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59052793516							D	A143 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									-15 5-5	R20
			59052793516							D	A144 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									-15 5-5	R23
			59052992051							D	A145 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R9
			59052992051							D	A146 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R12
			59052992051							D	A147 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R15
			59052992051							D	A148 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R18
			59052992051							D	A149 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R21
			59052992051							D	A150M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R24
			59059751144							D	A151A M RESISTOR, FIXED, WIREWOUND: SAME AS A072A M	EA		REF									-15 5-5	R25
			59059751144							D	A152A M RESISTOR, FIXED, WIREWOUND: SAME AS A072A M	EA		REF									-15 5-5	R26

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59059751144							D	A153A M RESISTOR, FIXED, WIREWOUND: SAME AS A072A M	EA		REF									-15 5-5	R27
			59059751144							D	A154A M RESISTOR, FIX(ED, WIREWOUND: SAME AS A072A M	EA		REF									-15 5-5	R28
			59059751144							D	A155A M RESISTOR, FIXED, WIREWOUND: SAME AS A072A M	EA		REF									-15 5-5	R29
			59059751144							D	A156A M RESISTOR, FIXED WIREWOUND: SAME AS AD72A M	EA		REF									-15 5-5	R30
			59056816462							D	A157 M RESISTOR, FIXED COMPOSITION: SAME AS A072A M	EA		REF									-15 5-5	R31
			59051908887							D	A158A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R32
			59051908887							D	A159A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R33
			59051908887							D	A160A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R34
			59051908887							D	A161A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R35
			59051908887							D	A162A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R36

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59051908887							D	A163A M RESISTOR, FIXED, COMPOSITION: SAME AS AO79A M	EA		REF									-15 5-5	R37
			59610876047							D	A164 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-5	CR1
			59610876047							D	A165 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-5	CR2
			59610876047							D	A166 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 ;M	EA		REF									-15 5-5	CR3
			59610876047							D	A167 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-5	CR4
			59610876047							D	A168 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-5	CR5
			59610876047							D	A169 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-5	CR6
			59109384692							D	A170A M CAPACITOR: SAME AS A091A M	EA		REF									-15 5-5	C1
			59109384692							D	A171A M CAPACITOR: SAME AS A091A M	EA		REF									-15 5-5	C2
			59109384692							D	A172A M CAPACITOR: SAME AS A091A M	EA		REF									-15 5-5	C3

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59109384692							D	A173A M CAPACITOR; SAME AS A091A M	EA		REF									-15 5-5	C4
			59109384692							D	A174A M CAPACITOR: SAME AS A091A M	EA		REF									-15 5-5	C5
			59109384692							D	A175A M CAPACITOR: SAME AS A09A M	EA		REF									-15 5-5	C6
			59610507499							D	A176 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-5	Q1
			59610507499							D	A177 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-5	Q3
			59610507499							D	A178 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-5	Q5
			59610507499							D	A179 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-5	Q7
			59610507499							D	A180 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-5	Q9
			59610507499							D	A181 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-5	Q11
			59618518293							D	A182 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-5	Q2
			59618518293							D	A183 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-5	Q4

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59618518293							D	A184 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-5	Q6
			59618518293							D	A185 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-5	Q8
			59618518293							D	A186 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-5	Q10
			59618518293							D	A187 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-5	Q12
			59709564972							D	A188 INSULATOR, DISK: SAME AS A109	EA		REF									-15 5-5	
			74409111073							C	A189 M CIRCUIT, CARD ASSEMBLY: SAME AS A031 M	EA		REF									-15 4-2	5
										D	A190 PRINTED CIRCUIT BOARD: SAME AS A032	EA		REF									-15 5-5	
			59627911120							D	A191 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS AG18 M	EA		REF									-15 5-5	Z1
			59627911048							D	A192 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-5	Z2
			59627911048 j							D	A193 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-5	Z15
			59627911393							D	A194 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z3

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911393							D	A195 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z5
			59627911393							D	A196 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	
			59627911393							D	A197 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z9
			59627911393							D	A198 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z11
			59627911393							D	A199 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z13
			59629111001							D	A200 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-5	Z4
			59629111001							D	A201 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-5	Z8
			59629111001							D	A202 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-5	Z12
			59627911082							D	A203 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-5	Z6
			59627911082							D	A204 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-5	Z10

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911082							D	A205 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-5	Z14
			59056910195							D	A206A M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R1
			59056910195							D	A207A M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R2
			59056910195							D	A208A M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R3
			59056910195							D	A209A M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R4
			59056910195							D	A210A M RESISTOR, FIXED. COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R5
			59056910195							D	A211A M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R6
			59056832241							D	A212 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R7
			59056832241							D	A213 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R10
			59056832241							D	A214 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R13

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59056832241							D	A215 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R16
			59056832241							D	A216 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R19
			59056832241							D	A217 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R22
			59052793516							D	A218 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									-15 5-5	R8
			59052793516							D	A219 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									-15 5-5	R11
			59052793516							D	A220 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									-15 5-5	R14
			59052793516							D	A221 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									-15 5-5	R17
			59052793516							D	A222 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									-15 5-5	R20
			59052793516							D	A223 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									-15 5-5	R23
			59052992051							D	A224 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R9

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59052992051							D	A225 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R12
			59052992051							D	A226 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R15
			59052992051							D	A227 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R18
			59052992051							D	A228 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R21
			59052992051							D	A229 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R24
			59059751144							D	A230A M RESISTOR, FIXED, WIREWOUND: SAME AS A072AM	EA		REF									-15 5-5	R25
			59059751144							D	A231A M RESISTOR, FIXED, WIREWOUND: SAME AS A072A M	EA		REF									-15 5-5	R26
			59059751144							D	A232A M RESISTOR, FIXED, WIREWOUND: SAME AS A072A M	EA		REF									-15 5-5	R27
			59059751144							D	A233A M RESISTOR, FIXED, WIREWOUND: SAME AS A072A M	EA		REF									-15 5-5	R28
			59059751144							D	A234A M RESISTOR, FIXED, WIREWOUND: SAME AS A072A M	EA		REF									-15 5-5	R29

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59059751144							D	A235A M RESISTOR, FIXED, WIREWOUND: SAME AS A072A M	EA		REF									-15 5-5	R30
			59056816462							D	A236 M RESISTOR, FIXED, COMPOSITION: SAME AS A078 M	EA		REF									-15 5-5	R31
			59051908887							D	A237A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R32
			59051908887							D	A238A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R33
			59051908887							D	A239A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R34
			59051908887							D	A240A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R35
			59051908887							D	A241A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R36
			59051908887							D	A242A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R37
			59610876047							D	A243 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-5	CR1
			59610876047							D	A244 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-5	CR2

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59610876047							D	A245 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-5	CR3
			59610876047							D	A246 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-5	CR4
			59610876047							D	A247 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-5	CR5
			59610876047							D	A248 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS AOB5 M	EA		REF									-15 5-5	CR6
			59109384692							D	A249A M CAPACITOR: SAME AS A091A M	EA		REF									-15 5-5	C1
			59109384692							D	A250A M CAPACITOR: SAME AS A091A M	EA		REF									-15 5-5	C2
			59109384692							D	A251A M CAPACITOR: SAME AS A091A M	EA		REF									-15 5-5	C3
			59109384692							D	A252A M CAPACITOR: SAME AS A091A M	EA		REF									-15 5-5	C4
			59109384692							D	A253A M CAPACITOR: SAME AS A091A M	EA		REF									-15 5-5	C5
			59109384692							D	A254A M CAPACITOR: SAME AS A091A M	EA		REF									-15 5-5	C6

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59610507499							D	A255 M TRANSISTOR: SAME As A097 M	EA		REF									-15 5-5	Q1
			59610507499							D	A257 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-5	Q5
			59610507499							D	A258 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-5	Q7
			59610507499							D	A259 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-5	Q9
			59610507499							D	A260 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-5	Q11
			59618518293							D	A261 M TRANSISTOR: SAME AS Al 03 M	EA		REF									-15 5-5	Q2
			59618518293							D	A262 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-5	Q4
			59618518293							D	A263 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-5	Q6
			59618518293							D	A264 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-5	Q8
			59618518293							D	A265 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-5	Q10
			59618518293							D	A266 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-5	Q12

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59709564972							D	A267 INSULATOR, DISK: SAME AS A109	EA		REF									-15 5-5	
			74409111073							C	A268 M CIRCUIT, CARD ASSEMBLY: SAME AS A031 M	EA		REF									-15 4-2	6
										D	A269 PRINTED CIRCUIT BOARD SAME AS A032	EA		REF									-15 4-2	
			59627911120							D	A270 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A018 M	EA		REF									-15 5-5	Z1
			59627911048							D	A271 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-5	Z2
			59627911048							D	A272 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-5	Z15
			59627911393							D	A273 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z3
			596279)1393							D	A274 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z5
			59627911393							D	A275 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z7
			59627911393							D	A276 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z9

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911393							D	A277 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z11
			59627911393							D	A278 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-5	Z13
			59629111001							D	A279 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-5	Z4
			59629111001							D	A280 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-5	Z8
			59629111001							D	A281 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-5	Z12
			59627911082							D	A282 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-5	Z6
			59627911082							D	A283 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-5	Z10
			59627911082							D	A284 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-5	Z14
			59056910195							D	A285A M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R1
			59056910195							D	A286A M RESISTOR, FIXED. COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R2

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59056910195							D	A287A M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R3
			59056910195							D	A288A M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R4
			59056910195							D	A289A M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R5
			59056910195							D	A290A M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-5	R6
			59056832241							D	A291 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R7
			59056832241							D	A292 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R10
			59056832241							D	A293 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R13
			59056832241							D	A294 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R16
			59056832241							D	A295 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R19
			59056832241							D	A296 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-5	R22

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59052793516							D	A297 M RESISTOR, FIXED, COMPOSITION: SAMEAS A060 M	EA		REF									-15 5-5	R8
			59052793516							D	A298 M RESISTOR, FIXED, COMPOSI7OON: SAME AS A060 M	EA		REF									-15 5-5	R11
			59052793516							D	A299 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									-15 5-5	R14
			59052793516							D	A300 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									-15 5-5	R17
			59052793516							D	A301 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									-15 5-5	R20
			59052793516							D	A302 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									-15 5-5	R23
			59052992051							D	A303 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R9
			59052992051							D	A304 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R12
			59052992051							D	A305 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R15
			59052992051							D	A306 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R18

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59052992051							D	A307 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R21
			59052992051							D	A308 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-5	R24
			59059751144							D	A309A M RESISTOR, FIXED, WIREWOUND: SAME AS A072A M	EA		REF									-15 5-5	R25
			59059751144							D	A310A M RESISTOR, FIXED, WIREWOUND: SAME AS A072A M	EA		REF									-15 5-5	R26
			59059751144							D	A311A M RESISTOR, FIXED, WIREWOUND: SAME AS A072A M	EA		REF									-15 5-5	R27
			59059751144							D	A312A M RESISTOR, FIXED, WIREWOUND: SAME AS A072A M	EA		REF									-15 5-5	R28
			59059751144							D	A313A M RESISTOR, FIXED, WIREWOUND: SAME AS A072A M	EA		REF									-15 5-5	R29
			59059751144							D	A314A M RESISTOR, FIXED, WIREWOUND: SAME AS A072A M	EA		REF									-15 5-5	R30
			59056816462							D	A315 M RESISTOR, FIXED, COMPOSITION: SAME AS A078 M	EA		REF									-15 5-5	R31
			59051908887							D	A316A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R32

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59051908887							D	A317A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R33
			59051908887							D	A318A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R34
			59051908887							D	A319A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R35
			59051908887							D	A320A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R36
			59051908887							D	A321A M RESISTOR, FIXED, COMPOSITION: SAME AS A079A M	EA		REF									-15 5-5	R37
			59610876047							D	A322 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-5	CR1
			59610876047							D	A323 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-5	CR2
			59610876047							D	A324 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-5	CR3
			59610876047							D	A325 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-5	CR4
			59610876047							D	A326 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-5	CR5

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59610876047							D	A327 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-5	CR6
			59109384692							D	A328A M CAPACITOR: SAME AS A091A M	EA		REF									-15 5-5	C1
			59109384692							D	A329A M CAPACITOR: SAME AS A091A M	EA		REF									-15 5-5	C2
			59109384692							D	A330A M CAPACITOR: SAME AS A09lA M	EA		REF									-15 5-5	C3
			59109384692							D	A331A M CAPACITOR: SAME AS A091A M	EA		REF									-15 5-5	C4
			59109384692							D	A332A M CAPACITOR: SAME AS A091A M	EA		REF									-15 5-5	CS
			59109384692							D	A333A M CAPACITOR: SAME AS A09SA M	EA		REF									-15 5-5	C6
			59610507499							D	A334 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-5	Q1
			59610507499							D	A335 M TRANSISTOR: SAME AS A0917 M	EA		REF									-15 5-5	Q3
			59610507499							D	A336 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-5	Q5

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59610507499							D	A337 M TRANSISTOR SAME AS A097 M	EA		REF									-15 5-5	Q7
			59610507499							D	A339 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-5	Q9
			59615874993							D	A339 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-5	Q11
			59618518293							D	A340 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-5	Q2
			59618518293							D	A341 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-5	Q4
			59618518293							D	A342 M TRANSISTOR: SAME AS A103 M	EA		REF									15 5-5	Q6
			59618518293							D	A343 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-5	Q8
			59618518293							D	A344 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-5	Q10
			59618518293							D	A345 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-5	Q12
			59709564972							D	A346 INSULATOR DISK: SAME AS A109	EA		REF									-15 5-5	
P	H	T	74409111085							C	A347 CIRCUIT, CARD ASSEMBLY: 58189: A52774-001	EA		1	1	2	3	1	2	3		3	-15 4-2	12
X1	D									D	A348 PRINTED CIRCUIT BOARD: 58189; A52775-001	EA		1									-15 5-9	

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627910994							D	A349 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-9	Z1
			59627910994							D	A350 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-9	Z4
			59627910994							D	A351 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-9	Z5
			59627910994							D	A352 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-9	Z6
			59627910994							D	A353 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-9	Z8
			59627910994							D	A354 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-9	Z9
			59627910994							D	A355 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-9	Z11
			59627910994							D	A356 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-9	Z12
			59627910994							D	A357 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-9	Z13
			59627910994							D	A358 M INTEGRATEDCIRCUIT, LOGIC GATE: SAME AS A028 M	EA	REF										-15 5-9	Z14

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627910994							D	A359 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-9	Z16
			59627911082							D	A360 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-9	Z2
			59627911082							D	A361 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-9	Z3
			59627911082							D	A362 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-9	Z7
			59627911082							D	A363 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-9	Z10
			59627911082							D	A364 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-9	Z15
			59627911082							D	A365 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-9	Z17
			59627911082							D	A366 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-9	Z19
			59627911082							D	A367 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-9	Z20
			59627911004							D	A368 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A005 M	EA		REF									-15 5-9	Z18

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911393							D	A369 M INTEGRATEDCIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-9	Z21
			59627911393							D	A370 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-9	Z22
			59627911393							D	A371 M INTEGRATEDCIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-9	Z23
			59627911393							D	A372 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-9	Z24
			59627911393							D	A373 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-9	Z25
			59627911393							D	A374 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-9 226	
			59627911393							D	A375 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-9	Z27
			59627911393							D	A376 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-9	Z28
			59056816462							D	A377 M RESISTOR, FIXED, COMPOSITION: SAME AS A078 M	EA		REF									-15 5-9	R1
P	H	T	74409111145							C	A378 CIRCUIT,CARD ASSEMBLY: 58189; A53721-001	EA		2	1	2	3	1	2	3		6	-15 4-2	8

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X1		D								D	A379 PRINTED CIRCUIT BOARD: 58189; A53722-001	EA		2									-15 5-7	
			59627911120							D	A380 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A018 M	EA		REF									-15 5-7	Z2
			59627911120							D	A381 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A018 M	EA		REF									-15 5-7	Z18
			59627911048							D	A382 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-7	Z3
			59627911048							D	A383 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-7	Z6
			59627911048							D	A384 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15. 5-7	Z7
			59627911048							D	A385 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-7	Z10
			59627911048							D	A386 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-7	Z11
			59627911048							D	A387 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-7	Z14
			59627911048							D	A388 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-7	Z15

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911048							D	A389 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-7	Z22
			59627911048							D	A390 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-7	Z23
			59627911048							D	A391 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									15 5-7	Z26
			59627911048							D	A392 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-7	Z27
			74409111145							D	A393 CIRCUIT CARD ASSEMBLY: SAME AS A378	EA		REF									-15 4-2	9
										D	A394 PRINTED CIRCUIT BOARD: SAME AS A379	EA		REF									-15 5- 7	
			59627911120							D	A395 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A018 M	EA		REF									-15 5-7	Z2
			59627911120							D	A396 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A018 M	EA		REF									-15 5-7	Z18
			59627911048							D	A397 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-7	Z3
			59627911048							D	A398 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-7	Z6

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911048							D	A399 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-7	Z7
			59627911048							D	A400 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-7	Z10
			59627911048							D	A401 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-7	Z11
			59627911048							D	A402 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-7	Z14
			59627911048							D	A403 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-7	Z15
			59627911048							D	A404 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-7	Z22
			59627911048							D	A405 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-7	Z23
			59627911048							D	A406 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-7	Z26
			59627911048							D	A407 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A025 M	EA		REF									-15 5-7	Z27
P	H	T	74409111615							C	A408 CIRCUIT, CARD ASSEMBLY: 58189; A53725-001	EA		2	1	2	3	1	2	3		6	-15 4-2	10

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X1	D									D	A409 PRINTED CIRCUIT BOARD: 58189; A53726-001	EA		2									-15 5-8	
			59627911082							D	A410 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z1
			59627911082							D	A411 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z2
			59627911082							D	A412 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z3
			59627911082							D	A413 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z4
			59627911082							D	A414 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z9
			59627911082							D	A415 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z10
			59627911082							D	A416 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z11
			59627911082							D	A417 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z12
			59627911082							D	A418 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z17

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911082							D	A419 M INTEGRATEDCIRCUIT, LOGIC GATE: SAME AS A007 M	EA	REF										-15 5-8	Z18
			59627911082							D	A420 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z19
			59627911082							D	A421 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z20
			59627911082							D	A422 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z25
			59627911082							D	A423 M INTEGRATEDCIRCUIT, LOGIC GATE: SAME AS A007 M	EA	REF								-15		5-8	Z26
			59627911082							D	A424 M INTEGRATEDCIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z27
			59627911082							D	A425 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z28
			74409111615							C	A426 CIRCUIT, CARD ASSEMBLY: SAME AS A408	EA		REF									-15 4-2	11
										D	A427 PRINTED CIRCUIT BOARD: SAME AS A409	EA		REF									-15 5-8	
			59627911082							D	A428 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z1

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911082							D	A429 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A0O7 M	EA		REF									-15 5-8	Z2
			59627911082							D	A430 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z3
			59627911082							D	A431 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007' M	EA		REF									-15 5-8	Z4
			59627911082							D	A432 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z9
			59627911082							D	A433 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z10
			59627911082							D	A434 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z11
			59627911082							D	A435 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z12
			59627911082							D	A436 M INTEGRATEDCIRCUIT, LOGIC GATE: SAME AS A007 M	EA	REF										-15 5-8	Z17
			59627911082							D	A437 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z18
			59627911082							D	A438 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z19

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911082							D	A439 M INTEGRATEDCIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z20
			59627911082							D	A440 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z25
			59627911082							D	A441 M INTEGRATEDCIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z26
			59627911082							D	A442 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-I5 5-8	Z27
			59627911082							D	A443 M INTEGRATEDCIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-8	Z28
P	H	T	74409352399							C	A444 CIRCUIT CARD ASSEMBLY: 58189; A65081-001	EA		1	1	2	3	1	2	3		3	-15 4-2	2
X1	D									D	A445 PRINTED CIRCUIT BOARD: 58189; A65082-001	EA		1									-15 5-4	
P	D		59108823565							D	A446 M CAPACITOR, FIXED, ELECTROLYTIC: 81349; CS13BJ474M	EA		5								25	-15 5-4	C1
			59108823565							D	A447 M CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A446 M	EA		REF									-15 5-4	C2
			59108823565							D	A448 M CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A446 M	EA		REF									-15 5-4	C3

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59108823565							D	A449 M CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A446 M	EA		REF									-15 5-4	C4
			59108823565							D	A450 M CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A446 M.	EA		REF									-15 5-4	C5
			59056910195							D	A451A M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-4	R1
			59056910195							D	A452A M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-4	R8
			59056910195							D	A453A M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-4	R15
			59056910195							D	A454A M RESISTOR, FXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-4	R22
			59056816462							D	A455 M RESISTOR, FIXED, COMPOSITION: SAME AS A078 M	EA		REF									-15 5-4	R2
			59056816462							D	A456 M RESISTOR, FXED, COMPOSITION: SAME AS A078 M	EA		REF									-15 5-4	R9
			59056816462							D	A457 M RESISTOR, FIXED, COMPOSITION: SAME AS A078 M	EA		REF									-15 5-4	R16
			59056816462							D	A458 M RESISTOR, FIXED, COMPOSITION: SAME AS A078 M	EA		REF									-15 5-4	R23

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59056816462							D	A459 M RESISTOR, FIXED, COMPOSITION: SAME AS A078 M	EA		REF									-15 5-4	R32
P	D		59051920649							D	A460 M RESISTOR, FIXED, COMPOSITION: 81349; RC20GF203J	EA		4								12	-15 5-4	R3
			59051920649							D	A461 M RESISTOR, FIXED, COMPOSITION: SAME AS A460 M	EA		REF									-15 5-4	R10
			59051920649							D	A462 M RESISTOR, FIXED, COMPOSITION: SAME AS A460 M	EA		REF									-15 5-4	R17
			59051920649							D	A463 M RESISTOR, FIXED, COMPOSITION: SAME AS A460 M	EA		REF									-15 5-4	R24
P	D		59056837723							D	A464 M RESISTOR, FIXED, COMPOSITION: 81349; RC07GF152J	EA		6								15	-15 5-4	R4
			59056837723							D	A465 M RESISTOR, FIXED, COMPOSITION: SAME AS A464 M	EA		REF									-15 5-4	R11
			59056837723							D	A466 M RESISTOR, FIXED, COMPOSITION: SAME AS A464 M	EA		REF									-15 5-4	R18
			59056837723							D	A467 M RESISTOR, FIXED, COMPOSITION: SAME AS A464 M	EA		REF									-15 5-4	R25
P	D		59051858510							D	A468 M RESISTOR, FIXED, COMPOSITION: 81349; RC07GF103J	EA		30								90	-15 5-4	R5

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59051858510							D	A469 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-4	R12
			59051858510							D	A470 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-4	R19
			59051858510							D	A471 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-4	R26
P	D		59056883738							D	A472 M RESISTOR, FIXED, COMPOSITION: 81349; RC07GF182J	EA		5								15	-15 5-4	R6
			59056883738							D	A473 M RESISTOR, FIXED, COMPOSITION: SAME AS A472 M	EA		REF									-15 5-4	R13
			59056883738							D	A474 M RESISTOR, FIXED, COMPOSITION: SAME AS A472 M	EA		REF									-15 5-4	R20
			59056883738							D	A475 M RESISTOR, FIXED, COMPOSITION: SAME AS A472 M	EA		REF									-15 5-4	R27
P	D		59052560412							D	A476 M RESISTOR, FIXED, COMPOSITION: 81349, RC42GF181J	EA		4								12	-15 5-4	R7
			59052560412							D	A477 M RESISTOR, FIXED, COMPOSITION: SAME AS A476 M	EA		REF									-15 5-4	R14
			59052560412							D	A478 M RESISTOR, FIXED, COMPOSITION: SAME AS A476 M	EA		REF									-15 5-4	R21

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59052560412							D	A479 M RESISTOR, FIXED, 150556 ,COMPOSITION: SAME AS A476 M	EA		REF									-15 5-4	R28
			59056832241							D	A480 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-4	R29
			59052793516							D	A481 M RESISTOR, FIXED, COMPOSITION: SAME AS A060 M	EA		REF									-15 5-4	R30
			59052992051							D	A482 M RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-4	R31
P	D		59050429745							D	A483 M RESISTOR, FIXED, WIREWOUND: 81349; RW67V330	EA		1								3	-15 5-4	R33
P	D		59052792650							D	A484 M RESISTOR, FIXED, COMPOSITION: 81349; RC32GF5621	EA		1								3	-15 5-4	R34
P	D		59050596489							D	A485 M RESISTOR, FIXED, WIREWOUND: 81349; RW67V820	EA		4								12	-15 5-4	R35
			59050596489							D	A486 M RESISTOR, FIXED, WIREWOUND: SAME AS A485 M	EA		REF									-15 5-4	R36
			59050596489							D	A487 M RESISTOR, FIXED, WIREWOUND: SAME AS A485 M	EA		REF									-15 5-4	R37
			59050596489							D	A488 M RESISTOR, FIXED, WIREWOUND: SAME AS A485 M	EA		REF									-15 5-4	R38

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	D		59052531231							D	A489 M RESISTOR, FIXED, COMPOSITION: 81349; RC42GF391J	EA	:	2									6 5-4	-15 R39
			59052531231							D	A490 M RESISTOR, FIXED, COMPOSITION: SAME AS A489 M	EA		REF									-15 5-4	R40
P	D		59051711975							D	A491 M RESISTOR, FIXED, COMPOSITION: 81349; RC42GF151J	EA		2								6	-15 5-4	R41
			59051711975							D	A492 M RESISTOR, FIXED, COMPOSITION: SAME AS A491 M	EA		REF									-15 5-4	R42
P	D		59052791948							D	A493 M RESISTOR, FIXED, COMPOSITION: 81349; RC42GF161J	EA		1								3	-15 5-4	R43
P	D		59052791965							D	A494 M RESISTOR, FIXED, COMPOSITION: 81349; RC42GF131J	EA		2								6	-15 5-4	R44
			59052791965							D	A495 M RESISTOR, FIXED, COMPOSITION: SAME AS A494 M	EA		REF									-15 5-4	R45
P	D		59618140768							D	A496 M SEMI-CONDUCTOR DEVICE, DIODE: 81349; JAN1N3064	EA		26								78	-15 5-4	CR1
			59618140768							D	A497 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A496 M	EA		REF	-								15 5-4	CR2
			59618140768							D	A498 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A496 M	EA		REF	-								15 5-4	CR3

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59618140768							D	A499 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-4	CR4
			59618140768							D	A500 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-4	CR7
			59610876047							D	A501 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-4	CR5
			59610876047							D	A502 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-4	CR6
			59610876047							D	A503 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-4	CR8
			59610876047							D	A504 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-4	CR9
			59610876047							D	A505 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-4	CR10
P	D		59618804779							D	A506 M TRANSISTOR: 81350; JAN2N2905	EA		14								70	-15 5-4	Q1
			59618804779							D	A507 M TRANSISTOR: SAME AS A506 M	EA		REF									-15 5-4	Q4
			59618804779							D	ASO5 M TRANSISTOR: SAME AS A506 M	EA		REF									-15 5-4	Q7

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59618804779							D	A509 M TRANSISTOR: SAME AS A506 M	EA		REF									-15 5-4	Q10
			59618518293							D	AS10 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-4	Q2
			59618518293							D	A511 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-4	Q5
			59618518293							D	A512 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-4	Q8
			59618518293							D	A513 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-4	Q11
			59618518293							D	A514 M TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-4	Q14
			59610507499							D	A515 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-4	Q3
			59610507499							D	A516 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-4	Q6
			59610507499							D	A517 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-4	Q9
			59610507499							D	A518 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-4	Q12
			59610507499							D	A519 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-4	Q13
X2	D		59619929555							D	A520 HEAT DISSIPATOR: 98978; TXBF032-025B	EA		4									-15 5-4	H2

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59709564972							D	A521 INSULATOR, DISK: SAME AS A109	EA		REF									-15 5-4	H1
P	H	T	74409352406							C	A522 CIRCUIT CARD ASSEMBLY: 58189; A65085-001	EA		1	1	2	3	1	2	3		3	-15 4-2	15
X1	D									D	A523 PRINTED CIRCUIT BOARD: 58189; A65086-001	EA		1									-15 5-12	
P	D		59104328720							D	A524B CAPACITOR, FIXED, PAPER: 99515; WL1-333E-5	EA		1								3	-15 5-12	C1
P	D		59109459003							D	A525B CAPACITOR, FIXED, PAPER: 80702; WLI-473E-5	EA		1								3	-15 5-12	C2
P	D		59108352175							D	A526 CAPACITOR, FIXED, PAPER: 81349; CP09A1KB103K3	EA		1								3	-15 5-12	C3
P	D		59100795253							D	A527A CAPACITOR, MICA: 81349; CM06FD472G03	EA		1								3	-15 5-12	C4
P	D		59109579909							D	A528A CAPACITOR, FIXED, MICA: 81349; CM05F391J03	EA		25								12	-15 5-12	C5
			59109579909							D	A529A CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-12	C7
			59109579909							D	A530A CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-12	C8

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59109579909							D	A531A CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-12	C9
P	D		59109960666							D	A532 CAPACITOR, FIXED, ELECTROLYTIC: 81349; CS13BC227M	EA		2								10	-15 5-12	C6
P	D		59507712089							D	A533 INDUCTOR: 96906; MS75054-5	EA		2								6	-15 5-12	L1
			59507712089							D	A534 INDUCTOR: SAME AS A533	EA		REF									-15 5-12	L2
			59627911082							D	A535 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-12	Z1
			59627911082							D	A536 M INTEGRATED CIRCUIT, LOGIC GATB: SAME AS A007 M	EA		REF									-15 5-12	Z2
			59627911082							D	A537 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-12	Z11
			59627911082							D	A538 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-12	Z14
			59627910994							D	A539 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-12	Z3
			59627910994							D	A540 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-12	Z4

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627910994							D	A541 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-12	Z5
			59627910994							D	A542 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-12	Z10
			59627911393							D	A543 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-12	Z6
			59627911393							D	A544 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-12	Z7
			59627911393							D	A545 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-12	Z8
			59627911393							D	A546 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-12	Z9
			59627911393							D	A547 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-12	Z12
			59627911393							D	A548 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-12	Z15
			59627911393							D	A549 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-12	Z18
			59627911393							D	A550 M INTEGRATED CIRCUIT LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-12	Z19

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911393							D	A551 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-12	Z20
			59627911004							D	A552 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A0OS M	EA		REF									-15 5-12	Z13
			59627911004							D	A553 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS AOO5 M	EA		REF									-15 5-12	Z16
			59627911004							D	A554 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS AOOS M	EA		REF									-15 5-12	Z17
			59627911004							D	A555 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A005 M	EA		REF									-15 5-12	Z21
P	D		59057264413							D	A556 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF123J	EA		2								6	-15 5-12	R1
P	D		59056819970							D	A557 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF822J	EA		12								36	-15 5-12	R2
P	D		59051956791							D	ASS8 M RESISTOR, FIXED, COMPOSITION: 81349; RC20GF681J	EA		23								66	-15 5-12	R3
P	D		59057024439							D	A559 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF133J	EA		1								3	-15 5-12	R4
P	D		59058086136							D	A560 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF361J	EA		1								3	-15 5-12	R5

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59056910195							D	A561 M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-12	R6
			59056910195							D	A562 M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-12	R7
			59056910195							D	A563 M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-12	R9
P		D	59056870002							D	A564 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF223J	EA		5								9	-15 5-12	R8
P	D		59612265139							D	A565 SEMI-CONDUCTOR DEVICE, DIODE: 81350; JAN1N3666-2	EA		6								18	-15 5-12	CR1
			59610507499							D	A566 TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-12	Q1
			59610507499							D	A567 TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-12	Q2
			59709564972							D	A568 INSULATOR, DISK: SAME AS A109	EA		REF									-15 5-12	
P	H	T	74409352407							D	A569 CIRCUIT CARD ASSEMBLY: 58189; A65089-001	EA		1	1	2	3	1	2	3		3	-15 4-2	13
X1	D									D	A570 PRINTED CIRCUIT BOARD: 58189; A65090-001	EA		1									-15 5-10	
			59629111001							D	A571 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-10	Z1

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59629111001							D	A572 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-10	Z4
			59629111001							D	A573 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-10	Z7
			59629111001							D	A574 M INTEGRATEDCIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-10	Z8
			59629111001							D	A575 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS AD24 M	EA		REF									-15 5-10	Z10
			59629111001							D	A576 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-10	Z14
			59627911082							D	A577 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-10	Z2
			59627911082							D	A578 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-10	Z3
			59627911082							D	A579 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-10	Z5
			59627911082							D	A58 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-10	Z6
			59627911082							D	A581 M INTEGRATEDCIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-10	Z9

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911082							D	A582 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-10	Z11
			59627911082							D	A583 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS AO07 M	EA		REF									-15 5-10	Z12
			59627911082							D	A584 M INTEGRATEDCIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-10	Z13
			59627911082							D	A585 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-10	Z15
P	D		59056824097							D	A586 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF302J	EA		13								36	-15 5-10	R1
			59056824097							D	A587 RESISTOR, FIXED, COMPOSITION: SAME AS A586	EA		REF									-15 5-10	R10
			59056824097							D	A588 RESISTOR, FIXED, COMPOSITION: SAME AS A586	EA		REF									-15 5-10	R19
			59056824097							D	A589 RESISTOR, FIXED, COMPOSITION: SAME AS A586	EA		REF									-15 5-10	R28
			59056824097							D	A590 RESISTOR, FIXED, COMPOSITION: SAME AS A586	EA		REF									-15 5-10	R37
			59056824097							D	A591 RESISTOR, FIXED, COMPOSITION: SAME AS A586	EA		REF									-15 5-10	R46

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59056824097							D	A592 RESISTOR, FIXED, COMPOSITION: SAME AS A586	EA		REF									-15 5-10	R55
			59056824097							D	A593 RESISTOR, FIXED, COMPOSITION: SAME AS A586	EA		REF									-15 5-10	R64
			59056824097							D	A594 RESISTOR, FIXED, COMPOSITION: SAME AS A586	EA		REF									-15 5-10	R73
P	D		59050518012							D	A595 RESISTOR, FIXED,FILM: 81349; RN60D7321F	EA		11								33	-15 5-10	R2
			59050518012							D	A596 RESISTOR, FIXED, FILM: SAME AS A595	EA		REF									-15 5-10	R11
			59050518012							D	AS97 RESISTOR, FIXED, FILM: SAME AS A595	EA		REF									-15 5-10	R20
			59050518012							D	AS98 RESISTOR, FIXED, FILM: SAME AS A595	EA		REF									-15 5-10	R29
			59050518012							D	A599 RESISTOR, FIXED,FILM: SAME AS A595	EA		REF									-15 5-10	R38
			59050518012							D	ASO6 RESISTOR, FIXED,FILM: SAME AS A595	EA		REF									-15 5-10	R47
			59050518012							D	A601 RESISTOR,FIXED, FILM: SAME AS A595	EA		REF									-15 5-10	R56
			59050518012							D	A602 RESISTOR, FIXED, FILM: SAME AS A595	EA		REF									-15 5-10	R65

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59050518012							D	A603 RESISTOR, FIXED, FILM SAME AS AS95	EA		REF									-15 5-10	R74
P	D		59056832246							D	A604 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF473J	EA		22								66	-15 5-10	R3
			59056832246							D	A605 RESISTOR, FIXED, COMPOSITION: SAME AS A604	EA		REF									-15 5-10	R7
			59056832246							D	A606 RESISTOR, FIXED, COMPOSITION: SAME AS A604	EA		REF									-15 5-10	R12
			59056832246							D	A607 RESISTOR, FIXED, COMPOSITION: SAME AS A604	EA		REF									-15 5-10	R16
			59056832246							D	A608 RESISTOR, FIXED, COMPOSITION: SAME AS A604	EA		REF									-15 5-10	R21
			59056832246							D	A609 RESISTOR, FIXED, COMPOSITION: SAME AS A604	EA		REF									-15 5-10	R25
			59056832246							D	A610 RESISTOR, FIXED, COMPOSITION: SAME AS A604	EA		REF									-15 5-10	R30
			59056832246							D	A611 RESISTOR, FIXED, COMPOSITION: SAME AS A604	EA		REF									-15 5-10	R34
			590 56832246							D	A612 RESISTOR, FIXED, COMPOSITION: SAME AS A604	EA		REF									-15 5-10	R39

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59056832246							D	A613	RESISTOR, FIXED, COMPOSITION: SAME AS A604	EA		REF									-15 5-10	R43
			59056832246							D	A614	RESISTOR, FIXED, COMPOSITION: SAME AS A604	EA		REF									-15 5-10	R48
			59056832246							D	A615	RESISTOR, FIXED, COMPOSITION: SAME AS A604	EA		REF									-15 5-10	R52
			59056832246							D	A616	RESISTOR, FIXED, COMPOSITION: SAME AS A604	EA		REF									-15 5-10	R57
			59056832246							D	A617	RESISTOR, FIXED, COMPOSITION: SAME AS A604	EA		REF									-15 5-10	R61
			59056832246							D	A618	RESISTOR, FIXED, COMPOSITION: SAME AS A604	EA		REF									-15 5-10	R66
			59056832246							D	A619	RESISTOR, FIXED, COMPOSITION: SAME AS A604	EA		REF									-15 5-10	R70
			59056832246							D	A620	RESISTOR, FIXED, COMPOSITION: SAME AS A604	EA		REF									-15 5-10	R75
			59056832246							D	A621	RESISTOR, FIXED, COMPOSITION: SAME AS A604	EA		REF									-15 5-10	R79
			59056819970							D	A622	RESISTOR, FIXED, COMPOSITION: SAME AS A557	EA		REF									-15 5-10	R4

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59056819970							D	A623	RESISTOR, FIXED, COMPOSITION: SAME AS A557	EA		REF									-15 5-10	R13
			59056819970							D	A624	RESISTOR, FIXED, COMPOSITION: SAME AS A557	EA		REF									-15 5-10	R22
			59056819970							D	A625	RESISTOR, FIXED, COMPOSITION: SAME AS A557	EA		REF									-15 5-10	R31
			59056819970							D	A626	RESISTOR, FIXED, COMPOSITION: SAME AS A557	EA		REF									-15 5-10	R40
			59056819970							D	A627	RESISTOR, FIXED, COMPOSITION: SAME AS A557	EA		REF									-15 5-10	R49
			59056819970							D	A628	RESISTOR, FIXED, COMPOSITION: SAME AS A557	EA		REF									-15 5-10	R58
			59056819970							D	A629	RESISTOR, FIXED, COMPOSITION: SAME AS A557	EA		REF									-15 5-10	R67
			59056819970							D	A630	RESISTOR, FIXED, COMPOSITION: SAME AS A557	EA		REF									-15 5-10	R76
			59051858510							D	A631 M	RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-10	R5
			59051858510							D	A632 M	RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-10	R6

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59051858510							D	A633 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-10	R14
			59051858510							D	A634 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-10	R15
			59051858510							D	A635 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-10	R23
			59051858510							D	A636 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-10	R24
			59051858510							D	A637 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-10	R32
			59051858510							D	A638 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-10	R33
			59051858510							D	A639 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-10	R41
			59051858510							D	A640 M RESISTOR, FIXED, COMPOSITION: SAME:AS A468 M	EA		REF									-15 5-10	R42
			59051858510							D	A641 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-10	R50
			59051858510							D	A642 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-10	R51

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59051858510							D	A643 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-10	R59
			59051858510							D	A644 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-10	R60
			59051858510							D	A645 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	:EA		REF									-15 5-10	R68
			59051858510							D	A646 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-10	R69
			59051858510							D	A647 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-10	R77
			59051858510							D	A648 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-10	R78
P	D		59058000179							D	A649 M RESISTOR, FIXED, COMPOSITION: 81349; RC07GF563J	EA		15								42	-15 5-10	R8
			59058000179							D	A6S0 M RESISTOR, FIXED, COMPOSITION: SAME AS A649 M	EA		REF									-15 5-10	R17
			59058000179							D	A651 M RESISTOR, FIXED, COMPOSITION: SAME AS A649 M	EA		REF									-15 5-10	R26
			59058000179							D	A652 M RESISTOR, FIXED, COMPOSITION: SAME AS A649 M	EA		REF									-15 5-10	R35

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59058000179							D	A653 M RESISTOR, FIXED, COMPOSITION: SAME AS A649 M	EA		REF									-15 5-10	R44
			59058000179							D	A654 M RESISTOR, FIXED, COMPOSITION: SAME AS A649 M	EA		REF									-15 5-10	R53
			59058000179							D	A655 M RESISTOR, FIXED, COMPOSITION: SAME AS A649 M	EA		REF									-15 5-10	R62
			59058000179							D	A656 M RESISTOR, FIXED, COMPOSITION: SAME AS A649 M	EA		REF									-15 5-10	R71
			59058000179							D	A657 M RESISTOR, FIXED, ICOMPOSITION: SAME AS A649 M	EA		REF									-15 5-10	R80
P	D		59057278001							D	A658 RESISTOR, FIXED, COMPOSITION: 81349: RC07GF6811	EA		11								33	-15 5-10	R9
			59057278001							D	A659 RESISTOR, FIXED, COMPOSITION: SAME AS A658	EA		REF									-15 5-10	R18
			59057278001							D	A660 RESISTOR, FIXED, COMPOSITION: SAME AS A658	EA		REF									-15 5-10	R27
			59057278001							D	A661 RESISTOR, FIXED, COMPOSITION: SAME AS A658	EA		REF									-15 5-10	R36
			59057278001							D	A662 RESISTOR, FIXED, COMPOSITION: SAME AS A658	EA		REF									-15 5-10	R45

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59057278001							D	A663 RESISTOR, FIXED, COMPOSITION: SAME AS A658	EA		REF									-15 5-10	R54
			59057278001							D	A664 RESISTOR, FIXED, COMPOSITION: SAME AS A658	EA		REF									-15 5-10	R63
			59057278001							D	A665 RESISTOR, FIXED, COMPOSITION: SAME AS A658	EA		REF									-15 5-10	R72
			59057278001							D	A666 RESISTOR, FIXED, COMPOSITION: SAME AS A658	EA		REF									-15 5-10	R81
P	D		59056869998							D	A667 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF472J	EA		4								12	-15 5-10	R85
			59057264413							D	A668 RESISTOR, FIXED, COMPOSITION: SAME AS A556	EA		REF									-15 5-10	R84
			59618140768							D	A669 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-10	CR1
			59618140768							D	A670 M SEMI-CONDUCTOR. DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-10	CR2
			59618140768							D	A671 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-10	CR3
			59618140768							D	A672 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-10	CR4

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59618140768							D	A673 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-10	CR5
			59618140768							D	A674 M SEM1-CONDUCTOR DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-10	CR6
			59618140768							D	A675 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-10	CR7
			59618140768							D	A676 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-10	CR8
			59618140768							D	A677 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-10	CR9
			59610507499							D	A678 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q1
			59610507499							D	A679 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q2
			59610507499							D	A680 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q3
			59610507499							D	A681 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q4
			59610507499							D	A682 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q5
			59610507499							D	A683 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q6

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59610507499							D	A684 M TRANSISTOR, SAME AS A097 M	EA		REF									-15 5-10	Q7
			59610507499							D	A685 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q8
			59610507499							D	A686 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q9
			59610507499							D	A687 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q10
			59610507499							D	A688 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q11
			59610507499							D	A689 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q12
			59610507499							D	A690 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q13
			59610507499							D	A691I M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q14
			59610507499							D	A692 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q15
			59610507499							D	A693 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q16
			59610507499							D	A694 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q17
			59610507499							D	A695 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q18

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59610507499							D	A696 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q19
			59610507499							D	A697 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q20
			59610507499							D	A698 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q21
			59610507499							D	A099 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q22
			59610507499							D	A700 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q23
			59610507499							D	A701 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q24
			59610507499							D	A702 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q25
			59610507499							D	A703 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q26
			59610507499							D	A704 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q27
			59610507499							D	A705 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-10	Q29
			59709564972							D	A706 INSULATOR, IISK: SAME AS A109	EA		REF									-15 5-10	
P	H	T	74409352408							C	A707 CIRCUIT CARD ASSEMBLY: 58189; A65093-001	EA		1	1	2	3	1	2	3		3	-15 4-2	17

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X1	D									D	A708 PRINTED CIRCUIT BOARD: 58189; A65094-001	EA		1									-15 5-14	
			59109579909							D	A709 M CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-14	C1
			59109579909							D	A710 M CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-14	C2
			59109579909							D	A711 M CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-14	C3
			59109579909							D	A712 M CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-14	C4
			59627911082							D	A713 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-14	Z1
			59627911082							D	A714 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-14	Z2
			59627911082							D	A715 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-14	Z3
			59627911082							D	A716 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-14	Z4
			59627911p082							D	A717 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-14	Z6

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911082							D	A718 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-14	 Z9
			59627911082							D	A719 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-14	 Z10
			59627911082							D	A720 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-14	 Z12
			59627911082							D	A721 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-14	 Z16
			59627911082							D	A722 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-14	 Z18
			59627911082							D	A723 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-14	 Z20
			59627911082							D	A724 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-14	 Z23
			59627911082							D	A725 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-14	 Z24
			59627911082							D	A726 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-14	 Z27
			59627911393							D	A727 M INTEGRATEDCIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-14	 Z7

