

TECHNICAL MANUAL
OPERATOR, AVIATION UNIT AND
INTERMEDIATE MAINTENANCE
MANUAL WITH REPAIR PARTS AND
SPECIAL TOOLS LIST (INCLUDING
DEPOT MAINTENANCE REPAIR PARTS
AND SPECIAL TOOLS)

FOR

TEST SET, ROCKET MANAGEMENT
SUBSYSTEM, XM 135
PART NO. 9324500-001

NSN 4933-01-083-0540

This copy is a reprint which includes current
pages from Change 1.

Prepared by
BEI Electronics, Inc.
FSCM 12050

Contract No. DAAJ01-76-C-0940

HEADQUARTERS, DEPARTMENT OF THE ARMY

OCTOBER 1981

W A R N I N G

Personnel performing operations, procedures, and practices which are included or implied in this technical manual shall observe the following warnings. Disregard of these warnings and precautionary information can cause serious injury or loss of life.

H I G H V O L T A G E

Serious burns and/or electrical shock can result from contact with exposed electrical wires or connections.

CHANGE

No. 2

TM 9-4933-227-13&P
HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington D.C., 3 September 1996

Operator, Aviation Unit and
Intermediate Maintenance Manual
With Repair Parts and Special Tools
List (Including Depot Maintenance
Repair Parts and Special Tools)

For

Test Set, Rocket Management Subsystem MI 35
Part Number 9324500-001

TM 9-4933-227-13&P, 26 October 1981, is changed to update technical information and illustrations due to redesign of the CPU, I/O, and Motherboard Assemblies to eliminate obsolete components. The new part numbers are:

CPU Circuit Assembly A2, PN 12927275
I/O Circuit Assembly A3, PN 12927274
Motherboard Wiring Assembly, PN 12927276

CPU Assembly A2, part number 9324515-001 and 12927275 are interchangeable. I/O Assembly A3, part number 9324517-001 and 12927274 are interchangeable. Motherboard Assembly part number 9324463-001 and 12927276 are interchangeable. Either may be used until supplies of part numbers 9324515-001, 9324517-001, and 9324463-001 are exhausted.

1. New or revised material is indicated by a vertical bar in the margin.
2. Remove old pages and insert new pages as follows:

Remove Page

iii and iv
B-3 thru B-6
C-15 and C-16
C-33 thru C-44
FO-6 (7 sheets)
FO-7 (4 sheets)
None
Three 2028s

Insert Page

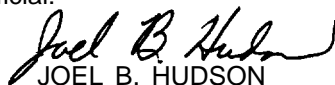
iii and iv
B-3 thru B-6
C-15 and C-16
C-33 thru C-44
FO-6 (7 sheets)
FO-7 (4 sheets)
FO-29 (5 sheets)
Three 2028s

3. File this transmittal sheet in front of the publication for reference purposes.

By Order of the Secretary of the Army:

DENNIS J. REIMER
General, United States Army
Chief of Staff

Official:


JOEL B. HUDSON

Administrative Assistant to the
Secretary of the Army
02354

DISTRIBUTION: To be distributed in accordance with the initial distribution number (IDN) 310959, requirements for TM 9-4933-227-13&P.

CHANGE
NO. 1

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington D. C., 29 August 1990

OPERATOR, AVIATION UNIT AND INTERMEDIATE MAINTENANCE
MANUAL WITH REPAIR PARTS AND SPECIAL TOOLS LIST
(INCLUDING DEPOT MAINTENANCE REPAIR PARTS
AND SPECIAL TOOLS)

TEST SET, ROCKET MANAGEMENT SUBSYSTEM. XM135

PART NUMBER 9324500-001

NSN 4933-01-083-0540

1. TM 9-4933-227-13&P, October 1981 is changed to incorporate the 20MM Turret and Rocket Management Subsystems, Electronic Circuit Boards, Failure Isolation Shop Set (FISS).
2. Remove old pages and insert new pages indicated below
3. New or changed material is indicated by vertical bar in the margin of the page.
4. Upon receipt of this change, all references to MOS 68M will be changed to 68J, due to MOS consolidation. Title for 68J is as follows: Aircraft Armament/Missile Systems Repairer.

Remove pages

7-3 and 7-4
7-5 and 7-6
B-3 and B-4
B-5 and B-6
C-43 and C-44

Insert pages

7-3 and 7-4
7-5 and 7-6
B-3 and B-4
B-5 and B-6
C-43 and C-44

5. File this change sheet in back of the publication for reference purposes.

By Order of the Secretary of the Army:

CARL E. VUONO
General United States Army
Chief of Staff

Official:

THOMAS F. SIKORA
Brigadier General, United States Army
The Adjutant General

DISTRIBUTION: To be distributed in accordance with DA Form 12-31E, (Blocks 959, 960, 961), Operator, AVUM, AVIM Maintenance requirements for TM 9-4933-227-13&P.

OPERATOR, AVIATION UNIT AND
INTERMEDIATE MAINTENANCE MANUAL
WITH REPAIR PARTS AND SPECIAL TOOLS
LIST (INCLUDING DEPOT MAINTENANCE
REPAIR PARTS AND SPECIAL TOOLS)

TEST SET, ROCKET MANAGEMENT SUBSYSTEM, XM 135
PART NO. 9324500-001

Current as of 26 October 1981

REPORTING OF ERRORS

The reporting of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to DA Publications) and forwarded direct to: Commander, US Army Armament Materiel Readiness Command, Attn: DRSAR-MAS, Rock Island Arsenal, IL 61299. A reply will be furnished directly to you.

		TABLE OF CONTENTS	Paragraph	Page
CHAPTER	1.	INTRODUCTION		1-1
Section	I.	General	1-1	1-1
	II.	Description and Tabulated Data	1-6	1-1
CHAPTER	2.	SERVICE UPON RECEIPT AND INSTALLATION		2-1
Section	I.	Site and Shelter Requirements	2-1	2-1
	II.	Service Upon Receipt of Material	2-3	2-1
	III.	Installation Instructions	2-5	2-1
	IV.	Preliminary Adjustment of Test Set	2-6	2-1
	V.	Circuit Alignment	2-7	2-2
CHAPTER	3.	OPERATING INSTRUCTIONS		3-1
Section	I.	Controls and Instruments	3-1	3-1
	II.	Operation Under Usual Conditions	3-3	3-3
	III.	Operation Under Unusual Conditions	3-6	3-5
	IV.	Preparation for Movement	3-8	3-5
CHAPTER	4.	OPERATOR/CREW MAINTENANCE INSTRUCTIONS		4-1
CHAPTER	5.	AVIATION UNIT MAINTENANCE INSTRUCTIONS		5-1
Section	I.	General		5-1
	II.	Tools and Equipment		5-1
	III.	Painting the Test Set		5-1
	IV.	Lubrication Instructions		5-1
	V.	Preventive Maintenance Checks and Services		5-1
	VI.	Troubleshooting at the Aviation Unit Maintenance (AVUM) Level		5-1
	VII.	Aviation Unit Maintenance Repair of the Test Set		5-1
CHAPTER	6.	FUNCTION OF THE TEST SET		6-1
CHAPTER	7.	AVIATION INTERMEDIATE MAINTENANCE INSTRUCTIONS		7-1
Section	I.	General	7-1	7-1
	II.	Tools, Test Equipment and Expendable Materials Requirements	7-2	7-1
	III.	Repainting the Test Set	7-5	7-1
	IV.	Preventive Maintenance Checks and Services	7-8	7-1
	V.	Troubleshooting	7-9	7-3
	VI.	Maintenance of the Test Set	7-18	7-68
CHAPTER	8.	MATERIAL USED IN CONJUNCTION WITH MAJOR ITEMS		8-1
Section	I.	General		8-1

TABLE OF CONTENTS (cont)

APPENDIX A.	REFERENCES		A-1
APPENDIX B.	MAINTENANCE ALLOCATION CHART		B-1
Section I.	Introduction	B-1	B-1
II.	Maintenance Allocation Chart		B-3
III.	Tools and Test Equipment Requirements		B-6
IV.	Remarks		B-6
APPENDIX C.	REPAIR PARTS AND SPECIAL TOOLS LIST (INCLUDING DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS)		C-1
Section I.	Introduction	C-1	C-1
II.	Repair Parts List	C-7	C-7
00	Test Set Rocket Management Subsystem XM135		C-7
01	Case		C-9
02	Test Set Subassembly		C-13
0201	Panel Assembly		C-19
020101	Keyboard and Cable Assembly A17		C-21
020102	Display Assembly A16		C-23
020103	Circuit Card Assembly A14, DU Cable Interface		C-25
0202	Backplane Assembly		C-29
020201	Circuit Card Assembly A13, Power Control		C-31
020202	Card Cage Assembly		C-33
02020201	Motherboard Wiring Assembly		C-35
0203	Circuit Card Assembly A2, CPU		C-37
0204	Circuit Card Assembly A3, I/O		C-41
0205	Circuit Card Assembly A4, DU Interface		C-45
0206	Circuit Card Assembly A8, Communications		C-47
0207	Circuit Card Assembly A9, Relay Driver		C-49
0208	Circuit Card Assembly A10, Squib OU Interface		C-51
0209	Circuit Card Assembly A11, Fuze OU Interface		C-53
0210	Circuit Card Assembly A12, Analog		C-55
0211	Cable Assembly W2, OUJ1 Test		C-59
0212	Cable Assembly W3, OUJ2 Test		C-61
0213	Cable Assembly W4, DU Test		C-63
0214	Cable Assembly W5, Power Control		C-65
0215	Cable Assembly W6, Display		C-67
0216	Cable Assembly W7, I/O		C-69
0217	Cable Assembly W8, I/O		C-71
0218	Circuit Card Assembly A1, Memory		C-73
0219	Circuit Card Assembly A15, Self-Test		C-75
0220	Cable Assembly W10, OUJ1 Self-Test		C-79
0221	Cable Assembly W11, OUJ2 Self-Test		C-81
0222	Cable Assembly W12, DU Self-Test		C-83
0223	Harness Assembly W13, Front Panel		C-85
03	Cable Assembly W1, Power		C-87
APPENDIX D.	EXPANDABLE SUPPLIES AND MATERIALS LIST		D-1
APPENDIX E.	SCHEMATIC DIAGRAMS		E-1
APPENDIX F.	MALFUNCTION CODES		F-1

LIST OF ILLUSTRATIONS

Figure	Title	Page
1-1	Rocket Management Subsystem Test Set M135	1-2
1-2	Test Set Identification Plates	1-3
3-1	RMS Test Set Front Panel	3-1
3-2	Test Set Case	3-3
3-3	Test Set Rear View with Panel Raised	3-4
6-1	Operational Block Diagram	6-2
6-2	Self-Test Block Diagram	6-3
7-1	Front Panel Raised	7-2
7-2	Back of Front Panel	7-5
7-3	Power Supply Configuration	7-63
7-4	Dimmer Control Circuit Wiring Details	7-72
7-5	Orientation of Connector J3	7-76
C-1	Test Set Rocket Management Subsystem XM135	C-6
C-2	Carrying Case	C-8
C-3	Test Set Subassembly	C-10
C-4	Front Panel Assembly	C-16
C-5	Keyboard and Cable Assembly	C-20
C-6	Display Assembly	C-22
C-7	DU Cable Interface Assembly A14	C-24
C-8	Backplate Assembly	C-26
C-9	Power Control Circuit Card Assembly A13	C-30
C-10	Card Cage Assembly	C-32
C-11	Motherboard Wiring Assembly	C-34
C-12	CPU Circuit Card Assembly A2	C-36
C-13	I/O Circuit Card Assembly A3	C-40
C-14	DU Interface Circuit Card Assembly A7	C-44
C-15	Communications Circuit Card Assembly A8	C-46
C-16	Relay Driver Circuit Card Assembly A9	C-48
C-17	Squib OU Interface Circuit Card Assembly A10	C-50
C-18	Fuze OU Interface Circuit Card Assembly A11	C-52
C-19	Analog Circuit Card Assembly A12	C-54
C-20	OUI1 Test Cable Assembly W2	C-58
C-21	OUI2 Test Cable Assembly W3	C-60
C-22	DU Test Cable Assembly W4	C-62
C-23	Power Control Cable Assembly W5	C-64
C-24	Display Cable Assembly W6	C-66
C-25	I/O Cable Assembly W7	C-68
C-26	I/O Cable Assembly W8	C-70
C-27	Circuit Card Assembly A1 Memory	C-72
C-28	Self-Test Circuit Card Assembly A15	C-74
C-29	OUI1 Self-Test Cable Assembly W10	C-78
C-30	OUI2 Self-Test Cable Assembly W11	C-80
C-31	DU Self-Test Cable Assembly W12	C-82
C-32	Front Panel Harness Assembly W13	C-84
C-33	Power Cable Assembly W1	C-86
FO-1	Test Set Subassembly Connector and Cable Configuration	
FO-2	Test Set Subassembly Schematic Diagram	
FO-2A	Test Set Subassembly Schematic Diagram	
FO-3	Keyboard and Cable Assembly Schematic Diagram	
FO-4	Display Assembly Schematic Diagram	
FO-5	Memory Assembly A1 Schematic Diagram	
FO-6	CPU Assembly A2 Schematic Diagram	
FO-7	I/O Assembly A3 Schematic Diagram	
FO-8	DU Interface Assembly A7 Schematic Diagram	
FO-9	Communications Assembly A8 Schematic Diagram	
FO-10	Relay Driver Assembly A9 Schematic Diagram	
FO-11	Squib OU Interface Assembly A10 Schematic Diagram	
FO-12	Fuze OU Interface Assembly A11 Schematic Diagram	
FO-13	Analog Circuit Assembly A12 Schematic Diagram	
FO-14	Power Control Assembly A13 Schematic Diagram	
FO-15	DU Cable Interface Assembly A14 Schematic Diagram	
FO-16	Self-Test Assembly A15 Schematic Diagram	
FO-17	Power Cable Assembly W1 Schematic Diagram	
FO-18	OUI1 Test Cable Assembly W2 Schematic Diagram	
FO-19	OUI2 Test Cable Assembly W3 Schematic Diagram	
FO-20	DU Test Cable Assembly W4 Schematic Diagram	
FO-21	Power Control Cable Assembly W5 Schematic Diagram	

LIST OF ILLUSTRATIONS (CONT)

Figure	Title	Page
FO-22	Display Cable Assembly W6 Schematic Diagram	
FO-23	I/O Cable Assembly W7 Schematic Diagram	
FO-24	I/O Cable assembly W8 Schematic Diagram	
FO-25	OUI1 Self-Test Cable Assembly W10 Schematic Diagram	
FO-26	OUI2 Self-Test Cable Assembly W11 Schematic Diagram	
FO-27	DU Self-Test Cable Assembly W12 Schematic Diagram	
FO-28	Cable Assembly W13 Schematic Diagram	
FO-29	Motherboard Schematic Diagram	

LIST OF TABLES

Table	Title	Page
3-1	Operator 's Controls and Indicators	3-2
7-1	General Troubleshooting Procedures	7-6
7-2	Troubleshooting by Faults Codes	7-9
7-3	Power Supply Voltages	7-62
7-4	Cable Assembly Connector Schedule	7-65
7-5	Keyboard and Display Checks	7-67
D-1	Expendable Supplies and Materials	D-1

CHAPTER 1 INTRODUCTION

Section I. GENERAL

1-1. Scope. This Manual contains description and operating and maintenance instructions for the Rocket Management Subsystem Test Set, XM135, figure 1-1. The Manual is divided into the following chapters and appendixes. Chapter 1 describes the Test Set; Chapter 2 provides service and installation instructions; Chapter 3 describes the operation of the Test Set, its controls and instruments, its internal functions and its operating procedures. Chapter 4 gives operator/crew maintenance instructions. Chapter 5 explains the maintenance, repair functions, and troubleshooting at the Aviation Unit Maintenance (AVUM) level. Chapter 6 details the functions of the Test Set. Chapter 7 explains the Aviation Intermediate Maintenance (AVIM) function and gives instructions for troubleshooting and final inspection of the Test Set. Chapter 8 defines materiel used in conjunction with the Test Set. Appendix A provides a list of references; Appendix B is the maintenance allocation chart;

Appendix C provides a basic issue items list and repair parts list; Appendix D provides a list of expendable items; and Appendix E contains Test Set schematic diagrams.

1-2. Maintenance Forms and Records. Maintenance forms and records that are to be used by maintenance personnel at all maintenance levels are listed in and prescribed by TM38-750, The Army Maintenance Management System (TAMMS).

1-3. Destruction of Army Materiel to Prevent Enemy Use. For destruction of Army materiel to prevent enemy use, refer to TM750-244-2.

1-4. Administrative Storage. For Administrative Storage refer to TM740-90-1.

1-5. Calibration. The Test Set does not require calibration.

Section II. DESCRIPTION AND TABULATED DATA

1-6. Purpose and Use. The Test Set, Rocket Management Subsystem, XM135 (RMS Test Set), is a manually operated portable test set which automatically tests Line-Replaceable Units (LRU) of the RMS, using programmed test routines initiated, as applicable, by the Test Set operator. The Test Set is used at the AVIM level to verify equipment failures that were detected by the built-in-test circuits in the RMS LRUs and to isolate troubles in these units to a shop-replaceable assembly. The Test Set can test: the RMS Display Unit, the RMS Operations Unit, and the Test Set itself, using built-in-test routines. The RMS test procedures are contained in TM9-1090-207-13&P. The items contained in the Test Set are described in the following paragraphs and are illustrated in Appendix C.

1-7. Description.

The Test Set, figure 1-1, is housed within an aluminum case that is equipped with carrying handles, clasp fasteners to secure the lid to the bottom section, and break-away hinges that permit removal of the lid during operation. A seal is provided between the lid and the bottom section to make the unit airtight when the two sections are closed and secure. A pressure relief

valve on the side of the container equalizes internal and external pressures. The valve must be pressed before the container is opened. The Test Set subassembly is in the bottom section of the container; all other items are in the top section.

b. The Test Set subassembly, figure C-3 has a control panel on which are mounted all controls, indicators and external connectors. All other electrical assemblies except for the printed circuit assemblies in the card cage are secured to the backplate of the subassembly with screws. The card cage is attached to the backplate assembly. The printed circuit assemblies that are located in the card cage are removable. Those that are located on the backplate or on the back of the front panel assembly are mounted with screws. The Test Set subassembly is installed in the bottom section of the container, but may be removed and mounted on any suitable flat surface.

c. One detachable cable is furnished with the Test Set to connect the Test Set to a 28 V dc power source. Three pendant cables provide connections to the line-replaceable units under test and to the Test Set self-test connectors when the Test Set is being self-tested.

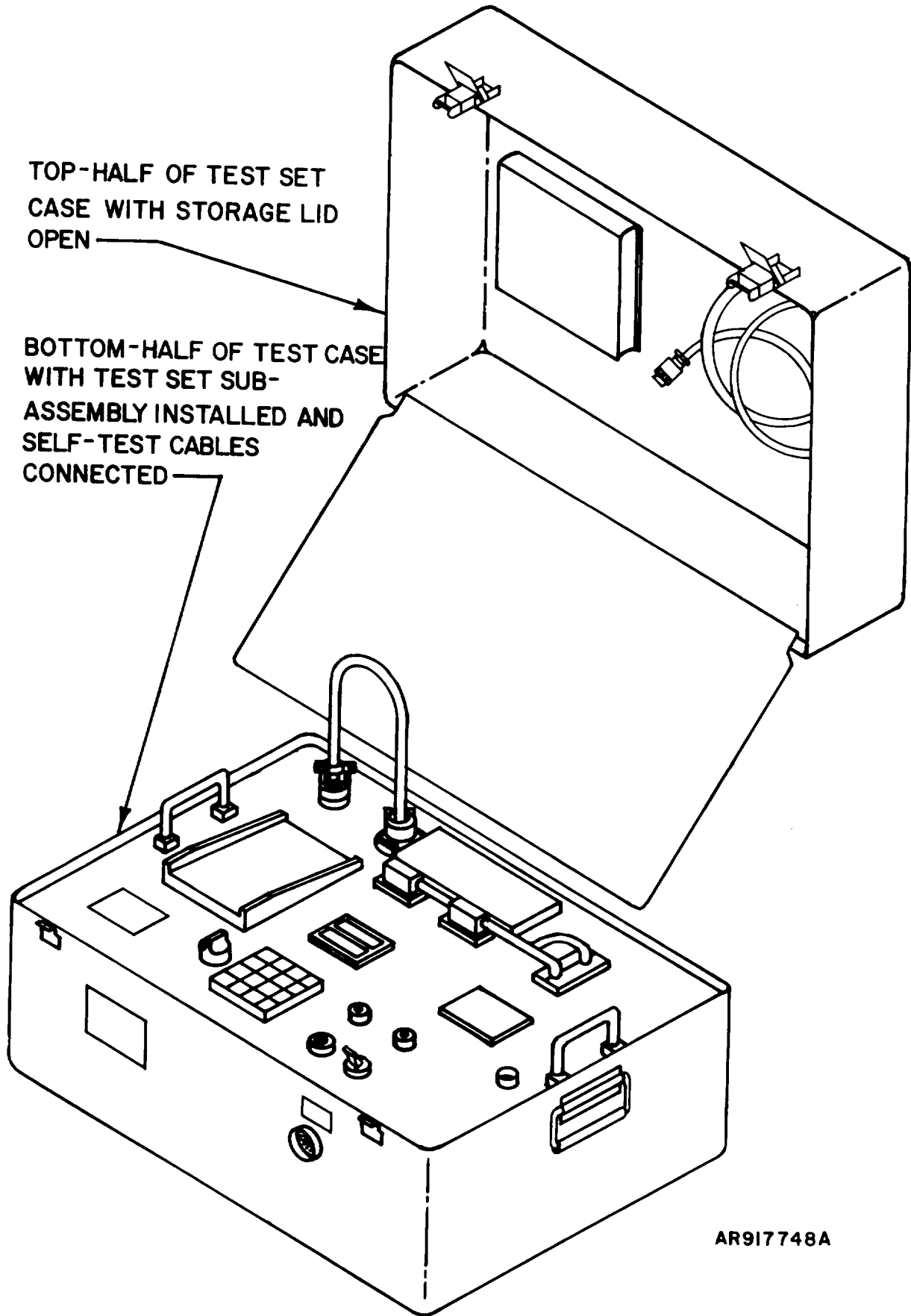


Figure 1-1 Rocket Management Subsystem Test Set XM135

1-8. Differences Between Models. This Manual covers only one model of the RMS Test Set.

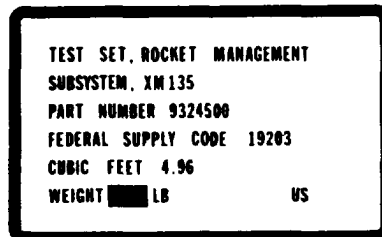
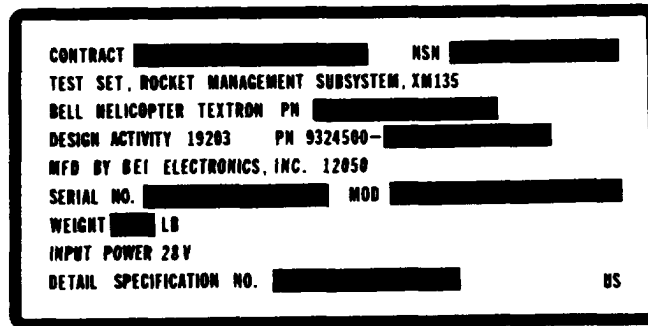
Volume 4.9 cubic feet

Operating Power . 28 V dc

1-9. Tabulated Data.

Length 26 inches
Width 20 inches
Height 16.5 inches
Weight Approximately 80 pounds

1-10. Identification Plates. The location of the identification plates on the Test Set case and subassembly are shown in figure C-1. Examples of the Test Set case and sub-assembly identification plates are given in figure 1-2.



AR926320

Figure 1-2. Test Set Identification Plates

CHAPTER 2 SERVICE UPON RECEIPT AND INSTALLATION

Section I. SITE AND SHELTER REQUIREMENTS

2-1. Siting. The Test Set may be used in any site that provides the power listed in paragraph 1-9.

normally provided by AVIM shops or maintenance shelters. Refer to paragraph 1-9 for weight and dimensions.

2-2. Shelter Requirements. The Test Set does not require shelter other than that

Section II. SERVICE UPON RECEIPT OF MATERIEL

2-3. Unpacking. The Test Set does not require special unpacking instructions. No special tools are required. The Test Set is shipped in a standard heavyweight corrugated cardboard carton. Internal packing material is polyurethane foam over a plastic envelope.

if the shipment is complete. Report all discrepancies in accordance with the instructions of TM38-750. The equipment should be placed in service even though a minor assembly or part that does not affect proper functioning is missing.

2-4. Checking Unpacked Equipment.

a. Inspect the equipment for damage to the hardware and painted surfaces incurred during shipment. If the equipment has been damaged, report the damage on DD Form 6.

Check to see if the equipment has been modified. (Equipment which has been modified will have the MWO number on the front panel, near the nomenclature plate.) Check also to see whether all currently applicable MWOs have been applied. (Current MWOs applicable to the equipment are listed in DA DAM 310-7).

b. Check the equipment against the component listing on the packing list to see

Section III. INSTALLATION INSTRUCTIONS

2-5. Special Equipment and Installation Requirements. No special tools, installation procedures, test equipment or materials are required to install the Test Set at the using facility. The unit is completely

assembled when shipped. There are no interconnecting units or plug-in items used. The Test Set requires availability of 28 V dc power source for operation.

Section IV. PRELIMINARY ADJUSTMENT OF TEST SET

2-6. Preliminary Adjustments. No preliminary adjustments are needed other than

normal setup and self-test. Refer to Chapter 3 for setup and self-test.

Section V. CIRCUIT ALIGNMENT

2-7. Circuit Alignment. The Test Set does not require any circuit alignment prior to self-testing. No switch settings, patch panel connections, or internal control settings are necessary.

2-8. Interconnection. The 28 V dc power cable W1 (figure 1-1) is used to connect the

Test Set to the external power source. Pendant cables W2 and W3 are used to connect the Test Set to an Operations Unit under test; cable W4 is used to connect the Test Set to a Display Unit under test.

CHAPTER 3
OPERATING INSTRUCTIONS

Section I. CONTROLS AND INSTRUMENTS



Only one RMS unit at a time shall be connected to the Test Set via the self-test cables to prevent damage to the units during a test.

3-1. Damage from Improper Settings.

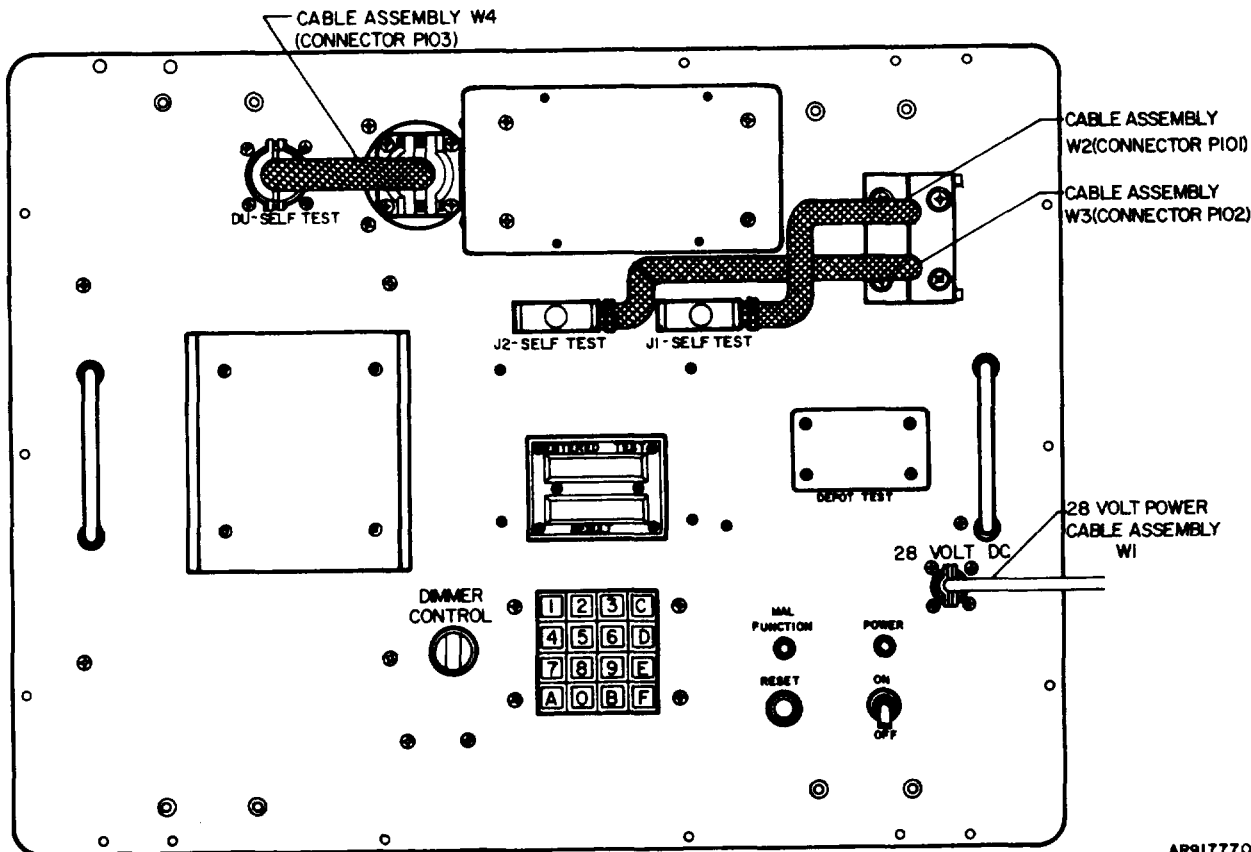
a. Two or more keys depressed at the same time. No damage will occur to the Test Set if two or more keys are depressed at one time. If a test is in process when the error occurs, RESULT will display 1000, indicating an incorrect code has been entered on the keyboard. Enter C on the Test Set keyboard to clear the error.

b. performing a test with two units on the Test Set test pads when both units are connected to Test Set by test cables. If

the Display Unit (DU) and the Operations Unit (OU) are connected to the Test Set by their respective test cables while one of the units is under test, program command feedback between the units will damage the units. No damage will occur to the Test Set.

c. Disconnecting test cable (s) from unit under test while test is in progress. The Test Set POWER ON/OFF switch shall be OFF before disconnecting any cables to the unit under test to prevent damage to the unit.

d. Disconnecting external power cable from Test Set or 28 V dc source while power is on the unit under test (or while test is in progress). Test Set POWER ON/OFF switch shall be OFF before connecting or disconnecting power cable.



AR91770

Figure 3-1. RMS Test Set Front Panel

3-2. Operator's Controls and Indicators.
 Operator's controls and indicators are shown
 in figure 3-1 and described in table 3-1.

Refer to TM9-1090-207-13&P for operation of
 controls when testing the RMS units.

Table 3-1. Operator's Controls and Indicators

NOMENCLATURE	FUNCTION
DU SELF-TEST connector	Receives connector P103 on cable W4 while self-testing the Test Set.
J2 SELF-TEST connector	Receives connector P102 on cable W3 while self-testing the Test Set.
J1 SELF-TEST connector	Receives connector P101 on cable W2 while self-testing the Test Set.
Cable W4	Connects the Test Set to a Display Unit under test.
Cables W3 and W2	Connect the Test Set to an Operations Unit under test.
28 Cable Assembly W1	Applies power from external power source to Test Set.
ENTERED TEST digital display	Displays program command codes exactly as entered by the operator.
RESULT digital display	Displays error code (malfunction codes) results in response to programmed functions command from test set keyboard.
DIMMER CONTROL	Controls brilliance of the Display Unit lighted displays and controls while under test.
Keyboard (16 alpha-numerical keys)	Allows operator to enter program command codes to the Test Set.
Keys 1 thru 9 and 0	Program command code numbers
Key A	Secondary program abort command code
Key B	Executive program and secondary program simultaneous abort code
Key C	Clears the internal program of all previous command code inputs.
Key D	Skips error code 1000 in functionally checking the keyboard and cable assembly prior to exhaustive test of the circuit assemblies.
Key E	Commands the internal program to receive the command code just keyed.
Key F	Focuses the Test Set internal test program from switch to-switch each time the key is depressed when testing and troubleshooting the Display Unit.
MALFUNCTION lamp	Lights when Test Set is faulty.
POWER lamp	Lights when power is applied to the Test Set.
RESET momentary pushbutton switch	Resets the Test Set internal program to the beginning of the program.
POWER ON/OFF toggle switch (circuit breaker)	Applies 28 V dc external power to the Test Set. Trips if 28-V power drain exceeds 20.0 amperes.

Section II. OPERATION UNDER USUAL CONDITIONS

3-3. Preliminary Starting Procedure. No preliminary starting procedures are required. Setup and self-test of the Test Set are described in paragraph 3-5.

3-4. Initial Adjustments. No routine checks or adjustments are required before putting the equipment in operation other than setup and self-test.

3-5. Operating Procedures. The Test Set is normally operated to test units of the RMS. It can also be operated in a self-test mode to verify its own performance. Specific instructions for operating the Test Set to test RMS units are given in TM9-1090-207-13&P. Specific instructions

for operating the Test Set in the self-test mode are given in Chapter 7 as part of the AVIM Troubleshooting instructions. The following paragraphs give instructions for setting up the Test Set to test RMS units or for operation in the self-test mode. Instructions are also given for setting up the Test Set subassembly for troubleshooting the Test Set. Shut-down instructions are also given.

a. Set Up the Test Set.

(1) Press pressure relief (push-button) valve (figure 3-2) and hold until Test Set internal-air pressure equalizes with outside air pressure.

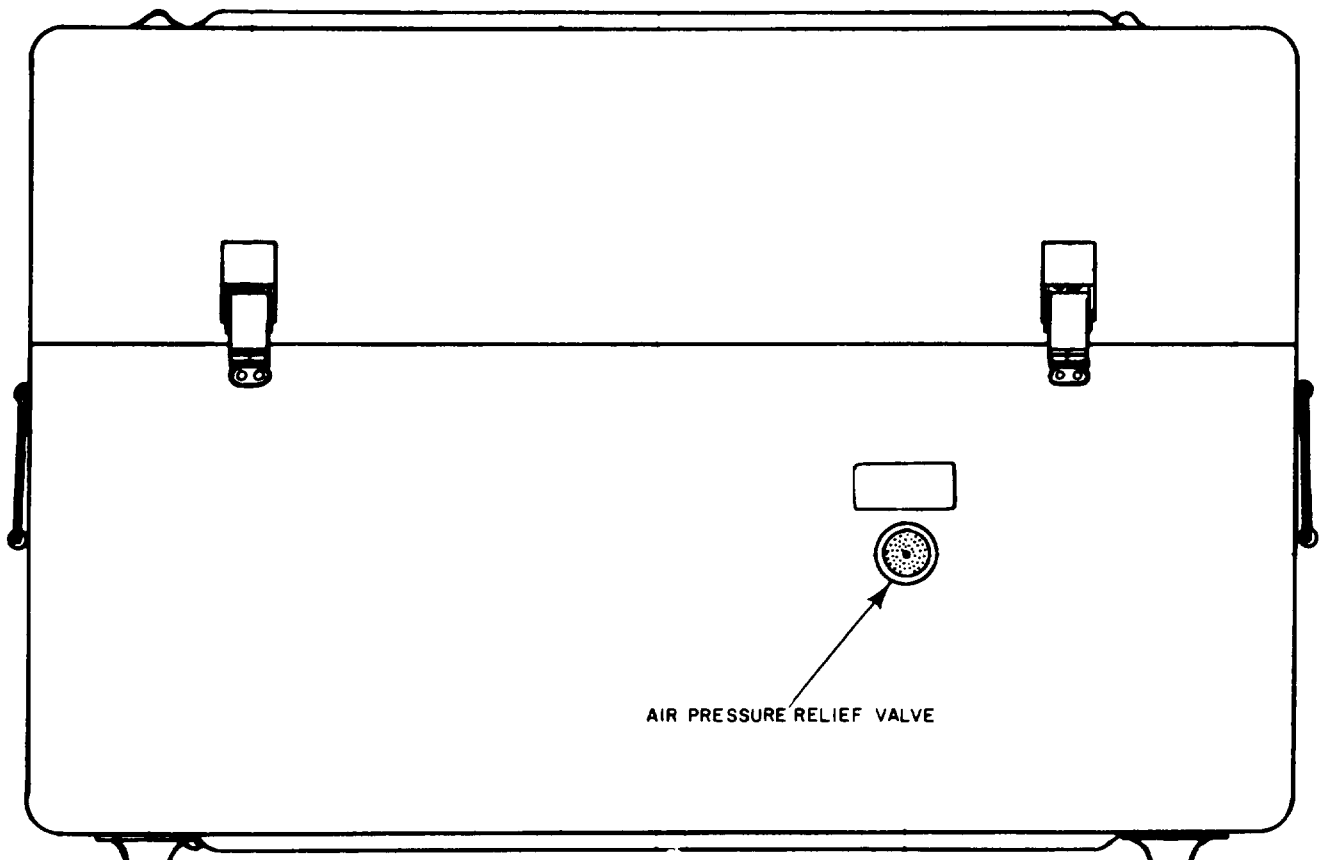


Figure 3-2. Test Set Case

AR 917775

(2) Unlatch and remove the Test Set cover.

(3) Check that the POWER ON/OFF switch on the Test Set control panel (figure 3-1) is set to OFF.

(4) Press to release three fasteners (figure 1-1) on storage lid of case.

(5) Open the storage compartment and unstuff cable assembly W1.

(6) Close storage lid and set Test Set cover aside.

(7) Verify that connectors P103, P102, and P101 (on cable assemblies W4, W3, and W2, respectively, (figure 3-1) , are connected to their respective self-test jacks; DU SELF-TEST, J2 SELF-TEST, and J1 SELF-TEST.

(8) Connect the external power cable to the Test Set control panel 28 Volt DC connector and to the external +28 volt power supply .

connector and to the external +28 Volt power supply .

(9) Set POWER ON/OFF switch to ON. POWER lamp shall light and remain lit. If POWER lamp is not lit, check for power at the external +28 volt source. Refer to table 7-1.

(10) Observe MALFUNCTION lamp. MALFUNCTION shall not be lit. If MALFUNCTION is lit, self-test the Test Set to locate faulty components. Refer to table 7-1.

(11) To test RMS units, refer to TM9-1090-207-13&P; to self-test the Test Set, refer to Chapter 7.

b. Shut Down the Test Set.

(1) Set POWER ON/OFF switch to OFF.

(2) Connect connector P103 to DU SELF-TEST jack.

(3) Connect connector P102 and P101 to their respective self-test jacks, J2 SELF-TEST and J1 SELF-TEST.

(4) Disconnect cable assembly W1 from the Test Set 28 VOLT DC connector and from the external power source.

(5) Open the storage lid (figure I-1) inside the Test Set cover by momentarily depressing each fastener until the lid is released.

(6) Stow cable assembly W1 and the technical manual in the lid of the Test Set.

(7) Close the storage lid and secure by momentarily depressing each fastener, inside the cover until the lid is secured.

(8) Set the Test Set cover in place on bottom half of case and secure four latches.

c. Set up the Test Set Subassembly.

(1) Remove the Test Set subassembly from the Test Set case as follows:

NOTE

If the Test Set is closed, refer to paragraph 3-5a to set up the Test Set.

(a) Verify that cable assembly W1 is not connected and Test Set POWER ON/OFF switch is set to OFF.

(b) Loosen 18 captive screws (31, figure C-4).

(c) Grasp both handles (36, figure C-4) on front panel assembly firmly, lift Test Set subassembly from case and set on work area.

(2) Open front panel as follows:

(a) Remove two screws (3, figure C-3) above and to the left of DU test pad and two screws below and to the left of DU test pad.

(b) Unscrew captive screw (figure 3-3) from stowed position.

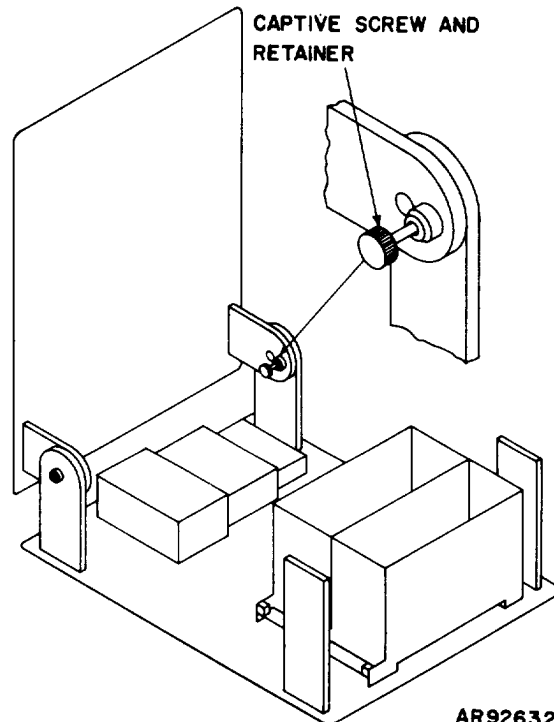


Figure 3-3. Test Set Rear View with Panel Raised

(c) Raise the front panel 90 degrees (figure 3-3).

(d) Secure the front panel in raised position by tightening the captive screw until panel is secure.

d. Shut Down the Test Subassembly.

(1) Close front panel as follows:

(a) Set POWER ON/OFF switch to OFF. Remove cable assembly W1.

(b) While holding panel steady, disengage and loosen captive screw (figure 3-3) until the front panel moves freely.

(c) Carefully lower front panel to full closed position.

(d) Install four flathead screws (3, figure C-3) on front panel.

(e) Reach under front panel and stow captive screw in hinge of front panel by engaging and tightening it in screw hole provided.

(2) Place subassembly in Test Set Case as follows:

(a) Verify that POWER ON/OFF switch is set to OFF.

(b) Inspect gasket on cover for damage. If gasket is defective, remove and replace gasket. Refer to removal and replacement instructions in Chapter 7.

(c) Grasp both handles (36, figure C-4) on front panel assembly firmly; lift subassembly from work area; and carefully lower subassembly into bottom half of case.

(d) Engage and tighten 18 captive screws (31, figure C-4) until front panel is firmly seated.

(e) Shut down Test Set as described in paragraph 3-5b.

Section III. OPERATION UNDER UNUSUAL CONDITIONS

3-6. Unusual conditions of the type that occur in a sheltered environment (Refer to Shelter Requirements, Chapter 2.) will not adversely affect the Test Set. All non-electric, current-carrying parts are of corrosion-resistant metal and are suitably plated or coated to resist corrosion. Dissimilar metals are protected against electrolytic corrosion. Environmentally

exposed nonmetals are moisture and flame resistant and capable of resisting fungus growth.

3-7. Preventive Measures. Shield the Test Set from direct contact with rain and water. Keep the unit free from dust. Refer to instructions in Chapter 5.

Section IV. PREPARATION FOR MOVEMENT

3-8. Pre-embarkation Procedure.

If an RMS Unit is mounted on the Test Set test pad, remove the unit from the pad. (Refer to TM9-1090-207-13&P for appropriate procedure.)

b. If the Test Set subassembly is removed from the case, follow directions in paragraph 3-5 to shut down the subassembly.

c. If the Test Set subassembly is in the case, shut down the Test Set (refer to paragraph 3-5).

3-9. Transporting the Test Set. The Test Set is a self-contained, portable unit with carrying handles (figure 3-2) which enable the set to be carried by two persons. When transporting over short distances, packaging is not required. When transporting for long distances, packaging is optional.

CHAPTER 4
OPERATOR/CREW MAINTENANCE INSTRUCTIONS

Operator/crew maintenance is performed at the Aviation Intermediate Maintenance levels.

**CHAPTER 5
AVIATION UNIT MAINTENANCE INSTRUCTIONS**

Section I. GENERAL

Not Applicable

Section II. TOOLS AND EQUIPMENT

Not Applicable

Section III. REPAINTING THE TEST SET

Not Applicable

Section IV. LUBRICATION INSTRUCTIONS

Not Applicable

**Section V. PREVENTIVE MAINTENANCE CHECKS
AND SERVICES**

Not Applicable

**Section VI. TROUBLESHOOTING AT THE AVIATION UNIT
MAINTENANCE (AVUM) LEVEL**

Not Applicable

**Section VII. AVIATION UNIT MAINTENANCE REPAIR
OF THE TEST SET**

Repair of the Test Set is performed at the AVIM level. Refer to chapter 7.

CHAPTER 6 FUNCTIONING OF THE TEST SET

6-1. General.

a. The Test Set is a microprocessor-controlled tester which exercises the RMS DU or OU and analyzes the errors found. If the unit does not respond correctly, the Test Set will display an error code which will lead the operator to the faulty sub-assembly of the unit under test.

b. Only the DU or a single OU may be tested at any one time since some control and data lines are common to both units.

c. Tests are entered by the operator through a keyboard and the results of these tests, as well as the test number, are displayed on a digital display. The tests are controlled by the microprocessor in the Test Set and are, therefore, automatic, except where the operator is required to manipulate controls on the DU.

d. Since both the DU and OU are microprocessor-controlled, the Test Set must cause the microprocessor in the DU or OU to be disabled or run under a test program. To accomplish this, extensive interface circuitry is required in the Test Set.

6-2. Function of Assemblies. To understand the purpose and function of each of the circuit assemblies within the Test Set, refer to the operational block diagram, figure 6-1. The bus-structured lines are shown as heavy lines, and input/output (I/O) ports are shown as fine lines. Although the I/O ports are shown as fine lines, each port contains eight bit-lines, some or all of which are used on the assembly to which they are shown connected. Figure 6-2 is a block diagram of the self-test functions of the Test Set. Cables connect the self-test functions and the functions of the operational areas of the Test Set. Parts locations and identifications for each of these assemblies are given in Appendix C; Schematic diagrams are presented in Appendix E. The purpose and function of each of the circuit assemblies are as follows:

a. Memory Assembly A1. The Memory Assembly contains all programs used by the Test Set microprocessor. Working together with the Random Access Memory (RAM) in CPU Assembly A2, the information from the Memory Assembly enables the Test Set self-test operation as well as other programs used in testing the RMS LRUs.

b. CPU Assembly A2. The CPU (Central Processing Unit) assembly contains the 8080 microprocessor and part of the RAM. It is the controller of the Test Set. The program is stored in Read Only Memory (ROM), and data derived from the tests are stored in the RAM until used. The CPU also has six I/O ports, consisting of eight bits each. These ports are used to control and pass or receive data from the peripheral devices in the Test Set.