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911393							D	A728 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-14	 Z8
			59627910994							D	A729 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-14	 Z11
			59627910994							D	A730 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-14	 Z13
			59627910994							D	A731 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-14	 Z14
			59627910994							D	A732 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-14	 Z15
			59627910994							D	A733 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-14	 Z22
			59627910994							D	A734 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-14	 Z26
			59629111001							D	A735 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-14	 Z19
P	D		59056832242							D	A736 M RESISTOR, FIXED, COMPOSITION: 81349: RC07GF471J	EA		17								42	-15 5-14	 R1
			59056832242							D	A737 M RESISTOR, FIXED, COMPOSITION: SAME AS A736 M	EA		REF									-15 5-14	 R2

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59056832242							D	A738 M RESISTOR, FIXED, COMPOSITION: SAME AS A736 M	EA		REF									-15 5-14	R3
			59056832242							D	A739 M RESISTOR, FIXED, COMPOSITION: SAME AS A736 M	EA		REF									-15 5-14	R4
			59056832242							D	A740 M RESISTOR, FIXED, COMPOSITION: SAME AS A736 M	EA		REF									-15 5-14	R5
			59056832242							D	A741 M RESISTOR, FIXED, COMPOSITION: SAME AS A736 M	EA		REF									-15 5-14	R6
			59056832242							D	A742 M RESISTOR, FIXED, COMPOSITION: SAME AS A736 M	EA		REF									-15 5-14	R7
			59056832242							D	A743 M RESISTOR, FIXED, COMPOSITION: SAME AS A736 M	EA		REF									-15 5-14	R8
			59056832242							D	A744 M RESISTOR, FIXED, COMPOSITION: SAME AS A736 M	EA		REF									-15 5-14	R9
			59056832242							D	A745 M RESISTOR, FIXED, COMPOSITION: SAME AS A736 M	EA		REF									-15 5-14	R10
			59056832242							D	A746 M RESISTOR, FIXED, COMPOSITION: SAME AS A736 M	EA		REF									-15 5-14	R14
			59056832242							D	A747 M RESISTOR, FIXED, COMPOSITION: SAME AS A736 M	EA		REF									-15 5-14	R15

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59056910195							D	A748 M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-14	R11
			59056910195							D	A749 M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-14	R12
			59056910195							D	A750 M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-14	R13
			59056910195							D	A751 M RESISTOR, FIXED, COMPOSITION: SAME AS A048A M	EA		REF									-15 5-14	R16
P	H	T	74409352404							C	A752A CIRCUIT CARD ASSEMBLY: 58189; A65121-001	EA		1	1	2	3	1	2	3		3	-15 4-2	14
X1	D									D	A753A PRINTED CIRCUIT BOARD: 58189; A65122-001	EA		1									-15 5-11	
P	D		59100601187							D	A754 CAPACITOR, FIXED, MICA: 81349; CM05F161J03	EA		2								6	-15 5-11	C1
			59100601187							D	A755 CAPACITOR, FIXED, MICA: SAME AS A754	EA		REF									-15 5-11	C2
			59109579909							D	A756 M CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-11	C3
			59109579909							D	A757 M CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-11	C4

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59109579909							D	A758 M CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-11	C5
			59109579909							D	A759 M CAPACITOR, FXED, MICA: SAME AS A528A	EA		REF									-15 5-11	C6
			59109579909							D	A760 M CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-11	C7
			59627910994							D	A761 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-11	Z1
			59627911082							D	A762 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-11	Z2
			59627911082							D	A763 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-11	Z3
			59627911082							D	A763A M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-11	Z4
P	D		59056863798							D	A764 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF272J	EA		5								15	-15 5-11	RI
			59056863798							D	A765 RESISTOR, FIXED, COMPOSITION:' SAME AS A764	EA		REF									-15 5-11	R4
			59056863798							D	A766 RESISTOR, FIXED, COMPOSITION: SAME AS A764	EA		REF									-15 5-11	R7-
			59056863798							D	A767 RESISTOR, FIXED, COMPOSITION: SAME AS A764	EA		REF									-15 5-11	R10

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59056816462							D	A768 M RESISTOR,FIXED, COMPOSITION: SAME AS A078 M	EA		REF									-15 5-11	R2
			59056816462							D	A769 M RESISTOR, FIXED, COMPOSITION: SAME AS A078 M	EA		REF									-15 5-11	RS
			59056816462							D	A770 M RESISTOR, FIXED, COMPOSITION: SAME AS A078 M	EA		REF									-15 5-11	RS
			59056816462							D	A771 M RESISTOR, FIXED, COMPOSITION: SAME AS A078 M	EA		REF									-15 5-11	R11
P	D		59056824101							D	A772 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF752J	EA		4								12	-15 5-11	R3
			59056824101							D	A773 RESISTOR, FIXED, COMPOSITION: SAME AS A772	EA		REF									-15 5-11	R6
			59056824101							D	A774 RESISTOR, FIXED, COMPOSITION: SAME AS A772	EA		REF									-15 5-11	R9
			59056824101							D	A775 RESISTOR, FIXED, COMPOSITION: SAME AS A772	EA		REF									-15 5-11	R12
			59056910195							D	A776 M RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-11	R13
			59056910195							D	A777 M RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-11	R23

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	D		59056869997							D	A778 RESISTOR, FIXED, COMPOSITION: B1349; RC07GF682J	EA		2								6	-15 5-11	R14
			59056869997							D	A779 RESISTOR, FIXED, COMPOSITION: SAME AS A778	EA		REF									-15 5-11	R24
			59058000179							D	A780 M RESISTOR, FIXED, COMPOSITION: SAME AS A649 M	EA		REF									-15 5-11	R15
			59058000179							D	A781 M RESISTOR, FIXED, COMPOSITION: SAME AS A649 M	EA		REF									-15 5-11	R25
			59058000179							D	A782 M RESISTOR, FIXED, COMPOSITION: SAME AS A649 M	EA		REF									-15 5-11	R47
			59058000179							D	A783 M RESISTOR, FIXED, COMPOSITION: SAME AS A649 M	EA		REF									-15 5-11	R55
P	D		59058074954							D	A784 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF751J	EA		2								6	-15 5-11	R16
			59058074954							D	A785 RESISTOR, FIXED, COMPOSITION: SAME AS A784	EA		REF									-15 5-11	R26
			59056824097							D	A786 RESISTOR, FIXED, COMPOSITION: SAME AS A586	EA		REF									-15 5-11	R17
			59056824097							D	A787 RESISTOR, FIXED, COMPOSITION: SAME AS A586	EA		REF									-15 5-11	R27
			59056824097							D	A787A RESISTOR, FIXED, COMPOSITION: SAME AS A586	EA		REF									-15 5-11	R72

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	D		59058016998							D	A788 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF621J	EA		2								6	-15 5-11	R18
			59058016998							D	A789 RESISTOR, FIXED, COMPOSITION: SAME AS A788	EA		REF									-15 5-11	R28
			59051858510							D	A790 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-11	RI9
			59051858510							D	A791 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-11	R29
			59051858510							D	A792 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-11	R45
			59051858510							D	A793 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-11	R46
			59051858510							D	A794 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-11	R53
			59051858510							D	A795 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-11	R54
P	D		59051955571							D	A796 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF680J	EA		4								12	-15 5-11	R20
			59051955571							D	A797 RESISTOR, FIXED, COMPOSITION: SAME AS A796	EA		REF									-15 5-11	R21

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59051955571							D	A798 RESISTOR, FIXED, COMPOSITION:	EA		REF									-15 5-11	R30
			SAME AS A796																					
			59051955571							D	A799 RESISTOR, FIXED, COMPOSITION: SAME AS A796	EA		REF									-15 5-11	R31
			59056910195							D	A800 M RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-11	R22
			59056910195							D	A801 M RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-11	R32
P	D		59056863369							D	A802 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF331J	EA		2								6	-15 5-11	R33
			59056863369							D	A803 RESISTOR, FIXED, COMPOSITION: SAME AS A802	EA		REF									-15 5-11	R37
P	D		59058016444							D	A804 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF911J	EA		2								6	-15 5-11	R34
			59058016444							D	A805 RESISTOR, FIXED, COMPOSITION: SAME AS A804	EA		REF									-15 5-11	R38
P	D		59056870000							D	A806 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF183J	EA		7								21	-15 5-11	R35
			59056870000							D	A807 RESISTOR, FIXED, COMPOSITION: SAME AS A806	EA		REF									-15 5-11	R39

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59056870000							ID	A808 RESISTOR, FIXED, COMPOSITION: SAME AS A806	EA		REF									-15 5-11	RSB
			59056870000							D	A809 RESISTOR, FIXED, COMPOSITION: SAME AS A806	EA		REF									-15 5-11	R60
			59056870000							D	A810 RESISTOR, FIXED, COMPOSITION: SAME AS A806	EA		REF									-15 5-11	R62
			59056870000							D	A811 RESISTOR, FIXED, COMPOSITION: SAME AS A806	EA		REF									-15 5-11	R64
			59056870000							D	A812 RESISTOR, FIXED, COMPOSITION: SAME AS A806	EA		REF									-15 5-11	R66
F	D		59056832236							D	A813 M RESISTOR, FIXED, COMPOSITION: 81349; RC07GF391J	EA		3								6	-15 5-11	R36
			59056832236							D	A814 M RESISTOR, FIXED, COMPOSITION: SAME AS A813 M	EA		REF									-15 5-11	R40
			59050518012							D	AS15 RESISTOR,FIXED,FILM: SAME AS AS95	EA		REF									-15 5-11	R41
			59050518012							D	A816 RESISTOR,FIXED,FILM: SAME AS A595	EA		REF									-15 5-11	RSO
			59056832246							D	A817 RESISTOR, FIXED, COMPOSITION: SAME AS A604	EA		REF									-15 5-11	R42

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59056832246							D	A818	RESISTOR, FIXED, COMPOSITION: SAME AS A604	EA		REF									-15 5-11	R49
			59056832246							D	A819	RESISTOR, FIXED, COMPOSITION: SAME AS A604	EA		REF									-15 5-11	RS1
			59056832246							D	A820	RESISTOR, FIXED, COMPOSITION: SAME AS A604	EA		REF									-15 5-11	R57
			59056819970							D	A821	RESISTOR, FIXED, COMPOSITION: SAME AS A557	EA		REF									-15 5-11	R44
			59056819970							D	A822	RESISTOR, FIXED, COMPOSITION: SAME AS A557	EA		REF									-15 5-11	R52
			59057278001							D	A823	RESISTOR, FIXED, COMPOSITION: SAME AS A658	EA		REF									-15 5-11	R48
			59057278001							D	A824	RESISTOR, FIXED, COMPOSITION: SAME AS A658	EA		REF									-15 5-11	R56
P	D		59056869994							D	A825	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF122J	EA		6								18	-15 5-11	R59
			59056869994							D	A826	RESISTOR, FIXED, COMPOSITION: SAME AS A825	EA		REF									-15 5-11	R61
			59056869994							D	A827	RESISTOR, FIXED, COMPOSITION: SAME AS A825	EA		REF									-15 5-11	R63

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59056869994							D	A828	RESISTOR, FIXED, COMPOSITION: SAME AS A825	EA		REF									-15 5-11	R65
			59056869994							D	A829	RESISTOR, FIXED, COMPOSITION: SAME AS A825	EA		REF									-15 5-11	R67
P	D		59052791724							D	A830	RESISTOR, FIXED COMPOSITION: 81349; RC32GF151J	EA		2								6	-15 5-11	R70
			59052791724							D	A831	RESISTOR, FIXED, COMPOSITION: SAME AS A830	EA		REF									-15 5-11	R71
			59618140768							D	A832 M	SEMI-CONDUCTOR, DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-11	CR6
			59618140768							D	A832A	SEMI-CONDUCTOR, DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-11	CR7
P	D		59619952310							D	A833	SEMI-CONDUCTOR, DEVICE, DIODE: 81349; JAN1N752A	EA		2								6	-15 5-11	VRI
			59619952310							D	A834	SEMI-CONDUCTOR, DEVICE, DIODE: SAME AS A833	EA		REF									-15 5-11	VR2
P	D		59617526121							D	A835	SEMI-CONDUCTOR, DEVICE, DIODE: 81350; JAN1N753A	EA		2								6	-15 5-11	VR3
			59617526121							D	A836	SEMI-CONDUCTOR, DEVICE, DIODE: SAME AS A835	EA		REF									-15 5-11	VR4
			59610507499							D	A837 M	TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-11	Q1

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59610507499							D	A838 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-11	Q2
			59610507499							D	A839 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 1 5-11	Q3
			59610507499							D	AB40 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-11	Q4
			59610507499							D	A841 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-11	Q5
			59610507499							D	A842 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-11	Q7
			59610507499							D	A843 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-11	Q9
			59610507499							D	A844 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-11	Q11
			59610507499							D	A845 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-11	Q13
			59610507499							D	A846 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-11	Q14
			59610507499							D	A847 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-11	Q15
			59610507499							D	A848 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-11	Q16
			59610507499							D	A849 M TRANSISTOR: SAME AS A097 M	'EA		REF									-15 5-11	Q17

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59610507499							D	A850 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-11	Q18
			59610507499							D	A851 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-11	Q19
			59610507499							D	A852 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-11	Q20
			59618804779							D	A853 M TRANSISTOR: SAME AS A506 M	EA		REF									-15 5-11	Q6
			59618804779							D	A854 M TRANSISTOR: SAME AS AS06 M	EA		REF									-15 5-11	Q8
			59618804779							D	A855 M TRANSISTOR: SAME AS A506 M	EA		REF									-15 5-11	Q10
			59618804779							D	A856 M TRANSISTOR: SAME AS A506 M	EA		REF									-15 5-11	Q12
			59618804779							D	A857 M TRANSISTOR: SAME AS A506 M	EA		REF									-15 5-11	Q21
			59618804779							D	A858 M TRANSISTOR: SAME AS A506 M	EA		REF									-15 5-11	Q22
			59618804779							D	A859 M TRANSISTOR: SAME AS A506 M	EA		REF									-15 5-11	Q23
			59618804779							D	A860 M TRANSISTOR: SAME AS A506 M	EA		REF									-15 5-11	Q24
			59618804779							D	A861 M TRANSISTOR: SAME AS A506 M	EA		REF									-15 5-11	Q25

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59709564972							D	A862	INSUIATOR, DISK: SAME AS A109	EA		REF									-15 5-11	
P	H	T	74409352403							C	863	CIRCUIT CARD ASSEMBLY: 58189; A65101-001	EA		1	1	2	3	1	2	3		3	-15 4-2	16
X1	D									D	A864	PRINTED CIRCUIT BOARD: 58189; A65102-001	EA		1									-15 5-13	
			59109579909							D	A865 M	CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-13	C1
			59109579909							D	A866 M	CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-13	C2
			59627911082							D	A867 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-13	Z1
			59627911082							D	A868 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-13	Z2
			59627911082							D	A869 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-13	Z7
			59627911082							D	A870 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-13	Z8
			59627911082							D	A871 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-13	Z9

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANC E										(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911082							D	A872 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-13	Z10
			59627911082							D	A873 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-13	Z12
			59627911082							D	A874 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-13	Z13
			59627911082							D	A875 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-13	Z16
			59627911082							D	A876 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-13	Z20
			59629111001							D	A877 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-13	Z3
			59629111001							D	A878 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-13	Z4
			59629111001							D	A87S M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-13	Z11
			59629111001							D	A880 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-13	Z18
			59629111001							D	A881 M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-13	Z19

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627910994							D	A882 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-13	Z6
			59627910994							D	A883 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-13	Z15
			59627910994							D	A884 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-13	Z17
			59056910195							D	A885 M RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-13	RI
			59056910195							D	A886 M RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-13	R2
P	H	T	74409352402							C	A887 CIRCUIT CARD ASSEMBLY: 58189:; A65105-001	EA		1	1	2	3	1	2	3		3	-15 4-2	19
X1	D									D	A888 PRINTED CIRCUIT BOARD: 58189; A65106-001	EA		1									-15 5-16	
P	D		59108804163							D	A889 CAPACITOR, FIXED, ELECTROLYTIC: 81349; CS13BC107K	EA		3								15	-15 5-16	C1
			59108804163							D	A890 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A889	EA		REF									-15 5-16	C2
			59108804163							D	A891 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A889	EA		REF									-15 5-16	C3

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	D		59109412356							D	A892 CAPACITOR, FIXED, ELECTROLYTIC: 81349; CS13BE107M	EA		1								5	-15 5-16	C4
P	D		59109578582							D	A893 CAPACITOR, FIXED, MICA: 81349; CM06F222J03	EA		4								12	-15 5-16	C5
			59109578582							D	A894 CAPACITOR, FIXED, MICA: SAME AS A893	EA		REF									-15 5-16	C6
			59109578582							D	A895 CAPACITOR, FIXED, MICA: SAME AS A893	EA		REF									-15' 5-16	C8
			59109578582							D	A896 CAPACITOR, FIXED, MICA: SAME AS A893	EA		REF									-15 5-16	C12
P	D		59108818906							D	A897A CAPACITOR, FIXED, MICA: 81349; CK06CW472M	EA		1								3	-15 5-16	C7
			59109579909							D	A898 M CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-16	C9
			59109579909							D	A899 M CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-16	C10
			59109579909							D	A900 M CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-16	C11
			59629111001							D	A901 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-16	Z1

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59629111001							D	A902 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-16	Z3
			59629111001							D	A903 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-16	Z12
			59629111001							D	A904 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-16	Z19
			59627910994							D	A905 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-16	Z2
			59627910994							D	A906 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-16	Z4
			59627910994							D	A907 'M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-16	Z7
			59627910994							D	A908 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-16	Z8
			59627910994							D	A909 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-16	Z16
			59627910994							D	A910 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-16	Z18
			59627911082							D	A911 M INTEGRATED CIRCUIT, LOGIC GATE: SAME ASA007 M	EA		REF									-15 5-16	Z5

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911082							D	A912 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-16	Z6
			59627911082							D	A913 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-16	Z9
			59627911082							D	A914 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-16	Z10
			59627911082							D	A915 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-16	211
			59627911082							D	A916 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-16	Z13
			59627911082							D	A917 M INTEGRATED CIRCUIT, LOGIC GATE: SAME As A007 M	EA		REF									-15 5-16	Z14,
			59627911082							D	A918 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-16	Z15
			59627911082							D	A919 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-16	Z17
			59627911393							D	A920 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-16	Z20
			59056910195							D	A921 M RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-16	R1

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59056910195							D	A922 M RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-16	R6
			59056910195							D	A923 M RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-16	R11
			59056910195							D	A924 M RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-16	R27
P	D		59056837721							D	A925 M RESISTOR, FIXED, COMPOSITION: 81349; RC07GF101J	EA		8								24	-15 5-16	R2
			59056837721							D	A926 M RESISTOR, FIXED, COMPOSITION: SAME AS A925 M	EA		REF									-15 5-16	R7
			59056837721							D	A927 M RESISTOR, FIXED, COMPOSITION: SAME AS A925 M	EA		REF									-15 5-16	R12
			59056837721							D	A928 M RESISTOR, FIXED, COMPOSITION: SAME AS A925 M	EA		REF									-15 5-16	R16
P	D		59056863368							D	A929 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF203J	EA		3								9	-15 5-16	R3
			59056863368							D	A930 RESISTOR, FIXED, COMPOSITION: SAME AS A929	EA		REF									-15 5-16	R8
			59056863368							D	A931 RESISTOR, FIXED, COMPOSITION: SAME AS A929	EA		REF									-15 5-16	R13

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59056832241							D	A932 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-16	R4
			59056832241							D	A933 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-16	R9
			59056832241							D	A934 M RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-16	R14
			59051956791							D	A935 M RESISTOR, FIXED, COMPOSITION: SAME AS A558 M	EA		REF									-15 5-16	RS
			59051956791							D	A936 M RESISTOR, FIXED, COMPOSITION: SAME AS A558 M	EA		REF									-15 5-16	R10
			59051956791							D	A937 M RESISTOR, FIXED, COMPOSITION: SAME AS A558 M	EA		REF									-15 5-16	R15
P	D		59056824095							D	A938 M RESISTOR, FIXED, COMPOSITION: 81349; RC07GF162J	EA		1								3	-15 5-16	R17
			59056910195							D	A939 M RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-16	R18
			59056910195							D	A940 M RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-16	R29
P	D		59052791890							D	A941 RESISTOR, FIXED, COMPOSITION: 81349: RC20GF391J	EA		1								3	-15 5-16	R19

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	D		59052793513							D	A942 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF221J	EA		3								9	-15 5-16	R20
P	D		59057235251							D	A943 M RESISTOR, FIXED, COMPOSITION: 81349; RC07GF222J	EA		3								9	-15 5-16	R21
			59056832242							D	A944A RESISTOR, FIXED, COMPOSITION: SAME AS A736 M	EA		REF									-15 5-16	R22
			59058000179							D	A945A RESISTOR, FIXED, COMPOSITION: SAME AS A649 M	EA		REF									-15 5-16	R23
			59058000179							D	A946 M RESISTOR, FIXED, COMPOSITION: SAME AS A649 M	EA		REF									-15 5-16	R24
			59056863798							D	A947 RESISTOR, FIXED, COMPOSITION: SAME AS A764	EA		REF									-15 5-16	R25
			59056883738							D	A948 M RESISTOR, FIXED, COMPOSITION: SAME AS A472 M	EA		REF									-15 5-16	R26
			59056824097							D	A949 RESISTOR, FIXED, COMPOSITION: SAME AS A586	EA		REF									-15 5-16	R28
			59618140768							D	A950 M SEMI-CONDUCTOR, DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-16	CR1
			59618140768							D	A951 M SEMI-CONDUCTOR, DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-16	CR2

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59618140768							D	A952 M SEMI-CONDUCTOR, DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-16	CR3
			59618140768							D	A953 M SEMI-CONDUCTOR, DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-16	CR4
			59618140768							D	A954 M SEMI-CONDUCTOR, DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-16	CRS
			59618140768							D	A955 M SEMI-CONDUCTOR, DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-16	CR6
			59618140768							D	A956 M SEMI-CONDUCTOR, DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-16	CR7
			59618140768							D	A957 M SEMI-CONDUCTOR, DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-16	CR8
			59618140768							D	A958 M SEMI-CONDUCTOR, DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-16	CR9
			59610507499							D	A959 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-16	Q1
			59610507499							D	A960 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-16	Q2
			59610507499							D	A961 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-16	Q3

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59610507499							D	A962 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-16	Q4
			59610507499							D	A963 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-16	Q5
			59610507499							D	A964 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-16	Q6
			59610507499							D	A965 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-16	Q7
			59610507499							D	A966 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-16	Q8
			59610507499							D	A967 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-16	Q9
			59700579700							D	A968 INSULATOR, DISK: SAME AS A109	EA		REF									-15 5-16	
P	H	T	74409352401							C	A969 CIRCUIT CARD ASSEMBLY: 58189: A65109-001	EA		1	1	2	3	1	2	3		3	-15 4-2	18
X1	D									D	A970 PRINTED CIRCUIT BOARD: 58189: A65110-001	EA		1									-15 5-15	
			59109960666							D	A971 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A532	EA		REF									-15 5-15	C1
P	D		59106550137							D	A972 CAPACITOR, FIXED, PAPER: 81349; CP09A1KB473K3	EA		1								3	-15 5-15	C2

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911393							D	A973 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-15	Z1
			59627911393							D	A974 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-15	Z2
			59627911393							D	A975 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-15	Z21
			59629111001							D	A976 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-15	Z3
			59627911004							D	A977 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A005 M	EA		REF									-15 5-15	Z4
			59627911004							D	A978 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A005 M	EA		REF									-15 5-15	Z23
			59627911082							D	A979 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-15	Z5
			59627911082							D	A980 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-15	Z6
			59627911082							D	A981 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-15	Z7
			59627911082							D	A982 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-15	Z13

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911082							D	A983 M INTEGRATED CIRCUT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-15	Z14
			59627911082							D	A984 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-15	Z15
			59627911082							D	A985 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-15	Z16
			59627911082							D	A986 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-15	Z18
			59627911082							D	A987 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-15	Z19
			59627911082							D	A988 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-15	Z20
			59627911082							D	A989 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-15	Z22
			59627911082							D	A990 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-15	Z26
			59627911082							D	A991 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-15	Z27
			59627910994							D	A992 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-15	Z8

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627910994							D	A993 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-15	29
			59627910994							D	A994 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-15	Z10
			59627910994							D	A995 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-15	Z11
			59627910994							D	A996 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-15	Z12
			59056869994							D	A999 RESISTOR, FIXED, COMPOSITION: SAME AS A825	EA		REF									-15 5-15	R3
P	H	T	74409352400							C	B001A CIRCUIT CARD ASSEMBLY: 58189; A65117-001	EA		1	1	2	3	1	2	3		3	-15 4-2	1
X1	D									D	B002A PRINTED CIRCUIT BOARD: 58189; A65118-001	EA		1									-15 5-3	
P	D		59109659441							D	B003 M CAPACITOR, FIXED, MICA: 81349; CM06F102J03	EA		1								3	-15 5-3	C1

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	MODEL 6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	D		59109363930							D	B004 M CAPACITOR, FIXED, ELECTROLYTIC: 81349; CS13BF474M	EA		2								10	-15 5-3	C2
			59109363930 i							D	B005 M CAPACITOR, FIXED, ELECTROLYTIC: SAME AS B004 M	EA		REF									-15 5-3	C3
			59109579909							D	B006 M CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-3	C4
			59109579909							D	B007 M CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-3	C5
			59109579909							D	B008 M CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-3	C6
			59109579909							D	B009 M CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-3	C9
			59109579909							D	B010 M CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-3	C10
			59109579909							D	B011 M CAPACITOR, FIXED, MICA: SAME AS A528A	EA		REF									-15 5-3	C12
			59109579909							D	B011A CAPACITOR, FIXED, MICA: SAM E AS A528A	EA		REF									-15 5-3	C16
P	D		59109566432							D	B011C CAPACITOR, FIXED, MICA: 81349; CM06F561J03	EA		2								6	-15 5-3	C18

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	MODEL 6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59109566432							D	B011D CAPACITOR, FIXED, MICA: SAME AS B011C	EA		REF									-15 5-3	C19
P	D		59108114783							D	B0012AM CAPACITOR, FIXED, MICA: 81349; CK06CW222M	EA		1								3	-15 5-3	C14
P	D		59108096917							D	B013 M CAPACITOR, FIXED, MICA: 81349; CM06F332J03	EA		3								9	-15 5-3	C7

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59108096917							D	B014 M CAPACITOR, FIXED, MICA: SAME AS B013 M	EA		REF									-15 5-3	C11
			59108096917							D	B015 M CAPACITOR, FIXED, MICA: SAME AS B013 M	EA		REF									-15 5-3	C13
P	D		59106550138							D	B016 M CAPACITOR, FIXED, PAPER: 81349; CP09A1KB224K3	EA		1								3	-15 5-3	C8
P	D		59107719020							D	B016C CAPACITOR, FIXED, PAPER: 96733; AM104	EA		1								3	-15 5-3	C15
			59629111001							D	B017 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-3	Z1
			59629111001							D	B018 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A024 M	EA		REF									-15 5-3	Z7
			59627911082							D	B019 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-3	Z2
			59627911082							D	B020 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-3	Z6
			59627911082							D	B021 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-3	Z9
			59627911082							D	B022 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-3	Z11
			59627910994							D	B023 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-3	Z3

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627910994							D	B024 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-3	Z4
			59627910994							D	B025 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-3	Z8
			59627910994							D	B026 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-3	Z10
			59627910994							D	B026AM INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-3	Z12
			59627911393							D	B027 M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-3	Z5
			59056816482							D	B028 M RESISTOR, FIXED, COMPOSITION: SAME AS A078 M	EA		REF									-15 5-3	R1
			59056816462							D	B029 M RESISTOR, FIXED, COMPOSITION: SAME AS A078 M	EA		REF									-15 5-3	R2
			59056816462							D	B030 M RESISTOR, FIXED, COMPOSITION: SAME AS A078 M	EA		REF									-15 5-3	R9
			59056832242							D	B031 M RESISTOR, FIXED, COMPOSITION: SAME AS A736 M	EA		REF									-15 5-3	R3
			59056832242							D	B032 M RESISTOR, FIXED, COMPOSITION: SAME AS A736 M	EA		REF									-15 5-3	R4
P	D		59056863129							D	B033 M RESISTOR, FIXED, COMPOSITION: 81249: RC07GF104J	EA		3								6	-15 5-3	R5

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59056863129							D	B034 M RESISTOR, FIXED, COMPOSITION: SAME AS B033 M	EA		REF									-15 5-3	R6
			59056869998							D	B035 RESISTOR, FIXED, COMPOSITION: SAME AS A667	EA		REF									-15 5-3	R7
			59056869998							D	B036 RESISTOR, FIXED, COMPOSITION: SAME AS A667	EA		REF									-15 5-3	R8
			59056869998							D	B037 RESISTOR, FIXED, COMPOSITION: SAME AS A667	EA		REF									-15 5-3	R24
			59051858510							D	B038 M RESISTOR, FIXED, COMPOSITION: SAME AS A468 M	EA		REF									-15 5-3	R10
P	D		59051923971							D	B039 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF331J	EA		2								6	-15 5-3	R11
			59056870002							D	B040 RESISTOR, FIXED, COMPOSITION: SAME AS A564	EA		REF									-15 5-3	R12
			59056870002							D	B041 RESISTOR, FIXED, COMPOSITION: SAME AS A564	EA		REF									-15 5-3	R16
			59056910195							D	B042 M RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-3	R13
			59056910195							D	B043 M RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-3	R14

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59056910195							D	B044 M RESISTOR, FIXED, COMPOSITION: SAME AS A04AAM	EA		REF									-15 5-3	R15
			59056910195							D	B045 M RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-3	R17
			59056910195							D	B046 M RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-3	R18
			59056910195							D	B047 M RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-3	R19
			59056910195							D	B048 M RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-3	R20
			59056910195							D	B049 M RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-3	R21
			59056910195							D	B050 M RESISTOR, FIXED, COMPOSITION: SAME AS A04AAM	EA		REF									-15 5-3	R22
			59056910195							D	B051 M RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-3	R23
			59056910195							D	B051AM RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-3	R29
			59056910195							D	B051BM RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-3	R30

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	D		59059103951							D	B05IG RESISTOR, FIXED, COMPOSITION: 81549; RW67V620	EA		1								3	-15 5-3	RS25
			59612265139							D	B052 SEMI'CONDUCTOR, DEVICE, DIODE: SAME AS A565	EA		REF									-15 5-3	CRI
			59612265139							D	B053 SEMI-CONDUCTOR, DEVICE, DIODE: SAME AS A565	EA		REF									-15 5-3	CR2

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59612265139							D	0054 SEMI-CONDUCTOR, DEVICE, DIODE: SAME AS A565	EA		REF									-15 5-3	CR4
			59612265139							D	B055 SEMI-CONDUCTOR, DEVICE, DIODE: SAME AS A565	EA		REF									-15 5-3	CR5
			59612265139							D	B056 SEMI-CONDUCTOR, DEVICE, DIODE: SAME AS A565	EA		REF									-15 5-3	CR6
P	D		59610824020							D	B0568 SEMI-CONDUCTOR, DEVICE, DIODE: 81349; JAN1N3825A	EA		1								5	-15 5-3	VR7
			59618140768							D	B057 M SEMI-CONDUCTOR, DEVICE, DIODE: SAME AS A496 M	EA		REF									-15 5-3	CR3
			59610507499							D	B058 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-3	Q1
			59610507499							D	8059 M TRANSISTOR: SAME AS A097 M	EA		REF									-15 5-3	Q2
			59618804779							D	B060 M TRANSISTOR: SAME AS A506 M	EA		REF									-15 5-3	Q3
P	D		59610814816							D	B061 TRANSISTOR: 81350; JAN2N1485	EA		2								5	-15 5-3	Q4
P	D		59508800241							D	B061C CHOKE: 96906; MS75055-5	EA		1								5	-15 5-3	L1
X2	D		59619775631							D	B062 M INSULATOR DISK: 07047; 10104	EA		1									-15 5-3	H1
			59700579700							D	8063 INSUIATOR, DISK: SAME AS A109	EA		REF									-15 5-3	H2

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	H	T	74402296561							C	B063A	CIRCUIT CARD ASSEMBLY 58189; A65177-001	EA		1	1	2	3	1	2	3		3	-15 4-2	20.1
X1	D									D	B063B	PRINTED CIRCUIT BOARD: 58189; A65178-001	EA		1									-15 5-18	
P	D		59104878424							D	B063C	CAPACITOR: 81349; CMOSFD391J03	EA		4								12	-15 5-18	C1
P	D		59107811154							D	B063D	CAPACITOR: 81349; CM06FD152J03	EA		2								6	-15 5-18	C2
P	D		59104560812							D	B063E	CAPACITOR: 81349; CM06FD511103	EA		2								6	-15 5-18	C3
			59627910994							D	B063F	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-18	Z1
			59627910994							D	B063G	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-18	Z2
			.59627911082							D	8063H	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-18	Z3
			59627911082							D	B0631	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-18	Z4
			59627911082							D	B063J	INTEGRATED CIRCUIT, -SAME AS A007 M LOGIC GATE5 SAME AS A007 M	EA		REF									5-18	Z10
			59627911082							D	B063K	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									5-18	Z14

104.1

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911082							D	B063L	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-18	Z9
			59627911082							D	B063M	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-18	Z13
			59627911082							D	B063N	INTEGRATED CIRCUIT, LOGIC.GATE: SAME AS A007 M	EA		REF									-15 5-18	Z7
			59627911082							D	B0630	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-18	Z12
			59627911082							D	B063P	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-18	Z15
			59627911393							D	B063Q	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS B036 M	EA		REF									-15 5-18	Z6
			59056910195							D	B063R	RESISTOR,FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-18	R1
			59056910195							D	B063S	RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-18	R5

104.2

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	MODEL 6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	D		59056824099							D	B063T	RESISTOR,FIXED, COMPOSITION: 81349: RC07GF4321	EA		2								6	-15 5-18	R2
			59056D37723							D	B063U	RESISTOR,FDIED, COMPOSITION: SAME AS A464 M	EA		REF									-IS 5-18	R3
			59056832242							D	B063V	RESISTOR,FD(ED, COMPOSITION: SAME AS A736 M	EA		REF									-15 5-18	R4
			59610876047							D	B063W	SEMI-CONDUCTOR DEVICE ,DIODE: SAME AS A08S M	EA		REF									-15 5-18	CR1
P	H	T	74400189634							C	B064A	CIRCUIT CARD ASSEMBLY: 80063; SME546659	EA		1	1	2	3	1	2	3		3	-15 4-2	20

104.3

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	MODEL 6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X1	D									D	B065A	PRINTED CIRCUIT BOARD: 80063; SMES46657	EA		1									-15 5-17	
P	D		59109494827							D	B066	CAPACITOR, FIXED, ELECTROLYTIC: 81349; CS13BD226M	EA		1								5	-15 5-17	C1
P	D		59108999129							D	B067	CAPACITOR, FIXED, ELECTROLYTIC: 81349; CS13BD686M	EA		1								5	-15 5-17	C2
P	D		59627911047							D	B068A	INTEGRATED CIRCUIT, LOGIC GATE: 58189; T00009	EA		5								18	-15 5-17	Z1
			59627911047							D	B068B	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS B068A	EA		REF									-15 5-17	Z2
			59627911047							D	B068C	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS B068A	EA		REF									-15 5-17	Z3
			59627911047							D	B068D	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS B068A	EA		REF									-15 5-17	Z4
			59627911047							D	B068E	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS B068A	EA		REF									-15 5-17	Z5
P	H	T	74404749509							C	B069C	CIRCUIT CARD ASSEMBLY: 58189; A57601-001	EA		1	1	2	3	1	2	3		3	-15 4-2	20.1
X1	D									D	B069D	PRINTED CIRCUIT BOARD: 58189; A57602-001	EA		1									-15 5-28	
			59104878424							D	B069EM	CAPACITOR: SAME AS B063C	EA		REF									-15 5-28	C1
			59107811154							D	B069FM	CAPACITOR: SAME AS B063D	EA		REF									-15 5-28	C2

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(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59104560812							D	B069GM CAPACITOR: SAME AS B063E	EA		REF									-15 5-28	C3
			59104878424							D	B069HM CAPACITOR: SAME AS B063C	EA		REF									-15 5-28	C4
P	D		59104600838							D	B069J CAPACITOR: 81349; M39003-01-2038	EA		2								6	-15 5-28	C5
			59104600838							D	B069K CAPACITOR: SAME AS B069J	EA		REF									-15 5-28	C6
P	D		59104558475							D	B069L CAPACITOR: 81349; CK06BX123K	EA		1								3	-15 5-28	C7
			59104878424							D	B0069MM CAPACITOR: SAME AS B063C	EA		REF									-15 5-28	C8
			59610876047							D	B069N SEMI-CONDUCTOR DEVICE, DIODE: SAME AS A085 M	EA		REF									-15 5-28	CR1
P	D		59619491432							D	B069P TRANSISTOR: 80131; JAN2N2219A	EA		3								15	-15 5-28	Q1
P	D		59619262569							D	B069Q TRANSISTOR: 80131; JAN2N491A	EA		2								10	-15 5-28	Q2
			59619491432							D	B069R TRANSISTOR: SAME AS B069P	EA		REF									-15 5-28	Q3
			59619262569							D	B069S TRANSISTOR: SAME AS B069Q	EA		REF									-15 5-28	Q4
			59619491432							D	B069T TRANSISTOR: SAME AS B069P	EA		REF									-15 5-28	Q5
			59618518293							D	B069U TRANSISTOR: SAME AS A103 M	EA		REF									-15 5-28	Q6
			59056910195							D	B069V RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-28	R1

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59056824099							D	B069W M RESISTOR, FIXED, COMPOSITION: SAME AS B063T	EA		REF									-15 5-28	R2
			59056837723							D	B069X RESISTOR, FIXED, COMPOSITION: SAME AS A464 M	EA		REF									-15 5-28	R3
			59056832242							D	B069Y RESISTOR, FIXED, COMPOSITION: SAME AS A736 M	EA		REF									-15 5-28	R4
			59056910195							D	B069Z RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-28	R5
			59056910195							D	B070B RESISTCR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-28	R6
			59057235251							D	B070C RESISTOR, FIXED, COMPOSITION: SAME AS A943 M	EA		REF									-15 5-28	R7
			590568'0002							D	B070D RESISTOR, FIXED, COMPOSITION: SAME AS A564	EA		REF									-15 5-28	R8
			5905006863129							D	B070E RESISTOR, FIXED, COMPOSITION: 81349; RC070F104J	EA		REF									-15 5-28	R9
			59056837721							D	B070F RESISTOR, FIXED, COMPOSITION: SAME AS A925 M	EA		REF									-15 5-28	R10
			59056837721							D	B070G RESISTOR, FIXED, COMPOSITION: SAME AS A925 M	EA		REF									-15 5-28	R11
			59057235251							D	B070H RESISTOR, FIXED, COMPOSITION: SAME AS A943 M	EA		REF									-15 5-28	R12

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59056870002							D	B071J RESISTOR, FIXED, COMPOSITION: SAME AS A564	EA		REF									-15 5-28	R13
			59056864530							D	B070K RESISTOR, FIXED, COMPOSITION: SAME AS 8033 M	EA		REF									-15 5-28	R14
P	D		59059009638							D	B070L RESISTOR, VARIABLE: 73138; SS5PR2M	EA		1								5	-15 5-28	R15
			59056832236							D	B070M RESISTOR, FIXED, COMPOSITION: SAME AS A813 M	EA		REF									-15 5-28	R16
P	D		59056863122							D	B070N RESISTOR, FIXED, COMPOSITION: 81349; RC07GF301J	EA		1								3	-15 5-28	R17
			59056837721							D	B070P RESISTOR, FIXED, COMPOSITION: SAME AS A925 M	EA		REF									-15 5-28	R18
			59056910195							D	B070Q RESISTOR, FIXED, COMPOSITION: SAME AS A048AM	EA		REF									-15 5-28	R19
			59056837721							D	B070R RESISTOR, FIXED, COMPOSITION: SAME AS A925 M	EA		REF									-15 5-28	R20
			59056832241							D	B070S RESISTOR, FIXED, COMPOSITION: SAME AS A054 M	EA		REF									-15 5-28	R21
P	D		59056832233							D	B070T RESISTOR, FIXED, COMPOSITION: 81349; RC07GF910J	EA		1								3	-15 5-28	R22
			59052992051							D	B070UM RESISTOR, FIXED, COMPOSITION: SAME AS A066 M	EA		REF									-15 5-28	R23

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	D		59059518105							D	BO70V RESISTOR, FIXED, COMPOSITION: 81349; RW67V270	EA		2								3	-15 5-28	R24
			59709564972							D	B070W INSULATOR, DISK: SAME AS A109	EA		REF									-15 5-28	H1
			59709564972							D	B070X INSULATOR, DISK: SAME AS A109	EA		REF									-15 5-28	H1
			59709564972							D	B070Y INSULATOR, DISK: SAME AS A109	EA		REF									-15 5-28	H1
			59709564972							D	B070Z INSULATOR, DISK: SAME AS A109	EA		REF									-15 5-28	H1
			59709564972							D	B072G INSULATOR, DISK: SAME AS A109	EA		REF									-15 5-28	H1
			59709564972							D	B072H INSULATOR, DISK: SAME AS A109	EA		REF									-15 5-28	H1
			59627910994							D	B072J INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-28	Z1
			59627910994							D	B072K INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-28	Z2
			59627911082							D	B072L INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-28	Z3
			59627911082							D	B072M INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-28	Z4
			59627911082							D	B072N INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-28	Z5

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911082							D	B072P	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-28	Z6
			59627911082							D	B072Q	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-28	Z7
			59627911393							D	B072R	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A036 M	EA		REF									-15 5-28	Z8
			59627911082							D	B072S	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-28	Z9
			59627910994							D	B072T	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A028 M	EA		REF									-15 5-28	Z10
			59627911082							D	B072U	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-28	Z11
			59627911082							D	B072V	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-28	Z12
			59627911082							D	B072W	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-28	Z13
			59627911082							D	B072X	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-28	Z14
			59627911082							D	B072Y	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-28	Z15
			59627911082							D	B072Z	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-28	Z16

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59627911082							D	B073B	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-28	Z17
			59627911082							D	B073C	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-28	Z18
			59627911082							D	B073D	INTEGRATED CIRCUIT, LOGIC GATE: SAME AS A007 M	EA		REF									-15 5-28	Z19
P	D		59104600847							D	B073E	CAPACITOR, CERAMIC: 81349; CK06BX104M	EA		1								3	-15 5-28	C9
M	H									C	B074A	PLATE DESIGNATION: 58189; A61707-001	EA		1									-15 4-2	21
M	H									C	B075	WIRING HARNESS: 58189; A65131-001	EA		1									-15 4-2	27.2

(1) (A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	H		59405571627							D	B076 M TERMINAL LUG: 96906; MS25036-53	EA		3									-15 4-2	27.3
A	H	R								C	B077 CHASSIS ASSEMBLY: 58189; A64003-002	EA		1									-15 4-2	58.1
X2	H		53400605386							D	B078 HANDLE BOW: 96906: MS39087-3	EA		1									-15 4-2	27
C	H		53050593661							*	B079 SCREW, MACHINE: 96906; MS51958-65	EA		2									-15 4-2	24
C	H		53101670812							*	B080 WASHER, FLAT: 88044; AN960CIOL	EA		40									-15 4-2	26
C	H		53109338120							*	B081 WASHER, LOCK: 96906; MS35338-138	EA		33									-15 4-2	25
X2	H									D	B082 SLIDE: 06666: C300S24	EA		1									-15 4-2	58
C	H		53050593657							*	B082A SCREW, MACHINE: 96906; MS51958-61	EA		14									-15 4-2	56
P	H		53109349765							*	B082B NUT, PLAIN, HEXAGON: 96906: MS35650-304	EA		21	*	*	*	*	*	*		21	-15 4-2	54
			53109338120							*	B082C WASHER, LOCK: SAME AS B081	EA		REF									-15 4-2	55
			53101670812							*	B082D WASHER, FLAT: SAME AS B080	EA		REF									-15 4-2	57
C	H		53050593665							*	B082E SCREW, MACHINE: 96906; MS51958-69	EA		2									-15 4-2	28.4

(1) (A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53109349765							*	B082F NUT, PLAIN, HEXAGON: SAME AS B082B	EA		REF									-15 4-2	28.1
			53109338120							*	B082G WASHER, LOCK SAME AS B081	EA		REF									-15 4-2	28.2
			53101670812							*	B082H WASHER, FLAT: SAME AS B080	EA		REF									-15 4-2	28.3
A	H									D	B083 CONTACT PLATE ASSEMBLY: 58189; A64003-003	EA		1									-15 4-2	45.1
C	H		53050593660							*	B084 SCREW, MACHINE: 96906; MS51958-64	EA		7									-15 4-2	43
			53101670812							*	B085 WASHER, FIAT: SAME AS B080	EA		REF									-15 4-2	44
			53109338120							*	B086 WASHER, LOCK: SAME AS B081	EA		REF									-15 4-2	42