(1) Address, control, and data lines are also used to control and receive data from DU Interface Circuit Assembly A7 and Communication Circuit Assembly A8 which connect to the microprocessors in the Display Unit and Operations Unit.

(2) The ports receive information from the keyboard (operator input) and control and pass information to the digital display to inform the operator of the results. The ports are also used to set up test conditions in all of the interface assemblies except Communications Assembly A8.

c. I/O Assembly A3. This assembly gives the CPU Assembly A2 the capability to control nine more ports. These ports control test setups and receive information from tests. The I/O assembly is controlled by the CPU through the address and control lines with the data transferred by the data lines.

d. DU Interface Assembly A7. This assembly allows the Test Set CPU Assembly A2 to control the microprocessor on the DU and run individual exercises on the DU under Test Set program control without interference from either the DU microprocessor or the DU memory. Through this interface, the CPU runs a memory test on the DU; checks the DU built-in test circuitry; sets up the front panel tests; and checks the front panel interface assemblies. The circuitry consists mainly of three solid-state line buffers.

e. Communications Assembly A8. The communications assembly simulates the communications that are normally used between the DU and OU during normal system operation. It allows the Test Set under program control to look like an OU to the DU under test and to look like a DU to the OU under test. Under Test Set program control the DU operation is simulated, complete with inventory; byte test; and arming and firing functions. The communications assembly also allows partial simulation in the OU. Under another test, the DU I/O is checked out by using this assembly in combination with the DU Interface Assembly A7.

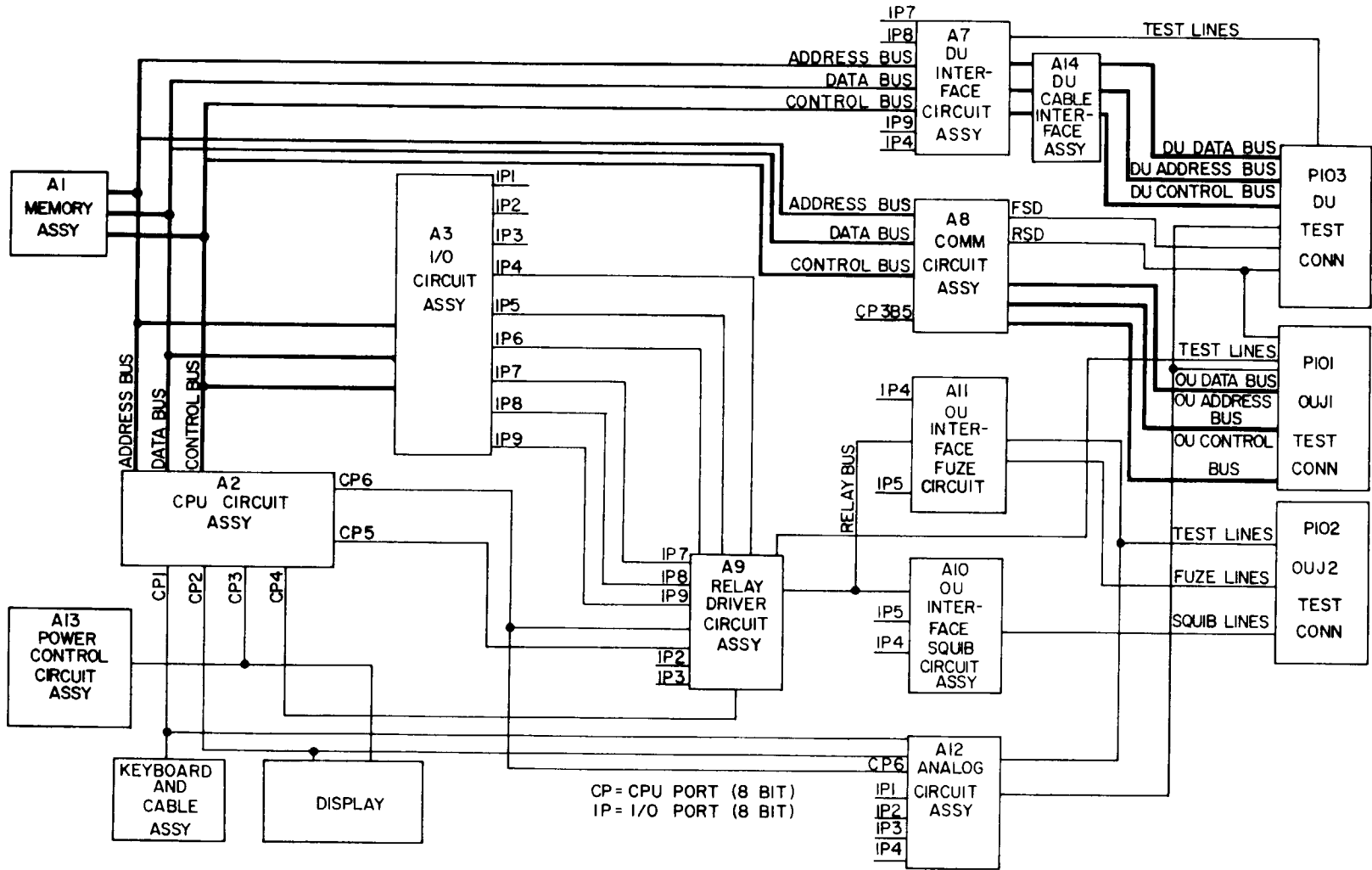


Figure 6-1. Operational Block Diagram

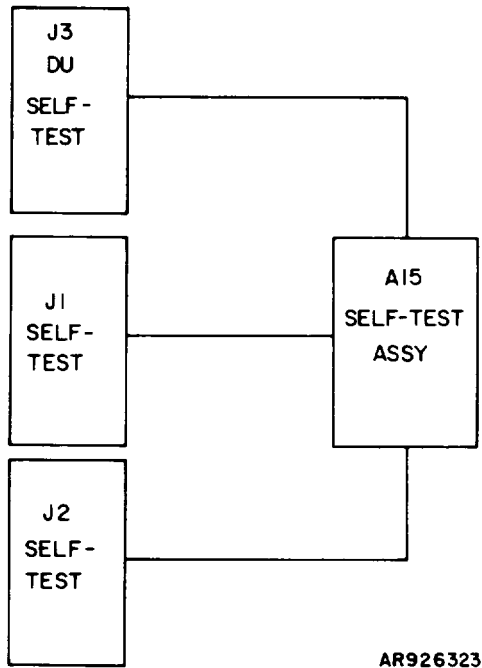


Figure 6-2. Self-Test Block Diagram

(1) In addition to communications, this assembly contains a test memory for the OU microprocessor. Since the OU microprocessor cannot be turned off due to its configuration, a separate test program memory must be substituted for the internal memory. The test memory causes the OU CPU Assembly A2 to run its own tests.

(2) The circuitry consists mainly of universal asynchronous receiver transmitters (UARTs), drivers, and the 2k byte memory.

f. Relay Driver Assembly A9. This assembly contains a number of different functions. As the name implies, it contains the latches and drivers to control the relays in two OU interface assemblies. The relay latch circuitry is controlled by ports from the I/O Assembly A3.

(1) This assembly also contains the latches for driving the display, the decoder for the analog multiplexer on the OU interface assemblies, and buffers for test lines connected to the OU.

(2) In addition, this assembly also contains the fuze setter test circuit which checks the setter signal from the OU.

g. OU Interface Fuze Assembly A11. This assembly contains the circuitry necessary to check the fuze set lines and the relays within the OU. Special function relays are used to check launcher identification lines in the OU. The assembly is controlled by enable signals for the relay

driver assembly and ports from the I/O assembly. Data is taken by ports from the I/O assembly.

h. OU Interface Squib Assembly A10. This assembly is used to check the fire pulse from the OU and the connections of the squib lines and relays within the OU. The assembly also contains one-ohm resistors which simulate the operation of the rocket squibs. Special function relays check other internal connections with the OU. I/O ports control this assembly.

i. Analog Circuit Assembly A12. This assembly, like the Relay Driver Assembly A9, has several functions. The primary function is to measure the power supply voltages of the DU and OU to two separate tolerances. This is done by analog multiplexer and voltage comparators. Also the assembly contains buffers for OU test signals. It also has circuitry to monitor the Test Set power supplies and light the MALFUNCTION light on the Test Set. If all of the voltages are present, I/O Assembly A3 and CPU Assembly A2 ports control this assembly.

j. Power Control Assembly A13. This assembly controls the power supplied to the OU and DU. This assembly also simulates the function of the fire control computer (FCC) and trigger signals. The assembly is controlled by the CPU Assembly A2 ports.

k. DU Cable Interface Assembly A14. DU Cable Interface Assembly A14 contains filters to provide some noise filtering and interfaces with DU Interface Assembly A7 in the Test Set card cage and the RMS Display Unit's address, data, and control lines. It allows DU Interface Assembly A7 to run the RMS DU without interference from the DU's memory or microprocessor.

l. Self-Test Assembly A15. The Self-Test Assembly A15 interfaces with RMS Unit test cables W2, W3, and W4 and the active components of the Test Set, facilitating the output and input signals of the testing processes. The self-test assembly connects outputs to inputs and completes the loop which checks the UARTs and the associated wiring. The self-test assembly checks the power supplies through analog assembly A12, at the same time testing the analog assembly itself. It is the point of interaction between the squib and fuze lines, effecting self-generated signals which simulate squibs and fuzes.

m. Digital Display. This assembly contains 12 hexadecimal digital LED displays which display the test entered and the result to the operator. The assembly also contains the buffer drivers for the displays. Control of the displays is done from the Relay Driver Assembly A9.

n. Power Supply PS1. This power supply provides -5 V dc power required by the CPU Assembly A2.

TM9-4933-227-13&P

o. Power Supply PS3. Power supply PS3 supplies ± 12 V dc power requirements of Analog Circuit Assembly A12.

p. Power Supply PS2. Power supply PS2 supplies +5 V dc power to the logic level of the circuit assemblies.

CHAPTER 7 AVIATION INTERMEDIATE MAINTENANCE INSTRUCTIONS

Section I. GENERAL

7-1. Aviation Intermediate Maintenance (AVIM) Function.

a. AVIM is that maintenance which is performed to major assemblies of the Test Set; specifically, the case, both sides of the front panel, and the subassembly. Some maintenance on top of the front panel can be performed with the subassembly in the case and the front panel closed (figure 1-1). Maintenance of those assemblies interfacing with the front panel and the

subassembly or the top of the front panel and the back of the front panel are performed with the subassembly removed from the case and the front panel open (figure 7-1).

b. Initial testing of the unit is performed if the Test Set has failed while testing the RMS LRUs. Troubleshooting and testing of repaired assemblies occur at the AVIM level, where the Test Set is validated before testing of RMS LRUs.

Section II. TOOLS, TEST EQUIPMENT, AND EXPENDABLE MATERIALS REQUIREMENTS

7-2. Tools. The Standard Armament Repairman tool kits listed in Appendix B are used to repair the Test Set. No special tools are required.

7-3. Test Equipment. A portable hydraulic/ electric power supply and multimeters are required to support the testing functions

for the Test Set. Refer to Appendix B for a list of equipment.

7-4. Expendable Materials. Expendable materials and supplies used for AVIM general maintenance and pair of the internal components of the Test Set are listed in Appendix D.

Section III. REPAINTING THE TEST SET

7-5. External surfaces of the Test Set shall be primed with polyamide epoxy primer (9, table D-1). The finish coating of external surfaces shall receive yellow gloss enamel (10).

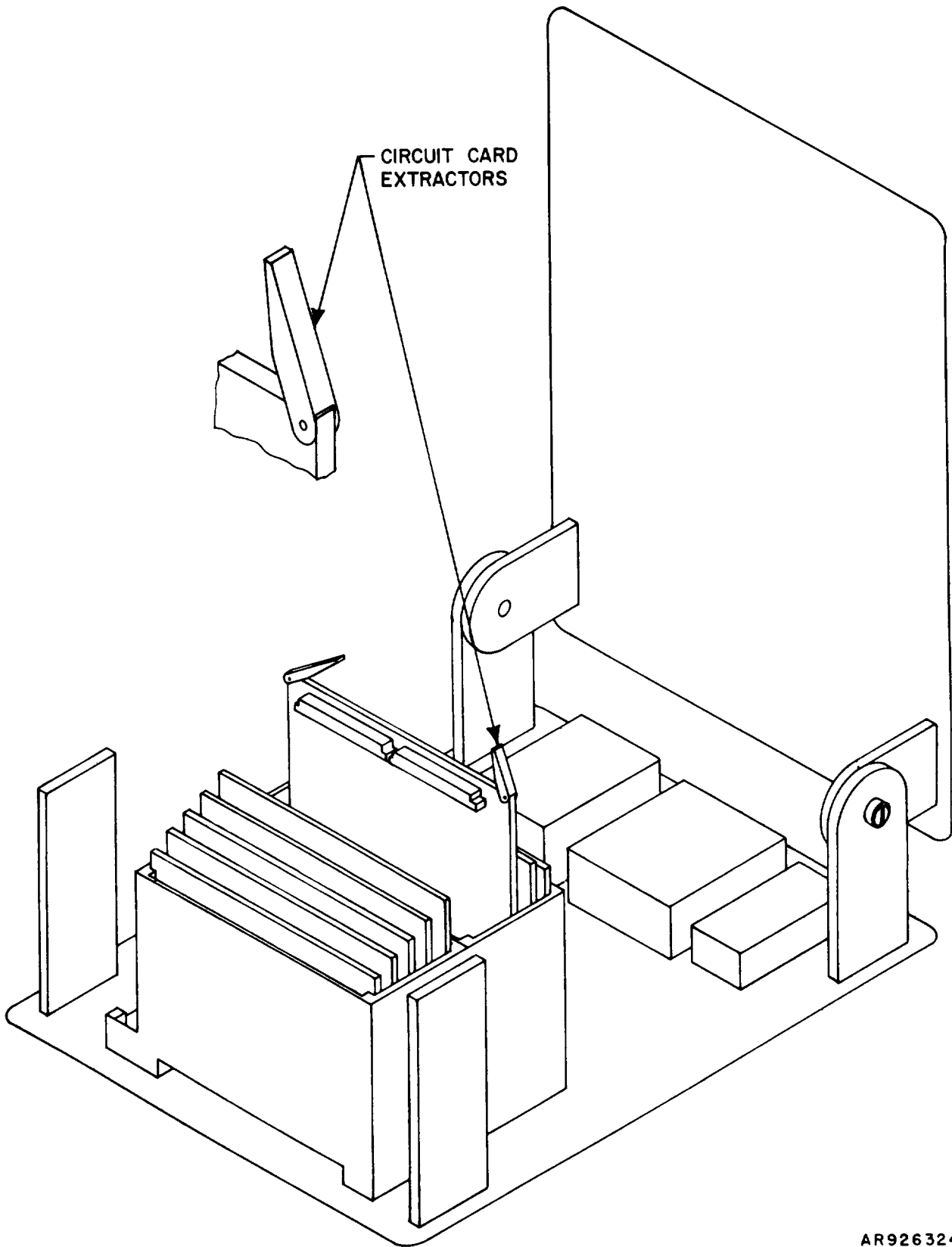
7-6. Internal surfaces shall be painted lusterless black (11, table D-1).

7-7. The Test Set panel shall be painted grey with black lettering, using grey semi-gloss enamel (12, table D-1).

Section IV. PREVENTIVE MAINTENANCE CHECKS AND SERVICES

7-8. Check for Physical Damage. Visually inspect for disassembly such as: unplugged circuit assemblies, connectors not seated, and evidence of burned components. Also check for the following:

a. Punctures or damage to gaskets which might affect the integrity of the operation of the unit.



AR926324

Figure 7-1. Front Panel Raised

b. Check that handles are intact and that the (external) pressure relief valve is not bent or damaged.

c. Open the Test Set and inspect the control panel for obvious signs of damage.

d. Check that cables are not frayed or split and their connectors and connector pins are not bent or broken. Refer to Section VI for removal and replacement instructions.

e. Check that display windows are not

broken or cracked. Remove and replace assemblies in accordance with directions in Section VI.

f. If Test Set case is greasy or soiled, clean grease and hard soil from case with a soft cloth (17, table D-1) and isopropyl alcohol (18).

Check that knobs, keys, and protruding controls are not chipped, bent, split, or broken such that their proper operation is inhibited.

Section V. TROUBLESHOOTING

7-9. General. Troubleshooting the Test Set is performed by observing the panel indicators as power is applied, by performing self-test procedures, and by performing specific functional checks.

a. A general troubleshooting procedure and the self-test procedures may lead you to the specific functional checks. You may self-test the Test Set to verify its performance without removing it from the carrying case; however, to perform specific functional checks or to replace an assembly or part the Test Set Subassembly must be removed from the carrying case. To troubleshoot the Test Set, first set up the Test Set Subassembly as described in paragraph 7-10, then continue with the self-test procedures given in paragraphs 7-11 and 7-12. Where necessary, the troubleshooting tables will direct you to specific functional checks. When you have completed troubleshooting and made any necessary repairs to the Test Set, refer to paragraph 3-5 for instructions to shut down the Test Set Subassembly and the Test Set.

b. The failure isolation shop set (FISS), electronic circuit boards: 20mm turret and rocket management subsystems provides slave boards for use during troubleshooting to aid in the identification of faulty circuit board assemblies within the line replaceable unit (LRU), once the faulty circuit board has been identified, the slave board is returned to the shop set for future use and are placement board is requisitioned for the LRU.

c. General Troubleshooting Procedure. A list of possible malfunctions is given in table 7-1 along with probable cause and corrective actions. You should use this table for isolating and correcting faults of a general nature that would appear before you begin the self-test Procedures.

d. Self-Test Troubleshooting. Self-test command codes are entered on the keyboard and malfunction (fault) codes appear on the RESULT display. The fault codes are arranged in numerical order in table 7-2. Shop-replaceable assemblies are replaced one at a time until the fault is cleared, then original assemblies are restored one at a time to insure that properly functioning assemblies are not replaced unnecessarily.

NOTE

Removal and replacement instructions for shop-replaceable assemblies and parts are given in Section VI. When you have isolated a fault, refer to Section VI for the approved replacement method.

7-10. Set up the Test Set Subassembly. In the following procedure, should any malfunction symptoms appear, refer to table 7-1 for troubleshooting instructions.

a. Set up the Test Set Subassembly as described in paragraph 3-5 and connect-power cable assembly W1 to the 28 VOLT DC connector and to the Hydraulic/Electric Power Supply.

b. Set POWER ON/OFF switch to ON. POWER lamp shall light and remain lit.

Observe MALFUNCTION lamp. MALFUNCTION lamp shall be dark.

d. Press RESET button and observe ENTERED TEST digital display. ENTERED TEST shall display 0.

7-11. Perform Self-Test 30. Self-Test 30 is used to check out the basic functions of the Test Set if Test Set failure is suspected when an RMS unit is connected to the Test Set.

NOTE

The RMS unit is not a functional part of this test.

a. Connect connectors P103, P102, and P101 to their Self-Test jacks; DU SELF-TEST, J2 SELF-TEST, and J1 SELF-TEST.

b. Check that power cable assembly W1 is connected.

Set POWER ON/OFF switch to ON. POWER lamp shall light.

Check that MALFUNCTION lamp is not lit.

On Test Set keyboard, depress C. ENTERED TEST shall display 0; RESULT shall be dark. If ENTERED TEST does not display 0 or RESULT does not remain dark, momentarily depress RESET and depress C again. If ENTERED TEST or RESULT still do not display as required, refer to table 7-1.

f. On Test Set keyboard, depress 30. ENTERED TEST shall display 30. RESULT shall remain dark.

(1) If ENTERED TEST and RESULT do not display as required, depress C to clear and depress 30.

(2) If ENTERED TEST displays 30 but RESULT does not remain dark (an invalid indication), troubleshoot the Test Set in accordance with table 7-1.

On Test Set keyboard, start the test by entering E.

h. Observe ENTERED TEST and RESULT displays.

(1) If an incorrect test code has been entered, ENTERED TEST will display the incorrect code and RESULT will display 1000. Re-enter C30E.

(1) If the code has been entered correctly, ENTERED TEST will display 30; RESULT will flash 8888 while the test is in progress.

(2) If the test is successfully completed, ENTERED TEST will display 30 and RESULT will display 8888 steadily. Any code other than 8888 or 1000 is a malfunction code. Refer to table 7-2.

(3) If a malfunction occurs, ENTERED TEST will display 30 and RESULT will display a malfunction code. To troubleshoot the Test Set, find the malfunction code in table 7-2 and follow instructions.

7-12. Perform Self-Test 31. Self-Test 31 is used to validate the operation of the Test Set memory, its digital and analog circuitry, and its interface functions before any RMS units are tested.

a. On Test Set keyboard, enter C. ENTERED TEST shall display 0. RESULT shall be dark. If ENTERED TEST or RESULT do not display as required, refer to table 7-1, locate the malfunction symptom in the MALFUNCTION column of the table and take corrective action as directed.

b. On Test Set keyboard, enter 31. ENTERED TEST shall display 31. RESULT shall remain dark. If ENTERED TEST displays 31, but RESULT does not remain dark, (invalid indication) , refer to table 7-1.

c. On Test Set keyboard, start the test by entering E.

(1) If the correct code has been entered, but ENTERED TEST does not display correctly, momentarily depress RESET.

(2) Re-enter C31E.

(3) If error persists, troubleshoot in accordance with table 7-1.

d. Observe ENTERED TEST and RESULT displays.

(1) If an incorrect test code has been entered, ENTERED TEST will display the incorrect code and RESULT will display 1000. Re-enter C31E.

(1) If the code has been entered correctly, ENTERED TEST and RESULT will flash 88888 for approximately two seconds. This is a test of the digital display segments. If any segment remains dark, refer to para-

graph 7-17. After the delay, ENTERED TEST will display 31, flashing at approximately one-second intervals (half-time on and half-time off) and RESULT will remain dark until the test is complete.

(2) If the Test Set is good, ENTERED TEST will display steady 31 and RESULT will display 8888. The Test Set may be used for testing RMS units.

(3) If a malfunction occurs, ENTERED TEST will display steady 31 and RESULT will display a malfunction code. Find the malfunction code in table 7-2 and follow instructions .

e. Refer to Section VI as needed for instructions for removal and replacement of cables , circuit assemblies, and parts. Refer also to figure C-4, Front Panel Assembly; figure 7-2, Back of Front Panel Assembly; figure FO-1, Test Set Subassembly Cable and Connector drawing; and figure C-8, Backplate Assembly, as needed, for identification and placement of parts and assemblies.

f. If cable assemblies W2, W3, or W4 appear to be faulty, perform continuity checks of suspected cables, as described in paragraph 7-15.

(1) If cables fail continuity checks, remove and replace cables.

(2) If cables are good, continue testing. The problem probably lies in the card cage wiring assembly. If the card cage wiring assembly is faulty, send the Test Set to Depot.

g. If power control assembly A13 (8, figure C-8) is faulty, remove and replace the assembly.

h. If power supplies appear to be faulty, check output voltages as described in paragraph 7-13 and adjust, if necessary, in accordance with paragraph 7-14. If voltages cannot be adjusted within tolerances specified in table 7-3, remove and replace faulty power supplies.

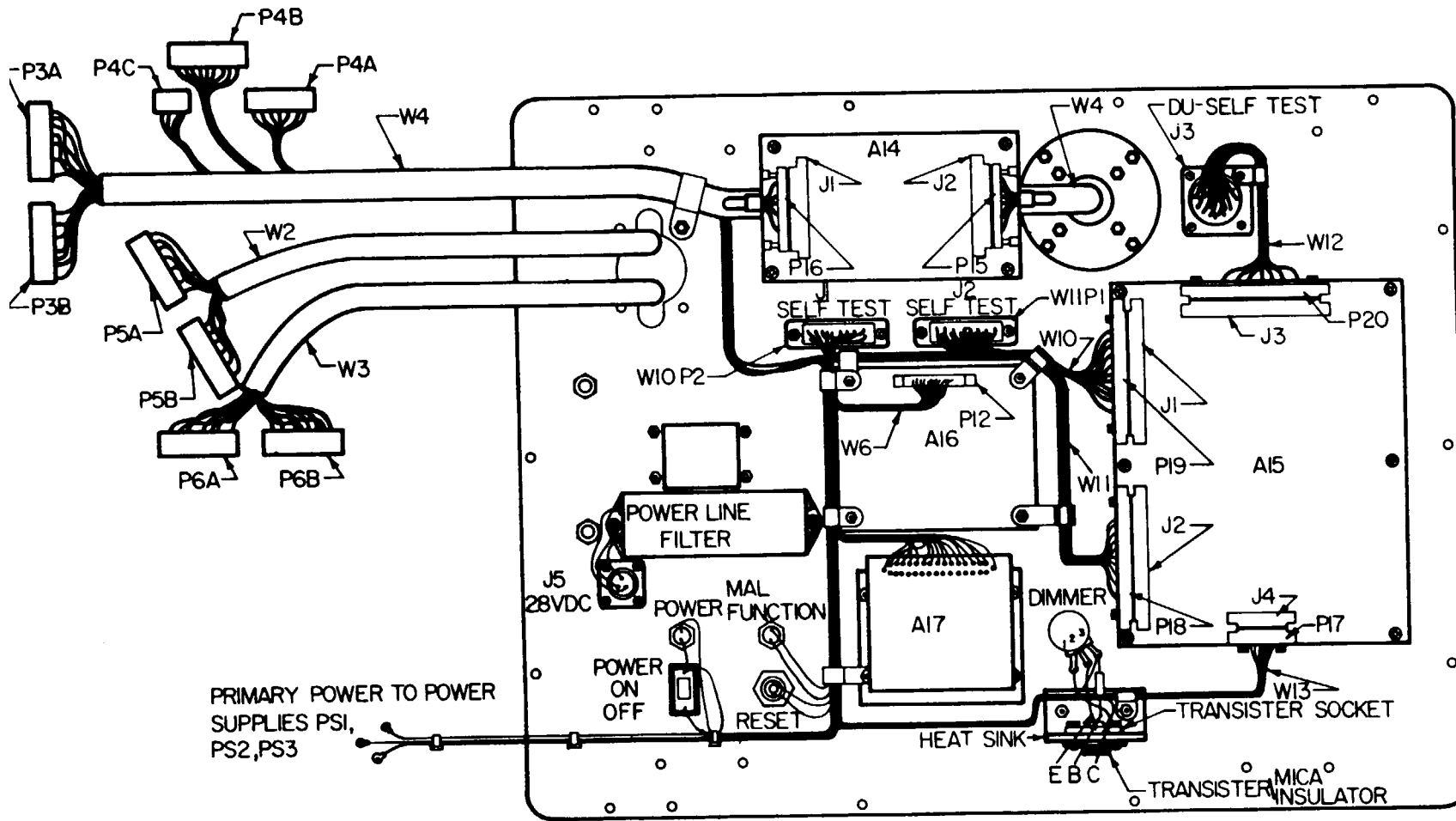
i. If, while following the troubleshooting procedure of table 7-2 for a given fault code, a different code appears in the RESULT display, find the new code in table 7-2 and follow the procedure for the new code. Continue troubleshooting as directed by table 7-2 until RESULT displays 8888.

j. If a fault code not listed in table 7-2 appears, or if a fault code persists after following the procedure of table 7-2:

(1) Check power supply voltages (Paragraph 7-13), and adjust if needed (paragraph 7-14).

(2) Check continuity of all cables not already checked (paragraph 7-15).

(3) Check resistance of power line filter (paragraph 7-16).



AR926342

Figure 7-2. Back of Front Panel

Table 7-1. General Troubleshooting Procedure

MALFUNCTION PROBABLE CAUSE CORRECTIVE ACTION	NOTE
	Failure isolation shop set will help identify failed circuit card assemblies



Be sure that all power to the Test Set is off before changing assemblies. Serious burns and/or electrical shock can result from contact with exposed electrical wires or connections.



If connectors are properly seated in card cage ports, no connector pins are visible. Connectors are keyed to their card cage port connectors so that all pins are visible in those ports which are empty. If connectors are improperly seated in their respective card cage ports, the Test Set may be damaged when power is turned on.

Test Set behaves erratically.

One or more power supply voltages are incorrect.

- a. Locate questionable power supply. Refer to paragraph 7-13.
- b. Remove and replace faulty power supply.

POWER lamp does not light - display is not lit.

POWER lamp is faulty.

Replace POWER lamp.

POWER switch trips when actuated.

- a. 28-volt power source is faulty.
 - (1) Check power cable assembly W1 and power connections.
 - (2) Check continuity of power cable W1. Refer to paragraph 7-15.
 - (3) Refer to TM9-4933-211-14 to check out the Hydraulic Electric Power Supply.
- b. Power switch is faulty.
 - Replace power switch.
- c. Short circuit in +28 volt circuits in Test Set.

Check continuity of 28 volt power circuits. See figures 7-3 and FO-2. Disconnect +28 volt (red) input wire to each power supply and relay K1, in turn, and check for a shorted power supply input or relay coil. Check wires for possible short circuit.

MALFUNCTION lamp lights.

- a. Internal cables are loose or unplugged.
 - Check that internal cable connections are secure.
- b. Wires are broken within cables.
 - (1) Check continuity of cables. Refer to paragraph 7-15.
 - (2) Replace faulty cables as needed. Refer to table 7-4.

Table 7-1. General Troubleshooting Procedures (cont)

MALFUNCTION	PROBABLE CAUSE	CORRECTIVE ACTION
	c.	Internal Test Set power voltages are incorrect. (1) Check power supply voltages. Refer to paragraph 7-14. (2) If power supply is faulty, replace power supply.
ENTERED TEST does not display zero when first turned on.		CPU assembly A2 is not reset. Depress RESET switch.
ENTERED TEST displays other than zero after RESET has been depressed,	a.	Memory assembly A1, CPU assembly A2, I/O assembly A3, DU interface assembly A7, communications assembly A8, or relay driver assembly A9 is faulty, (1) Replace each assembly in turn and run self-test 30 as described in paragraph 7-11. (2) When symptom is corrected, install original assemblies one at a time and rerun test each time.
	b.	Display assembly A16 is faulty. Replace display assembly A16.
ENTERED TEST does not display zero after C (clear) is depressed on Test Set keyboard.	a.	CPU assembly A2, I/O assembly A3, relay driver assembly A9, or display assembly A16 is faulty. (1) Replace each assembly in turn and run self-test 30 each time as described in paragraph 7-11. (2) When symptom is corrected, install original assemblies one at a time and rerun test each time.
	b.	Display assembly A16 is defective. Replace display assembly A16.
Display shows missing digits during self-test 30 or 31.	a.	Internal cable is loose. Check internal cable connections.
	b.	Cable contains broken wire. (1) Check continuity of internal cable assemblies. Refer to paragraph 7-15. (2) Replace cable assemblies as needed.
	c.	Display assembly A16 is faulty. Replace display assembly A16.
An invalid indication appears on RESULT display when correct test code has been repeatedly entered on keyboard.	a.	Internal cable assembly is loose or disconnected. Inspect internal cable connections for improperly seated connectors.

Table 7-1. General Troubleshooting Procedure (cont)

MALFUNCTION	PROBABLE CAUSE	CORRECTIVE ACTION
b.	Cable assembly contains a broken wire.	(1) Visually inspect cable assembly wires. (2) If cable assembly is faulty, replace faulty cable assembly.
c.	I/O assembly A3, CPU assembly A2, relay driver assembly A9, display assembly A16, or memory assembly A1 is faulty.	(1) Replace each assembly in turn and run self-test 30 as described in paragraph 7-11. (2) When symptom is corrected, install original assemblies one at a time and rerun test each time.
d.	Keyboard and cable assembly A17 is faulty.	Perform display and keyboard and cable assembly functional check. Refer to paragraph 7-17.
e.	Card cage wiring assembly is faulty.	Perform display and keyboard and cable assembly functional check (paragraph 7-17). If problem persists, remove newly installed assemblies and forward the Test Set to Depot.
Incorrect ENTERED TEST code appears when correct code is repeatedly entered on the Test Set keyboard.		
a.	Display cable assembly W6 is loose or disconnected.	Inspect cable assembly connections. Make sure cable is properly seated in connector.
b.	Display assembly W6 has broken internal wire.	(1) Check continuity of cable assembly. Refer to paragraph 7-15. (2) Replace cable assembly if defective.
c.	I/O assembly A3, CPU assembly A2, memory assembly A1, or relay driver assembly A9 is faulty.	(1) Replace each assembly in turn and run self-test 30 as described in paragraph 7-11. (2) When symptom is corrected, install original assemblies one at a time and rerun test each time.
d.	Display assembly A16 is faulty.	Perform display and keyboard and cable assembly functional check (paragraph 7-17)
e.	Card cage 7-17 wiring assembly is faulty.	(1) Perform display and keyboard and cable assembly functional check (paragraph 7-17). (2) If problem persists, remove all newly installed assemblies. Install original assemblies and forward the Test Set to Depot.
POWER lamp remains lit after POWER ON/OFF switch is set to OFF.		
POWER ON/OFF switch (circuit breaker) is faulty.		
Replace POWER ON/OFF switch.		

Table 7-2. Troubleshooting by Fault Codes

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
-----------------------------------	--------------------	-------------------

WARNING

Be sure that all power to the Test Set is off before changing assemblies. Serious burns and/or electrical shock can result from contact with exposed electrical wires or connections.

NOTE

Refer to Section VI to remove and replace assemblies.

1477

- Step 1. Set Test Set POWER ON/OFF switch to OFF.
- Step 2. Remove and replace self-test assembly A15.
- Step 3. Set Test Set POWER ON/OFF switch to ON. POWER lamp shall light and remain on, MALFUNCTION lamp shall not light.
- Step 4. On Test Set keyboard enter C31E. ENTERED TEST shall flash 31 while test is in progress.
- Step 5. Wait for ENTERED TEST to stop flashing, then observe RESULT.
 - a. If RESULT displays 1477, go to step 6.
 - b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.
 - c. If RESULT displays 8888, unit has passed the test. Fault was in original self-test assembly A15. New assembly A15 is good. To shut down the Test Set refer to paragraph 3-5.
- Step 6. Set Test Set POWER ON/OFF switch to OFF.
- Step 7. Remove cable assembly W2 and check continuity. Refer to paragraph 7-15.
 - a. If cable assembly is good, fault is in card cage wiring assembly. Reinstall original self test assembly A15 and cable assembly W2. Send Test Set to Depot.
 - b. If cable fails continuity check, replace cable assembly W2 and go to step 8.
- Step 8. Set Test Set POWER ON/OFF switch to ON.
- Step 9. On Test Set keyboard enter C31E.
- Step 10. Wait for ENTERED TEST to stop flashing, then observe RESULT.
 - a. If RESULT displays 1477, go to step 11.
 - b. If RESULT displays any other malfunction code, find the code number of the MALFUNCTION (RESULT Display Code) column and follow instructions.
 - c. If RESULT displays 8888, unit has passed the test. Fault was in original cable assembly W2. New A15 assembly is good.
 - (1) Set POWER ON/OFF switch to OFF.
 - (2) Reinstall original CPU assembly A2.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code) TEST OR INSPECTION	CORRECTIVE ACTION
	<ul style="list-style-type: none"> (3) Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 1477, return to step 1. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original cable assembly W2. Original A15 assembly and new cable assembly W2 are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set, refer to paragraph 3-5.
Step 11.	Set Test Set POWER ON/OFF switch to OFF.
Step 12.	Reinstall original self-test assembly A15 and cable assembly W2. Fault is in card cage wiring assembly. Send Test Set to Depot.
1515	<ul style="list-style-type: none"> Step 1. Set Test Set POWER ON/OFF switch to OFF. Step 2. Remove and replace CPU assembly A2. Step 3. Set Test Set POWER ON/OFF switch to ON. POWER lamp shall light and remain on. MALFUNCTION lamp shall not light. Step 4. On Test Set keyboard enter C31E. ENTERED TEST shall flash 31 while test is in progress. Step 5. Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 1515, go to step 6. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original CPU assembly A2. New CPU assembly A2 is good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5. Step 6. Set POWER ON/OFF switch to OFF. Step 7. Remove and replace relay driver assembly A9. Step 8. Set POWER ON/OFF switch to ON. Step 9. On Test Set keyboard enter C31E. Step 10. Wait for ENTERED TEST to stop flashing, then observe RESULT <ul style="list-style-type: none"> a. If RESULT displays 1515, go to step 11. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original relay driver assembly A9. New CPU assembly A2 and relay driver assembly A9 are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A2 assembly.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code) TEST OR INSPECTION CORRECTIVE ACTION	
	<ul style="list-style-type: none"> (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 1515, return to step 1. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original relay driver assembly A9. New A9 and original A2 assemblies are good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5.
Step 11.	Set Test Set POWER ON/OFF switch to OFF.
Step 12.	Remove and replace I/O assembly A3.
Step 13.	Set Test Set POWER ON/OFF switch to ON.
Step 14.	On Test Set keyboard enter C31E.
Step 15.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 1515, go to step 16. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888, unit has passed the test. Fault was in original I/O assembly A3. New CPU assembly A2, relay driver assembly A9, and I/O assembly A3 are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original CPU assembly A2 and relay driver assembly A9. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard, enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 1515, return to step 1 to further isolate fault. A fault exists in either original A2 or A9 or both original A2 and A9 assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original I/O assembly A3. Original A2 and A9 assemblies are good. Set Test Set POWER ON/OFF switch to OFF, To shut down Test Set refer to paragraph 3-5.
Step 16.	Set Test Set POWER ON/OFF switch to OFF.
Step 17.	Remove and replace DU interface assembly A7.
Step 18.	Set Test Set POWER ON/OFF switch to ON.
Step 19.	On Test Set keyboard enter C31E.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
-----------------------------------	--------------------	-------------------

- | | | |
|----------|---|--|
| Step 20. | Wait for ENTERED TEST to stop flashing and observe RESULT. | |
| a. | If RESULT displays 1515, go to step 21. | |
| b. | If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions | |
| c. | If RESULT displays 8888, unit has passed the test. Fault was in original DU interface assembly A7. New CPU assembly A2, I/O assembly A3, DU interface assembly A7, and relay driver assembly A9 are good. | |
| | (1) Set Test Set POWER ON/OFF switch to OFF. | |
| | (2) Reinstall original CPU assembly A2, I/O assembly A3 and relay driver assembly A9. | |
| | (3) Set Test Set POWER ON/OFF switch to ON. | |
| | (4) On Test Set keyboard enter C31E. | |
| | (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. | |
| | (a) If RESULT displays 1515, return to step 1 to further isolate fault . Fault exists in either original A2, A3 or A9 or in all the original assemblies. | |
| | (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. | |
| | (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original DU interface A7 assembly. Original A2, A3, A9 and new A7 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5. | |
| Step 21. | Set Test Set POWER ON/OFF switch to OFF. | |
| Step 22. | Remove cable assembly W2 and perform continuity check. Refer to paragraph 7-15. | |
| a. | If cable assembly is good, fault is in card cage wiring assembly, Reinstall original A2, A3, A7 and W2 assemblies. Send Test Set to Depot. | |
| b. | If cable fails continuity check, replace cable assembly W2 and go to step 23. | |
| Step 23. | Set Test Set POWER ON/OFF switch to ON. | |
| Step 24. | On Test Set keyboard enter C31E. | |
| Step 25. | Wait for ENTERED TEST to stop flashing, then observe RESULT. | |
| a. | If RESULT displays 1515, go to step 26. | |
| b. | If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. | |
| c. | If RESULT displays 8888, unit has passed the test. Fault was in original cable assembly W2. New A2, A3, A7, A9, and W2 assemblies are good . | |

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION	(RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
		Step 26.	Set Test Set POWER ON/OFF switch to OFF
		Step 27.	Reinstall original A2, A3, A7, A9 assemblies and cable assembly W2. Fault is in card cage wiring assembly. Send Test Set to Depot.
1518		Step 1.	Set Test Set POWER ON/OFF switch to OFF.
		Step 2.	Remove and replace analog circuit assembly A12.
		Step 3.	Set Test Set POWER ON/OFF switch to ON. POWER lamp shall light and remain on. MALFUNCTION lamp shall not light.
		Step 4.	On Test Set keyboard enter C31E. ENTERED TEST shall flash 31 while test is in progress.
		Step 5.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 1518, go to step 6. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888, unit has passed the test. Fault was in original analog circuit assembly A12. New A12 assembly is good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5.
		Step 6.	Set POWER ON/OFF switch to OFF.
		Step 7.	Remove and replace CPU assembly A2.
		Step 8.	Set POWER ON/OFF switch to ON.
		Step 9.	On Test Set keyboard enter C31E.
		Step 10.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 1518, go to step 11. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original CPU assembly A2. New A12 and A2 assemblies are good. <ul style="list-style-type: none"> (1) Set POWER ON/OFF switch to OFF. (2) Reinstall original analog circuit assembly A12. (3) Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 1518, return to step 1. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original CPU assembly A2. Original A12 and new A2 assemblies are good. Set POWER ON/OFF switch to OFF. To shut down the Test Set, refer to paragraph 3-5.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
	Step 11.	Set Test Set POWER ON/OFF switch to OFF.
	Step 12.	Remove and replace I/O assembly A3.
	Step 13.	Set Test Set POWER ON/OFF switch to ON.
	Step 14.	On Test Set keyboard enter C31E.
	Step 15.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 1518, go to step 16. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888, unit has passed the test, Fault was in original self-test assembly A15. New A2, A12, and A15 assemblies are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A2 and A12 assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 1518, return to step 1 to further isolate fault. Fault exists in either original A2, A12, or A15 assemblies or all of the original assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original self-test assembly A15. Original A2, A12, and new A15 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.
	Step 16.	Set Test Set POWER ON/OFF switch to OFF,
	Step 17.	Remove cable assembly W2 and perform continuity check. Refer to paragraph 7-15. <ul style="list-style-type: none"> a. If cable assembly is good, fault is in card cage wiring assembly. Reinstall original A2, A12, and A15 assemblies. Send Test Set to Depot. b. If cable fails continuity check, replace cable assembly W2 and go to step 18.
	Step 18.	Set Test Set POWER ON/OFF switch to ON.
	Step 19.	On Test Set keyboard, enter C31E.
	Step 20.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 1518, go to step 21. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code) TEST OR INSPECTION CORRECTIVE ACTION
<p>c. If RESULT displays 8888, unit has passed the test, Fault was in original cable assembly W2. New A2, A12, A15, and W2 assemblies are good.</p> <ol style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A2, A12, and A15 assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ol style="list-style-type: none"> (a) If RESULT displays 1518, return to step 1 to further isolate fault. Fault exists in either original A2, A12, or A15 assemblies or all the original assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original cable assembly W2. Original A12, A2, A15, and new W2 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set, refer to paragraph 3-5.
<p>Step 21. Set Test Set POWER ON/OFF switch to OFF.</p>
<p>Step 22. Reinstall all original A12, A2, A15, and W2 assemblies. Fault is in card cage wiring assembly. Send Test Set to Depot.</p>
<p>1520</p>
<p>Step 1. Set Test Set POWER ON/OFF switch to OFF.</p>
<p>Step 2. Remove and replace communications assembly A8.</p>
<p>Step 3. Set Test Set POWER ON/OFF switch to ON. POWER lamp shall light and remain on. MALFUNCTION lamp shall not light,</p>
<p>Step 4. On Test Set keyboard enter C31E. ENTERED TEST shall flash 31 while test is in progress.</p>
<p>Step 5. Wait for ENTERED TEST to stop flashing, then observe RESULT.</p> <ol style="list-style-type: none"> a. If RESULT displays 1520, go to step b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original communications assembly A8. New A8 assembly is good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5.
<p>Step 6. Set POWER ON/OFF switch to OFF.</p>
<p>Step 7. Remove and replace I/O assembly A3.</p>
<p>Step 8. Set POWER ON/OFF switch to ON.</p>
<p>Step 9. On Test Set keyboard enter C31E.</p>
<p>Step 10. Wait for ENTERED TEST to stop flashing, then observe RESULT.</p>

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code) TEST OR INSPECTION CORRECTIVE ACTION	
<ul style="list-style-type: none"> a. If RESULT displays 1520, go to step 11. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888, unit has passed the test. Fault was in original I/O assembly A3. New A3 and A8 assemblies are good. <ul style="list-style-type: none"> (1) Set POWER ON/OFF switch to OFF (2) Reinstall original communications assembly A8. (3) Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 1520, return to step 1. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions, (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original I/O assembly A3. Original A8 and new A3 assemblies are good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5. 	<ul style="list-style-type: none"> Step 11. Set Test Set POWER ON/OFF switch to OFF, Step 12. Remove and replace DU interface assembly A7. Step 13. Set Test Set POWER ON/OFF switch to ON. Step 14. On Test Set keyboard enter C31E. Step 15. Wait for ENTERED TEST to stop flashing, then observe RESULT, <ul style="list-style-type: none"> a. If RESULT displays 1520, go to step 16. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original DU interface assembly A7. New A3, A7, and A8 assemblies are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A3 and A8 assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 1520, return to step 1. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
-----------------------------------	--------------------	-------------------

- (c) If RESULT displays 8888, Test Set has passed the test, Fault was in original DU interface assembly A7. Original A3 and A8 and new A7 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.
- Step 16. Set Test Set POWER ON/OFF switch to OFF.
- Step 17. Remove and replace self-test assembly A15.
- Step 18. Set Test Set POWER ON/OFF switch to ON.
- Step 19. On Test Set keyboard enter C31E.
- Step 20. Wait for ENTERED TEST to stop flashing, then observe RESULT.
- If RESULT displays 1520, go to step 21,
 - If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.
 - If RESULT displays 8888, unit has passed the test. Fault was in original self-test assembly A15. New A3, A7, A8 and A15 assemblies are good.
 - Set Test Set POWER ON/OFF switch to OFF.
 - Reinstall original A3, A7, and A8 assemblies.
 - Set Test Set POWER ON/OFF switch to ON.
 - On Test Set keyboard enter C31E.
 - Wait for ENTERED TEST to stop flashing, then observe RESULT.
 - If RESULT displays 1520, return to step 1 to further isolate fault. Fault exists in either original A3, A7, or A8 assemblies or in all the original assemblies.
 - If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.
 - If RESULT displays 8888, Test Set has passed the test. Fault was in original self-test assembly A15. Original A3, A7, and A8 and new A15 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.
- Step 21. Set Test Set POWER ON/OFF switch to OFF.
- Step 22. Remove cable assembly W4 and perform continuity check. Refer to paragraph 7-15.
- If cable assembly is good, fault is in card cage wiring assembly. Reinstall original A3, A7, A8, and A15 assemblies. Send Test Set to Depot.
 - If cable fails continuity check, replace cable assembly W4 and go to step 23.
- Step 23. Set Test Set POWER ON/OFF switch to ON.
- Step 24. On Test Set keyboard enter C31E.
- Step 25. Wait for ENTERED TEST to stop flashing, then observe RESULT.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
		<ul style="list-style-type: none"> a. If RESULT displays 1520, go to step 26. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original cable assembly W4. New A3, A7, A8, A15, and W4 assemblies are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A3, A7, A8, and A15 assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 1520, return to step 1. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original cable assembly W4. Original A3, A7, A8, and A15 and new W4 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.
	Step 26,	Set Test Set POWER ON/OFF switch to OFF.
	Step 27,	Reinstall original A3, A7, A8, A15, and W4 assemblies, Fault is in card cage wiring assembly. Send Test Set to Depot.
1521		
	Step 1.	Set Test Set POWER ON/OFF switch to OFF.
	Step 2.	Remove and replace DU interface assembly A7.
	Step 3.	Set Test Set POWER ON/OFF switch to ON. POWER lamp shall light and remain on. MALFUNCTION lamp shall not light.
	Step 4.	On Test Set keyboard enter C31E. ENTERED TEST shall flash 31 while test is in progress.
	Step 5.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 1521, go to step 6. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original DU interface assembly A7. New assembly A7 is good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5.
	Step 6.	Set POWER ON/OFF switch to OFF.
	Step 7.	Remove and replace I/O assembly A3.
	Step 8.	Set POWER ON/OFF switch to, ON.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code) TEST OR INSPECTION	CORRECTIVE ACTION
Step 9. On Test Set keyboard enter C31E.	
Step 10. Wait for ENTERED TEST to stop flashing, then observe RESULT.	
	<ul style="list-style-type: none"> a. If RESULT displays 1521, go to step 11. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original I/O assembly A3. New A3 and A7 assemblies are good. <ul style="list-style-type: none"> (1) Set POWER ON/OFF switch to OFF. (2) Reinstall original assembly A7. (3) Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 1521, return to step 1. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original I/O assembly A3. Original A7 and new A3 assemblies are good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5.
Step 11. Set Test Set POWER ON/OFF switch to OFF.	
Step 12. Remove and replace self-test assembly A15.	
Step 13. Set Test Set POWER ON/OFF switch to ON.	
Step 14. On Test Set keyboard enter C31E.	
Step 15. Wait for ENTERED TEST to stop flashing, then observe RESULT	
	<ul style="list-style-type: none"> a. If RESULT displays 1521, go to step 16. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, Test Set has passed the test. Fault was in original self-test assembly A15. New A3, A7, and A15 assemblies are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A3 and A7 assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 1521, return to step 1 to further isolate Fault exists in either original A3 or A7 assemblies or both original assemblies.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code) TEST OR INSPECTION CORRECTIVE ACTION	
	<ul style="list-style-type: none"> (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original self-test assembly A15. Original A3 and A7 and new A15 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.
Step 16.	Set Test Set POWER ON/OFF switch to OFF.
Step 17.	Remove cable assembly W4 and perform continuity check. Refer to paragraph 7-15. <ul style="list-style-type: none"> a. If cable assembly is good, fault is in card cage wiring assembly, Reinstall original A3, A7, and A15 assemblies. Send Test Set to Depot. b. If cable fails continuity check, replace cable assembly W4 and go to step 18.
Step 18.	Set Test Set POWER ON/OFF switch to ON.
Step 19.	On Test Set keyboard enter C31E.
Step 20.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 1521, go to step 21. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8868, unit has passed the test. Fault was in original cable assembly W4. New A3, A7, A15, and W4 assemblies are good <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A3, A7, and A15 assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard, enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 1521, return to step 1 to further isolate fault. Fault exists in either original A3, A7, or A15 assemblies or in all of the original assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original cable assembly W4. Original A3, A7, and A15 and new W4 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set, refer to paragraph 3-5.
Step 21.	Set Test Set POWER ON/OFF switch to OFF.
Step 22.	Reinstall all original A3, A7, A15, and W4 assemblies. Fault is in card cage wiring assembly. Send Test Set to Depot.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code) TEST OR INSPECTION	CORRECTIVE ACTION
1522	<p>Step 1. Set Test Set POWER ON/OFF switch to OFF.</p> <p>Step 2. Remove and replace squib OU interface circuit assembly A10.</p> <p>Step 3. Set Test Set POWER ON/OFF switch to ON. POWER lamp shall light and remain on. MALFUNCTION lamp shall not light.</p> <p>Step 4. On Test Set keyboard enter C31E.</p> <p>Step 5. Wait for ENTERED TEST to stop flashing, then observe RESULT.</p> <ul style="list-style-type: none"> a. If RESULT displays 1522, go to step 6. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original squib OU interface circuit assembly A10. New A10 assembly is good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5. <p>Step 6. Set POWER ON/OFF switch to OFF.</p> <p>Step 7. Remove and replace relay driver assembly A9</p> <p>Step 8. Set POWER ON/OFF switch to ON.</p> <p>Step 9. On Test Set keyboard enter C31E.</p> <p>Step 10. Wait for ENTERED TEST to stop flashing, then observe RESULT.</p> <ul style="list-style-type: none"> a. If RESULT displays 1522, go to step 11. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888, unit has passed the test. Fault was in original relay driver assembly A9. New A9 and A10 assemblies are good. <ul style="list-style-type: none"> (1) Set POWER ON/OFF switch to OFF. (2) Reinstall original assembly A10. (3) Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 1522, return to step 1. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original relay driver assembly A9. Original A9 and new A10 assemblies are good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5, <p>Step 11. Set Test Set POWER ON/OFF switch to OFF.</p> <p>Step 12. Remove and replace I/O assembly A3.</p>

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
	Step 13.	Set Test Set POWER ON/OFF switch to ON.
	Step 14.	On Test Set keyboard enter C31E.
	Step 15.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 1522, go to step 16. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888, unit has passed the test. Fault was in original I/Oassembly A3. New A2, A3, and A9 assemblies are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A9 and A10 assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 1522, return to step 1 to further isolate fault. Fault exists in either original A9 or A10 assemblies or in both original assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original I/O assembly A3. Original A9 and A10 and new A3 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.
	Step 16.	Set Test Set POWER ON/OFF switch to OFF.
	Step 17.	Remove and replace self-test assembly A15.
	Step 18.	Set Test Set POWER ON/OFF switch to ON.
	Step 19.	On Test Set keyboard enter C31E.
	Step 20.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 1522, go to step 21. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original self-test assembly A15. New A3, A9, A10, and A15 assemblies are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A3, A9, and A10 assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
-----------------------------------	--------------------	-------------------

- | | | |
|----------|-----|--|
| | | <ul style="list-style-type: none"> (a) If Result displays 1522, return to step 1 to further isolate Fault exists in either original A3, A9, or A10 assemblies or in all the original assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original self-test assembly A15. Original A3, A9, and A10 and new A15 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5. |
| Step 21. | | Set Test Set POWER ON/OFF switch to OFF. |
| Step 22. | | Remove cable assembly W3 and perform continuity check. Refer to paragraph 7-15. |
| | a. | If cable assembly is good, fault is in card cage wiring assembly. Reinstall original A9, A10, and A15 assemblies. Send Test Set to Depot. |
| | b. | If cable fails continuity check, replace cable assembly W3 and go to step 23. |
| Step 23. | | Set Test Set POWER ON/OFF switch to ON. |
| Step 24. | | On Test Set keyboard enter C31E. |
| Step 25. | | Wait for ENTERED TEST to stop flashing, then observe RESULT. |
| | a. | If RESULT displays 1522, go to step 26. |
| | b. | If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . |
| | c. | If RESULT displays 8888, Test Set has passed the test. Fault was in original cable assembly W3. New A3, A9, A10, A15, and W3 assemblies are good. |
| | (1) | Set Test Set POWER ON/OFF switch to OFF. |
| | (2) | Reinstall original A3, A9, A10, and A15 assemblies. |
| | (3) | Set Test Set POWER ON/OFF switch to ON. |
| | (4) | On Test Set keyboard enter C31E. |
| | (5) | Wait for ENTERED TEST to stop flashing, then observe RESULT. |
| | (a) | If RESULT displays 1522, return to step 1 to further isolate fault. Fault exists in either original A3, A9, A10, or A15 assemblies or in all of the original assemblies. |
| | (b) | If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. |
| | (c) | If RESULT displays 8888, Test Set has passed the test. Fault was in original cable assembly W3. Original A3, A9, A10, and A15 and new W3 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set, refer to paragraph 3-5. |

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
	Step 26.	Set Test Set POWER ON/OFF switch to OFF.
	Step 27.	Reinstall original A3, A9, A10, A15, and W3 assemblies. Fault is in card cage wiring assembly. Send Test Set to Depot.
1523	Step 1.	Set Test Set POWER ON/OFF switch to OFF.
	Step 2.	Remove and replace relay driver assembly A9.
	Step 3.	Set Test Set POWER ON/OFF switch to ON. POWER lamp shall light and remain on. MALFUNCTION lamp shall not light.
	Step 4.	On Test Set keyboard enter C31E.
	Step 5.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 1523, go to step 6. b. If RESULT displays and other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888, unit has passed the test. Fault was in original relay driver assembly A9. New A9 assembly is good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5.
	Step 6.	Set POWER ON/OFF switch to OFF.
	Step 7.	Remove and replace I/O assembly A3.
	Step 8.	Set POWER ON/OFF switch to ON.
	Step 9.	On Test Set keyboard enter C31E,
	Step 10.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 1523, go to step 11. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888; unit has passed the test. Fault was in original I/O assembly A3. New A3 and A9 assemblies are good. <ul style="list-style-type: none"> (1) Set POWER ON/OFF switch to OFF. (2) Reinstall original assembly A9 (3) Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 1523, return to step 1. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original I/O assembly A3. Original A9 and new A3 assemblies are good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5.
	Step 11	Set Test Set POWER ON/OFF switch to OFF.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
	Step 12.	Remove and replace CPU assembly A2.
	Step 13.	Set Test Set POWER ON/OFF switch to ON.
	Step 14.	On Test Set keyboard enter C31E.
	Step 15.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 1523, go to step 16. b. If RESULT displays any other malfunction code, number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888. unit has passed the test. Fault was in original CPU assembly A2. New A2,A3, and A9 assemblies are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A3 and A9 assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 1523, return to step 1 to further isolate fault. Fault exists in either original A3 or A9 assemblies or in both original assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original CPU assembly A2. Original A3 and A9 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.
	Step 16.	Set Test Set POWER ON/OFF switch to OFF.
	Step 17.	Remove cable assembly W2 and perform continuity check. Refer to paragraph 7-15. <ul style="list-style-type: none"> a. If cable assembly is good, fault is in card cage wiring assembly. Reinstall original A2, A3, and A9 assemblies. Send Test Set to Depot. b. If cable fails continuity check, replace cable assembly W2 and go to step 18.
	Step 18.	Set Test Set POWER ON/OFF switch to ON.
	Step 19.	On Test Set keyboard enter C31E.
	Step 20.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 1523, go to step 21. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions c. If RESULT displays 8888, unit has passed test. Fault was in original cable assembly W2. New A2, A3, A9, and W2 assemblies are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF.

Table 7-2, Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)
 TEST OR INSPECTION
 CORRECTIVE ACTION

- (2) Reinstall original A2, A3, and A9 assemblies.
- (3) Set Test Set POWER ON/OFF switch to ON.
- (4) On Test Set keyboard enter C31E.
- (5) Wait for ENTERED TEST to stop flashing, then observe RESULT.
 - (a) RESULT displays 1523, return to step 1 to further isolate Fault exists in either original A2, A3 or A9 assemblies or in all of the original assemblies.
 - (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.
 - (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original cable assembly W2. Original A2, A3, and A9 and new W2 assemblies are good. Set Test Set POWER ON/OFF switch to OFF, To shut down Test Set, refer to paragraph 3-5.

Step 21. Set Test Set POWER ON/OFF switch to OFF.

Step 22. Reinstall original A2, A3, A9, and W2 assemblies. Fault is in card cage wiring assembly. Send Test Set to Depot.

1524

- Step 1. Set Test Set POWER ON/OFF switch to OFF.
- Step 2. Remove and replace OU fuze interface assembly All.
- Step 3. Set Test Set POWER ON/OFF switch to ON. POWER lamp shall light and remain on. MALFUNCTION lamp shall not light.
- Step 4. On Test Set keyboard enter C31E. ENTERED TEST shall flash 31 while test is in progress.
- Step 5. Wait for ENTERED TEST to stop flashing, then observe RESULT.
 - a. If RESULT displays 1524, go to step 6.
 - b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.
 - c. If RESULT displays 8888, unit has passed test. Fault was in original OU fuze interface assembly All. New All assembly is good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5,
- Step 6. Set POWER ON/OFF switch to OFF.
- Step 7. Remove and replace relay driver assembly A9.
- Step 8. Set POWER ON/OFF switch to ON.
- Step 9. On Test Set keyboard enter C31E.
- Step 10. Wait for ENTERED TEST to stop flashing, then observe RESULT.
 - a. If RESULT displays 1524, go to step 11.
 - b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code) TEST OR INSPECTION	CORRECTIVE ACTION
c. If RESULT displays 8888, unit has passed the test. Fault was in original relay driver assembly A9. New A9 and All assemblies are good .	<ul style="list-style-type: none"> (1) Set POWER ON/OFF switch to OFF. (2) Reinstall original assembly All. (3) Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 1524, return to step 1. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original relay driver assembly A9. New A9 and original All assemblies are good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5.
Step 11. Set Test Set POWER ON/OFF switch to OFF.	
Step 12. Remove and replace I/O assembly A3.	
Step 13. Set Test Set POWER ON/OFF switch to ON.	
Step 14. On Test Set keyboard enter C31E.	
Step 15. Wait for ENTERED TEST to stop flashing, then observe RESULT.	<ul style="list-style-type: none"> a. If RESULT displays 1524, go to step 16. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original I/O assembly A3. New A3, A9, and All assemblies are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A9 and All assemblies, (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) RESULT displays 1524, return to step 1 to further isolate Fault is in either original A9 or All assemblies or both of the original assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original I/O assembly A3. Original A9 and All and new A3 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
	Step 16.	Set Test Set POWER ON/OFF switch to OFF.
	Step 17.	Remove and replace self-test assembly A15.
	Step 18.	Set Test Set POWER ON/OFF switch to ON.
	Step 19.	On Test Set keyboard enter C31E.
	Step 20.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 1524, go to step 21. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888, unit has passed the test, Fault was in original self-test assembly A15. New A3, A9, A11, and A15 assemblies are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF, (2) Reinstall original A3, A9, and A11 assemblies, (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 1524, return to step 1 to further isolate fault Fault exists in either original A3, A9, or All assemblies or in all of the original assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original self-test assembly A15. Original A3, A9, and All and new A15 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.
	Step 21.	Set Test Set POWER ON/OFF switch to OFF.
	Step 22.	Remove cable assembly W3 and perform continuity check. Refer to paragraph 7-15. <ul style="list-style-type: none"> a. If cable assembly is good, fault is in card cage wiring assembly. Reinstall original A3, A9, A11, and A15 assemblies. Send Test Set to Depot . b. If cable fails continuity check, replace cable assembly W3 and go to step 23.
	Step 23.	Set Test Set POWER ON/OFF switch to ON.
	Step 24.	On Test Set keyboard enter C31E.
	Step 25.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 1524, go to step 26. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions .

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code) TEST OR INSPECTION CORRECTIVE ACTION	
<p>c. If RESULT displays 8888, unit has passed the test. Fault was in original cable assembly W3. New A3, A9, A11, A15, and W3 assemblies are good.</p> <p>(1) Set Test Set POWER ON/OFF switch to OFF.</p> <p>(2) Reinstall original A3, A9, A11, and A15 assemblies.</p> <p>(3) Set Test Set POWER ON/OFF switch to ON.</p> <p>(4) On Test Set keyboard enter C31E.</p> <p>(5) Wait for ENTERED TEST to stop flashing, then observe RESULT.</p> <p>(a) If RESULT displays 1524, return to step 1 to further isolate fault. Fault exists in either original A3, A9, A11, or A15 assemblies or in all of the original assemblies.</p> <p>(b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.</p> <p>(c) If RESULT displays 8888, Test Set has passed the test. Fault was in original cable assembly W3. Original A3, A9, A11, and A15 and new W3 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set, refer to paragraph 3-5.</p>	
Step 26.	Set Test Set POWER ON/OFF switch to OFF.
Step 27.	Reinstall original A3, A9, A11, A15, and W3 assemblies. Fault is in card cage wiring assembly. Send Test Set to Depot.
2515	
Step 1.	Set Test Set POWER ON/OFF switch to OFF.
Step 2.	Remove and replace CPU assembly A2.
Step 3.	Set Test Set POWER ON/OFF switch to ON. POWER lamp shall light and remain on. MALFUNCTION lamp shall not light.
Step 4.	On Test Set keyboard enter C31E, ENTERED TEST shall flash 31 while test is in progress.
Step 5.	Wait for ENTERED TEST to stop flashing, then observe RESULT.
a.	If RESULT displays 2515, go to step 6.
b.	If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.
c.	If RESULT displays 8888, unit has passed the test. Fault was in original CPU assembly A2. New CPU assembly A2 is good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5.
Step 6.	Set POWER ON/OFF switch to OFF.
Step 7.	Remove and replace relay driver assembly A9.
Step 8.	Set POWER ON/OFF switch to ON.
Step 9.	On Test Set keyboard enter C31E.
Step 10	Wait for ENTERED TEST to stop flashing, then observe RESULT.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code) TEST OR INSPECTION CORRECTIVE ACTION
<ul style="list-style-type: none"> a. If RESULT displays 2515, go to step 11. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888, unit has passed the test. Fault was in original relay driver assembly A9. New A2 and A9 assemblies are good. <ul style="list-style-type: none"> (1) Set POWER ON/OFF switch to OFF. (2) Reinstall original CPU assembly A2. (3) Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 2515, return to step 1. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original relay driver assembly A9. Original A2 and new A9 assemblies are good. Set POWER ON/OFF switch to OFF. To shut down the Test Set, refer to paragraph 3-5.
<p>Step 11. Set Test Set POWER ON/OFF switch to OFF,</p>
<p>Step 12. Remove and replace 1/0 assembly A3.</p>
<p>Step 13. Set Test Set POWER ON/OFF switch to ON.</p>
<p>Step 14. On Test Set keyboard enter C31E.</p>
<p>Step 15. Wait for ENTERED TEST to stop flashing, then observe RESULT.</p>
<ul style="list-style-type: none"> a. If RESULT displays 2515, go to step 16. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original 1/0 assembly A3. New A2, A3, and A9 assemblies are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A2 and A9 assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) RESULT displays 2515, return to step 1 to further isolate fault. Fault exists in either original A2 or A9 assemblies or in both of the original assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code) TEST OR INSPECTION	CORRECTIVE ACTION
	(c) If RESULT displays 8888, Test Set has passed the test. Fault was in original 1/0 assembly A3. Original A2 and A9 and new A3 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.
Step 16.	Set Test Set POWER ON/OFF switch to OFF.
Step 17.	Remove cable assembly W2 and perform continuity check. Refer to paragraph 7-15. <ul style="list-style-type: none"> a. If cable assembly is good, fault is in card cage wiring assembly. Reinstall original A2, A3, and A9 assemblies. Send Test Set to Depot. b. If cable fails continuity check, replace cable assembly W2 and go to step 18.
Step 18.	Set Test Set POWER ON/OFF switch to ON.
Step 19.	On Test Set keyboard enter C31E.
Step 20.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 2515, go to step 21. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original cable assembly W2. New A2, A3, A9, and W2 assemblies are good. <ol style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A2, A3, and A9 assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E, (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 2515, return to step 1 to further isolate fault. Fault exists in either original A2, A3, or A9 assemblies or in all of the original assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original cable assembly W2. Original A2, A3, and A9 and new W2 assemblies are good. Set Test Set P.OWER ON/OFF switch to OFF. To shut down Test Set, refer to paragraph 3-5.
Step 21.	Set Test Set POWER ON/OFF switch to OFF.
Step 22.	Remove and replace self-test assembly A15.
Step 23.	Set Test Set POWER ON/OFF switch to ON.
Step 24.	On Test Set keyboard enter C31E.
Step 25.	Wait for ENTERED TEST to stop flashing, then observe RESULT.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
		<ul style="list-style-type: none"> a. If RESULT displays 2515, go to step 26. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions c. If RESULT displays 8888, unit has passed the test. Fault was in original self-test assembly A15. New A2, A3, A9, A15 and W2 assemblies are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A2, A3, A9, and W2 cable assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 2515, return to step 1 to further isolate fault . Fault exists in either original A2, A3, A9, or W2 assemblies or in all of the original assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original self-test assembly A15. Original A2, A3, A9, and W2 and new A15 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.
	Step 26.	Set Test Set POWER ON/OFF switch to OFF.
	Step 27.	Reinstall original A2, A3, A9, A15, and W2 assemblies. Fault is in card cage wiring assembly. Send Test Set to Depot.
2518	Step 1.	Set Test Set POWER ON/OFF switch to ON. POWER lamp shall light and remain on. MALFUNCTION lamp shall not light.
	Step 2.	Check power supply and relay K1 voltages. Refer to paragraph 7-13 and table 7-3. <ul style="list-style-type: none"> a. If voltages are within limits, go to step 3. b. If voltages are not within limits, adjust Power Supply assemblies PS1, PS2, and PS3. Refer to paragraph 7-14.
	Step 3.	Set Test Set POWER ON/OFF switch to OFF.
	Step 4.	Remove and replace analog circuit assembly A12.
	Step 5.	Set Test Set POWER ON/OFF switch to ON.
	Step 6.	On Test Set keyboard enter C31E. ENTERED TEST shall flash 31 while test is in progress.
	Step 7.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 2518, go to step 8. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
		<ul style="list-style-type: none"> c. If RESULT displays 8888, unit has passed the test. Fault was in original analog circuit assembly A12. New assembly A12 is good. Set POWER ON/OFF switch to OFF, To shut down the Test Set refer to paragraph 3-5.
	Step 8.	Set POWER ON/OFF switch to OFF.
	Step 9.	Remove and replace CPU assembly A2.
	Step 10.	Set POWER ON/OFF switch to ON.
	Step 11.	On Test Set keyboard enter C31E.
	Step 12.	<p>Wait for ENTERED TEST to stop flashing, then observe RESULT.</p> <ul style="list-style-type: none"> a. If RESULT displays 2518, go to step 13. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888, unit has passed the test. Fault was in original CPU assembly A2. New A2 and A12 assemblies are good. <ul style="list-style-type: none"> (1) Set POWER ON/OFF switch to OFF. (2) Reinstall original A12 assembly. (3) Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 2518, return to step 1. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original CPU assembly A2. Original A12 and new A2 assemblies are good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5.
	Step 13.	Set Test Set POWER ON/OFF switch to OFF.
	Step 14.	Remove and replace I/O assembly A3.
	Step 15.	Set Test Set POWER ON/OFF switch to ON.
	Step 16.	On Test Set keyboard enter C31E.
	Step 17.	<p>Wait for ENTERED TEST to stop flashing, then observe RESULT.</p> <ul style="list-style-type: none"> a. If RESULT displays 2518, go to step 18. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888, unit has passed the test. Fault was in original I/O assembly A3. New A2, A12, and A3 assemblies are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
		<ul style="list-style-type: none"> (2) Reinstall original A2 and A12 assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard, enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) RESULT displays 2518, return to step 3 to further isolate Fault exists in either original A2 or A12 assemblies or in both the original assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original I/O assembly A3. Original A2 and A12 and new A3 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.
Step 18.		Set Test Set POWER ON/OFF switch to OFF.
Step 19.		Remove and replace self-test assembly A15.
Step 20.		Set Test Set POWER ON/OFF switch to ON.
Step 21.		On Test Set keyboard enter C31E.
Step 22.		Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 2518, go to step 23. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888, unit has passed the test. Fault was in original self-test assembly A15. New A2, A3, A12, and A15 assemblies are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A2, A3, and A12 assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 2518, return to step 3 to further isolate fault Fault exists in either original A2, A3, or A12 assemblies or in all of the original assemblies, (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original self-test assembly A15. Original A2, A3, and A12 and new A15 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.
Step 23.		Set Test Set POWER ON/OFF switch to OFF.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
	Step 24.	Remove cable assembly W2 and perform continuity check. Refer to paragraph 7-15.
		a. If cable assembly is good, go to step 29.
		b. If cable fails continuity check, replace cable assembly W2 and go to step 25.
	Step 25.	Set Test Set POWER ON/OFF switch to ON.
	Step 26.	On Test Set keyboard enter C31E.
	Step 27.	Wait for ENTERED TEST to stop flashing, then observe RESULT.
		a. If RESULT displays 2518, go to step 28.
		b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions .
		c. If RESULT displays 8888, unit has passed the test. Fault was in original cable assembly W2. New A2, A3, A12, A15 and W2 assemblies are good.
		(1) Set Test Set POWER ON/OFF switch to OFF.
		(2) Reinstall original A2, A3, A12, and A15 assemblies.
		(3) Set Test Set POWER ON/OFF switch to ON.
		(4) On Test Set keyboard enter C31E.
		(5) Wait for ENTERED TEST to stop flashing, then observe RESULT.
		(a) If RESULT displays 2518, return to step 3 to further isolate fault . Fault exists in either original A2, A3, A12, or A15 assemblies or in all of the original assemblies.
		(b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.
		(c) If RESULT displays 8888, Test Set has passed the test. Fault was in original cable assembly W2. Original A2, A3, A12, and A15 and new W2 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set, refer to paragraph 3-5.
	Step 28.	Set Test Set POWER ON/OFF switch to OFF.
	Step 29.	Remove cable assembly W4 and perform continuity check. Refer to paragraph 7-15.
		a. If cable assembly is good, fault is in card cage wiring assembly, Reinstall original A2, A3, A12, A15, and W2 assemblies. Send Test Set to Depot.
		b. If cable fails continuity check, replace cable assembly W4 and to step 30.
	Step 30.	Set Test Set POWER ON/OFF switch to ON.
	Step 31.	On Test Set keyboard enter C31E.
	Step 32.	Wait for ENTERED TEST to stop flashing, then observe RESULT.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
		<ul style="list-style-type: none"> a. If RESULT displays 2518, go to step 33, b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original cable assembly W4. New A2, A3, A12, A15, W2, and W4 assemblies are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A2, A3, A12, A15, and W2 assemblies. (3) Set Test Set POWER ON/OFF switch to ON, (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 2518, return to step 3 to further isolate fault. Fault exists in either original A2, A3, A12, A15, or W2 assemblies or in all of the original assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original cable assembly W4. Original A2, A3, A12, A15, and W2 and new W4 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set, refer to paragraph 3-5.
Step 33.	Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set, refer to paragraph 3-5.	
Step 34, 2521	Reinstall original A2, A3, A12, A15, W2, and W4 assemblies, Fault is in card cage wiring assembly. Send Test Set to Depot.	
Step 1.	Set Test Set POWER ON/OFF switch to OFF.	
Step 2.	Remove and replace DU interface assembly A7.	
Step 3.	Set Test Set POWER ON/OFF switch to ON. POWER lamp shall light and remain on. MALFUNCTION lamp shall not light.	
Step 4.	On Test Set keyboard enter C31E: ENTERED TEST shall flash 31 while test is in progress.	
Step 5.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 2521, go to step 6. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test, Fault was in original DU interface assembly A7. New A7 assembly is good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5. 	
Step 6.	Set POWER ON/OFF switch to OFF.	
Step 7.	Remove and replace DU cable interface assembly A14.	

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code) TEST OR INSPECTION CORRECTIVE ACTION
Step 8. Set POWER ON/OFF switch to ON.
Step 9. On Test Set keyboard enter C31E.
<p>Step 10. Wait for ENTERED TEST to stop flashing, then observe RESULT.</p> <ol style="list-style-type: none"> a. If RESULT displays 2521, go to step 11. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original DU cable interface assembly A14. New A7 and A14 assemblies are good. <ol style="list-style-type: none"> (1) Set POWER ON/OFF switch to OFF. (2) Reinstall original A7 assembly. (3) Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. <p>(5) Wait for ENTERED TEST to stop flashing, then observe RESULT.</p> <ol style="list-style-type: none"> (a) If RESULT displays 2521, return to step 1. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original DU interface assembly A14. Original A7 and new A14 assemblies are good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5.
Step 11. Set Test Set POWER ON/OFF switch to OFF.
Step 12. Remove and replace self-test assembly A15.
Step 13. Set Test Set POWER ON/OFF switch to ON.
Step 14. On Test Set keyboard enter C31E.
<p>Step 15. Wait for ENTERED TEST to stop flashing, then observe RESULT.</p> <ol style="list-style-type: none"> a. If RESULT displays 2521, go to step 16. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original self-test assembly A15. New A7, A14, and A15 assemblies are good. <ol style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A7 and A14 assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. <p>(5) Wait for ENTERED TEST to stop flashing, then observe RESULT.</p>

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code) TEST OR INSPECTION CORRECTIVE ACTION	
Step 16. Set Test Set POWER ON/OFF switch to OFF.	
Step 17. Remove and replace CPU assembly A2.	
Step 18. Set Test Set POWER ON/OFF switch to ON.	
Step 19. On Test Set keyboard enter C31E.	
Step 20. Wait for ENTERED TEST to stop flashing, then observe RESULT.	
a. If RESULT displays 2521, go to step 21.	
b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.	
c. If RESULT displays 8888, unit has passed the test. Fault was in original CPU assembly A2. New A2, A7, A14, and A15 assemblies are good.	
(1) Set Test Set POWER ON/OFF switch to OFF.	
(2) Reinstall original A7, A14, and A15 assemblies.	
(3) Set Test Set POWER ON/OFF switch to ON.	
(4) On Test Set keyboard enter C31E.	
(5) Wait for ENTERED TEST to stop flashing, then observe RESULT.	
(a) RESULT displays 2521, return to step 1 to further isolate Fault exists in either original A7, A14, or A15 assemblies or in all of the original assemblies.	
(b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.	
(c) If RESULT displays 9888, Test Set has passed the test. Fault was in original CPU assembly A2. Original A7, A14, and A15 and new A2 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.	
Step 21. Set Test Set POWER ON/OFF switch to OFF.	
Step 22. Remove cable assembly W4 and perform continuity check. Refer to paragraph 7-15.	
a. If cable assembly is good, fault is in card cage wiring assembly. Reinstall original A7, A14, and A15 assemblies. Send Test Set to Depot.	

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
		<ul style="list-style-type: none"> b. If cable fails continuity check, replace cable assembly W4 and go to step 23.
	Step 23.	Set Test Set POWER ON/OFF switch to ON.
	Step 24.	On Test Set keyboard enter C31E.
	Step 25.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 2521, go to step 26. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888, unit has passed the test. Fault was in original cable assembly W4. New A2, A7, A14, A15, and W4 are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to O_F. (2) Reinstall original A2, A7, A14, and A15 assemblies, (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 2521, return to step 1 to further isolate fault . Fault exists in either original A2, A7, A14, or A15 assemblies or in all of the original assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original cable assembly W4. Original A2, A7, A14, and A15 and new W4 assemblies are-good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set, refer to paragraph 3-5.
	Step 26.	Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.
	Step 27.	Reinstall original A2, A7, A14, A15, and W4 assemblies. Fault is in card cage wiring assembly. Send Test Set to Depot.
2524	Step 1.	Set Test Set POWER ON/OFF switch to OFF.
	Step 2.	Remove and replace fuze OU interface assembly A11.
	Step 3.	Set Test Set POWER ON/OFF switch to ON. POWER lamp shall light and remain on. MALFUNCTION lamp shall not light.
	Step 4.	On Test Set keyboard enter C31E. ENTERED TEST shall flash 31 while test is in progress.
	Step 5.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 2524, go to step 6. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code) TEST OR INSPECTION	CORRECTIVE ACTION
<ul style="list-style-type: none"> c. If RESULT displays 8888, unit has passed the test. Fault was in original fuze OU interface assembly A11. New A11 assembly is good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5. 	<ul style="list-style-type: none"> Step 6. Set POWER ON/OFF switch to OFF. Step 7. Remove and replace relay driver assembly A9. Step 8. Set POWER ON/OFF switch to ON. Step 9. On Test Set keyboard enter C31E. Step 10. Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 2524, go to step 11. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888, unit has passed the test. Fault was in original relay driver assembly A9. New A9 and A11 assemblies are good <ul style="list-style-type: none"> (1) Set POWER ON/OFF switch to OFF. (2) Reinstall original A11 assembly. (3) Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 2524, return to step 1. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original relay driver assembly A9. New A9 and original A11 assemblies are good. Set POWER ON/OFF switch to OFF. To shut down the Test Set, refer to paragraph 3-5. Step 11. Set Test Set POWER ON/OFF switch to OFF. Step 12. Remove and replace I/O assembly A3. Step 13. Set Test Set POWER ON/OFF switch to ON. Step 14. On Test Set keyboard enter C31E. Step 15. Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 2524, go to step 16. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888, unit has passed the test. Fault was in original I/O assembly A3. New A3, A9, and A11 assemblies are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code) TEST OR INSPECTION	CORRECTIVE ACTION
---	-------------------

- | | |
|----------|---|
| | <ul style="list-style-type: none"> (2) Reinstall original A9 and A11 assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 2524, return to step 1 to further isolate fault . Fault exists in either original A9 or All assemblies or in both of the original assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original I/O assembly A3. Original A9 and A11 and new A3 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5. |
| Step 16. | Set POWER ON/OFF switch to OFF. |
| Step 17. | Remove and replace self-test assembly A15. |
| Step 18. | Set POWER ON/OFF switch to ON. |
| Step 19. | On Test Set keyboard enter C31E. |
| Step 20. | Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 2524, go to step 21. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888, unit has passed the test. Fault was in original self-test assembly A15. New A3, A9, A11, and A15 assemblies are good. <ul style="list-style-type: none"> (1) Set POWER ON/OFF switch to OFF. (2) Reinstall original A3, A9, and A11. (3) Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 2524, return to step 1 to further isolate fault . Fault exists in either original A3, A9, or A11 assemblies or in all of the original assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original self-test assembly A15. Original A3, A9, and A11 and new A15 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5. |
| Step 21. | Set Test Set POWER ON/OFF switch to OFF. |

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code) TEST OR INSPECTION	CORRECTIVE ACTION
Step 22.	<p>Remove cable assembly W3 and perform continuity check. Refer to paragraph 7-15.</p> <ol style="list-style-type: none"> a. If cable assembly is good, go to step 26. b. If cable fails continuity check, replace W3 assembly and go to step 23.
Step 23.	Set Test Set POWER ON/OFF switch to ON.
Step 24.	On Test Set keyboard enter C31E.
Step 25.	<p>Wait for ENTERED TEST to stop flashing, then observe RESULT.</p> <ol style="list-style-type: none"> a. If RESULT displays 2524, go to step 26. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8898, unit has passed the test. Fault was in original cable assembly W3. New A3, A9, A15, A11, and W3 assemblies are good. <ol style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A3, A9, A11, and A15 assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ol style="list-style-type: none"> (a) If RESULT displays 2524, return to step 1 to further isolate fault. Fault exists in one or more of the original A3, A9, A11, or A15 assemblies or in all of the original assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original cable assembly W3. Original A3, A9, A11, and A15 and new W4 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down test refer to paragraph 3-5.
Step 26.	Set Test Set POWER ON/OFF switch to OFF.
Step 27.	<p>Remove cable assembly W2 and perform continuity check of cable assembly W2. Refer to paragraph 7-15.</p> <ol style="list-style-type: none"> a. If cable assembly is good, fault is in card cage wiring assembly. Reinstall original A3, A9, A11, A15, W2, and W3 assemblies. Send Test Set to Depot. b. If cable fails continuity check, replace cable assembly W2 and go to step 28.
Step 28.	Set Test Set POWER ON/OFF switch to ON.
Step 29.	On Test Set keyboard enter C31E.
Step 30.	Wait for ENTERED TEST to stop flashing, then observe RESULT.

MALFUNCTION (RESULT Display Code)
TEST OR INSPECTION
CORRECTIVE ACTION

- a. If RESULT displays 2524, go to step 31.
 - b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.
 - c. If RESULT displays 8888, unit has passed the test. Fault was in original cable assembly W2. New A3, A9, A11, A15, W3 and W2 assemblies are good.
 - (1) Set Test Set POWER ON/OFF switch to OFF.
 - (2) Reinstall original A3, A9, A11, A15, and W3 assemblies.
 - (3) Set Test Set POWER ON/OFF switch to ON.
 - (4) On Test Set keyboard, enter C31E.
 - (5) Wait for ENTERED TEST to stop flashing, then observe RESULT.
 - (a) If RESULT displays 2524, return to step 1 to further isolate fault. Fault exists in one or more of the original A3, A9, A11, A15, or W3 assemblies.
 - (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.
 - (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original cable assembly W2. Original A3, A9, A-1, A15, and W3 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set, refer to paragraph 3-5.
- Step 31. Set Test Set POWER ON/OFF switch to OFF.
- Step 32. Reinstall original A3, A9, A11, A15, W2, and W3 assemblies. Fault is in card cage wiring assembly. Send Test Set to Depot.
- 3515
- Step 1. Set Test Set POWER ON/OFF switch to OFF.
 - Step 2. Remove and replace CPU assembly A2.
 - Step 3. Set Test Set POWER ON/OFF switch to ON. POWER lamp shall light and remain on. MALFUNCTION lamp shall not light.
 - Step 4. On Test Set keyboard enter C31E. ENTERED TEST shall flash 31 while test is in progress.
 - Step 5. Wait for ENTERED TEST to stop flashing, then observe RESULT.
 - a. If RESULT displays 3515, go to step 6.
 - b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.
 - c. If RESULT displays 8888, unit has passed the test. Fault was in original CPU assembly A2. New A2 assembly is good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5.
 - Step 6. Set POWER ON/OFF switch to OFF
 - Step 7. Remove and replace power control assembly A13
 - Step 8. Set POWER ON/OFF switch to ON.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
-----------------------------------	--------------------	-------------------

- | | | |
|----------|---|--|
| Step 9. | On Test Set keyboard enter C31E. | |
| Step 10. | Wait for ENTERED TEST to stop flashing, then observe RESULT. | |
| | a. If RESULT displays 3515, go to step 11. | |
| | b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT display code) column and follow instructions. | |
| | c. If RESULT displays 8888, unit has passed the test. Fault was in original power control assembly A13. New A2 and A13 assemblies are good | |
| | (1) Set POWER ON/OFF switch to OFF. | |
| | (2) Reinstall original A2 assembly. | |
| | (3) Set POWER ON/OFF switch to ON. | |
| | (4) On Test Set keyboard enter C31E. | |
| | (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. | |
| | (a) If RESULT displays 3515, return to step 1. | |
| | (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. | |
| | (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original power control assembly W13. Original A2 and new A13 assemblies are good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5. | |
| Step 11. | Set Test Set POWER ON/OFF switch to OFF. | |
| Step 12. | Remove and replace DU interface assembly A7. | |
| Step 13. | Set Test Set POWER ON/OFF switch to ON. | |
| Step 14. | On Test Set keyboard enter C31E. | |
| Step 15. | Wait for ENTERED TEST to stop flashing, then observe RESULT. | |
| | a. If RESULT displays 3515, go to step 16. | |
| | b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . | |
| | c. If RESULT displays 8888, unit has passed the test. Fault was in original DU interface assembly A7. New A2, A7, and A13 assemblies are good. | |
| | (1) Set Test Set POWER ON/OFF switch to OFF. | |
| | (2) Reinstall original A2 and A13 assemblies. | |
| | (3) Set Test Set POWER ON/OFF switch to ON. | |
| | (4) On Test Set keyboard enter C31E. | |
| | (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. | |
| | (a) If RESULT displays 3515, return to step 1 to further isolate fault . Fault exists in either or both original A2 or A13 assemblies . | |

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
		<ul style="list-style-type: none"> (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original DU interface assembly A7. Original A2 and A13 and new A7 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.
Step 16.	Set POWER ON/OFF switch to OFF.	
Step 17.	Remove and replace self-test assembly A15.	
Step 18.	Set POWER ON/OFF switch to ON.	
Step 19.	On Test Set keyboard enter C31E.	
Step 20.	Wait for ENTERED TEST to stop flashing, then observe RESULT.	<ul style="list-style-type: none"> a. If RESULT displays 3515, go to step 21. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original self-test assembly A15. New A2, A7, A13, and A15 assemblies are good. <ul style="list-style-type: none"> (1) Set POWER ON/OFF switch to OFF. (2) Reinstall original A2, A7, and A13. (3) Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 3515, return to step 1 to further isolate fault. Fault exists in one or more of the original A2, A7, or A13 assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original self-test assembly A15. Original A2, A7, and A13 and new A15 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.
Step 21.	Set Test Set POWER ON/OFF switch to OFF.	
Step 22.	Remove cable assembly W4 and perform continuity check. Refer to paragraph 7-15.	<ul style="list-style-type: none"> a. If cable assembly is good, go to step 27. b. If cable fails continuity check, replace cable assembly W4 and go to step 23.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
	Step 23.	Set Test Set POWER ON/OFF switch to ON.
	Step 24.	On Test Set keyboard enter C31E.
	Step 25.	Wait for ENTERED TEST to stop flashing, then observe RESULT, <ul style="list-style-type: none"> a. If RESULT displays 3515, go to step 26. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888, unit has passed the test. Fault was in original cable assembly W4. New A2, A7, A13, A15, and W4 assemblies are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A2, A7, A13, and A15 assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) When ENTERED TEST stops flashing, observe RESULT. <ul style="list-style-type: none"> (a) RESULT displays 3515, return to step 1 to further isolate fault. Fault exists in one or more of the original A2, A7, A13, or A15 assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original cable assembly W4. Original A2, A7, A13, and A15 and new W4 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set, refer to paragraph 3-5.
	Step 26.	Set Test Set POWER ON/OFF switch to OFF.
	Step 27.	Remove cable assembly W2 and perform continuity check. Refer to paragraph 7-15, <ul style="list-style-type: none"> a. If cable assembly is good, fault is in card cage wiring assembly. Reinstall original A2, A7, A13, A15, W2 and W4 assemblies. Send Test Set to Depot. b. If cable fails continuity check, replace cable assembly and go to step 28.
	Step 28.	Set Test Set POWER ON/OFF switch to ON.
	Step 29.	On Test Set keyboard enter C31E.
	Step 30.	When ENTERED TEST stops flashing, observe RESULT, <ul style="list-style-type: none"> a. If RESULT displays 3515, go to step 31. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original cable assembly W2. New A2, A7, A13, A15, W2 and W4 assemblies are good.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code) TEST OR INSPECTION CORRECTIVE ACTION	
3521	<p>(1) Set Test Set POWER ON/OFF switch to OFF.</p> <p>(2) Reinstall original A2, A7, A13, A15, and W4 assemblies.</p> <p>(3) Set Test Set POWER ON/OFF switch to ON.</p> <p>(4) On Test Set keyboard enter C31E.</p> <p>(5) When ENTERED TEST stops flashing, observe RESULT.</p> <p>(a) RESULT displays 3515, return to step 1 to further isolate Fault exists in one or more of the original A2, A7, A13, A15, or W4 assemblies.</p> <p>(b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.</p> <p>(c) If RESULT displays 8888, Test Set has passed the test. Fault was in original cable assembly W2. Original A2, A7, A13, A15, and W4 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set, refer to paragraph 3-5.</p>
Step 31.	Set Test Set POWER ON/OFF switch to OFF.
Step 32.	Reinstall original A2, A7, A13, A15, W2, and W4 assemblies. Fault is in card cage wiring assembly. Send Test Set to Depot.
Step 1.	Set Test Set POWER ON/OFF switch to OFF.
Step 2.	Remove and replace DU interface assembly A7.
Step 3.	Set Test Set POWER ON/OFF switch to ON. POWER lamp shall light and remain on. MALFUNCTION lamp shall not light.
Step 4.	On Test Set keyboard enter C31E. ENTERED TEST shall flash 31 while test is in progress.
Step 5.	Wait for ENTERED TEST to stop flashing, then observe RESULT.
	<p>a. If RESULT displays 3521, go to step 6.</p> <p>b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.</p> <p>c. If RESULT displays 8888, unit has passed the test. Fault was in original DU interface A7. New A7 assembly is good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5.</p>
Step 6.	Set POWER ON/OFF switch to OFF.
Step 7.	Remove and replace communications assembly A8.
Step 8.	Set POWER ON/OFF switch to ON.
Step 9.	On Test Set keyboard enter C31E,
Step 10.	When ENTERED TEST stops flashing, observe RESULT.
	<p>a. If RESULT displays 3521, go to step 11.</p> <p>b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.</p>

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)
 TEST OR INSPECTION
 CORRECTIVE ACTION

- c. If RESULT displays 8888, unit has passed the test. Fault was in original communications assembly A8. New A7 and A8 assemblies are good .
 - (1) Set POWER ON/OFF switch to OFF.
 - (2) Reinstall original A7 assembly.
 - (3) Set POWER ON/OFF switch to ON.
 - (4) On Test Set keyboard enter C31E.
 - (5) When ENTERED TEST stops flashing, observe RESULT.
 - (a) If RESULT displays 3521, return to step 1.
 - (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.
 - (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original communications assembly A8. Original A7 and new A8 assemblies are good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5.

Step 11. Set Test Set POWER ON/OFF switch to OFF,

Step 12. Remove and replace self-test assembly A15.

Step 13. Set Test Set POWER ON/OFF switch to ON.

Step 14. On Test Set keyboard enter C31E.

Step 15. When ENTERED TEST stops flashing, observe RESULT.