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53109349765							*	B087 M NUT, PLAIN, HEXAGON: SAME AS B082B	EA		REF									-15 4-2	41
C	H									E	B088 SPACER: 80063: SMB546132	EA		8									-15 4-2	52
C	H		59408272653							E	B088A LUG, TERMINAL: 96906; MS77068-2	EA		4									-15 4-2	53
C	H		53050546652							*	B089 SCREW, MACHINE: 96906; MS51957-28	EA		45									-15 4-2	49
C	H		53106389857							*	B090 WASHER, FLAT: 88044: AN960C6L	EA		29									-15 4-2	51
C	H		53109296395							*	B091 WASHER, LOCK: 58189: MS35338-136	EA		49									-15 4-2	50
X2	H									E	B092 CONTACT PLATE: 58189; A64034-001	EA		I									-15 4-2	45
X2	H									F	B092A INSULATOR: 16512; 200150-01	EA		21									-15 4-2	45.3
P	H		59991345933							F	B092B PINS: 16512; 540111-04	EA		1192	100	200	300	100	200	300		100	-15 4-2	45.4
C	H		53050546651							*	B092C SCREW, MACHINE: 96906: MS51957-27	EA		46									-15 4-2	45.2
X2	H									F	B092D INSULATOR: 16512; 550056-01	EA		230									-15 4-2	45.5
P	H		59351392510							F	B092E PIN, ELECTRICAL CONTACT: 16512; 540123-03	EA		230	20	30	40	20	30	40		115	-15 4-2	45.6
										F	B092F PIN, ELECTRICAL CONTACT: SAME AS B092E	EA		REF									-15 4-2	45.7

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
										F	B092G PIN, ELECTRICAL CONTACT: SAME AS B092E	EA		REF									-15 4-2	45.8
										F	B092H PIN, ELECTRICAL CONTACT: SAME AS B092E	EA		REF									-15 4-2	45.9
X2	H									E	B093 BUSS BAR: 58189: A53855-001	EA		1									-15 4-2	48
X2	H									E	B093A STRIP, INSULATING: 80063; SMD634807-2	EA		1									-15 4-2	48.1
C	H		53505826151							*	B094 SCREW, MACHINE: 96906: MS18212-30	EA		3									-15 4-2	46
C	H									*	B095 NUT, PLAIN, HEXAGON: 80063; SMB546299	EA		3									-15 4-2	47
C	H		53258132050							F	B095A GROMMET, RUBBER: 96906; MS35490-32	EA		2									-15 4-2	48.2
A	H									D	B096 CHASSIS ASSEMBLY: 58189: A64003-004	EA		1									-15 4-2	58.2
X	H									E	B097 CHASSIS: 58189: A61706-002	EA		1									-1.5 4-2	59
X2	H									E	B098A TERMINAL BOARD: 75382; 602C3-4ST7UH	EA		1									-15 4-2	33

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
M	H									E	B099 MARKER, STRIP: 75382; MS602-7XXXP1A	EA		1									-15 4-2	34
X2	H		53105586207							*	B100A WASHER, FIAT: 88044; AN960C8L	EA		73									-15 4-2	32
C	H		53050546672							*	B101 SCREW, MACHINE: 96906; MSS51957-47	EA		4									-15 4-2	31
C	H		53109338119							*	B102 WASHER, LOCK: 96906; MS35338-137	EA		76									-15 4-2	30
C	H		53109249759							*	B103 NUT, PLAIN, HEXAGON: 96906; MS35649-284	EA		29									-15 4-2	29
X2	H									E	B104A TERMINAL, BOARD: 75382; 603C3UH	EA		1									-15 4-2	39
M	H									E	B105 STRIP, MARKER: 75382; MS603-3XXPIA	EA		1									-15 4-2	40
			53106389857							*	B106A WASHER, FLAT: SAME AS 8090	EA		REF									-15 4-2	38
C	H		53050546657							*	B107 SCREW, MACHINE: 96906; MSS51957-33	EA		20									-15 4-2	37
			53109296395							*	B108 WASHER, LOCK: SAME AS B091	EA		REF									-15 4-2	36
C	H		53109349761							*	B109 NUT, PLAIN, HEXAGON: 96906; MS35649-264	EA		23									-15 4-2	35
X2	H		59407735147							E	B109A TRIM, PLASTIC: 82654; 203413	EA		1									-15 4-2	28

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
A	H	R								D	B110 MAINTENANCE PANEL ASSEMBLY: 58189; A64003-005	EA		1									-15 4-2	21.1
X2	H									E	B111 PANEL, BLANK: 58189; A64406-001	EA		1									-15 4-2	27.1
P	H		59309310490							E	B112 SWITCH, PUSH: 96182; 4535-100-28	EA		1	1	2	3	1	2	3	3		-15 4-2	23
X2	H		53406849956							E	B113 M LATCH: 94222; 49-1-1-0	EA		4									-15 4-2	22
C	H									*	B113A WASHER, FLAT: 88044; AN960C416	EA		6									-15 4-2	22.1
X2	H									B	B114A FRAME MECHANISM: 58189; A61667-002	EA		1									-15 4-1	6
A	H	R								B	B114B BRACKET STACKER: 58189; A64024-001	EA		1									-15 4-1	11.1
C	H		53050510851							*	B115 SCREW, MACHINE: 96906; MS51957-110	EA		6									-15 4-1	4
C	H		53109847042							*	B116 WASHER, LOCK: 96906; MS35338-141	EA		6									-15 4-1	3
C	H		53101834355							*	B117 WASHER, FLAT: 88044; AN960C616L	EA		6									-15 4-1	5
C	H		53109895956							*	B118 NUT, PLAIN, HEXAGON: 96906; MS35691-19	EA		6									-15 4-1	2
A	H	R								B	B120 M BRACKET HOPPER: 58189; A64023-001	EA		1									-15 4-1	11
C	H		53050510838							*	B121 SCREW, MACHINE: 96906; MS51957-97	EA		6									-15 4-1	9

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	H		53101670814							*	B122	WASHER, FLAT: 88044; AN960C516L	EA		12									-15	4-1 8.1, 10
C	H		53109746623							*	B123	WASHER, LOCK: 96906; MS35338-140	EA		6									-15	4-1 8
C	H		53108299981							*	B124	NUT, PLAIN, HEXAGON: 96906; MS35649-2312	EA		6									-15	4-1 7
A	H	R								B	B126A	CARD PUNCH ASSEMBLY: 07264; X14651B	EA		1									-15	4-1 12
			53050510838							*	B127	SCREW, MACHINE: SAME AS B121	EA		REF									-15	4-1 9
			53109746623							*	B128	WASHER, LOCK: SAME AS B123	EA		REF									-15	4-1 8
			53101670814							*	B129	WASHER, FLAT: SAME AS B122	EA		REF									-15	4-1 8.1, 10
			53108299981							*	B130	NUT, PLAIN, HEXAGON: SAME AS B124	EA		REF									-15	4-1 7
X2	H									C	B131	PANEL, PUNCH: 07264; X14692P2AT2	EA		1									-15	4-7 203
X2	H									C	B132	GUIDE, CARD: 07264; B14632B	EA		1									-15	4-7 25
A	H	R								C	B133	CARD GUIDE ASSEMBLY: 07264; B34073	EA		1									-15	4-7 24.1

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	H		53055587323							*	B134	SCREW, MACHINE: SAME AS A002	EA		REF									-15	4-7 21
C	H		53106191148							*	B135	WASHER, FIAT: 96906; MS15795-808	EA		18									-15	4-7 23
C	H		53100541831							*	B136	WASHER, LOCK: 96906; MS35338-81	EA		21									-15	4-7 22
X2	H									D	B137	GUIDE, CARD: 07264; B14680AP2	EA		1									-15	4-7 24
X2	H		74409936482							D	B138	8PRING, GUIDE: 07264; B13422T1	EA		3									-15	4-7 20
C	H		53055505001							*	B139	SCREW, MACHINE: 96906; MS35233-12	EA		17									-15	4-7 18
C	H		53100429609							*	B141	WASHER, LOCK: 96906; MS35338-78	EA		36									-15	4-7 19
P	H	T	74400194676							C	B142C	PUNCH HEAD ASSEMBLY: 07264; X13567P2B	EA		1	*	*	*	1	1	2		1	-15	4-7 5
C	H									*	B143	NUT, PLAIN, HEXAGON: 96906; MS35691-510	EA		1									-15	4-7 2
C	H		53059836623							*	B144	SCREW, MACHINE: 96906; MS16997-82	EA		2									-15	4-7 1
C	H		53106255756							*	B145	WASHER, FLAT: 96906; MS15795-812	EA		3									-15	4-7 4

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	H		53100426759							*	B146 WASHER, LOCK: 96906; MS35338-83	EA		3									-15 4-7	3
A	D	T								D	B147 FEED ASSEMBLY: 07264; X13474P2	EA		1									-15 4-8	13
A	D	T								E	B147A FEED, SUB ASSEMBLY: 07264; X13658P2	EA		1									-15 4-9	85
X2	D									F	B148A HOUSING-SHAFTS ASSEMBLY: 07264; D13466AP1G2	EA		1									-15 4-9	84
X2	D									G	B149A HOUSING COVER ASSEMBLY: 07264; D13640P1G2	EA		1									-15 4-9	86
X2	D									H	B150 M HOUSING, LOWER: 07264; D13174P2	EA		1									-15 4-9	66
C	D									*	B151A SCREW, CAP SOCKET: 09211; 842000211	EA		3									-15 4-9	29
C	D									*	B152A SCREW, MACHINE: 07264: B35154T1	EA		2									-15 4-9	28
C	D		53059835519							*	B153 SCREW, MACHINE: 96906; MS16997-11	EA		2									-15 4-9	65.2
C	D		53059789434							*	B154 SCREW, MACHINE: 96906;. MS16997-10	EA		23									-15 4-9	65.1
A	D	T								H	B155A HOUSING ASSEMBLY: 07264; D13180BP1G2	EA		1									-15 4-9	78.1

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									J	B156 M HOUSING, MIDDLE: 07264; D13172P3	EA		1									-15 4-9	78
X2	D									J	B157 M HOUSING, MIDDLE: 07264; D13173P3	EA		1									-15 4-9	83
C	D									*	B158A SCREW, CAP SOCKET: 09211; 842002809	EA		2									-15 4-9	77.1
C	D		53059789373							*	B159 SCREW, MACHINE: 96906; MS16997-35	EA		1									-15 4-9	77.2
C	D		53158475751							J	B160 M PIN, STRAIGHT, HEAD-LESS: 96906; MS16555-629	EA		2									-15 4-9	78.2
X2	D									H	B162A HOUSING, UPPER: 07264; C13175P2C	EA		1									-15 4-9	30
			53059789434							*	B163 SCREW, MACHINE: SAME AS B154	EA		REF									-15 4-9	65.1
C	D		53158251207							H	B166 M PIN, STRAIGHT, HEAD-LESS: 96906; MS16555-627	EA		8									-15 4-9	30.1
X2	D									H	B167 M COVER, HOUSING: 07264; D13176AP2A	EA		1									-15 4-9	16

(1) (A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE																								
C	D		53059789348							*	B168 SCREW, MACHINE: 96906; MS16997-20	EA		45									-15 4-9	9
C	D		53059789376							*	B169 SCREW, MACHINE: 96906; MS16997-38	EA		1									-15 4-9	9.1
X2	D		31109788019							G	B173 M BEARING, ROLLER: 86174; SCE85	EA		2									-15 4-9	67.2
X2	D									G	B174 M BEARING, ROLLER: 21335; SCH1010	EA		1									-15 4-9	67.3
X2	D									G	B175 M BEARING, ROLLER: 60399; GJI210	EA		2									-15 4-9	49
X2	D									G	B176 M SHAFT, CLAMP: 07264; D13262AP2	EA		1									-15 4-9	67
X2	D									G	B177AM SHAFT, FEED ARM: 07264; D13189A	EA		1									-15 4-9	82
M	D		53309327841.							F	B177BM GASKET, COVER: 07264; B13395T1	EA		1									-15 4-9	17
M	D									F	B177C GASKET, COVER: 07264; B13395T2	EA		1									-15 4-9	17.1
P	D		53309779114							F	B178 M SEAL, SHAFT: 16606; F80020VA1-2X3-4	EA		2								6	-15 4-9	27

(1) (A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE																								
X2	D		53309752283							F	B179 M SEAL, SHAFT: 16606; F80020VA3-4X1	EA		2									-15 4-9	48,65
X2	D									F	B180A SHAFT-CAM ASSEMBLY: 07264; B13632P1G2	EA		1									-15 4-9	76.1
X2	D									G	B181 M SHAFT, FEED CAM: 07264; C13218A	EA		1									-15 4-9	76
X2	D									G	B182A NUT SHAFT: 07264; A13404T1	EA		1									-15 4-9	68
X2	D									G	B183 M SPACER, SHAFT: 07264; B13217	EA		1									-15 4-9	70
X2	D									G	B183A SPACER, PUMP: 07264; B13812	EA		2									-15 4-9	75
P	D		31101448496							G	B183B BEARING, BALL: 12335; 9101K	EA		3								6	-15 4-9	14.77
P	D		53154184362							G	B183D KEY, WOODRUFF: 07264; A13806'	EA		3								9	-15 4-9	72
X2	D									G	B183E1 CAM, CAMP: 07264; C13224P3	EA		1									-15 4-9	12
P	D		74404441070							G	B183F CAM, FEED: 07264; 111099201	EA		1								2	-15 4-9	73
X2	D									G	B183G OFFSET KEY: 07264; 111049600	EA		1									-15 4-9	72.1
P	D		74400506085							F	B184 M PUMP, OIL: 07264; 813397	EA		2								4	-15 4-9	71

(1) (A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	D		74404723981							F	B185 M KEY, PUMP: 07264; A13464	EA		2								6	-15 4-9	69
										F	B185A KEY, WOODRUFF: SAME AS B183D	EA		REF									-15 4-9	13
X2	D									F	B191 M SPACER, SHAFT: 07264; B13371A	EA		1									-15 4-9	11
X2	D									F	B192A SHIM, .002 IN. THICK: 07264; C3817CT69	EA		4									-15 4-9	74
X2	D		53409972799							F	B193 M SPRING, FEED: 07264; B13215P8A	EA		1									-15 4-9	51
X2	D									F	B194 M SEAT, SPRING: 07264; B13280	EA		1									-15 4-9	50
			53059789348							*	B195 SCREW, MACHINE: SAME AS B168	EA		REF									-15 4-9	3
X2	D									F	B196B ARMATURE ASSEMBLY: 07264; B13401P2C	EA		1									-15 4-9	41
X2	D									F	B197A MAGNET ASSEMBLY: 07264: B13614P1G2	EA		1									-15 4-9	46
P	D		74404441064							F	B200 M SHAFT, ARMATURE: 07264; B13214P2	EA		1								2	-15 4-9	43
C	D									*	B200B SETSCREW: 96906; MS51029-26	EA		4									-15 4-9	39
X2	D		53402825340							F	B202 M RING, RETAINING: 79136: 5133-18	EA		1									-15 4-9	40
C	D									F	B203A SETSCREW: 07264; V603333	EA		1									-15 4-9	22

(1) (A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									F	B204A SPRING, ARMATURE: 07264; A13471P1	EA		1									-15 4-9	42
X2	D									F	B205A PIN, GROOVED: 73957; GP67-093-0500-12	EA		2									-15 4-9	47
X2	D									F	B206A SPACER, MAGNET: 07264; A7058BPIT1	EA		1									-15 4-9	45.1
X2	D									F	B207 M SPACER, MAGNET: 07264; A7058BPIT2	EA		1									-15 4-9	45
X2	D		53402007549							F	B208 M RING, RETAINING: 79136; 5008-112	EA		1									-15 4-9	10
X2	D		93400701212							F	B211A WINDOW, GLASS: 70925; B5602	EA		3									-15 4-9	64
X2	D		74400543359							F	B212 M GASKET, END CAP: 07264; B13396	EA		1									-15 4-9	56
X2	D		53302516403							F	B213A SEAL, SHAFT: 73680; 92X9508	EA		2									-15 4-9	7
X2	D		53301965368							F	B214A PACKING, O RING: 88044; AN6227-7	EA		3									-15 4-9	15
X2	D		74400543360							F	B215 M BREATHER: 97484; A83	EA		2									-15 4-9	1
M	D		53300879880							F	B216 M GASKET, COVER: 07264; B13394	EA		1									-15 4-9	5

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	H		74400506083							F	B217 M FILTER, OIL- 07264; A13281	EA		1	1	2	3	1	2	3		3	-15 4-9	53
X2	D		53305992619							F	B218 M PACKING, O RING: 88044; AN5227-5	EA		6									-15 4-9	1.1
P	H		53409910881							F	B219 M CHIP DETENT, MAG- NETIC: 07264; A13431	EA		2	1	2	3	1	2	3		4	-15 4-9	52
P	H		41308918652							F	B220 M FILTER, OIL: 07264; A13472	EA		2	1	2	3	1	2	3		3	-15 4-9	37
P	H		74400506084							F	B221 M TRAP, LINT: 07264; A13503	EA		2	1	2	3	1	2	3		4	-15 4-9	38
X2	D									F	B222 M CAP, OIL FILTER: 07264; A13282	EA		2									-15 4-9	36
C	D		53050227053							*	B223 SCREW, MACHINE: 96906; MS35249-20	EA		3									-15 4-9	35
C	D		59408383748							F	B224 M TERMINAL, STUD: 98291; TPFT201	EA		2									-15 4-9	46.1
X2	D									F	B225 M BRACKET, CONNECTOR: 07264; 813500	EA		1									-15 4-9	26
			53055505001							*	B226 SCREW, MACHINE: SAME AS B139	EA		REF									-15 4-9	24
X2	D		53302222767							F	B227A PACKING, O RING: 88044; AN6227-1	EA		2									-15 4-9	30.4
X2	D									*	B228 NUT, SELF LOCKING: 70276; 9026L211	EA		3									-15 4-9	6

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									F	B230A STOP, ARMATURE: 07264; B13604P2B	EA		1									-15 4-9	45.2
X2	D		53059785350							*	B231 SCREW, MACHINE: 96906; MS16997-22	EA		4									-15 4-9	44.1
X2	D		59352802017							F	B232 M CONNECTOR, RECEPT- ACLE, ELECTRICAL: 81312: M7PLRN	EA		1									-15 4-9	25
X2	D									F	B233A SPROCKET, DRIVE SHAFT- 07264:; C13286P1I	EA		1									-15 4-9	8
P	D		74409936328							F	B240 M CLAMP ARM ASSEMBLY: 07264; B13399G1	EA		1								2	-15 4-9	19
X2	D		53059836651							*	B241 SCREW, MACHINE: 96906: MS16998-27	EA		5									-15 4-9	18
P	D		74409936335							F	B242 M CLAMP ARM A6SEMBLY: 07264: B13399G2	EA		1								2	-15 4-9	'60
			53059836651							*	B243 SCREW, MACHINE: SAME AS B241	EA		REF									-15 4-9	59
X2	D									F	B251 M CLAMP, WIRE: 07264; A13483	EA		1									-15 4-9	30.3

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D		53055505002							*	B252 SCREW, MACHINE: 96906; MS35233-13	EA		13									-15 4-9	 30.2
P	H		62509388626							F	B253 M LAMP ASSEMBLY: 07264: 813505	EA		1	*	*	*	*	*	*	5	-15	 4-9	 32
			53055505002							*	B254 SCREW, MACHINE: SAME AS 8252	EA		REF									-15 4-9	 31
X1	H									G	B255 M HOLDER, LAMP: 07264; 813482A	EA		1									-15 4-9	 32.4
X1	H									G	B256 M TERMINAL, STUD: 71279; 1558-2	EA		2									-15 4-9	 32.3
X1	H		62409369051							G	B257 M LAMP: 07264; A32622T1	EA		1									-15 4-9	 32.1
X1	H		53408234829							G	B258 M SPRING: 92830; C120-016-0380	EA		1									-15 4-9	 32.2
X2	D									F	8267A SHIM, LAMP ASSEMBLY: 07264; A13563	EA	1	-15									 4-9	 32.5
X2	D									F	B268A PACKING O RING: 79689; 8013-3664	EA		1									-15 4-9	 52.1
X2	D									F	B269A SPRING, CLAMP: 07264; B13216P2	EA		1									-15 4-9	 67.1
C	D									*	B269B SETSCREW: 56878; M73FS832-3C	EA		2									-15 4-9	 63

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									F	B271 M SHAFT, ROLLER: 07264; A13209TI1	EA		1									-15 4-9	 33
P	D		74400506094							F	B272 M ROLLER, SMALL: 07264; A13211P2	EA		1								3	-15 4-9	 34.1
A	D									F	B272A ROLLER AND PIN ASSEMBLY: 07264; B33137P2	EA		1									-15 4-9	 80.6
X2	D									G	B272B SHAFT, ROLLER: 07264; A13191	EA		1									-15 4-9	 79
P	D		74400543367							G	B273 M ROLLER, FEED: 07264; A13192	EA		1								3	-15 4-9	 81
X2	D									G	B274 M ROLLER, SHORT: 07264; A13531T1	EA		12									-15 4-9	 80
X2	D									G	B275 M ROLLER, SHORT: 07264; A13531T2	EA		12									-15 4-9	 80.1
X2	D									G	B276 M ROLLER, SHORT: 07264; A13531T3	EA		12									-15 4-9	 80.2
X2	D									G	B277 M ROLLER, SHORT: 07264; A13531T4	EA		12									-15 4-9	 80.3
X2	D									G	B278 M ROLLER, SHORT: 07264; A13531T5	EA		12									-15 4-9	 80.4
X2	D									G	B279 M ROLLER, SHORT: 07264; A13531T6	EA		12									-15 4-9	 80.5
P	D		31109024348							F	B280 M BEARING, ROLLER: 60399; GB34	EA		1								3	-15 4-9	 34
X2	D									F	B280A COVER, SPRING: 07264; D13185P4	EA		1									-15 4-9	 4

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D		53059789347							*	B280B SCREW, MACHINE: 96906; MS16997-19	EA		6									-15 4-9	 2
X2	D									F	B280CM CAP, END: 07264; B13179P2	EA		1									-15 4-9	 55
C	D		53059789342							*	B280D SCREW, MACHINE: 96906; MS16997-9	EA		11									-15 4-9	 54
C	D									*	B280E SCREW, CAP, SOCKET-HEAD: 07264; B35154T2	EA		1	-15								 4-9	 54.1
P	D									E	B280FM ARM,CLAMP: ASSEMBLY PAIR: 07264; 111236003	EA		1								2	-15 4-9	 23,62
C	D		53059836661							*	B280G SCREW, MACHINE: 96906; MS16998-44	EA		2									-15 4-9	 20,57
X2	D									E	B280H CARD GLIDE: ASSEMBLY 07264; D13408BP1	EA		1									-15 4-9	 1.6
			53055505001							*	B280J SCREW, MACHINE: SAME AS B139	EA		REF									-15 4-9	 1.2
C	D		53057702579							*	B280K SCREW, MACHINE: 96906; MS35249-22	EA		4									-15 4-9	 1.3
X2	D									E	B280L SHIM, CARD GLIDE: 07264; C13417AT1	EA		3									-15 4-9	 1.4
X2	D									E	B280LI SHIM, CARD GLIDE SUPPORT: 07264; A13610	EA		7									-1.5 4-9	 1.5
X2	D									E	B280M BLOCK, SUPPORT: 07264; A13463	EA		1									-15 4-9	 1.9
			53059789434							*	B280N SCREW, MACHINE: SAME AS B154	EA		REF									-15 4-9	 1.7

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	D		53105956211							*	B280N1 WASHER, FLAT: 96906; MS15795-803	EA		6									-15 4-9	 1.8
X2	D									E	B280P SPRING, GUIDE: 07264; B13422T2	EA		1									-15 4-9	 1.10

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									E	B280Q CLAMP, SPRING: 07264; A13423	EA		2									-15 4-9	1.11
			53059789434							*	B280R SCREW, MACHINE: SAME AS B154	EA		REF									-15 4-9	1.12
X2	D									E	B280S GUIDE, CARD EDGE: 07264; A13421P1	EA		1									-15 4-9	1.13
			53059789434							*	B280T SCREW, MACHINE: SAME AS B154	EA		REF									-15 4-9	1.7
										*	B280T1 WASHER, FIAT: SAME AS B280N1	EA		REF									-15 4-9	1.8
X2	D									E	B281 GUIDE, CARD: 07264; B13484T1	EA		1									-15 4-9	1.16
			53055505001							*	B282 SCREW, MACHINE: SAME AS B139	EA		REF									-15 4-9	1.14
			53055505002							*	B282A SCREW, MACHINE: SAME AS B252	EA		REF									-15 4-9	1.15
X2	D									E	B283 GUIDE, CARD: 07264; B13484T2	EA		1									-15 4-9	1.17
			53055505001							*	B284 SCREW, MACHINE: SAME AS B139	EA		REF									-15 4-9	1.14
X2	D									E	B284A SHIM, .0015 IN. THICK: 07264; A13230AT1	EA		6									-15 4-9	61
X2	D									E	B284B SHIM, .002 IN. THICK: 07264; A13230AT2	EA		6									-15 4-9	61.1
X2	D									E	B284C SHIM,.0025 IN. THICK 07264; A13230AT3	EA		6									-15 4-9	61.2
X2	D									E	8284D SHIM, .003 IN. THICK: 07264; A13230AT4	EA		6									-15 4-9	61.3

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									E	B284E SHIM, .005 IN. THICK: 07264; A13230AT5	EA		6									-15 4-9	61.4
X2	D									E	B284F SHIM, .006 IN. THICK: 07264; A13230AT6	EA		6									-15 4-9	61.5
X2	D									E	B284G SHIM, .007 IN. THICK: 07264; A13230AT7	EA		6									-15 4-9	61.6
X2	D									E	B284H SHIM, .008 IN. THICK: 07264; A13230AT8	EA		6									-15 4-9	61.7
X2	D									E	B284J SHIM, .009 IN. THICK: 07264; A13230AT9	EA		6									-15 4-9	61.8
X2	D									E	B284K SHIM, .010 IN. THICK: 07264; A13230AT10	EA		6									-15 4-9	61.9
X2	D									E	B284L SHIM, .011 IN. THICK: 07264; A13230AT11	EA		6									-15 4-9	61.10
X2	D									E	B284M SHIM, .012 IN. THICK 07264; A13230AT12	: EA		6									-15 4-9	61.11
X2	D									E	B284N SHIM, .013 IN. THICK: 07264; A13230AT13	EA		6									-15 4-9	61.12
X2	D									E	B284P SHIM, .014 IN. THICK: 07264; A13230AT14	EA		6									-15 4-9	61.13
X2	D									E	B284Q SHIM, .015 IN. THICK: 07264; A13230AT15	EA		6									-15 4-9	61.14
										E	B285A SHIM, CARD GUIDE SUPPORT: SAME AS B280LI	EA		REF									-15 4-35	1.5
X2	D									D	B286 GATE, CABLE: ASSEMBLY 07264; C13529P2A	EA		1									-15 4-8	33

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	MODEL 6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(7) (B) 6-10	(7) (C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(8) (B) 6-10	(8) (C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(11) (B) ITEM NO. OR REF DESIGN
C	D		53050685415							*	B287 SCREW, MACHINE: 96906; MS16995-20	EA		2									-15 4-8	31
C	D									*	B287A WASHER, LOCK: 07264; A13635	EA		2									-15 4-8	32
X2	D									E	B288 CONNECTOR, PLUG, ELECTRICAL: 71468; DBM25P	EA		1									-15 4-11	1
X2	D		59352832923							E	B289 CONNECTOR, PLUG, ELECTRICAL: ' 96906; MS3106A10SL4S	EA		1									-15 4-11	3
X2	D									E	B289A HOOD CONNECTOR: 88044; AN3057-4	EA		1									-15 4-11	3.1
X2	D		59359843160							E	B290 CONNECTOR, PLUG, ELECTRICAL: 81312; M7SLSH19CS	EA		1									-15 4-11	2
X2	D									E	B290A M HOOD CONNECTOR 81312; H19CS	EA		1									-15 4-11	2.1
X2	D									E	B290B M WRAP TIE: 06383; SST1IB	EA		1									-15 4-11	3.5
X2	D		59357386483							E	B290C CONNECTOR, PLUG, ELECTRICAL: 00779; 1-480318-0	EA		2									-1 4-11	3.2
P	D		59357386490	E						E	B290D CONTACT ELECTRICAL: 00779; 60510-1	EA		4									-15 4-11	3.3
X2	D									E	B291 SLEEVE: 71468; 18220-4	EA		2									-15 4-11	3.6

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	MODEL 6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(7) (B) 6-10	(7) (C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(8) (B) 6-10	(8) (C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(11) (B) ITEM NO. OR REF DESIGN
X2	D		59402314430							E	B292A TERMINAL. LUG: 00779: 32562	EA		1									-15 4-11	3.4
X2	D									E	B293 GATE, MOUNT ASSEMBLY: 07264; D13516P3	EA		1									-15 4-11	30.1
X2	D									F	B294A MOUNT, GATE: 07264; D13228D	EA		1									-15 4-11	30
P	H		74409936336							P	B295 PHOTOCELL MOUNT ASSEMBLY: 07264; 813593	EA		1	*	*	*	*	*	*		2	-15 4-11	18.1
			53059789434							*	B296 SCREW, MACHINE: SAME AS B154	EA		REF									-15 4-11	17
X2	H									G	B297 MOUNT, PHOTOCELL: 07264; B13414B	EA		1									-15 4-11	18
P	H		74409936337							G	B298 COVER, GLASS: 07264; A32477T5	EA		1	*	*	*	*	*	*		3	-15 4-11	15
P	H		59611131302							P	B299 PHOTOCELL: 07264; A32925	EA		1	*	*	*	*	*	*		3	-15 4-11	16
C	D		59405817901							P	8300 TERMINAL, INSULATOR: 98291; STSMITURC2	EA		6									-15 4-11	29
X2	D		74400595887							P	B301 MAGNET: 07264: C705P4AT9	EA		2									-15 4-11	12
X2	D									P	B302 CLAMP, MAGNET: 07264; A7059AT3	EA		2									-15 4-11	11
			53059789348							*	B303 SCREW, MACHINE: SAME AS B16H	EA		REF									-15 4-11	10

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									F	B304 GUIDE, CARD: 07264; C13605	EA		1									-15 4-11	5
X2	D									F	B305A GATE: 07264; C13232G	EA		1									-15 4-11	7
C	D		53057210899							*	B306 SETSCREW: 96906; MS51029-11	EA		2									-15 4-11	6
X2	D									F	B307 SHAFT, ARMATURE: 07264; A13491	EA		1									-15 4-11	4
X2	D									F	B311A TERMINAL BOARD ASSEMBLY: 07264; A13621	EA		1									-15 4-11	26
			53059789342							*	B312 SCREW, MACHINE: SAME AS B280D	EA		REF									-15 4-11	21
X2	D									G	B312A TERMINAL: 07264: A13488	EA		2									-15 4-11	25
C	D									*	B3128' SCREW, MACHINE: 96906; M835233-25	EA		2									-15 4-11	23
C	D		53106311294							*	8312C NUT,PLAIN,HEXAGON: 80205; NAS671-6	EA		2									-15 4-11	24
X2	D									F	B313 INSULATOR: 07264; A13497	EA		1									-15 4-11	22
C	D		53058775493							F	B314 SETSCREW: 96906; MS51029-20	EA		2									-15 4-11	27,28
P	D		59309936847							F	B315 SWITCH: 07264; A13507	EA		1								5	-15 4-11	20
C	D		53050582075							*	B316 SCREW, MACHINE: 96906; MS16997-3	EA		2									-15 4-11	19

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									F	B317 CLAMP, LOOP: 07264; A13415A	EA		1									-15 4-11	14
			53050227053							*	B318 SCREW, MACHINE: SAME AS B223	EA		REF									-15 4-11	13

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	D		53150197470							F	B319 PLUNGER, SPRING: 07264; A13479	EA		2								8	-15 4-11	8
P	D		53400197472							F	8320 SPRING, GATE: 07264; A13495T1	EA		2								8	-15 4-11	9
A	D	T								D	B321 PUNCH-COVER ASSEMBLY: 07264; X13627P2A	EA		1									-15 4-8	132
X2	D									E	B322 M MAIN FRAME-MAGNET ASSEMBLY: 07264; D13630P2A	EA		1									-15 4-8	131
X2	D									F	B323 M FRAME-BAIL-CAPSTAN ASSEMBLY: 07264; D13647P2A	EA		1									-15 4-8	130
X2	D									G	B324 M FRAME-BAILAND GUIDE ASSEMBLY: 07264; D13629P2	EA		1									-15 4-8	129
X2	D									H	8325 M FRAME-BEARING SHAFT ASSEMBLY: 07264; D13631P2A	EA		1									-15 4-8	128
X2	D									J	B326 M MAINFRAME, PLATE AND GUIDES ASSEMBLY. 07264; X13297G2	EA		1								4-8	-15 127	
X2	D									K	B327 PLATE, MAIN: 07264; D13244AP3	EA		1									-15 4-8.	42
			53059836651							*	B328 SCREW, MACHINE: SAME AS B241	EA		REF									-15 4-8	124
			53158251207							*	B329 PIN, STRAIGHT, HEAD- LESS: SAME AS B166 M	EA		REF									-15 4-8	125.2
C	D									*	B329A SCREW, MACHINE: 96906; MS16996-15	EA		2									-15 4-8	124.1

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									K	B330 FRAME, MAIN: 07264; X13294AP3A	EA		1									-15 4-8	126
X2	D									K	B331 GUIDE, INTERPOSER: 07264; D13581	EA		2									-15 4-8	89

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	D		53050685414							*	B332 SCREW, MACHINE: 12344; MS16995-11	EA		10									-15 4-8	 88
C	D		53156821727							*	B333 PIN, STRAIGHT, HEAD LESS: 96906; MS16555-625	EA		4									-15 4-8	 89.1
X2	D									K	B334 GUIDE ASSEMBLY: 07264; B13443B	EA		1									-15 4-8	 101.1
C	D		53059591082							*	B335 SCREW, MACHINE: 96906; MS16995-18	EA		6									-15 4-8	 95
X2	D									L	B336 GUIDE, ROLLER: 07264; C13441A	EA		1									-15 4-8	 100
X2	D									L	B337 SUPPORT, GUIDE: 07264; B13442A	EA		1									-15 4-8	 101
X2	D									K	B338 GUIDE, ROLLER: 07264; C13445B	EA		1									-15 4-8	 110
			53059591082							*	B339 SCREW, MACHINE: SAME AS B335	EA		REF									-15 4-8	 108
X2	D		31109804717							J	B340 BEARING, ROLLER: 21335; NK16-16	EA		4									-15 4-8	 123
X2	D									J	B341 SHAFT, PUNCH: 07264; D13335AP2	EA		1									-15 4-8	 121
X2	D									J	B342 KEY, PUNCH SHAFT: 07264; A13460A	EA		1									-15 4-8	 119
X2	D									J	B343 SPACER, SHAFT: 07264; B13332P4AT1	EA		1									-15 4-8	 115

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									J	B344 SPACER SHAFT 07264; B13332P3T1	EA		3									-15 4-8	 117
X2	D									J	B345 SPACER, SLEEVE:: 07264; B13586AP2	EA		1									-15 4-8	 118
X2	D		74400506029							J	B346 CAM, PUNCH BAIL: 07264; C13252P:1	EA		2									-15 4-8	 116
X2	D									J	B347 M SHIM, .002 IN. THICK: 07264; A13331T1	EA		3									-15 4-8	 120
										J	8348 BEARING, BALL: SAME AS B183B	EA		REF									-15 4-8	 111
										J	B349 SPACER, PUMP: SAME AS B183A	EA		REF									-15 4-8	 107
X2	D									J	8350 HOUSING, PUMP: 07264; C13437AP3A	EA		1									-15 4-8	 112
			53059785350							*	B351 SCREW, MACHINE: SAME AS B231	EA		REF									-15 4-8	 108.1
			53301965368							J	8352 PACKING, O RING: SAME AS B214A	EA		REF									-15 4-8	 113
X2	D		74400506028							J	8353 SEAL, DISC: 07264; A13353A	EA		1									-15 4-8	 103
X2	D									J	8354- COVER, PUMP HOUSING: 07264; C13409P2A	EA		1									-15 4-8	 105
C	D									*	B355 SCREW, MACHINE: 96906; MS16997-24	EA		4									-15 4-8	 104
										J	8356 KEY, PUMP: SAME AS B185 M	EA		REF									-15 4-8	 102

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			74400506085							J	B357 PUMP, OIL: SAME AS B184 M	EA		REF									-15 4-8	 106
			93400701212							J	B358 WINDOW, GLASS: SAME AS B211L	EA		REF									-15 4-8	 122

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130.1

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									J	B359 SPACER: 07264; B13660	EA		1									-15 4-8	 122.1
C	D									J.	B360 WASHER, SPRING: 92830; 24	EA		1									-15 4-8	 122.2
X2	D									H	B361 SHIM, GUIDE, .002 IN. THICK: 07254; A13446T1	EA		1									-15 4-8	 109
X2	D									H	B362 SHIM, GUIDE, .0025 IN. THICK: 07264; A13446T2	EA		1									-15 4-8	 109.1
X2	D									H	B363 SHIM, GUIDE, .003 IN. THICK: 07264; A13446T3	EA		1									-15 4-8	 109.2
X2	D		53409353773							H	B364 SPRING, GUIDE: 07264; B13475P2A	EA		3									-15 4-8	 98
X2	D		31109895509							H	B365 BEARING, ROLLER: GUIDE 07264; A13559	EA		4									-15 4-8	 99
			53302222767							H	B366 PACKING, O RING: SAME AS B227A	EA		REF									-15 4-8	 110.1
X2	D									H	B367 BALL, NYLON: 97792; GR11/8	EA		1									-15 4-8	 100.1
X2	D									H	B368 SHIM, SPRING: 07264; C3817CT9	EA		2									-15 4-8	 98.1
X2	D									H	B369 PUNCH BAIL ASSEMBLY: 07264; D13292AP3A	EA		1									-15 4-8	 133
X2	D									J	B370 BAIL, PUNCH: 07264; D13292AP3A1	EA		2									-15 4-8.1	 1
C	D									*	B371A SCREW, MACHINE: 09211; 842132213	EA		8									-15 4-8.1	 4

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(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	MODEL 6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(7) (B) 6-10	(7) (C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(8) (B) 6-10	(8) (C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(11) (B) ITEM NO. OR REF DESIGN
X2	D									J	B372 SPACER, BAIL: 07264; A13302T1	EA		2									-15 4-8.1	2
X2	D									J	B373 SPACER, BAIL: 07264; A133C2T2	EA		2									-15 4-8.1	3
			53050685414							*	B374 SCREW, MACHINE: SAME AS B332	EA		REF									-15 4-8.1	6
X2	D		53400890552							G	B376 SPACER: 07264; A13354AP2	EA		1									-15 4-8 7	73

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	MODEL 6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(7) (B) 6-10	(7) (C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(8) (B) 6-10	(8) (C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(11) (B) ITEM NO. OR REF DESIGN
X2	D									G	B377 PLATE, CAP: 07264; A13438A	EA		2									-15 4-8	97
C	D									*	B378A SCREW, CAP, SOC-KET HEAD: 09211; 842000204	EA		4									-15 4-8	96
X2	D									G	B379 SHIM, MAIN FRAME: 07264; A13303	EA		2									-15 4-8	125.1
										G	B380 NUT, SELF LOCKING: SAME AS B228	EA		REF									-15 4-8	18, 70
										G	B381 KEY, WOODRUFF: SAME AS B183D	EA		REF									-15 4-8	114
X2	D									G	B382 BAIL-PLATE ASSEMBLY: 07264; D13513P2	EA		1									-15 4-8	125
C	D									*	B382A SCREW, MACHINE: 07264; 842000301	EA		2									-15 4-8.1	53
C	D									*	B3828 SCREW, MACHINE: 07264; 842132029	EA		2									-15 4-8.1	54
X2	D									H	B383 BAIL, INTERPOSER - ASSEM BLY: 07264; D13476P2A	EA		1									-15 4-8.1	5
X2	D									J	B385 SPRING, INTERPOSER: 07264; A13496	EA		24									-15 4-8.1	11
X2	D		74400543364							J	8386 ROLLER, LARGE: 07264; A13324	EA		2									-15 4-8.1	12
X2	D									J	B387 ROLLER, SPRING: 07264; A13532	EA		30									-15 4-8.1	13
C	D									J	B388A SETSCREW: 09211; 845002602	EA		2									-15 4-8.1	14

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									J	B389 BAIL, INTERPOSER: 07264; D13645P2	EA		1									-15 4-8.1	15
X2	D		74400893895							K	B390 INTERPOSER: 07264; D13254P3T1	EA		6									-15 4-8.1	7
X2	D		74400506082							K	B391 INTERPOSER: 07264; D13254P3T2	EA		6									-15 4-8.1	8
X2	D		74400506079							K	B392 INTERPOSER: 07264; D13254P3T3	EA		6									-15 4-8.1	9
X2	D		74400506075							X	B393 INTERPOSER: 07264; D13254P3T4	EA		6									-15 4-8.1	10

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									K	B394 PIN, BAIL: 07264; A13305	EA		2									-15 4-8.1	16
X2	D									H	B395 SET, BLOCK: 07264;: B13419BT2	EA		1									-15 4-8.1	44
C	D		53059789349							*	B396 SCREW, MACHINE: 96906; MS16997-21	EA		5									-15 4-8.1	43
X2	D									H	B397 SET BLOCK: 07264; B13419BT1	EA		1									-15 4-8.1	45
			53059789349							*	B398 SCREW, MACHINE: SAME AS 8396	EA		REF									-15 4-8.1	43
X2	D									H	B399 SUPPORT, SPRING: 07264; A13329P2	EA		2									-15 4-8.1	46
X2	D									H	B400 SEAT, SPRING: 07264; A13330T2	EA		2									-15 4-8.1	47
X2	D									H	B401 SPRING, BAIL: 07264; B13372P2B	EA		2									-15 4-8.1	48
X2	D		74400543365							H	B402 PLUG, JAM: 07264; A13486	EA		2									-15 4-8.1	50
C	D									*	B403 SETSCREW: 02615: M72FS1032-6C	EA		2									-15 4-8.1	49
X2	D									H	B404 SEAT, SPRING: 07264; 813462	EA		2									-15 4-8.1	51
			53303558974							H	B405 PACKING, PREFORMED SAME AS B218 M	EA		REF									-15 4-8.1	52

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									H	B406 BLOCK PINS ASSEMBLY: 07264; C13512AP2B	EA		1									-15 4-8.1	17
C	D									*	B407A SCREW, MACHINE: 09211; 842000301	EA		4									-15 4-8.1	19
X2	D									J	B408 PINS ASSEMBLY: 07264; D13625P2B	EA		1									-15 4-8.1	18
X2	D									K	B409 PLATE-BLK ASSEMBLY: 07264; X13626P2B	EA		1									-15 4-8.1	20
X2	D									L	B410 BLOCK, GUIDE: 07264; D13226AP2A	EA		1									-15 4-8.1	21

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									L	B411 PLATE, DIE: 07264; D13227DT2	EA		1									-15 4-8.1	37
X2	D									L	B412 PIN, STRAIGHT, HEAD-LESS: 07264; A13554	EA		2									-15 4-8.1	38
X2	D									K	B413 CAP, BAIL: 07264; C13259P2A	EA		1									-15 4-8.1	23.1
X2	D									K	B414 PIN, PUNCH: 07264; C13577P1	EA		12									-15 4-8.1	22
X2	D									K	B415 PIN, PUNCH: 07264; C13577P2	EA		12									-15 4-8.1	23
X2	D									J	B416 STOP, PUNCH PIN: 07264; C13317P2T2	EA		1									-15 4-8.1	25
C	D									*	B417A SCREW, MACHINE: 09211; 842127024	EA		4									-15 4-8.1	24
X2	D									J	B418 SEAL, PUNCH, PIN: 07264; 813453	EA		2									-15 4-8.1	26
X2	D									J	B419 SHIM, STOP: 07264; B13451A	EA		1									-15 4-8.1	27
X2	D									J	B420 SEAL, PUNCH PIN: 07264; B13452AT2	EA		15									-15 4-8.1	29
X2	D									J	B421 RETAINER, OIL: 07264; B13318AT2	EA		3									-15 4-8.1	28
X2	D									F	B422 CHECKING ASSEMBLY: 07264; C13657A	EA		1									-15 4-8	92

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	D									*	B423A SCREW, CAP, SOCKET HEAD: 09211; 842003710	EA		4									-15 4-8	91
X2	D									G	B424 SUPPORT, CONTACT: 07264; C13582A	EA		1									-15 4-8.1	36
X2	D									G	B427A PAD, DAMPING: 07264; A13675A	EA		1									-15 4-8.1	35