- a. If RESULT displays 3521, go to step 16.
- b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.
- c. If RESULT displays 8888, unit has passed the test. Fault was in original self-test assembly. New A7, A8, and A15 assemblies are good .
 - (1) Set Test Set POWER ON/OFF switch to OFF.
 - (2) Reinstall original A7 and A8 assemblies.
 - (3) Set Test Set POWER ON/OFF switch to ON.
 - (4) On Test Set keyboard enter C31E.
 - (5) When ENTERED TEST stops flashing, observe RESULT.
 - (a) If RESULT displays 3521, return to step 1 to further isolate fault. Fault is in either or both original A7 or A8 assemblies .
 - (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.
 - (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original self-test assembly A15. Original A7 and A8 and new A15 assemblies are good. Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code) TEST OR INSPECTION	CORRECTIVE ACTION
Step 16.	Set POWER ON/OFF switch to OFF.
Step 17.	Remove and replace DU cable interface assembly A14.
Step 18.	Set POWER ON/OFF switch to ON.
Step 19.	On Test Set keyboard enter C31E.
Step 20.	<p>Wait for ENTERED TEST to stop flashing, then observe RESULT</p> <ol style="list-style-type: none"> a. If RESULT displays 3521, go to step 21. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original DU cable interface assembly A14. New A7, A8, A14, and A15 assemblies are good. <ol style="list-style-type: none"> (1) Set POWER ON/OFF switch to OFF. (2) Reinstall original A7, A8, and A15 assemblies (3) Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) When ENTERED TEST stops flashing, observe RESULT. <ol style="list-style-type: none"> (a) RESULT displays 3521, return to step 1 to further isolate Fault exists in one or more of the original A7, A8, or A15 assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original DU cable interface assembly A14. Original A7, A8, and A15 and new A14 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.
Step 21.	Set Test Set POWER ON/OFF switch to OFF.
Step 22.	<p>Remove cable assembly W4 and perform continuity check. Refer to paragraph 7-15.</p> <ol style="list-style-type: none"> a. If cable assembly is good, go to step 27. Reinstall original A7, A8, A14, and A15 assemblies. Send Test Set to Depot. b. If cable fails continuity check, replace cable assembly W4 and go to step 23.
Step 23.	Set Test Set POWER ON/OFF switch to ON.
Step 24.	On Test Set keyboard enter C31E.
Step 25.	<p>When ENTERED TEST stops flashing, observe RESULT.</p> <ol style="list-style-type: none"> a. If RESULT displays 3521, go to step 26. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions .

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code) TEST OR INSPECTION CORRECTIVE ACTION
<p>c. If RESULT displays 8888, unit has passed the test. Fault was in original cable assembly W4. New A7, A8, A15, and A14 and new W4 assemblies are good.</p> <ol style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A7, A8, A14, and A15 assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) When ENTERED TEST stops flashing, observe RESULT. <ol style="list-style-type: none"> (a) If RESULT displays 3521, return to step 1 to further isolate fault. Fault exists in one or more of the original A7, A8, A14, or A15 assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original cable assembly W4. Original A7, A8, A14, and A15 and new W4 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set, refer to paragraph 3-5.
<p>Step 26. Set Test Set POWER ON/OFF switch to OFF.</p>
<p>Step 27. Remove cable assembly W2 and perform continuity check. Refer to paragraph 7-15.</p> <ol style="list-style-type: none"> a. If cable assembly is good, fault is in card cage wiring assembly. Reinstall original A7, A8, A14, A15, and W4 assemblies. Send Test Set to Depot. b. If cable fails continuity check, replace cable assembly and go to step 28.
<p>Step 28. Set Test Set POWER ON/OFF switch to ON.</p>
<p>Step 29. On Test Set keyboard enter C31E,</p>
<p>Step 30. When ENTERED TEST stops flashing, observe RESULT.</p> <ol style="list-style-type: none"> a. If RESULT displays 3521, go to step 31. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original cable assembly W2. New A7, A8, A14, A15, W2, and W4 assemblies are good. <ol style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A7, A8, A14, A15, and W4 assemblies. (3) Set Test Set POWER ON/OFF switch to ON, (4) On Test Set keyboard enter C31E. (5) Observe RESULT.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
-----------------------------------	--------------------	-------------------

- | | | |
|----------|---|---|
| | | <ul style="list-style-type: none"> (a) RESULT displays 3521, return to step 1 to further isolate Fault exists in either one or more of the A7, A8, A14, A15, or W4 assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original cable assembly W2. Original A7, A8, A14, A15, and W4 and new W2 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5. |
| Step 31. | Set Test Set POWER ON/OFF switch to OFF. | |
| Step 32. | Reinstall original A7, A8, A14, A15, W2, and W4 assemblies. Fault is in card cage wiring assembly. Send Test Set to Depot. | |
| 3524 | | |
| Step 1. | Set Test Set POWER ON/OFF switch to OFF. | |
| Step 2. | Remove and replace fuze OU interface assembly All. | |
| Step 3. | Set Test Set POWER ON/OFF switch to ON. POWER lamp shall light and remain on. MALFUNCTION lamp shall not light. | |
| Step 4. | On Test Set keyboard enter C31E. ENTERED TEST shall flash 31 while test is in progress. | |
| Step 5. | Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 3524, go to step 6. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888, unit has passed the test. Fault was in original fuze OU interface assembly A11. New A11 assembly is good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5. | |
| Step 6. | Set POWER ON/OFF switch to OFF. | |
| Step 7. | Remove and replace relay driver assembly A9. | |
| Step 8. | Set POWER ON/OFF switch to ON. | |
| Step 9. | On Test Set keyboard enter C31E. | |
| Step 10. | When ENTERED TEST stops flashing, observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 3524, go to step 11. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original relay driver assembly A9. New A9 and A11 assemblies are good. <ul style="list-style-type: none"> (1) Set Power on/OFF switch to OFF. (2) Reinstall original A11 assembly. | |

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
		<ul style="list-style-type: none"> (3) Set POWER ON/OFF switch to ON, (4) On Test Set keyboard enter C31E. (5) When ENTERED TEST stops flashing, observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 3524, return to step 1. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original relay driver assembly A9. Original A11 and new A9 assemblies are good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5.
Step 11.	Set Test Set POWER ON/OFF switch to OFF.	
Step 12.	Remove and replace 1/0 assembly A3.	
Step 13.	Set Test Set POWER ON/OFF switch to ON.	
Step 14.	On Test Set keyboard enter C31E.	
Step 15.	When ENTERED TEST stops flashing, observe RESULT.	<ul style="list-style-type: none"> a. If RESULT displays 3524, go to step 16. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original 1/0 assembly A3. New A3, A9, and A11 assemblies are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF (2) Reinstall original A9 and A11 assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) When ENTERED TEST stops flashing, observe RESULT. <ul style="list-style-type: none"> (a) RESULT displays 3524, return to step 1 to further isolate fault. Fault exists in either or both original A9 or A11 assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original 1/0 assembly A3. Original A9 and A11 and new A3 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.
Step 16.	Set Test Set POWER ON/OFF switch to OFF.	
Step 17.	Remove and replace self-test assembly A15.	
Step 18.	Set Test Set POWER ON/OFF switch to ON.	

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
	Step 19.	On Test Set keyboard enter C31E
	Step 20.	When ENTERED TEST stops flashing, observe RESULT <ol style="list-style-type: none"> a. If RESULT displays 3524, go to step 21 b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original self-test assembly A15. New A3, A9, A11, and A15 assemblies are good. <ol style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A3, A9, and A11 assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) When ENTERED TEST stops flashing, observe RESULT. <ol style="list-style-type: none"> (a) If RESULT displays 3524, return to step 1 to further isolate fault. Fault exists in one or more of the original A3, A9, or A11 assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original self-test assembly A15. Original A3, A9, and A11 and new A15 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.
	Step 21.	Set Test Set POWER ON/OFF switch to OFF.
	Step 22.	Remove cable assembly W3 and perform continuity check. Refer to paragraph 7-15. <ol style="list-style-type: none"> a. If cable assembly is good, fault is in card cage wiring assembly. Reinstall original A3, A9, A11, and A15 assemblies. Send Test Set to Depot. b. If cable fails continuity check, replace cable assembly W3 and go to step 23.
	Step 23.	Set Test Set POWER ON/OFF switch to ON.
	Step 24.	On Test Set keyboard enter C31E.
	Step 25.	When ENTERED TEST stops flashing, observe RESULT. <ol style="list-style-type: none"> a. If RESULT displays 3524, go to step 26. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original cable assembly W3. New A3, A9, A11, and A15 assemblies are good.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
-----------------------------------	--------------------	-------------------

- (1) Set Test Set POWER ON/OFF switch to OFF.
- (2) Reinstall original A3, A9, A11, and A15 assemblies.
- (3) Set Test Set POWER ON/OFF switch to ON.
- (4) On Test Set keyboard enter C31E.
- (5) When ENTERED TEST stops flashing, observe RESULT.
 - (a) If RESULT displays 3524, return to step 1 to further isolate fault. Fault exists in one or more of the original A3, A9, A11, or A15 assemblies.
 - (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions,
 - (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original cable assembly W3. Original A3, A9, A11, and A15 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.

Step 26. Set Test Set POWER ON/OFF switch to OFF.

Step 27. Reinstall original A3, A9, A11, A15, and W3 assemblies. Fault is in card cage assembly. Send Test Set to Depot.

4515

Step 1. Set Test Set POWER ON/OFF switch to OFF.

Step 2. Remove and replace CPU assembly A2.

Step 3. Set Test Set POWER ON/OFF switch to ON. POWER lamp shall light and remain on. MALFUNCTION lamp shall not light.

Step 4. On Test Set keyboard enter C31E. ENTERED TEST shall flash while test is in progress.

Step 5. Wait for ENTERED TEST to stop flashing, then observe RESULT.

- a. If RESULT displays 4515, go to step 6.
- b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions ,
- c. If RESULT displays 8888, unit has passed the test. Fault was in original CPU assembly A2. New A2 assembly is good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5.

Step 6. Set POWER ON/OFF switch to OFF.

Step 7. Remove and replace memory assembly A1.

Step 8. Set POWER ON/OFF switch to ON.

Step 9. On Test Set keyboard enter C31E.

Step 10. Wait for ENTERED TEST to stop flashing, then observe RESULT.

- a. If RESULT displays 4515, go to step 11.
- b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
-----------------------------------	--------------------	-------------------

- | | | |
|--|----|---|
| | c. | <p>If RESULT displays 8888, unit has passed the test. Fault was in original memory assembly A1. New A1 and A2 assemblies are good.</p> <p>(1) Set POWER ON/OFF switch to OFF.</p> <p>(2) Reinstall original A2 assembly.</p> <p>(3) Set POWER ON/OFF switch to ON.</p> <p>(4) On Test Set keyboard enter C31E.</p> <p>(5) When ENTERED TEST stops flashing, observe RESULT.</p> <p>(a) If RESULT displays 4515, return to step 1.</p> <p>(b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.</p> <p>(c) If RESULT displays 8888, Test Set has passed the test. Fault was in original memory assembly A1. Original A2 and new A1 assemblies are good. Set POWER ON/OFF switch to OFF, To shut down the Test Set refer to paragraph 3-5.</p> |
|--|----|---|

Step 11. Set Test Set POWER ON/OFF switch to OFF.

Step 12. Remove and replace I/O assembly A3.

Step 13. Set Test Set POWER ON/OFF switch to ON.

Step 14. On Test Set keyboard enter C31E.

Step 15. When ENTERED TEST stops flashing, observe RESULT.

- | | | |
|--|----|--|
| | a. | If RESULT displays 4515, go to step 16. |
| | b. | If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. |
| | c. | <p>If RESULT displays 8888, unit has passed the test. Fault was in original I/O assembly A3. New A1, A2, and A3 assemblies are good.</p> <p>(1) Set Test Set POWER ON/OFF switch to OFF.</p> <p>(2) Reinstall original A1 and A2 assemblies.</p> <p>(3) Set Test Set POWER ON/OFF switch to ON.</p> <p>(4) On Test Set keyboard enter C31E.</p> <p>(5) Observe RESULT.</p> <p>(a) If RESULT displays 4515, return to step 1 to further isolate Fault exists in either or both original A1 or A2 assemblies.</p> <p>(b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.</p> <p>(c) If RESULT displays 8888, Test Set has passed the test. Fault was in original I/O assembly A3. Original A1 and A2 and new A3 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.</p> |

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
	Step 16.	Set Test Set POWER ON/OFF switch to OFF.
	Step 17.	Remove and replace DU interface assembly A7.
	Step 18.	Set Test Set POWER ON/OFF switch to ON.
	Step 19.	On Test Set keyboard enter C31E.
	Step 20.	When ENTERED TEST stops flashing, observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 4515, go to step 21. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888, unit has passed the test. Fault was in original DU interface assembly A7. New A1, A2, A3, and A7 assemblies are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF. (2) Reinstall original A1, A2, and A3 assemblies. (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) When ENTERED TEST stops flashing, observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 4515, return to step 1 to further isolate fault. Fault exists in one or more of the original A1, A2, or A3 assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original DU interface assembly. Original A1, A2, and A3 and new A7 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.
	Step 21.	Set Test Set POWER ON/OFF switch to OFF.
	Step 22.	Remove and replace communications assembly A8.
	Step 23.	Set Test Set POWER ON/OFF switch to ON.
	Step 24.	On Test Set keyboard enter C31E.
	Step 25.	When ENTERED TEST stops flashing, observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 4515, go to step 26. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions. c. If RESULT displays 8888, unit has passed the test. Fault was in original communications assembly A8. New A1, A2, A3, and A7 and new A8 assemblies are good. <ul style="list-style-type: none"> (1) Set Test Set POWER ON/OFF switch to OFF (2) Reinstall original A1, A2, A3, and A7 assemblies.

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
		<ul style="list-style-type: none"> (3) Set Test Set POWER ON/OFF switch to ON. (4) On Test Set keyboard enter C31E. (5) When ENTERED TEST stops flashing, observe RESULT. <ul style="list-style-type: none"> (a) If RESULT displays 4515, return to step 1 to further isolate fault. Fault exists in one or more of the original A1, A2, A3, or A7 assemblies. (b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions, (c) If RESULT displays 8888, Test Set has passed the test. Fault was in original communications assembly A8. Original A1, A2, A3, and A7 and new A8 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.
	Step 26.	Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set refer to paragraph 3-5.
4521	Step 27.	Reinstall original A1, A2, A3, A7, and A8 assemblies. Fault is in card cage wiring assembly. Send Test Set to Depot.
	Step 1.	Set Test Set POWER ON/OFF switch to OFF,
	Step 2.	Remove and replace DU interface assembly A7.
	Step 3.	Set Test Set POWER ON/OFF switch to ON. POWER lamp shall light and remain on. MALFUNCTION lamp shall not light.
	Step 4.	On Test Set keyboard enter C31E. ENTERED TEST shall flash 31 while test is in progress.
	Step 5.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 4521, go to step 6. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions . c. If RESULT displays 8888, unit has passed the test. Fault was in original DU interface assembly A7. New A7 assembly is good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5.
	Step 6.	Set POWER ON/OFF switch to OFF.
	Step 7.	Remove and replace self-test assembly A15.
	Step 8.	Set POWER ON/OFF switch to ON.
	Step 9.	On Test Set keyboard enter C31E.
	Step 10.	Wait for ENTERED TEST to stop flashing, then observe RESULT. <ul style="list-style-type: none"> a. If RESULT displays 4521, go to step 11. b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions ,

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION (RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
		<p>c. If RESULT displays 8888, unit has passed the test. Fault was in original self-test assembly A15. New A7 and new A15 assemblies are good.</p> <p>(1) Set POWER ON/OFF switch to OFF.</p> <p>(2) Reinstall original A7 assembly</p> <p>(3) Set POWER ON/OFF switch to ON.</p> <p>(4) On Test Set keyboard enter C31E.</p> <p>(5) When ENTERED TEST stops flashing, observe RESULT.</p> <p>(a) If RESULT displays 4521, return to step 1.</p> <p>(b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.</p> <p>(c) If RESULT displays 8888, Test Set has passed the test. Fault was in original self-test assembly A15. Original A7 and new A15 assemblies are good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5.</p>
Step 11.	Set Test Set POWER ON/OFF switch to OFF.	
Step 12.	Remove cable assembly W4 and perform continuity check. Refer to paragraph 7-15.	
		<p>a. If cable assembly is good, fault is in card cage wiring assembly. Reinstall original A7 and A15 assemblies. Send Test Set to Depot.</p> <p>b. If cable fails continuity check, replace cable assembly W4 and go to step 13.</p>
Step 13.	Set Test Set POWER ON/OFF switch to ON.	
Step 14.	On Test Set keyboard enter C31E.	
Step 15.	When ENTERED TEST stops flashing, observe RESULT.	
		<p>a. If RESULT displays 4521, go to step 16.</p> <p>b. If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.</p> <p>c. If RESULT displays 8888, unit has passed the test. Fault was in original cable assembly W4. New A7, A15, and W4 assemblies are good.</p> <p>(1) Set Test Set POWER ON/OFF switch to OFF.</p> <p>(2) Reinstall original A7 and A15 assemblies.</p> <p>(3) Set Test Set POWER ON/OFF switch to ON.</p> <p>(4) On Test Set keyboard enter C31E.</p> <p>(5) When ENTERED TEST stops flashing, observe RESULT.</p> <p>(a) If RESULT displays 4521, return to step 1 to further isolate fault. Fault exists in either or both original A7 or A15 assemblies.</p>

Table 7-2. Troubleshooting by Fault Codes (Cont.)

MALFUNCTION	RESULT Display Code)	TEST OR INSPECTION	CORRECTIVE ACTION
			<p>(b) If RESULT displays any other malfunction code, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.</p> <p>(c) If RESULT displays 8888, Test Set has passed the test. Fault was in original cable assembly W4. Original A7 and A8 and new W4 assemblies are good. Set Test Set POWER ON/OFF switch to OFF. To shut down Test Set, refer to paragraph 3-5.</p>
		Step 16.	Set Test Set POWER ON/OFF switch to OFF.
		Step 17.	Reinstall original A7, A15, and W4 assemblies. Fault is in card cage wiring assembly. Send Test Set to Depot.
5515			
		Step 1.	Set Test Set POWER ON/OFF switch to OFF.
		Step 2.	Remove and replace CPU assembly A2.
		Step 3.	Set Test Set POWER ON/OFF switch to ON. POWER lamp shall light and remain on. MALFUNCTION lamp shall not light.
		Step 4.	On Test Set keyboard enter C31E. ENTERED TEST shall flash 31 while test is in progress.
		Step 5.	Wait for ENTERED TEST to stop flashing, then observe RESULT
		a.	If RESULT displays 8888, unit has passed the test. Fault was in original CPU assembly A2. New A2 assembly is good. Set POWER ON/OFF switch to OFF. To shut down the Test Set refer to paragraph 3-5.
		b.	If RESULT displays any malfunction code other than 5515, find the code number in the MALFUNCTION (RESULT Display Code) column and follow instructions.
		c.	If RESULT displays 5515, the Test Set has failed the test. Fault is in the card cage wiring assembly.
		(1)	Set Test Set POWER ON/OFF switch to OFF. To shut down the Test Set, refer to paragraph 3-5.
		(2)	Reinstall original CPU assembly A2 and send Test Set to Depot.

7-13. Verify Power Supply Voltages and Check for Faulty Circuits. Test, Remove and Replace as necessary all Power Supplies and Faulty wiring before Circuit assemblies are tested. Circuit assembly testing must be done with known good power supplies. Voltage of each power supply shall be as specified in Table 7-3.



Be sure that all power to the Test Set is off before changing assemblies. Serious burns and/or electrical shock can result from contact with exposed electrical wires or connections.

NOTE

Refer to Section VI to remove and replace assemblies.

a. Verify that POWER ON/OFF switch is set to ON and measure dc voltage applied to Power supplies and relay K1. Voltage at input terminals of each power supply and relays K1 shall be +25 to +31 volts.

(1) If voltage is not within limits, check Hydraulic/Electric Power Supply and connections .

(2) If power supply and connections are good, check continuity of power cable W1 (paragraph 7-15). Remove and replace cable if faulty.

(3) To check power line filter and POWER ON/OFF switch, refer to paragraph 7-16.

b. Check relay K1 with coil de-energized and energized as follows:

(1) Momentarily press RESET switch.

(2) Measure voltage at K1 terminal A1.

(3) On Test Set keyboard, enter C31E. A fault code will appear on RESULT display. Disregard this fault code.

(4) Enter C13D.

(5) Measure voltage at K1-A1. Voltage shall be +25 to +31 volts.

(6) Momentarily press key B to release the relay.

(7) If voltage at K1-A1 is not as specified in (2) and (5), above, shut off power and remove and replace the relay.

c. With circuit assemblies in card cage, measure output voltages of all power supplies . Voltage at output terminals of each power supply and at relay K1 shall be as specified in table 7-3. Refer to figure 7-3 for power supply and relay configuration. Compare the measurements with the voltages specified in the Allowable Voltage Limits column of table 7-3. If any measurement is outside the specified limits, record the measurement and continue until all power supplies have been measured.

NOTE

Power supply PS3 contains two isolated power supplies, each with terminals designated +12 V and RTN. One of the power supplies is connected to provide +12 volts to the Test Set circuits; the other is connected to provide -12 volts. Connections to these power supplies are as shown in figure 7-3. Polarity of the output voltage of each power supply is as indicated by the respective power supply terminal designations.

d. If all power supply voltages measured within limits, power supplies and interfacing wiring are good. Troubleshoot circuit assemblies as described in paragraph 7-12.

e. If any one or more voltages measured are not within limits, set POWER ON/OFF switch to OFF and remove all circuit assemblies from card cage. Refer to Section VI.

f. Disconnect DU Test Cable W4 from DU Cable Interface Assembly A14 by removing connector P15 from connector A14J2 and connector P16 from connector A14J1.

g. Disconnect harness assembly W13 from self-test assembly A15 by removing connector P17 from connector A15J4.

h. Set POWER ON/OFF switch to ON and measure voltages of those power supplies that were not within limits. Refer to table 7-3.

(1) If voltages of questioned power supplies return to limits, power supplies and interfacing wiring between card cage, DU Cable Interface Assembly A14, Self-Test Assembly A15, and power supplies are good. One or more circuit assemblies may be faulty. refer to paragraph 7-10.

(a) Set POWER ON/OFF switch to OFF and connect DU Test Cable Connector P15 to DU Cable Interface Connector A14J2, Connect DU Test Cable Connector P16 to DU Cable Interface Connector A14J1.

(b) Connect Harness Assembly W13 to Self-Test Assembly A15 by connecting Harness Assembly Connector P17 to Self-Test Assembly Connector A15J4.

(c) Install circuit assemblies in card cage. Refer to Section VI to replace circuit assemblies. Troubleshoot the circuit assemblies. Refer to paragraph 7-10.

(2) If voltages of questioned power supplies do not return to limits, adjust voltages of questionable power supplies as described in paragraph 7-14.

(a) If voltages adjust to limits, card cage circuits, wiring between card cage, DU Cable Interface Assembly A14, Self-Test Assembly A15, and power supplies PS1, PS2 and PS3 are good. One or more circuit assemblies may be faulty.

1 Set POWER ON/OFF switch to OFF and connect DU Test Cable Connector P15 to DU Cable Interface Connector A14J2. Connect DU Test Cable Connector P16 to DU Cable Interface Connector A14J1.

2 Connect Harness Assembly W13 to Self-Test Assembly A15 by connecting Harness Assembly Connector P17 to Self-Test Assembly Connector A15J4.

3 Install circuit assemblies in card cage. Refer to Section VI to replace circuit assemblies. Troubleshoot the circuit assemblies. Refer to paragraph 7-10.

(b) If voltages cannot be adjusted to limits, proceed to next step.

i. Refer to out-of-tolerance voltage measurements recorded in step b, set POWER ON/OFF switch to OFF, and disconnect OUTPUT wires from questionable power supplies.

j. Set POWER ON/OFF switch to ON and measure outputs of questionable power supplies .

(1) If all power supplies are within limits specified in table 7-3, power supplies are good. Fault lies in wiring between power supply, DU cable interface assembly A14, Self-Test assembly A15, and card cage; in the card cage circuits; or one or more circuit assemblies are bad. Go to step 1.

(2) If one or more power supplies are not within limits, set POWER ON/OFF switch to OFF, and remove and replace faulty power supplies.

NOTE

Refer to Section VI to remove and install power supplies.

k. Set POWER ON/OFF switch to ON and measure new power supply output voltages. Check that voltages are within tolerances. Adjust voltages as necessary (refer to paragraph 7-14, then go to step 1.)

1. Set POWER ON/OFF switch to OFF and reconnect wires to OUTPUT terminals of all power supplies.

m. Set POWER ON/OFF switch to ON and measure power supplies.

(1) If one or more power supplies are not within tolerance, wiring between card cage and power supply is at fault or card cage wiring assembly is faulty.

(a) Set POWER ON/OFF switch to OFF and connect DU Test cable connector P15 to connector A14J2 and DU Test cable connector P16 to connector A14J1.

(b) Connect harness assembly W13 to Self-Test assembly A15 by connecting harness assembly connector P17 to Self-Test assembly connector A15J4.

(c) Install circuit assemblies in card cage. Refer to Section VI to replace circuit assemblies. Shut down Test Set (refer to paragraph 3-5b) and forward Test Set to Depot.

(2) If power supplies are within tolerance, set POWER ON/OFF switch to OFF and install circuit assemblies in card cage. refer to Section VI to install circuit assemblies in card cage.

n. Set POWER ON/OFF switch to ON and measure power supply output voltages.

(1) If voltage is as specified in table 7-3, supplies, circuit assembly wiring, and interfacing wiring are good.

(2) If voltage is incorrect, one or more circuit assemblies are faulty.

Troubleshoot the Test Set circuit assemblies as described in paragraph 7-12.

Table 7-3. Power Supply Voltages

Reference Designation (Figure 7-3)	Terminals	Nominal Voltage (V dc) ^d	Allowable Voltage Limits (V dc)
PS1	+ INPUT	+28	+25 to +31
PS1	+ OUTPUT	- 5	- 4.5 to - 5.5 ^a
PS2	+ INPUT	+28	+25 to +31
PS2	+ EOUT	+ 5	+4.75 to + 5.25
PS3	+ INPUT	+28	+25 to +31
PS3	+12 V (yellow wire) and RTN (white wire)	+12	+11.4 to +12.6
PS3	+12 V (white wire) and RTN (blue wire)	-12	-11.4 to -12.6
K1	A2, X2 ^b	+28	+25 to +31
K1	A 1 ^b	+28 ^c	+25 to +31

a At full load

b Connect negative multimeter lead to negative input terminal of any power supply.

c With relay coil de-energized: 0 V dc

d With relay coil energized: 28 V dc
With respect to Test Set power return

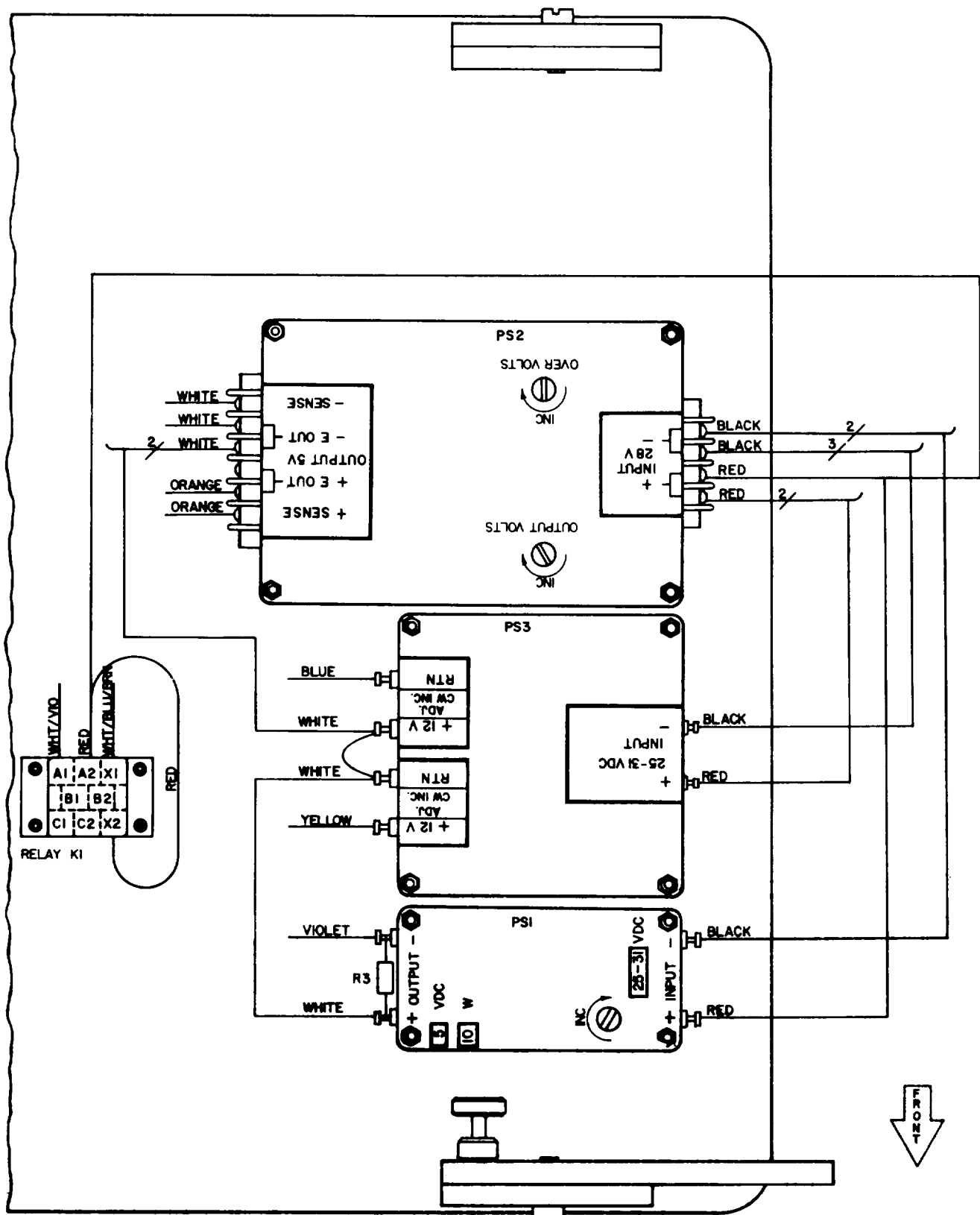


Figure 7-3. Power Supply Configuration

1926357A

7-14. Adjust Power Supply voltages. Refer to figure 7-3 for terminal configurations.

NOTE

All power supply voltages shall be checked in accordance with instructions in paragraph 7-13 before adjustments are made.

Adjust voltage of PS2. Set Test Set POWER ON/OFF switch to ON. Connect multimeter to +EOUT and -EOUT terminals. Observe polarity. Meter shall indicate +4.75 to +5.25 V dc.

(1) If voltage is above +5.25 V, observe multimeter while adjusting power supply as follows:

(a) Turn the OUTPUT VOLTS screw counterclockwise until meter indicates +5.0 volts.

(b) Turn OVER VOLTS screw counterclockwise until voltage dips, (about four or five turns)

(c) Turn output volts one turn clockwise. Meter shall indicate +4.75 to +5.25 V.

(2) If voltage is below +4.75 V dc, observe multimeter while adjusting power supply as follows:

(a) Turn OVER VOLTS screw clockwise four or five turns.

(b) Turn OUTPUT VOLTS counterclockwise until meter indicates +5.0 V dc.

(c) Turn OVER VOLTS counterclockwise until meter reading dips.

(d) Turn OUTPUT VOLTS clockwise one turn. Meter shall indicate +4.75 to +5.25 V dc

(3) If voltage remains out of tolerance, repeat (1) and/or (2) until voltage is adjusted within limits. If either adjustment screw is at its limit and voltage does not fall within tolerance, record last measurement and adjust PS3. Go to step b.

(4) If PS2 voltage can be adjusted within tolerance, proceed to PS3 as follows:

b. Adjust voltage of PS3. Set POWER ON/OFF switch to ON.

(1) Connect multimeter to terminals +12 V (yellow wire) and RTN (white wire). Observe polarity. Meter shall indicate +11.4 to +12.6 volts. Adjust, if necessary, as described below.

(a) If indication is above 12.6 volts, turn voltage adjustment counterclockwise until meter indicates 12.0 volts.

(b) If indication is below 11.4 volts, turn voltage adjustment clockwise until meter indicates 12.0 volts.

(2) Observe polarity and connect multimeter to RTN terminal (blue wire) and +12 V terminal (white wire). Observe multimeter while adjusting power supply as follows:

(a) If indication is above 12.6 volts, turn voltage adjustment counterclockwise until meter indicates 12.0 volts.

(b) If indication is below 11.4 volts, turn voltage adjustment clockwise until meter indicates 12.0 volts.

(3) If voltage cannot be adjusted, record last measurement and proceed to step L.

(4) If voltage can be adjusted within limits, adjust power supply PS1 as follows:

c. Adjust voltage of PS1. Connect multimeter to + and - OUTPUT terminals. Observe polarity. Meter shall indicate -4.75 to -5.25 volts. Observe multimeter while adjusting power supply as follows:

(1) If indication is more than 5.25 volts, turn VOLTS ADJ counterclockwise until meter indicates 5.0 volts.

(2) If indication is less than 4.75 volts, turn VOLTS ADJ clockwise until meter indicates 5.0 volts.

(3) If voltage cannot be adjusted within limits, repeat (1) or (2) until voltage is adjusted within limits. If VOLTS ADJ screw is at its limit and voltage is not within limits, record last measurement and return to paragraph 7-13.h.

(4) If PS1 can be adjusted within tolerances, return to paragraph 7-13.g. (2)

7-15. Cable Assembly Continuity Check.

WARNING

Be sure that all power to the Test Set is off before changing assemblies. Serious burns and/or electrical shock can result from contact with exposed electrical wires or connections.

NOTE

Refer to Section VI to remove and replace assemblies.

a. Set POWER ON/OFF switch to OFF and disconnect all cables listed in table 7-4. Refer to figures called out in the List of Illustrations for drawings of cables and cable connectors.

b. Perform continuity checks on cable assemblies according to the respective schematic diagrams in Appendix E.

(1) Shielded cable assemblies; e.g., self-test cable assemblies W10 and W12, DU test cable assembly W4, OUJ1 test cable assembly W2, and OUJ2 test cable assembly W3 must be checked from pin to pin and from each pin to the shield.

(2) Those cables which are not shielded; e.g., power cable W1. I/O cable

assembly W7, I/O cable assembly W8, display cable assembly w6, and power control cable assembly W5 must be checked for continuity from pin to pin.

(3) Pin-to-shield measurements shall indicate no continuity, except where indicated on schematic; and pin-to-pin measurements shall indicate continuity. Pin-to-pin measurements greater than one ohm indicate that the cable assembly is faulty.

c. Remove faulty cable assemblies and install known good cable assemblies as described in Section VI.

d. Connect all cable assemblies to proper connectors. Refer to table 7-4.

Table 7-4. Cable Assembly Connector Schedule

Cable Assembly	Connector	Mates With
W1, 28-Volt Power	P1 P2	J5 (28 VOLT DC) on front panel Power source
W2, OUI1 Test	P101 P5A P5B	J1 of OU under test J5 of card cage assembly J5 of card cage assembly
W3, OUI2 Test	P102 P6A P6B	J2 of OU under test J6 of card cage assembly J6 of card cage assembly
W4, DU Test	P103 P3A P3B P15 P16	J1 of DU under test J3 of card cage assembly J3 of card cage assembly A14J2 A14J1
W5, Power Control	P6C P11	J6 of card cage assembly A13J1
W6, Display	P4A P12	J4 of card cage assembly J1 of display assembly A16
W7, I/O	P1B P14	J1 of card cage assembly A3J2
W8, I/O	P1A P13	J1 of card cage assembly A3J1
W10, OUI1 Self-Test	J1 (J1-SELF TEST) P19	P101 during self-test A15J1
W11, OUI2 Self-Test	J2 (J2-SELF TEST) P18	P102 during self-test A15J2
W12, DU Self-Test	J3 (DU-SELF TEST) P20	P103 during self-test A15J3
W13, Harness Assembly	P4C P17	J4 of card cage assembly A15J4

7-16. Power Line Filter Resistance Check



Be sure that all power to the Test Set is off before changing assemblies. Serious burns and/or electrical shock can result from contact with exposed electrical wires or connections.

NOTE

Refer to Section VI to remove and replace assemblies.

Check voltage drop thru filter as follows:

- (1) On LINE end of filter, connect

multimeter positive lead to L (red) terminal and negative lead to N (black) terminal. Set POWER ON/OFF switch to ON. Multimeter shall indicate +25 to +31 volts. Record indication. Set POWER ON/OFF switch to OFF.

- (2) On LOAD end of filter, connect multimeter positive lead to L (red) terminal and negative lead to N (black) terminal. Set POWER ON/OFF switch to ON. Multimeter shall indicate within 0.5 volts of indication of step (1). Set POWER ON/OFF switch to OFF.

- b. If the difference between indications in a.(1) and (2) is more than 0.5 volts, set POWER ON/OFF switch to OFF, and remove and replace filter. If difference between indications is less than 0.5 volts, filter assembly is good.

7-17. Display and Keyboard and Cable Assembly Functional Checks. In this procedure, display assembly A16 and keyboard and cable assembly A17 are checked together. Failure of this check could be caused by either assembly or by other wiring within the Test Set. To isolate a fault, keyboard and cable assembly A17 is first removed and replaced. If the fault does not clear, display assembly A16 is removed and replaced. If the fault persists, the Test Set should be sent to Depot for repair.

a. Set POWER ON/OFF switch to ON.

b. Press keys as indicated in the On Keyboard, Press: column of table 7-5, in turn, and observe the ENTERED TEST and RESULT displays. Displays shall be as specified in the ENTERED TEST and RESULT columns for each combination entered. If either display is not as specified, proceed to step d.

c. If ENTERED TEST and RESULT are as specified for each keyboard combination.. entered, and RESULT displays 8888 in response to C30E and C31E, Test Set is good.

d. If any display is not as specified, remove and replace keyboard and cable assembly A17 as described in Section VI and repeat step b.

If, after replacing keyboard and cable assembly A17, any display is not as specified, remove and replace display assembly A16 and repeat step b.

f. If trouble persists, restore original A17 and A16 assemblies and send Test Set to Depot for repairs. If trouble clears after replacing display assembly A16, restore original keyboard and cable assembly A17 and repeat step b.

Table 7-5. Keyboard and Display Checks

On Keyboard, Press :	ENTERED TEST	Displays	
			RESULT
C	0		Dark
12345E	12345		1000
C	0		Dark
67890E	67890		1000
C	0		Dark
ABFE	ABF		1000
D	ABF		1000
C	0		Dark
30E	30		*
C	0		Dark
31E	31		*

* These keyboard entries are the self-test command codes. If RESULT indicates:

- (1) 8888, Test Set is functioning properly.
- (2) 1000, Re-enter C30E or C31E. If RESULT still displays 1000, proceed to step d.
- (3) Any other number, this is a fault code. Find this number in the MALFUNCTION (RESULT Display Code) column of table 7-2 and follow troubleshooting instructions. If you cannot find the displayed fault code in table 7-2, it is an invalid fault code; proceed to step d.

SECTION VI MAINTENANCE OF THE TEST SET

7-18. Cleaning. Internal assemblies should be cleaned as needed. Follow directions given in this paragraph. Refer to table D-1 for expendable materials used.

NOTE

Do not use solvent on any parts of the Test Set.

Clean Connectors. Remove dust and dirt from connectors with a brush (8, table D-1).

b. Clean Circuit Assemblies. Brush soiled areas of circuit board, removing all foreign matter.

7-19. Repair. Repairing the Test Set is done at the AVIM level and consists of removing and replacing assemblies. In most instances, the Test Set subassembly is removed from the case and the front panel is raised to accomplish repairs. Disassembly of a unit should proceed only as far as necessary to remove the failed assembly. Repairable assemblies are divided into two groups:

a. Assemblies located on top of, attached to, or underneath the front panel assembly, as described in paragraph 7-20.

b. Assemblies located on the backplate assembly; resting in, or attached to the card cage assembly, or interfacing with the card cage assembly and front panel assembly; or located on the Test Set case; as described in paragraph 7-21.

7-20. Removal Procedures - Front Panel Assemblies and Components.



Be sure that all power to the Test Set is off before changing assemblies. Serious burns and/or shock can result from contact with exposed electrical wires or connections.

a. Assemblies Located on Top of the Front Panel. Refer to figures C-3 and C-4 as noted.

(1) *Remove Operations Unit Test Mounting Pad.*

(a) Remove four flathead screws (18, figure C-3).

(b) Lift test mounting pad (19) from control panel.

(2) *Remove Cable Clamp.*

(a) Loosen two socket-head cap screws (31, figure C-3) until the cable clamp half (30) is disengaged.

(b) Remove four screws (36) and washers (28 and 29),

(c) Remove cable clamp half (35) and gasket (34).

(d) *Inspect gasket for damage.*

(3) *Remove Display Unit Test Mounting pad.*

(a) Remove two screws (33, figure C-4) and two screws (37).

(b) Lift test mounting pad (30) from control panel.

(4) *Remove DIMMER CONTROL knob.*

(a) Loosen set screw in knob (21, figure C-4).

(b) Lift knob from DIMMER CONTROL assembly shaft.

(5) *Remove MALFUNCTION or POWER Lamp.*

(a) Unscrew knurled lamp holder ring (12, figure C-4) and lift off.

(b) Use your fingernails to gently pry lamp (14) from holder. Pay under ring below red lens.

(6) *Remove DU Test Cable W4.*

(a) Remove DU cable interface assembly A14 as described in paragraph 7-20.b. (20).

(b) Remove OU test pad. Refer to paragraph 7-20.a. (1).

(c) Disconnect connector P3A from connector J3 at the card cage assembly.

(d) Disconnect connector P3B from connector J3 at the card cage assembly.

(e) Remove four screws (12, figure C-3), washers (15), and hex nuts (16) from bulkhead mounting plate.

(f) While holding connectors P3A and P3B and the cable assembly underneath the front panel, gently pull the cable assembly from the opening in the front panel.

W3. (7) *Remove OUJ2 Test Cable Assembly*

(a) Remove cable clamp as described in paragraph 7-20.a. (2).

(b) Disconnect connectors P6A and P6B from card cage connector J6.

(c) Working under the front panel, pass cable (37, figure C-3) through the opening in the front panel and remove.

W2. (8) *Remove OUJ1 Test Cable Assembly*

(a) Remove cable clamp as described in paragraph 7-20.a. (2).

(b) Disconnect connectors P5A and P5B from connector J5 at card cage assembly,

(c) From underneath the front panel, pass cable (26, figure C-3) through opening of front panel assembly and remove.

(9) *Remove Front Panel Handles.* Remove hex nuts (36, figure C-4) and lock that holds handles to panel. Lift handles from panel

(10) *Remove Bezel, Display Filter, and Bezel Gasket.*

(a) Remove display assembly A16 (64, figure C-3) as described in paragraph 7-20.b. (6).

(b) Remove four screws (60, figure C-3) that hold bezel (61), gasket (62), and filter (63) to panel.

(c) Inspect gasket. If gasket is not damaged, it may be reused.

(d) Remove two screws (60) that hold filter (63) and gasket (62) to bezel.

(11) *Remove DIMMER CONTROL R1*

(a) Tag and disconnect wires from variable resistor (22) and fixed resistor (23, figure C-4). See figure 7-4 for wiring information.

(b) Remove DIMMER CONTROL knob as described in paragraph 7-20.a. (4).

(c) Remove nuts and lockwasher from variable resistor (22) and remove variable resistor from panel.

(12) *Remove Keyboard and Cable Assembly A17.*

(a) Unplug connector P4B from J4 of card cage assembly.

(b) Refer to figure 7-2 and remove nuts, lockwashers, cable clamp washers, and cable clamps that hold keyboard cable to rear of front panel.

(c) Remove four screws (55, figure C-3), nuts (16), lockwashers (15), flat washers (56), cable clamp (57), and cable clamp washer (11) that hold keyboard assembly (53) to panel.

(d) Remove keyboard and cable assembly from panel.

(13) *Remove MALFUNCTION or POWER Lampholder.*

(a) Remove lamp as described in paragraph 7-20.a. (5).

(b) Tag and disconnect wires from lampholder (12, figure C-4) to be removed.

(c) Unscrew lamp holder mounting ring on top of the front panel and remove lamp holder from panel.

(14) *Remove RESET Switch*

(a) Tag and disconnect two wires from the RESET switch (20, figure C-4).

(b) Remove hex nut and lockwasher and remove switch assembly from front panel.

(15) *Remove POWER ON/OFF Switch.*

(a) Tag and disconnect wires from POWER switch (19, figure C-4).

(b) Remove knurled nut and remove switch from panel.

b. Assemblies Located on the Back of Front Panel Assembly. Refer to figures 7-2 and C-3.)

(1) *Remove Self-Test Cable Assembly W12 (figure 7-2).*

(a) Remove screw (5 and 4, figure C-4), nut (9), lockwasher (8), and cable clamp from DU-SELF TEST connector J3.

(b) Loosen two jackscrews and disconnect connector W12P20 from connector A15J3.

(c) Remove cable W12 from DU-SELF TEST connector J3 at the back of the front panel (figure 7-2).

(2) *Remove DU Cable Interface Assembly A14.*

(a) Loosen two jackscrews and disconnect connector W4P15 from A14J2 of DU cable interface assembly A14.

(b) Loosen two jackscrews and disconnect connector W4P16 from connector A14J1.

(c) Remove screws (23, figure C-3) and washers (8 and 22) and remove DU cable interface assembly (21).

(3) *Remove Self-Test Assembly A15.*

(a) Remove six screws (68), lockwashers (15), and flat washers (56) that hold the assembly to the front panel.

(b) Disconnect connector P17, P18, P19, and P20 from their mating connectors on self-test assembly A15 (67, figure 0-3). See figure 7-2 for connector locations.

(4) *Remove OIJ2 Self-Test Cable Assembly W11.*

(a) Remove cable clamps and hardware that secure cables W10 and W11 to display assembly A16. See figure 7-2 for cable and connector layout.

(b) Remove three screws (68, figure C-3), flat washers (56), and lockwashers (15) next to cable assemblies W10 and W11 on self-test assembly A15 (67).

(c) Loosen three remaining screws on A15 assembly.

(d) Tilt the A15 assembly up at the edge to which cable assemblies W10 and W11 are connected until you can loosen jackscrews and disconnect connector W11P18 from A15J2.

(e) Remove two screws (4), nuts (9), and lockwashers (8) that hold cable assembly (25) to panel.

(f) Remove cable assembly.

(5) *Remove OIJ1 Self-Test Cable Assembly W10.*

(a) Remove cable clamps and hardware that secure cable W10 to display assembly A16. See figure 7-2 for cable and connector layout.