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D		74400543366							G	B429 CONTACT, CONNECTOR ASSEMBLY: 07264; C13590	EA		1									-15 4-8.1	33
C	D		53055157219							*	B430 SCREW, MACHINE: 96906; MS35233-17	EA		19									-15 4-8.1	31
C	D		53109349748							*	B430A NUT, PLAIN, HEXAGON: 96906; MS35649-244	EA		8									-15 4-8.1	30
X2	D		74400506093							H	8431 CONTACT ASSEMBLY: 07264; C13576	EA		1									-15 4-8.1	34
X2	D		74400506093							H	B432 CONNECTOR ASSEMBLY: 07264; A13075	EA		3									-15 4-8	86
			53059789434							*	B433 SCREW, MACHINE: SAME AS B154	EA		REF									-15 4-8	50
X2	D									G	8434A PLATE, CLAMP:. 07264; A13580A	EA		1									-15 4-8.1	32
X2	D									F	B435 MAGNET ASSEMBLY: 07264; D13585G1	EA		1									-15 4-8	87.1
			53055157219							*	B436 SCREW, MACHINE: SAM E AS 8430	EA		REF									-15 4-8	85
X2	D									G	B437 FRAME: 07264; C13584T1	EA		1									-15 4-8	87.2
X2	D		74400506080							G	B438 COIL: 07264; C13579	EA		24									-15. 4-8	87.3
			74400506093							G	B439 CONNECTOR: ASSEMBLY SAME AS B432	EA		REF									-15 4-8	86

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53059789434							*	B440 SCREW, MACHINE: SAME AS 8154	EA		REF									-15 4-8	50
X2	D									G	B441 CLAMP: 07264; C13583	EA		4									-15 4-8	87.5
			5305555001							*	B442 SCREW, MACHINE: SAME AS B139	EA		REF									-15 4-8	87.4
X2	D									F	B443 MAGNET ASSEMBLY: 07264; D13585G2	EA		1									-15 4-8	87
			53055157219							*	B444 SCREW, MACHINE: SAME AS B430	EA		REF									-15 4-8	85
X2	D									G	B445 FRAME: 07264; C13584T2	EA		1									-15 4-8	87.6
			74400501080							G	B446 COIL: SAME AS B438	EA		REF									-15 4-8	87.3
			7440050-093							G	B447 CONNECTOR ASSEMBLY SAME AS B432	EA		REF									-15 4-8	86
			53059780434							*	B448. SCREW, MACHINE: SAME AS B154	EA		REF									-15 4-8	50
										G	B449 CLAMP: SAME AS B441	EA		REF									-15 4-8	87.5
			5305550S001							*	B450 SCREW, MACHINE: SAME AS B139	EA		REF									-15 4-8	87.4
C	D		53057229397							G	B450A SET' SCREW: 96906; MS51023-53	EA		1									-15 4-8	38
C	D		5305726I089							G	B450B SET SCREW: 96906: MS51965-41	EA		2									-15 4-8	38.1
X2	D									F	B451 CLAMP, WIRE: 07264; A13480	EA		2									-15 4-8	94

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	D									*	B452 SCREW, CAP, SOCKET: 09211; 842000301	EA		4									-15 4-8	93

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									F	B453 SHIM, INTERPOSER GUIDE, .002 IN. THICK: 07264; A13351T1	EA		8									-15 4-8	90
X2	D									F	B454 SHIM, INTERPOSER GUIDE, .003 IN. THICK: 07264; A13351T2	EA		8									-15 4-8	90.1
X2	D									F	B455 SHIM, INTERPOSER GUIDE, .0015 IN. THICK: 07264; A13351T3	EA		8									-15 4-8	90.2
X2	D									F	B456 SHIM, INTERPOSER GUIDE, .0025 IN. THICK: 07264; A13351T4	EA		8									-15 4-8	90.3
X2	D									F	B457 SHIM, INTERPOSER GUIDE, .002 IN. THICK: 07264: A13599AT1	EA		8									-15 4-8	90.4
X2	D									F	B458 SHIM, INTERPOSER GUIDE, .003 IN. THICK: 0i264; A13599AT2	EA		8									-15 4-8	90.5
X2	D									E	B459 HOUSING, LOWER: 07264; D13300P2	EA		1									-15 4-8	79
			53059789348							*	B460 SCREW, MACHINE: SAME AS B168	EA		REF									-15 4-8	67
C	D									*	B461A SCREW, CAP, BUTTON HEAD: 09211; 842001606	EA		4									-15 4-8	51
X2	D									E	B462 COVER, HOUSING: 07264; C13301P3	EA		1									-15 4-8	68

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53059789348							*	B463 SCREW, MACHINE: SAME AS B168	EA		REF									-15 4-8	78
										*	B464A SCREW, CAP, BUTTON HEAD: SAME AS B461A	EA		REF									-15 4-8	51
X2	D									E	B465 COVER, CONNECTOR: 07264; D13434P2A	EA		1									-15 4-8	54
			53059789348							*	B466 SCREW, MACHINE: SAME AS B168	EA		REF									-15 4-8	53
										*	B467A SCREW, CAP, BUTTON HEAD: SAME AS B461A	EA		REF									-15 4-8	48
			53109296395							*	B467B WASHER, LOCK: SAME AS BO91	EA		REF									-15 4-8	52
C	D									*	B467C SCREW, CAP, BUTTON HEAD: 09211; 842001607	EA		3									-15 4-8	46

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									E	B468	COVER, SIDE: 07264; D13433P2	EA		1									-15 4-8	43
			53059789348							*	B469	SCREW, MACHINE: SAME AS B168	EA		REF									-15 4-8	41
										*	B470A	SCREW, CAP BUTTON HEAD: SAME AS B461A	EA		REF									-15 4-8	42
X2	D									E	B471	CAP, MAIN FRAME: 07264; C13432P2	EA		1									-15 4-8	84
			53059789348							*	B472	SCREW, MACHINE: . SAME AS B168	EA		REF									-15 4-8	81
X2	D		74400506024							E	B473	GASKET, CAP: 07264; B13447	EA		2									-15 4-8	83
X2	D									E	B474	GASKET, COVER: 07264; A13448AP2A	EA		1									-15 4-8	44
X2	D									E	B475	GASKET, COVER: 07264; A13448AP1A	EA		1									-15 4-8	45
X2	D									E	B476	GASKET, COVER: 07264; D13449BP2	EA		1									-15 4-8	55
X2	D		53309323784							E	B477	GASKET, HOUSING: 07264; C13450B	EA		2									-15 4-8	69, 80
			53409910881							E	B478	CHIP DETENT, MAG-NETIC: SAME AS B219 M	EA		REF									-15 4-8	74
X2	D		30200454485							E	B479	SPROCKET, MAIN: 07264; C13287P1	EA		1									-15 4-8	58
X2	D		74400506071							E	B480	BUSHING, SPROCKET, 07264; B13284B	EA		1									-15 4-8	57

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(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									E	B481	RING, CLAMP: 07264; 813288	EA		1									-15 4-8	59
C	D		53059836652							*	B481A	SCREW, MACHINE: 96906; MS16998-29	EA		3									-15 4-8	56
X2	D									E	B482	SCREEN, FILTER, OIL: SAME as B220	EA		1									-15 4-8	65
										E	B483	FILTER, OIL: SAME as B217	EA		REF									-15 4-8	76
			74400506084							E	B484	TRAP, LINT: SAME AS B221 M	EA		REF									-15 4-8	66
										E	B485	CAP, OIL FILLER: SAME AS B222 M	EA		REF									-15 4-8	64
			53050227053							*	B485A	SCREW, MACHINE: SAME AS 8223	EA		REF									-15 4-8	63
X2	D									E	B486	LATCH ASSEMBLY: 07264; A31933	EA		1									-15 4-8	49
X2	D		74400506070							E	B487	SPRING ASSEMBLY: 07264; A31934	EA		1									-15 4-8	47
X2	D		30209369025							E	B489	PULLEY: 07264; 832287	EA		1									-15 4-8	71
			53302516403							E	B490A	SEAL SHAFT: SAME AS B213A	EA		REF									-15 4-8	62
X2	D									E	B491	SEAL, OIL: 71724; A6XP2-1 5/8	EA		1									-15 4-8	77
			74400543360							E	B492	BREATHER: SAME AS B215 M	EA		REF									-15 4-8	60
			93400701212							E	B493	WINDOW, GLASS: SAME AS B211A	EA		REF									-15 4-8	82

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									E	B494 SHIM, 0.005 IN. THICK: 07264; C3817CT57	EA		6									-15 4-8	72
			53303558974							E	B495 PACKING, O RING: SAME AS B218 M	EA		REF									-15 4-8	61

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D		53306843420							E	B496 PACKING, O RING: 96906; MS28775-13	EA		1									-15 4-8	75
X2	D									E	B497A PIN, GROOVED: 73957; GP4-062-0312-12	EA		4									-15 4-8	68.1
X2	D									D	B498 EJECTOR, IDLER ASSEMBLY 07264: D13511P2G2	EA		1									-15 4-8	22
X2	D									E	B499 PIN, EJECT MTG: 07264; 813428P2	EA		1									-15 4-8	39
X2	D									E	B500 EJECT SUB ASSEMBLY: 07264; D13622P2	EA		1									-15 4-8	22.1
X2	D									F	B501 IDLER, BEARING ASSEMBLY 07264; B13510G2	EA		1									-15 4-10	42
X2	D									G	B502 HOUSING, IDLER: 07264; B13260AP2	EA		1									-15 4-10	41
P	D		31109779102							G	B503 BEARING, ROLLER: 21335; SCE168	EA		2								8	-15 4-10	40
C	D									G	B504 SETSCREW: 02615; M73FS1032-6C	EA		1									-15 4-10	7
C	D		530598366553							G	B505 SCREW, MACHINE: 96906; MS16998-30	EA		1									-15 4-10	8
X2	D									F	B506 SHAFT ASSEMBLY: 07264; B13594	EA		1									-15 4-10	36.1
X2	D									G	B507 SPROCKET, IDLER: 07264; B13285P3	EA		1									-15 4-10	34
C	D									*	B507A WASHER, FLAT: 07264: 933105007	EA		1									-15 4-10	30
C	D									*	B507B WASHER, CRUSH PROOF: 07264; A13526	EA		1									-15 4-10	35

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									G	BS07C SPACER, DRIVE SHAFT: 07264; A013242	EA		1									-15 4-10	33
X2	D									G	B508 SHAFT, IDLER: 07264; B13243P2	EA		1									-15 4-10	36
X2	D									F	B509 EJECT PIVOT ASSEMBLY: 07264; B13623	EA		1									-15 4-10	39.1
X2	D									G	B510 PIVOT, EJECTOR: 07264; C13271AP2	EA		1									-15 4-10	39
X2	D		31109804552							G	B511 BEARING, ROLLER: 21335; RNA4900PP	EA		1									-15 4-10	37
X2	D		31109788026							G	B512 BEARING, BALL: 43334; SSZ99R4XR3E	EA		1									-15 4-10	32

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	D		53656873379							G	B513 RING, RETAINING: 79136; N5000-62SMD	EA		1								5	-15 4-10 3	8
P	D		53658990688							G	B514 RING, RETAINING: 79136; N5001-62SMD	EA		1								5	-15 4-10	31
X2	D		53157533892							G	B515 PIN, SPRING: 72962; 79422-094-0750	EA		1									-15 4-10	26
X2	D									F	B516 ROLLER, IDLER: 07264; B13274P2T1	EA		1									-15 4-10	28.1
C	D									*	B517 NUT, SELF LOCKING: 72962; 42NE048	EA		2									-15 4-10	28,29
X2	D									F	B518A SOLENOID: 02642; TM1245-1	EA		1									-15 4-10	11
X2	D		53157538386							F	B519 PIN, STRAIGHT, HEAD-LESS: 96906; MS16555-641	EA		1									-15 4-10	10
P	D		53655981362							F	B520 RING, RETAINING: 17407; 5555-18	EA		2								10	-15 4-10	9
P	D		53409982927							E	B521 SPRING, EJECTOR FRONT: 07264; A13334A	EA		1								5	-15 4-10	25
P	H		30309369100							E	B522 BELT, ULTRA SPEED: 07264; A60055	EA		1	1	2	3	1	2	3		3	-15 4-10	27
X2	D									E	B523 ROLLER-FRAME - ASSEMBLY: 07264; B135098	EA		1									-15 4-10	23.1
X2	D									F	B524 FRAME-SUPPORT - ASSEMBLY: 07264; B13624	EA		1									-15 4-10	23.2

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D		74409936313							G	B525 FRAME ASSEMBLY: 07264; B13492	EA	1										-15 4-10	23
P	D		74409936308							G	B526 SUPPORT, FRAME: 07264; B13312A	EA	1									2	-15 4-10	24

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(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	D		53150119708							G	B527 PIN, SUPPORT: 07264; A13333A	EA		1								3	-15 4-10	22
			53050512480	:						G	B528 M SETSCREW: SAME AS B200B	EA		REF									-15 4-10	12
C	D	,								G	B529 SETSCREW: 02615; M73FS832-4C	EA		1									-15 4-10	21
C	D		53409910888							F	B530 M WASHER, SPACER: 07264; A1327BAT1	EA		1									-15 4-10	15
C	D		53409910882							P	B531 M WASHER, SPACER: 07264; A13278AT2	EA		1									-15 4-10	14
C	D		53102752080							F	B532 NUT, SELF LOCKING: 72962; 68NTM02	EA		2									-15 4-10	13
X2	D		30409930030							F	B533 SHAFT, ROLLER: 07264; A13236A	EA		1									-15 4-10	19
X2	D									F	B534 ROLLER ASSEMBLY: 07264; B136138	EA		1									-15 4-10	20.1
X2	D									G	B535 ROLLER, EJECT: 07264; A13238C	EA		1									-15 4-10	20
X2	D		53409910880							G	B536 SPACER, ROLLER: 07264; A13273A	EA		1									-15 4-10	17
P	D		31109853728							G	B537 BEARING, BALL: 21335; 33PPSFS118	EA		2								8	-15 4-10	16
X2	D									D	B538 GUIDE, SUPPORT ASSEMBLY: 07264; C13508P4	EA		1									-15 4-8	37
			53059789348							*	B538A SCREW, MACHINE: SAME AS B168	EA		REF									-15 4-8	36

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(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									E	B539 SUPPORT, GUIDE: 07264; C13418P3A	EA		1									-15 4-8	 37.7
X2	D									E	B540 GUIDE, CARD: 07264; B13420	EA		1									-15 4-8	 37.8

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(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	H		7040-00-621-1718							E	B541 BRAKE, SPRING: 34631;110617904	EA		1									-15 4-8	 37.10
			53059789342							*	B542 SCREW, MACHINE: SAME AS B280D	EA		REF									-15 4-8	 37.12
										E	B543 CLAMP, SPRING: SAME AS B280Q	EA		REF									-15 4-8	 37.11
			74409936482							E	B544 SPRING, GUIDE: SAME AS B138	EA		REF									-15 4-8	 37.13
P	H		7040-00-621-1723							E	B545A BRAKE, SPRING: 34631, 110617905	EA		1									-15 4-8	 37.9
			53059789342							*	B545B SCREW, MACHINE: SAME AS B280D	EA		REF									-15 4-8	 37.12
X2	D									E	B546A CONNECTOR ASSEMBLY: 07264; B13662P2A	EA		1									-15 4-8	 37.1
C	D									*	B547 SCREW, MACHINE: 96906: MS35233-3	EA		10									-15 4-8	 37.2
X2	D									F	B548 M CONNECTOR, RECEPTACLE, ELECTRICAL: 00779; 1-480319-0	EA		2									-15 4-8	 37.4
P	D		59991338954							F	B549 M CONTACT, ELECTRICAL: 00779; 60511-1	EA		4								12	-15 4-8	 37.5
X2	D									F	B5550 BOOT: 07264; B13671	EA		1									-15 4-8	 37.6

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(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	H		5360-00--280-3328							F	B552A CONTACT ASSEMBLY: 9503; B33197P2A	EA		1									-15 4-8	37.3
X2	D									D	B55SA SUPPORT ASSEMBLY: 07264; D13591P2B	EA		1									-15 4-8	35
			53059789434							*	B5558B SCREW, MACHINE: SAME AS B154	EA		REF									-15 4-8.1	39
										E	B555C SUPPORT, DIE PLATE: 07264; C13616P2A	EA		1									-15 4-8.1	40
										E	B555D PLATE, INSULATOR: 07264; 813663	EA		1									-15 4-8.1	41
X2	D		74409369026							D	B556A GUARD, BELT: 07264; C35915	EA		1									-15 4-8	20
C	D		53050546650							*	B557 SCREW, MACHINE: 96906; MS35233-26	EA		15									-15 4-8	16
C	D		53108805976							*	B558 WASHER, FLAT: 96906; MS15795-806	EA		35									-15 4-8	17
C	D									*	B559 NUT, PLAIN, HEXAGON: 72653; 15-192	EA		1									-15 4-8	15
X2	D									*	B560A WASHER, FLAT: 07264; B0033T12	EA		2									-15 4-8	19.1
X2	D		5810-00--509-1073							D	B561 PICKUP, MAGNETIC: 81691; 3015A	EA		1									-15 4-8	25
X2	D									D	B562 STOP, TRUNION: 07264; A13534AP1	EA		1									-15 4-8	8
X2	D									D	B563 NUT, BARREL: 07264; A13425A	EA		1									-15 4-8	24
X2	D									D	B564A SHIM, GATE, MOUNT: 07264: A13416A	EA		2									-15 4-8	34

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D		53058990515							D	B565 CLAMP,KNOB ASSEMBLY: 07264; B13502G1	EA		2									-15 4-8	12
X2	D									E	B566 KNOB, CLAMP: 07264; A13501	EA		4									-15 4-8	12.2
X2	D									E	B567 CLAMP: 07264; B1323171	EA		1									-15 4-8	12.1
X2	D		53059348832							D	B568 CLAMP, KNOB ASSEMBLY: 07264; B13502G4	EA		1									-15 4-8	23
										E	B569 KNOB, CLAMP: SAME AS B566	EA		REF									-15 4-8	23.1
X2	D									E	B570 CLAMP: 07264; B13231T4	EA		1									-15 4-8	23.2
			53303558974							D	B573 PACKING, O RING: SAME AS B218 M	EA		REF									-15 4-8	14
X2	D		14309555390							D	B574 CLAMP, CABLE: 95987; 516-4	EA		2									-15 4-8	4.4
			53050546650							*	B575 SCREW, MACHINE: SAME AS 8557	EA		REF									-15 4-8	3.1
			53100429609							*	B575A WASHER, LOCK: SAME AS B141	EA		REF									-15 4-8	3.3
C	D									*	B576 WASHER, D: 95987; D140	EA		9									-15 4-8	3.2
X2	D		53405741786							D	B576A CLAMP, CABLE: 95987; 1/8-3	EA		1									-15 4-8	3

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53055505002							*	B576B SCREW, MACHINE: SAME AS B252	EA		REF	-'15								4-8	1
X2	D									*	B576C WASHER, D: 95987; D140D	EA		1	-15								4-8	2
X2	D									D	B576D CLAMP, CONNECTOR 07264; B13661	EA		1	-15								4-8	5
X2		D								*	B576E SCREW, MACHINE: 96906; MS35233-41	EA		1	-15								4-8	4
P	H		30308378302	1						D	B577A BELT, POSITIVE DRIVE: 76474; 225L075	EA		1	2	3	4	2	3	4		4	-15 4-8	40
X2	D									D	B577C TRUNNION, ASSEMBLY 07264; C13426CP2	EA		1	-15								4-8	27.1
C	D		53058593099							*	B577D SCREW, MACHINE: 96906; MS16998-34	EA		7	-15								4-8	26
X2	D									E	B577E BASE, TRUNNION: 07264; C1338BCP2A	EA		1	-15								4-8	27
X2	D		53300879880							E	B577F CAP, TRUNNION: 07264; B13390BP2	EA		1	-15								4-8	8.2
C	D		53059836654							*	B577G SCREW, MACHINE: 96906; MS16998-31	EA		1	-15								4-8	7
X2	D		53059003880							F	B577H CLAMP, KNOB ASSEMBLY: 07264; B13502G3	EA		1	-15								4-8	6
										F	B577J KNOB, CLAMP: SAME AS B566	EA		REF	-15								4-8	6.1

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(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANC E									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									E	B577K CLAMP: 07264; B13231T3	EA		1									-15 4-8	6.2
X2	D		53402904480							D	B577L INSERT, THREADED: 96906; MS21208F1-20	EA		2									-15 4-8	8.1
X2	D									D	B577M SHIM, TRUNNION: 07264; A13424CT2	EA		1									-15 4-8	30
C	D									D	B577N M LARGE TRUNNION: 07264; C13427AP2	EA		1									-15 4-8	29.1
			53058593099							*	B577P SCREW, MACHINE: SAME AS B577D	EA		REF									-15 4-8	28
			53059836651							*	B577Q SCREW, MACHINE: SAME AS B241	EA		REF									15 4-8	21
X2	D									E	B577R BASE, TRUNNION: 07264; C13387AP2A	EA		1									-15 4-8	29
X2	D									E	B577S CAP, TRUNNION: 07264; B13389AP2	EA		1									-15 4-8	11
C	D		53059836655							*	B577T SCREW, MACHINE: 96906; MS16998-32	EA		1									-15 4-8	10
X2	D		53059348831							E	B577U CLAMP, KNOB ASSEMBLY: 07264; B13502G2	EA		1									-15 4-8	9
										F	B577V KNOB, CLAMP: SAME AS B566	EA		REP									-15 4-8	9.1
X2	D									F	B577W CLAMP: 07264; B13231T2	EA		1									-15 4-8	9.2

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(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53402904480							E	B577X	INSERT, THREADED: SAME AS B577L	EA		REF									-15 4-8	29.2
X2	H									C	B578A	GUIDE, INPUT: 07264; B14898P1A	EA		1									-15 4-7	189
C	H		53055432799							*	B579	SCREW, MACHINE: 96906; MS35233-63	EA		2									-15 4-7	186
			53106191148							*	B580	WASHER, FLAT: SAME AS B135	EA		REF									15 4-7	188
			53100541831							*	B581	WASHER, LOCK: SAME AS B136	EA		REF									-15 4-7	187
A	H	R								C	B582	GLIDE ASSEMBLY: 07264; B14797G1	EA		1									-15 4-7	193
C	H		53102714645							*	B583	NUT, PLAIN, HEXAGON 96906: MS35649-84	EA		6									-15 4-7	190
C	H		53100541830							*	B584	WASHER, LOCK: 96906: MS35338-80	EA		12									-15 4-7	191
C	H		53108805978							*	B585	WASHER, FLAT: 96906: MS15795-807	EA		7									-15 4-7	192
X2	H									D	B586	GLIDE, CARD: 07264; B14796T1	EA		1									-15 4-7	193.1
C	H									D	B587	STUD, CAPTIVE: 46384; CFHS832-8	EA		4									-15 4-7	193.2
C	H									C	B588	GLIDE ASSEMBLY: 07264; B14797G2	EA		1									-15 4-7	197

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53102714645							*	B589	NUT, PAIN,HEXAGON: SAME AS B583	EA		REF									-15 4-7	194
			53108805978							*	B590	WASHER, FLAT: SAME AS B585	EA		REF									-15 4-7	196
			53100541830							*	B591	WASHER, LOCK: SAME AS B584	EA		REF									-15 4-7	195
X2	H									D	B592	GLIDE, CARD: 07264; B14796T2	EA		1									-15 4-7	197.1
										D	B593	STUD, CAPTIVE: SAME AS B587	EA		REF									-15 4-7	197.2
X2	H									C	B594	SUPPORT, CARD: 07264; B14732	EA		1									-15 4-7	199
C	H		53050227095							*	B595	SCREW, MACHINE: 96906; MS35249-35	EA		10									-15 4-7	198
A	H	R								C	B596A	PICKER-ASSEMBLY: 07264; D14710DP1A	EA		1									-15 4-7	48
			53058593099							*	B597	SCREW, MACHINE: SAME AS B577D	EA		REF									-15 4-7	47
X2	H									*	B598	SHIM, LAMINATED: 07264; A34058	EA		3									-15 4-7	48.1
X2	H									D	B599A	FRAME, PICKER 07264; E14606BP2	EA		1									-15 4-12	73

(1) (A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE																										
X2	H									D	B600	MOUNT, SOLENOID: 07264; D14789	EA		1										-15 4-12	41
C	H		53056208158							*	B601	SCREW, MACHINE: 96906; MS35233-31	EA		14										-15 4-12	21
			53108805976							*	B602	WASHER, FLAT: SAME AS B558	EA		REF										-15 4-12	23
C	H		53100111041							*	B603	WASHER, LOCK: 96906; MS35338-79	EA		42										-15 4-12	22
X2	H									D	B604	PUSHER, BELT: 07264; C14553BP2	EA		1										-15 4-12	72
X2	H									D	B605	THROAT, AIR TRANSFER 07264; B14663A	EA		1										-15 4-12	13
C	H		53050546668							*	B606	SCREW, MACHINE: 96906; MS35233-43	EA		5										-15 4-12	11
			53108805978							*	B607	WASHER, FLAT: SAME AS B585	EA		REF										-15 4-12	12.1
			53100541830							*	B608	WASHER, LOCK: SAME AS B584	EA		REF										-15 4-12	12
X2	H									D	B609	THROAT, PICKER: 07264; C14875	EA		1										-15 4-12	9
C	H		53050526456							*	B610	SCREW, MACHINE: 96906; MS16996-10	EA		2										-15 4-12	7
			53100541831							*	8611	WASHER, LOCK: SAME AS B136	EA		REF										-15 4-12	8

(1) (A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE																										
X2	H		7014-01-052-9890							D	B612	SHAFT DRIVE: 07264: B14547BP2B	EA		1										-15 4-12	53
X2	H									D	B614A	SHAFT, IDLER: 07264; A14037P2B	EA		1										-15 4-12	69
P	H		74409176976							D	B615A	PULLEY, DRIVE: 07264; C14002P2A	EA		1	*	*	*	*	*	*		5		-15 4-12	52
C	H									*	B616	SETSCREW: 96906; MS51029-26	EA		6										-15 4-12	51
P	H		74409187800							D	B617A	PULLEY, IDLER: 07264; C14546A	EA		1	1	1	2	1	1	2		1		-15 4-12	68
C	H		53402562465							*	B618 M	RING, RETAINING: 79136; 5133-37MD	EA		3										-15 4-12	65
X2	H									D	B619	SHAFT, PIVOT: 07264; A14587T2	EA		1										-15 4-12	71
										*	B620	SETSCREW: SAME AS B616	EA		REF										-15 4-12	70
X2	H									D	B621A	TUBE,LINE,VACUUM: 07264; A14720A	EA		1										-15 4-12	56
C	H		53050603849							*	B622	SETSCREW: 96906; MS51029-17	EA		2										-15 4-12	55
X2	H									D	B623	BLOCKER, LIGHT: 07264; B14694C	EA		1										-15 4-12	45
			53055157219							*	B623A	SCREW, MACHINE: SAME AS B430	EA		REF										-15 4-2	44

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H									D	B624A	CLAMP, BLOCKER: 07264; B14695C	EA		1									-15 4-12	46
C	H		53055767493							*	B625	SCREW, MACHINE: 96906; 'MS35233-15	EA		7									-15 4-12	42
			53100429609							*	B626	WASHER, LOCK: SAME AS B141	EA		REF									-15 4-12	43
X2	H									D	B627	STOP, SOLENOID: 07264; A14591	EA		1									-15 4-12	19
			53050546668							*	B628	SCREW, MACHINE: SAME AS B606	EA		REF									-15 4-12	16
			53108805978							*	B629	WASHER, FLAT: SAME AS B585	EA		REF									-15 4-12	18
			53100541830							*	B630	WASHER, LOCK: SAME AS B584	EA		REF									-15 4-12	17
X2	H		74409265412							D	B631	SPRING, RETURN: 07264; A14583	EA		1									-15 4-12	20
X2	H		59451653878							D	B632	PLUNGER,: SOLENOID 07264; A14578A	EA		1									-15 4-12	25
C	H		53102660517							*	B633	NUT, PLAIN, HEXAGON 88044; AN340CS	EA		1									-15 4-12	26
			53108805976							*	B633A	WASHER, FLAT: SAME AS B558	EA		REF									-15 4-12	27
X2	H									D	B634	BUMPER: 07264; A34115	EA		1									-15 4-12	24
										D	B635	PIN, GROOVED: SAME AS B205A	EA		REF									-15 4-12	40

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H									D	B636	PLATE, POSITIVE: 07264; A14880	EA		1									-15 4-12	64
			53055767493							*	B637 M	SCREW, MACHINE: SAME AS B625	EA		REF									-15 4-12	62
			53100429609							*	B638	WASHER, LOCK: SAME AS B141	EA		REF									-15 4-12	63
X2	H		74409936484							D	B639	SLIDER: 07264; A14033	EA		2									-15 4-12	61
P	H		74400543361							D	B640	BELT SET, PICKER: 07264; 814653	EA		1	1	2	3	1	2	3		3	-15 4-12	66
A	H	R								D	B641	PHOTOCELL ASSEM-BLY: 07264; A14995T2	EA		2									-15 4-12	15
C	H		53058038232							*	B642	SETSCREW: 96906; MS51029-9	EA		2									-15 4-12	14
P	H		59409772717							E	B643 M	CONTACT,: ELECTRICAL 00779; 42927-1	EA		16	6	9	12	6	9	12		36	-15 4-12	15.1
P	H		74409954627							E	B644	SEMI-CONDUCTOR, PHOTO: 07264; A32523T1	EA		4	4	8	12	4	8	12		12	-15 4-12	15.2
C	H		53108254226							D	B645	WASHER, NYLON: 95987; NW6-3124	EA		1									-15 4-12	28
C	H		53409335752							D	B646A	PLUNGER, SPRING: 02116; NS54NO11-03	EA		2									-15 4-12	60
X2	H									D	B647	PULLEY TIMING: 07264: A34054	EA		1									-15 4-12	49

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	H									*	B648	SETSCREW: 96906; M851023-49	EA		2									-15 4-12	48
P	H		3110-00-931-8644							D	B650	BEARING, BALL: 21335; SSPP2	EA		4	4	8	12	4	8	12		8	-15 4-12	67
P	H		3110-00-807-4221							D	B649M	BEARING: 43334; SSZ99R6XR1C	EA		4	4	8	12	4	8	12		12	-15 4-12	54
P	H		59459297847							D	B651	SOLENOID: 18482; TM1365	EA		1	1	2	3	1	2	3		3	-15 4-12	31
C	H									*	B652	SCREW, MACHINE: 96906; MS35233-28	EA		12									-15 4-12	29
			53100111041							*	B653	WASHER, LOCK: SAME AS B603	EA		REF									-15 4-12	30
P	H		62501679571							D	B654	SOCKET, LAMP: 07264; 814998T3	EA		1	1	1	1	1	1	1		3	-15 4-12	5
			53055505002							*	B655	SCREW, MACHINE: SAME AS 8252	EA		REF									-15 4-12	3
			53100429609							*	B656	WASHER, LOCK: SAME AS 8141	EA		REF									-15 4-12	4
			59409379600							E	B657 M	CONTACT, ELECTRICAL SAME AS 8643 M	EA		REF									-15 4-12	15.1
P	H		74400506027							D	B658	COVER, GLASS: 07264; A14589	EA		1	1	2	3	1	2	3		1	-15 4-12	10
X2	H									D	B659	TUB ASSEMBLY, AIR: 07264; A34052	EA		1									-15 4-12	2

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53050603849							*	B660	SETSCREW: SAME AS B622	EA		REF									-15 4-12	1
P	H		62501679569							D	B661	SOCKET, LAMP: 07264; B14998T1	EA		2	1	1	1	1	1	1		6	-15 4-12	39
			53055505002							*	B662	SCREW, MACHINE: SAME AS B252	EA		REF									-15 4-12	37
			53100429609							*	B663	WASHER, LOCK: SAME AS B141	EA		REF									-15 4-12	38
			59409379600							E	B664 M	CONTACT, ELECTRICAL: SAME AS B643 M	EA		REF									-15 4-12	15.1
C	H									D	B665A	PIN, GROOVED: 73957; GP67-093-0625-12	EA		1									-15 4-12	47
										D	B666	SEMI-CONDUCTOR WITH LEADS: SAME AS B641	EA		REF									-15 4-12	36
			53058038232							*	B667	SETSCREW: SAME AS B642	EA		REF									-15 4-12	35
			59409379600							E	B668 M	CONTACT, ELECTRICAL: SAME AS B643 M	EA		REF									-15 4-12	15.1
			74409954627							E	B669	SEMI-CONDUCTOR, PHOTOEA SAME AS B644			REF									-15 4-12	36.1
P	H		62501679570							D	B670	SOCKET, LAMP: 07264; B14998T2	EA		1	1	1	1	1	1	1		1	-15 4-12	6
			53055505002							*	B671	SCREW, MACHINE: SAME AS B252	EA		REF									-15 4-12	3

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53100429609							*	B672	WASHER, LOCK: SAME AS B14 1	EA		REF									-15 4-12	4
			59409379600							E	B673 M	CONTACT,: ELECTRICAL SAME AS B643 M	EA		REF									-15 4-12	15.1
X2	H									D	B674	SHIELD, SEMI-CONDUCTOR: 07264; A14896	EA		1									-15 4-12	34
										*	B675	SCREW, MACHINE: SAME AS B652	EA		REF									-15 4-12	32
			53100111041							*	B676	WASHER, LOCK: SAME AS 8603	EA		REF									-15 4-12	33
			74409936482							D	B677	SPRING, GUIDE: SAME AS 8138	EA		REF									-15' 4-12	58
X2	H									*	B678	PLATE, NUT: 07264; A34101	EA		1									-15 4-12	59
C	H		53050227056							*	B679	SCREW, MACHINE: 96906; MS35249-21	EA		2									-15 4-12	57
X2	H									D	B679A	BRACKET, SUPPORT: 07264; A35627	EA		1									-15 4-7	4.4
C	H		53050574593							*	B679B	SCREW, MACHINE: 96906; MS16996-9	EA		5									-15 4-7	4.1
X2	H									C	B680	STRAP, STAY: 06383; SSC2B	EA		4									-15 4-7	9.1
X2	H		53408680835							C	B681	CLAMP, STAY: 06383; TM2	EA		2									-15 4-7	53

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	H		53050227136							*	B682	SCREW, MACHINE: 96906; MS35249-50	EA		2									-15 4-7	50
			53102714645							*	B682A	NUT,PLAIN,: HEXAGON SAME AS B583	EA		REF									-15 4-7	52
			53100541830							*	B682B	WASHER, LOCK: SAME AS B584	EA		REF									-15 4-7	51
X2	H		53400742072							C	B683	STAY STRAP: 06383; SST2	EA		6									-15 4-7	49
A	H	R								C	B684	CAPSTAN: ASSEMBLY 07264; C14706B	EA		1									-15 4-7	14
X2	H									*	B685	SPACER: 07264; A14785	EA		3									-15 4-7	12
C	H		53050685407							*	B686	SCREW, MACHINE: 96906; MS16996-16	EA		3									-15 4-7	10
			53100541831							*	B687	WASHER, LOCK: SAME AS B136	EA		REF									-15 4-7	11
X2	H									D	B688	SUPPORT, CAPSTAN: 07264; C14545P2	EA		1									-15 4-14	15
X2	H									D	B689 M	ROLLER: 07264; B14543P1T2	EA		1									-15 4-14	12
										*	B690	SETSCREW: SAME AS B616	EA		REF									-15 4-14	11
X2	H									D	B691	SHAFT: 07264; B14624C	EA		1									-15 4-14	13
X2	H									D	B692	SPACER, SLEEVE: 07264; A14889	EA		1									-15 4-14	8
			31109318644							D	B693	BEARING: SAME AS B650	EA		REF									-15 4-14	14

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53402562465							D	B694 M RING, RETAINING: SAME AS B618 M	EA		REF									-15 4-14	9
P	H		53405588698							D	B695 M RING, RETAINING: 79136; 500B-87MD	EA		1	*	*	*	*	*	*	*	5	-15 4-14	10
P	H		74400193978							D	B696 COVER, GLASS: 07264; A34057	EA		1	1	2	3	1	2	3		1	-15 4-14	5
A	H	R								D	B697 M PHOTOCELL ASSEMBLY: 07264; A14995T3	EA		1									-15 4-14	4.1
C	H		53057274791							*	B698 SETSCREW: 96906; MS51029-10	EA		1									-15 4-14	1
			59357386483							E	B699 M CONNECTOR, PLUG, ELECTRICAL: SAME AS B290C	EA		REF									-15 4-14	3
			59357386490							E	B700A CONTACT, ELECTRICAL: SAME AS B290D	EA		REF									-15 4-14	2
			74409954627							E	B701 SEMI-CONDUCTOR, PHOTO: SAME AS B644	EA		REF									-15 4-14	4
X2	H									D	B702 PULLEY, TIMING: 07264; A34053	EA		1									-15 4-14	7
										*	8703 SETSCREW: SAME AS B648	EA		REF									-15 4-14	6
X2	H									C	B704 GUIDE, CARD,EDGE: 07264; B14484T1	EA		1									-15 4-7	182
			53050227095							*	B705 SCREW, MACHINE: SAME AS B595	EA		REF									-15 4-7	181

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H									C	B705A PLUG, CAP: 07264; A35331	EA		1									-15 4-8.1	55
X2	H									C	B705B TUBING, 1/2 IN. INSIDE DIAMETER, 3 3/4 IN.LONG: 07264; 685000305	EA		2									-15 4-7	60
X2	H									C	B705C TUBING, 5/8 IN. INSIDE DIAMETER, 19 IN.LONG 07264; 685000307	EA		1									-15 4-7	55
X2	H									C	B705D TUBING, 5/16 IN. INSIDE DIAMETER, 8 1/2IN. LONG: 07264; 685000303	EA		1									-15 4-7	54.1
										C	B705E TUBING, 1/2 IN. INSIDE DIAMETER, 13 IN.LONG SAME AS B705B	EA		REF									-15 4-7	56
X2	H									C	B705F TUBING, 19/32 IN. INSIDE DIAMETER, 8 IN. LONG: 30327; B706	EA		2									-15 4-7	125
										C	B705G TUBING, 19/32 IN. - INSIDE DIAMETER, 19 IN.LONG: SAME AS B705F	EA		REF									-15 4-7	54
X2	H		473027B9094							C	B705H CLAMP, HOSE 88044; AN737IW34	EA		2									-15 4-7	232

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H									C	B706	BUMPER, CARD: 07264; A14588	EA		1									-15 4-7	180
C	H		53102714644							*	B707	NUT, PLAIN,: HEXAGON 96906; MS35649-64	EA		16									-15 4-7	179
C	H		53057195064							*	B708	SCREW, MACHINE: 96906; MS35249-37	EA		6									-15 4-7	176
			53108805976							*	B709	WASHER, FLAT: SAME AS B558	EA		REF									-15 4-7	177
			53100111041							*	B710	WASHER, LOCK: SAME AS 8603	EA		REF									-15 4-7	178
P	H		62407130237							C	B711	LAMP: 24455; 253	EA		4	2	4	6	2	4	6		200	-15 4-12	39.1
			62407130237							C	B712	LAMP: SAME AS B711	EA		REF									-15 4-12	5.1
			62407130237							C	B713	LAMP: SAME AS B711	EA		REF									-15 4-12	6.1
			62407130237							C	B714	LAMP: SAME AS B711	EA		REF									-15 4-13	48.1
A	H	R								C	B715	OFFSET ASSEMBLY: 07264; C14573P2A	EA		1									-15 4-7	17
C	H		53059591909							*	B716	SCREW, MACHINE: 96906; MS16996-11	EA		2									-15 4-7	15
			53100541831							*	B717	WASHER, LOCK: SAME AS B136	EA		REF									-15 4-7	16

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H									D	B718	SUPPORT, ROLLER: 07264; B14646P2	EA		1									-15 4-13	56
X2	H									D	B719	SUPPORT, BRACKET: 07264; B14595AP2A	EA		1									-15 4-13	55
C	H		53055434357							*	B720	SCREW, MACHINE: 96906; MS35234-63	EA		2									-15 4-13	51
			53100541831							*	B8721	WASHER, LOCK: SAME AS B136	EA		REF									-15 4-13	52
			53106191148							*	B721A	WASHER, FLAT: SAME AS B135	EA		REF									-15 4-13	53
X2	H									D	B722	BRACKET,: SOLENOID 07264; B14645T2	EA		1									-15 4-13	24
X2	H									*	B723	NUT, STRAP: 07264; A14700	EA		1									-15 4-13	15
C	H		53051803331							*	B724A	SETSCREW: 88044; AN526C1032-18	EA		2									-15 4-13	12
			53106191148							*	B725	WASHER, FLAT: SAME AS B135	EA		REF									-15 4-13	14
			53100541831							*	B726	WASHER, LOCK: SAME AS B136	EA		REF									-15 4-13	13
X2	H									D	B727A	CARD,DEFLECTOR ASSEMBLY: 07264; B35192P2	EA		1									-15 4-13	39
A	H	R	74400543362							D	B728	PIVOT ASSEMBLY: 07264;A14539A	EA		1									-15 4-13	20
X2	H									E	B729	WASHER, FLAT: 07264; B0033T30	EA		1									-15 4-13	11.1

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	H		74400505993							D	B730	ARM, PIVOT: 07264;A14647	EA		1	1	2	3	1	2	3		1	-15 4-13	19
X2	H									D	B730A	SPRING DEFLECTOR: 07264; 111057500	EA		1									-15 4-13	38.1
X2	H		74407986188							D	B731A	SLEEVE: 07264;A14592B	EA		1									-15 4-13	17
P	H		74409936524							D	B732	ROLLER ASSEMBLY: 07264; A14017P2T1	EA		1	1	2	3	1	2	3		1	-15 4-13	9
X2	H									D	B733	SHAFT, ROLLER: 07264; A14536	EA		1									-15 4-13	10
			53050546668							*	B734	SCREW, MACHINE: SAME AS B606	EA		REF									-15 4-13	6
			53100541830							*	B735	WASHER, LOCK: SAME AS B584	EA		REF									-15 4-13	7
P	H		53050878779							D	B736	PIN, PIVOT ARM: 07264; A14648	EA		1	1	2	3	1	2	3		1	-15 4-13	18
X2	H									D	B737	SPRING, OFFSET: 07264; B14674P2A	EA		1									-15 4-13	16
X2	H		74400506073							D	B738	ROLLER: 07264; A14670	EA		2									-15 4-13	26
C	H		53405988635							*	B739 M	RING, RETAINING: 79136; 5555-12	EA		2									-15 4-13	25
X2	H									D	B740	PIN, ROLLER: 07264; A14665	EA		2									-15 4-13	29
			53055505002							*	B740A	SCREW, MACHINE: SAME AS B252	EA		REF									-15 4-13	27
			53100429609							*	B740B	WASHER, LOCK: SAME AS B141	EA		REF									-15 4-13	28

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H									D	B741	PIN, PIVOT: 07264; A14593	EA		1									-15 4-13	38
C	H									*	B742 M	RING, RETAINING: 79136; 5555G9	EA		2									-15 4-13	37
P	H		59451345577							D	B743	SOLENOID: 28478; MX12-220	EA		1	1	2	3	1	2	3		3	-15 4-13	23
			53055505002							*	B744	SCREW, MACHINE: SAME AS B252	EA		REF									-15 4-13	21
			53100429609							*	B745	WASHER, LOCK: SAME AS B141	EA		REF									-15 4-13	22
P	H		31109788027							D	B746	BEARING, BALL: 43334; SSZ99NR6XRIC	EA		2	2	4	6	2	4	6		4	-15 4-13	8
C	H		53252816594							D	B747	GROMMET, RUBBER: 75543; 903	EA		3									-15 4-13	54
X2	H		53402056306							D	B748 M	CLAMP, CABLE: 95987; 3-16-3	EA		1									-15 4-13	4
X2	H		53402003036							D	B752	CLAMP, CABLE: 95987; 1-8-4	EA		7									-15 4-13	4.1
			53055505002							*	B753	SCREW, MACHINE: SAME AS 8252	EA		REF									-15 4-13	1
										*	B754	WASHER, D: SAME AS B576	EA		REF									-15 4-13	3
			53100429609							*	B755	WASHER, LOCK: SAME AS 8141	EA		REF									-15 4-13	2

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			62501679569							D	B756	SOCKET, LAMP: SAME AS B661	EA		REF										-15 4-13	48
			53055505002							*	B757	SCREW, MACHINE: SAME AS B252	EA		REF										-15 4-13	45
			53100429609							*	B758	WASHER, LOCK: SAME AS B141	EA		REF										-15 4-13	46
C	H		53107821349							*	B758A	WASHER, FLAT: 96906; MS15795-804	EA		1										-15 4-13	47
			59409379600							E	B759 M	CONTACT,: ELECTRICAL SAME AS B643 M	EA		REF										-15 4-13	5
A	H	R								D	B760	SWITCH ASSEMBLY: 07264; A14999	EA		1										-15 4-13	44.1
X2	H		53100156307							*	B761	NUT, STRAP: 07264; A11311	EA		1										-15 4-13	43
C	H		53055432762							*	B762	SCREW, MACHINE: 96906; MS35233-7	EA		2										-15 4-13	40
C	H		53109651792							*	B763 M	WASHER, FLAT: 96906; MS15795-802	EA		14										-15 4-13	42
C	H		53100583829							*	B764	WASHER, LOCK: 96906; MS35338-77	EA		10										-15 4-13	41
P	H		59309033424							E	B765	SWITCH,PUSH BUTTON 80207; SSL	EA		1	1	2	3	1	2	3		3	-15 4-13	44
P	H		59351029270							E	B766 M	CONTACT,: ELECTRICAL 00779; 66091-2	EA		24	5	10	15	5	10	15		48	-15 4-13	5.1