(b) Remove three screws (68, figure C-3), flat washers (56), and lockwashers (15) next to cable assemblies W10 and W11 on self-test assembly A15 (67).

(c) Loosen three remaining screws on A15 assembly.

(d) Tilt the A15 assembly up at the edge to which cable assemblies W10 and

W11 are connected until you can loosen jackscrews and disconnect W10P19 from A15J1.

(e) Remove two screws (4), nuts (9), and lockwashers (8) that hold cable assembly (24) to panel.

(f) Remove cable assembly.

(6) *Remove Display Assembly A16.*

(a) Loosen jackscrews and disconnect connector W6P12 from display assembly A16. See figure 7-2 for connector and cable layout.

(b) Remove four nuts (16, figure C-3), four lockwashers (15), four cable clamp washers (11), two cable clamps (65), cable clamps (10), and cable clamps (60) that hold display assembly A16 (64) to panel.

NOTE

It is not necessary to remove cable clamps from cables. They need only be moved off their respective screws so A16 assembly can be removed.

(c) Lift display assembly (64) from panel.

(7) *Remove Line Filter F11.*

NOTE

Display Assembly A16 must be removed before line filter FL1 can be removed. Refer to paragraph 7-20.b. (6).

(a) Tag wires on L, N, and ground terminals on the LINE end of the filter (7, figure C-4) and at the LOAD end of the filter and unsolder wires.

(b) Remove screws (2), hex nuts (6), and washers (5) and remove filter.

(8) *Remove Front Panel Harness Assembly W13.*

(a) Remove heat sink screw (58, figure C-3), hex nut (9), lockwasher (8), cable clamp washer (11), and cable clamp (59) that secure cable W13.

(b) Disconnect cable assembly connector W13P17 from A15J4.

(c) Unsolder and tag wires from harness assembly that go to dimmer control R1 and transistor Q1. See figure 7-4 for wiring details,

(d) Remove remaining cable clamps and hardware that hold harness assembly W13. Refer to figure 7-2 for cable layout.

(e) Disconnect connector W13P4C from card cage connector J4.

(f) Remove cable assembly from panel.

(9) *Remove Transistor Q1.*

(a) Hold heads of screws (36, figure C-4) which secure the transistor (28) and the socket (24) to heatsink (25).

(b) Unscrew nuts (6) and remove washers (5) from screws, at the same time applying a small amount of pressure to transistor socket so it does not fall from the heat sink bracket. Hold in position and remove screws (26), mica insulator (28), and transistor (27).

(c) Replace screws (26) in heat sink bracket screw holes, and secure the transistor socket to the heatsink with two nuts (6) and lockwashers (5). Install washers and nuts on screws so that transistor socket is loosely fastened to the heat sink bracket and interconnecting wiring is not damaged or pulled from its terminals.

(d) Separate mica insulator (28) from transistor. Mica insulator may be re-used if not damaged. If sufficient heat sink compound remains on insulator, it may not be necessary to apply new compound when replacing assembly.

(10) *Remove Transistor Socket.*

(a) Unsolder and tag wires to transistor socket. See figure 7-4 for wiring details.

(b) Remove transistor as described in paragraph 7-20.b. (9), steps (a) and (b).

(c) Remove transistor socket from the heat sink bracket.

(11) *Remove Heat Sink.*

(a) Remove transistor socket as described in paragraph 7-20.b. (10).

(b) Remove screws (58, figure C-3), nut (9), lockwasher (8), cable clamp washer (11), and cable clamp (59).

(c) Remove screw (29, figure C-4), nut (18), and lockwasher (17).

(d) Remove heat sink (25).

7-21. Removal Procedures - Assemblies located on the Backplate assembly; resting in or attached to the card cage assembly, interfacing with the card cage assembly and Front Panel assembly; and assemblies located on the Test Set Case.

a. Assemblies Located on the Backplate Assembly. Refer to figure C-8 except where noted.

(1) *Remove Power Control Assembly A13.*

(a) Disconnect cable assembly W5 connector P11 from power control assembly (8, figure C-8).

(b) Remove four nuts (9), lockwashers (10) and flat washer (3).

(c) Remove assembly A13.

(2) *Remove Power Supply PS2.*

(a) Unscrew, remove and tag spade lugs at +SENSE, +EOUT, -EOUT, and -SENSE terminals of power supply PS2 (16, figure C-8).

(b) Unscrew, remove and tag spade dc lugs at + and - INPUT terminals.

(c) Remove screws (17), nuts (5), and washers (6) that hold power supply to back plate.

(d) Remove power supply.

NOTE

Wicking wire (14, table D-1) may be used to facilitate unsoldering of components.

(3) *Remove Power Supply PS3.*

(a) Tag wires to be unsoldered from power supply PS3 (21, figure C-8).

(b) Unsolder wires from OUTPUT terminals +12 V, RTN, +12 V, and RTN.

(c) Unsolder wires from 28 V dc + and - INPUT terminals.

(d) Remove screws (18), nuts (5), and washers (6) that hold power supply to back plate.

(e) Remove PS3 (21).

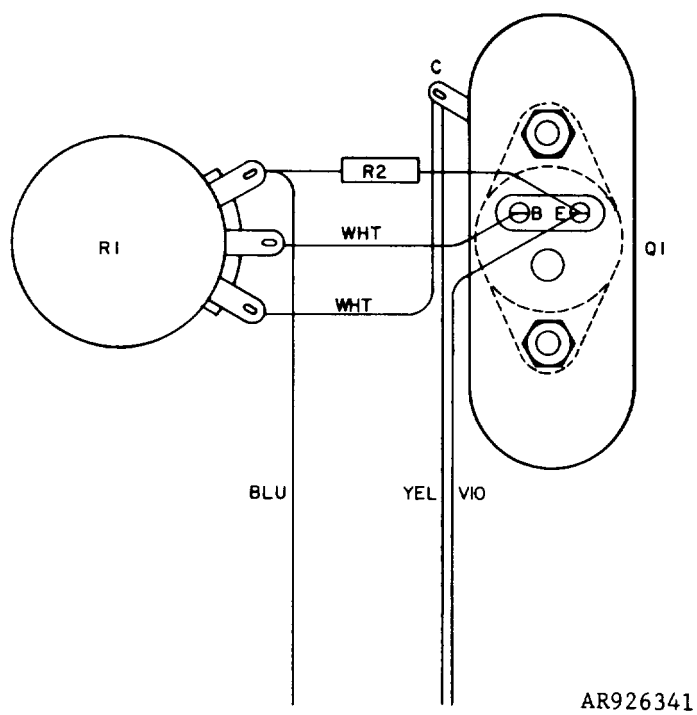
(5) *Remove Power Supply PS1.*

(a) Tag wires to be unsoldered from power supply PS1 (20, figure C-8).

(b) Unsolder wires from + and - OUTPUT terminals at PS3.

(c) Unsolder wires from + and - INPUT 28 V dc terminals.

(d) Remove screws (19), nuts (5), and washers (6) that hold power supply to back plate.



AR926341

Figure 7-4. Dimmer Control Circuit Wiring Details

(e) Remove power supply (20).

b. Assemblies Resting in or Attached to the Card Cage Assembly or Interfacing With the Card Cage Assembly and Front Panel Assembly.

(1) Remove Power Control Assembly Cable W5.

(a) Remove cable tiedown clamp.

(b) Disconnect connector P6c from connector J6 at card cage.

(c) Loosen jackscrews and disconnect connector W5P11 (figure FO-1) from power control assembly at A13J1.

(d) Remove cable assembly.

(2) Remove Relay K1.

(a) Remove screws (29, figure C-8) and washers (30). Make sure that helical coil inserts (32) are not removed from relay spacers.

(b) Lift relay K1 out of relay spacers (32).

(c) Disconnect and tag wires.

(d) Remove relay K1.

(3) Remove Display Cable Assembly W6.

(a) Loosen jackscrews and disconnect connector P12 (figure FO-1) from A16J1.

(b) Refer to figure 7-2 and remove hex nuts, and washers from cable clamps that secure cable assembly W6.

(c) Disconnect connector P4A at card cage connector J4.

(d) Remove cable assembly W6.

(4) Remove I/O Cable Assembly W7.

(a) Remove cable assembly W7 and W8 cable tiedown clamps.

(b) Disconnect connector P1B from card cage connector J1.

(c) Loosen two I/O circuit assembly retainer screws (counterclockwise).

(d) Grasp circuit assembly extractors, and raise them until they are at the limit of travel (figure C-12).

(e) Applying constant, even pressure straight upward, simultaneously, to both circuit card extractors, lift the circuit card assembly (figure 7-1) until the assembly is raised high enough to remove the I/O cable from the circuit assembly.

(f) Loosen two jackscrews (figure FO-1), separating connector P14 from the circuit assembly, and remove cable assembly W7.

(5) Remove I/O Cable Assembly W8.

(a) Remove cable assembly W7 and W8 cable tiedown clamps.

(b) Remove connector P1A from card cage connector J1.

(c) Loosen (counterclockwise) two I/O circuit assembly retainer screws.

(d) Grasp circuit assembly extractors (figure C-12), and raise them until they are at the limit of travel.

(e) Applying constant, even pressure straight upward, simultaneously, to both circuit card extractors, lift the circuit card assembly (figure 7-1) until the assembly is raised high enough to remove the I/O cable from the circuit assembly.

(f) Loosen jackscrews (figure FO-1), separating connector P13 from the circuit assembly A3J1 and remove cable assembly W8.

(6) Remove I/O Plug-In Circuit Assembly A3.

(a) Loosen jackscrews (figure FO-1), separating connector P14 from connector A3J2.

(b) Loosen jackscrews (figure FO-1), separating connector P13 from A3J1.

(c) Grasp circuit assembly extractors (figure C-12), and raise them until they are at the limit of travel.

(d) Applying constant, even pressure straight upward, simultaneously, to both circuit assembly extractors, lift the circuit assembly (figure 7-1), until the assembly is raised high enough to remove.

(7) Remove Circuit Assemblies A1, A2, A7, A8, A9, A10, A11, and A12.

(a) Loosen two circuit assembly retainer stress.

(b) Grasp circuit assembly extractors (figure C-12), and raise them until they are at the limit of travel.

(c) Applying constant, even pressure straight upward, simultaneously, to both circuit assembly extractors, lift the circuit assembly from its place between the card cage guides (figure 7-1).

c. Remove Items Attached to Test Set Case.

(1) *Remove Pressure Relief Valve.*

(a) Remove nut (1, figure C-2) from Test Set case.

(b) Remove pressure relief valve assembly.

(2) *Remove Test Set Case Gasket.*

Insert scribe under gasket (1, figure C-2) and pry out of groove.

7-22. Inspection



POWER ON/OFF switch must be set to OFF before visual inspection begins .

a. Visually inspect parts for obvious damage. Replace defective parts.

b. Check all connectors and jacks for bent pins before plugging in mating connectors .

c. Check all connectors within the card cage and connected to the front panel assembly, underneath the front panel or on top of the front panel, to make sure they are firmly seated.

d. Check circuit assemblies and connectors for bent pins before inserting circuit assemblies in the card cage.

e. Inspect space under card cage. Remove all foreign objects and debris.

7-23. Installation Procedures - Front Panel Assemblies and Components.

NOTE

Be sure that all power to the Test Set is off before changing assemblies . Serious burns and/or shock can result from contact with exposed electrical wires or connections.

a. Assemblies located on top of front panel. Refer to figure C-4, except where noted.

(1) *Install POWER ON/OFF Switch.*

(a) Install ON/OFF switch assembly (19, figure C-4) into opening of front panel.

(b) Install knurled ring. If switch does not fit snugly under front

panel, reach under front panel and readjust the hex nut (with internal tooth lock washer) to take up the slack.

(c) Solder wires to terminals. Check wire tags to verify that correct wires are soldered to terminals.

(2) *Install Operation Unit Test Mounting Pad.* Position mounting pad (3, figure C-4) on control panel and replace four flat-head screws (2).

(3) *Install Cable Clamp.*

(a) Place gasket (34, figure C-3) on front panel opening.

(b) Position cable clamp half (35) on gasket.

(c) Install screws (32), washers (28 and 29), and tighten slightly.

(d) Position cable clamp half (30) on extreme right end of cable clamp slots.

(e) Install screws and washers. Tighten enough to hold the cable clamp loosely in place.

(f) Holding the cables firmly against the notches in left-hand cable clamp, slide the right half of the cable clamp to the left, positioning it firmly against the cables.

(g) Tighten two socket-head cap screws (31), pressing the right half of the cable clamp firmly against the cables and holding them in place.

(h) Tighten until clamp is firmly seated.

(4) *Install Display Unit Test Mounting Pad.*

(a) Position mounting pad (30, figure C-4) on control panel.

(b) Install two screws (33) on the front end and two screws (37) on the back end of the test pad.

(5) *Install DIMMER CONTROL Knob.*

(a) Place knob (21, figure C-4) over the DIMMER CONTROL shaft and push knob down until seated.

(b) Tighten set screw in knob.

(6) *Install MALFUNCTION OR POWER Lamp.*

(a) Install lamp (14, figure C-4) in lamp holder. Make sure lamp is firmly seated in socket.

(b) Pass knurled lamp holder ring (12) over lamp and screw down.

(7) *Install DU Test Cable W4.*

(a) Holding connectors P3A and P3B and cable assembly underneath the front panel, pass cable assembly connector P103 through front panel opening until bulkhead mounting plate gasket (13, figure 2-3) is seated.

(c) Connect P3A and P3B to connector J3 at the card cage assembly.

(d) Install DU Cable Interface Assembly A14. Refer to paragraph 7-23.b.

(e) Install DU Test Mounting Pad. Refer to paragraph 7-23a.(2).

(8) *Install OUJ2 Test Cable Assembly.*

(a) Pass connector P102 through opening from underneath front panel, passing through gasket (34, figure C-3).

(b) Install connectors P6A and P6B in connector J6 at card cage.

(c) Install cable clamp. Refer to paragraph 7-23a.(3).

(9) *Install OUJ1 Test Cable Assembly W2.*

(a) Working underneath the front panel, pass connector P101 through opening in front panel and gasket (34, figure C-3).

(b) Connect OU connectors P5A and P5B to connector J5 at the card cage assembly.

(c) Install cable clamp. Refer to paragraph 7-23a.(3).

(10) *Install Front Panel Handles.* Install ends of handle (36, figure C-4) in front panel and secure with hex nuts (36).

(11) *Install Bezel Display Filter, and Bezel Gasket.*

(a) Place bezel assembly (62 and 61, figure C-3) on opening of front panel.

(b) Partially install four screws (60) through bezel assembly, until they engage screw holes in front panel.

(c) Position filter (63) under front panel opening and finish installing screws through front panel into filter (63), split lockwashers (5), and hex nuts (9),

(d) Install Display (circuit) Assembly A16. Refer to paragraph 7-23.b.

(12) *Install DIMMER CONTROL R1.*

(a) Set variable resistor (22, figure c-4) into front panel opening and hold in place.

(b) Secure with internal tooth lockwasher and nut (22, figure C-4).

(c) Attach DIMMER CONTROL knob Refer to paragraph 7-23a.(5).

(d) Connect three wires and fixed resistor (23) as shown in figure 7-4.

(13) *Install Keyboard and Cable Assembly A17.*

(a) Install keyboard assembly (53, figure C-3) in front panel opening.

(b) Install screws (55), washers (56), and lockwashers (15) in keyboard assembly flanges.

(c) Install keyboard cable connector in connector J4 of the card cage assembly.

(d) Place cable in cable clamps. Refer to figure 7-2.

(e) Install nuts and washers that secure cable clamps.

(14) *Install MALFUNCTION or POWER Indicator.*

(a) Refer to figure C-4 and install lamp holder assembly (12) into front panel opening,

holder (12).

(b) Install aluminum cartridge

holder ring (12).

(c) Install lamp (14) and lamp

holder ring (12).

(d) Solder wires to terminals. Check wire tags to verify that correct wires are soldered to terminals.

(15) *Install RESET Switch.*

(a) Install RESET switch (20, figure C-4) into opening of front panel and secure with lock washer and hex nut (20).

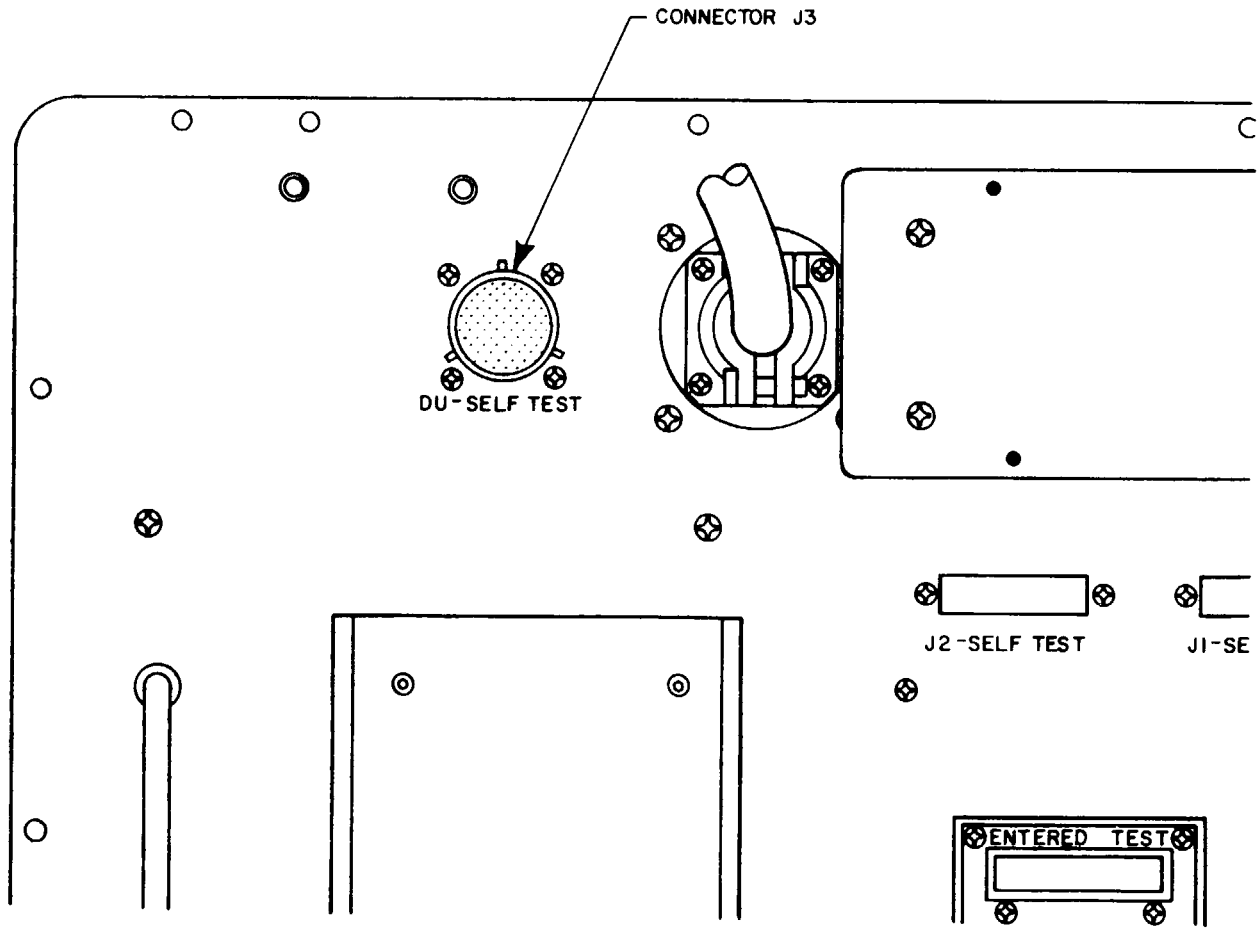
(b) Connect wires to switch terminals. Check wire tags to verify that correct wires are soldered to terminals.

b. Assemblies Located on the Back of the Front Panel Assembly.

(1) *Install DU Self-Test Cable Assembly W12.*

(a) Set gasket (6, figure C-3) on flange of connector J3.

(b) Set connector J3 with gasket in place on underside of Test Set panel. Orient contractor as shown in figure 7-5.



AR926324

Figure 7-5. Orientation of Connector J3

(c) Install three screws (5), lockwashers (8), and nuts (9) through the three mounting holes that do not receive the cable clamp. See figure 7-2 for location of cable clamp.

(d) Install screw (4) through panel and connector flange, place cable clamp (10) over cable, place clamp and cable clamp washer (11) over screws. Secure with lockwasher (8) and nut (9). Tighten all four nuts.

(e) Connect connector P20 to A15J3 and alternately tighten connector jackscrews until connectors are securely attached.

(2) Install DU Cable Interface Assembly A14.

(a) Set assembly A14 (21, figure C-3) in place on underside of front panel as shown in figure 7-2. Orient circuit assembly so that all four mounting holes are over spacers. If only two or three holes are aligned with spacers, turn assembly one-half turn so all four holes are aligned.

(b) Secure with four screws (23), lockwashers (8), and flat washers (22).

(c) Mate connector P15 with A14J2 and connector P16 with A14J1. Alternately tighten jackscrews on each connector until connectors are fully seated.

(3) Install Self-Test Assembly A15.

(a) Orient assembly A15 (67, figure C-3) as shown in figure 7-2 and mate connectors P17 with A15J4, P18 with A15J2, P19 with A15J1, and P20 with A15J3. Alternately tighten jackscrews on each connector until connectors are fully seated.

(b) Set assembly over spacers and secure with six screws (68), lockwashers (15), and flat washers (56).

(4) Install OUJ2 Self-Test Assembly W11.

(a) Pass connector J2 (24, figure C-3) through J2 Self Test opening on front panel. Mate connector P102 with J2 and note the orientation of J2.

(b) Separate connector P102 from J2 but hold the orientation of J2. Secure J2 to panel with two screws (4), lockwashers (8), and nuts (9).

(c) Route cable assembly W11 as shown on figure 7-2. Secure with cable clamp as shown.

(d) Mate connector P18 with A15J2 as shown on figure 7-2 and alternately tighten jackscrews on P18 until P18 is fully seated.

NOTE

To help you mate connector P18 with A15J2, you can loosen or remove some or all of the screws that hold circuit assembly A15 in place. When the connectors are fully seated, be sure to secure A15 as described in paragraph 7-23.b. (3).

(5) Install OUJ1 Self-Test Cable W10.

(a) Pass connector J1 (25, figure C-3) through J1 Self Test opening on front panel. Mate connector P101 with J1 and note the orientation of J1.

(b) Separate connector P101 from J1 but hold the orientation of J1. Secure J1 to panel with two screws (4), lockwashers (8), and nuts (9).

(c) Route cable assembly W10 as shown on figure 7-2. Secure with cable clamp as shown.

(d) Mate connector P19 with A15J1 as shown on figure 7-2 and alternately tighten jackscrews on P19 until it is fully seated.

NOTE

To help you mate connector P19 with A15J1, you can loosen or remove some or all of the screws that hold circuit assembly A15 in place. When the connectors are fully seated, be sure to secure A15 as described in paragraph 7-23.b. (3).

NOTE

Display assembly A16 must be removed before line filter FL1 can be installed. Refer to paragraph 7-19.b. (6).

(6) Install Line Filter FL1.

(a) Set filter (7, figure C-4) in place on underside of front panel so that LINE end of filter is close to 28 volt dc connector J5.

(b) Install two screws (2) through panel and filter mounting holes, place one terminal lug (8) with green wire (that you removed in paragraph 7-19.b. (7) on each screw, and secure with one lockwasher (5) and nut (6) on each screw.

(c) Prepare six pieces of tubing (bulk item 25) one-half inch long and slip them over the red, black, and green wires that are to be connected to the filter.

(d) Solder red, black, and green wire to LINE and LOAD terminals of filter FL1, as shown in figure FO-2.

(e) Clean all flux and other residue from terminals. Use alcohol (18, table D-1) and soft bristle brush (8) as needed.

(f) Slip tubing over soldered terminals and apply heat to shrink terminals.

(7) Install Display Assembly A16.

(a) Set display assembly (64, figure C-3) in place on spacers on underside of front panel. Check topside of panel to be sure display digits appear behind bezel (61).

(b) Place cable clamps and cable clamp washer on screws as shown in figure 7-2.

(c) Secure circuit assembly, cable clamps, and cable clamp washers with four lockwashers (15) and nuts (16).

(d) Connect connector P12 to A6J1 and alternately tighten two jackscrews until connector is firmly seated.

(8) Install Harness Assembly W13.

(a) Set harness assembly W13 in place on underside of front panel as shown in figure 7-2 and secure it with cable clamps.

(b) Connect connector P17 to A15J4 and alternately tighten two jackscrews until connector is firmly seated.

(c) Connect connector P4C to card cage connector J4.

(d) Solder harness wires to panel components as described in paragraph 7-23a.

(9) Install Transistor Q1 and Associated Parts.

(a) Pass two screws (29, figure C-4) through front panel and hold them in place.

(b) Orient heatsink (25) as shown in figure C-4 and set in place on underside of panel. Secure with two lockwashers (17) and nuts (18).

(c) Temporarily attach transistor socket (24) to heatsink (25) with two screws (26) and nuts (6), and solder lug (8).

(d) Connect wires and resistor (23) to transistor socket as shown in figure 7-5.

(e) Remove screws and nuts that were installed in step (c).

(f) Apply a thin, even coat of thermal conducting compound (16, table D-1) to surface of heatsink (25) that faces away from transistor socket and to mounting surface of transistor (27).

(g) Set mica insulator (28) on transistor so that transistor leads pass through small holes in insulator.

(h) Hold socket (24) in place on heatsink (25) and mount transistor (27) with insulator (28) in socket. Secure in place with two screws (26), lockwashers (5) and nuts (6). Be sure solder lug is in place on screws as shown in figure C-4.

(i) Wipe excess thermal conducting compound.

7-24. Installation procedures for assemblies located on the backplate assembly; resting in or attached to the card cage assembly, interfacing with the card cage assembly and the front panel assembly; and assemblies located on the Test Set case.

Assemblies Located on the Backplate Assembly. Refer to figure C-8 except where noted.

(1) *Install Power Control Assembly.*

(a) Set power control assembly (8, figure C-8) on mounting bracket (4) over spacers (11).

(b) Secure four nuts (9), flat washers (3), and lockwashers (10).

(c) Install Power Control Cable Assembly W5. Refer to paragraph 7-24.b.

NOTE

Refer to figure 7-3 for power supply configurations.

(2) *Install Power Supply PS2.*

(a) Use alcohol (18, table D-1) to clean backplate where power supply is to be installed.

(b) Apply thin, even layer of thermal conducting compound (17, table D-1) to back of power supply (16, figure C-8).

(c) Set power supply in position on backplate assembly and secure with four screws (17), lockwashers (6), and nuts (5). Tighten nuts. Excess thermal compound will squeeze out from underneath the power supply.

(d) Wipe excess thermal compound from power supply and backplate.

(e) Connect wires to power supply as shown in figure 7-3.

(3) *Install Power Supply PS3.*

(a) Use alcohol (18, table D-1) to clean backplate where power supply is to be installed.

(b) Apply thin, even layer of thermal conducting compound (17, table D-1) to back of power supply (21, figure C-8).

(c) Set power supply in position on backplate assembly and secure with four screws (18), lockwashers (6), and nuts (5). Tighten nuts. Excess thermal compound will squeeze out from underneath the power supply.

(d) Wipe excess thermal compound from power supply and backplate.

(e) Solder wires to terminals as shown in figure 7-3.

(4) *Install Power Supply PSI.*

(a) Use alcohol (18, table D-1) to clean backplate where power supply is to be installed.

(b) Apply thin, even layer of thermal conducting compound (17, table D-1) to back of power supply (20, figure C-8).

(c) Set power in position on backplate assembly and secure with four screws (19), lockwashers (6), and nuts (5). Tighten nuts. Excess thermal compound will squeeze out from underneath the power supply.

(d) Wipe excess thermal compound from power supply and backplate.

(e) Solder wires to terminals as shown in figure 7-3.

(5) *Install Relay K1.*

(a) Connect wires to terminals of relay (28, figure C-8) according to tags. See figures 7-3 and FO-2 for wiring details.

(b) Set relay on spacers (31), orientation of relay is not critical; however, be sure wires are not damaged or stretched.

(c) Secure relay with four screws (29) and lockwashers (30).

b. Assemblies Resting in or Attached to the Card Cage Assembly, Interfacing with the Card Cage Assembly and the Front Panel Assembly.

(1) *Install Power Control Cable Assembly W5.*

(a) Connect connector P11 (51, figure C-3) to connector A13J1 of power control assembly.

(b) Alternately tighten jackscrews until connector is firmly seated.

(c) Connect connector P6C (51) to connector J6 at card cage.

(d) Install cable clamp (49) with screw (50), clamp washer (11), and lockwasher (15).

(2) *Install Display Cable Assembly W6.*

(a) Connect connector P12 to connector A16J1 as shown in figure 7-2.

(b) Alternately tighten jackscrews on connector P12 until connector is firmly seated.

(c) Connect connector P4A in connector J4 of card cage.

(d) Install cable in cable clamps as shown in figure 7-2.

NOTE

In the following procedures, do not force connectors. If connector does not seat properly, check for bent pins. If pins are not bent, the connector is probably reversed. Turn connector around so that it keys correctly with the mating connector.

(3) *Install I/O Cable Assemblies W7 and WE.* The following steps describe the installation of both I/O cable assemblies. If only one cable assembly is to be installed, disregard the inappropriate steps.

(a) Mate connector P14 (48, figure C-3) to A3J2. Alternately tighten two jackscrews until connector is firmly seated.

(b) Mate connector P13 (47) to A3J1. Alternately tighten two jackscrews until connector is firmly seated.

(c) Install connector P1A and P1B in connector J1 of card cage assembly.

(d) Tie cable W7 to cable tie bar (10, figure C-10) with four straps (19, table D-1).

(e) Secure cables to card cage with cable clamp (49, figure C-3), clamp washer (11), screw (50), and lockwasher (15).

(4) Install Circuit Card Assemblies A1, A2, and A7 thru A12. In the following steps, mechanical parts of the plug-in circuit assemblies are identified by calling them out on figure C-12, CPU circuit card assembly A2. The clamps and extractors referred to are the same on each card, although the item numbers might vary from one figure to the next.

(a) Check that both circuit card retainers (8, figure 12) are loose. If wedge clamps are tight against body of retainer, turn retainer screws at top edge of card until clamps are loose.

(b) Face circuit assembly so that component side is toward the higher A-numbered slots of the card cage. Card cage slots are identified by labels adjacent to the slots.

(c) Gently slide circuit assembly into its respective slot. Be sure that A-number on card extractor (17, figure C-12) is the same as the A-number of the slot into which you are inserting the assembly.

(d) When assembly is at bottom of slot, press firmly and evenly on both card extractors (6) and (17) to be sure assembly connector is properly seated in motherboard.

(e) Turn retainer (8) screws clockwise to expand retainer clamps to hold assembly in cage.

(5) Install I/O Circuit Assembly A3.

(a) For circuit assembly A3, follow steps 7-24.b. (4) (a) through (e).

(b) Connect connector P13 (47, figure C-3) to A3J1. Alternately tighten connector jackscrews until connector is firmly seated.

(c) Connect connector P14 (48) to A3J2. Alternately tighten jackscrews until connector is firmly seated.

c. Items Located on the Test Set Case.

(1) Install Gasket in Case.

(a) Scrape all traces of old gasket and adhesive from flange in Test Set case.

(b) Apply thin coating of adhesive (20, table D-1) to flange and set new gasket (1, figure C-2) in place.

(c) Press gasket firmly all around to insure that it is properly seated. Be sure holes in gasket line up with holes in flange.

(d) Wipe off excess adhesive.

(2) *Install Pressure Relief Valve.*

(a) Place the pressure relief valve (3, figure C-2) into the opening of the Test Set case.

(b) Secure in place with large hex nut (part of valve).

7-25. Final Inspection.

a. Visually inspect the Test Set after repairs have been made.

(1) Inspect the Test Set front panel for dents, cracks, or scratches.

(2) Check the controls, knobs, keys, and displays for physical damage. Make sure that keys and protruding controls are not bent or damaged so as to impair their operation. Displays should not be cracked or broken.

(3) Inspect cables and connectors. Make sure cables are not split, frayed, or otherwise damaged. Connector pins shall not be bent or broken.

(4) Check that lamps and other indicators are not cracked or broken.

(5) Make sure that all screws and bolts are tight and that none are missing.

(6) Check that all switches operate freely and that control knobs do not bind as they are turned.

b. The Test Set shall be tested after repairs have been made, to determine whether the equipment is ready to test RMS units.

(1) Test procedures, as applicable, for each method of testing are outlined in paragraph 7-9.

(2) Select the appropriate method and test repaired assemblies as directed by the procedure.

(3) If further repairs are required, refer to Section IV of Chapter 7 for instructions.

CHAPTER 8
MATERIAL USED IN CONJUNCTION WITH MAJOR ITEMS

Section I. GENERAL

No auxiliary equipment is required for use with the Test Set.

APPENDIX A - REFERENCES

A-1. Supply Catalogs.

The following Department of the Army Supply Publications pertain to repair of this material:

Brushes, Paints, Sealers, and Adhesives	C8000-IL-A
Miscellaneous Chemical Specialities	C6800-IL
Miscellaneous Hardware	C5340-IL-A, Vol. 1,2,&3
Tool Set, Aircraft Armament Repairman: Basic (4933-00-987-9816)	SC9433-95- CL-A13
Tool Set, Aircraft Armament Repairman; Supplemental (4933-00- 994-9242)	SC4933-95- CL-A14

A-2. Other Publications.

a. General.

The Army Maintenance Management System (TAMMS)	TM 38-750
Procedures for Destruction of Electronics Material to Prevent Enemy Use	TM 750-224- 2

b. Maintenance.

Aviation Intermediate Maintenance Manual for Armament Subsystem, Heli- copter; 20-mm Automatic Gun: XM97E1/E2	TM 9-1090- 207-30
Aviation Intermediate Maintenance Repair Parts Maintenance Manual with Repair Parts and Special Tools List (including Depot Maintenance Repair Parts and Special Tools) for Rocket Management Subsystem, Inventory- Deployment, XM138.	TM 9-1090- 207-13&P
Operator's, Organizational, Direct Support, and General Support Maintenance Manual for Power Supply, Hydraulic/ Electric, Portable	TM 9-4933- 211-14

c. Shipment and Storage.

Administrative Storage of Equipment	TM 740-90-1
--	-------------

APPENDIX B MAINTENANCE ALLOCATION CHART

Section I. INTRODUCTION

B-1. General.

a. This section provides a general explanation of all maintenance and repair functions authorized at various maintenance levels.

b. The Maintenance Allocation Chart (MAC) in Section II designates overall responsibility for the performance of maintenance functions on the Test Set. The implementation of the maintenance functions upon the Test Set will be consistent with the assigned maintenance functions.

c. Section III lists the special tools and test equipment required for each maintenance function as referenced from Section II.

d. Section IV contains supplemental instructions or explanatory notes for a particular maintenance function.

B-2. Maintenance Functions.

a. Inspect. To determine the serviceability of an item by comparing its physical and mechanical characteristics with established standards through examination.

b. Test. To verify serviceability and detect incipient failure by measuring the mechanical or electrical characteristics of an item and comparing those characteristics with prescribed standards.

c. Service. Operations required periodically to keep an item in proper operating condition; i.e., to clean (decontaminate), to preserve, to drain, to paint, or to replenish fuel, lubricants, hydraulic fluids, or compressed air supplies.

d. Adjust. To maintain within prescribed limits by bringing into proper or exact position or by setting the operating characteristics to specified parameters.

e. Align. To adjust specified variable elements of an item to bring about optimum or desired performance.

f. Calibrate. To determine and cause corrections to be made on instruments or test measuring and diagnostic equipment used in precision measurement. Consists of comparisons of two instruments, one of which is a certified

standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.

g. Install. The act of emplacing, seating, or fixing into position an item, part, or module (component or assembly) in a manner to allow the proper functioning of an equipment or system.

h. Replace. The act of substituting a serviceable like type part, subassembly, or module (component or assembly) for an unserviceable counterpart.

i. Repair. The application of maintenance services (inspect, test, adjust, align, calibrate, or replace) or other maintenance actions (welding, grinding, riveting, straightening, facing, remachining, or resurfacing) to restore serviceability to an item by correcting specific damage fault, malfunction, or failure in a part, subassembly, module (component or assembly), end item, or system.

j. Overhaul. The maintenance effort (services/actions) necessary to restore an item to a completely serviceable/operational condition as prescribed by maintenance standards (i.e., Depot Maintenance Work Requirement) in appropriate technical publications. Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.

k. Rebuild. Consists of those services/actions necessary for the restoration of unserviceable equipment to a like-new condition in accordance with original manufacturing standards. Rebuild is the highest degree of material maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (hours/miles, etc.) considered in classifying Army equipment/ components.

B-3. Explanation of Columns in MAC, Section II.

a. Column 1, Group Number. Column 1 lists group numbers, the purpose of which is to identify components, assemblies, subassemblies, and modules with next higher assembly.

b. Column 2, Component/Assembly. Column 2 contains the names of components.

assemblies, subassemblies, and modules for which maintenance is authorized.

a. Column 3. Maintenance Functions. Column 3 lists the functions to be performed on the item listed in column 2. (For detailed explanation of these functions, see D-2.),

d. Column 4. Maintenance Category. Column 4 specifies, by the listing of a "work time" figure in the appropriate subcolumns, the lowest level of maintenance authorized to perform the function listed in column 3. This figure represents the active time required to perform the maintenance function at the indicated level of maintenance. Where the number or complexity of the tasks within the listed maintenance function vary at different maintenance levels, appropriate "work time" figures are shown for each level. The number of manhours specified by the "work time" figure represents the average time required to restore an item (assembly, subassembly component, module, end item, or system to a serviceable condition under typical field operating conditions. This time includes preparation time, troubleshooting time, and quality assurance/quality control time-in addition to the time-required to perform the specific task identified for the maintenance functions authorized in the maintenance allocation chart. The symbol designations for the various maintenance levels are as follows:

- O Aviation Unit Maintenance.
- F Aviation Intermediate Maintenance.
- D Depot Maintenance.

e. Column 5. Tools and Equipment. Column 5 specifies by code, those common tool sets (not individual tools) and special tools, TMDE, and support equipment required to perform the designated function.

f. Column 6. Remarks. This column contains a letter code keyed to the remarks contained in Section IV.

B-4. Explanation of Columns in Tool and Test Equipment Requirements. Section III.

a. Column 1. Reference Code. The tool and TMDE reference code correlates with a code used in the MAC. Section II, column 5.

b. Column 2. Maintenance Level. The lowest level of maintenance authorized to use the tool or test equipment.

c. Column 3. Nomenclature. Name or identification of the tool or test equipment.

d. Column 4. National Stock Number. The National stock number of the tool or TMDE.

e. Column 5. TOOL Part Number. The manufacturer's part number.

B-5. Explanation of Columns in Remarks Section IV.

a. Reference Code. The code recorded in column 6, Section II.

b. Remarks. This column lists information pertinent to the maintenance function being performed as indicated in the MAC, Section II.

MAINTENANCE ALLOCATION CHART

(1)	(2)	(3)	(4)			(5)	(6)	
GROUP NUMBER	COMPONENT/ASSEMBLY	MAINTENANCE FUNCTION	MAINTENANCE AVUM	CATEGORY AVIM	DEPOT	TOOLS AND EQUIPMENT	REMARKS	
00	Test Set Rocket Management Subsystem M135	Inspect		0.2				
		Test		2.5			1, 2, 3, 6, 7	A, C, D
		Service		0.1				
		Adjust		0.2			3, 4, 6	A
		Install		0.2		4.5	1, 2	
		Replace		0.2		4.7	1, 2	
		Repair		2.1		83.4	1, 2, 3, 4, 5, 6	A, B
		Overhaul				147.0	1, 2, 3, 4, 5, 6	
01	Case, Carrying	Inspect		0.1				
		Service		0.1				
		Install		0.1		0.5	1	
		Replace		0.2		0.5	1, 2	
		Repair		2.1		1.0	1, 2	
		Overhaul				2.0	1, 2	
02	Test Set, Rocket Subassembly	Inspect		1.2				
		Test		2.5			1, 2, 3, 6, 7	A, C, D
		Adjust		0.1			3	B
		Install		1.0		4.0	1, 2	
		Replace		0.2		4.2	1, 2	
		Repair		0.3		36.7	1, 2, 3, 4, 5, 6	A, B
		Overhaul				123.0	1, 2, 3, 4, 5, 6	
0201	Panel Assembly	Inspect		0.5				
		Test		0.3			6	A, C
		Install		2.0		4.8	1, 2	
		Replace		2.0		4.0	1, 2	
		Repair		1.0		9.0	1, 2, 3, 4, 5, 6	
		Overhaul				12.0	1, 2, 3, 4, 5, 6	

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE CATEGORY		(5) TOOLS AND EQUIPMENT	(6) REMARKS
			AVUM	AVIM		
020101	Keyboard and Cable Assembly A17	Inspect		0.1		
		Test		0.1	1.0	3,5,6
		Install		0.5		1,2
		Replace		0.5		1,2
		Repair			1.0	1,2,3,4,5,6
	Overhaul			3.0	1,2,3,4,5,6	
020102	Display Assembly A16	Inspect		0.1		
		Test		0.1	1.0	3,5,6
		Install		0.1		1,2
		Replace		0.1		1,2
		Repair			4.0	3,4,5,6
	Overhaul			4.0	3,4,5,6	
020103	Circuit Card Assembly A14, DU Cable Interface	Inspect		0.1		
		Test		0.1	1.0	5,6
		Install		0.2		1,2
		Replace		0.2		1,2
		Repair			4.0	3,4,5,6
	Overhaul			4.0	3,4,5,6	
0202	Backplate Assembly	Inspect		0.2		
		Test		0.2		6
		Adjust		1.0		3,6
		Install		0.2		1,2
		Replace			0.2	1,2
		Repair		1.0	8.0	1,2, ,4,5,6
		Overhaul			8.0	1,2,3,4,5,6
020201	Circuit Card Assembly A13, Power Control	Inspect		0.1		
		Test		0.1	1.0	5,6
		Install		0.1		1,2
		Replace		0.1		1,2
		Repair			3.0	1,2,3,4,5,6
	Overhaul			3.0	1,2,3,4,5,6	
020202	Card Cage Assembly	Inspect		0.1		
		Test		0.1		5,6
		Install		0.1		1,2
		Replace		0.2		1,2
		Repair			0.1	3,4,5,6
	Overhaul			0.1	3,4,5,6	
0202020	Motherboard Wiring Assembly	Inspect			0.5	
		Test			2.0	5,6
		Install			0.5	1,2
		Replace			0.7	1,2
		Repair			1.0	1,2,3,4,5,6
	Overhaul			4.0	1,2,3,4,5,6	

MAINTENANCE ALLOCATION CHART

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE CATEGORY			(5) TOOLS AND EQUIPMENT	(6) REMARKS
			AVUM	AVIM	DEPOT		
0203 Thru 0210	Circuit Card Assemblies A2, A3, and A7 thru A12	Inspect		0.5			A, C
		Test		0.3	1.0	3,5,6	
		Install		2.0	4.8	1,2	
		Replace		2.0	4.0	1,2	
		Repair		1.0	9.0	1,2,3,4,5,6	
		Overhaul			12.0	1,2,3,4,5,6	
0211 Thru 0217	Cable Assemblies W2 thru W8	Inspect		0.1			A, C
		Test		2.0		3	
		Install		0.2		1,2,3	
		Replace		0.3		1,2	
		Repair			4.0	1,2,3	
		Overhaul			4.0	1,2,3	
0218	Circuit Card Assembly A1, Memory	Inspect		0.1			A, C
		Test		0.1	1.0	3,5,6	
		Install		0.1		1,2	
		Replace		0.1		1,2	
		Repair			4.0	1,2,3,4,5,6	
		Overhaul			4.0	1,2,3,4,5,6	
0219	Circuit Card Assembly A15, Self-Test	Inspect		0.1			A, C
		Test		0.1	1.0	3,5,6	
		Install		0.1		1,2	
		Replace		0.1		1,2	
		Repair			4.0	1,2,3,4,5,6	
		Overhaul			4.0	1,2,3,4,5,6	
0220 Thru 0222	Cable Assemblies W10 thru W12	Inspect		0.1			A, C
		Test		2.0		3	
		Install		0.2		1,2	
		Replace		0.2		1,2	
		Repair			4.0	1,2,3	
		Overhaul			4.0	1,2,3	
0223	Harness Assembly W13, Front Panel	Inspect		0.2			A, C
		Test		2.0		3	
		Install		0.3		1,2	
		Replace		0.3		1,2	
		Repair			4.0	1,2,3	
		Overhaul			4.0	1,2,3	
03	Cable Assembly W1, Power	Inspect		0.1			A
		Test		0.5		3	
		Install		0.1		1,2	
		Replace		0.1		1,2	
		Repair			4.0	1,2,3	
		Overhaul			4.0	1,2,3	

SECTION III. TOOL AND TEST EQUIPMENT REQUIREMENTS

(1)	(2)	(3)	(4)	(5)
REFERENCE CODE	MAINTENANCE LEVEL	NOMENCLATURE	NATIONAL STOCK NUMBER	TOOL PART NUMBER
1	O, F, D	TOOL SET, BASIC AIRCRAFT ARMAMENT REPAIRMAN	4933-00-987-9816	
2	F, D	TOOL SET, AIRCRAFT ARMAMENT REPAIRMAN SUPPLEMENTAL	4933-00-994-9242	
3	F, D	MULTIMETER, AN/USM 223	6625-00-999-7465	
4	D	OSCILLOSCOPE, AN/USM 228	6625-00-228-2201	
5	D	DIGITAL CARD TESTER, AN/USM 465A	6625-01-060-6804	2225A
6	F, D	POWER SUPPLY	6130-00-542-6385	PP-1104C/G
7	F	SHOP SET, FAILURE ISOLATION, ELECTRONIC CIRCUIT BOARDS: 20-MM CURRENT AND ROCKET MANAGEMENT SUBSYSTEM	4933-01-229-0617	118387720

SECTION IV. REMARKS

(1)	(2)
REFERENCE CODE	REMARKS
A	TEST SET SELF-TEST
B	POWER SUPPLY ONLY REQUIRES ADJUSTMENTS
C	RELAYS ON A10 AND ALL CIRCUIT CARDS CAN BE REPLACED
D	REFERENCE TM 9-4933-270-30 FOR DESCRIPTION AND USE OF FAILURE ISOLATION SHOP SET (FISS)

APPENDIX C REPAIR PARTS AND SPECIAL TOOLS LIST (INCLUDING DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS)

Section I. INTRODUCTION

C-1. Scope.