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	H		53408045043							D	B767	RING, RETAINING: 79136; 5555-25MD	EA		1										-15 4-13	11
C	H		53055434359							D	B768	SCREW, MACHINE: 96906; MS35234-65	EA		2										-15 4-13	49
C	H		53105966479							*	B769	NUT, LOCK: 13257; 22NC4-02	EA		2										-15 4-13	50
			59409379600							E	B770 M	CONTACT,: ELECTRICAL SAME AS B643 M	EA		REF										-15 4-13	5
X2	H									D	B771	STRAP, BONDING: 07264; A35292	EA		1										-15 4-13	36
C	H		53056394777							*	B772	SCREW, MACHINE: 96906; MS35233-27	EA		2										-15 4-13	30
										*	B773	SCREW, MACHINE: SAME AS B652	EA		REF										-15 4-13	31
			53108805976							*	B774	WASHER, FLAT: SAME AS B558	EA		REF										-15 4-13	32
			53102714644							*	B775	NUT, PLAIN, HEXAGON: SAME AS B707	EA		REF										-15 4-13	35
C	H		53102091366							*	B776	WASHER, LOCK: 96906; MS35335-58	EA		7										-15 4-13	33, 34
X2	H									C	B777	ELEVATOR: ASSEMBLY 07264; D14708	EA		1										-15 4-7	43.1
			53050574593							*	B778	SCREW, MACHINE: SAME AS B679B	EA		REF										-15 4-7	26

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53100541831							*	B779	WASHER, LOCK: SAME AS 8136	EA		REF									-15 4-7	27
X1	H									D	B780	COLLAR, SHAFT: 93990; C50S	EA		1									-15 4-7	31
C	H		53058778739							*	B781	SETSCREW: 96906; MS51021-49	EA		1									-15 4-7	30
X1	H									D	B782	PACKING, PERFORMED: 75543 934	EA		1									-15 4-7	29
X1	H									D	B783	COLIAR: 93990;C12S	EA		1									-15 4-7	36
C	H									*	B784	SETSCREW: 96906; MS51021-21	EA		1									-15 4-7	35
X1	H									D	B785	SHAFT, SLIDE: 07264; B14798	EA		1									-15 4-7	34
X1	H		74409179821							D	B786	HANGER, SPRING: 07264; A32441	EA		1									-15 4-7	37
X1	H									D	B787	PLATE, BACKER: 07264, C14534B	EA		1									-15 4-7	43
			53057195064							*	B788	SCREW, MACHINE: SAME AS B708	EA		REF									-15 4-7	42
X1	H									D	B789	ELEVATOR,: STACKER 07264; D14664T2	EA		1									-15 4-7	44
X1	H		53609982928							D	B790A	SPRING, STACKER: 07264;A14398	EA		1									-15 4-7	38

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X1	H									D	B791	RETAINER, SPRING: 07264; A14655	EA		1									-15 4-7	41
			53050546650							*	B792	SCREW, MACHINE: SAME AS B557	EA		REF									-15 4-7	39
			53100111041							*	B793	WASHER, LOCK: SAME AS 8603	EA		REF									-15 4-7	40
X1	H		31109839655							D	B794	BEARING, B1LL 96881; A81420NBP	EA		2									-15 4-7	33
X1	H									D	B795	BUMPER, RUBBER. 07264; A14877	EA		1									-15 4-7	32
M	H									C	B796	HARNESS ASSEMBLY: 07264; C14994A	EA		1									-15 4-7	49.1
X2	H									D	B797	BRACKET,: CONNECTOR 07264; C14746B	EA		1									-15 4-7	49.15
X2	H									D	B798	CLAMP, BRACKET: 07264; 814863A	EA		2									-15 4-7	49.5
										*	B798A	SCREW, MACHINE: SAME AS B652	EA		REF									-15 4-7	49.3
			53100111041							*	B798B	WASHER, LOCK: SAME AS 8603	EA		REF									-15 4-7	49.4
			53108805976							*	B798C	WASHER, FLAT: SAME AS 8558	EA		REF									-15 4-7	49.6
M	H									D	B799	HARNESS, WIRING: 07264; X14979A	EA		1									-15 4-7	49.2
P	H		59351028114							E	B800	CONNECTOR, - RECEPTACLE, ELECTRICAL: 81312; MRE50P95J6TY34	EA		1	1	1	1	1	1	1		3	-15 4-7	149
C	H									*	B801	NUT, PLAIN,: HEXAGON 96906; MS35649-44	EA		12									-15 4-7	147.1

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	H		53059590379							*	B802 SCREW, MACHINE: 96906; MS16995-10	EA		8									-15 4-7	147

166.1

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53100429609		.					*	B803 WASHER, LOCK: SAME AS B141	EA		REF									-15 4-7	147.2
P	H		59351028115							E	B804 CONNECTOR, - RECEPTACLE, ELECTRICAL: 81312; MRE75P95J6TY34	EA		1	1	1	1	1	1	1			3 4-7	-15 148
										*	B805 NUT, PLAIN, HEXAGON: SAME AS B801	EA		REF									-15 4-7	147.1
			53059590379							*	B806 SCREW, MACHINE: SAME AS B802	EA		REF									-15 4-7	147
			53100429609							*	B807 WASHER, LOCK: SAME AS 8141	EA		REF									-15 4-7	147.2
										E	B808 M CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS B548 M	EA		REF									-15 4-7	169.1
X2	H									*	B809 CLIP, CONNECTOR MOUNTING: 07264; A14678	EA		1									-15 4-7	169
			53056394777							*	B810 SCREW, MACHINE: SAME AS B772	EA		REF									-15 4-7	167
			53100111041							*	B811 WASHER, LOCK: SAME AS B603	EA		REF									-15 4-7	168
			59991338954							E	B812A CONTACT, ELECTRICAL SAME AS B549 M	EA		REF									-15 4-7	169.2
C	H		59402048966							E	B813 M TERMINAL, LUG: 00779; 31885	EA		7									-15 4-7	154
			53056208158							*	B813A SCREW, MACHINE SAME AS B601	EA		REF									-15 4-7	150
			53100111041							*	B813B WASHER, LOCK: SAME AS B603	EA		REF									-15 4-7	152

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53108805976							*	B813C WASHER, FLAT: SAME AS B558	EA		REF									-15 4-7	151
			53102091366							*	B813D WASHER, LOCK: SAME AS B776	EA		REF									-15 4-7	153

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	H		59358830218							E	B814 CONNECTOR, PLUG, ELECTRICAL: 71468; DBMF2SS	EA		3	1	1	1	1	1	1		9	-15 4-7	49.9
										*	B815 SCREW, MACHINE: SAME AS B547	EA		REF									-15 4-7	49.7
			53100583829							*	B816 WASHER, LOCK: SAME AS B764	EA		REF									-15 4-7	49.8
			53105956761							*	B816A WASHER, FLAT: SAME AS B763 M	EA		REF									-15 4-7	49.10
			59358830218							E	B817 CONNECTOR, PLUG, ELECTRICAL: SAME AS B814	EA		REF									-15 4-7	49.19
										*	B818 SCREW, MACHINE: SAME AS B547	EA		REF									-15 4-7	49.7
			53100583829							*	B819 WASHER, LOCK: SAME AS B764	EA		REF									-15 4-7	49.8
			53105956761							*	B819A WASHER, FLAT: SAME AS B763 M	EA		REF									-15 4-7	49.10
			59358830218							E	B820 CONNECTOR, PLUG, ELECTRICAL: SAME AS B814	EA		REF									-15 4-7	49.11
										*	B821 SCREW, MACHINE: SAME AS B547	EA		REF									-15 4-7	49.7
			53100583829							*	B822 WASHER, LOCK: SAME AS B764	EA		REF									-15 4-7	49.8
			53105956761							*	B822A WASHER, FLAT: SAME AS B763 M	EA		REF									-15 4-7	49.10
P	H		59357166512							E	B823 CONNECTOR, PLUG, ELECTRICAL: 71468; DBM25S	EA		1	1	1	1	1	1	1		3	-15 4-7	49.18

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H		59357224350							E	B824 HOOD, CONNECTOR: 71468; DB24659	EA		1									-15 4-7	49.17

168.1

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H		59356310873							E	B825 LOCK, SCREW: 71468; 20419	EA		2									-15 4-7	49.16
X2	H		59357320221							E	B826 M TAPER PIN BLOCK: 00779; 480064-1	EA		3									-15 4-7	146
			53102714644							*	B827 NUT, PLAIN,: HEXAGON SAME AS B707	EA		REF									-15 4-7	145
			53056208158							*	B828 SCREW, MACHINE: SAME AS B601	EA		REF									-15 4-7	142
			53108805976							*	B829 WASHER, FLAT: SAME AS B558	EA		REF									-15 4-7	143
			53100111041							*	B830 WASHER, LOCK: SAME AS B603	EA		REF									-15 4-7	144
			59357320221							E	B831 M TAPER PIN BLOCK: SAME AS B826 M	EA		REF									-15 4-7	141
			53056208158							*	B832 SCREW', MACHINE: SAME AS B601	EA		REF									-15 4-7	63
			53108805976							*	B833 WASHER, FLAT: SAME AS B558	EA		REF									-15 4-7	65
			53100111041							*	B834 WASHER, LOCK: SAME AS B603	EA		REF									-15 4-7	64
			59357320221							E	B835 M TAPER PIN BLOCK: SAME AS B826 M	EA		REF									-15 4-7	166

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(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53102714644							*	B836	NUT, PLAIN,: HEXAGON SAME AS B707	EA		REF									-15 4-7	 145
			53056208158							*	B837	SCREW, MACHINE: SAME AS B601	EA		REF									-15 4-7	 142
			53108805976							*	B838	WASHER, FLAT: SAME AS 2558	EA		REF									-15 4-7	 143
			53100111041							*	B839	WASHER, LOCK: SAME AS B603	EA		REF									-15 4-7	 144
			59351029270							E	B840 M	CONTACT,: ELECTRICAL SAME AS B766 M	EA		REF									-15 4-7	 141.1
			53400742072							E	B841	STAY STRAP: SAME AS B683	EA		REF									-15 4-7	 49
A	H	R								E	B842	CONNECTOR BRACKET ASSEMBLY: 07264; C14996A	EA		1									-15 4-7	 165.1
C	H		53055582865							*	B843	SCREW, MACHINE: 96906; MS35233-30	EA		6									-15 4-7	 163
			53100111041							*	B844	WASHER, LOCK: SAME AS B603	EA		REF									-15 4-7	 164
P	H		59052792649							F	B845	RESISTOR, FIXED, COMPOSITION: 81349; RC32GF181J	EA		1	1	2	3	1	2	3		3	-15 4-7	 156
X2	H									F	B846	TERMINAL, STUD: 71279; 1581-1	EA		4									-15 4-7	 162
			53102714644							*	B847	NUT, PLAIN, HEXAGON SAME AS B707	EA		REF									-15 4-7	 160

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53100111041							*	B848	WASHER, LOCK: SAME AS B603	EA		REF									-15 4-7	 161
P	H		59059905063							F	B849	RESISTOR, FLYED, -WIRE WOUND: 02985;TM50-70-3PCT	EA		1	1	2	3	1	2	3		3	-15 4-7	 155
										*	B850	NUT, PLAIN, HEXAGON: SAME AS B801	EA		REF									-15 4-7	 155.1
			53055767493							*	B851 M	SCREW, MACHINE: SAME AS B625	EA		REF									-15 4-7	 155.2
			53100429609							*	B852	WASHER, LOCK: SAME AS B141	EA		REF									-15 4-7	 155.3
X2	H									F	B853	BRACKET, CONNECTOR: 07264; C14726C	EA		1									-15 4-7	 165
			53252816594							F	B854	GROMMET, RUBBER: SAME AS B747	EA		REF									-15 4-7	 164.1
X2	H		53400526287							F	B855	CLIP, MOUNTING: 99378: 100-:200-12A6	EA		1									-15 4-7	 159
										*	B856	NUT, PLAIN, HEXAGON: SAME AS B801	EA		REF									-15 4-7	 158
			53055767493							*	B857 M	SCREW, MACHINE: SAME AS B625	EA		REF									-15 4-7	 158.2
			53100429609							*	B858	WASHER, LOCK: SAME AS B141	EA		REF									-15 4-7	 158.1
P	H		59101028035							F	B859	CAPACITOR, FIXED, ELECTROLYTIC: 56289; 45D10133HL	EA		1	1	2	3	1	2	3		3	-15 4-7	 157

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H		53408125393							D	B860	CLAMP: 71286; 30L1-4	EA		1									-15 4-7	49.14
										*	B861	SCREW, MACHINE: SAME AS B547	EA		REF									-15 4-7	49.12
			53100583829							*	B862	WASHER, LOCK: SAME AS B764	EA		REF									-15 4-7	49.13
X2	H									C	B863	MOUNT, PHOTOCELL: 07264; B14717	EA		1									-15 4-7	175
			53055157219							*	B864	SCREW, MACHINE: SAME AS B430	EA		REF									-15 4-7	170
			53103429609							*	B865	WASHER, LOCK: SAME AS B141	EA		REF									-15 4-7	171
										*	B865A	WASHER, FLAT: SAME AS B280N1	EA		REF									-15 4-7	172
A	H	R								C	B866	SEMI-CONDUCTOR WITH LEADS: 07264; A14995T1	EA		1									-15 4-7	174
			53057210899							*	B867	SETSCREW: SAME AS B306	EA		REF									-15 4-7	173
			59409379600							D	B868 M	CONTACT, ELECTRICAL: SAME AS 8643 M	EA		REF									-15 4-7	174.1
			74409954627							D	B869	SEMI-CONDUCTOR, PHOTO: SAME AS B644	EA		REF									-15 4-7	174.2
A	H	R								C	B870	CHASSIS ASSEMBLY: 07264; X14781B	EA		1									-15 4-7	140.1
C	H		53109037570							*	B871	NUT, CAPTIVE: 96906; M824679-87	EA		B									-15 4-7	73

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	H									*	B872	WASHER, LOCK 96906; MS35338-84	EA		11									-15 4-7	74
C	H		53105432870							*	B873	WASHER, FLAT: 96906; MS15795-314	EA		4									-15 4-7	74.1
A	H	R								D	B874 M	PUMP VACUUM - ASSEMBLY: 07264; C14774A	EA		1									-15 4-7	134.1
C	H									*	B875	BOLT, MACHINE: 96906; MS35307-5	EA		4									-15 4-7	119.1
C	H		53105825677							*	B876	WASHER, FLAT: 96906; MS15795-810	EA		14									-15 4-7	120.1
C	H		53100426758							*	B877	WASHER, LOCK: 96906; MS35338-82	EA		14									-15 4-7	120
X2	H									E	B878	MOUNT, FLANGE: 07264; B14739	EA		1									-15 4-7	121
C	H		53056882018							*	B879	SCREW, MACHINE: 96906; MS35308-7	EA		4									-15 4-7	119
			53105825677							*	B880A	WASHER, FLAT: SAME AS B876	EA		REF									-15 4-7	120.1
			53100426758							*	B881	WASHER, LOCK: SAME AS B877	EA		REF									-15 4-7	120
X2	H									E	B882	PULLEY, 60 CYCLE: 07264; B14702A	EA		1									-15 4-7	118
C	H		53057271282							*	B883	SETSCREW: 96906; MS51031-49	EA		1									-15 4-7	117
P	H	R	7040-00-148-6919							E	B883A	PUMP, VACUUM: 07264; A34138	EA		1									-15 4-7	134

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H									F	B883B BODY: 24123; B1321B	EA		1									-15 4-14.1	1
X2	H									F	B883C END PLATE DRIVE: 24123; AC636	EA		1									-15 4-14.1	2
X2	H									F	B883D ENDEND PLATE: DEAD 24123; AC635	EA		1									-15 4-14.1	3
X2	H									F	B883E ROTOR ASSEMBLY: 24123; AC647	EA		1									-15 4-14.1	4
X2	H									F	B883F VANE: 24123; AASIOA	EA		4									-15 4-14.1	5
X2	H									F	B883G DEFLECTOR: 24123; AC649	EA		2									-15 4-14.1	6
P	H		31108290074							F	B883H BEARING: 24123: AC416	EA		2	4	8	12	4	8	12		4	-15 4-14.1	7
X2	H									F	B883I SPRING, BELLEVILLE: 24123; AC657	EA		2									-15 4-14.1	8
X2	H									F	B883K RING RETAINING: 24123; AC658	EA		I									-15 4-14.1	9
C	H									F	B883L WASHER: 24123; AC659	EA		1									-15 4-14.1	10
X2	H									F	B883M END CAP: 24123; AC639	EA		1									-15 4-14.1	11
P	H		43109861238							F	B883N GASKET, SPACER: 24123; B330	EA		1	*	*	*	*	*	*		5	-15 4-14.1	12

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	H		41408038997							F	B883P COOLING FAN: 24123; B340C1-2	EA		1	1	2	3	1	2	3		2	-15 4-14.1	13
X2	H		47300119928							E	B884 REDUCER, BRASS: 79470; 3226X4	EA		1									-15 4-7	122
X2	H		47309327352							E	B884A FITTING, TUBE: 30327; 269P1-2X3-8	EA		2									-15 4-7	133
X2	H		47302221837							E	B885 NIPPLE, BRASS: 79470; 3326X4	EA		3									-15 4-7	124.128, 131
X2	H		47304713102							E	B886 TEE, BRASS: 79470; 3700X4	EA		1									-15 4-7	130
X2	H		47309158176							E	B887 FITTING, HOSE: 30327; KA06-04MB	EA		2									-15 4-7	126,129
C	H		53409375381							E	B888 RING, RETAINING: 80756; RS177S	EA		4									-15 4-7	118.1
P	H		41304613891							E	B889 MUFFLER ASSEMBLY: 24123; AB609B	EA		1	2	4	6	2	4	6		2	-15 4-7	132
X2	H									F	B890 COVER: 24123; AV81OA	EA		1									-15 4-6.1	6
M	H									F	B891 GASKET: 24123; AA404	EA		1									-15 4-6.1	5
X2	H									F	B892 JAR ALUMINUM: 24123; AA132	EA		1									-15 4-6.1	1
P	H		43109571967							F	B893 ELEMENT MUFFLER: ASSEMBLY: 24123: AC434	EA		1	1	2	3	1	2	3		2	-15 4-6.1	9
X2	H									G	B893A STUD: 24123; AC396	EA		1									-15 4-6.1	7
X2	H									G	B893B END CAP: 24123; AC394	EA		1									-15 4-6.1	8

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H									G	B893C MUFFLER PLATE: 24123: AC395	EA		1									-15 4-6.1	3
P	H		53309973024							G	B893D FILTER, CARTRIDGE: 24123; AC393	EA		1	*	*	*	*	*	*		5	-15 4-6.1	2
X2	H									G	B893E COUPLING: 24123; AC391	EA		1									-15 4-6.1	4

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H		47302778256							E	B894 ELBOW, BRASS: 79470; 3500X4	EA		2									-15 4-7	123
X2	H		47300444040							E	B895 CONNECTOR,: BRASS 79470; 3400X4	EA		1									-15 4-7	127
X	H									D	B896 CHASSIS: 07264; X14740D	EA		1									-15 4-7	140
X2	H									D	B897 SHOCK MOUNT: 92850; 31-2172	EA		4									-15 4-7	75
			53109037570							*	B898 NUT, CAPTIVE: SAME AS B871	EA		REF									-15 4-7	73
										*	B899A WASHER, LOCK: SAME AS B872	EA		REF									-15 4-7	74
X2	H		53408680834							D	B900 CLAMP, STAY: 06383; TM1	EA		6									-15 4-7	59
			53050227095							*	B901 SCREW, MACHINE: 8AME AS 595	EA		REF									-15 4-7	57
			53108805976							*	B902A WASHER, FLAT: SAME AS 8558	EA		REF									-15 4-7	59.1
P	H		30309428532							D	B903 BELT, POSIVE, DRIVE: 76474; 260X037	EA		1	1	2	3	1	2	3		3	-15 4-7	102
A	H	R								D	B904 MOTOR ASSEMBLY: 07264; C34076A	EA		1									-15 4-7	112.1
C	H		53059900668							*	B906 CREW, MACHINE: 96906; M816995-81	EA		3									-15 4-7	109

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	H									*	B907	SCREW, MACHINE: 96906; M824671-83	EA		1									-15 4-7	111
										*	B908	WASHER, LOCK: SAME AS B872	EA		REF									-15 4-7	110
P	H	T	61054381927							E	B909	MOTOR: 07264; A14891	EA		1	*	*	*	1	1	2		1	-15 4-7	112
X2	D									F	B909A	ROTOR ASSEMBLY: 50380; 55B35	EA		1									-15 4-7	230
X2	D									F	B909B	FRAME: 50380; 46806	EA		1									-15 4-7	234
X2	D									F	B909C	SHIELD, FE: 50380; 840B01	EA		1									-15 4-7	208
X2	D									F	B909D	SHIELD, FE: 50380; 1B04	EA		1									-15 4-7	220
X2	D									*	B909E	STUD. 50380; 52938	EA		4									-15 4-7	207
P	H		7440-216-5846							F	B909F	SWITCH PLATE: 50380; 81B01	EA		1	*	*	*	*	*	*		5	-15 4-7	212
X2	D									*	B909G	SCREW, MACHINE: 50380; 10P	EA		5									4-7	211
P	D		59304361178							F	B909H	SWITCH, CUTOUT: 50380; 26P04	EA		1								3	-15 4-7	231
P	D		31101448589							F	B909J	BEARING BALL: 50380: 51881	EA		2								2	-15 4-7	226, 229

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	D									F	B909K	CLAMP, BEARING: 50380; 83514	EA		1									-15 4-7	223
X2	D									*	B909L	SCREW, MACHINE: 50380; 54127	EA		2									-15 4-7	221
X2	D									*	B909M	WASHER, LOCK: 50380; 53220	EA		2									-15 4-7	222
X2	D									F	B909N	COLLAR, CLAMP: 50380; 30A	EA		1									-15 4-7	227
X2	D									F	B909P	FAN: 50380; 49A02	EA		1									-15 4-7	228
P	D		59107285227							F	B909Q	CONDENSER: 37942; 64814	EA		1								5	-15 4-7	206
X2	D									F	B909R	HOUSING, CONDENSER: 50380; 40A	EA		1									-15 4-7	205
										*	B909S	SCREW, MACHINE: SAME AS B909G	EA		REF									-15 4-7	204
X2	D									F	B909T	BAFFLE: 50380; 34B	EA		1									-15 4-7	232
M	D									F	B909U	NAMEPLATE: 50380; 35P01	EA		1									-15 4-7	216
X2	D									*	B909V	SCREW, MACHINE: 50380; 13P	EA		4									-15 4-7	214
X2	D									F	B909W	COVER, TERMINAL: 50380; 24A	EA		1									-15 4-7	215

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
										*	B909X SCREW, MACHINE: SAME AS B909V	EA		REF									-15 4-7	214
X2	D									F	B909Y SHIM, BEARING: 50380; 50445	EA		2									-15 4-7	210 225
X2	D									F	B909Z PIN STATOR: 50380; 762281	EA		1									-15 4-7	233
X2	D									F	B9092 SPRING LOAD: 50380; 57081	EA		2									-15 4-7	209 224
X2	D									F	B9093 PLUG, HOLE: 50380; 114P01	EA		2									-15 4-7	213
X2	D									P	B9094 FRAME, MOTOR: 50380; CS	EA		1									-15 4-7	225
X2	H									E	B910 PULLEY 60 CYCLE: 07264; A14888	EA		1									-15 4-7	108
C	H		53052924558							*	B911 SETSCREW: 88044; AN565D616-8	EA		2									-15 4-7	104
X2	H									E	B911A PULLEY 50 CYCLE: 07264; A14887	EA		1									-15 4-7	108.1
X2	H		53055765807							*	B911B DOLT, MACHINE: 96906; MS35307-11	EA		3									-15 4-7	104.1
			53105825677							*	B911C WASHER, FIAT: SAME AS 8876	EA		REF									-15 4-7	104.2
			53100426758							*	B911D WASHER, LOCK: SAME AS 8877	EA		REF									-15 4-7	104.3
X2	H									E	B912 BUSHING 60 CYCLE: 07264; A14893	EA		1									-15 4-7	105
X2	H									E	B912A BUSHING 50 CYCLE: 07264; A14879	EA		1									-15 4-7	105.1
X2	H		74400543358							E	B913A PULLEY, DRIVE 60 CYCLE 07264; B14627A	EA		1									-15 4-7	103.1
C	H									*	B914 SETSCREW: 96906; MS51023-47	EA		4									-15 4-7	101
X2	H		74400577545							E	B914A PULLEY ASSEMBLY 50 CYCLE: 07264; B34085	EA		1									-15 4-7	103.2
										*	B914B SETSCREW: SAME AS 8914	EA		REF									-15 4-7	101
X2	H									F	B914C HUB, PULLEY: 07264; 834081	EA		1									-15 4-7	103.4
X2	H									F	B914D PULLEY: 07264; 834083	EA		1									-15 4-7	103.3
C	H		53150886280							E	B915 KEY, MACHINE: 96906; MS20067-9s	EA		1									-15 4-7	106
			53409375381							E	B916 RING, RETAINING: SAME AS B888	EA		REF									-15 4-7	103
A	H	R								D	B917 IDLER ASSEMBLY: 07264; B14776	EA		1									-15 4-7	100.1

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H									*	B918 NUT, PIATE: 07264; A14890	EA		1									-15 4-7	95
C	H		53059887834							*	B919 SCREW, MACHINE: 96906; MS16995-53	EA		3									-15 4-7	93
			53105825677							*	B919A WASHER, FLAT: SAME AS B876	EA		REF									-15 4-7	94.1
			53100426758							*	B920 WASHER, LOCK: SAME AS B877	EA		REF									-15 4-7	94
X2	H									E	B921 M BRACKET, IDLER: 07264; B14738A	EA		1									-15 4-7	100
X2	H									E	B922 SHAFT, IDLER: 07264; A14598A	EA		1									-15 4-7	98
X2	H		74400505992							E	B923 PULLEY, IDLER: 07264; A14597A	EA		1									-15 4-7	99
C	H									*	B924 RING, RETAINING: 79136; 5100-50	EA		1									-15 4-7	96
			31108074221							E	B925AM BEARING: SAME AS B649 M	EA		REF									-15 4-7	97
C	H									E	B926 SHIM: 07264; C3817CT58	EA		1									-15 4-7	97.1
X2	H									D	B927 MOUNT, PUNCH: 07264; B14775	EA		1									-15 4-7	72
C	H		53059887841							*	B928 SCREW, MACHINE: 96906; MS16995-67	EA		2									-15 4-7	70

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	H									D	B929 STUD, CONTACT, THREAD: 07264; A34102	EA		1									-15 4-7	71
P	H		30300876583							D	B930 BELT, POSITIVE, DRIVE 60 CYCLE: 76474; 285L075	EA		1	2	4	6	2	4	6		2	-15 4-7	107
P	H		30300876608							D	B930A BELT, POSITIVE, DRIVE 50 CYCLE: 76474; 300L075	EA		1	1	2	3	1	2	3		2	-15 4-7	107.1
X2	H		74400506052							D	B931 RESTRICTOR, AIR: 07264; A14782A	EA		1									-15 4-7	86
X2	H									D	B932 TUBE, CHAD: 07264; A14723A	EA		1									-15 4-7	116
X2	H									D	B933A SPRING, COMPRESSION: 07264; B14870	EA		1									-15 4-7	115
C	H									*	B934 RING, RETAINING: 79136; 5555-75M	EA		1									-15 4-7	114
M	H									D	B935 GASKET: ,07264; A14871	EA		1									-15 4-7	113
C	H		53154892590							D	B936 PIN, SPRING: 96906; MS171707	EA		3									-15 4-7	46
A	H	R								D	B937 EXHAUSTER ASSEMBLY: 07264; C14770G1	EA		1									-15 4-7	84
C	H		53055434363							*	B938 SCREW, MACHINE: 96906; MS35234-69	EA		4									-15 4-7	81
C	H									*	B939 STANDOFF: 07264; A14886	EA		4									-15 4-7	85

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL.Y ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53106191148							*	B940	WASHER, FLAT: SAME AS B135	EA		REF									-15 4-7	83
			53100541831							*	B941	WASHER, LOCK: SAME AS B136	EA		REF									-15 4-7	82
X2	H									E	B942	NOZZLE, MIXER 07264; D14771T1	EA		1									-15 4-7	84.1
X2	H									E	B943	PLATE, INLET: 07264; C14772T3	EA		1									-15 4-7	84.2
X2	H		53407275151							D	B944	STAY STRAP: 06383; SST1	EA		6									-15 4-7	58
X2	H									D	B945	NIPPLE, BRASS: 79470; 3326-6	EA		1									-15 4-7	88
			47309327352							D	B946A	FITTING TUBE: SAME AS B884A	EA		REF									-15 4-7	87
P	H		48209529376							D	B947	VALVE, RELIEF: 24123; AA840	EA		1	1	2	3	1	2	3		1	-15 4-7	91.1
X1	H									E	B948	BODY, VALVE: 24123; AA841	EA		1									-15 4-7	91
X1	H									E	B949	VALVE: 24123; AA842	EA		1									-15 4-7	92
X1	H									E	B950	SPRING, COMPRESSION: 24123; AA844	EA		1									-15 4-7	90
C	H									*	B951	NUT, HEXAGON, SELF-LOCKING: 24123; AA843	EA		2									-15 4-7	89
X2	H									D	B952	TERMINAL BLOCK: 75382; GMF60-4	EA		1									-15 4-7	139

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(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL.Y ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H		59405028294							*	B953	STRADDLE PLATE: 75382; 600SP	EA		4									-15 4-7	138
			53056208158							*	B954	SCREW, MACHINE: SAME AS B601	EA		REF									-15 4-7	136
			53100111041							*	B955	WASHER, LOCK: SAME AS B603	EA		REF									-15 4-7	137
X2	H									D	B956	INSULATOR, STRIP: 75382; MS600-4	EA		1									-15 4-7	139.1
X2	H									D	B957	COVER, TERMINAL: 84971; TAI5M02-04	EA		1									-15 4-7	135
X2	H									D	B958	BONDING STRAP: 07264; A35293	EA		1									-15 4-7	80
			53056208158							*	B959	SCREW, MACHINE: SAME AS B601	EA		REF									-15 4-7	76
										*	B960	SCREW, MACHINE: SAME AS B652	EA		REF									-15 4-7	66
			53108805976							*	B961	WASHER, FLAT: SAME AS B558	EA		REF									-15 4-7	67,78
			53100111041							*	B962	WASHER, LOCK: SAME AS B603	EA		REF									-15 4-7	68,77
			53102091366							*	B963	WASHER, LOCK: SAME AS B776	EA		REF									-15 4-7	69,79
A	H	R								C	B964	CHAD BAG ASSEMBLY: 07264; C14722A	EA		1									-15 4-1	42
C	H									*	B964A	SCREW, MACHINE: 58189; 639123-468	EA		8									-15 4-1	39

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(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL.Y ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53109338119							*	B964B WASHER, LOCK: SAME AS B102	EA		REF									-15 4-1	 41
			53101670812							*	B964C WASHER, LOCK SAME AS B080	EA		REF									-15 4-1	 40

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184.1

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	H		74409936380							D	B965 BAG, CHAD: 07264; C14143P2	EA		1	1	1	2	1	1	2		3	-15 4-1	 61
X2	H									D	B966 COLLAR: 07264; C14736	EA		1									-15 4-1	 47
X2	H									D	B967 FLANGE: 07264; B14737	EA		1									-15 4-1	 48
C	H		53050546670							*	B968 SCREW, MACHINE: 96906; MS35233-45	EA		2									-15 4-1	 44
			53106191148							*	B969 WASHER, FLAT: SAME AS B135	EA		REF									-15 4-1	 45
			53100541830							*	B970 WASHER, LOCK: SAME AS B584	EA		REF									-15 4-1	 46
P	H		59300522798							D	B971 SWITCH, PUSH: 91929; BZRWT04	EA		1	1	2	3	1	2	3		3	-15 4-1	 49
X2	H									*	B972 NUT, STRAP: 07264; A11540	EA		1									-15 4-1	 53
C	H		53055432776							*	B973 SCREW, MACHINE: 96906; MS35233-34	EA		2									-15 4-1	 50
			53108805976							*	B974 WASHER, FLAT: SAME AS B558	EA		REF									-15 4-1	 52
			53100111041							*	B975 WASHER, LOCK: SAME AS B603	EA		REF									-15 4-1	 51
X2	H									D	B976 BRACKET, MOUNTING: 07264; A14054	EA		1									-15 4-1	 54

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(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H									D	B977	BRACKET, SUPPORT: 07264; A14052P3	EA		3									-15 4-1	58
X2	H		53409982933							D	B978	SPRING: 07264: B14109	EA		3									-15 4-1	57
C	H									D	B979	WASHER 07264: A14051T2	EA		3									-15 4-1	59
C	H		53059836655							*	B980	SCREW, MACHINE: 96906; MS16998-35	EA		3									-15 4-1	60
			53106191148							*	B981	WASHER, FLAT: SAME AS B135	EA		REF									-15 4-1	56
C	H		53102089255							*	B982	NUT, HEXAGON, SELF-LOCK 72962; 79NM 02	EA		3									-15 4-1	55
X2	H									D	B983	BRACKET, BAG: 07264: D14445A	EA		1									-15 4-1	62
X2	H									D	B984	CLAMP, HOSE: 81646, 5201	EA		1									-15 4-1	43.1
			53402003036							C	B985	CLAMP, CABLE: SAME AS B752	EA		REF									-15 4-7	9
			53050546650							*	B986	SCREW, MACHINE: SAME AS B557	EA		REF									-15 4-7	6
										*	B987	WASHER, D: SAME AS B576	EA		REF									-15 4-7	8
			53100429609							*	B987A	WASHER, LOCK: SAME AS B141	EA		REF									-15 4-7	7
X2	H		53408192522							C	B988	BUMPER, RUBBER: 75543: 727R	EA		1									-15 4-7	201

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(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53050546650							*	B989	SCREW, MACHINE: SAME AS B557	EA		REF									-15 4-7	200
X2	H									C	B990	GROMMET RUBBER: 75543; 936	EA		1									-15 4-7	202
			47302778256							C	B991	ELBOW, BRASS: SAME AS B894	EA		REF									-15 4-7	62
X2	H									C	B992	NIPPLE: 07264; A14897	EA		1									-15 4-7	61
P	H		30300876584							C	B993	BELT, POSITIVE DRIVE: 76474; 100XL037	EA		2	4	8	12	4	8	12		4	-15 4-7	13,45
M	H									C	B993A	HARNESS, WIRING: 07264; C14864	EA		1									-15 4-7	217
			59402048966							D	B994 M	TERMINAL, LUG: SAME AS B813 M	EA		REF									-15 4-7	219
X2	H		59406365590							D	B995 M	TERMINAL LUG: 00779; 31890	EA		2									-15 4-7	218
X2	H									C	B997	GUIDE, EDGE: 07264; B14884T2	EA		1									-15 4-7	185
			53055582865							*	B998	SCREW, MACHINE: SAME AS B843	EA		REF									-15 4-7	183
			53100111041							*	B999	WASHER, LOCK: SAME AS B603	EA		REF									-15 4-7	184
X2	H									C	C001	BUMPER, GUARD: 07264; A34096	EA		1									-15 4-7	236

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(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UNIT PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H									C	C001A	BRACKET DAMPER: 07264; C35628	EA		1									-15 4-7	240
X2	H									C	C001B	DAMPER: 07264; A35626	EA		1									-15 4-7	239
C	H		53105432739							*	C001C	WASHER, LOCK: 96906; MS35333-72	EA		1									-15 4-7	238
			53102714645							*	C001D	NUT, PLAIN, HEXAGON: SAME AS B583	EA		REF									-15 4-7	237
X2	H									C	C001E	SPRING RELIEF: 07264; C35830	EA		1									-15 4-7	189.3
X2	H									C	C001F	DOUBLER: 07264; B35829	EA		1									-15 4-7	189.2
			53050546650							*	C001G	SCREW, MACHINE: SAME AS B557	EA		REF									-15 4-7	189.1
A	H	R								B	C002	CONTROL PANEL: 58189: A64006-001	EA		1									-15 4-1	19
C	H		53050546669							*	C003	SCREW, MACHINE: 96906; MS51957-44	EA		20									-15 4-1	16
			53105586207							*	C004 M	WASHER, FLAT: SAME AS B100A	EA		REF									-15 4-1	17
			53109338119							*	C005	WASHER, LOCK: SAME AS B102	EA		REF									-15 4-1	18
X2	H									C	C006	PANEL BLANK: 58189; A64016-001	EA		1									-15 4-3	20
A	H									C	C007	SWITCH, PUSH BUTTON: 96182; 1197-30	EA		1									-15 4-3	18
X2	H		66059410561							D	C005	SWITCH-LIGHT UNIT: 96182; 10EA1C1	EA		7									-15 4-3	

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(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UNIT PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	H		59309593427							D	C009	SWITCH ASSEMBLY: 96182; 10EF1	EA		7	1	2	3	1	2	3		21	-15 4-3	
X2	H									D	C010 M	COLORED BULB FILTER: 96182; 10ELWGGW	EA		1									-15 4-3	

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H									D	C011A DISPLAY SCREEN: 96182; 10EN1	EA		7									-15 4-3	
X2	H									D	C012A FRONT LENS: 96182; 10ER1T5V12START	EA		1									-15 4-3	
A	H									C	C013 SWITCH, PUSH BUTTON: 96182; 1197-31	EA		1									-15 4-3	17
			66059410561							D	C014 SWITCH-LIGHT UNIT: SAME AS C006	EA		REF									-15 4-3	
			59309593427							D	CO15 SWITCH ASSEMBLY: SAME AS C009	EA		REF									-15 4-3	
X2	H									D	C016 M COLORED BULB FILTER: 96182; 10ELR00R	EA		1									-15 4-3	
										D	C017A DISPLAY SCREEN: SAME AS C011A	EA		REF									-15 4-3	
X2	H									D	C018A FRONT LENS: 96182; 10ER1TSV12STOP	EA		1									-15 4-3	
A	H									C	C019 SWITCH, PUSH BUTTON: 96182; 1197-32	EA		1									-15 4-3	12
			66059410561							D	C020 SWITCH-LIGHT UNIT: SAME AS C008	EA		REF									-15 4-3	
			59309593427							D	C021 SWITCH ASSEMBLY: SAME AS C009	EA		REF									-15 4-3	
X2	H									D	C022A COLORED BULB FILTER: 96182; 10ELW00W	EA		2									-15 4-3	

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
										D	C023A DISPLAY SCREEN: SAME AS C011A	EA		REF									-15 4-3	
X2	H									D	C024A FRONT LENS: 96182; 10ERIT5V13ACPOWER	EA		1									-15 4-3	
A	H									C	C025 SWITCH, PUSH BUT-TON: 96182; 1197-33	EA		1									-15 4-3	14
			66059410561							D	C026 . SWITCH-LIGHT UNIT: SAME AS C008	EA		REF									-15 4-3	
			59309593427							D	C027 SWITCH ASSEMBLY: SAME AS C009	EA		REF									-15 4-3	
										D	C028A DISPLAY SCREEN: SAME AS C011A	EA		REF									-15 4-3	
X2	H									D	C029A FRONT LENS: 96182; 10ER1T5V13LAMP TEST	EA		1									-15 4-3	
A	H									C	C030 SWITCH, PUSH BUTTON: 96182; 1197-34	EA		1									-15 4-3	11
			66059410561							D	C031 SWITCH-LIGHT UNIT: SAME AS C008	EA		REF									-15 4-3	
			59309593427							D	C032 SWITCH ASSEMBLY: SAME AS C009	EA		REF									-15 4-3	
										D	C033A DISPLAY SCREEN: SAME AS C011A	EA		REF									-15 4-3	

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(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UNPK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H									D	C034A FRONT LENS: 96182; 10ERIT5V13AUDIBLERESET	EA		1									-15 4-3	
A	H									C	C035 SWITCH, PUSH BUTTON: 96182; 1197-35	EA		1									-15 4-3	15
			66059410561							D	C036 SWITCH-LIGHT UNIT: SAME AS C008	EA		REF									-15 4-3	
			59309593427							D	C037 SWITCH ASSEMBLY: SAME AS C009	EA		REF									-15 4-3	
										D	C038 M COLORED BULB FILTER: SAME AS C022A	EA		REF									-15 4-3	
										D	C039A DISPLAY SCREEN: SAME AS C011A	EA		REF									-15 4-3	
X2	H									D	C040A FRONT LENS: 96182; 10ER1T5V13SINGLEFEED	EA		1									-15 4-3	
A	H									C	C041 SWITCH, PUSH BUTTON: 96182: 1197-37	EA		1									-15 4-3	16
			66059410561							D	C042 SWITCH-LIGHT UNIT: SAME AS C008	EA		REF									-15 4-3	
			59309593427							D	C043 SWITCH ASSEMBLY: SAME AS C009	EA		REF									-15 4-3	
X2	H									D	C044A COLORED BULB FILTER 96182; 10ELA00A	EA		1									-15 4-3	
										D	C045A DISPLAY SCREEN: SAME AS C011A	EA		REF									-15 4-3	

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UNPK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H									D	C046A FRONT LENS: 96182; 10ER1T5V13LOCALTEST	EA		1									-15 4-3	
A	H									C	C047A LIGHT, INDICATOR: 96182; 80EA1F1WL2N13DC POWER	EA		1									-15 4-3	13
X2	H		62100195599							D	C048 HOUSING LIGHT CAP-SULE: 96182; 80EA1	EA		11									-15 4-3	
X2	H		62109273688							D	C049 FILTER COLOR: 96182; 8OEF1W	EA		1									-15 4-3	
X2	H									D	C051 FRONT LENS: 96182; 80EL2N13DC POWER	EA		1									-15 4-3	
A	H									C	C052A LIGHT, INDICATOR: 96182; 80EA1F1RL2N130UTSYN	EA		1									-15 4-3	5
			62100195599							D	C053 HOUSING LIGHT CAP-SULE: SAME AS C048	EA		REF									-15 4-3	
X2	H		62100119338							D	C054 FILTER, COLOR: 96182; 80EF1R	EA		7									-15 4-3	
X2	H									D	C056 FRONT LENS: 96182; 80EL2N 130UTSYN	EA		1									-15 4-3	
A	H									C	C057A LIGHT, INDICATOR: 96182; 80EA1FIRL2N13CARD ALARM	EA		1									-15 4-3	4

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(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			62100195599							D	C058	HOUSING LIGHT CAPSULE: SAME AS C048	EA		REF									-15 4-3	
			62100119338							D	C059	FILTER, COLOR: SAME AS C054	EA		REF									-15 4-3	
X2	H									D	C061	FRONT LENS: 96182; 80EL2N13CARDALARM	EA		1									-15 4-3	
A	H									C	C062A	LIGHT, INDICATOR: 96182; 80EA1F1AL2N13NOT ASSIGNED	EA		1									-15 4-3	1
			62100195599							D	C063	HOUSING LIGHT SAME AS C048	EA		REF									-15 4-3	
X2	H		62109273519							D	C064	FILTER, COLOR: 96182; 80EF1A	EA		3									-15 4-3	
X2	H									D	C066	FRONT LENS: 96182; 80EL2N13NOTASSIGNED	EA		1									-15 4-3	
A	H									C	C067A	LIGHT, INDICATOR: 96182; 80EA1F1RL2N13 MOTIONFAIL	EA		1									-15 4-3	6
			62100195599							D	C068	HOUSING LIGHT SAME AS C048	EA		REF									-15 4-3	
			62100119338							D	C069	FILTER, COLOR: SAME AS C054	EA		REF									-15 4-3	

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H									D	C071	FRONT LENS: 96182; 80EL2N13MOTIONFAIL	EA		1									-15 4-3	
A	H									C	C072A	LIGHT, INDICATOR: 96182; 80EA1F1AL2N12CHAD	EA		1									-15 4-3	3
			62100195599							D	C073	HOUSING LIGHT SAME AS C048	EA		REF									-15 4-3	
			62109273519							D	C074	FILTER, COLOR: SAME AS C064	EA		REF									-15 4-3	
X2	H									D	C076	FRONT LENS: 96182; 80EL2N12CHAD	EA		1									-15 4-3	
A	H									C	C077A	LIGHT, INDICATOR: 96182; 80EA1F1RL2N14 CODECONVERROR	EA		1									-15 4-3	10
			62100195599							D	C078	HOUSING LIGHT SAME AS C048	EA		REF									-15 4-3	
			62100119338							D	C079	FILTER, COLOR: SAME AS C054	EA		REF									-15 4-3	
X2	H									D	C081A	FRONT LENS: 96182;. 80EL2N14CODECONV ERROR	EA		1									-15 4-3	

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(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
A	H									C	CO82A LIGHT, INDICATOR: 96182; 80EA1F1RL2N13 PARITYERROR	EA		1									-15 4-3	7
			62100195599							D	C083 HOUSING LIGHT SAME AS C048	EA		REF									-15 4-3	
			62100119338							D	C084 FILTER, COLOR: SAME AS C054	EA		REF									-15 4-3	
X2	H									D	C086 FRONT LENS: 96182; 80EL2N13PARITY ERROR	EA		1									-15 4-3	
A	H									C	C087A LIGHT, INDICATOR: 96182; 80EA1F1RL2N13 PUNCHERROR	EA		1									-15 4-3	8
			52100195599							D	C088 HOUSING LIGHT CAPSULE: SAME AS C048	EA		REF									-15 4-3	
			62100119338							D	C089 FILTER, COLOR: SAME AS C054	EA		REF									-15 4-3	
X2	H									D	C091 M FRONT LENS: 96182; 80EL2N13PUNCH ERROR	EA		1									-15 4-3	
A	H									C	C092A LIGHT, INDICATOR: 96182; 80EA1F1AL2N13 HOPPERLOW	EA		1									-15 4-3	2
			62100195599							D	C093 HOUSING LIGHT CAPSULE: SAME AS C048	EA		REF									-15 4-3	

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			62109273519							D	C094 FILTER, COLOR: SAME AS C064	EA		REF									-15 4-3	
X2	H									D	C096 FRONT LENS: 96182; 80EL2N13HOPPER LOW	EA		1									-15 4-3	
A	H									C	C097A LIGHT, INDICATOR: 96182; 80EA1F1RL2N13 STEPFAIL	EA		1									-15 4-3	9
			62100195599							D	C098 HOUSING LIGHT CAPSULE: SAME AS C048	EA		REF									-15 4-3	
			62100119338							D	C099 FILTER, COLOR: SAME AS C054	EA		REF									-15 4-3	
X2	H									D	C101 FRONT LENS: 96182; 80EL2N13STEP FAIL	EA		1									-15 4-3	
P	H		62408614352							C	C102 M LAMP, INCANDESCENT: 08806; 330	EA		32	10	15	20	10	15	20		1800	-15 4-3	19
P	H		62409651381							C	C102A LAMP,INCANDESCENT: 08806:382	EA		2	1	2	3	1	2	3		100	-15 4-3	19.1
X2	H		53408454884							C	C102B CLAMP, NYLON: 71616; CPC1953-7B	EA		1									-15 4-3	24
			53109349765							*	C102C NUT,PLAIN,HEXAGON: SAME AS B082B	EA		REF									-15 4-3	21
			53109338120							*	C102D WASHER, LOCK: SAME AS B081	EA		REF									-15 4-3	22

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(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	H		53100593659							*	C102E	WASHER, FLAT: 88044; AN960C10	EA		13										-15 4-3	23
M	H									C	C103	WIRING HARNESS: 58189; A65137-001	EA		1										-15 4-1	67
A	H		74409335070							D	C104	CONTACT ASSEMBLY: 58189; A53847-001	EA		3										-15 4-1	63
X2	H									E	C105	BRACKET, ANGLE: 58189; A53846-001	EA		3										-15 4-1	84

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	H									*	C106	SCREW, EXTERNAL RELIEVED BODY: 80063; SMB546131	EA		8										-15 4-1	71
			53106389857							*	C107	WASHER, FLAT: SAME AS B090	EA		REF										-15 4-1	72
			53109296395							*	C108A	WASHER, LOCK: SAME AS B091	EA		REF										-15 4-1	73
X2	H									E	0109	INSULATOR, BUSHING: 16512; P550009-09	EA		230										-15 4-1	83
P	H		74400193468							D	C110	CONTACT, ELECTRICAL: 16512; 540362-06	EA		206	10	15	20	10	15	20		618	-15 4-1	79
C	H		59405039995							D	C111	TERMINAL, LUG: 96906; MS25036-1	EA		80									-15 4-3	25
X2	H		53400742072							D	C112	STRAP, LINE SUPPORT: 96906; MS17821-1-9	EA		36									-15 4-1	81
M	H									D	C113	PLATE, IDENTIFICATION: 59730; TC-125	EA		12									-15 4-1	82
C	H		59405773711							D	C113A	TERMINAL, LUG: 96906; MS25036-3	EA		1									-15 4-3	26
X2										D	C113B	CLAMP, CABLE: 12357; HP10N	EA		8									-15 4-1	78
										*	C113C	NUT, PLAIN, HEXAGON: SAME AS B430A	EA		REF									-15 4-1	74
C	H		53109338118							*	C113D	WASHER, LOCK: 96906; MS35338-135	EA		4									-15 4-1	75
C	H									*	C113E	WASHER, FLAT: 88044; AN960C4	EA		4									-15 4-1	76
C	H		53057637827							*	C113F	SCREW, MACHINE: 96906; MS51959-18	EA		4									-15 4-1	77

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H									D	C113G	PIN, KEYING 80063; SMB-546216	EA		4									-15 4-1	 80
A	H									B	C114A	PLATE, INTERFACE: 58189; A61665-005	EA		1									-15 4-1	 29
C	H		53050546670							*	C115	SCREW, MACHINE: 96906; MS51957-45	EA		13									-15 4-1	 26
			53105586207							*	C116 M	WASHER, FLAT: SAME AS B100A	EA		REF									-15 4-1	 27
			53109338119							*	C117	WASHER, LOCK: SAME AS B102	EA		REF									-15 4-1	 28

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H									C	C118	JUMPER SERIES: 75382; 640RJ8	EA		1									-15 4-5	 5
X2	H									C	C119A	TERMINAL BOAR 75382; 600-C-22UH	EA		2									-15 4-5	 13
C	H		53050546655							*	C120	SCREW, MACHINE: 96906; MS51957-31	EA		23									-15 4-5	 8
			53109296395							*	C121	WASHER, LOCK: SAME AS B091	EA		REF									-15 4-5	 10
			53109349761							*	C122	NUT, PLAIN, HEXAGON: SAME AS B109	EA		REF									-15 4-5	 9
										C	C123A	TERMINAL BOARD: SAME AS C119A	EA		REF									-15 4-5	 13
			53050546655							*	C124	SCREW, MACHINE: SAME AS C120	EA		REF									-15 4-5	 8
			53109296395							*	C125	WASHER, LOCK: SAME AS B091	EA		REF									-15 4-5	 10
			53109349761							*	C126	NUT, PLAIN, HEXAGON: SAME AS B109	EA		REF									-15 4-5	 9
M	H									C	C127	MARKER STRIP: 75382; MS600-22XXXP4D	EA		2									-15 4-5	 14
X2	H									C	C128A	TERMINAL BOARD: 75382; 604-C-8UH	EA		1									-15 4-5	 6
C	H		53050546674							*	C129	SCREW, MACHINE: 96906; MS51957-49	EA		4									-15 4-5	 1

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(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53109338119							*	C130	WASHER, LOCK: SAME AS B102	EA		REF									-15 4-5	3
			53105586207							*	C131 K	WASHER, FLAT: SAME AS B100A	EA		REF									-15 4-5	4
			53109249759							*	C132	NUT, PLAIN, HEXAGON: SAME AS B103	EA		REF									-15 4-5	2
M	H									C	C133	MARKER, STRIP: 75382; HS604-8XXXP1C	EA		1									-15 4-5	7
X2	H									C	C134	PLATE, INTERFACE: 58189; A61665-02	EA		1									-15 4-5	15
C	H									C	C134A	CLAMP, CABLE: 12357; HP-12N	EA		8									-15 4-5	14.4
C	H		53050546671							*	0134B	SCREW,MACHINE,PANHEAD: 96906; MS51957-46	EA		25									-15 4-5	14.1
			53105586207							*	C134C	WASHER, FLAT: SAME AS B1001A	EA		REF									-15 4-5	14.3
			53109338179							*	C134D	WASHER, LOCK SAME AS B102	EA		REF									-15 4-5	14.2
A	H	R								B	C35	FILTER ASSEMBLY: 581891 A64008-001	EA		1									-15 4-1	33
			53109338120							*	C137	WASHER, LOCK: SAME AS B081	EA		REF									-15 4-1	32
X2	H									B	C137A	STANDOFF: 14850; D1-10985B-1	EA		6									-15 4-1	31.1
X2	H									B	CU37B	SHIELD, ASSEMBLY: 14850; A1-10979C	EA		1									-15 4-1	31
C	H									*	01370	SCREW, MACHINE: 14850; A1-11068P-3	EA		6									-15 4-1	30
X2	H									C	0139	PLATE ASSEMBLY 58189; A64041-001	EA		1									-15 4-6	19

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	H		59157126673							C	C140	FILTER RADIO FREQUENCY INTERFERENCE: 56289; 10JX63	EA		2	1	2	3	1	2	3		6	-15 4-6	6
			59157126673							C	C141	FILTER RADIO FREQUENCY INTERFERENCE: SAME AS C140	EA		REF									-15 46-	6

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	H		59150611346							C	C142	FILTER, RADIO FREQUENCY: 56289; 20JX35	EA		2	1	2	3	1	2	3		6	-15 4-6	5
			59150611346							C	C143	FILTER, RADIO FREQUENCY: SAME AS C142	EA		REF									-15 4-6	5
X2	H									C	C144A	TERMINAL BOARD: 75382; 604C2UH	EA		1									-15 4-6	11
			53050546657							*	C145	SCREW, MACHINE: SAME AS B107	EA		REF									-15 4-6	7
			53106389857							*	C146	WASHER, FLAT: SAME AS B090	EA		REF									-15 4-6	10
			53109296395							*	C147	WASHER, LOCK SAME AS B091	EA		REP									-15 4-6	9
			53109349761							*	C148	NUT, PIN, HEXAGON: SAME AS B109	EA		REF									-15 4-6	8
X2	H									*	C149	TERMINAL BOARD: 75382: 602C4UH	EA		1									-15 4-6	17
C	H		53050546673							*	C1SO	SCREW, MACHINE: 96906; M851957-48	EA		4									-15 4-6	13
			53105586207							*	C151 M	WASHER, FLAT: SAME AS B100A	EA		REF									-15 4-6	16
			53109338119							*	C152	WASHER, LOCK: SAME AS B102	EA		REP									-15 4-6	15
			53109249759							*	C153	NUT, PLAIN, HEXAGON: SAME AS B103	EA		REP									-15 4-6	14

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(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
M	H									C	C154	STRIP MAKER 75382; MS602-4XXXP4A	EA		1									-15 4-6	12
M	H									C	C155	STRIP M -L R: 75382; MS604-2XXXP1C	EA		1									-15 4-6	18
C	H									*	C156A	NUT, PLAIN, HEXAGON: 96906; MS35690-410	EA		1									-15 4-6	1
C	H									*	C157A	WASHER, LOCK: 96906; MS35338-139	EA		1									-15 4-6	2
C	H		53105273634							*	C158A	WASHER, LOCK 96906; MS35335-61	EA		1									-15 4-6	3
M	H									C	C160	WIRING HARNESS: 58189; A65132-001	EA		1									-15 4-6	4
C	H		59405571628							D	C161	TERMINAL LUG: 96906; MS25036-56	EA		16									-15 4-6	20
C	H		59406603634							D	C162	TERMINAL LUG: 96906; MS25036-57	EA		2									-15 4-6	21
			59405571627							D	C162	TERMINAL LUG: SAME A8 8076 M	EA		REF									-15 4-6	22
C	H									D	C162B	TERMINAL LUG: 96906; MS25036-54	EA		2									-15 4-6	23
X2	H									B	C163	COVER ASSEMBLY: 58189; A64010-001	EA		1									-15 4-1	1
X1	H									C	C164	COVER: 58189; A64010-002	EA		1									-15 4-1	1.3
X1	H									C	C165	LATCH: 83014; H4600C156-218	EA		8									-15 4-1	1.4

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(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X1	H									*	C166	Shield, noise, rear 14850; ATE-D-0801-1	EA		1									-15 4-1	1.5
A	H	R								B	C167	ENCLOSURE 05439; 600004-1	EA		1									-15 4-1	43
X	H									C	C168	CHASSIS, ELECTRICAL EQUIPMENT: 05439; 600003	EA		1									-15 4-1	123
X2	H									D	C168A	BUMPER, RUBBER: 70485; 1178-2	EA		4									-15 4-1	123.1
A	H									C	C169	DOOR ASSEMBLY, RIGHT HAND: 05439; 600002-2	EA		1									-15 4-1	124
X2	H									*	C170	PIN, STRAIGHT, HEAD-LESS: 05439; 600105-4	EA		6									-15 4-1	125
X2	H									D	C171	DOOR: 05439; 600002-3	EA		2									-15 4-1	126
X2	H									D	C172	HANDLE: 05439; 600111-1	EA		4									-15 4-1	127
X2	H									D	C173	CAM: 05439; 600111-2	EA		2									-15 4-1	128
X2	H									D	C174	ROD: 05439; 600111-3	EA		4									-15 4-1	129
X2	H									D	C175	GROMMET, NYLON: 05439; 600112-1	EA		6									-15 4-1	130
X2	H									D	C176	LINER, MYLAR: 05439; 600002-5	EA		2									-15 4-1	131

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
A	H									C	C177	DOOR, FRONT, LEFT HAND: 05439; 600002-1	EA		1									-15 4-1	132
										*	C178	PIN, STRAIGHT, HEAD-LESS: SAME AS C170	EA		REP									-15 4-1	125
										D	C179	DOOR: SAME AS C171	EA		REF									-15 4-1	133
										D	C180	HANDLE SAME AB C172	EA		REF									-15 4-1	127
										D	C181	CAM: SAME AS C173	EA		REP									-15 4-1	128
										D	C182	ROD: SAME AS C174	EA		REP									-15 4-1	129
										D	C183	GROMMET, NYLON: SAME AS C175	EA		REP									-15 4-1	130
										D	C184	LINER, MYLAR: SAME AS C176	EA		REP									-15 4-1	131
X2	H									C	C185	DOOR ASSEMBLY, REAR: 05439; 600106-7	EA		1									-15 4-1	134
										*	C186	PIN, STRAIGHT, HEAD-LESS: SAME AS C170	EA		REF									-15 4-1	125
X2	H									D	C187	DOOR 05439; 600106-2	EA		1									-15 4-1.	135

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(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
										D	C188	HANDLE: SAME AS C172	EA		REF									-15 4-1	127
X2	H									D	C189	CAM: 05439; 600111-5	EA		2									-15 4-1	136
X2	H									D	C190	ROD: 05409; 600111-6	EA		2									-15 4-1	137
										D	C191	GROMMET, NYLON: SAME AS C175	EA		REF									-15 4-1	130
X2	H									D	C192	MYLAR LINER: 05439; 600106-4	EA		2									-15 4-1	138
X2	H									C	C193	PLATE, MOUNTING: 05439; 600102-1	EA		1									-15 4-1	139
X2	H									C	C194	PLATE, SUPPORT: 05439; 600103-1	EA		1									-15 4-1	140
C	H		53109349751							*	C195A	NUT, PLAIN, HEXAGON: 96906; MS35650-302	EA		11									-15 4-1	141
			53100593659							*	C196 M	WASHER, FLAT: SAME AS C102E	EA		REF									-15 4-1	143
C	H									*	C197A	WASHER, LOCK: 96906; MS35338-43	EA		19									-15 4-1	142

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(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H									C	C205	BASE: 05439; 600100-1	EA		1									-15 4-1	144
C	H									*	C206A	SCREW, MACHINE: 88044; ANS30-10-8	EA		4									-15 4-1	145
X2	H									C	C207	TRIM, METAL: 05439; 600109-1	EA		2									-15 4-1	152
P	H		5340519149							*	C207A	CLIP, MOUNTING: 78553; C29943-014-1	EA		25	10	20	30	10	20	30		25	-15 4-1	154
X2	H									*	C208	TRIM, METAL: 05439; 600109-2	EA		2									-15 4-1	153
										*	C208A	CLIP, MOUNTING: SAME AS C207A	EA		REF									-15 4-1	154
X2	H									C	C209	STRIP, LOGO: 05439; 600110-1	EA		1									-15 4-1	151
X2	H									C	C210	TRIM, METAL: 05439; 600001-1	EA		1									-15 4-1	150
C	H									*	C210A	SCREW, MACHINE: 96906; MS35191-270	EA		3									-15 4-1	146
			53109349751							*	C210B	NUT, PLAIN ,HEXAGON: SAME AS C195A	EA		REF									-15 4-1	147
										*	C210C	WASHER, LOCK: SAME AS C197A	EA		REF									-15 4-1	148
			53100593659							*	C210D	WASHER, FLAT: SAME AS C102E	EA		REF									-15 4-1	149

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(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
A	H	R								B	C212A POWER SUPPLY: 06809; 40-000090-1	EA		1									-15 4-1	20
P	H		59100544243							C	C213 CAPACITOR, HIGH VOLTAGE: 03508; 86F2004MA	EA		1	1	2	3	1	2	3		3	-15 4-4	49
P	H		59100544242							C	C214 CAPACITOR, HIGH VOLTAGE: 03508; 86F1063MA	EA		1	1	2	3	1	2	3		3	-15 4-4	48
X2	H									C	C215B CAPACITOR, RETAINING ASSEMBLY: 06809; 40-000081-1	EA		3									-15 4-4	45
X2	H									C	C215C INSULATOR: 06809; 40-000124-1	EA		3									-15 4-4	45.1
C	H									*	C216A SCREW, MACHINE: 88044: AN3C45A	EA		4									-15 4-4	41
C	H		53108098546							*	C217 WASHER, FLAT: 96906; MS27183-8	EA		8									-15 4-4	44
										*	C218 M WASHER, LOCK: SAME AS C197A	EA		REF									-15 4-4	43
P	H		59100544241							C	C219 CAPACITOR, HIGH VOLTAGE: 03508; 86F1062MA	EA		2	1	2	3	1	2	3		6	-15 4-4	47
			59100544241							C	C220 CAPACITOR, HIGH VOLTAGE: SAME AS C219	EA		REF									-15 4-4	47
										C	C221 CAPACITOR, RETAINING ASSEMBLY: SAME AS C215B	EA		REF									-15 4-4	45
			59100505332							C	C221A INSULATOR: SAME AS C215C	EA		REF									-15 4-4	45.1

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
										*	C222A SCREW, MACHINE: SAME AS C216A	EA		REF									-15 4-4	41

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(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53108098546							*	C223 WASHER, FLAT: SAME AS C217	EA		REF									-15 4-4	44
										*	C224 M WASHER, LOCK: SAME AS C197A	EA		REF									-15 4-4	43
P	H		59100544225							C	C225 CAPACITOR, HIGH VOLTAGE: 03508; 86F1061MA	EA		2	1	2	3	1	2	3		6	-15 4-4	46
			59100544225							C	C226 CAPACITOR, HIGH VOLTAGE: SAME AS C225	EA		REF									-15 4-4	46
										C	C227 CAPACITOR,RETAINING ASSEMBLY: SAME AS C215B	EA		REF									-15 4-4	45
			59100505332							C	C227A INSULATOR: SAME AS C215C	EA		REF									-15 4-4	45.1
C	H									*	C228A SCREW, MACHINE: 88044; AN3C63A	EA		2									-15 4-4	42
			53108098546							*	C229 WASHER, FLAT: SAME AS C217	EA		REF									-15 4-4	44
										*	C230 M WASHER, LOCK: SAME AS C197A	EA		REF									-15 4-4	43
P	H		59100505330							C	C231 CAPACITOR, HIGH VOLTAGE: 03508; 86F1064MA	EA		2	1	2	3	1	2	3		6	-15 4-4	55
C	H		53100134530							*	C232 NUT,PLAIN,HEXAGON: 96906; MS35649-62	EA		5									-15 4-4	53
			53050546655							*	C233 SCREW, MACHINE: SAME AS C120	EA		REF									-15 4-4	50

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	H		53100821404							*	C234 WASHER, FLAT: 96906; MS27183-6	EA		45									-15 4-4	51
C	H		53100454007							*	C235 WASHER, LOCK: 96906; MS35338-41	EA		43									-15 4-4	52
X2	H									C	C236 BRACKET, CAPACITOR: 94682; 97A	EA		5									-15 4-4	57
			53050546652							*	C237 SCREW, MACHINE: SAME AS 8089	EA		REF									-15 4-4	54
			53100821404							*	C238 WASHER, FLAT: SAME AS C234	EA		REF									-15 4-4	51
			53100454007							*	C239 WASHER, LOCK: SAME AS C235	EA		REF									-15 4-4	52
P	H		59100505331							C	C240 CAPACITOR, HIGH VOLTAGE: 03508; 86F1065MA	EA		2	1	2	3	1	2	3		6	-15 4-4	56
			53100134530							*	C241 NUT, PLAIN, HEXAGON: SAME AS C232	EA		REF									-15 4-4	53
			53050546655							*	C242 SCREW, MACHINE: SAME AS C120	EA		REF									-15 4-4	50
			53100821404							*	C243 WASHER, FLAT: SAME AS C234	EA		REF.									-15 4-4	51
			53100454007							*	C244 WASHER,LOCK: SAME AS C235	EA		REF									-15 4-4	52
										C	C245 BRACKET, CAPACI-TOR:SAME AS C236	EA		REF									-15 4-4	57

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(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53050546652							*	C246	SCREW, MACHINE: SAME AS B089	EA		REF									-15 4-4	54
			53100821404							*	C247	WASHER, FLAT: SAME AS C234	EA		REF									-15 4-4	51
			53100454007							*	C248	WASHER, LOCK: SAME AS C235	EA		REF									-15 4-4	52
			59100505331							C	C249	CAPACITOR, HIGH VOLT-AGE: SAME AS C240	EA		REF									-15 4-4	56
			53100134530							*	C250	NUT, PLAIN, HEXAGON: SAME AS C232	EA		REF									-15 4-4	53
			53050546655							*	C251	SCREW, MACHINE: SAME AS C120	EA		REF									-15 4-4	50
			53100821404							*	C252	WASHER, FLAT: SAME AS C234	EA		REF									-15 4-4	51
			53100454007							*	C253	WASHER, LOCK: SAME AS C235	EA		REF									-15 4-4	52
										C	C254	BRACKET, CAPACITOR: SAME AS C236	EA		REF									-15 4-4	57
			53050546652							*	C255	SCREW, MACHINE: SAME AS 8089	EA		REF									-15 4-4	54
			53100821404							*	C256	WASHER, FLAT: SAME AS C234	EA		REF									-15 4-4	51
			53100454007							*	C257	WASHER, LOCK: SAME AS C235	EA		REF									-15 4-4	52

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	H		59100505332							C	C258	CAPACITOR, HIGH VOLT-AGE: 03508; 86F1067MA	EA		1	1	2	3	1	2	3		3	-15 4-4	58
			53100134530							*	C259	NUT, PLAIN, HEXAGON: SAME AS C232	EA		REF									-15 4-4	53
			53050546655							*	C260	SCREW, MACHINE: SAME AS C120	EA		REF									-15 4-4	50
			53100821404							*	C261	WASHER, FLAT: SAME AS C234	EA		REF									-15 4-4	51
			53100454007							*	C262	WASHER, LOCK: SAME AS C235	EA		REF									-15 4-4	52
										C	C263	BRACKET, CAPACITOR: SAME AS C236	EA		REF									-15 4-4	57
			53050546652							*	C264	SCREW, MACHINE: SAME AS B089	EA		REF									-15 4-4	54
			53100821404							*	C265	WASHER, FLAT: SAME AS C234	EA		REF									-15 4-4	51
			53100454007							*	C266	WASHER, LOCK: SAME AS C235	EA		REF									-15 4-4	52
			59100505330							C	C267	CAPACITOR, HIGH VOLT-AGE: SAME AS C231	EA		REF									-15 4-4	55
			53100134530							*	C268	NUT, PLAIN, HEXAGON: SAME AS C232	EA		REF									-15 4-4	53
			53050546655							*	C269	SCREW, MACHINE: SAME AS C120	EA		REF									-15 4-4	50

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(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53100821404							*	C270	WASHER, FLAT: SAME AS C234	EA		REF										-15 4-4	51
			53100454007							*	C271	WASHER, LOCK: SAME AS C235	EA		REF										-15 4-4	52
										C	C272	BRACKET, CAPACITOR: SAME AS C236	EA		REF										-15 4-4	57
			53050546652							*	C273	SCREW, MACHINE: SAME AS B089	EA		REF										-15 4-4	54
			53100821404							*	C274	WASHER, FLAT: SAME AS C234	EA		REF										-15 4-4	51
			53100454007							*	C275	WASHER, LOCK: SAME AS C235	EA		REF										-15 4-4	52
X2	H									C	C276B	CHASSIS: 06809; 40-000062	EA		1										-15 4-4	104
X1	H									D	C276C	CHASSIS: 06809; 40-000062-1	EA		1										-15 4-4	103.6
X1	H		53105968131							D	C277	FASTENER, CLINCH: 46384; S632-2	EA		20										-15 4-4	103.1
X1	H		53105968129							D	C278	FASTENER, CLINCH: 46384: S832-2	EA		5										-15 4-4	103.2
X1	H									D	C279A	FASTENER, CLINCH: 46384; SS032-2	EA		17										-15 4-4	103.3

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X1	H		53102954246							D	C280	FASTENER CLINCH: 46384; AS632-2	EA		10										-15 4-4	103.4
X1	H		53258171158							D	C281	EYELET, FLANGED: 57771: A510	EA		1										-15 4-4	103.5
P	H	T	74400189646							C	C282A	CIRCUIT CARD ASSEMBLY: 06809: 40-000008-1	EA		1	1	2	3	1	2	3		3	-15 4-4	92
X1	D									D	C283B	PRINTED CIRCUIT BOARD: 06809: 40-000006-1	EA		1									-15 5-19	
P	D		59100613200							D	C283C	CAPACITOR, FIXED, PAPER: 03508; 75F3R1B104	EA		6								18	-15 5-19	C1
P	D		59101145274							D	C284 M	CAPACITOR, FIXED, ELECTROLYTIC: 03508: 75F1R1B472	EA		1								5	-15 5-19	C2
P	D		59052793512							D	C285 M	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF431J	EA		2								6	-15 5-19	R1
P	D		59051956806							D	C286	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF102J	EA		9								3	-15 5-19	R2
			59051956806							D	C287	RESISTOR, FIXED, COMPOSITION: SAME AS C286	EA		REF									-15 5-19	R13
			59051908887							D	C288 M	RESISTOR, FIXED, COMPOSITION: SAME AS A079AM	EA		REF									-15 5-19	R3
P	D		59050693912							D	C289	RESISTOR, FIXED, FILM: 81349; RN60D1960F	EA		7								21	-15 5-19	R4

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(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAYS SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59050693912							D	C290 RESISTOR, FIXED, FILM: SAME AS C289	EA		REF									-15 5-19	R5
			59050693912							D	C291 RESISTOR, FIXED, FILM: SAME AS C289	EA		REF									-15 5-19	R6
			59050693912							D	C292 RESISTOR, FIXED, FILM: SAME AS C289	EA		REF									-15 5-19	R7
			59050693912							D	C293 RESISTOR, FIXED, FILM SAME AS C289	EA		REF									-15 5-19	R8
			59050693912							D	C294 RESISTOR, FIXED, FILM SAME AS C289	EA		REF									-15 5-19	R9
			59050693912							D	C295 RESISTOR, FIXED, FILM SAME AS C289	EA		REF									-15 5-19	R15
			59052793512							D	0C296A RESISTOR, FIXED, COM-POSITION: SAME AS C285 M	EA		REF									-15 5-19	R11
P	D		59052524018							D	C297A RESISTOR, FIXED, COM-POSITION: 81349; RC20GF470J	EA		2								6	-15 5-19	R21
P	D		59052793517							D	C298 RESISTOR, FIXED, COM-POSITION: 81349; RC20GFS10J	EA		2								6	-15 5-19	R14
P	D		59052791757							D	C299 RESISTOR, FIXED, COM-POSITION: 81349; RC20GF152J	EA		5								15	-15 5-19	R16
P	D		59052793506							D	C300 RESISTOR, FIXED, COM-POSITION: 81349; RC20GF332J	EA		11								33	-15 5-19	R17

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAYS SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	D		59050693914							D	C301 M RESISTOR, FIXED, FILM: 81349; RN60D1961F	EA		2								6	-15 5-19	R18
P	D		59057636457							D	C302 RESISTOR, FIXED, FILM: 81349; RN60D1152F	EA		2								6	-15 5-19	R19
P	D		59052793505							D	C303 RESISTOR, FIXED, COM-POSITION: 81349; RC20GF392J	EA		1								3	-15 5-19	R20
P	D		59059854889							D	C304 RESISTOR, FIXED, FILM: 81349; RN60D8250F	EA		1								3	-15 5-19	R22
P	D		59059527042							D	C305 RESISTOR, FIXED, FILM: 81349; RN60D2610F	EA		1								3	-15 5-19	R23
P	D		5905-00-107-0818							D	C306AM RESISTOR, VARIABLE: 73138;77PR500	EA		6								18	-15 5-19	R24
										D	C307AM RESISTOR, VARIABLE: SAME AS C306AM	EA		REF									-15 5-19	R30
P	D		59059882313							D	C308 RESISTOR, FIXED, FILM: 81349; RN60D1211F	EA		3								9	-15 5-19	R25
			59059882313							D	C309 RESISTOR, FIXED, FILM: SAME AS C308	EA		REF									-15 5-19	R35
P	D		59059570643							D	C310 RESISTOR, FIXED, FILM: 81349; RN60D4640F	EA		5								15	-15 5-19	R27
P	D		59059882317							D	C311 RESISTOR, FIXED, FILM: 81349; RN60D1001F	EA		1								3	-15 5-19	R28
P	D		59059544642							D	C312 M RESISTOR, FIXED, FILM: 81349; RN60D1621F	EA		3								9	-15 5-19	R29

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(1) (A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	D		59057611901							D	C313	RESISTOR, FIXED, FILM: 81349; RN60D2151F	EA		3								9	-15 5-19	R31
P	D		59057818015							D	C314	RESISTOR, FIXED, FILM: 81349; RN60D3480F	EA		3								9	-15 5-19	R12
			59057818015							D	0315	RESISTOR, FIXED, FILM: SAME AS C314	EA		REF									-15 5-19	R32
P	D		59059655554							D	C316	RESISTOR, FIXED, FILM: 81349; RN60D6810F	EA		1								3	-15 5-19	R33
P	D		59051959481							D	C317	RESISTOR, FIXED, COM-POSITION: 81349; RC20GF751J	EA		1								3	-15 5-19	R34
P	D		59050507598							D	C318	RESISTOR, FIXED, FILM: 81349; RN60D1401F	EA		1								3	-15 5-19	R26
P	D		596189O1009							D	C319	SEMI-CONDUCTOR DE-VICE, DIODE: 81349; 1N963B	EA		1								3	-15 5-19	CR1
P	D		59611070748							D	C320	SEMI-CONDUCTOR DE-VICE, DIODE: 03508; A14BX280	EA		8								24	-15 5-19	CR2
			59611070748							D	C321	SEMI-CONDUCTOR DE-VICE, DIODE SAME AS C320	EA		REF									-15 5-19	CR3
			59611070748							D	C322	SEMI-CONDUCTOR DE-VICE, DIODE: SAME AS C320	EA		REF									-15 5-19	CR4
P	D		59610816103							D	C324	SEMI-CONDUCTOR DE-VICE, DIODE: 81349; 1N823	EA		4								12	-15 5-19	CR6

(1) (A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59610816103							D	C325 M	SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C324	EA		REF									-15 5-19	CR5
P	D		59610540046							D	C326	TRANSISTOR: 81349; 2N1711	EA		34								170	-15 5-19	Q1
			59610540046							D	C327	TRANSISTOR: SAME AS C326	EA		REF									-15 5-19	Q4
			59610540046							D	C328	TRANSISTOR: SAME AS C326	EA		REF									-15 5-19	Q5
			59610540046							D	C329	TRANSISTOR: SAME AS C326	EA		REF									-15 5-19	Q6
			59610540046							D	C330	TRANSISTOR: SAME AS C326	EA		REF									-15 5-19	Q7
			59610540046							D	C331	TRANSISTOR: SAME AS C326	EA		REF									-15 5-19	Q8
P	D		59618804779							D	C332	TRANSISTOR 81349; 2N2905	EA		10								50	-15 5-19	Q2
			59618804779							D	C333	TRANSISTOR: SAME AS C332	EA		REF									-15 5-19	Q3
			59618804779							D	C334	TRANSISTOR: SAME AS C332	EA		REF									-15 5-19	Q9
P	H	T	74400189638							C	C335A	CIRCUIT CARD ASSEMBLY: 06809, 40-000011-1	EA		1	1	2	3	1	2	3		3	-15 4-4	93
X1	D									D	C336A	PRINTED CIRCUIT BOARD: 06809: 40-000009-1	EA		1									-15 5-20	

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(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	D		59101145282							D	C337A	CAPACITOR, FIXED, PAPER: 03508; 75F2R1B473	EA		2								6	-15 5-20	C1
			59100613200							D	C338A	CAPACITOR, FIXED, PAPER: SAME AS C283A	EA		REF									-15 5-20	C2
			59059570643							D	C339	RESISTOR, FIXED, FILM SAME AS C310	EA		REF									-15 5-20	R1
			59059570643							D	C340	RESISTOR, FIXED, FILM SAME AS C310	EA		REF									-15 5-20	R2
			59059570643							D	C341	RESISTOR, FIXED, FILM SAME AS C310	EA		REF									-15 5-20	R3
			59059570643							D	C0342	RESISTOR, FIXED, FILM SAME AS C310	EA		REF									-15 5-20	R23
P	D		59051712006							D	C343A	RESISTOR, FIXED, COMPOSITION: 81349; RC20GP271J	EA		7								21	-15 5-20	R4
P	D		59051908889							D	C344 M	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF101J	EA		6								18	-15 5-20	R22
			59051908889							D	C345 M	RESISTOR, FIXED, COMPOSITION: SAME AS C344 M	EA		REF									-15 5-20	R35
			59051908889							D	C346 M	RESISTOR, FIXED, COMPOSITION: SAME AS C344 M	EA		REF									-15 5-20	R36

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59052791757							D	C347	RESISTOR, FIDED, COMPOSITION: SAME AS C299	EA		REP									-15 5-20	R5
P	D		59052793504							D	C348	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF472J	EA		11								33	-15 5-20	R6
			59052793504							D	C349	RESISTOR, FIXED, COMPOSITION: SAME AS C348	EA		REF									-15 5-20	R11
P	D		59052791889							D	C350	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF361J	EA		1								3	-15 5-20	R12
P	D		59059529230							D	C351	RESISTOR, FIXED, FILM 81349; RN60D7500F	EA		2								6	-15 5-20	R13
			59059529230							D	C352	RESISTOR, FIXED, FILM SAME AS C351	EA		REF									-15 5-20	R28
			59051956806							D	C353	RESISTOR, FIXED, COMPOSITION: SAME AS C286	EA		REF									-15 5-20	R14
			59051956806							D	C354	RESISTOR, FIXED, COMPOSITION: SAME AS C286	EA		REF									-15 5-20	R29
P	D		59058407609							D	C355	RESISTOR, FIXED, FILM 81349; RN60C1871F	EA		4								12	-15 5-20	R16
			59058407609							D	C356	RESISTOR, FIXED, FILM SAME AS C355	EA		REF									-15 5-20	R18
			59058407609							D	C357	RESISTOR, FIXED, FILM SAME AS C355	EA		REF									-15 5-20	R31

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59058407609							D	C358 RESISTOR, FIXED, FILM: SAME AS C355	EA		REF									-15 5-20	R33
										D	C359AM RESISTOR, VARIABLE: SAME AS C306AM	EA		REF									-15 5-20	R17
										D	C360AM RESISTOR, VARIABLE: SAME AS C306AM	EA		REF									-15 5-20	R32
			59051712006							D	C361 M RESISTOR, FIXED, COMPOSITION: SAME AS C343A	EA		REF									-15 5-20	R19
			59051712006							D	C362 M RESISTOR, FIXED, COMPOSITION: SAME AS C343A	EA		REF									-15 5-20	R34
			59052793517							D	C363 RESISTOR, FIXED, COMPOSITION: SAME AS C298	EA		REF									-15 5-20	R20
P	D		59051923973							D	C364 M RESISTOR, FIXED, COMPOSITION: 81349; RC20GF4717	EA		5								15	-15 5-20	R21
P	D		59050870545							D	C365 RESISTOR, FIXED, WIREWOUND: 81349; RW59V102	EA		2								6	-15 5-20	R26
			59050870545							D	C366 RESISTOR, FIXED, WIREWOUND: SAME AS C365	EA		REF									-15 5-20	R24
P	D		59052494195							D	C367 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF752J	EA		2								6	-15 5-20	R27

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59051908887							D	C368 M RESISTOR, FIXED, COMPOSITION: SAME AS A079AM	EA		REF									-15 5-20	R8
			59050693914							D	C369 M RESISTOR, FIXED, FILM: SAME AS C301 M	EA		REF									-15 5-20	R30
P	D		59059841465							D	C370A RESISTOR, FIXED, FILM: 81349; RN60D5621F	EA	5									15	-15 5-20	R9
P	D		59050518003							D	C371 RESISTOR, FIXED, FILM: 81349; RNEOD1582F	EA		2								6	-15 5-20	R25
P	D		59059855435							D	C372 RESISTOR, FIXED, FILM: 81349; RN60D7501F	EA		1								3	-15 5-20	R10
			59059544642							D	C373 RESISTOR, FIXED, FILM: SAME AS 0312 M	EA		REF									-15 5-20	RIS
			59057818015							D	C374 RESISTOR, FIXED, FILM: SAME AS 0314	EA		REF									-15 5-20	R7
			59611070748							D	C375 SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C320	EA		REF									-15 5-20	CR1
			59611070748							D	C376 SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C320	EA		REF									-15 5-20	CR2
			59611070748							D	C377 SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C320	EA		REF									-15 5-20	CR3
			59611070748							D	C378 SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C320	EA		REF									-15 5-20	CR6

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59610816103							D	C379	SEMI-CONDUCTOR - DEVICE. DIODE: SAME AS C324	EA		REF									-15 5-20	CR4
			59610816103							D	C380	SEMI-CONDUCTOR DE-VICE, DIODE: SAME AS C324	EA		REF									-15 5-20	CR8
P	D		59611070819							D	C381	SEMI-CONDUCTOR DE-VICE, DIODE: 06809; 40-000125-1	EA		2								6	-15 5-20	CR5
			59611070819							D	C382	SEMI-CONDUCTOR - DEVICE, DIODE: SAME AS C381	EA		REF									-15 5-20	CR9
P	D		59610888792							D	C383 M	SEMI-CONDUCTOR - DEVICE, DIODE: 81349; 1N5059	EA		35								102	-15 5-20	CR7
			59610540046							D	C384	TRANSISTOR: SAME AS C326	EA		REF									-15 5-20	Q1
			59610540046							D	C385	TRNSISTOR: SAME AS C326	EA		REF									-15 5-20	Q3
			59610540046							D	C386	TRANSISTOR: SAME AS C326	EA		REF									-15 5-20	Q4
			59610540046							D	C387	TRANSISTOR: SAME AS C326	EA		REF									-15 5-20	Q5
			59610540046							D	C388	TRANSISTOR: SAME AS C326	EA		REF									-15 5-20	Q7
			59618804779							D	C389	TRANSISTOR: SAME AS C332	EA		REF									-15 5-20	Q2

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59618804779							D	C390	TRANSISTOR: SAME AS C332	EA		REF									-15 5-20	Q6
			59618804779							D	C391	TRANSISTOR: SAME AS C332	EA		REF									-15 5-20	Q8
			59618804779							D	C392	TRANSISTOR: SAME AS C332	EA		REF									-15 5-20	Q9
			59618804779							D	C393	TRANSISTOR: SAME AS C332	EA		REF									-15 5-20	Q10
			59618804779							D	C394	TRANSISTOR: SAME AS C332	EA		REF									-15 5-20	Q11
P	H	T	74400189637							C	C395A	CIRCUIT CARD ASSEMBLY: 06809: 40-000014-1	EA		1	1	2	3	1	2	3		3	-15 4-4	94
X1	D									D	C396A	PRINTED CIRCUIT BOARD: 06809; 40-000012-1	EA		1									-15 5-21	
			59101145282							D	C397A	CAPACITOR, FIXED, PAPER: SAME AS C337A	EA		REF									-15 5-21	C1
P	D		59056767410							D	C398	RESISTOR, FIXED, WIREWOUND: 81349; RW59V182	EA		1								3	-15 5-21	R1
			59052791757							D	C399	RESISTOR, FIXED, COMPOSITION: SAME AS C299	EA		REF									-15 5-21	R2
P	D		59059522148							D	C400	RESISTOR, FIXED, FILM: 81349: RN60D3011F	EA		I								3	-15 5-21	R3

(1) (A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	D		59059695854							D	C401	RESSTOR, FIXED, FILM: 81349; RN60DS620F	EA		1								3	-15 5-21	R4
			59051956791							D	C402 M	RESISTOR, FIXED, OOM-POSITION: SAME AS A558 M	EA		REF									-15 5-21	R5
			59051956791							D	C403 M	RESISTOR, FIXED, COM-POSITON: SAME AS ASS8 M	EA		REF									-15 5-21	R21
			S9051923973							D	C404A	RESISTOR, FIXED, COM-POSITION: SAME AS C364 M	EA		REF									-15 5-21	R6
P	D		59056895771							D	C405A	RESISTOR, FIXED, WIREWOUND:. 63743; 3X3000	EA		1								3	-15 5-21	R11
			59051923973							D	C406A	RESISTOR, FIXED, COM-POSITION: SAME AS C364 M	EA		REF									-15 5-21	R8
P	D		59052792616							D	C407	RESISTOR, FIXED, OOM-POSITION: 81349: RC20GF153J	EA		4								12	-15 5-21	R9
			59052792616							D	C408	RESISTOR, FIXED, COM-POSITION: SAME AS C407	EA		REF									-15 5-21	R10
P	D		59050883847							D	C409	RESISTOR, FIXED, WIREWOUND: 81349; RW59V202	EA		4								12	-15 5-21	R7
			59050883847							D	C410	RESISTOR, FIXED, WIREWOUND: SAME AS C409	EA		REF									-15 5-21	R12

(1) (A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59050883847							D	C411	RESISTOR, FIXED, WIREWOUND: SAME AS C409	EA		REF									-15 5-21	R13
P	D		59051908887							D	C412A	RESISTOR, FIXED, WIREWOUND: 81349; RW69V471	EA		1								3	-15 5-21	R14
			59051908887							D	C413 M	RESISTOR, FIXED, COM-POSITION: SAME AS A079AM	EA		REF									-15 5-21	R15
P	D		59050693116							D	C414	RESISTOR, FIXED,.FILM 81349: RN60D3831F	EA		1								3	-15 5-21	R16
P	D		59056863380							D	C415	RESISTOR, FIXED, FILM 81349; RN60C2871F	EA		1								3	-15 5-21	R17
										D	C416AM	RESISTOR, VARABLE: SAME AS C306AM	EA		REF									-15 5-21	R18
P	D		59059572041							D	C417A	RESISTOR, FIXED, FILM 81349; RN65C9531F	EA		1								3	-15 5-21	R19
P	D		59059526023							D	C418	RESISTOR, FIXED, FILM 81349; RN60D3162F	EA		1								3	-15 5-21	R20
P	D		59051858510							D	C419 M	RESISTOR, FIXED, COM-POSITION: 81349; RC20GF103J	EA		4								12	-15 3-21	R23
			59052494195							D	C420	RESISTOR, FIXED, COM-POSITION: SAME AS C367	EA		REF									-15 5-21	R22
P	D		59059522146							D	C421	RESISTOR, FIXED, FILM 81349; RN60DS111F	EA		1								3	-15 5-21	R24

(1) (A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59611070748							D	C422	SEMI-CONDUCTOR - DEVICE, DIODE: SAME AS C320	EA		REF									-15 5-21	CR2
P	D		59611070820							D	C423	SEMI-CONDUCTOR - DEVICE, DIODE: 06809; 40-000126-1	EA		2								6	-15 5-21	CR1
			59611070820							D	C424	SEMI-CONDUCTOR - DEVICE, DIODE: SAME AS C0423	EA		REF									-15 5-21	CR5
P	D		59619426756							D	C425	SEMI-CONDUCTOR - DEVICE, DIODE: 81349; 1N942	EA		1								3	-15 5-21	CR3
P	D		59618360382							D	C426	SEMI-CONDUCTOR - DEVICE, DIODE: 81349; 1N3022A	EA		1								3	-15 5-21	CR4
			59618804779							D	C427	TRANSISTOR: SAME AS C332	EA		REF									-15 5-21	Q1
			59610540046							D	C428	TRANSISTOR: SAME AS C326	EA		REF									-15 5-21	Q2
			59610540046							D	C429	TRANSISTOR SAME AS C326	EA		REF									-15 5-21	Q3
P	D		59619491440							D	C430	TRANSISTOR: 81349; 2N2905A	EA		20								100	-15 5-21	Q4
			59619491440							D	C431	TRANSISTOR: SAME AS C430	EA		REF									-15 5-21	Q5
			59619491440							D	C432	TRANSISTOR: SAME AS C430	EA		REF									-15 5-21	Q6