This appendix lists spares and repair parts; special tools; special test, measurement, and diagnostic equipment ('RIDE); and other special support equipment required for performance of AVUM, AVIM, and depot maintenance of the Test Set. It authorizes the requisitioning and issue of spares and repair parts as indicated by the source and maintenance codes.

C-2. General.

This Repair Parts and Special Tools List is divided into the following sections:

- a. Section II. Repair Parts List.
A list of spares and repair parts authorized for use in performing maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in numeric sequence, with the parts in each group listed in figure and item number sequence.
- b. Section III. Special Tools List.
A list of special tools, special TMDE, and other special support equipment authorized for the performance of maintenance.
- c. Section IV. National Stock Number and Part Number Index. A list in national item identification number (NIIN) sequence, of all national stock numbers (NSN) appearing in the listing, followed by a list in alphameric sequence of all part numbers appearing in the listings. National stock numbers and part numbers are cross-referenced to each illustration figure and item number appearance. This index is followed by a cross-reference List of reference designations to figure and item numbers.

C-3. Explanation of Columns.

a. Illustration. This column is divided as follows:

(1) Figure Number. Indicates the figure number of the illustration on which the item is shown.

(2) Item Number. The number used to identify item called out in the illustration.

b. Source, Maintenance, and Recoverability (SMR) Codes.

(1) Source Code. Source codes indicate the manner of acquiring support items for maintenance, repair, or overhaul of end items. Source codes are entered in the first and second positions of the Uniform SMR Code format as follows:

Code	Definition
PA	-Item procured and stocked for anticipated or known usage.
PB	-Item procured and stocked for insurance purpose because essentiality dictates that a minimum quantity be available in the supply system.
PC	-Item procured and stocked and which otherwise would be coded PA except that it is deteriorative in nature.
PD	-Support item, excluding support equipment, procured for initial issue or outfitting and stocked only for subsequent or additional initial issues or outfittings. Not subject to automatic replenishment.
PE	-Support equipment procured and stocked for initial issue or outfitting to specified maintenance repair activities.
PF	-Support equipment which will not be stocked but which will be centrally procured on demand.
PG	-Item procured and stocked to provide for sustained support for the life of the equipment. It is applied to an item peculiar to the equipment which, because of probable discontinuance or shut-down of production facilities, would prove uneconomical to reproduce at a later time.

TM9-4933-227-13&P

- KD -An item of a depot overhaul/repair kit and not purchased separately. Depot kit defined as a kit that provides items required at the time of overhaul or repair.
- KF -An item of a maintenance kit and not purchased separately. Maintenance kit defined as a kit that provides an item that can be replaced at organizational or intermediate levels of maintenance.
- KB -Item included in both a depot overhaul/repair kit and a maintenance kit.
- MO -Item to be manufactured or fabricated at organizational level.
- MF -Item to be manufactured or fabricated at a direct support maintenance level.
- MH -Item to be manufactured or fabricated at the general support maintenance level.
- MD -Item to be manufactured or fabricated at the depot maintenance level.
- AO -Item to be assembled at organizational level.
- AF -Item to be assembled at direct support maintenance level.
- AH -Item to be assembled at general support maintenance level.
- AD -Item to be assembled at depot maintenance level.
- XA -Item is not procured or stocked because the requirements for the item will result in the replacement of the next higher assembly.
- XB -Item is not procured or stocked. If not available through salvage, requisition.
- xc -Installation drawing, diagram, instruction sheet, field service drawing, that is identified by manufacturer's part number.
- XD -A support item that is not stocked. When required, item will be procured through normal supply channels.

NOTE

Cannibalization or salvage may be used as a source of supply for any items coded above except those coded XA and aircraft support items as restricted by AR700-42.

(2) Maintenance Code. Maintenance codes are assigned to indicate the levels of maintenance authorized to USE and REPAIR support items. The maintenance codes are entered in the third and fourth positions of the Uniform SMR Code format as follows;

(a) The maintenance code entered in the third position indicates the lowest maintenance level authorized to remove, replace, and use the support item. The maintenance code entered in the third position indicates one of the following levels of maintenance:

Code	Application/Explanation
0	-Support item is removed, replaced, used at the organizational (AVUM) level.
F	-Support item is removed, replaced, used at the direct support (AVIM) level.
D	-Support items that are removed, replaced, used at depot, mobile depot or specialized repair activity only.

(b) The maintenance code entered in the fourth position indicates if the item is to be repaired and identifies the lowest maintenance level with the capability to perform complete repair (i.e., all authorized maintenance functions). This position contains one of the following maintenance codes.

Code	Application/Explanation
0	-The lowest maintenance level capable of complete repair of the support item is the Aviation Unit Maintenance level.
F	-The lowest maintenance level capable of complete repair of the support item is the Aviation Intermediate Maintenance level.
D	-The lowest maintenance level capable of complete repair of the support item is the depot level.

(3) Recoverability Code. Recoverability codes are assigned to support items to indicate the disposition action on unserviceable items. The recoverability code is entered in the fifth position of the Uniform SMR Code format as follows:

Recoverability Code	Definition
Z	-Nonrepairable item. When unserviceable, condemn and dispose at the level indicated in position 3.

- O -Repairable item. When uneconomically repairable, condemn and dispose at Aviation Unit Maintenance level.
- F -Repairable item. When uneconomically repairable, condemn and dispose at the Aviation Intermediate Maintenance level.
- D -Repairable item. When beyond lower level repair capability, return to depot. Condemnation and disposal not authorized below depot level.

c. National Stock Number. Indicates the National stock number assigned to the item, which will be used for requisitioning.

d. Part Number. Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items.

NOTE

When a stock numbered item is requisitioned, the item received may have a different part number than the part being replaced.

e. Federal Supply Code for Manufacturer (FSCM). The FSCM is a 5-digit numeric code listed in SB 708-42 which is used to identify the manufacturer, distributor, or Government agency, etc.

f. Description. Indicates the Federal item name and, if required, a minimum description to identify the item. The physical security classification of the item, if applicable, is indicated by a parenthetical entry ((C)-Confidential, (S)-Secret, (T)-Top Secret). Items that are included in kits and sets are listed below the name of the kit or set with the quantity of each item in the kit or set indicated in the quantity incorporated in unit column. When the part to be used differs between serial numbers of the same model, the effective serial numbers are shown as the last line of the description. In the Special Tools List, the initial basis of issue (BOI) appears as the last line of the entry for each special tool, special TMDE, and other special support equipment. When density of equipments supported exceeds density spread indicated in the basis of issue, the total authorization is increased accordingly.

g. Unit of Measure (U/M). Indicates the standard of the basic quantity of the listed item as used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in,

pr, etc). When the unit of measure differs from the unit of issue the lowest unit of issue that will satisfy the required units of measure will be requisitioned.

h. Quantity Incorporated in Unit. Indicates the quantity of the item used in the breakout shown on the illustration figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column in lieu of a quantity indicates that no specific quantity is applicable, (e.g., shims, spacers, etc).

C-4. Special Information.

a. Usable on codes are not used in this listing. There is only one model of the Test Set.

b. (Applicable to revisions or changes only). Action change codes indicated in the left-hand margin of the listing page denote the following;

N-indicates an added item.

C-Indicates a change in data.

R-Indicates a change in NSN only.

C-5. How to Locate Repair Parts.

a. When National Stock Number or Part Number Is Unknown;

(1) First. Using the table of contents, determine the functional group or subgroup within which the item belongs. This is necessary since illustrations are prepared as functional groups or subgroups and listings are divided into the same groups.

(2) Second. Find the illustration covering the functional group or subgroup to which the item belongs.

(3) Third. Identify the item on the illustration and note the illustration figure and item number of the item.

(4) Fourth. Using the Repair Parts Listing, find the figure and item number noted on the illustration.

b. When National Stock Number or Part Number Is Known;

(1) First. Using the Index of National Stock Numbers and Part Numbers, find the pertinent National stock number or part number. This index is in NIIN sequence followed by a list of part numbers in alphameric sequence, cross-referenced to the illustration figure number and item number.

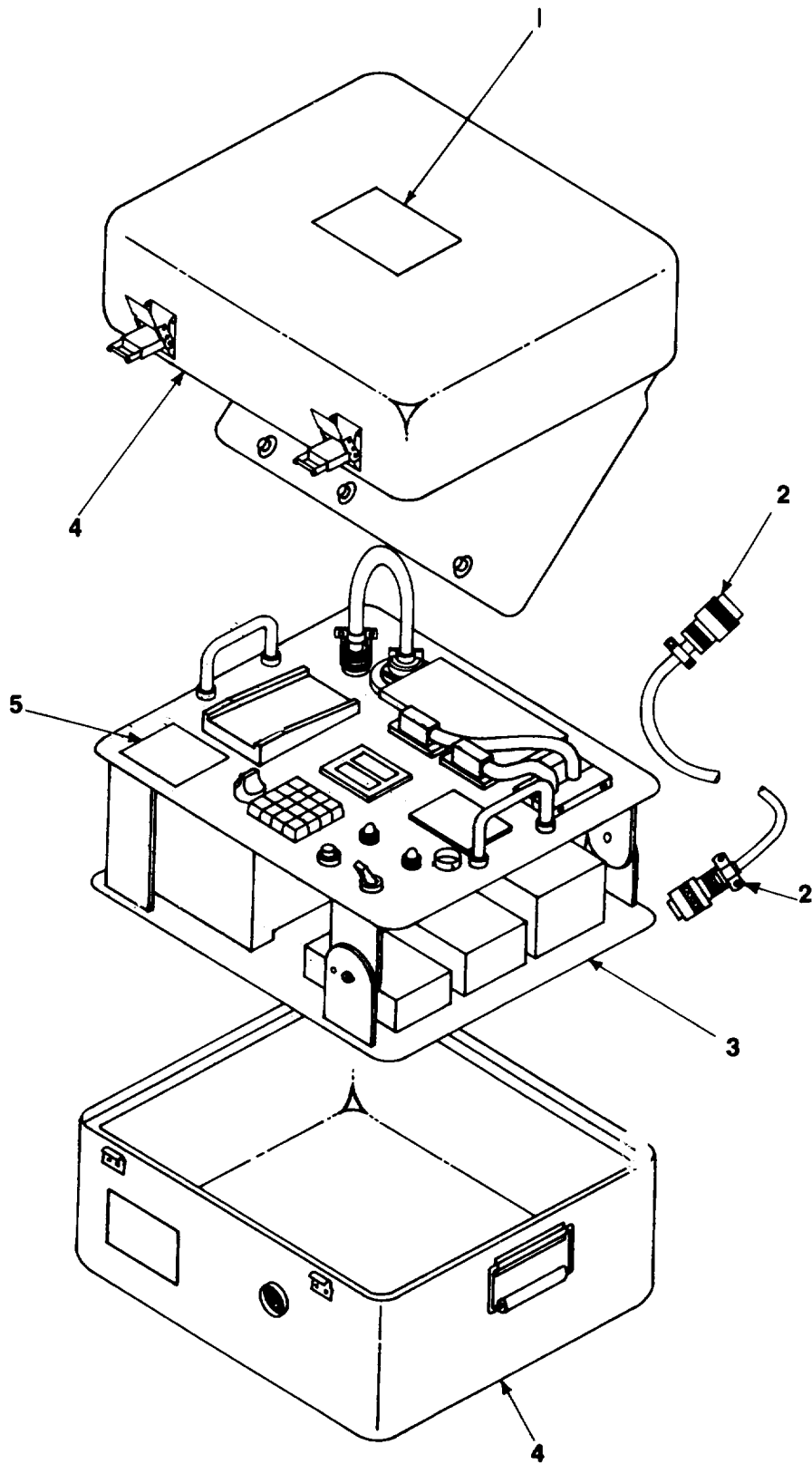
TM9-4933-227-13&P

(2) Second. After finding the figure and item number, locate the figure and item number in the repair parts list.

C-6. Abbreviations.

<u>Abbreviation</u>	<u>Explanation</u>
cd-or	Cadmium-ore
zn-pltd	zinc-plated
MOD	Model
opn	opening

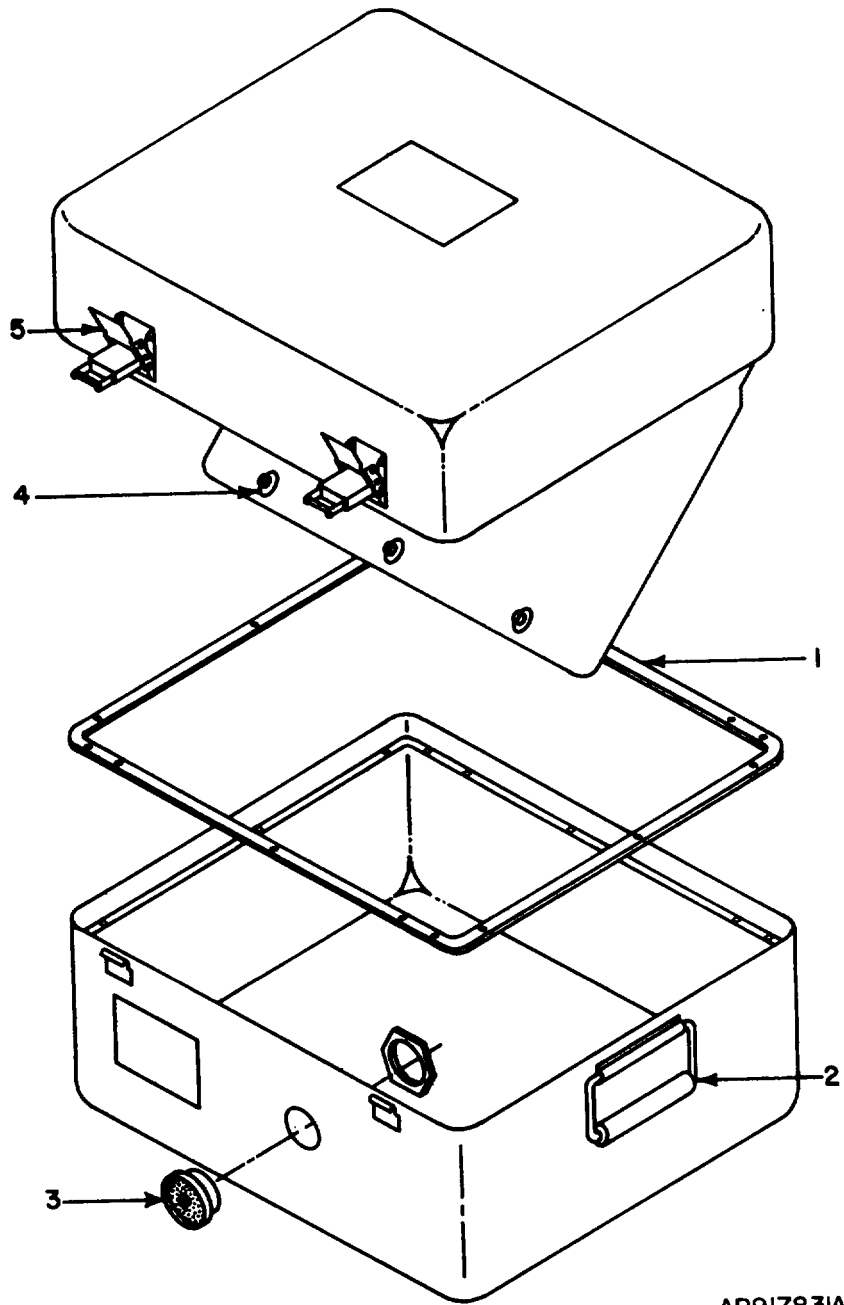
Section II. REPAIR PARTS LIST



AR917857.

Figure C-1. Test Set, Rocket Management Subsystem: XM135

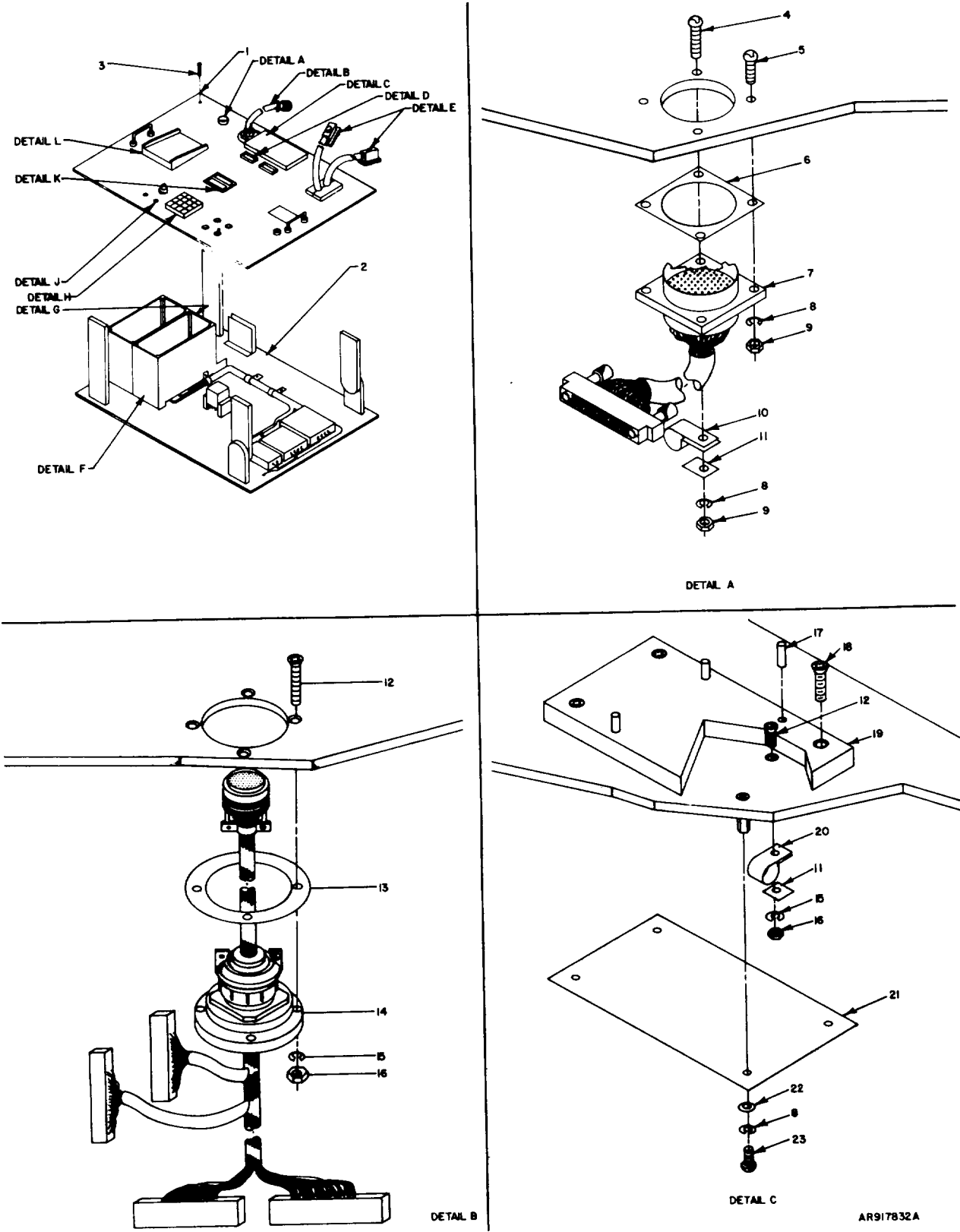
(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 00 TEST SET, ROCKET MGMT SUBSYS: XM135 9324500-001			
C-1	1	MDDZZ		9324503-2	19203	LABEL, NAMEPLATE, CASE		EA	4
C-1	2	PAFDD	4933-01-084-0431	9324512-001	19203	CABLE ASSEMBLY, W1, POWER		EA	1
C-1	3	PBFDD	4933-01-083-0541	9324509-001	19203	TEST SET SUBASSEMBLY		EA	1
C-1	4	PBFDD	4933-01-083-0554	9324502	19203	CASE, TEST SET		EA	1
C-1	5	MDDZZ		9324503-1	19203	LABEL, NAMEPLATE, PANEL		EA	1



AR91783IA

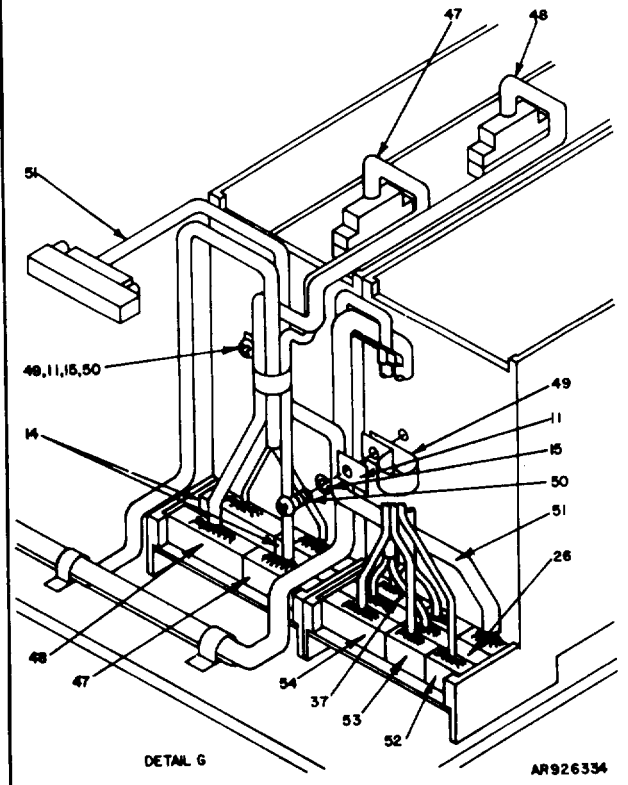
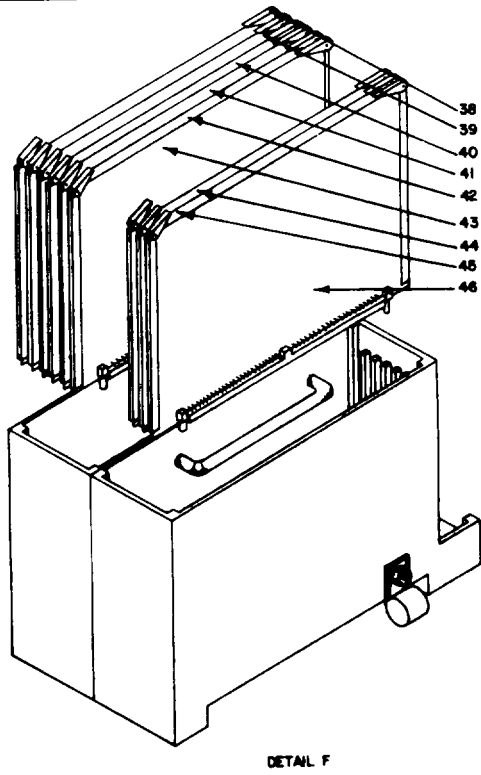
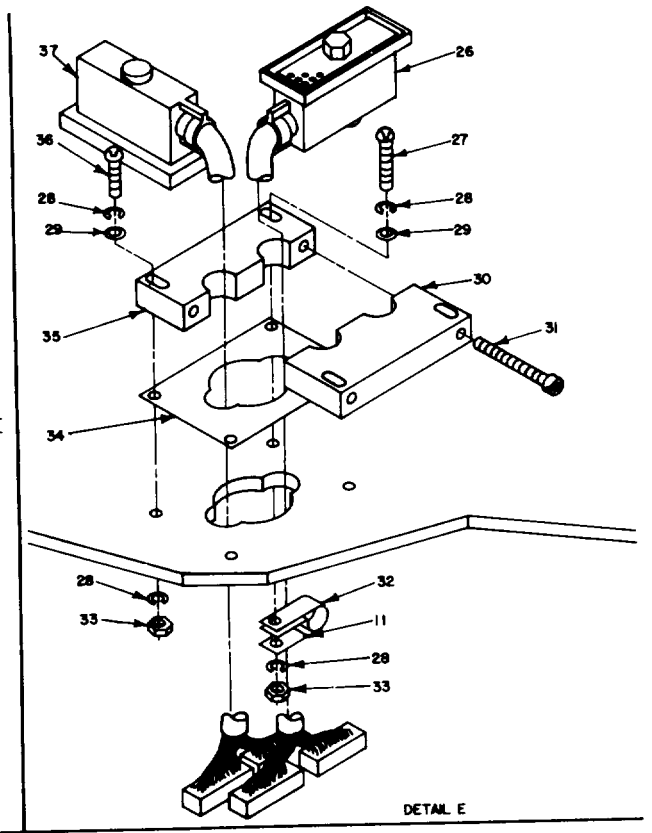
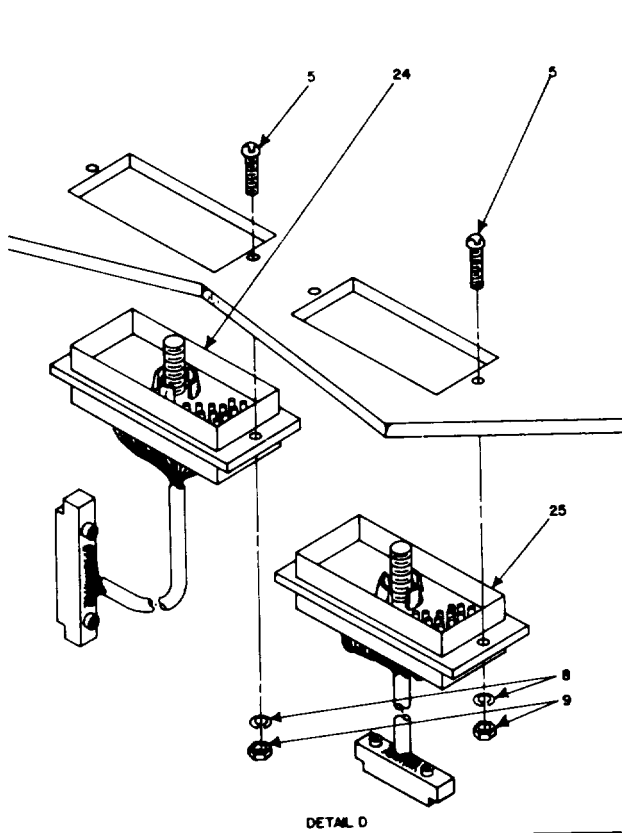
C-2. Carrying Case

(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 01 CASE 9324502			
C-2	1	PAFZZ		ZP-5031-47	98376	GASKET		EA	1
C-2	2	PADZZ	5430-01-014-0535	ZSP3-003	98376	HANDLE		EA	2
C-2	3	PAFZZ	4820-00-898-3003	ZSP6-037-4	98376	VALVE, PRESSURE RELIEF		EA	1
C-2	4	PADZZ	5340-00-993-0879	ZSP2-2004	98376	LATCH, PUSHBUTTON		EA	3
C-2	5	PADZZ	5340-00-992-8139	ZSP2-204	98376	LATCH,SEPARABLE		EA	4



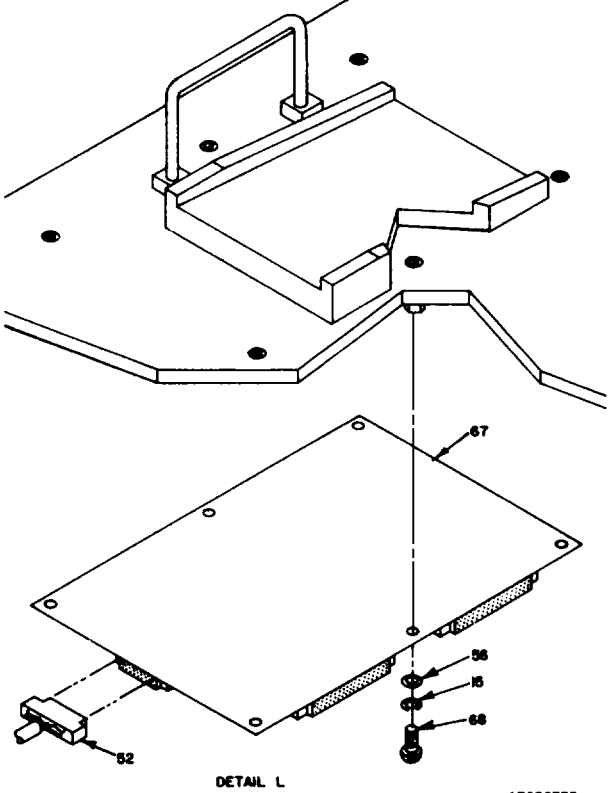
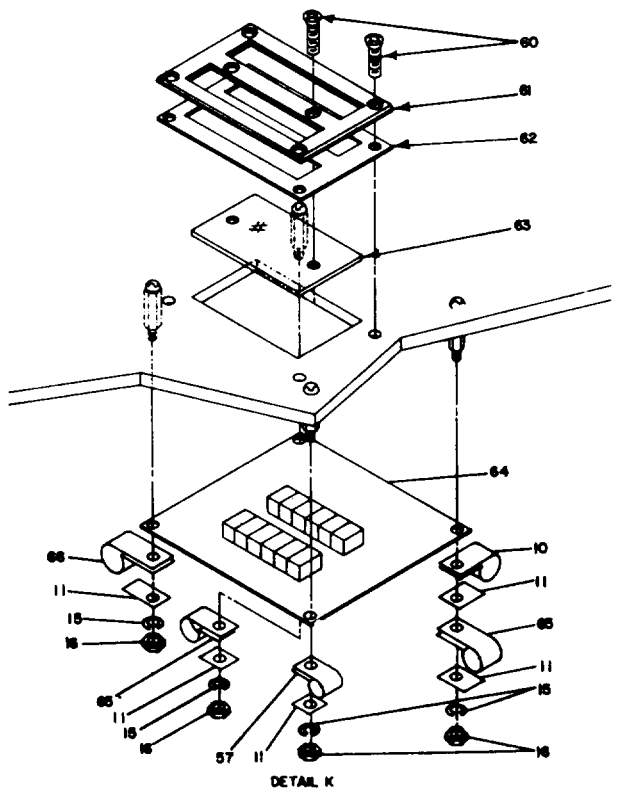
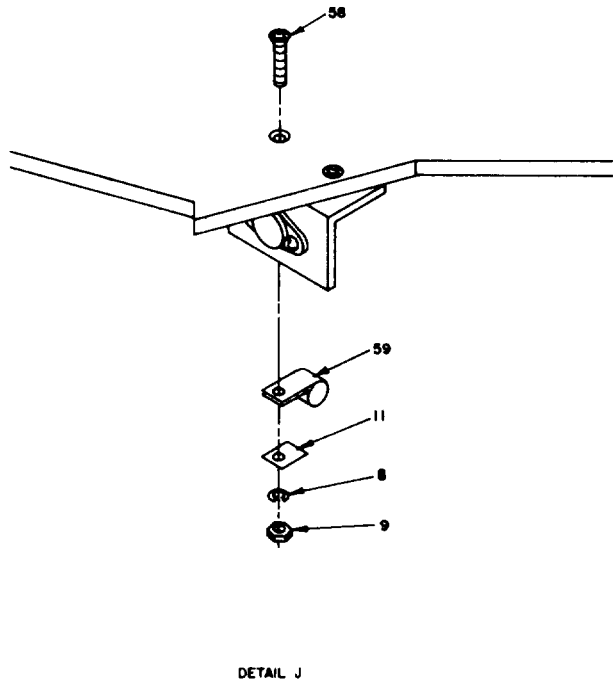
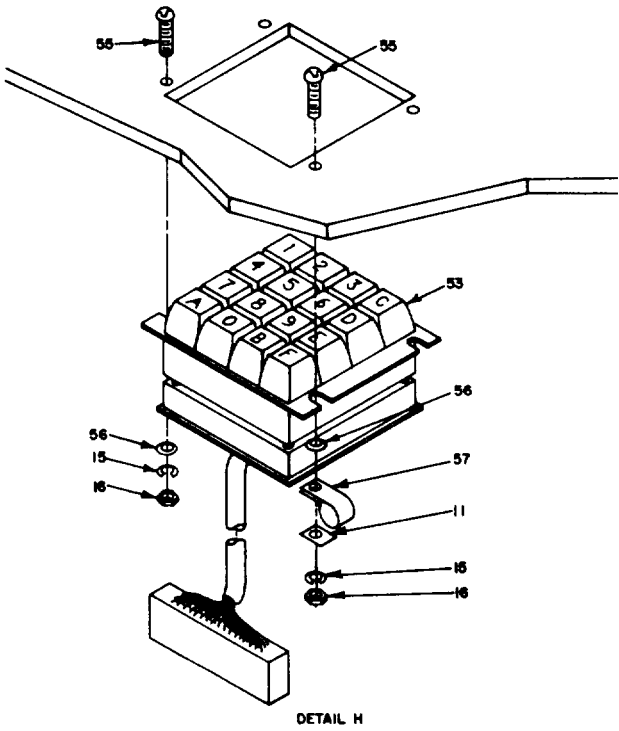
AR917832A

C-3. TEST Set Subassembly (Sheet 1 of 3)



AR926334

C-3. Test Set Subassembly (Sheet 2 of 3)



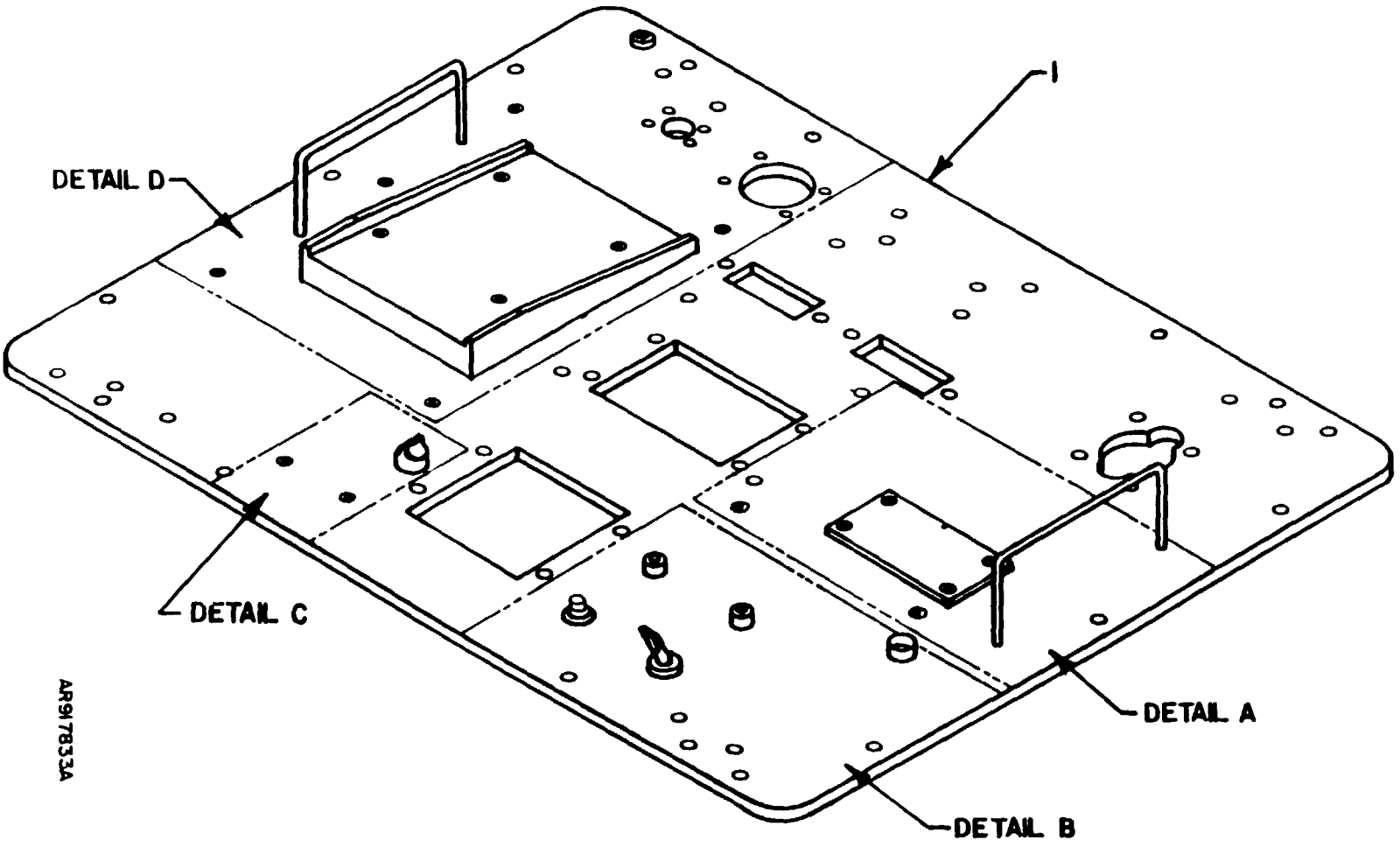
APP26335

C-3. Test Set Subassembly (Sheet 3 of 3)

(1) ILLUSTRATION (A) FIG. NO	(2) (B) ITEM NO	(3) SMR CODE	(4) FEDERAL STOCK	(5) PART NUMBER	(6) FSCM DESCRIPTION	(7) USABLE ON CODE	(8) QTY INC IN UNIT
					TM9-4933-227-13&P (6)		
					GROUP 02 TEST SET SUBASSEMBLY 9324509-001		
C-3	1	XAFDD		9324504-001	19203 PANEL ASSEMBLY	EA	1
C-3	2	XAFDD		9324526-001	19203 BACKPLATE ASSY	EA	1
C-3	3	PAFZZ	5305-00-071-1322	MS51960-65	96906 SCREW,MACHINE	EA	8
C-3	4	PAFZZ		MS51957-19	96906 SCREW,MACHINE	EA	1
C-3	5	PAFZZ	5305-00-054-5651	MS51957-17	96906 SCREW,MACHINE	EA	7
C-3	6	PAFZZ	5999-01-079-9252	9324172	19203 GASKET, DU RECEPTACLE	EA	1
C-3	7	PAFDD		9324466-001	19203 CABLE ASSEMBLY W12, DU SELF-TEST	EA	1
C-3	8	PAFZZ	5310-00-543-2410	MS35338-40	96906 WASHER LOCK	EA	19
C-3	9	PAFZZ	5310-00-934-9748	MS35649-244	96906 NUT PLAIN, HEXAGON	EA	15
C-3	10	PAFZZ		MS25281-R07	96906 CLAMP,CABLE	EA	2
C-3	11	PAFZZ		MS15795-803	96906 WASHER,CABLE CLAMP	EA	12
C-3	12	PAFZZ	5305-00-719-5064	MS51959-30	96906 SCREW,MACHINE	EA	4
C-3	13	PAFZZ		9324489	19203 GASKET, BULKHEAD MOUNTING	EA	1
C-3	14	PAFDD	4933-01-810-8247	9324510-001	19203 CABLE ASSEMBLY W4, DU TEST	EA	1
C-3	15	PAFZZ		MS35338-136	96906 LOCKWASHER	EA	22
C-3	16	PAFZZ	5310-00-934-9761	MS35649-264	96906 NUT, HEXAGON	EA	14
C-3	17	PAFZZ	5315-00-817-0612	MS16555-42	96906 PIN, DOWEL	EA	4
C-3	18	PAFZZ	5305-00-770-2579	MS51959-45	96906 SCREW, MACHINE	EA	4
C-3	19	MDFZZ		9324527	19203 PAD, MOUNTING, OU	EA	1
C-3	20	PAFZZ		MS25281-R12	96906 CLAMP, CABLE	EA	1
C-3	21	PAFDD		9324496-001	19203 CIRCUIT CARD ASSY A14, DU CABLE INTFC	EA	1
C-3	22	PAFZZ	5310-00-595-6211	MS15795-803	96906 WASHER,FLAT	EA	4
C-3	23	PAFZZ	5305-00-054-5648	MS51957-14	96906 SCREW,MACHINE	EA	4
C-3	24	PAFDD		9324465-001	19203 CABLE ASSEMBLY W11, OUI2 SELF-TEST	EA	1
C-3	25	PAFDD		9324464-001	19203 CABLE ASSEMBLY W10, OUI1 SELF-TEST	EA	1
C-3	26	PAFDD	4933-01-083-6078	9324511-001	19203 CABLE ASSEMBLY W2, OUI1 TEST	EA	1
C-3	27	PAFZZ	5305-00-059-3360	MS35207-68	96906 SCREW, MACHINE	EA	1
C-3	28	PAFZZ	5310-00-058-2951	MS35337-81	96906 LOCKWASHER	EA	4
C-3	29	PAFZZ		AN960-10L	88044 WASHER, FLAT	EA	2
C-3	30	PAFZZ	5935-01-083-4682	9324531-2	19203 CLAMP, CABLE, ELECTRICAL	EA	1
C-3	31	PAFZZ	5305-00-068-5407	MS16996-16	96906 SCREW, CAP, SOCH	EA	2
C-3	32	PAFZZ		MS25281-R14	96906 CLAMP, CABLE	EA	1
C-3	33	PAFZZ		MS35650-304	96906 NUT, HEXAGON	EA	2
C-3	34	PAFZZ	5330-01-083-4669	9324566	19203 GASKET	EA	1
C-3	35	PAFZZ	5935-01-083-4683	9324531-1	19203 CLAMP, CABLE	EA	1
C-3	36	PAFZZ		MS35207-263	96906 SCREW, MACHINE	EA	3
C-3	37	PAFDD	4933-01-076-6872	9324519-001	19203 CABLE ASSEMBLY W3, OUI2 TEST	EA	1
C-3	38	PAFDD	5999-01-083-4690	9324518-001	19203 CIRCUIT CARD ASSY A12, ANALOG	EA	1
C-3	39	PAFDD	4933-01-076-6903	9324524-001	19203 CIRCUIT CARD ASSY A11, FZ OU INTFC	EA	1
C-3	40	PAFDD	4933-01-076-6773	9324522-001	19203 CIRCUIT CARD ASSY A10, SQB OU INTFC	EA	1

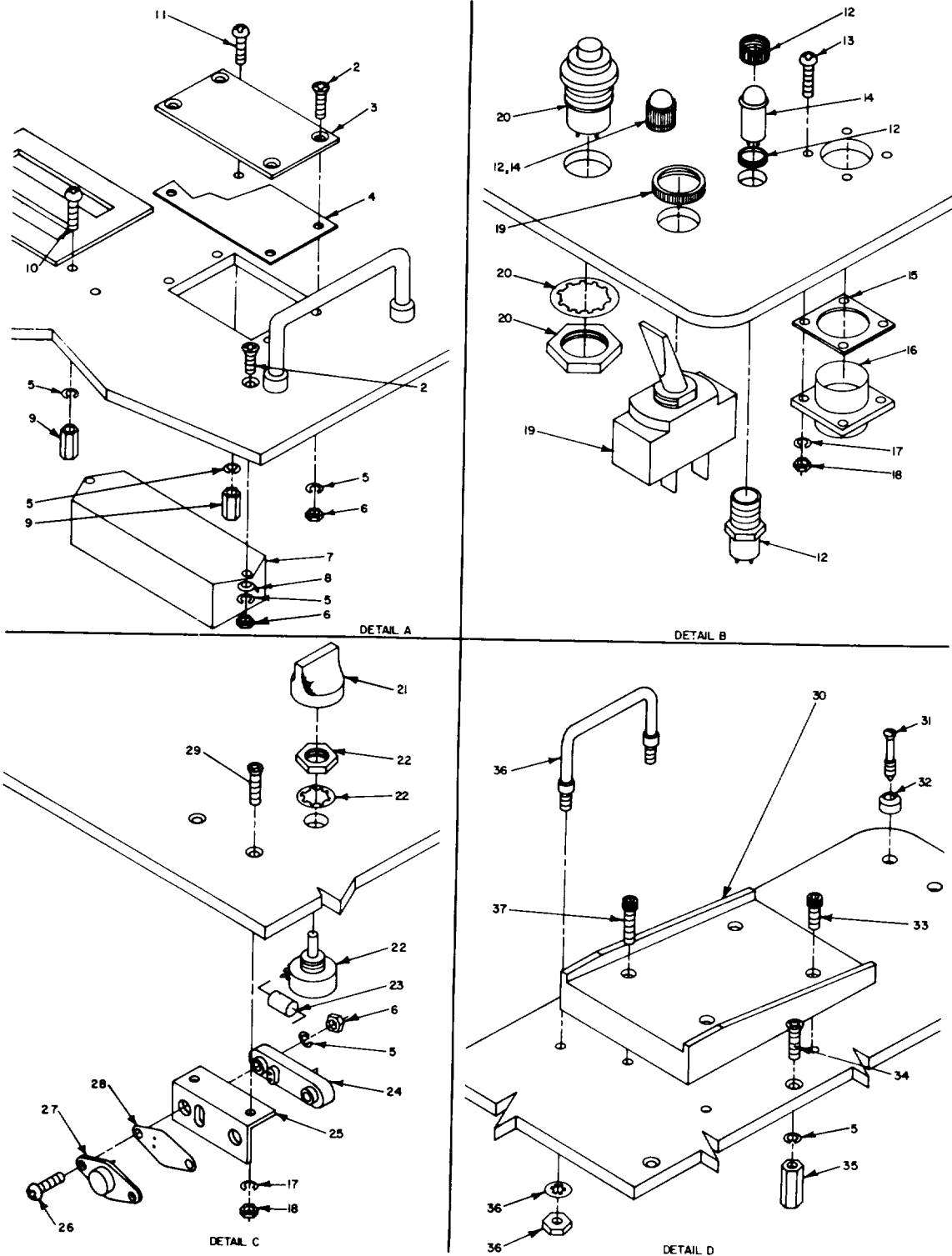
C-13/C-14 (BLANK)