(1) (A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59619491440							D	C433	TRANSISTOR: SAME AS C430	EA		REF									-15 5-21	Q7
			59619491440							D	C434	TRANSISTOR: SAME AS C430	EA		REF									-15 5-21	Q8
P	D		59611332884							D	C435	TRANSISTOR: 81349; 2N2243A	EA		3								15	-15 5-21	Q9
A	H	R								C	C436A	HEAT SINK ASSEMBLY: 06809; 40-000085-1	EA		1									-15 4-4	62
			53050546652							*	C437	SCREW, MACHINE: SAME AS B089	EA		REF									-15 4-4	59
			53100821404							*	C438	WASHER, FLAT: SAME AS C234	EA		REF									-15 4-4	61
			53100454007							*	C439	WASHER, LOCK: SAME AS C235	EA		REF									-15 4-4	60
X2	H									D	C440B	END PLATE: 06809; 40-000017-4	EA		2									-15 4-4	62.1
C	H		53050546654							*	C441	SCREW, MACHINE: 96906:; MS51957-30	EA		12									-15 4-4	62.2
C	H		53101941548							*	C442	WASHER, FLAT: 96906; MS15795-205	EA		41									-15 4-4	62.4
C	H		53101983724							*	C443	WASHER, LOCK: 96906; MS35337-41	EA		20									-15 4-4	62.3
										D	C444 M	END PLATE: SAME AS C440B	EA		REF									-15 4-4	62.1

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53050546654							*	C445 SCREW, MACHINE: SAME ASC441	EA		REF									-15 4-4	62.2
			53101941548							*	C446 WASHER, FLAT: SAME AS C442	EA		REF									-15 4-4	62.4
			53101983724							*	C447 WASHER, LOCK: SAME AS C443	EA		REF									-15 4-4	62.3
X2	H									D	C448A COVER, SIDE: 06809;: 40-000015-1	EA		2									-15 4-4	62.5
A	H	R								D	C449A HEATSINK SUBASSEM-BLY: 06809; 40-0000421-	EA		1									-15 4-4	62.6
			53050546657							*	C450 SCREW, MACHINE: SAME AS B107	EA		REF									-15 4-4	62.7
			53101941548							*	C451 WASHER, FLAT: SAME AS C442	EA		REF									-15 4-4	62.9
			53101983724							*	C452 WASHER, LOCK: SAME AS C443	EA		REF									-15 A-4	62.8
P	H		59108388395							E	C453 CAPACITOR, FIXED, PAPER: 03508; 75FIR1B103	EA		14	1	2	3	1	2	3		42	-15 5-22	C1
			59108388395							E	C454 CAPACITOR, FIXED, PAPER: SAME AS C453	EA		REF									-15 5-22	C2
P	H		59108388395							E	C455 CAPACITOR, FIXED, PAPER 03508; 75F1R28103	EA		2	1	2	3	1	2	3		6	-15 5-22	C3

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59108388395							E	0456 CAPACITOR, FIXED, PAPER: SAME AS C455	EA		REF									-15 5-22	C4
P	H		59351020130							E	C457 CONNECTOR, PLUG, ELECTRICAL: 00779; 1-480278-5	EA		1	1	1	1	1	1-	1		3	-15 5-22	P1
P	H		59351020131							E	C458 CONNECTOR, PLUG, ELECTRICAL: 00779; 1-480278-6	EA		1	1	1	1	1	1	1		3	-15 5-22	P2
P	H		59351330470							E	C0459A CONTACT, ELECTRICAL 00779: 61118-1	EA		35	5	10	15	5	10	15		105	-15 5-22	H1
X2	H		53409705484							E	C460 M CLAMP, LOOP: 12357; HP4N	EA		2									-15 5-22	H5
C	H		53050546653							*	C461 SCREW, MACHINE: 96906; MS51957-29	EA		20									-15 5-22	H2
			53101941548							*	C462 WASHER, FLAT: SAME AS C442	EA		REF									-15 5-22	H3
C	H		53100431754							*	C463 WASHER, LOCK: 96906; MS35337-79	EA		21									-15 5-22	H4
P	H		59059027456							E	C464 RESISTOR, FIXED, WIRE WOUND: 81349; RW57GR20	EA		5	1	2	3	1	2	3		15	-15 5-22	R1
			59059027456							E	C465 RESISTOR,FIXED, WIRE WOUND: SAME AS C464	EA		REF									-15 5-22	R2
			59059027456							E	C466 RESISTOR, FIXED, WIREWOUND:. SAME AS C464	EA		REF									-15 5-22	R3

(1) (A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	H		59059516735							E	C467	RESISTOR, FIXED, WIREWOUND: 81349; RW59V151	EA		3	1	2	3	1	2	3		9	-15 5-22	R5
P	H		59052267626							E	C468B	RESISTOR, FIXED, WIREWOUND: 63743; 3X6000	EA		1	1	2	3	1	2	3		3	-15 5-22	R4
P	H		59617525395							E	C469	SEMI-CONDUCTOR - DEVICE, DIODE: 81349; IN1184	EA		2	1	2	3	1	2	3		6	-15 5-22	CR1
			59617525395							E	C470	SEMI-CONDUCTOR- DEVICE, DIODE: SAME AS C469	EA		REF									-15 5-22	CR2
P	H		59619350138							E	C471	SEMI-CONDUCTOR- DEVICE, DIODE: 81349; 1N1202	EA		2	1	2	3	1	2	3		6	-15 5-22	CR3
			59619350138							E	C472	SEMI-CONDUCTOR- DEVICE, DIODE: SAME AS C471	EA		REF									-15 5-22	CR4
P	H		59611996008							E	C473	TRANSISTOR 81349; 213055	EA		9	1	2	3	1	2	3		36	-15 5-22	Q1
			53050546653							*	C474	SCREW, MACHINE: SAME AS C461	EA		REF									-15 5-22	H2
			53101941548							*	C475	WASHER, FLAT: SAME AS C442	EA		REF									-15 5-22	'H3
			53100431754							*	C476	WASHER, LOCK: SAME AS C463	EA		REF									-15 5-22	H4
			59611996008							E	C477	TRANSISTOR: SAME AS C473	EA		REF									-15 5-22	Q2

(1) (A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53050546653							*	C478	SCREW, MACHINE: SAME AS C461	EA		REF									-15 5-22	H2
			53101941548							*	C479	WASHER, FLAT: SAME AS C442	EA		REF									-15 5-22	H3
			53100431754							*	C480	WASHER, LOCK: SAME AS C463	EA		REF									-15 5-22	H4
			59611996008							E	C481	TRANSISTOR: SAME AS C473	EA		REF									-15 5-22	Q3
			53050546653							*	C482	SCREW, MACHINE: SAME AS C461	EA		REF									-15 5-22	H2
			53101941548							*	C483	WASHER, FLAT: SAME AS C442	EA		REF									-15 5-22	H3
			53100431754							*	C484	WASHER, LOCK: SAME AS C463	EA		REF									-15 5-22	H4
			59611996008							E	C485	TRANSISTOR: SAME AS C473	EA		REF									-15 5-22	Q4
			53050546653							*	C486	SCREW, MACHINE: SAME AS C461	EA		REF									-15 5-22	H2
			53101941548							*	C487	WASHER, FLAT: SAME AS C442	EA		REF									-15 5-22	H3
			53100431754							*	C488	WASHER, LOCK: SAME AS C463	EA		REF									-15 5-22	H4
C	H		59405015859							E	C489	TERMINAL LUG: 00779; 34112	EA		6									-15 5-22	H6

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	H		59409439539							E	C490	TERMINAL LUG: 00779; 34113	EA		5									-15 5-22	H7
X2	H									E	C491A	HEAT-SINK: 06809; 40-000097-1	EA		1									-15 5-22	
X1	H									F	C492A	EXTURSION: 06809; 40-000004-1	EA		3									-15 5-22	
C	H		53108034994							F	C493	NUT, SELFLOCKING: 46384; CLS632-3	EA		12									-15 5-22	
C	H									F	C494	TERMINAL STUD: 98291; FTSM66L4	EA		50									-15 5-22	E1
										F	C495	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-22	E2
										F	C496	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-22	E3
										F	C497	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-22	E5
										F	C498	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-22	E6
										F	C499	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-22	E7
										F	C500	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-22	E8
										F	C501	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-22	E9

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(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
										F	C502	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-22	E10
										F	C503	TERMINAL STUD ; SAME AS C494	EA		REF									-15 5-22	E11
										F	C504	TERMINAL STUD: SAME AS C494	EA		REF									-15 -5-22	E12
										F	C505	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-22	E13
										F	C506	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-22	E14
										F	C507	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-22	E15
										F	C508	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-22	E16
										F	C509	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-22	E17
										F	C510	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-22	E18
C	H									F	CS11	TERMINAL STUD: 86577; 206-29F	EA		3									-15 5-22	E4
										F	C512	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-22	E19
A	H	R								D	C513A	HEATSINK SUB-ASSEMBLY: . 06809; 40-000044-1	EA		1									-15 4-4	62.10

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(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53050546657							*	C514	SCREW, MACHINE: SAME AS B107	EA		REF									-15 4-4	62.7
			53101941548							*	CS15	WASHER, FLAT: SAME AS C442	EA		REF									-15 4-4	62.9
			53101983724							*	C516	WASHER, LOCK: SAME AS C443	EA		REF									-15 4-4	62.8
			59108388395							E	C517	CAPACITOR, FIXED, PAPER: SAME AS C453	EA		REF									-15 5-23	C1
			59108388395							E	C518	CAPACITOR, FIXED, PAPER: SAME AS C453	EA		REF									-15 5-23	C2
			59108388395							E	C519	CAPACITOR, FIXED, PAPER: SAME AS C453	EA		REF									-15 5-23	C3
			59108388395							E	C520	CAPACITOR, FIXED, PAPER: SAME AS C453	EA		REF									-15 5-23	C4
			53409705484							E	C521	CLAMP, LOOP: SAME AS C460 M	EA		REF									-15 5-23	H5
			53050546653							*	C522	SCREW, MACHINE: SAME AS C461	EA		REF									-15 5-23	H2
			53101941548							*	C523	WASHER, FLAT: SAME AS C442	EA		REF									-15 5-23	H3
			53100431754							*	C524	WASHER, LOCK: SAME AS C463	EA		REF									-15 5-23	H4

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	H		59350505307							E	C525	CONNECTOR, PLUG, ELECTRICAL: 00779; 1-480278-3	EA		1	1	1	1	1	1	1		3	-15 5-23	P1
P	H		59350505315							E	C526	CONNECTOR,PLUG, ELECTRICAL: 00779; 1-480278-8	EA		1	1	1	1	1	1	1		3	-15 5-23	P2
			59351330470							E	C527A	CONTACT, ELECTR-ICAL SAME AS C459A	EA		REF									-15 5-23	H1
			59059027456							E	C528	RESISTOR, FIXED, WIRE WOUND: SAME AS C464	EA		REF									-15 5-23	R1
			59059027456							E	C529	RESISTOR, FIXED, WIRE WOUND: SAME AS C464	EA		REF									-15 5-23	R5
P	H		59050880636							E	C530	RESISTOR, FIXED, WIRE WOUND: 81349; RW59V601	EA		6	1	2	3	1	2	3		18	-15 5-23	R2
			59050880636							E	C531	RESISTOR, FIXED, WIRE WOUND: SAME AS C530	EA		REF									-15 5-23	R4
			59050880636							E	C532	RESISTOR, FIXED, WIRE WOUND: SAME AS C530	EA		REF									-15 5-23	R6
			59050880636							E	C533	RESISTOR, FIXED, WIRE WOUND: SAME AS 0530	EA		REF									-15 5-23	R7
P	H		59058890010							E	C534	RESISTOR, FIXED, WIRE WOUND: 81349; RW59V100	EA		1	1	2	3	1	2	3		3	-15 5-23	R3

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	H		59617526158							E	C535 SEMI-CONDUCTOR DEVICE, DIODE: 81349; 1N1200	EA		4	1	2	3	1	2	3		12	-15 5-23	CR1
			59617526158							E	C536 SEMI-CONDUCTOR - DEVICE, DIODE: SAME AS C535	EA		REF									-15 5-23	CR2
			59617526158							E	C537 SEMI-CONDUCTOR - DEVICE, DIODE: SAME AS C535	EA		REF									-15 5-23	CR3
			59617526158							E	C538 SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C535	EA		REF									-15 5-23	CR4
			59611996008							E	C539 TRANSISTOR: SAME AS C473	EA		REF									-15 5-23	Q1
			53050546653							*	C540 SCREW, MACHINE: SAME AS C461	EA		REF									-15 5-23	H2
			53101941548							*	C541 WASHER, FLAT: SAME AS C442	EA		REF									-15 5-23	H3
			53100431754							*	C542 WASHER, LOCK: SAME AS C463	EA		REF									-15 5-23	H4
			59611996008							E	C543 TRANSISTOR: SAME AS C473	EA		REF									-15 5-23	Q2
			53050546653							*	C544 SCREW, MACHINE: SAME A8 C461	EA		REF									-15 5-23	H2
			53101941548							*	C545 WASHER, FLAT: SAME AS C442	EA		REF									-15 5-23	H3

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53100431754							*	C546 WASHER, LOCK: SAME AS C463	EA		REF									-15 5-23	H4
			59611996008							E	C547 TRANSISTOR: SAME AS C473	EA		REF									-15 5-23	Q3
X2	H									E	C548 INSULATOR DISK: 08289; DM103SL	EA		6									-15 5-23	H7
			53050546654							*	C549 SCREW, MACHINE: SAME AS C441	EA		REF									-15 5-23	H6
			53101941548							*	C550 WASHER, FLAT: SAME AS C442	EA .		REF									-15 5-23	H3
			53100431754							*	C551 M WASHER, LOCK: SAME AS C463	EA		REF									-15 5-23	H4
C	H		59709103528							*	C552 WASHER, NON METAL 08289; MW375-140	EA		4									-15 5-23	H8
			53102714644							*	C553 NUT, PLAIN, HEXAGON: SAME AS B707	EA		REF									-15 5-23	H9
			59611996008							E	C554 TRANSISTOR: SAME AS C473	EA		REF									-15 5-23	Q4
										E	C555 INSULATOR DISK: SAME AS C548	EA		REF									-15 5-23	H7
			53050546654							*	C556 SCREW, MACHINE: SAME AS C441	EA		REF									-15 5-23	H6
			53101941548							*	C557 WASHER, FLAT: SAME AS C442	EA		REF									-15 5-23	H3

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53100431754							*	C558 WASHER, LOCK: SAME AS C463	EA		REF									-15 5-23	H4
			59709103528							*	C559 WASHER, NON METAL: SAME AS C552	EA		REF									-15 5-23	H8
			53102714644							*	C560 NUT, PLAIN, HEXAGON: SAME AS 8707	EA		REF									-15 5-23	H9
X2	H									E	C561A BUSHING, INSULATOR: 06809; 40-000111-1	EA		8									-15 5-23	H10
C	H		59400584543							E	C562 TERMINAL LUG: 79963; 505	EA		2									-15 5-23	H11
			59405015859							E	C563 TERMINAL LUG: SAME AS C489	EA		REF									-15 5-23	H12
X2	H									E	C564A HEATSINK: 06809; 40-000098-1	EA		1									-15 5-23	
										F	C565 EXTRUSION: SAME AS C492A	EA		REF									-15 5-23	
			53108034994							F	C566 NUT, SELFLOCKING: SAME AS C493	EA		REF									-15 5-23	
										F	C567 TERMINAL STUD: SAME AS C494	EA		REF									-15 5-23	E1
										F	C568 TERMINAL STUD: SAME AS C494	EA		REF									-15 5-23	E2

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANC E									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
										F	C571 TERMINAL STUD: SAME AS C494	EA		REF									-15 5-23	E5
										F	C572 TERMINAL STUD: SAME AS C494	EA		REF									-15 5-23	E7
										F	C573 TERMINAL STUD: SAME AS C494	EA		REF									-15 5-23	E8
										F	C574 TERMINAL STUD: SAME AS C494	EA		REF									-15 5-23	E9
										F	C575 TERMINAL STUD: SAME AS C494	EA		REF									-15 5-23	E10
										F	C576 TERMINAL STUD: SAME AS C494	EA		REF									-15 5-23	E11
										F	C577 TERMINAL STUD: SAME AS C494	EA		REF									-15 5-23	E12
										F	C578 TERMINAL STUD: SAME AS C494	EA		REF									-15 5-23	E13
										F	C579 TERMINAL STUD: SAME AS C494	EA		REF									-15 5-23	E14
										F	C580 TERMINAL STUD: SAME AS C494	EA		REF									-15 5-23	E1S
										F	C581 TERMINAL STUD: SAME AS C494	EA		REF									-15 5-23	E16

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
										F	C582	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-23	E17
										F	C583	TERMINAL STUD: SAME AS C494	EA		REF									-15 .5-23	E18
										F	C584	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-23	E19
										F	C585	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-23	E20
										F	C586	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-23	E21
										F	C587	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-23	E22
										F	C588	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-23	E23
										F	C589	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-23	E24
										F	C590	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-23	E25
										F	C591	TERMINAL STUD: SAME AS C511	EA		REF									-15 5-23	E6
A	H	R								D	C592A	HEATSINK SUB-ASSEMBLY: 06809; 40-000045-1	EA		1									-15 4-4	62.11
			53050546657							*	C593	SCREW, MACHINE: SAME AS B107	EA		REF									-15 4-4	62.7

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53101941548							*	C594	WASHER, FLAT: SAME AS C442	EA		REF									-15 4-4	62.9
			53101983724							*	C595	WASHER, LOCK SAME AS C443	EA		REF									-15 4-4	62.8
P	H		59350544172							E	C596	CONNECTOR, PLUG, ELECTRICAL: 00779; 1-480278-9	EA		1	1	1	1	1	1	1		3	-15 5-24	P1
			59351330470							E	C597A	CONTACT, ELECTR-ICAL SAME AS C459A	EA		REF									-15 5-24	H1
X2	H									E	C598A	CLAMP, LOOP: 12357; HP2N.	EA		1									-15 5-24	H5
			53050546653							*	C599	SCREW, MACHINE: SAME AS C461	EA		REF									-15 5-24	H2
			53101941548							*	C600	WASHER, FLAT: SAME AS C442	EA		REF									-15 5-24	H3
			53100431754							*	C601	WASHER, LOCK: SAME AS C463	EA		REF									-15 5-24	H4
P	H		59055429838							E	C602	RESISTOR, FIXED, WIRE WOUND: 81349; RW59VSRO	EA		1	1	2	3	1	2	3		3	-15 5-24	R1
P	H		59050601233							E	C603A	RESISTOR, FIXED, FILM: 81349; RW58VR27	EA		1	1	2	3	1	2	3		3	-15 5-24	R2
			59050880636							E	C604	RESISTOR, FIXED, WIRE WOUND: SAME AS C530	EA		REF									-15 5-24	R3

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	H		59617125578							E	C605	TRANSISTOR: 81349: 2N3442	EA		1	1	2	3	1	2	3		5	-15 5-24	Q1
			53050546653							*	C606	SCREW, MACHINE: SAME AS C461	EA		REF									-15 5-24	H2
			53101941548							*	C607	WASHER, FLAT: SAME AS C442	EA		REF									-15 5-24	H3
			53100431754							*	C608	WASHER, LOCK: SAME AS C463	EA		REF									-15 5-24	H4
P	H		59619997351							E	C609	TRANSISTOR: 05277; 164-10	EA		1	1	2	3	1	2	3		5	-15 5-24	Q2
X2	H									E	C610A	HEATSINK: 06809; 40-000029-1	EA		1									-15 5-24	
										F	C611	EXTRUSION: SAME AS C492A	EA		REF									-15 5-24	
			53108034994							F	C612	NUT, SELFLOCKING: SAME AS C493	EA		REF									-15 5-24	
										F	C613	TERMINAL STUD: SAME AS C511	EA		REF									-15 5-24	E1
										F	C614	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-24	E2
										F	C615	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-24	E3
										F	C616	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-24	E4

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
										F	C617	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-24	E5
										F	C618	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-24	E6
										F	C619	TERMINAL STUD: SAME AS C494	EA		REF									-15 5-24	E7
P	H	T	74400189896							C	C620A	CIRCUIT CARD ASSEMBLY: 06809; 40-000102-1	EA		1	1	2	3	1	2	3		3	-15 4-4	40
X1	D									D	C621A	PRINTED CIRCUIT BOARD: 06809; 40-000100-1	EA		1									-15 5-25	
			59100613200							D	C622 M	CAPACITOR, FIXED, PAPER: SAME AS C283A	EA		REF									-15 5-25	C2
			59100613200							D	C623 M	CAPACITOR, FIXED, PAPER: SAME AS C283A	EA		REF									-15 5-25	C3
			59100613200							D	C624 M	CAPACITOR, FIXED, PAPER: SAME AS C283A	EA		REF									-15 5-25	C6
			59100613200							D	C624A	CAPACITOR, FIXED, PAPER: SAME AS C283A	EA		REF									-15 5-25	C14
			59108388395							D	C625	CAPACITOR, FIXED, PAPER: SAME AS C453	EA		REF									-15 5-25	C8
			59108388395							D	C626	CAPACITOR, FIXED, PAPER: SAME AS C453	EA		REF									-15 5-25	C9

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59108388395							D	C627	CAPACITOR, FIXED, PAPER: SAME AS C453	EA		REF									-15 5-25	C11
P	D		59107821973							D	C628	CAPACITOR, FIXED, ELECTROLYTIC: 81349; CS13BE106K	EA		2								10	-15 5-25	C4
			59107821973							D	C629	CAPACITOR, FDIED, ELECTROLYTIC: SAME AS C628	EA		REF									-15 5-25	C5
P	D		59109361357							D	C630	CAPACITOR, FIXED, ELECTROLYTIC: 81349; CS13BE107K	EA		1								5	-15 5-25	C1
P	D		59107338009							D	C631	CAPACITOR, FIXED ELECTROLYTIC: 81349; CL65BG181MP3	EA		2								10	-15 5-25	C10
			59107338009							D	C632	CAPACITOR, FIXED, ELECTROLYTIC: SAME AS C631	EA		REF									-15 5-25	C12
P	D		59109361334							D	C633	CAPACITOR, FIXED, ELECTROLYTIC: 81349; CS13BF105K	EA		1								5	-15 5-25	C7
P	D		59108805432							D	C634	CAPACITOR, FXED, ELECTROLYTIC: 81349; CS13BC227K	EA		1								5	-15 5-25	C13
			59052791757							D	C635	RESISTOR, FIXED, COMPOSITION: SAME AS C299	EA		REF									-15 5-25	R11
			59052791757							D	C636	RESISTOR, FIXED, COMPOSITION: SAME AS C299	EA		REF									-15 5-25	R13

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59052793506							D	C637	RESISTOR, FIXED, COMPOSITION: SAME AS C300	EA		REF									-15 5-25	R22
			59052793506							D	C638	RESISTOR, FIXED, COMPOSITION: SAME AS C300	EA		REF									-15 5-25	R23
			59052793506							D	C639	RESISTOR, FIXED, COMPOSITION: SAME AS C300	EA		REF									-15 5-25	R25
			59052793506							D	C640	RESISTOR, FIXED, COMPOSITION: SAME AS C300	EA		REF									-15 5-25	R32
			59052793506							D	C641	RESISTOR, FIXED, COMPOSITION: SAME AS C300	EA		REF									-15 5-25	R33
			59052793506							D	C642	RESISTOR, FIXED, COMPOSITION: SAME AS C300	EA		REF									-15 5-25	R54
			59052793506							D	C643	RESISTOR, FIXED, COMPOSITION: SAME AS C300	EA		REF									-15 5-25	R58
			59052793506							D	C644	RESISTOR, FIXED, COMPOSITION: SAME AS C300	EA		REF									-15 5-25	R71
			59052793506							D	C645	RESISTOR, FIXED, COMPOSITION: SAME AS C300	EA		REF									-15 5-25	R82
			59052793506							D	C646	RESISTOR, FIXED, COMPOSITION: SAME AS C300	EA		REF									-15 5-25	R85

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)		UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
											DESCRIPTION															
			59052792616							D	C647	RESISTOR, FIXED, COMPOSITON: SAME AS C407	EA		REF									-15 5-25	R15
			59052792616							D	C648	RESISTOR, FIXED, COMPOSITION: SAME AS C407	EA		REF									-15 5-25	R36
			59052793504							D	C649	RESISTOR, FIXED, COMPOSITION: SAME AS C348	EA		REF									-15 5-25	R2
			59052793504							D	C650	RESISTOR, FIXED, COMPOSITION: SAME AS C348	EA		REF									-15 5-25	R20
			59052793504							D	C651	RESISTOR, FIXED, COMPOSITION: SAME AS C348	EA		REF									-15 5-25	R27
			59052793504							D	C652	RESISTOR, FIXED, COMPOSITION: SAME AS C348	EA		REF									-15 5-25	R30
			59052793504							D	C653	RESISTOR, FIXED, COMPOSITION: SAME AS C348	EA		REF									-15 5-25	R41
			59052793504							D	C654	RESISTOR, FIXED, COMPOSITION: SAME AS C348	EA		REF									-15 5-25	R46
			59052793504							D	C655	RESISTOR, FIXED, COMPOSITION: SAME AS C348	EA		REF									-15 5-25	R48
			59052793504							D	C656	RESISTOR, FIXED, COMPOSITION: SAME AS C348	EA		REF									-15 5-25	R68

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)		UNIT OF ISSUE	QYT INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
											DESCRIPTION															
			59052793504							D	C657	RESISTOR, FIXED, COMPOSITION: SAME AS C348	EA		REF									-15 5-25	R83
			59051956806							D	C658	RESISTOR, FIXED, COMPOSITION: SAME AS C286	EA		REF									-15 5-25	R1
			59051956806							D	C659	RESISTOR, FIXED, COMPOSITION: SAME AS C286	EA		REF									-15 5-25	R28
			59051956806							D	C660	RESISTOR, FIXED, COMPOSITION: SAME AS C286	EA		REF									-15 5-25	R29
			59051956806							D	C661	RESISTOR, FIXED, COMPOSITION: SAME AS C286	EA		REF									-15 5-25	R34
			59051956806							D	C662	RESISTOR, FIXED, COMPOSITION: SAME AS C286	EA		REF									-15 5-25	R66
P	D		59052791876							D	C663	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF222J	EA		2								6	-15 5-25	R26
			59052791876							D	C664	RESISTOR, FIXED, COMPOSITION: SAME AS C663	EA		REF									-15 5-25	R39
P	D		59051712004							D	C665	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF223J	EA		2								6	-15 5-25	R31
			59051712004							D	C666	RESISTOR, FIXED, COMPOSITION: SAME AS C665	EA		REF									-15 5-25	R62

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59059452664							D	C667 M RESISTOR, FIXED, COMPOSITION: SAME AS C419 M	EA		REF									-15 5-25	R43
			59059452664							D	C668 M RESISTOR, FIXED COMPOSITION: SAME AS C419 M	EA		REF									-15 5-25	R64
			59059452664							D	C669 M RESISTOR, FIXED, COMPOSITION: SAME AS C419 M	EA		REF									-15 5-25	R88
			59051956791							D	C670 M RESISTOR, FIXED, COMPOSITION: SAME AS A558 M	EA		REF									-15 5-25	R3
			59051956791							D	C671 M RESISTOR, FIXED COMPOSITION: SAME AS A558 M	EA		REF									-15 5-25	R5
			59051956791							D	C672 M RESISTOR, FIXED, COMPOSITION: SAME AS A558 M	EA		REF									-15 5-25	R12
			59051956791							D	C673 M RESISTOR, FIXED, COMPOSITION: SAME AS A558 M	EA		REF									-15 5-25	R14
			59051956791							D	C674 M RESISTOR, FIXED, COMPOSITION: SAME AS A558 M	EA		REF									-15 5-25	R16
			59051956791							D	C675 M RESISTOR, FIXED COMPOSITION: SAME AS A558 M	EA		REF									-15 5-25	R21
			59051956791							D	C676 M RESISTOR, FIXED, COMPOSITION: SAME AS A558 M	EA		REF									-15 5-25	R24

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59051956791							D	C677 M RESISTOR, FIXED, COMPOSITION: SAME AS A558 M	EA		REF									-15 I5-25	R37
			59051956791							D	C679 M RESISTOR, FIXED, COMPOSITION: SAME AS A558 M	EA		REF									-15 5-25	R38
			59051956791							D	C679 M RESISTOR, FIXED, COMPOSITION: SAME AS A558 M	EA		REF									-15 5-25	R40
			59051956791							D	C680 M RESISTOR, FIXED, COMPOSITION: SAME AS A558 M	EA		REF									-15 5-25	R42
			59051956791							D	C681 M RESISTOR, FIXED, COMPOSITION: SAME AS A558 M	EA		REF									-15 5-25	R47
			59051956791							D	C682 M RESISTOR, FIXED, COMPOSITION: SAME AS A55M	EA		REF									-15 5-25	R49
			59051956791							D	C683 M RESISTOR, FIXED, COMPOSITION: SAME AS A558 M	EA		REF									-15 5-25	R52
			59051956791							D	C684 M RESISTOR, FIXED, COMPOSITION: SAME AS A558 M	EA		REF									-15 5-25	R57
			59051956791							D	C685 M RESISTOR, FIXED, COMPOSITION: SAME AS A558 M	EA		REF									-15 5-25	R18
			59052793513							D	C686 RESISTOR,FIXED, COMPOSITION: SAME AS A942	EA		REF									-15 5-25	R35

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59052793513							D	C687 RESISTOR, FIXED, COMPOSITION: SAME AS A942	EA		REF									-15 5-25	R61
			59052524018							D	C688 M RESISTOR, FIXED, COMPOSITION: SAME AS C297A	EA		REF									-15 5-25	R8
P	D		59052991541							D	C689 RESISTOR, FIXED, COMPOSITION: 81349; RC20GFI1SJ	EA		1								3	-15 5-25	R6
			59051923973							D	C690 M RESISTOR, FIXED, COMPOSITION: SAMEAS 0364 M	EA		REF									-15 5-25	R7
			59051923973							D	C691 M RESISTOR, FIXED, COMPOSITION: SAME AS C364 M	EA		REF									-15 5-25	R70
P	D		59052793521							D	C692 M RESISTOR, FIXED, COMPOSITION: 81349; RC20GF150J	EA		1								3	-15 5-25	R63
			59051923971							D	C693 RESISTOR, FIXED, COMPOSITION: SAME AS B039	EA		REF									-15 5-25	R65
			59051908889							D	C694 M RESISTOR, FIXED COMPOSITION: SAME AS C344 M	EA		REF									-15 5-25	R67
P	D		59059526024							D	C695 RESISTOR, FIXED, FILM 81349; RN60D3482F	EA		1								3	-15 5-25	R66
P	D		59058926578							D	C696 M RESISTOR, FIXED, FILM 81349; RN60D1212F	EA		1								3	-15 5-25	R50

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59057611901							D	C697 RESISTOR, FIXED, FILM SAME AS C313	EA		REF									-15 5-25	R72
			59057611901							D	C698 RESISTOR, FIXED, FILM SAME AS 0C313	EA		REF									-15 5-25	R74
			159057636457							D	C699 RESISTOR, FIXED, FILM SAME AS C302	: EA		REF									-15 5-25	R56
P	D		59050693919							D	C700 RESISTOR, FIXED, FILM 81349; RN60D1782F	EA		1								3	-15 5-25	R84
P	D		59050793561							D	C701 RESISTOR, FIXED, FILM 81349; RN6OD3481F	EA		4								12	-15 5-25	R4
			59050793561							D	C702 RESISTOR, FIXED, FILM SAME AS C701	EA		REF									-15 5-25	R19
			59050793561							D	C703 RESISTOR, FIXED, FILM SAME AS C701	EA		REF									-15 5-25	R79
			59050793561							D	C704 RESISTOR, FIXED, FILM SAME AS C701	EA		REF									-15 5-25	R89
			59059841465							D	C705 M RESISTOR, FIXED, FILM SAME AS C370A	EA		REF									-15 5-25	R9
			59059841465							D	C706 M RESISTOR, FIXED, FILM SAME AS C370A	EA		REF									-15 5-25	R76
			59059841465							D	C707 M RESISTOR, FIXED, FILM SAME AS C370A	EA		REF									-15 5-25	R78

(1) (A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59059841465							D	C708 M	RESISTOR, FIXED, FILM SAME AS C370A	EA		REF									-15 5-25	R80
P	D		59057289896							D	C709	RESISTOR, FIXED, FILM 81349; RN60D287LF	EA		1								3	-15 5-25	R17
P	D		59059836914							D	C710 M	RESISTOR, FIXED, FILM 81349: RN60D1002F	EA		1								3	-15 5-25	R44
			59059544642							D	C711 M	RESISTOR, FIXED, FILM SAME AS C312 M	EA		REF									-15 5-25	R11
P	D		59050788293							D	C712A	RESISTOR, FIXED, FILM 81349; RN60DI821F	EA		I								3	-15 5-25	R45
			59050518003							D	C713	RESISTOR, FIXED, FILM SAME AS C371	EA		REF									-15 5-25	R75
P	D		59057527228							D	C714	RESISTOR, FIXED, FILM 81349; RN60C1782F	EA		1								3	-15 5-25	R59
P	D		59058342968							D	C715	RESISTOR, FIXED, FILM 81349; RN60C1781F	: EA		3									-15 5-25	R10
			59059516735							D	C716	RESISTOR, FIXED, WIREWOUND: SAME AS C467	EA		REF									-15 5-25	R53
			59059516735							D	C717	RESISTOR, FIXED, WIRE WOUND: SAME AS C467	EA		REF									-15 5-25	R55
P	D		59058650361							D	C718	RESISTOR, FIXED, WIRE WOUND: 81349; RW79U5621F	EA		1								3	-15 5-25	R87

(1) (A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	D		59055779574							D	C719	RESISTOR, FIXED, WIRE WOUND: 81349; RW59V2R2	EA		1								3	-15 5-25	R69
P	D		59059543308							D	C720	RESISTOR, FIXED, WIRE WOUND: 81349; RW57V301	EA		1								3	-15 5-25	R60
										D	C721AM	RESISTOR, VARIABLE: SAME AS C306AM	EA		REF									-15 5-25	R73
			59059882313							D	C722	RESISTOR, FIXED, FILM SAME AS C308	EA		REF									-15 5-25	R77
P	D		59050430381							D	C723A	RESISTOR, FIXED, FILM 81349; RN60D2211F	EA		1								3	-15 5-25	R51
P	D		59451070747							D	C724	RELAY: 02295:; CR120G900A02	EA		1								3	-15 5-25	K1
P	D		59618527549							D	C725	SEMI-CONDUCTOR - DEVICE, DIODE: 81349; lN754A	EA		3								9	-15 5-25	CR27
			59618527549							D	C726	SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C725	EA		REF									-15 5-25	CR28
			59618527549							D	C727	SEMI-CONDUCTOR - DEVICE, DIODE: SAME AS C725	EA		REF									-15 5-25	CR30
P	D		59617656083							D	C728 M	TRANSISTOR: 81349; 2N2323	EA		1								5	-15 5-25	Q42

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	D		59612446905							D	C729 M TRANSISTOR: 81349; 2N4986	EA		2								10	-15 5-25	Q40
			59612446905							D	C730 M TRANSISTOR: SAME AS C729 M	EA		REF									-15 5-25	Q41
			59610888792							D	C731 M SEMI-CONDUCTOR - DEVICE, DIODE: SAME AS C383 N	EA		REF									-15 5-25	CR1
			59610888792							D	C732 M SEMI-CONDUCTOR - DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR2
			59610888792							D	C733 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR3
			59610888792							D	C734 M SEMI-CONDUCTOR - DEVICE, DIODE: SAME AS C383 N	EA		REF									-15 5-25	CR7
			59610888792							D	C735 M SEMI-CONDUCTOR - DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR6
			59610888792							D	C736 M SEMI-CONDUCTOR - DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR7
			59610888792							D	C737 M SEMI-CONDUCTOR - DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR8
			59610888792							D	C738 M SEMI-CONDUCTOR D- DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR9

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59610888792							D	C739 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR10
			59610888792							D	C740 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR11
			59610888792							D	C741 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR12
			59610888792							D	C742 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR13
			59610888792							D	C743 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR14
			59610888792							D	C744 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR15
			59610888792							D	C745 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR16
			59610888792							D	C746 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR17
			59610888792							D	C747 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR18
			59610888792							D	C748 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR19

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59610888792							D	C749 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR20
			59610888792							D	C750 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR21
			59610888792							D	C751 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C883 M	EA		REF									-15 5-25	CR22
			59610888792							D	C752 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR23
			59610888792							D	C753 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR25
			59610888792							D	C754 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR26
			59610888792							D	C755 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 .5-25	CR29
			59610888792							D	C756 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR31
			59610888792							D	C757 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR32
			59610888792							D	C758 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR35

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QYT INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO.EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59610888792							D	C759 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-25	CR36
P	D		59619381135							D	C760 SEMI-CONDUCTOR DEVICE, DIODE: 81349; IN4148	EA		1								3	-15 5-25	CR5
			59619491440							D	C761 TRANSISTOR: SAME AS C430	EA		REF									-15 5-25	Q3
			59619491440							D	C762 TRANSISTOR: SAME AS C430	EA		REF									-15 5-25	Q4
			59619491440							D	C763 TRANSISTOR: SAME AS C430	EA		REF									-15 5-25	Q8
			59619491440							D	C764 TRANSISTOR: SAME AS C430	EA		REF									-15 5-25	Q9
			59619491440							D	C765 TRANSISTOR: SAME AS C430	EA		REF									-15 5-25	Q15
			59619491440							D	C766 TRANSISTOR: SAME AS C430	EA		REF									-15 5-25	Q19
			59619491440							D	C767 TRANSISTOR: SAME AS C430	EA		REF									-15 5-25	Q20
			59619491440							D	C768 TRANSISTOR: SAME AS C430	EA		REF									-15 5-25	Q21
			59619491440							D	C769 TRANSISTOR: SAME AS C430	EA		REF									-15 5-25	Q22
			59619491440							D	C770 TRANSISTOR: SAME AS C430	EA		REF									-15 5-25	Q24

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO. EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59619491440							D	C771 TRANSISTOR: SAME AS C430	EA		REF									-15 5-25	Q25
			59619491440							D	C772 TRANSISTOR: SAME AS C430	EA		REF									-15 5-25	Q26
			59619491440							D	0773 TRANSISTOR: SAME AS C430	EA		REF									-15 5-25	Q27
			59619491440							D	0774 TRANSISTOR: SAME AS 0430	EA		REF									-15 5-25	Q31
			59619491440							D	0775 TRANSISTOR: SAME AS C430	EA		REF									-15 5-25	Q37
			59610540046							D	C776 TRANSISTOR: SAME AS C326	EA		REF									-15 5-25	Q2
			59610540046							D	C777 TRANSISTOR: SAME AS C326	EA		REF									-15 5-25	Q5
			59610540046							D	C779 TRANSISTOR: SAME AS C326	EA		REF									-15 5-25	Q6
			59610540046							D	C779 TRANSISTOR SAME AS C326	EA		REF									-15 5-2S	Q7
			59610540046							D	C780 TRANSISTOR SAME AS C326	EA		REF									-15 5-25	Q10
			59610540046							D	C77B TRANSISTOR SAME AS 0326	EA		REF									-15 5-25	Q11
			59610540046							D	0782 TRANSISTOR: SAME AS C326	EA		REF									5-25	Q12

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO. EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59610540046							D	C783 TRANSISTOR: SAME AS C326	EA		REF									-15 5-25	Q13
			596510540046							D	C784 TRANSISTOR: SAME AS C326	EA		REF									-15 5-25	Q14
			59610540046							D	C78S TRANSISTOR: SAME AS C326	EA		REF									-15 5-25	Q15
			59610540046							D	C786 TRANSISTOR: SAME AS C326	EA		REF									-15 5-25	Q17
			59610540046							D	C787 TRANSISTOR: SAME AS C326	EA		REF									-15 5-25	Q18
			59610540046							D	C788 TRANSISTOR: SAME AS C326	EA		REF									-15 5-25	Q23
			59610540046							D	C789 TRANSISTOR SAME AS C326	EA		REF									-15 5-25	Q28
			59610540046							D	C790 TRANSISTOR: SAME AS C326	EA		REF									-15 5-25	Q29
			59610540046							D	C791 TRANSISTOR: SAME AS C326	EA		REF									-15 5-25	Q30
			59610540046							D	C792 TRANSISTOR: SAME AS C326	EA		REF									-15 5-25	Q34
			59610540046							D	C793 TRANSISTOR: SAME AS C326	EA		REF									-15 5-25	Q35
			59610540046							D	C794 TRANSISTOR: SAME AS C326	EA		REF									-15 5-25	Q36

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59610546046							D	C795 TRANSISTOR: SAME AS C326	EA		REF									-15 5-25	Q38
			59610540046							D	C796 TRANSISTOR: SAME AS C326	EA		REF									-15 5-26	Q39
			59611332884							D	C797 TRANSISTOR: SAME AS C435	EA		REF									-15 5-25	Q1
			59611332884							D	C798 TRANSISTOR: SAME AS C435	EA		REF									-15 5-25	Q32
			59611996008							D	C799 TRANSISTOR: SAME AS C473	EA		REF									-15 5-25	Q33
X2	D									D	C800 HEATSINK: 06809; 40-000167-1	EA		1									-15 5-25	MP1
										*	C801 INSULATOR DISK: SAME AS C548	EA		REF									-15 5-25	H3
			53050546652							*	C802 SCREW, MACHINE: SAME AS B089	EA		REF									-15 5-25	H4
			53109296395							*	C803 WASHER, LOCK: SAME AS B091	EA		REF									-15 5-25	H2
			53109349761							*	C804 NUT, PLAIN, HEXAGON: SAME AS B109	EA		REF									-15 5-25	H1
P	D		59501028133							D	C805C TRANSFORMER: 06809: 40-000133-1	EA		1								2	-15 5-25	T1
A	H	R								C	C806AM CONNECTOR BRACKET ASSEMBLY: 06809; 40-000110-1	EA		1									-15 4-4	88

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPL. ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53050546652							*	C807M SCREW, MACHINE: SAME AS 8089	EA		REF									-15 4-4	85
										*	C807A NUT, PLAIN, HEXAGON: SAME AS 109	EA		REF									-15 4-4	84.1
			53100821404							*	C808 WASHER, FLAT: SAME AS C234	EA		REF									-15 4-4	87
			53100454007							*	C809 WASHER, LOCK: SAME AS C235	EA		REF									-15 4-4	86
X2	H									D	C810 M BRACKET, CONNECTOR 06809; 40-000109-1	EA		1									-15 5-26	A14
										E	C811 TERMINAL STUD. SAME AS C494	EA		REF									-15 5-26	E1
										E	C812 TERMINAL, STUD: SAME AS C494	EA		REF									-15 5-26	E2
										E	C813 TERMINAL STUD: SAME AS C494	EA		REF									-15 5-26	E3
										E	C814 TERMINAL STUD: SAME AS C494	EA		REF									-15 5-26	E4
			53105968131							E	C815 FASTENER, CLINCH: SAME AS C277	EA		REF									-15 5-26	H1
X1	H		53256410860							E	C816 EYELET, FLANGE: 57771; A240	EA		2									-15 5-26	K2
P	H		59050444406							D	C817C RESISTOR, FIXED, WIREWOUND: 81349: RE65GR150	EA		1	1	2	3	1	2	3		3	-15 5-26	R1
C	H		53050545639							*	C818 SCREW, MACHINE: 96906; MSS1957-5	EA		2									-15 5-26	H3

(1) (A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	H		53102855631							*	C819 WASHER, FLAT: 88044; AN960C2	EA		2									-15 5-26	H4
C	H		53109282690							*	C820 WASHER, LOCK 96906; MS35338-134	EA		2									-15 5-26	H5
C	H		53109382013							*	C821 NUT, PLAIN, HEXAGON: 96906; MS35649-224	EA		2									-15 5-26	H6
P	H		59057636661							D	C822 A RESISTOR, FIXED, WIREWOUND: 81349; RWS7GR10	EA		2	1	2	3	1	2	3		6	-15 5-26	R2
			59057636661							D	C823 A RESISTOR, FIXED, WIREWOUND: SAME AS C822A	EA		REF									-15 5-26	R3
P	H		59610606817							D	C824 TRANSISTOR: 81389; 2N683	EA		1	1	2	3	1	2	3		5	-15 5-26	CR1
P	H		59618465808							D	C825 TRANSISTOR: 81349; 2N682	EA		3	1	2	3	1	2	3		9	-15 5-26	CR2
			59618465808							D	C826 TRANSISTOR: SAME AS C825	EA		REF									-15 5-26	CR3
			59618465808							D	C827 TRANSISTOR: SAME AS. C826	EA		REF									-15 5-26	CR4
			59409439539							D	C828 TERMINAL, LUG: SAME AS C490	EA		REF									-15 5-26	H8
X2	H		59709772714							D	C829 A SPACER: 08289; TW516-25	EA		4									-15 5-26	H9
C	H		59405523625							D	C830 TERMINAL LUG: 79963; 29A	EA		1									-15 5-26	H7

(1) (A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	H									D	C831 WASHER, NON METAL: 08289; MW750-255	EA		8									-15 5-26	H10
P	H		59351377302							D	C831 A CONNECTOR HOUSING: 00779; 1-480275-5	EA		1	1	2	3	1	2	3		1	-15 5-26	J5
P	H		59351377303							D	C831 B CONNECTOR HOUSING: 00779: 1-480275-6	EA		1	1	2	3	1	2	3		1	-15 5-26	J6
P	H		59351377301							D	C831 C CONNECTOR HOUSING: 00779; 1-480275-3	EA		1	1	2	3	1	2	3		1	-15 5-26	J7
P	H		59354515687							D	0831 D CONNECTOR HOUSING: 00779; 1-480275-8	EA		1	1	2	3	1	2	3		1	-15 5-26	J8
P	H		59354515685							D	C831 E CONNECTOR HOUSING: 00779; 1-480275-9	EA		1	1	2	3	1	2	3		1	-15 5-26	J9
P	H		59994766327							D	C831 F CONTACT ELECTRICAL: 00779; 67777-1	EA		35	10	20	30	10	20	30		1	-15 5-26	H11
X2	H									D	C832 POST ELECTRICAL MECHANISM: 06809; 40-000116-1	EA		2									-15 4-4	84
			53050546651							*	C833 M SCREW, MACHINE: SAME AS B092C	EA		REF									-15 4-4	84.2
			53109296395							*	C834 WASHER, LOCK: SAME AS 8091	EA		REF									-15 4-4	84.3
C	H		53105319514							*	C835 WASHER, FLAT: 88044; AN960C6	EA		4									-15 4-4	84.4
P	H	T	74400189690							D	C836 M CIRCUIT CARD ASSEMBLY: 06809; 40-000113-1	EA		1	1	2	3	1	2	3		3	-15 4-4	83
										*	C837 M SCREW, MACHINE: SAME AS .B092C	EA		REF									-15 4-4	84.2
			53105319514							*	C838 WASHER, FLAT: SAME AS C835	EA		REF									-15 4-4	84. 4

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO. EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53109296395							*	C839 WASHER, LOCK: SAME AS B091	EA		REF									-15 4-4	84.3
X1	D									E	C840 A PRINTED CIRCUIT BOARD: 06809: 40-000114-1	EA		1									-15 5-26	A15
			59108388395							E	C841 CAPACITOR, FIXED PAPER: SAME AS C453	EA		REF									-15 5-26	C1
			59108388395							E	C842 CAPACITOR, FIXED, PAPER: SAME AS C453	EA		REF	-15								5-26	C2
			59108388395							E	C843 CAPACITOR, FIXED, PAPER: SAME AS C453	EA		REF	-15								5-26	C3
			59108388395							E	C844 CAPACITOR, FIXED, PAPER: SAME AS C453	EA		REF	-15								5-26	C4
			59108388395							E	C845 CAPACITOR, FIXED, PAPER: SAME AS C453	EA		REF	-15								5-26	C5
			59051712006							E	C846 M RESISTOR, FIXED, COMPOSITION: SAME AS C343A	EA		REF	-15								5-26	R6
			59051712006							E	C847 M RESISTOR, FIXED, COMPOSITION: SAME AS C343A	EA		REF	-15								5-26	R9
			59051712006							E	C848 M RESISTOR, FIXED, COMPOSITION: SAME AS C343A	EA		REF	-15								5-26	R12
P	D		59059787703							E	C849 RESISTOR, FIXED, WIREWOUND: 81349; RWS9VIR5	EA		1								3	-15 5-26	R2
			59050880636							E	C850 RESISTOR, FIXED, WIREWOUND. SAME AS C530	EA		REF									-15 5-26	R10
			59051956791							E	C851 A RESISTOR, FIXED, COMPOSITION: SAME AS A558 M	EA		REF									-15 5-26	R3

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59051712006							E	C852 M RESISTOR, FIXED, COMPOSITION: SAME AS C343A	EA		REF									-15 5-26	R4
			59050883847							E	C853 RESISTOR, FIXED, WIRE WOUND: SAME AS C409	EA		REF									-15 5-26	R1
			59051908889							E	C854A M RESISTOR, FIXED, COMPOSITION: SAME AS C344 M	EA		REF									-15 5-26	R8
P	D		59050805899							E	C855A RESISTOR, FIXED, WIRE WOUND: 81349; RW59V101	EA		1								3	-15 5-26	R7
P	D		59052793518							E	C856 M RESISTOR, FIXED, COMPOSITION: 81349; RC20GF3001	EA		1								3	-15 5-26	R8
			59051908889							E	C857A M RESISTOR, FIXED, COMPOSITION: SAME AS C344 M	EA		REF									-15 5-26	R11
			59610880792							E	C858 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-26	CR1
			59610888792							E	C859 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-26	CR2
			59610888792							E	C860 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-26	CR3
			59610888792							E	C861 M SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 5-26	CR4

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
A	H	R								C	C862A FRONT PANEL ASSEMBLY: 06809; 40-000072-1	EA		1									-15 4-4	4
C	H		53050546668							*	C863 SCREW, MACHINE: 96906; MS51957-43	EA		14									-15 4-4	1
C	H		53108098544							*	C964 WASHER, FLAT: 96906; MS27183-7	EA		15									-15 4-4	3
C	H		53100453299							*	C865 WASHER, LOCK: 96906; MS35338-42	EA		11									-15 4-4	2
A	H	R								D	C866A FRONT PANEL: 06809; 40-000058-1	EA		1									-15 4-4	4.1
P	H		59356156736							E	C867A JACK TIP: 98291; SKT5BCBLK	EA		1	1	2	3	1	2	3		2	-15 4-4	20
P	H		59356156742							E	C868A JACK TIP: 98291; SKT5BCGRN	EA		4	1	2	3	1	2	3		8	-15 4-4	19
			59356156742							E	C869A JACK TIP: SAME AS C868A	EA		REF									-15 4-4	19
			59356156742							E	C870A JACK TIP: SAME AS C868A	EA		REF									-15 4-4	19
			59356156742							E	C871A JACK TIP: SAME AS C868A	EA		REF									-15 4-4	19
P	H		59201999502							D	C872A FUSE, CARTRIDGE: 81349; F03A250V15SA	EA		2	2	4	6	2	4	6		200	-15 4-4	13
			59201999502							D	C873A FUSE, CARTRIDGE: SAME AS C872A	EA		REF									-15 4-4	13

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	H		59202805002							D	C874A FUSE, CARTRIDGE: 81349: F03A250V10A	EA		4	3	6	9	3	6	9		400	-15 4-4	14
			59202805002							D	C875A FUSE, CARTRIDGE: SAME AS C874A	EA		REF									-15 4-4	14
			59202805002							D	C876A FUSE, CARTRIDGE: SAME AS C874A	EA		REF									-15 4-4	14
			59202805002							D	C877A FUSE, CARTRIDGE: SAME AS C874A	EA		REF									-15 4-4	14
P	H		59209022943							D	C8788 FUSE, CARTRIDGE: 71400; MDA1SA	EA		3	3	6	9	3	6	9		300	-15 4-4	11
			59209022943							D	C879B FUSE, CARTRIDGE: SAME AS C878B	EA		REF									-15 4-4	11
			59209022943							D	C880B FUSE, CARTRIDGE: SAME AS C878B	EA		REF									-15 4-4	11
P	H		59205838486							D	C881B FUSE, CARTRIDGE: B1349; F03B125V3A	EA		4	3	6	9	3	6	9		400	-15 4-4	12
			59205838486							D	C882B FUSE, CARTRIDGE: SAME AS C881B	EA		REF									-15 4-4	12
			59205838486							D	C883B FUSE, CARTRIDGE: SAME AS C881B	EA		REF									-15 4-4	12
			59205838486							D	C884B FUSE, CARTRIDGE: SAME AS C881B	EA		REF									-15 4-4	12
P	H		59200431425							D	C885 FUSE HOLDER: 71400; FHL18G1-9	EA		1	1	1	1	1	1	1		3	-15 4-4	6

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	H		59209525360							D	C886 FUSE HOLDER: 71400; FHL18GI-1	EA		4	1	1	1	1	1	1		12	-15 4-4	8
			59209525360							D	C887 FUSE HOLDER: SAME AS C886	EA		REF									-15 4-4	8
			59209525360							D	C888 FUSE HOLDER: SAME AS C886	EA		REF									-15 4-4	8
			59209525360							D	C889 FUSE HOLDER: SAME AS C886	EA		REF									-15 4-4	8
P	H		59202693743							D	C890 FUSE HOLDER: 71400; FHL18G1-5	EA		1	1	1	1	1	1	1		3	-15 4-4	7
P	H		59205772264							D	C891A FUSE HOLDER: 71400; HKL-X	EA		3	1	1	1	1	1	1		12	-15 4-4	9
			59205772264							D	C892A FUSE HOLDER: SAME AS C891A	EA		REF									-15 4-4	9
			59205772264							D	C893A FUSE HOLDER: SAME AS C891A	EA		REF									-15 4-4	9
P	H		59206360970							D	C894A FUSE HOLDER: 71400; HKP-A	EA		4	1	1	1	1	1	1		12	-15 4-4	10
			59206360970							D	C895A FUSE HOLDER: SAME AS C894A	EA		REF									-15 4-4	10
			59206360970							D	C896A FUSE HOLDER: SAME AS C894A	EA		REF									-15 4-4	10
			59206360970							D	C897A FUSE HOLDER: SAME AS C894A	EA		REF									-15 4-4	10

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53406849956							D	C898 M	LATCH: SAME AS B113 M	EA		REF									-15 4-4	5
P	H		59350505387							C	C899	CONNECTOR, RECEPTACLE, ELECTRICAL 91662; 00-6022-022-940-002	EA		3	1	1	1	1	1	1		9	-15 4-4	95
C	H		53050545648							*	C900	SCREW, MACHINE: 96906; MS51957-14	EA		6									-15 4-4	89
C	H		53109838483							*	C901	WASHER, FLAT: 96906; MS27183-5	EA		8									-15 4-4	91
C	H		53105432410							*	C902	WASHER, LOCK: 96906: MS35338-40	EA		8									-15 4-4	90
X2	H									C	C903A	POLARIZATION KEY: 91662; 60-61-3118	EA		3									-15 4-4	96
			59350505387							C	C904	CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS C899	EA		REF									-15 4-4	95
			53050545648							*	C905	SCREW, MACHINE: SAME AS C900	EA		REF									-15 4-4	89
			53109838483							*	C906	WASHER, FLAT: SAME AS C901	EA		REF									-15 4-4	91
			53105432410							*	C907	WASHER, LOCK: SAME AS C902	EA		REF									-15 4-4	90
										C	C908A	POLARIZATION KEY: SAME AS C903A	EA		REF									-15 4-4	96

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59350505387							C	C909	CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS C899	EA		REF									-15 4-4	95
			53050545648							*	C910	SCREW, MACHINE: SAME AS .C900	EA		REF									-15 4-4	89
C										C	911A	POLARIZATION KEY: SAME AS C903A	EA		REF									-15 4-4	96
			53109838483							*	C912	WASHER, FLAT: SAME AS C901	EA		REF									-15 4-4	91
			53105432410							*	C913	WASHER, LOCK: SAME AS C902	EA		REF									-15 4-4	90
P	H		59350805023							C	C914	CONNECTOR, RECEPTACLE, ELECTRICAL: 71785; 250-25-36-170	EA		1	1	1	1	1	1	1		3	-15 4-4	39
C	H		53100134524							*	C915	NUT, PLAIN, HEXAGON: 96906: MS35649-42	EA		2									-15 4-4	37
C	H		53050545651							*	C916	SCREW, MACHINE: 96906; MS51957-17	EA		2									-15 4-4	34
			53109838483							*	C917	WASHER, FLAT: SAME AS C901	EA		REF									-15 4-4	36
			53105432410							*	C918	WASHER, LOCK: SAME AS C902	EA		REF									-15 4-4	35
X2	H									C	C919	POLARIZATION KEY: 71785; 456-99-99-193	EA		1									-15 4-4	38
X2	H									C	C920A	COVER, FUSE: 06809; 40-000078-1	EA		1									-15 4-4	24

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO. EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53050546652							*	C921 SCREW, MACHINE: SAME AS I089	EA		REF									-15 4-4	21
			53100821404							*	C922 WASHER, FLAT: SAME AS C234	EA		REF									-15 4-4	23
			53100454007							*	C923 WASHER, LOC1 SAME AS C235	EA		REF									-15 4-4	22
X2	H									C	C924 GROMMET, RUBBER: 70485: 1139	EA		1									-15 4-4	71
X2	H									C	0925 HANDLE, BOW: 96906; M839078-3	EA		2									-15 4-4	18
			53050593660							*	C926 SCREW, MACHINE: SAME AS B084	EA		REF									-15 4-4	15
			53108098546							*	C927 WASHER, FLAT: SAME AS C217	EA		REF									-15 4-4	17
										*	0928 M WASHER, LOCI: SAME AS C197A	EA		REF									-15 4-4	16
P	H		59451004743							C	C929 RELAY: 12300; PM15D24VDC	EA		1	1	2	3	1	2	3		3	-15 4-4	70
			53050546670							*	C930 SCREW, MACHINE: SAME AS C115	EA		REF									-15 4-4	67
			53108098544							*	C931 WASHER, FLAT: SAME AS C864	EA		REF									-15 4-4	69
			53100453299							*	C932 WASHER, LOC1: SAME AS C865	EA		REF									-15 4-4	68

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO. EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H									C	C933A BRACKET, ANGLE: 06809: 40-000065-1	EA		1									-15 4-4	66
			53050546668							*	C934 SCREW, MACHINE: SAME AS C863	EA		REF									-15 4-4	63
			53108098544							*	C935 WASHER, FLAT: SAME AS C864	EA		REF									-15 4-4	65
			53100453299							*	C936 WASHER, LOCK: SAME AS C865	EA		REF									-15 4-4	64
X2	H									C	C937A PLATE, RIGHT HAND SIDE: 06809: 40-000066-1	EA		1									-15 4-4	27
C	H									*	C938A SCREW, MACHINE: 88044; AN50SP6R5	EA		10									-15 4-4	25
			53105968131							D	C939 FASTENER, CLINCH: SAME AS C277	EA		REF									-15 4-4	103.1
			53105968129							D	C940 FASTENER, CLINCH: SAME AS C278	EA		REF									-15 4-4	103.2
X2	H									C	C941A SIDE PLATE, LEFT HAND: 06809; 40-000066-2	EA		1									-15 4-4	26
										*	C942A SCREW, MACHINE: SAME AS C938A	EA		REF									-15 4-4	25
			53105968131							D	C943 FASTENER, CLINCH: SAME AS C277	EA		REF									-15 4-4	103.1
			53105968129							D	C944 FASTENER, CLINCH: SAME AS C278	EA		REF									-15 4-4	103.2

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H									C	C945A BRACKET, LEFT HAND: 06809; 40-00067-1	EA		1									-15 4-4	31
			53050546668							*	C946 SCREW, MACHINE: SAME AS C863	EA		REF									-15 4-4	28
			53108098544							*	C947 WASHER, FLAT: SAME AS C864	EA											-15 4-4	30
			53109338119							*	C948 WASHER, LOCK: SAKE AS B102	EA		REF									-15 4-4	29
X2	H									C	C949A BRACKET, RIGHT HAND 06809; 40-00067-2	EA		1									-15 4-4	32
			53050546668							*	C950 SCREW, MACHINE: SANE AS C863	EA		REF									-15 4-4	28
			53108098544							*	C951 WASHER, PLAT: SAME AS C864	EA		REF									-15 4-4	30
			53109338119							*	C952 WASHER, LOCK: SAME AS B102	EA		REF									-15 4-4	29
P	H		58219613243							C	C953 CARD GUIDE: 07556; 58-3040	EA		2	1	2	3	1	2	3		6	-15 4-4	33
X2	H									C	C954 TERMINAL BOARD: 75382; 603C1012.	EA		1									-15 4-4	82
			53100415407							*	C957 WASHER, LOCK: SAME AS C235	EA		REF									-15 4-4	79
X2	H									C	C957A STANDOFF: 14850; DI-10914B-1	EA		4									-15 4-4	78.5
X2	H									C	C957B SHIELD ASSEMBLY: 148501 A1-10980C	E		1									-15 4-4	78.4
C	H									*	C957C SCREW, MACHINE: 14850; A1-11068F-4	EA		8									-15 4-4	78
X2	H									C	C958 TERMINAL BOARD: 75382; 602CY21S1	EA		1									-15 4-4	81

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53050546655							*	C959 SCREW, MACHINE: SAME AS C120	EA		REF									-15 4-4	77
			53100821404							*	C960 WASHER, FLAT: SAME AS C234	EA		REF									-15 44	80
			53100454007							*	C961 WASHER, LOCK: SAME AS C235	EA		REF									-15 4-4	79
X2	H									C	C961A BRACKET: 14850; D1-10987C	EA		2									-15 4-4	78.3
X2	H									C	C961B SHIELD 14B50; D1-10981C	EA		1									-15 4-4	78.2
C	H									*	C961C SCREW, MACHINE: SAME AS C957C	EA		REF									-15 4-4	78
C	H									*	C96E NUT, PLAIN, HEXAGON 96906; MS35649-262	EA		4									-15 4-4	78.1
X2	H									C	C962 RETAINER 0609 40000120-1	EA		1									-15 44	76
X2	H									C	C962A BRACKET, ANGLE: 06809: 40-000095-1	EA		2									-15 4-4	75
			53050546652							*	C963 SCREW, MACHINE SAME AS B089	EA		REF									-15 4-4	72
			53100821404							*	C964 WASHER, FLAT: SAME AS C234	EA		REF									-15 4-4	74
			53100454007							*	C965 WASHER , LOCK: SAME AS:C235	EA		REF									-15 4-4	73
P	H		59500977508							C	C966A TRANSFORMER, POWER 06809; 40-000106-1	EA		1	1	2	3	1	2			3	-15 4-4	108
C	H		53108348736							*	C967 NUT, PLAIN, HEXAGON 96906; MS35691-2	EA		4									-15 4-4	100

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO. EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	H		53108094058							*	C968 WASHER, FLAT: 96906; M827183-10	EA		4									-15 4-4	102
C	H		53106379547							*	C969 WASHER, FLAT: 96906; M835339-44	EA		4									-15 4-4	101
C	H		53102641390							*	C969A WASHER, FLAT: 88044; AN961-10	EA		26									-15 4-4	99
C	H		53101848968							*	C969BM WASHER, LOCK: 96906; MS35337-100	EA		13									-15 4-4	98
C	H									*	C0969C NUT, PLAIN, HEXAGON: 96906; M820341-10B	EA		13									-15 4-4	97
A	H	R	74401656535							B	C970 BLOWER: 03522; RC2EB412A31	EA		1									-15 4-1	38
P	H		41308640650							C	C970A FILTER, WASHABLE: 03522; S-1006-5	EA		1	1	1	2	1	1	2		1	-15 4-1	34.4
P	H		59109729420							C	C970B CAPACITOR: 03522; S-1309	EA		1	1	2	3	1	2	3		3	-15 4-1	38.2
X2	H		41409883694							C	C970C BLOWER, WHEEL, CW: 03522; S-1364	EA		1									-15 4-1	38.3
X2	H		41409883695							C	C970D BLOWER, WHEEL, CCW: 03522; 8-1365	EA		1									-15 4-1	38.4
P	H		61051345596							C	C970E MOTOR: D3522; S-1783	EA		1	*	*	*	1	1	2		1	-15 4-1	38.5
			53050546669							*	0C971 SCREW, MACHINE: SAME AS 0003	EA		REF									-15 4-1	35
			53105586207							*	C972 M WASHER, FLAT: SAME AS B100A	EA		REF									-15 4-1	36
			53109338119							*	C973 WASHER, LOCK: SAME AS B102	EA		REF									-15 4-1	37

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO. EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	H									B	C974 GRILL ASSEMBLY: 58189; A64042-002	EA		1									-15 4-1	34
X1	H									C	C975 GRILL BLANK: 80063; SMC546276-3	EA		1									-15 4-1	34.1
X1	H									*	C976 STUD: 78553; P116-473-24	EA		2									-15 4-1	34.2

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
C	H		53109826813							*	C977	LOCKNUT: 96906; MS21044C06	EA		2									-15 4-1	34.3
X2	H									B	C978	SLIDE 01561; 0230522	EA		1									-15 4-1	
										*	0979 M	SCREW, MACHINE: SAME AS B964A	EA		REF									-15 4-1	21
			53101670812							*	C980	WASHER, FLAT: SAME AS B080	EA		REF									-15 4-1	22
			53109338120							*	C981	WASHER, LOCK: SAME AS B081	EA		REF									4-1	23
										*	C981A	SCREW, MACHINE: SAME AS B082A	EA		REF									-15 4-1	24
M	H									B	C982	CABLE ASSEMBLY: 58189; A65133-001	EA		1									-15 4-1	69
P	H		59351028112							C	C983A	CONNECTOR, RECEP-TACLE ELECTRICAL: 81312; MREMS50S9SJTC6 H8TY34	EA		1	1	1	2	3	1	2	3	3	-15 4-1	85
			74409335070							C	C984	CONTACT ASSEMBLY: SAME AS C104	EA		REF									-15 4-1	65
D										C	C985	BRACKET, ANGLE: SAME AS C105	EA		REF									-15 4-1	84
										*	C986	SCREW, EXTERNAL RELIEVED BODY: SAME AS C106	EA		REF									-15 4-1	71
			53106389857							*	C987	WASHER, FLAT: SAME AS B090	EA		REF									-15 4-1	72
			53109296395							*	C987A	WASHER, LOCK: SAME AS B091	EA		REF									-15 4-1	73

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
										*	C989	INSULATOR, BUSHING: SAME AS C109	EA		REF									-15 4-1	83
			53400742072							C	C990	STRAP, LINE SUPPORT: SAME AS C112	EA		REF									-15 4-1	81
										C	C991	NAMEPLATE: SAME AS C113	EA		REF									-15 4-1	82
X2	H		59409935216							C	C992	FERRULE: 00779; 2-323930-2	EA		46									-15 4-1	86
			74400193468							C	C994	CONTACT, ELECTRICAL: SAME AS 110	EA		REF									-15 4-1	79
										C	C994A	PIN, KEYING: SAME AS C113G	EA		REF									-15 4-1	80
										C	C995	CLAMP, LOOP: SAME AS C113B	EA		REF									-15 4-1	78
			53057637827							*	C996A	SCREW, MACHINE: SAME AS C113F	EA		REF									-15 4-1	77
										*	C997A	WASHER, FLAT: SAME AS C113E	EA		REF									-15 4-1	76
			53109338118							*	C998A	WASHER, LOCK SAME AS C113D	EA		REF									-15 4-1	75
										*	C999A	NUT, PLAIN, HEXAGON: SAME AS B430A	EA		REF									-15 4-1	74

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
M	H									B	D001 CABLE ASSEMBLY: 58189;A65134-001	EA		1									-15 4-1	68
P	H		59354361185							C	B002 M CONNECTOR, RECEP-TACLE, ELECTRICAL: 81312; MREMS7SS9SJT C6H8TY34	EA		1	1	2	3	1	2	3		3	-15 4-1	87
A	H									C	D003 CONTACT ASSEMBLY: 80063; SMC546217	EA		1									-15 4-1	64
X2	H									D	D004 BRACKET, ANGLE: 80063;SMC546130-3	EA		1									-15 4-1	88
										*	D005 SCREW, EXTERNAL RELIEVED BODY: SAME AS C106	EA		REF									-15 4-1	71
			53106389857							*	D006 WASHER, FLAT: SAME AS B090	EA		REF									-15 4-1	72
			53109296395							*	D006A WASHER, LOCK: SAME AS B091	EA		REF									-15 4-1	73
										*	DO.08 INSULATOR, BUSHING: SAME AS, C109	EA		REF									-15 4-1	83
			74400193468							C	D009 CONTACT, ELECTRICAL: SAME AS C110	EA		REF									-15 4-1	79
										C	D009A PIN, KEYING: SAME AS C113G	EA		REF									-15 4-1	80
			53400742072							C	D010 STRAP, LINE SUPPORT: SAME AS C112	EA		REF									-15 4-1	81
										C	D011 NAMEPLATE: SAME AS C113	EA		REF									-15 4-1	82

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
										C	D012 CLAMP, LOOP: SAME AS C113B	EA		REF									-15 4-1	78
			53057637827							*	D013A SCREW, MACHINE: SAME AS C113F	EA		REF									-15 4-1	77
										*	D014A WASHER, FLAT: SAME AS C113E	EA		REF									-15 4-1	76
			53109338118							*	D015A WASHER, LOCK: SAME AS CI13D	EA		REF									-15 4-1	75
										*	D016A NUT, PLAIN, HEXAGON: SAME AS B430A	EA		REF									-15 4-1	74
M	H									B	D017 CABLE ASSEMBLY: 58189; A65135-001	EA		1									-15 4-1	70
			59409935216							C	D018 FERRULE: SAME AS C992	EA		REF									-15 4-1	91
			74409335070							C	D019 CONTACT ASSEMBLY: SAME AS C104	EA		REF									-15 4-1	66
										D	D020 BRACKET, ANGLE: SAME AS C105	EA		REF									-15 4-1	84
										*	D021 SCREW, EXTERNAL RELIVED BODY: SAME AS C106	EA		REF									-15 4-1	71
			53106389857							*	D022 WASHER, FLAT: SAME AS B090	EA		REF									-15 4-1	72
			53109296395							*	D022A WASHER, LOCK: SAME AS 8091	EA		REF									-15 4-1	73

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
										D	D024 INSULATOR, BUSHING: SAME AS C109	EA		REF									-15 4-1	83
			74400193468							C	D025 CONTACT, ELECTRICAL: SAME AS C10	EA		REF									-15 4-1	79
										C	D025A PIN, KEYING: SAME AS C113G	EA		REF									-15 4-1	80
			59405039995							C	D026 TERMINAL, LUG: SAME AS C11	EA		REF									-15 4-1	90
C	H		59405571631							C	D027 TERMINAL, LUG: 96906; MS25036-15	EA		1									-15 4-1	93
C	H		59405574346							C	D028 TERMINAL, LUG: 86906; MS25036-16	EA		1									-15 4-1	92
C	H		59405571629							C	D029 TERMINAL, LUG: 96906; MS25036-49	EA		12									-15 4-1	94
C	H									C	D029A CLAMP, LOOP: 12357; HP11N	EA		1									-15 4-1	89
			53057637827							*	D029B SCREW, MACHINE: SAME AS C113F	EA		REF									-15 4-1	77
										*	D029C WASHER, FLAT: SAME AS C113E	EA		REF									-15 4-1	76
			53109338118							*	D029D WASHER, FLAT: SAME AS C1I13D	EA		REF									-15 4-1	75
										*	D029E NUT, PLAIN, HEXAGON: SAME AS B430A	EA		REF									-15 4-1	74
										C	D030 NAMEPLATE: SAME AS C113	EA		REF									-15 4-1	82
			53400742072							C	D031 STRAP, LINE SUPPORT: SAME AS C112	EA		REF									-15 4-1	81

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
P	H		47201775996							B	D031A HOSE AIR DUCT: 58189; A64062-001	EA		1	1	2	3	1	2	3		2	-15 4-1	1.2
X2	H		47309086292							B	D031B CLAMP HOSE: 81349; UM35842-14	EA		2									-15 4-1	1.1
X2	H									B	D031C FLANGE AR DUCT: 58189; A64061-001	EA		1									-15 4-1	38.1
X2	H									B	D031D FLANGE AIR DUCT: 58189; A64060-001	EA		1									-15 4-1	12.4

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY. ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53050546669							*	D032	SCREW, MACHINE: SAME AS C003	EA		REF									-15 4-1	12.1
			53109338119							*	D033	WASHER, LOCK: SAME AS B102	EA		REF									-15 4-1	12.3
			53105586207							*	0034	WASHER, FLAT: SAME AS B100A	EA		REF									-15 4-1	12.2
M	H									B	D035	PLATE IDENTIFICATION: 58189; A52242-001	EA		1									-15 4-1	42.1
C	H		53052535603							*	D036	SCREW, MACHINE: 96906; MS21318-1	EA		2									-15 4-1	42.2
M	H									B	D037	WIRING HARNESS: 58189; A65127-001	EA		1									-15 4-1	95
			59405571528							C	D038	TERMINAL LUG: SAME AS C161	EA		REF									-15 4-1	96
			59405571629							C	D039	TERMINAL LUG: SAME AS D029	EA		REF									-15 4-1	97
M	H									B	D040A	WIRING HARNESS: 58189; A57614-001	EA		1									-15 4-13.1	18
										C	D041	TERMINAL LUG: SAME AS C161	EA		REF									-15 4-13.1	22
C	H									C	D041A	TERMINAL LUG: 58189; 540582-209	EA		2									-15 4-13.1	21
			59405571629							C	D042	TERMINAL LUG: SAME AS D029	EA		REF									-15 4-13.1	19
C	H									C	D042A	TERMINAL LUG: 96906; MS25036-2	EA		1									-15 4-13.1	20
M	H									B	D043	WIRING HARNESS: 58189; A65129-001	EA		1									-15 4-1	99
			59405571629							C	D044	TERMINAL LUG: SAME AS D029	EA		REF									-15 4-1	97

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			59405039995							C	D045	TERMINAL LUG: SAME AS C111	EA		REF									-15 4-1	100
M	H									B	D046	WIRING HARNESS: 58189, A65130-001	EA		1									-15 4-1	101
C	H		59402049142							C	D047	TERMINAL LUG: 96906; MS25036-12	EA		10									-15 4-1	102
			59405571629							C	D048	TERMINAL LUG: SAME AS D029	EA		REF									-15 4-1	103
										C	D049	TERMINAL LUG: SAME AS D047	EA		REF									-15 4-1	104
										B	D050	CLAMP, LOOP: SAME AS C134A	EA		REF									-15 4-1	105
			53109249759							*	DOS1	NUT, PAIN, HEXAGON: SAME AS B103	EA		REF									-15 4-1	106
			53105586207							*	D052	WASHER, FLAT: SAME AS B100A	EA		REF									-15 4-1	108
			53109338119							*	DOS3	WASHER, LOCK: SAME AS B102	EA		REF									-15 4-1	107
			53050546671							*	D054	SCREW, MACHINE: SAME AS C134B	EA		REF									-15 4-1	109
										B	D055	CLAMP, LOOP: SAME AS C134A	EA		REF									-15 4-1	105
			53050546671							*	D056	SCREW, MACHINE: SAME AS C134B	EA		REF									-15 4-1	109
			53109338119							*	D057	WASHER, LOCK: SAME AS 8102	EA		REF									-15 4-1	107

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO. EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53105586207							*	D058 WASHER, FLAT: SAME AS B100A	EA		REF									-15 4-1	108
C	H		53406646732							B	D059 CLAMP, LOOP: 12357; HP-14N	EA		1									-15 4-1	110
			53109249759							*	D060 NUT, PLAIN, HEXAGON: SAME AS 8103	EA		REF									-15 4-1	506
			53105586207							*	D061 WASHER, FLAT: SAME AS B100A	EA		REF									-15 4-1	108
			53109338119							*	D062 WASHER, LOCK: SAME AS B102	EA		REF									-15 4-1	107
			53050546671							*	D063 SCREW, MACHINE: SAME AS C1348	EA		REF									-15 4-1	109
C	H		5341693440							B	D064 CLAMP, LOOP, 12357, HP-16N	EA		3									-15 4-1	111
			53109249759							*	D065 NUT, PLAIN, HEXAGON: SAME AS B103	EA		REF									-15 4-1	106
			53105586207							*	D066 WASHER, FLAT: SAME AS B010A	EA		REF									-15 4-1	107
			53109338119							*	D067 WASHER, LOCK: SAME AS 8102	EA		REF									-15 4-1	108
			53050546671							*	D068 SCREW, MACHINE: SAME AS C134B	EA		REF									-15 4-1	109
										B	D069 CLAMP, LOOP: SAME AS D064	EA		REF									-15 4-1	111
			53050546671							*	D070 SCREW, MACHINE: SAME AS C134B	EA		REF									-15 4-1	109

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO. EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53109338119							*	D071 WASHER, LOCK: SAME AS B102	EA		REF									-15 4-1	108
			53105586207							*	D072 WASHER, FLAT: SAME AS B100A	EA		REF									-15 4-1	107
C	H									B	D073 CLAMP, LOOP: 12357; HP-8N	EA		4									-15 4-1	112
			53109249759							*	D074 NUT, PLAIN, HEXAGON: SAME AS B103	EA		REF									-15 4-1	106
			53109338119							*	D075 WASHER, LOCK: SAME AS B102	EA		REF									-15 4-1	108
			53105586207							*	D076 WASHER, FLAT: SAME AS B100A	EA		REF									-15 4-1	107
										B	D077 CLAMP, LOOP: SAME AS D073	EA		REF									-15 4-1	157
C	H		53403378642							B	D077A CLAMP, LOOP: 12357; HP-9N	EA		2									-15 4-1	156
			53050546671							*	D078 SCREW, MACHINE: SAME AS C134B	EA		REF									-15 4-1	109
			53109339119							*	D079 WASHER, LOCK: SAME AS B102	EA		REF									-15 4-1	108
			53105586207							*	D080 WASHER, FLAT: SAME AS B100A	EA		REF									-15 4-1	107
			53403378642							B	D081 CLAMP, LOOP: SAME AS D077A	EA		REF									-15 4-1	113
			53050546671							*	D082 SCREW, MACHINE: SAME AS C134B	EA		REF									-15 4-1	109
			53109338119							*	DOB3 WASHER, LOCK: SAME AS B002	EA		REF									-15 4-1	108

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			5310586207							*	D084 WASHER, FLAT SAME AS B100A	EA		REF									-15 4-1	107
										B	DG085 CLAMP, CABLE: SAME AS C113B	EA		REF									-15 4-1	114
			53050546671							*	D086 SCREW, MACHINE: SAME AS C134B	EA		REF									-15 4-1	109
C	H									*	D087 WASHER, LOCK: 96906; MS35335-59	EA		5									-15 4-1	108
			53105586207							*	D088 WASHER, FLAT: SAME AS B100A	EA		REF									-15 4-1	107
C	H										D089 CLAMP, LOOP: 80063; SMC634831-2	EA		1									-15 4-1	115
			53109249759							*	D090 NUT, PLAIN, HEXAGON: SAME AS B103	EA		REF									-15 4-1	106
			53109338119							*	D091 WASHER, LOCK: SAME AS B102	EA		REF									-15 4-1	103
			53105586207							*	D092 WASHER, FLAT: SAME: AS B100A	EA		REF									-15 4-1	107
			53050546671							*	D093 SCREW, MACHINE: SAME AS C134B	EA		REF									-15 4-1	109
X2	H									B	D094 BAR CABLE: 80063; SMC634816	EA		1									-15 4-1	116
			53109349765							*	D095 NUT, PLAIN, HEXAGON: SAME AS B082B	EA		REF									-15 4-1	117
			53109338120							*	D096 WASHER, LOCK: SAME AS B081	EA		REF									-15 4-1	118
			53101670812							*	D097 WASHER, FLAT: SAME AS B080	EA		REF									-15 4-1	119

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53109249759							B	D098 NUT, PLAIN, HEXAGON SAME AS B103	EA		REF									-15 4-1	120
										B	D099 WASHER, LOCK: SAME ASD087	EA		REF									-15 4-1	121
			53105585207							B	D100 WASHER, FLAT: SAME AS B100A	EA		REF									-15 4-1	122
A	H	R								B	D101 MOTOR STOP ASSEMBLY 58189; A57605-001	EA		1									-15 4-13.1	25
			53050546670							*	D101A SCREW, MACHINE: SAME AS C115	EA		REF									-15 4-13.1	4
			53109249759							*	D101B NUT, PLAIN, HEXAGON SAME AS B103	EA		REF									-15 4-13.1	1
			53109338119							*	D101C WASHER, LOCK: SAME AS B102	EA		REF									-15 4-13.1	3
			53105586207							*	D101D WASHER, FLAT: SAME AS BIO0A	EA		REF									-15 4-13.1	2
X2	H									C	D102 COVER, PROTECTIVE: 58189; A5761I-001	EA		1									-15 4-13.1	39
			53050546668							*	D103 SCREW, MACHINE: SAME AS C863	EA		REF									-15 4-13.1	36
			53105586207							*	D104 WASHER, FLAT: SAME AS B100A	EA		REF									-15 4-13.1	38
			53109338119							*	D105 WASHER, LOCK: SAME AS B102	EA		REF									-15 4-13.1	37
X2	H									C	D106 STANDOFF, HEX: 10801; 8407-SS	EA		2									-15 4-13.1	40
X2	H									C	D107 BRACKET, MOTOR STOP: 58189: A57604-001	EA		1									-15 4-13.1	65
P	H		74400836555							C	D108 RELAY: 24211: GB7200-8	EA		1	*	*	*	1	1	2		3	-15 4-13.1	45

(1)			REPAIR PARTS FOR ON-SITE, AREA RESUPPLY, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE			(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO. EQUIP. SUPPORTED			(9)	(10)	(11) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT DC	(C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-5	(B) 6-10	(C) 11-20	(A) 1-5	(B) 6-10	(C) 11-20	1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	DEPOT MANIT ALW PER 100 EQUIP	(A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
										*	D109	SCREW, MACHINE, PAN HEAD: SAME AS C134B	EA		REF									-15 4-13.1	44
			53105586207							*	D110	WASHER, FLAT: SAME AS B100A	EA		REF									-15 4-13.1	43
			53109338119							*	D111	WASHER, LOCK: SAME AS B102	EA		REF									-15 4-13.1	42
			53109249759							*	D0112	NUT, PLAIN, HEXAGON: SAME AS 8103	EA		REF									-15 4-13.1	41
P	H		66450898842							C	D113	METER: TIMING 74400; M5659	EA		1	*	*	*	1	1	2		2	-15 4-13.1	50
			53106389857							*	D114	WASHER, FLAT: SAME AS 8090	EA		REF									-15 4-13.1	48
			53109296395							*	Dl15	WASHER, LOCK: SAME AS B091	EA		REF									-15 4-13.1	47
			53109349761							*	D116	NUT, PLAIN, HEXAGON SAME AS B109	EA		REF									-15 4-13.1	46
			53050546653							*	D117	SCREW, MACHINE: SAME AS C461	EA		REF									-15 4-13.1	49
P	H		59305772285							C	D118	SWITCH, TOGGLE: 96906; MS35059-23	EA		1	1	2	3	1	2	3		3	-15 4-13.1	35
X2	H									C	D119	COVER, TERM, BLOCK: 06803; 01-001396-11	EA		1									-15 4-13.1	32
X2	H									C	D120	BRKT MTG TERM BLOCK: 06809: 01-001394-1	EA		2									-15 4-13.1	31
X2	H									C	D121	TERMINAL BOARD: 75382; 600-12GMF	EA		1									-15 4-13.1	33
C	H		53109305871							*	D122	NUT, PLAIN, HEXAGON: 58189; 639361-038	EA		7									-15 4-13.1	27
			53050546655							*	D123	SCREW, MACHINE: SAME AS C120	EA		REF									-15 4-13.1	30
			53109296395							*	D124	WASHER, LOCK: SAME AS B091	EA		REF									-15 4-13.1	28
			59405028294							C	D125	STRADDLE PLATE: SAME AS B953	EA		REF									-15 4-13.1	29

(1) SOURCE CD	(1) MAINT DC	(1) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
X2	11									C	D126	MARKER, STRIP: 75382: MS600-12XXXP1A	EA		1									-15 4-13.1	34
X2	H		59406327234							C	D127	JUMPER: 75382; 600J	EA		2									-15 4-13.1	26
M	H									C	D127A	WIRING HARNESS: 58189: A57607-001	EA		1									-15 4-13.1.	23
C	H		59408130698							D	D128	TERMINAL LUG: 96906; MS25036-101	EA		18									-15 4-13.1	7, 58
C	H		59402835280							D	D129	TERMINAL LUG: 96906; MS25036-106	EA		9									-15 4-13.1	24
P	H	R	74400258824							C	D129A	CIRCUIT CARD ASSEMBLY: 06809; 12-890129-1	EA		1	*	*	*	*	*	*		3	-15 4-13.1	57, 59
										*	D129B	NUT, PLAIN, HEXAGON SAME AS D122	EA		REF									-15 4-13.1	52
										*	D129C	WASHER, LOCK: SAME AS B091	EA		REF									-15 4-13.1	53
										*	D129D	WASHER, FLAT: SAME AS 8090	EA		REF									-15 4-13.1	54
C	H									*	D129E	WASHER, FIBER: 06809; 549011-050	EA		6									-15 4-13.1	55
										*	D129F	SCREW, MACHINE: SAME AS C120	EA		REF									-15 4-13.1	56
X1	H									D	D129G	PRINTED CIRCUIT BOARD: 06809; 12-870129	EA		1									-15 4-13.1	64
										D	D129H	SEMI-CONDUCTOR DEVICE, DIODE: SAME AS C383 M	EA		REF									-15 4-13.1	60
X2	H									D	D129J	TERMINAL, TURRET TYPE: 80063; SMB546534	EA		4									-15 4-13.1	61
										D	D129K	RESISTOR, FIXED, COMPOSITION: SAME AS B070V	EA		REF									-15 4-13.1	62
										D	D129L	TRANSISTOR: SAME AS B061	EA		REF									-15 4-13.1	63
M	H									B	D130	CABLE ASSEMBLY SPECIAL PURPOSE: 58189; A57608-001	EA		1									-15 4-13.1	6
			59408130698							C	D131	TERMINAL LUG: SAME AS D128	EA		REF									-15 4-13.1	7
C	H		59405571629							C	D132	TERMINAL LUG: 96906; MS25036-149	EA		6									-15 4-13.1	8
C	H		59401434771							C	D133	TERMINAL LUG: 96906; MS25036-103	EA		1									-15 4-13.1	9
M	H									B	D134	CABLE ASSEMBLY, SPECIAL PURPOSE: 58189; A57609-001	EA		1									-15 4-13.1	14
C	H									C	D135	TERMINAL LUG: 00779; 331338	EA		4									-15 4-13.1	17
			59408130698							C	D136	TERMINAL LUG: SAME AS D128	EA		REF									-15 4-13.1	7
			53400742072							C	D137	STRAP LINE SUPPORT: SAME AS C112	EA		REF									-15 4-13.1	15
										C	D137A	PLATE IDENTIFICATION: SAME AS C113	EA		REF									-15 4-13.1	16
C	H		53407892686							B	D138	CLAMP, CABLE: 71616; CPC1953-8B	EA		2									-15 4-13.1	13
C	H									B	D139	CLAMP, CABLE: 71616; CPC1953-6B	EA		1									-15 4-13.1	5

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
			53050546670							*	D140 SCREW, MACHINE: SAME AS C115	EA		REF									-15 4-13.1	4
			53109249759							*	D141 NUT, PLAIN, HEXAGON: SAME AS B103	EA		REF									-15 4-13.1	1
			53109338119							*	D142 WASHER, LOCK: SAME AS B102	EA		REF									-15 4-13.1	3
			53105586207							*	D143 WASHER, FLAT: SAME AS B100A	EA		REF									-15 4-13.1	2
			53050546652							B	D144 SCREW, MACHINE: SAME AS B089	EA		REF									-15 4-13.1	12
			53109296395							*	D145 WASHER, LOCK: SAME AS B091	EA		REF									-15 4-13.1	11
										*	D146 NUT, PLAIN, HEXAGON: SAME AS D122	EA		REF									-15 4-13.1	10
M	H									B	D147 CABLE ASSEMBLY, SPECIAL PURPOSE: 06809; A57616	EA		1									-15 4-13.1	51
										C	D148 TERMINAL LUG: SAME AS D128	EA		REF									-15 4-13.1	7
										C	D149 TERMINAL LUG: SAME AS D132	EA		REF									-15 4-13.1	8
										C	D150 STRAP LINE SUPPORT: SAME AS CI12	EA		REF									-15 4-13.1	15
										C	D151 PLATE IDENTIFICATION SAME AS C113	EA		REF									-15 4-13.1	16

(1) (A) SOURCE CD	(1) (B) MAINT DC	(1) (C) REC CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) (30 DAYS) SITE STOCKAGE ALLOWANCE (A) 1-5	(B) 6-10	(C) 11-20	(8) 45 DAY AREA RESUPPLY ALLOW BASED ON NO. EQUIP. SUPPORTED (A) 1-5	(B) 6-10	(C) 11-20	(9) 1-YEAR ALW PER 100 EQUIP. CNTGCY PLAN	(10) DEPOT MANIT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (A) FIG. NO.	(B) ITEM NO. OR REF DESIGN
MD	HD	D								B	Panel Cover Assembly 14850 ATE-D-0748	ea		1									4-1	1
MD	HD	D								D	Sound Cover Assembly 14850 ATE-.-0755	ea		1									4-1	1.4
PA	HZ	Z								D	Turn Fastener, Oval Hd. 14850 ATE-D-0757-2	ea		10									4-1	158
PA	HZ	Z								D	Receptacle, Clip On. 14850 ATE-D-0757-4	ea		10									4-1	160
PA	HZ	Z								D	Lestsner, Split Ring 14850 ATE-D-0748-2	ea		2									4-1	159
MD	HZ	Z								D	Bracket Assembly 14850 ATE-D-0754	ea		1									4-1	161
PA	HZ	Z								D	Sorew, Mach. Pan Hd. 14850 ATE-D-0757-1	ea		8									4-1	162
PA	HZ	Z								D	Receptacle, Type B 14850 ATE-D-0748-3	ea		2									4-1	163
XB	HZ	Z								D	Stud, Double Base 14850 ATE-D-0757-5	ea		4									4-1	164
PA	HZ	Z								D	Screw, Mch. Flat Hd. 96906 MS-35190-234	ea		8									4-1	165
PA	HZ	Z								D	Washer, Look, Int. Tooth 96906 MS-35333-47	ea		8									4-1	166
PA	HZ	Z								D	Nut, Plain Hex 96906 MS-35649-262	ea		8									4-1	167

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NG: None.
USAR: None
For explanation of abbreviations used, see AR 310-50.

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