(1) ILLUSTRATION (A) FIG. NO	(2) (B) ITEM NO	(3) SMR CODE	(4) FEDERAL STOCK	(5) PART NUMBER	(6) FSCM DESCRIPTION	(7) U/M	(8) QTY INC IN UNIT
					TM9-4933-227-13&P (6)		
					GROUP 02 TEST SET SUBASSEMBLY 9324509-001 (CONTINUED)		
C-3	41	PAFDD	4933-01-076-6902	9324523-001	19203 CIRCUIT CARD ASSY A9, RELAY DRIVER	EA	1
C-3	42	PAFDD	4933-01-076-6772	9324520-001	19203 CIRCUIT CARD ASSY A8, COMMUNICATION	EA	1
C-3	43	PAFDD	5999-01-083-4689	9324521-001	19203 CIRCUIT CARD ASSY A7, DU INTERFACE	EA	1
C-3	44	PAFDD	5998-01-336-3621	12927274	19203 CIRCUIT CARD ASSY A3, I/O	EA	1
C-3	45	PAFDD	5998-01-341-5133	12927275	19203 CIRCUIT CARD ASSY A2, CPU	EA	1
C-3	46	PAFDD	5999-01-101-4035	9324516-001	19203 CIRCUIT CARD ASSY A1, MEMORY	EA	1
C-3	47	PAFDD	5995-01-083-6074	9324590-001	19203 CABLE ASSY W8, I/O	EA	1
C-3	48	PAFDD	5995-01-083-6075	9324601-001	19203 CABLE ASSY W7, I/O	EA	1
C-3	49	PAFZZ	5340-00-807-1065	MS25281-R16	96906 CLAMP, CABLE	EA	1
C-3	50	PAFZZ	5303-00-054-6654	MS19957-30	96906 SCREW, MACHINE	EA	2
C-3	51	PAFDD	5995-01-083-6076	9324588-001	19203 CABLE ASSY W5, POWER CONTROL	EA	1
C-3	52	PAFDD	5995-01-106-0625	9324458-001	19203 HARNESS ASST W13, FRONT PANEL	EA	1
C-3	53	PAFDD	4933-01-076-6771	9324592-001	19203 KEYBOARD AND CABLE ASSY A17	EA	1
C-3	54	PAFDD	5995-01-083-6077	9324589-001	19203 CABLE ASSY W6, DISPLAY	EA	1
C-3	55	PAFZZ	5305-00-054-6655	MS1957-31	96906 SCREW, MACHINE	EA	2
C-3	56	PADZZ	5310-00-880-5976	MS15795-806	96906 WASHER, FLAT	EA	8
C-3	57	PAFZZ		MS25281-R05	96906 CLAMP, CABLE	EA	2
C-3	58	PAFZZ	5305-00-763-7827	MS1959-18	96906 SCREW, MACHINE	EA	1
C-3	59	PAFZZ		MS25281-R04	96906 CLAMP, CABLE	EA	1
C-3	60	PAFZZ	5305-00-763-7822	MS1959-14	96906 SCREW, MACHINE	EA	6
C-3	61	PAFZZ	6695-01-083-4679	9324537	19203 BEZEL	EA	1
C-3	62	PAFZZ	5330-01-083-4670	9324567	19203 GASKET, BEZEL	EA	1
C-3	63	PAFZZ	4933-01-083-0542	9324538	19203 FILTER, DISPLAY	EA	1
C-3	64	PAFZZ	5999-01-077-3605	9324507-001	19203 DISPLAY ASSY A16	EA	1
C-3	65	PAFZZ		MS25281-R08	96906 CLAMP, CABLE	EA	2
C-3	66	PAFZZ		MS25281-R06	96906 CLAMP, CABLE	EA	1
C-3	67	PAFDD	5998-01-120-0836	324477-001	19203 CIRCUIT CARD ASSY A15, SELF-TEST	EA	1
C-3	68	PAFZZ	5305-00-054-6652	MS1957-28	96906 SCREW, MACHINE	EA	6



AR917833A

C-4. Front Panel Assembly (Sheet 1 of 2)

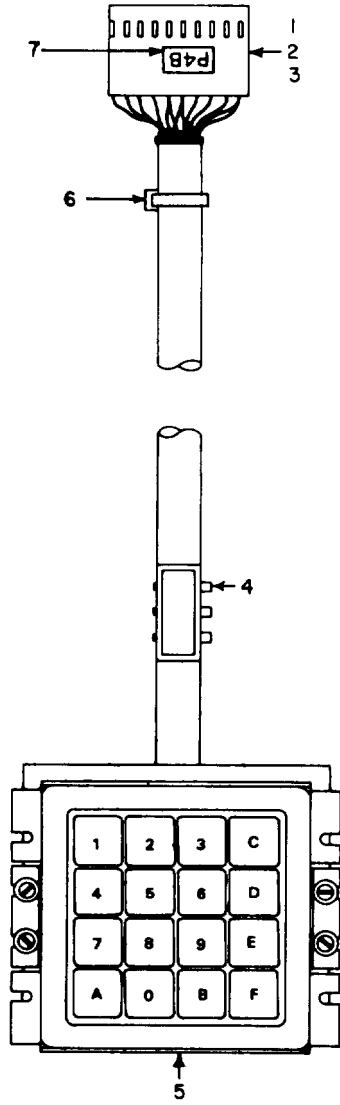


AR926332

C-4. Front Panel Assembly (Sheet 1 of 2)

C-17/C-18 (Blank)

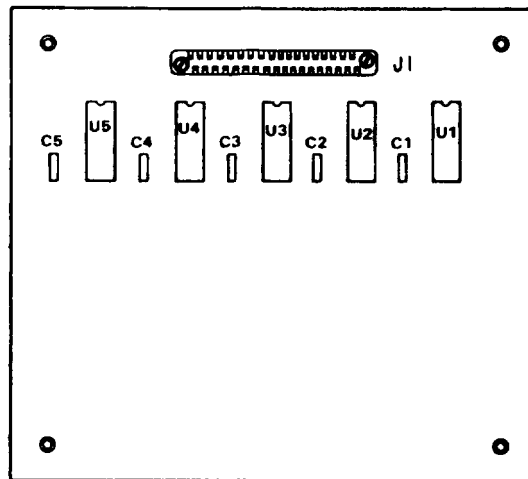
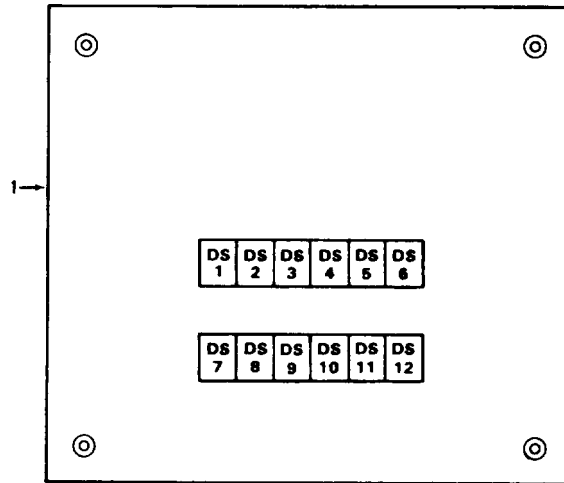
(1) ILLUSTRATION (A) FIG. NO	(2) (B) ITEM NO	(3) SMR CODE	(4) FEDERAL STOCK	(5) PART NUMBER	(6) FSCM	TM9-4933-227-13&P DESCRIPTION	(7) USABLE ON CODE	(8) QTY INC IN UNIT
						GROUP 0201 PANEL ASSEMBLY 9324504-001		
C-4	1	XADZZ		9324505	19203	PANEL	EA	1
C-4	2	PADZZ	5305-00-719-5064	MS51959-30	96906	SCREW, MACHINE	EA	4
C-4	3	PADZZ		9324474	19203	PLATE, COVER	EA	1
C-4	4	PADZZ		9324473	19203	GASKET	EA	1
C-4	5	PAFZZ	5310-00-883-9385	MS35338-155	96906	WASHER, LOCK	HD	4
C-4	6	PAFZZ	5310-00-616-8660	NAS671C6	80205	NUT, PLAIN, HEXAGON	HD	4
C-4	7	PAFZZ		9324497	19203	FILTER, ELECTRICAL, LINE	EA	1
C-4	8	PAFZZ		MS0035431-3	96906	LUG, SOLDER	EA	2
C-4	9	PAFZZ		9324596-32	19203	SPACER	EA	4
C-4	10	PAFZZ	5305-00-054-6656	MS51957-32	96906	SCREW, MACHINE	EA	1
C-4	11	PAFZZ		MS51957-33	96906	SCREW, MACHINE	EA	3
C-4	12	PAFZZ	6250-01-083-4678	9324582	19203	LAMPHOLDER	EA	2
C-4	13	PAFZZ	5305-00-054-5650	MS51957-16	96906	SCREW, MACHINE	EA	4
C-4	14	PAFZZ	4933-01-076-6770	9324501	19203	DIODE, LIGHT-EMITTING	EA	2
C-4	15	PAFZZ	5330-01-083-4666	9324573	19203	GASKET	EA	1
C-4	16	PAFZZ	5935-00-904-0778	MS3110E12-3P	96906	CONNECTOR, RECEPTACLE	EA	1
C-4	17	PAFZZ	5310-00-543-2410	MS35338-40	96906	WASHER, LOCK	EA	24
C-4	18	PAFZZ		MS35649-242	96906	NUT, HEXAGON	EA	12
C-4	19	PAFZZ	5925-01-080-2484	9324525	19203	CIRCUIT BREAKER	EA	1
C-4	20	PAFZZ	5930-00-227-5098	MS25089-3HR	96906	SWITCH, PUSH	EA	1
C-4	21	PAFZZ	5355-01-083-4665	9324535	19203	KNOB	EA	1
C-4	22	PAFZZ	5905-00-428-8504	RV4NAYS202A	81349	RESISTOR, VARIABLE	EA	1
C-4	23	PADZZ	5905-00-401-7426	RCR20G272JS	81349	RESISTOR, FIXED, COMPOSITION	EA	1
C-4	24	PADZZ		9324484	19203	SOCKET, TRANSISTOR	EA	1
C-4	25	PADZZ		9324493	19203	HEATSINK	EA	1
C-4	26	PADZZ	5305-00-054-6654	MS51957-30	96906	SCREW, MACHINE	EA	6
C-4	27	PADZZ		9324265	19203	TRANSISTOR, DARLINGTON AMPLIFIER	EA	1
C-4	28	PADZZ		9324324	19203	INSULATOR, MICA	EA	1
C-4	29	PADZZ		MS51959-16	96906	SCREW, MACHINE	EA	8
C-4	30	PAFZZ	4933-01-083-0544	9324528	19203	PAD, MOUNTING, DU	EA	1
C-4	31	PAFZZ	5305-01-083-4662	9324543-1	19203	SCREW, EXTERNALLY RELIEVED BODY	EA	18
C-4	32	PAFZZ	4933-01-083-0545	9324543-2	19203	RETAINER	EA	18
C-4	33	PAFZZ	5305-00-988-7602	MS16995-26	96906	SCREW, CAP, SOCKET HEAD	EA	4
C-4	34	PAFZZ		MS51959-28	96906	SCREW, MACHINE	EA	6
C-4	35	PAFZZ		9324547-16	19203	SPACER	EA	6
C-4	36	PAFZZ	5340-01-083-4680	9324533	19203	HANDLE, BAIL	EA	2
C-4	37	PAFZZ	5305-00-068-5407	MS16996-16	96906	SCREW, CAP, SOCKET HEAD	EA	2



AR 917834

C-5. Keyboard and Cable Assembly

(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 020101 KEYBOARD AND CABLE ASSEMBLY A17 9324592-001			
C-5	1	PADZZ	4933-01-083-0546	9324586-01	19203	HOUSING, CONNECTOR		EA	1
C-5	2	PADZZ	4933-01-083-0551	9324587-01	19203	INSERT, CONNECTOR		EA	18
C-5	3	PADZZ	4933-01-083-0553	9324587-05	19203	INSERT, CONNECTOR KEYING		EA	1
C-5	4	PADZZ	5910-00-460-0850	MS3368-4-9	96906	STRAP, TIEDOWN, TYPE II		EA	1
C-5	5	XADZZ		9324506	19203	KEYBOARD ASSY		EA	1
C-5	6	PADZZ		MS3367-4-9	96906	STRAP, TIEDOWN, TYPE I		EA	10
C-5	7	PADZZ		9324479-8	19203	LABEL, CONNECTOR REF DES		EA	1



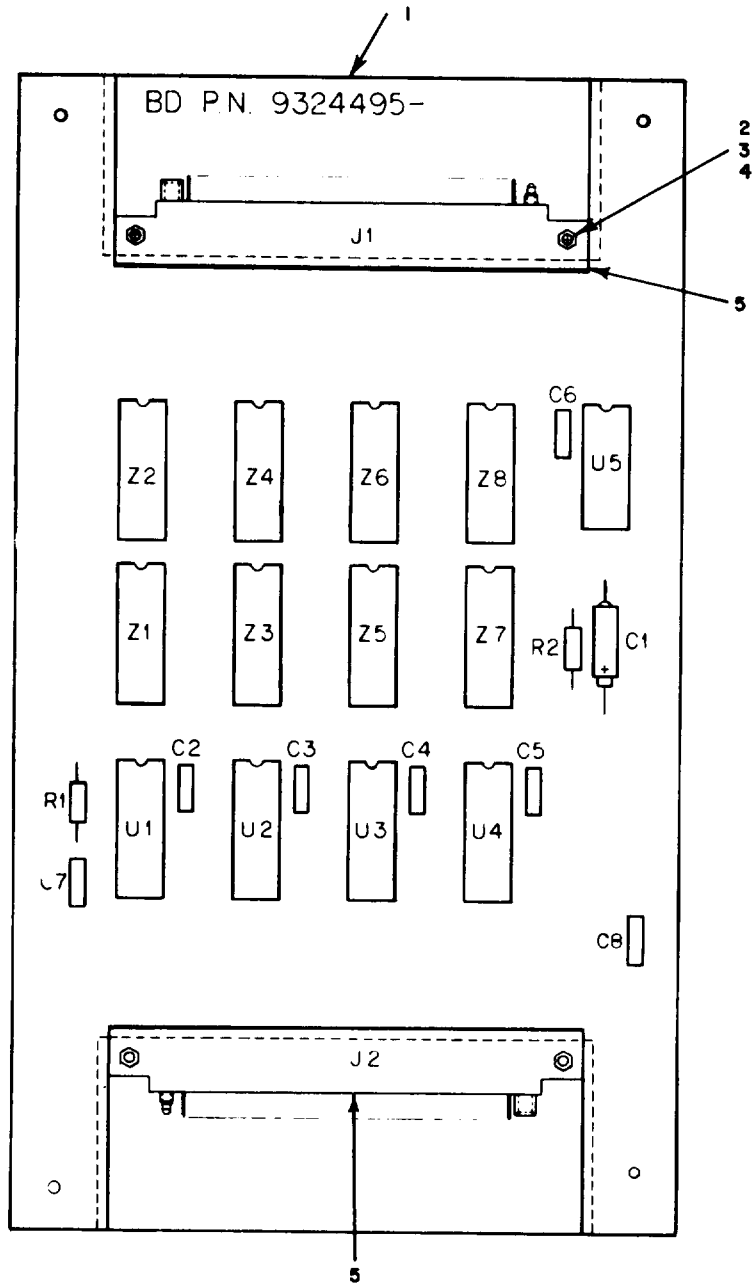
LEGEND

<u>Ref</u> <u>Des</u>	<u>Item</u> <u>No</u>	<u>Ref</u> <u>Des</u>	<u>Item</u> <u>No</u>
C1	2	DS8	3
C2	2	DS9	3
C3	2	DS10	3
C4	2	DS11	3
C5	2	DS12	3
DS1	3	J1	4
DS2	3	U1	5
DS3	3	U2	5
DS4	3	U3	5
DS5	3	U4	5
DS6	3	U5	5
DS7	3		

AR 917835

C-6. DisplayAssembly

(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 020102 DISPLAY ASSEMBLY A16 9324507-001			
C-6	1	XADZZ		9324536	19203	CIRCUIT BOARD		EA	1
C-6	2	PADZZ		M39014/05-2256	81349	CAPACITOR, FIXED, CER		EA	5
C-6	3	PADZZ	4933-01-083-0543	9324563	19203	DISPLAY, HEXADECIMAL		EA	12
C-6	4	PADZZ		M55302/56-B36	81349	CONNECTOR, RECEPTACLE, ELECTRICAL		EA	1
C-6	5	PADZZ		M38510/16301BEB	81349	MICROCIRCUIT, DIGITAL		EA	5



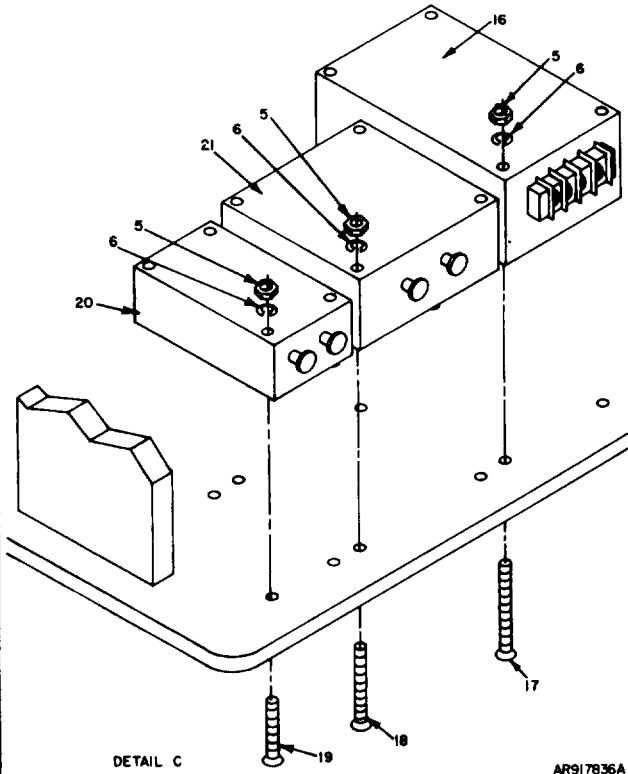
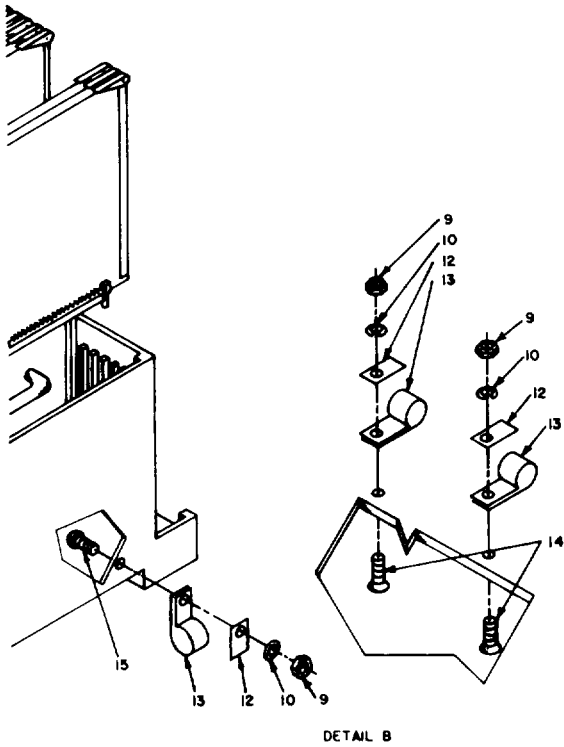
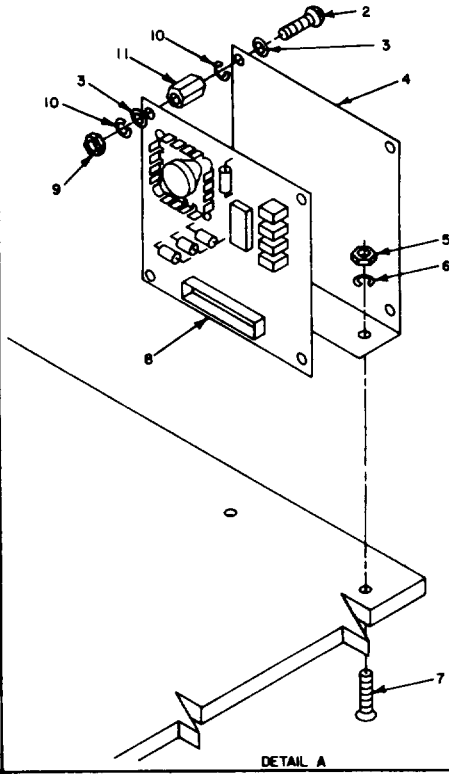
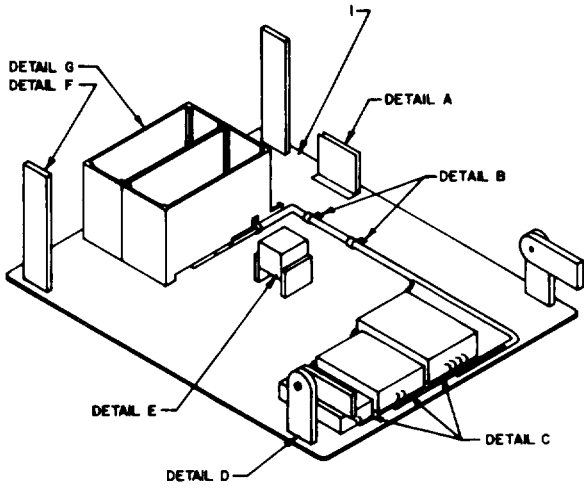
AR917859

LEGEND

Ref Des	Item No	Ref Des	Item No	Ref Des	Item No
C1	6	J1	5	U5	10
C2	7	J2	5	Z1	11
C3	7	P1	8	Z2	11
C4	7	R2	8	Z3	11
C5	7	U1	9	Z4	11
C6	7	U2	9	Z5	11
C7	7	U3	9	Z6	11
C8	7	U4	9	Z7	11
				Z8	11

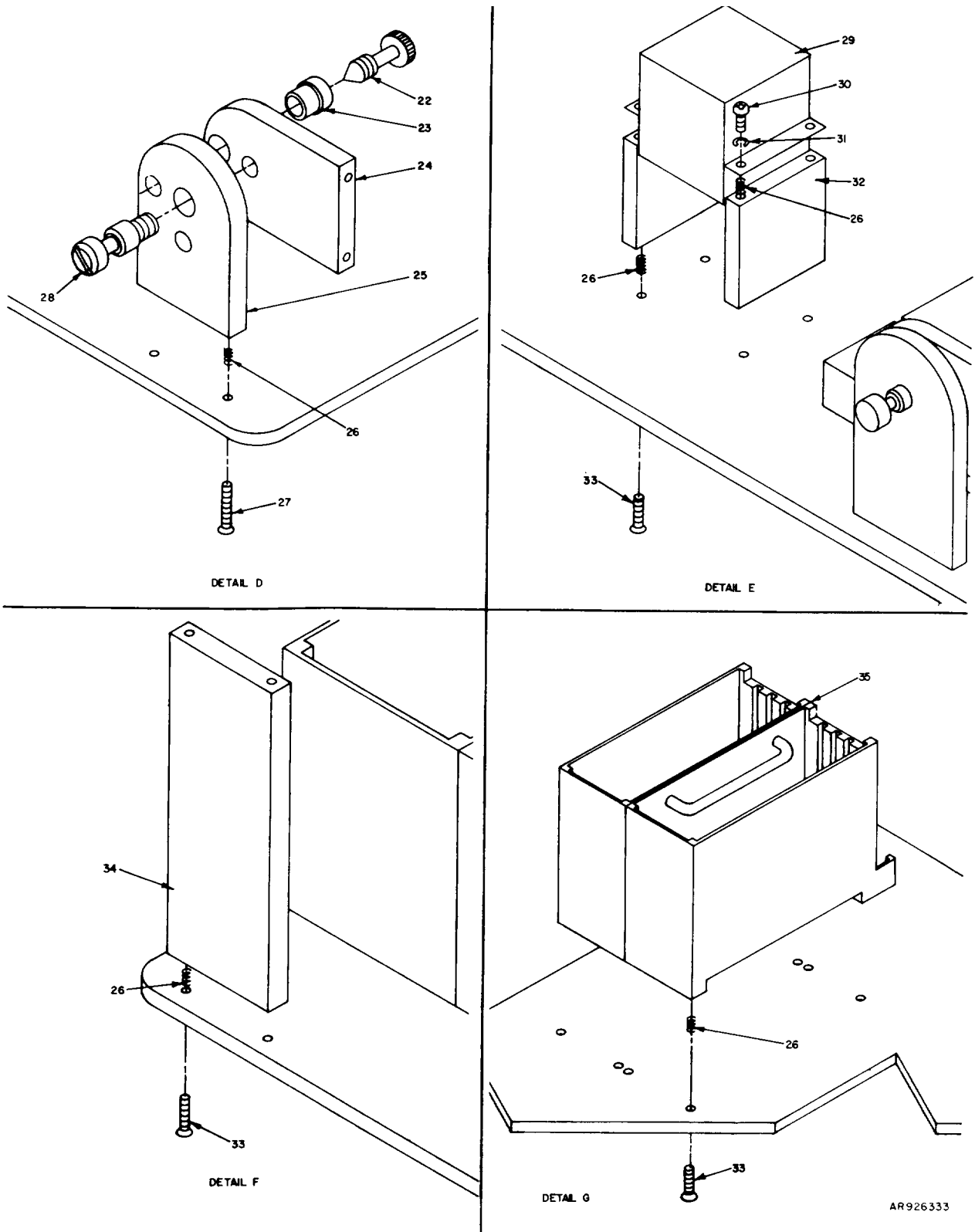
C-7. DU Cable Interface Assembly A14

(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 020103 CIRCUIT CARD ASSY A14, DU CABLE INTER 9324496-001			
C-7	1	XADZZ		9324495	19203	CIRCUIT BOARD		EA	1
C-7	2	PADZZ	5305-00-054-5648	MS51957-14	96906	SCREW, MACHINE		EA	4
C-7	3	PADZZ	5310-00-595-6211	MS15795-803	96906	WASHER, FLAT		EA	4
C-7	4	PADZZ	5310-00-208-3786	NAS671C4	80205	NUT, HEXAGON		EA	4
C-7	5	PADZZ		MS5302/61-A40	81349	CONNECTOR, ELECTRICAL		EA	2
C-7	6	PADZZ	5910-00-113-5475	M39003/01-2287	81349	CAPACITOR, ELCTLT		EA	1
C-7	7	PADZZ	5910-01-056-5472	M39014/01-1594	81349	CAPACITOR, FIXED		EA	7
C-7	8	PADZZ	5905-00-110-7620	RCR07G102JS	81349	RESISTOR, FIXED		EA	2
C-7	9	PADZZ		M38510/32203BEB	81349	MICROCIRCUIT, DIGITAL		EA	4
C-7	10	PADZZ	5962-01-031-7030	M38510/30001BCB	81349	MICROCIRCUIT, DIGITAL		EA	1
C-7	11	PADZZ		M8340102M1001JA	81349	NETWORK, RESISTOR		EA	8



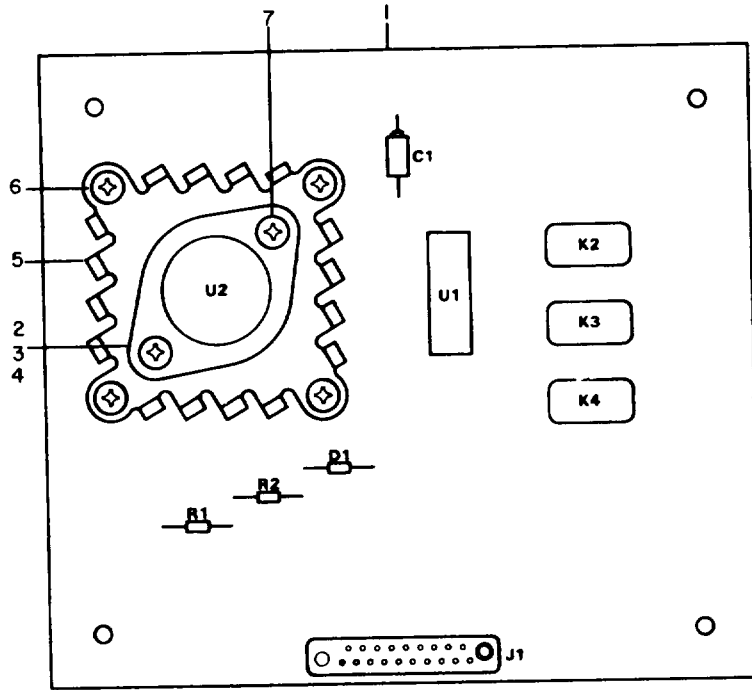
AR917836A

C-8. Backplate Assembly (Sheet 1 of 2)



C-8. Backplate Assembly (Sheet 2 of 2)

(1) ILLUSTRATION (A) FIG. NO	(2) (B) ITEM NO	(3) SMR CODE	(4) FEDERAL STOCK	(5) PART NUMBER	(6) FSCM DESCRIPTION	(7) USABLE ON CODE U/M	(8) QTY INC IN UNIT
					TM9-4933-227-13&P (6)		
					GROUP 0202 BACKPLATE ASSEMBLY 9324526-001		
C-8	1	XADZZ		9324508	19203 BACKPLATE	EA	1
C-8	2	PADZZ	5305-00-054-6656	MS1957-32	96906 SCREW, MACHINE	EA	4
C-8	3	PAFZZ		MS27183-5	96906 WASHER, FLAT	EA	8
C-8	4	MDDZZ		9324593	19203 BRACKET, MOUNTING	EA	1
C-8	5	PAFZZ	5310-00-934-9748	MS35649-244	96906 NUT, PLAIN, HEXAGON	EA	15
C-8	6	PAFZZ	5310-00-543-2410	MS35338-40	96906 WASHER, LOCK	EA	15
C-8	7	PADZZ		MS1959-16	96906 SCREW, MACHINE	EA	3
C-8	8	PAFDD	4933-01-076-6904	9324576-001	19203 CIRCUIT CARD ASSEMBLY A13, POWER CONTR	EA	1
C-8	9	PAFZZ		MS35649-64	96906 NUT, HEXAGON	EA	7
C-8	10	PADZZ		MS35338-136	96906 WASHER, LOCK	EA	11
C-8	11	PAFZZ	5365-01-083-4674	9324547-06	19203 SPACER	EA	4
C-8	12	PAFZZ		WC-D6-140	96906 WASHER, CABLE CLAMP	EA	3
C-8	13	PAFZZ		MS25281-R6	96906 CLAMP, CABLE	EA	3
C-8	14	PAFZZ	5305-00-719-5064	MS1959-30	96906 SCREW, MACHINE	EA	2
C-8	15	PADZZ	5305-00-054-6654	MS1957-30	96906 SCREW, MACHINE	EA	1
C-8	16	PAFZZ	4933-01-076-6794	9324552	19203 POWER SUPPLY	EA	1
C-8	17	PAFZZ	4933-01-083-6066	9324499-40	19203 SCREW	EA	4
C-8	18	PAFZZ		9324499-28	19203 SCREW	EA	4
C-8	19	PAFZZ	5305-01-052-3302	MS24693-12	96906 SCREW, MACHINE	EA	4
C-8	20	PAFZZ	4933-01-076-6793	9324513	19203 POWER SUPPLY	EA	1
C-8	21	PAFZZ	4933-01-076-6795	9324553	19203 POWER SUPPLY	EA	1
C-8	22	PAFZZ	5305-01-083-4661	9324575-1	19203 SCREW, EXTERNALLY, RELIEVED BODY	EA	1
C-8	23	PAFZZ	4933-01-084-0423	9324575-2	19203 RETAINER, SCREW	EA	1
C-8	24	PADZZ	4933-01-083-6072	9324545-2	19203 SPACER, PANEL, PIVOT	EA	2
C-8	25	PADZZ	4933-01-083-6073	9324545-3	19203 SPACER, PANEL, PIVOT	EA	2
C-8	26	PAFZZ		MS21208-A-20	96906 INSERT, HELICAL COIL	EA	24
C-8	27	PAFZZ	5305-00-071-1322	MS1960-65	96906 SCREW, MACHINE	EA	8
C-8	28	PAFZZ		9324558	19203 SCREW, SHOULDER	EA	2
C-8	29	PAFZZ		MS27418-28	96906 RELAY	EA	1
C-8	30	PAFZZ		MS1957-45	96906 SCREW, MACHINE	EA	4
C-8	31	PAFZZ		MS35338-132	96906 WASHER, LOCK	EA	4
C-8	32	PAFZZ		9324453	19203 SPACER, RELAY	EA	2
C-8	33	PADZZ		MS159-43	96906 SCREW, MACHINE	EA	12
C-8	34	PAFZZ	4933-01-083-6071	9324545-1	19203 SPACER, PANEL	EA	2
C-8	35	PADDD	5975-01-083-4671	9324514-001	19203 CARD CAGE ASSEMBLY	EA	1



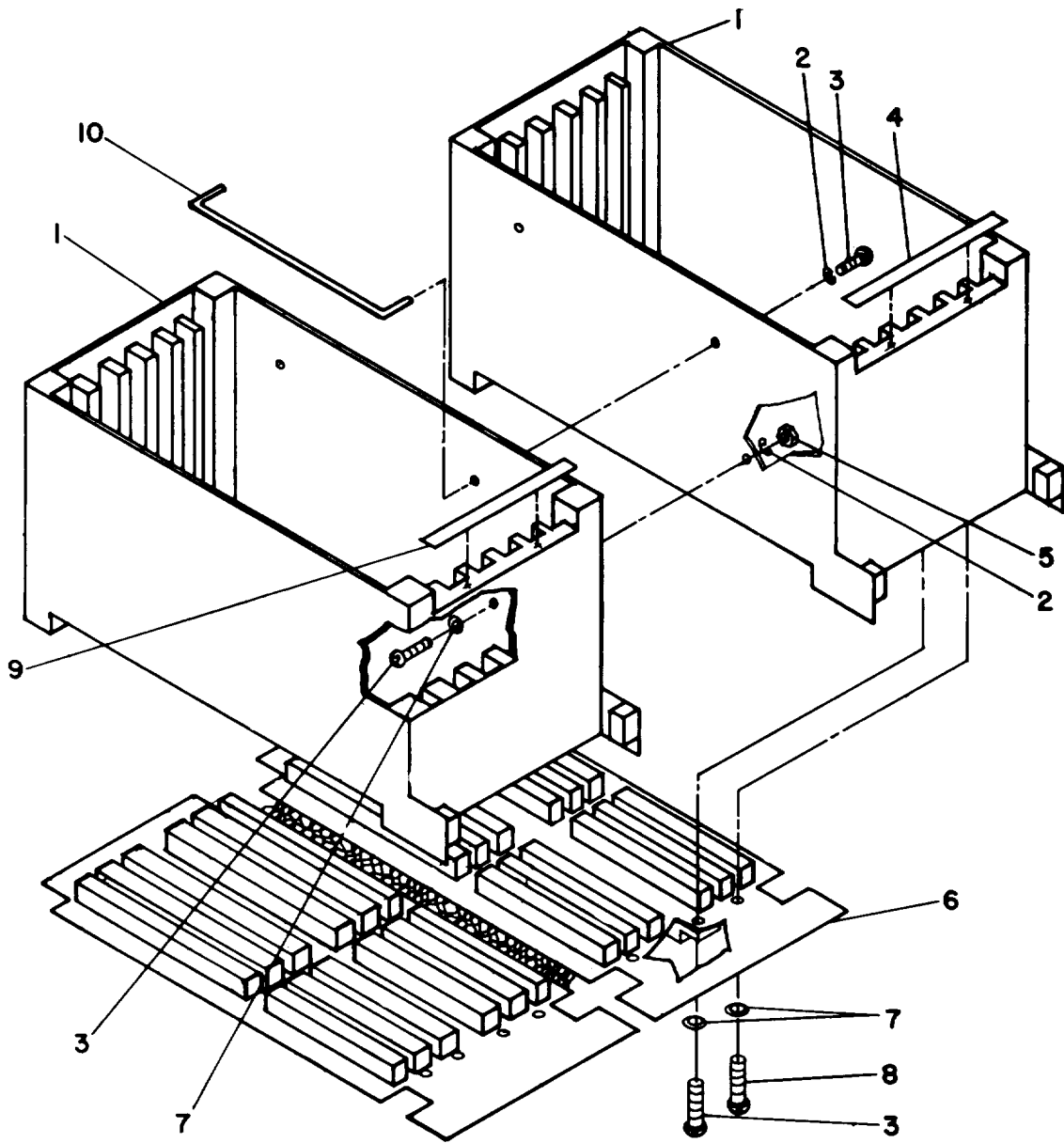
LEGEND

<u>Ref</u> <u>Des</u>	<u>Item</u> <u>No</u>	<u>Ref</u> <u>Des</u>	<u>Item</u> <u>No</u>
C1	8	K4	11
D1	9	R1	12
J1	10	R2	13
K2	11	U1	14
K3	11	U2	15

AR917837A

Figure C-9. Power Control Circuit Card Assembly A13

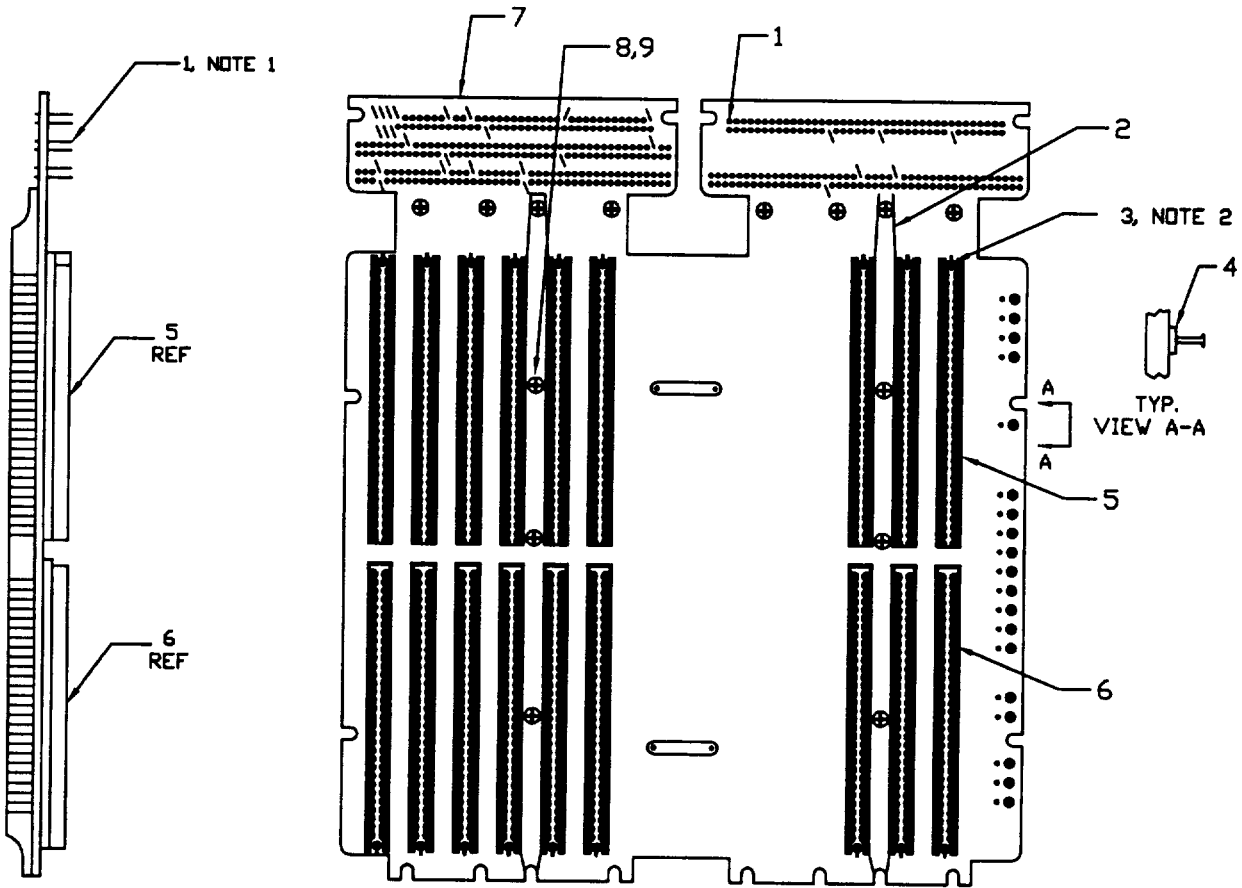
(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 020201 CIRCUIT CARD ASSY A13, POWER CONTROL 9324576-001			
C-9	1	XADZZ		9324577	19203	CIRCUIT BOARD		EA	1
C-9	2	PADZZ	5305-00-054-5649	MS51957-15	96906	SCREW, MACHINE		EA	2
C-9	3	PADZZ	5310-00-208-3786	NAS671C4	80205	NUT, FLAIN, HEXAGON		EA	6
C-9	4	PADZZ	5310-00-193-7577	MS35333-36	96906	LOCKWASHER		EA	2
C-9	5	PADZZ	5999-01-083-4686	9324579	19203	HEATSINK		EA	1
C-9	6	PADZZ	5305-00-054-5647	MS51957-13	96906	SCREW, MACHINE		EA	4
C-9	7	PADZZ	5310-00-933-8118	MS35338-135	96906	LOCKWASHER		EA	5
C-9	8	PADZZ	5910-00-460-0850	M39003/01-2357	81349	CAPACITOR, FIXED, ELCTLT		EA	1
C-9	9	PADZZ	5961-01-073-5463	JAN1N4105	81349	SEMICONDUCTOR DEVICE, DIODE		EA	1
C-9	10	PADZZ	5935-01-023-3018	M55302/56-B20	81349	CONNECTOR, RECEPTACLE, ELECTRICAL		EA	1
C-9	11	PADZZ	5945-01-010-5767	M39016/13-057M	81349	RELAY, ARMATURE		EA	3
C-9	12	PADZZ	5905-00-203-1478	RNC55H2430FS	81349	RESISTOR, FIXED, FILM		EA	1
C-9	13	PADZZ	5905-00-629-3102	RNC55H1431FS	81349	RESISTOR, FIXED, FILM		EA	1
C-9	14	PADZZ	5962-01-077-8969	9324292	19203	MICROCIRCUIT DIGITAL		EA	1
C-9	15	PADZZ		9324578	19203	MICROCIRCUIT		EA	1



AR917838A

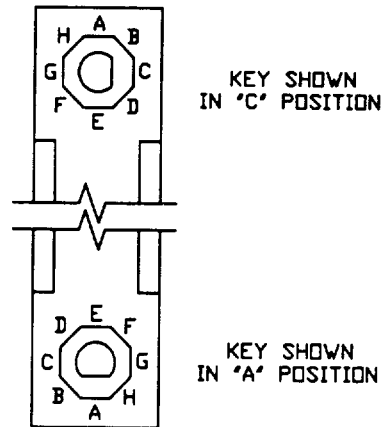
C-10. Card Cage. Assembly

(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 020202 CARD CAGE ASSEMBLY 9324514-001			
C-10	1	XADZZ		9324594	19203	CARD CAGE		EA	1
C-10	2	PADZZ	5310-00-929-6395	MS35338-136	96906	WASHER, LOCK		EA	7
C-10	3	PADZZ	5305-00-054-6654	MS1957-30	96906	SCREW, MACHINE		EA	11
C-10	4	PADZZ	7690-01-120-0415	9324481-2	19203	LABEL, CONNECTOR REF DES		EA	1
C-10	5	PADZZ	5310-00-934-9747	MS35649-262	96906	NUT, FLAIN, HEX		EA	5
C-10	6	PADDD	5998-01-339-7405	12927276	19203	MOTHERBOARD WIRING ASSEMBLY		EA	1
C-10	7	PADZZ	5310-00-722-5998	MS15795-805	96906	WASHER, FLAT		EA	33
C-10	8	PADZZ	5305-00-054-6652	MS1957-28	96906	SCREW, MACHINE		EA	24
C-10	9	PADZZ	7690-01-120-0414	324481-1	19203	LABEL, CONNECTOR REF DES		EA	1
C-10	10	PADZZ	5340-01-120-0531	9324461	19203	BAR, CABLE TIE		EA	1



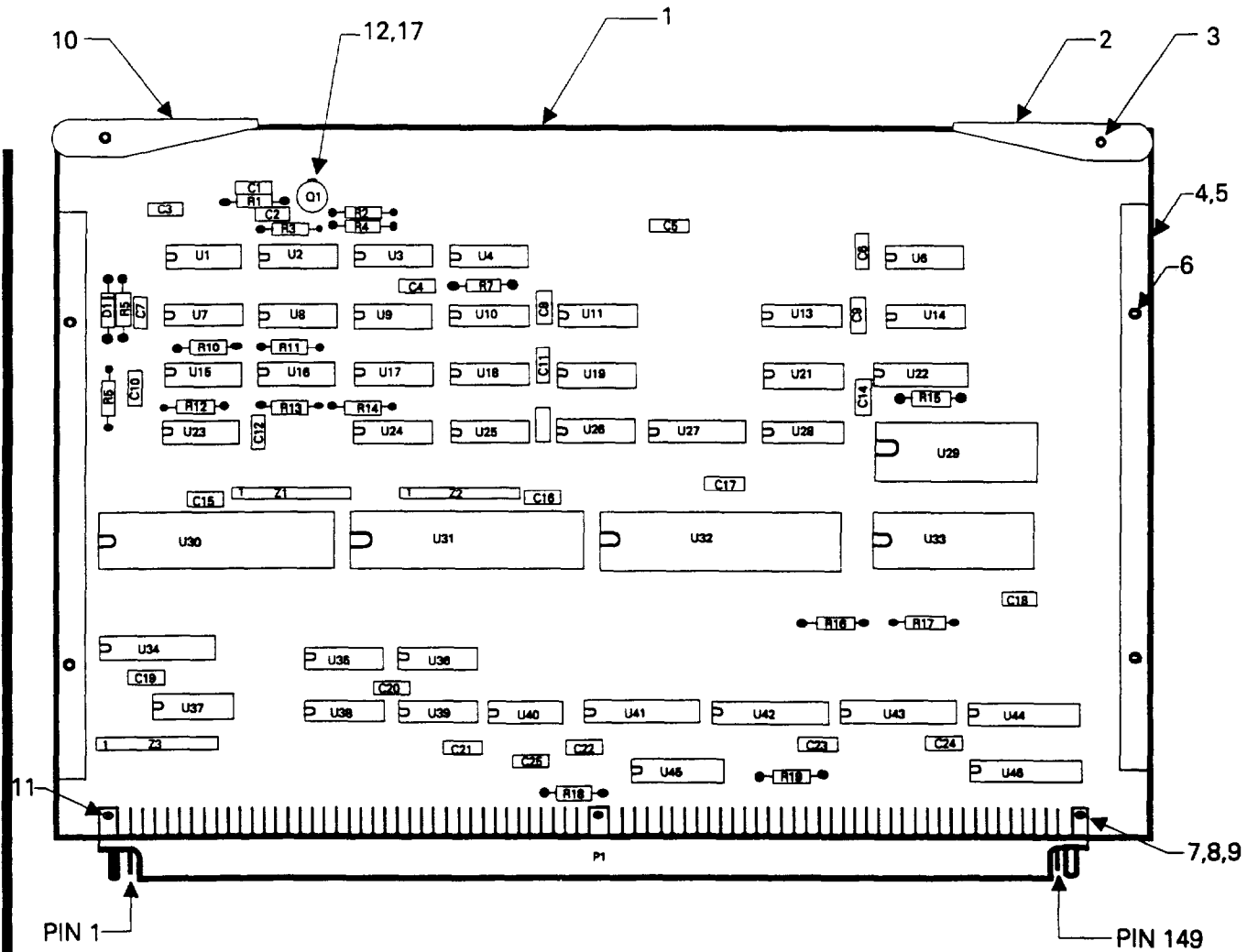
NOTES:

1. ARROWS INDICATE HOLES WITHOUT PINS
2. REFERENCE KEY ORIENTATION DESIGNATION.



■ Figure C-11. Motherboard Wiring Assembly

(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 02020201 MOTHERBOARD WIRING ASSEMBLY 12927276			
C-11	1	PADZZ		M28859/4D-02	19203	TERMINALS, FEED THROUGH		EA	396
C-11	2	PADZZ		9324492	19200	BAR, SUPPORT		EA	2
C-11	3	PADZZ		M28754/39B-002	19203	KEY, POLARIZING		EA	18
C-11	4	PADZZ	5940-00-082-4975	M55155/29-12	19203	TERMINAL, TURRET		EA	19
C-11	5	PADZZ	5935-01-353-5842	12927273-001	19203	CONNECTOR, SPACER ASSEMBLY		EA	9
C-11	6	PADZZ	5935-01-349-8035	12927273-002	19203	CONNECTOR, SPACER ASSEMBLY		EA	9
C-11	7	XADZZ		12927269	19200	PRINTED CIRCUIT BOARD, MOTHERBOARD ASSEMBLY		EA	1
C-11	8	PADZZ	5310-00-951-4679	MS27183-3	96906	WASHER, FLAT		EA	6
C-11	9	PADZZ	5305-00-054-5649	MS51957-15	96906	SCREW, PH		EA	6



REF	ITEM	REF	ITEM	REF	ITEM	REF	ITEM	REF	ITEM
DES	NO.	DES	NO.	DES	NO.	DES	NO.	DES	NO.
C1	13	C20	13	R11	23	U11	33	U30	40
C2	14	C21	13	R12	21	U12	28	U31	40
C3	13	C22	13	R13	20	U13	34	U32	41
C4	13	C23	13	R14	23	U14	34	U33	42
C5	13	C24	13	R15	24	U15	35	U34	43
C6	13	C25	15	R16	24	U16	32	U35	44
C7	13	D1	16	R17	24	U17	29	U36	38
C8	13	P1	11	R18	21	U18	29	U37	33
C9	13	Q1	17	R19	20	U19	36	U38	44
C10	15	R1	18	U1	25	U20	28	U39	44
C11	13	R2	19	U2	26	U21	29	U40	44
C12	13	R3	20	U3	27	U22	37	U41	43
C13	13	R4	19	U4	27	U23	32	U42	43
C14	13	R5	21	U5	28	U24	38	U43	43
C15	13	R6	22	U6	29	U25	36	U44	43
C16	13	R7	20	U7	30	U26	34	U45	45
C17	13	R8	20	U8	31	U27	37	U46	43
C18	13	R9	20	U9	32	U28	29	Z1	46
C19	13	R10	20	U10	32	U29	39	Z2	46
								Z3	46

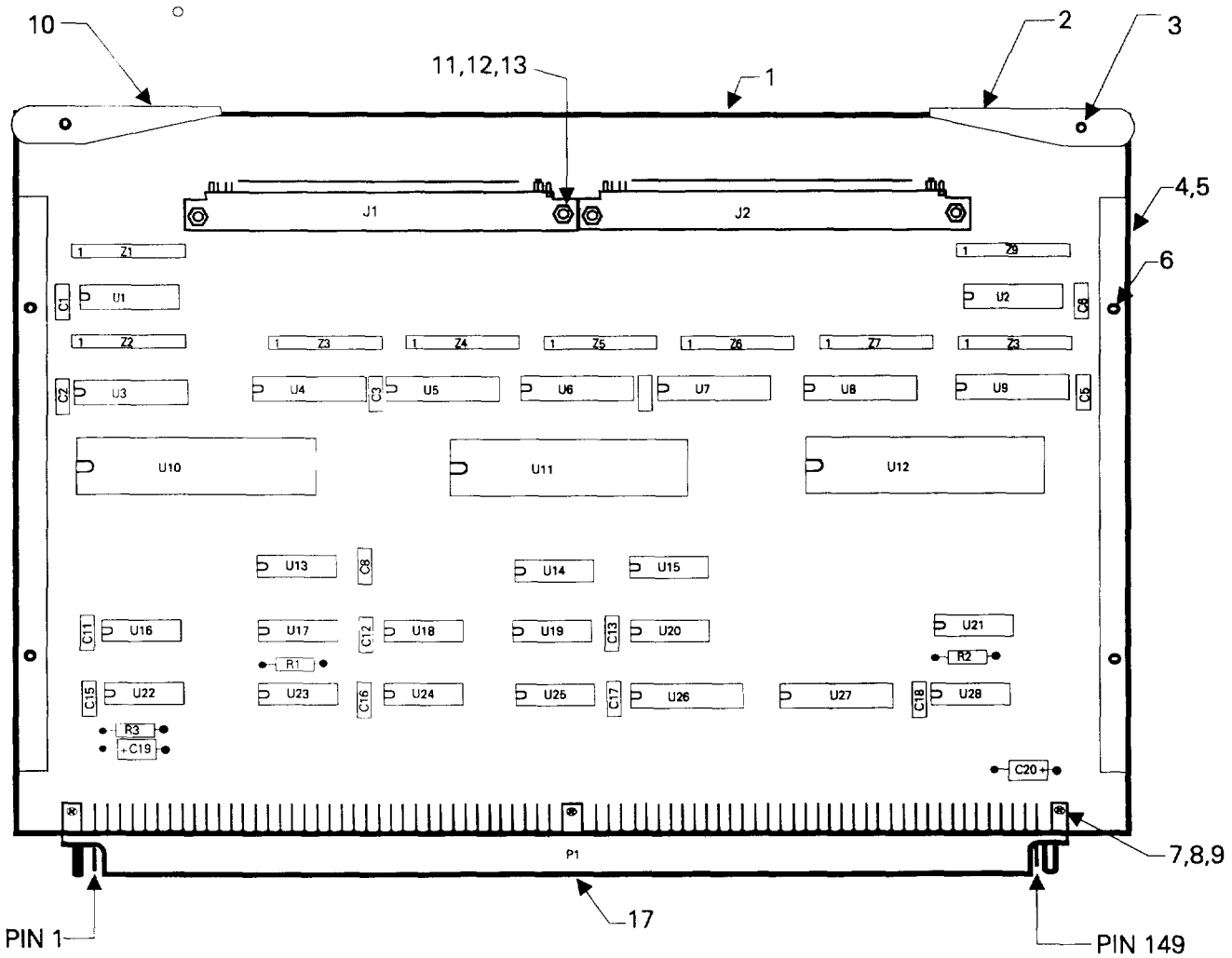
Figure C-12. CPU Circuit Card Assembly A2

(1) ILLUSTRATION (A) FIG. NO	(2) (B) ITEM NO	(3) SMR CODE	(4) FEDERAL STOCK	(5) PART NUMBER	(6) FSCM DESCRIPTION	(7) USABLE ON CODE U/M	(8) QTY INC IN UNIT
					TM9-4933-227-13&P (6)		
					GROUP 0203 CIRCUIT CARD ASSEMBLY A2, CPU 12927275		
C-12	1	XADZZ		12927267	19200 PRINTED CIRCUIT BOARD, CPU ASSEMBLY	EA	1
C-12	2	PADDD	4933-01-083-6061	12927272-1	19203 EXTRACTOR, CIRCUIT CARD	EA	1
C-12	3	PADZZ	5940-00-825-5029	MS171432	96906 PIN, ROLL	EA	2
C-12	4	PADZZ	4933-01-083-6064	9324542	19203 PLATE, RETAINING	EA	2
C-12	5	PADZZ	4933-01-083-6063	9324546	19203 RETAINER, CIRCUIT CARD	EA	2
C-12	6	PADZZ	5305-01-168-5623	12011850	19200 SCREW, FH	EA	4
C-12	7	PADZZ		12011851	19200 SCREW	EA	3
C-12	8	PADZZ	5310-01-193-4603	67541	73734 WASHER	EA	3
C-12	9	PADZZ	5310-00-105-4086	MS35650-314	96906 NUT	EA	3
C-12	10	PADZZ	4933-01-083-6062	9324549-2	19203 EXTRACTOR, CIRCUIT CARD	EA	1
C-12	11	PADZZ		9324551-1	19203 CONNECTOR, ELECTRICAL	EA	1
C-12	12	PADZZ	5999-01-054-6449	M38527/03-001D	81349 PAD	EA	1
C-12	13	PADZZ	5910-01-313-7589	M39014/01-1539	81349 CAPACITOR	EA	22
C-12	14	PADZZ	5910-00-113-5445	M39014/01-1339	81349 CAPACITOR	EA	1
C-12	15	PADZZ	5910-01-232-3347	CX06K106K	81349 CAPACITOR	EA	2
C-12	16	PADZZ	5961-01-022-5664	JANTX1N914	81349 SEMICONDUCTOR DEVICE, DIODE	EA	1
C-12	17	PADZZ	5961-00-925-3777	JAN2N2907A	81349 TRANSISTOR	EA	1
C-12	18	PADZZ	5905-00-111-4845	RCR07G201JS	81349 RESISTOR	EA	1
C-12	19	PADZZ	5905-00-135-3972	RCR07G200JS	81349 RESISTOR	EA	2
C-12	20	PADZZ	5905-00-110-7620	RCR07G102JS	81349 RESISTOR	EA	7
C-12	21	PADZZ	5905-00-106-3666	RCR07G103JS	81349 RESISTOR	EA	3
C-12	22	PADZZ	5905-00-110-0388	RCR07G104JS	81349 RESISTOR	EA	1
C-12	23	PADZZ	5905-00-111-4727	RCR07G272JS	81349 RESISTOR	EA	2
C-12	24	PADZZ	5905-00-114-0711	RCR07G472JS	81349 RESISTOR	EA	3
C-12	25	PADZZ		M38510/16-B-31A	81349 OSCILLATOR, XTAL	EA	1
C-12	26	PADZZ	5962-01-268-3515	M38510/07003BCX	81349 MICROCIRCUIT, DIGITAL	EA	1
C-12	27	PADZZ	5962-01-262-1543	M38510/32702BCX	81349 MICROCIRCUIT, DIGITAL	EA	2

CHANGE 2

C-37/C-38 (BLANK)

(1) ILLUSTRATION (A) FIG. NO	(2) (B) ITEM NO	(3) SMR CODE	(4) FEDERAL STOCK	(5) PART NUMBER	(6) FSCM DESCRIPTION	(7) USABLE ON CODE	(8) QTY INC IN UNIT
					GROUP 0203 CIRCUIT CARD ASSEMBLY A2, CPU 12927275		
C-12	28	PADZZ		M38510/31504BEX	81349 MICROCIRCUIT, DIGITAL	EA	3
C-12	29	PADZZ	5962-01-135-0921	M38510/30501BCX	81349 MICROCIRCUIT, DIGITAL	EA	5
C-12	30	PADZZ	5962-01-262-1541	M38510/31302BC	81349 MICROCIRCUIT, DIGITAL	EA	1
C-12	31	PADZZ	5962-01-249-8044	M38510/31501BCA	81349 MICROCIRCUIT, DIGITAL	EA	1
C-12	32	PADZZ	5962-01-058-1539	M38510/30102BCX	81349 MICROCIRCUIT, DIGITAL	EA	4
C-12	33	PADZZ	5962-01-027-6863	M38510/30003BCB	81349 MICROCIRCUIT, DIGITAL	EA	2
C-12	34	PADZZ	5962-01-031-7030	M38510/30001BCB	81349 MICROCIRCUIT, DIGITAL	EA	3
C-12	35	PADZZ	5962-01-139-6234	M38510/00801BCB	81349 MICROCIRCUIT, DIGITAL	EA	1
C-12	36	PADZZ	5962-01-091-8196	M38510/30007BCX	81349 MICROCIRCUIT, DIGITAL	EA	2
C-12	37	PADZZ	5962-01-050-0918	M38510/30701BEX	81349 MICROCIRCUIT, DIGITAL	EA	2
C-12	38	PADZZ	5962-01-279-0966	M38510/31004BCX	81349 MICROCIRCUIT, DIGITAL	EA	2
C-12	39	PADZZ		12927266	19203 MICROCIRCUIT, DIGITAL	EA	1
C-12	40	PADZZ		12926760	19203 MICROCIRCUIT, DIGITAL	EA	2
C-12	41	PADZZ	5962-01-397-4923	M38510/48001BQX	81349 MICROCIRCUIT, Z80A CPU	EA	1
C-12	42	PADZZ		12927262	19203 MICROCIRCUIT, EEPROM	EA	1
C-12	43	PADZZ	5962-01-093-8823	M38510/32401BRX	81349 MICROCIRCUIT, DIGITAL	EA	6
C-12	44	PADZZ	5962-01-386-4250	M38510/00803BCX	81349 MICROCIRCUIT, DIGITAL	EA	4
C-12	45	PADZZ	5962-01-135-0575	M38510/32203BEX	81349 MICROCIRCUIT, DIGITAL	EA	1
C-12	46	PADZZ	5905-01-224-0255	M8340109M1001JC	81349 NETWORK, RESISTOR	EA	3



REF	ITEM	REF	ITEM	REF	ITEM	REF	ITEM
DES	NO.	DES	NO.	DES	NO.	DES	NO.
C1	14	C19	15	U9	19	U25	29
C2	14	C20	15	U10	20	U26	19
C3	14	J1	16	U11	20	U27	19
C4	14	J2	16	U12	20	U28	27
C5	14	R1	18	U13	21	Z1	30
C6	14	R2	18	U14	22	Z2	30
C7	14	R3	18	U15	22	Z3	30
C8	14	U1	19	U16	23	Z4	30
C9	14	U2	19	U17	23	Z5	30
C10	14	U3	19	U18	24	Z6	30
C11	14	U4	19	U19	25	Z7	30
C12	14	U5	19	U20	26	Z8	30
C13	14	U6	19	U21	27	Z9	30
C14	14	U7	19	U22	23		
C15	14	U8	19	U23	23		
C16	14			U24	28		
C17	14						
C18	14						

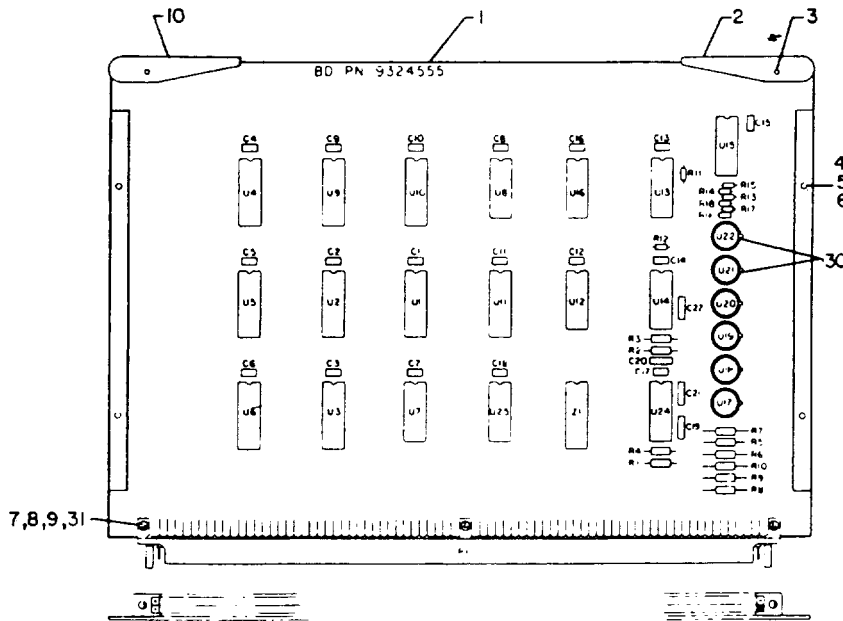
Figure C-13. I/O Circuit Card Assembly A3

(1) ILLUSTRATION (A) FIG. NO	(2) (B) ITEM NO	(3) SMR CODE	(4) FEDERAL STOCK	(5) PART NUMBER	(6) FSCM DESCRIPTION	(7) USABLE ON CODE U/M	(8) QTY INC IN UNIT
					TM9-4933-227-13&P (6)		
					GROUP 0204 CIRCUIT CARD ASSEMBLY A3, I/O 12927274		
C-13	1	XADZZ		12927268	19200 PRINTED CIRCUIT BOARD I/O ASSEMBLY	EA	1
C-13	2	PADDD	4933-01-083-6061	12927272-1	19203 EXTRACTOR, CIRCUIT CARD	EA	1
C-13	3	PADZZ	5940-00-825-5029	MS17143-2	96906 PIN, ROLL	EA	2
C-13	4	PADZZ	933-01-083-6064	9324542	19203 PLATE, RETAINING	EA	2
C-13	5	PADZZ	4933-01-083-6063	9324546	19203 RETAINER, CIRCUIT CARD	EA	2
C-13	6	PADZZ	5305-01-168-5623	12011850	19200 SCREW, FH	EA	4
C-13	7	PADZZ		12011851	19200 SCREW	EA	3
C-13	8	PADZZ	5310-01-193-4603	67541	73734 WASHER	EA	3
C-13	9	PADZZ	5310-00105-4086	MS35650-314	96906 NUT	EA	3
C-13	10	PADZZ	4933-01-083-6062	9324549-2	19203 EXTRACTOR, CIRCUIT CARD	EA	1
C-13	11	PADZZ	5310-00-595-6211	MS15795-803	96906 WASHER	EA	4
C-13	12	PADZZ	5310-00-208-3786	NSA671C4	80205 NUT	EA	4
C-13	13	PADZZ	5305-00-054-5649	MS51957-15	96906 SCREW, MACHINE	EA	4
C-13	14	PADZZ	5910-00-010-8717	M39014/01-1593	81349 CAPACITOR	EA	18
C-13	15	PADZZ	5310-01-330-4470	M39003/01-6025	81349 CAPACITOR	EA	2
C-13	16	PADZZ	5935-01-123-0775	M55302/61-B44	81349 CONNECTOR, ELECTRICAL	EA	2
C-13	17	PADZZ		9324551-2	19203 CONNECTOR, ELECTRICAL	EA	1
C-13	18	PADZZ	5905-00-114-0711	RCR07G472JS	81349 RESISTOR	EA	3
C-13	19	PADZZ	5962-01-093-8823	M38510/32401BRX	81349 MICROCIRCUIT, DIGITAL	EA	11
C-13	20	PADZZ	5962-01-072-4143	12927260	19203 MICROCIRCUIT, DIGITAL	EA	3
C-13	21	PADZZ	5962-01-058-1539	M38510/30102BCX	81349 MICROCIRCUIT, DIGITAL	EA	1
C-13	22	PADZZ	5962-01-135-0921	M38510/30501BCX	81349 MICROCIRCUIT, DIGITAL	EA	2
C-13	23	PADZZ		M38510/30504BCX	81349 MICROCIRCUIT, DIGITAL	EA	4
C-13	24	PADZZ	5962-01-246-0880	M38510/30605BCX	81349 MICROCIRCUIT, DIGITAL	EA	1
C-13	25	PADZZ	5962-01-139-6234	M38510/00801BCX	81349 MICROCIRCUIT, DIGITAL	EA	1
C-13	26	PADZZ	5962-01-268-3515	M38510/07003BCX	81349 MICROCIRCUIT, DIGITAL	EA	1
C-13	27	PADZZ	5962-01-050-0918	M38510/30701BEX	81349 MICROCIRCUIT, DIGITAL	EA	2

CHANGE 2

C-41/C-42 (BLANK)

(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 0204 CIRCUIT CARD ASSEMBLY A3, I/O 12927274 (CONTINUED)			
C-13	28	PADZZ	5962-01-249-5429	M38510/32204BEA	81349	MICROCIRCUIT, DIGITAL		EA	1
C-13	29	PADZZ	5962-01-074-4120	M38510/3000BCX	81349	MICROCIRCUIT, DIGITAL		EA	1
C-13	30	PADZZ	5905-01-224-0255	M8340109M1001JC	81349	NETWORK, RESISTOR		EA	9

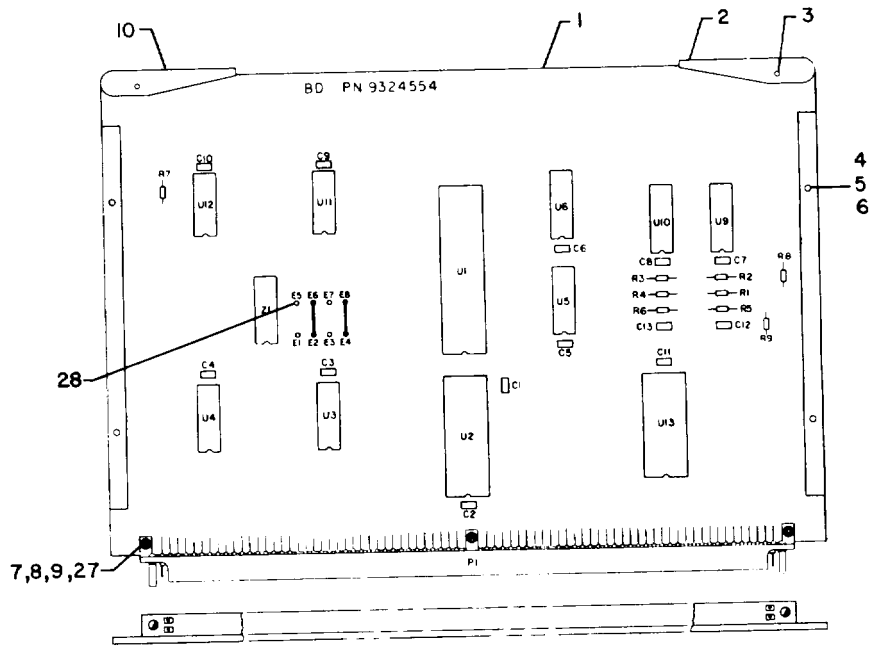


LEGEND

Ref Des	Item No	Ref Des	Item No	Ref Des	Item No
C1	12	P1	11	U4	18
C2	12	R1	33	U5	19
C3	12	R2	33	U6	19
C4	12	R3	33	U7	20
C5	12	R4	33	U8	21
C6	12	R5	14	U9	18
C7	12	R6	14	U10	22
C8	12	R7	14	U11	23
C9	12	R8	14	U12	24
C10	12	R9	14	U13	25
C11	12	R10	14	U14	26
C12	12	R11	15	U15	24
C13	12	R12	13	U16	24
C14	12	R13	16	U17	27
C15	12	R14	16	U18	27
C16	12	R15	16	U19	27
C17	12	R16	16	U20	27
C18	12	R17	16	U21	27
C19	32	R18	16	U22	27
C20	32	U1	17	U23	26
C21	32	U2	17	U24	28
C22	32	U3	17	Z1	29

Figure C-14. DU Interface Circuit Card Assembly A2

(1) ILLUSTRATION (A) FIG. NO	(2) (B) ITEM NO	(3) SMR CODE	(4) FEDERAL STOCK	(5) PART NUMBER	(6) FSCM DESCRIPTION	(7) U/M	(8) QTY INC IN UNIT
TM9-4933-227-13&P							
(6)							
GROUP 0205 CIRCUIT CARD ASSY A7, DU INTERFACE							
9324521-001							
C-14	1	XADZZ		9324555	19203	CIRCUIT BOARD	EA 1
C-14	2	PADZZ	4933-01-083-6061	9324549-1	19203	EXTRACTOR, CIRCUIT CARD	EA 1
C-14	3	PADZZ	5315-00-847-3735	MS16562-190	96906	PIN, SPRING	EA 2
C-14	4	PADZZ	4933-01-083-6063	9324546	19203	RETAINER, CIRCUIT CARD	EA 2
C-14	5	PADZZ	4933-01-083-6064	9324542	19203	PLATE, RETAINING	EA 2
C-14	6	PADZZ		64424	73734	SCREW, FH	EA 4
C-14	7	PADZZ		64448	73734	SCREW	EA 3
C-14	8	PADZZ		67541	73734	WASHER	EA 3
C-14	9	PADZZ	5310-00-105-4086	MS35650-314	96906	NUT, PLAIN, HEXAGON	EA 3
C-14	10	PADZZ	4933-01-083-6062	9324549-2	19203	EXTRACTOR, CIRCUIT CARD	EA 1
C-14	11	PADZZ		9324551-7	19203	CONNECTOR PLUG, ELECTRICAL	EA 1
C-14	12	PADZZ	5910-01-056-5472	M39014/01-1594	81349	CAPACITOR, FIXED, CER	EA 18
C-14	13	PADZZ	5905-00-689-1290	RCR05G512JS	81349	RESISTOR, FIXED, COMP	EA 1
C-14	14	PADZZ	5905-00-401-7426	RCR20G272JS	81349	RESISTOR, FIXED, COMP	EA 6
C-14	15	PADZZ	5905-00-617-5091	RCR05G472JS	81349	RESISTOR, FIXED, COMP	EA 1
C-14	16	PADZZ	5905-01-035-5065	RCR05G103JS	81349	RESISTOR, FIXED, COMP	EA 6
C-14	17	PADZZ		M38510/32202BEB	81349	MICROCIRCUIT	EA 3
C-14	18	PADZZ		M38510/32203BEB	81349	MICROCIRCUIT	EA 2
C-14	19	PADZZ	5962-01-083-4684	9324307	19203	MICROCIRCUIT, DIGITAL	EA 2
C-14	20	PADZZ	5962-01-027-6863	M38510/30003BCB	81349	MICROCIRCUIT DIGITAL	EA 1
C-14	21	PADZZ		M38510/31001BCB	81349	MICROCIRCUIT	EA 1
C-14	22	PADZZ	5962-01-050-0918	M38510/30701BEB	81349	MICROCIRCUIT, DIGITAL	EA 1
C-14	23	PADZZ	5962-01-065-7026	M38510/31504BEB	81349	MICROCIRCUIT, DIGITAL	EA 1
C-14	24	PADZZ	5962-00-369-9839	M38510/00803BCB	81349	MICROCIRCUIT	EA 3
C-14	25	PADZZ	5962-00-361-8732	M38510/00801BCB	81349	MICROCIRCUIT	EA 1
C-14	26	PADZZ	5962-01-031-7030	M38510/30001BCB	81349	MICROCIRCUIT DIGITAL	EA 2
C-14	27	PADZZ		JAN4N23A	81349	ISOLATOR	EA 6
C-14	28	PADZZ	5962-01-050-0916	M38510/31303BCB	81349	MICROCIRCUIT, DIGITAL	EA 1
C-14	29	PADZZ	5905-01-068-9313	M8340102M1002JB	81349	NETWORK, RESISTOR	EA 1
C-14	30	PADZZ	5999-01-064-9543	M38527/2-05D	81349	PAD, TRANSISTOR	EA 6
C-14	31	PADZZ	5310-00-804-0141	MS15795-801	96906	WASHER, FLAT	EA 6
C-14	32	PADZZ		M39014/01-1357	81349	CAPACITOR, FIXED, CERAMIC	EA 4
C-14	33	PADZZ	5905-00-106-1356	RCR07G152JS	81349	RESISTOR, FIXED, COMPOSITION	EA 4



LEGEND

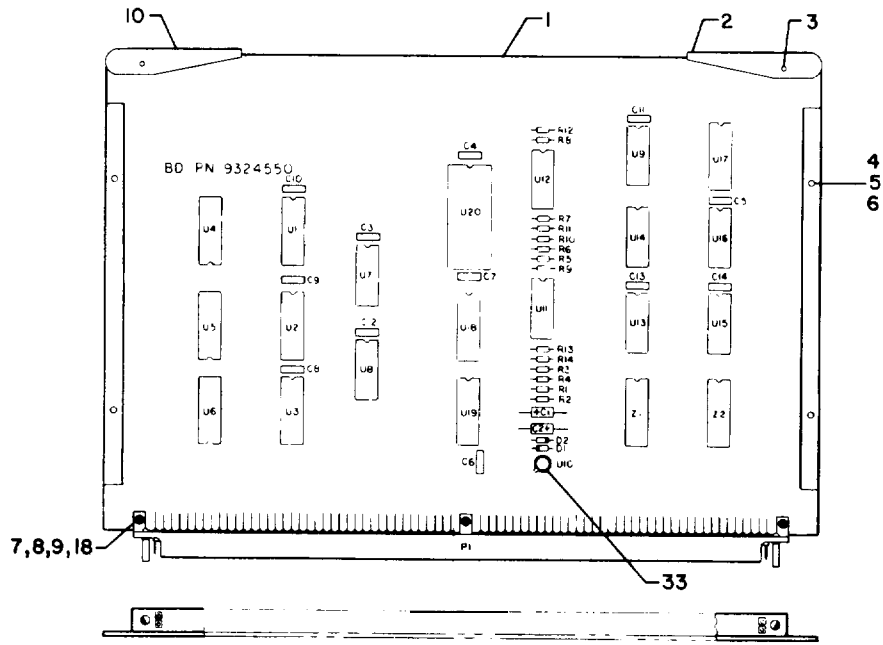
Ref Des	Item No	Ref Des	Item No
C1	12	R5	15
C2	12	R6	15
C3	12	R7	29
C4	12	R8	30
C5	12	R9	30
C6	12	U1	16
C7	12	U2	17
C8	12	U3	18
C9	12	U4	19
C10	12	U5	20
C11	12	U6	20
C12	13	U9	21
C13	13	U10	22
P1	11	U11	23
R1	14	U12	24
R2	14	U13	25
R3	14	Z1	26
R4	14		

NOTE: Ref Des not used - U7, U8

AR917842A

Figure C-15. Communications Circuit Card Assembly A8

(1) ILLUSTRATION (A) FIG. NO	(2) (B) ITEM NO	(3) SMR CODE	(4) FEDERAL STOCK	(5) PART NUMBER	(6) FSCM DESCRIPTION	(7) USABLE ON CODE U/M	(8) QTY INC IN UNIT
TM9-4933-227-13&P (6)							
GROUP 0206 CIRCUIT CARD ASSY A8, COMMUNICATIONS 9324520-001							
C-15	1	XADZZ		9324554	19203	CIRCUIT BOARD	EA 1
C-15	2	PADZZ	4933-01-083-6061	9324549-1	19203	EXTRACTOR, CIRCUIT CARD	EA 1
C-15	3	PADZZ	5315-00-847-3735	MS16562-190	96906	PIN, SPRING	EA 2
C-15	4	PADZZ	4933-01-083-6063	9324546	19203	RETAINER, CIRCUIT CARD	EA 2
C-15	5	PADZZ	4933-01-083-6064	9324542	19203	PLATE, RETAINING	EA 2
C-15	6	PADZZ		64424	73734	SCREW,FH	EA 4
C-15	7	PADZZ		64448	73734	SCREW	EA 3
C-15	8	PADZZ		67541	73734	WASHER, LOCK	EA 3
C-15	9	PADZZ	5310-00-105-4086	MS35650-314	96906	NUT, PLAIN, HEXAGON	EA 3
C-15	10	PADZZ	4933-01-083-6062	9324549-2	19203	EXTRACTOR, CIRCUIT CARD	EA 1
C-15	11	PADZZ		9324551-8	19203	CONNECTOR	EA 1
C-15	12	PADZZ	5910-00-214-6378	M39014/01-1576	81349	CAPACITOR, FIXED CER	EA 11
C-15	13	PADZZ		M39014/01-1357	81349	CAPACITOR, FIXED, CER	EA 2
C-15	14	PADZZ	5905-00-412-0758	RCR05G510JS	81349	RESISTOR, FIXED, COMP	EA 4
C-15	15	PADZZ	5905-00-458-9348	RCR05G181JS	81349	RESISTOR, FIXED, COMP	EA 2
C-15	16	PADZZ	1090-01-068-0442	9324311	19203	IC, UNIV ASYNCHRONOUS RCVR/XMTR	EA 1
C-15	17	PADZZ	5962-01-083-4685	9324315	19203	MICROCIRCUIT DIGITAL	EA 1
C-15	18	PADZZ	5962-01-059-2592	M38510/31101BEB	81349	MICROCIRCUIT	EA 1
C-15	19	PADZZ	5962-01-050-0918	M38510/30701BEB	81349	MICROCIRCUIT, DIGITAL	EA 1
C-15	20	PADZZ	5962-01-083-4684	9324307	19203	MICROCIRCUIT, DIGITAL	EA 2
C-15	21	PADZZ		M38510/10405BCB	81349	MICROCIRCUIT	EA 1
C-15	22	PADZZ		9324291	19203	MICROCIRCUIT	EA 1
C-15	23	PADZZ	5962-01-027-6863	M38510/30003BCB	81349	MIRCOCIRCUIT, DIGITAL	EA 1
C-15	24	PADZZ	5962-01-030-3146	M38510/30002BCB	81349	MICROCIRCUIT	EA 1
C-15	25	PADZZ		9324472	19203	MICROCIRCUIT	EA 1
C-15	26	PADZZ	5905-01-068-9313	M8340102M1002JB	81349	NETWORK, RESISTOR	EA 1
C-15	27	PADZZ	5310-00-804-0141	MS15795-801	96906	WASHER, FLAT	EA 8
C-15	28	PADZZ		9324457	19203	INSERT, TERMINAL	EA 8
C-15	29	PADZZ	5905-00-458-9500	RCR05G102JS	81349	RESISTOR, FIXED, COMPOSITION	EA 1
C-15	30	PADZZ	5905-00-180-8303	RCR05G152JS	81349	RESISTOR, FIXED, COMPOSITION	EA 2



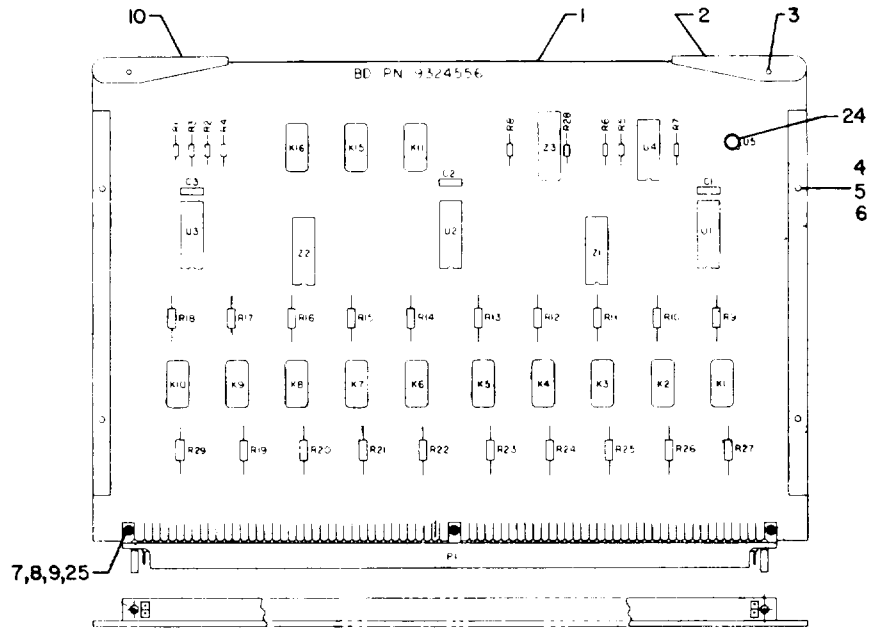
LEGEND

<u>Ref</u>	<u>Item</u>	<u>Ref</u>	<u>Item</u>	<u>Ref</u>	<u>Item</u>
<u>Des</u>	<u>No</u>	<u>Des</u>	<u>No</u>	<u>Des</u>	<u>No</u>
C1	12	R2	15	U6	23
C2	12	R3	16	U7	24
C3	13	R4	16	U8	25
C4	13	R5	17	U9	25
C5	13	R6	21	U10	26
C6	13	R7	17	U11	27
C7	13	R8	19	U12	28
C8	13	R9	20	U13	29
C9	13	R10	21	U14	29
C10	13	R11	21	U15	29
C11	13	R12	19	U16	29
C12	13	R13	17	U17	30
C13	13	R14	17	U18	22
C14	13	U1	22	U19	22
D1	14	U2	22	U20	31
D2	14	U3	22	Z1	32
P1	11	U4	23	Z2	32
R1	15	U5	23		

AR917843A

FIGURE C-16. Relay Driver Circuit Card Assembly A9.

(1) ILLUSTRATION (A) FIG. NO	(2) (B) ITEM NO	(3) SMR CODE	(4) FEDERAL STOCK	(5) PART NUMBER	(6) FSCM DESCRIPTION	(7) USABLE ON CODE	(8) QTY INC IN UNIT
					TM9-4933-227-13&P (6)		
					GROUP 0207 CIRCUIT CARD ASSY A9, RELAY DRIVER 9321523-001		
C-16	1	XADZZ		9324550	19203		EA 1
C-16	2	PADZZ	4933-01-083-6061	9324549-1	19203		EA 1
C-16	3	PADZZ	5315-00-847-3735	MS16562-190	96906		EA 2
C-16	4	PADZZ	4933-01-083-6063	9324546	19203		EA 2
C-16	5	PADZZ	4933-01-083-6064	9324542	19203		EA 2
C-16	6	PADZZ		64424	73734		EA 3
C-16	7	PADZZ		64448	73734		EA 3
C-16	8	PADZZ		67541	73734		EA 3
C-16	9	PADZZ	5310-00-105-4086	MS35650-314	96906		EA 3
C-16	10	PADZZ	4933-01-083-6062	9324549-2	19203		EA 1
C-16	11	PADZZ		9324551-9	19203		EA 1
C-16	12	PADZZ	5910-00-495-0042	M39003/01-2356	81349		EA 2
C-16	13	PADZZ	5910-00-214-6378	M39014/01-1576	81349		EA 12
C-16	14	PADZZ	5961-00-938-1135	JAN1N4148	81349		EA 2
C-16	15	PADZZ	5905-00-401-7432	RNC55H1003FS	81349		EA 2
C-16	16	PADZZ	5905-00-255-9304	RNC55H1242FS	81349		EA 2
C-16	17	PADZZ	5905-00-721-3678	RNC55H2491FS	81349		EA 4
C-16	18	PADZZ	5310-00-804-0141	MS15795-801	96906		EA 8
C-16	19	PADZZ	5905-00-617-5091	RCR05G472JS	81349		EA 2
C-16	20	PADZZ	5905-00-003-5782	RNC55H3921FS	81349		EA 1
C-16	21	PADZZ	5905-00-138-3376	RNC55H1001FS	81349		EA 3
C-16	22	PADZZ	5962-01-066-1590	9324289	19203		EA 5
C-16	23	PADZZ	5962-01-077-8969	9324292	19203		EA 3
C-16	24	PADZZ	5962-01-030-6352	M38510/30005BCB	81349		EA 1
C-16	25	PADZZ	5962-01-027-6863	M38510/30003BCB	81349		EA 2
C-16	26	PADZZ	5962-01-075-3772	9324310	19203		EA 1
C-16	27	PADZZ	5962-01-066-1588	9324280	19203		EA 1
C-16	28	PADZZ	5962-01-066-0337	9324284	19203		EA 1
C-16	29	PADZZ	5962-00-369-9839	M38510/00803BCB	81349		EA 4
C-16	30	PADZZ	5962-01-050-0918	M38510/30701BEB	81349		EA 1
C-16	31	PADZZ		9324581	19203		EA 1
C-16	32	PADZZ	5905-01-068-9313	M8340102M1002JB	81349		EA 2
C-16	33	PADZZ	5999-01-015-39014	M38527/1-01D	81349		EA 1



LEGEND

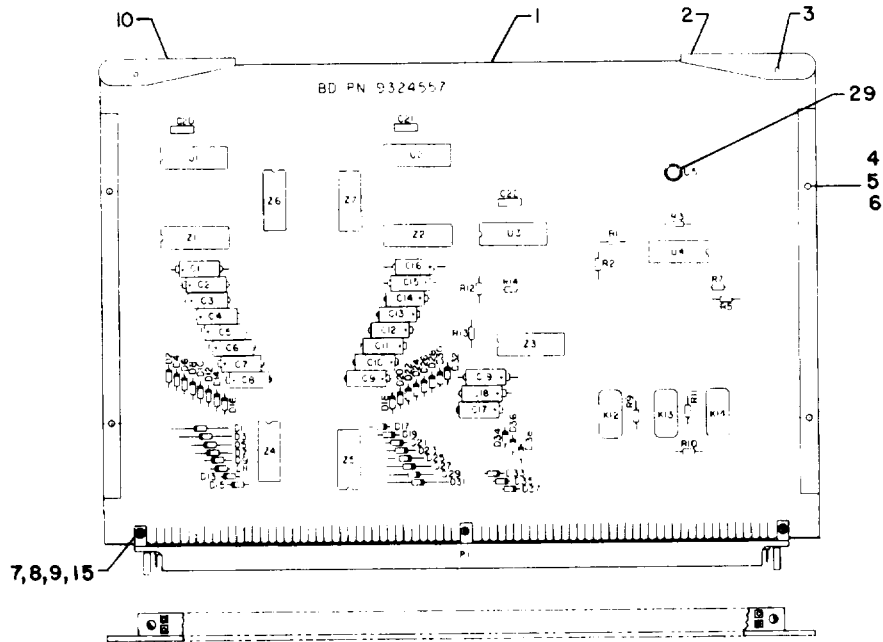
Ref Des	Item No	Ref Des	Item No	Ref Des	Item No
C1	12	R2	14	R20	18
C2	12	R3	15	R21	18
C3	12	R4	15	R22	18
K1	13	R5	16	R23	18
K2	13	R6	16	R24	18
K3	13	R7	16	R25	18
K4	13	R8	17	R26	18
K5	13	R9	18	R27	18
K6	13	R10	18	R28	26
K7	13	R11	18	R29	27
K8	13	R12	18	U1	19
K9	13	R13	18	U2	19
K10	13	R14	18	U3	19
K11	13	R15	18	U4	20
K15	13	R16	18	U5	21
K16	13	R17	18	Z1	22
P1	11	R18	18	Z2	22
R1	14	R19	18	Z3	23

NOTE: Ref Des not used-K12, K13, K14,

AR917844A

Figure C-17. Squib OU Interface Circuit Card Assembly A10

(1) ILLUSTRATION (A) FIG. NO	(2) (B) ITEM NO	(3) SMR CODE	(4) FEDERAL STOCK	(5) PART NUMBER	(6) FSCM DESCRIPTION	(7) U/M	(8) QTY INC IN UNIT
					TM9-4933-227-13&P (6)		
					GROUP 0208 CIRCUIT CARD ASSY A10, SQB OU INTFC 9324522-001		
C-17	1	XADZZ		9324556	19203 CIRCUIT BOARD	EA	1
C-17	2	PADZZ	4933-01-083-6061	9324549-1	19203 EXTRACTOR, CIRCUIT CARD	EA	1
C-17	3	PADZZ	5315-00-847-3735	MS16562-190	96906 PIN, SPRING	EA	2
C-17	4	PADZZ	4933-01-083-6063	9324546	19203 RETAINER, CIRCUIT CARD	EA	2
C-17	5	PADZZ	4933-01-083-6064	9324542	19203 PLATE, RETAINING	EA	2
C-17	6	PADZZ		64424	73734 SCREW, FH	EA	4
C-17	7	PADZZ		64448	73734 SCREW	EA	3
C-17	8	PADZZ		67541	73734 WASHER	EA	3
C-17	9	PADZZ	5310-00-105-4086	MS35650-314	96906 NUT, PLAIN, HEXAGON	EA	3
C-17	10	PADZZ	4933-01-083-6062	9324549-2	19203 EXTRACTOR, CIRCUIT CARD	EA	1
C-17	11	PADZZ		9324551-10	19203 CONNECTOR PLUG, ELECTRICAL	EA	1
C-17	12	PADZZ	5910-00-214-6378	M39014/01-1576	81349 CAPACITOR, FIXED, CER	EA	3
C-17	13	PADZZ	5945-01-010-5767	M39016/13-057M	81349 RELAY, ARMATURE	EA	13
C-17	14	PADZZ	5905-00-126-6683	RCR07G332JS	81349 RESISTOR, FIXED, COMP	EA	2
C-17	15	PADZZ	5905-00-114-5343	RCR07G182JS	81349 RESISTOR, FIXED, COMP	EA	2
C-17	16	PADZZ		RCR07G105JS	81349 RESISTOR, FIXED, COMP	EA	3
C-17	17	PADZZ	5905-00-106-3666	RCR07G103JS	81349 RESISTOR, FIXED, COMP	EA	1
C-17	18	PADZZ	5905-01-056-2148	RCR20G1R0JS	81349 RESISTOR, FIXED, COMP	EA	19
C-17	19	PADZ	7025-01-074-1655	9324297	19203 MULTIPLEXER, ANALOG	EA	3
C-17	20	PADZZ	5962-01-066-0337	9324284	19203 MICROCIRCUIT, DIGITAL	EA	1
C-17	21	PADZZ	5962-01-075-3772	9324310	19203 MICROCIRCUIT, LINEAR	EA	1
C-17	22	PADZZ		M8340102M2201JB	81349 NETWORK, RESISTOR	EA	2
C-17	23	PADZZ	5905-01-068-9313	M8340102M1002JA	81349 NETWORK, RESISTOR	EA	1
C-17	24	PADZZ	5999-01-015-3901	M38527/1-01D	81349 PAD, TRANSISTOR	EA	1
C-17	25	PADZZ	5310-00-804-0141	MS15795-801	96906 WASHER, FLAT	EA	8
C-17	26	PADZ	5905-00-110-7620	RCR07G102JS	81349 RESISTOR, FIXED, COMPOSITION	EA	1
C-17	27	PADZZ		RCR2QG392JS	81349 RESISTOR, FIXED, COMPOSITION	EA	1



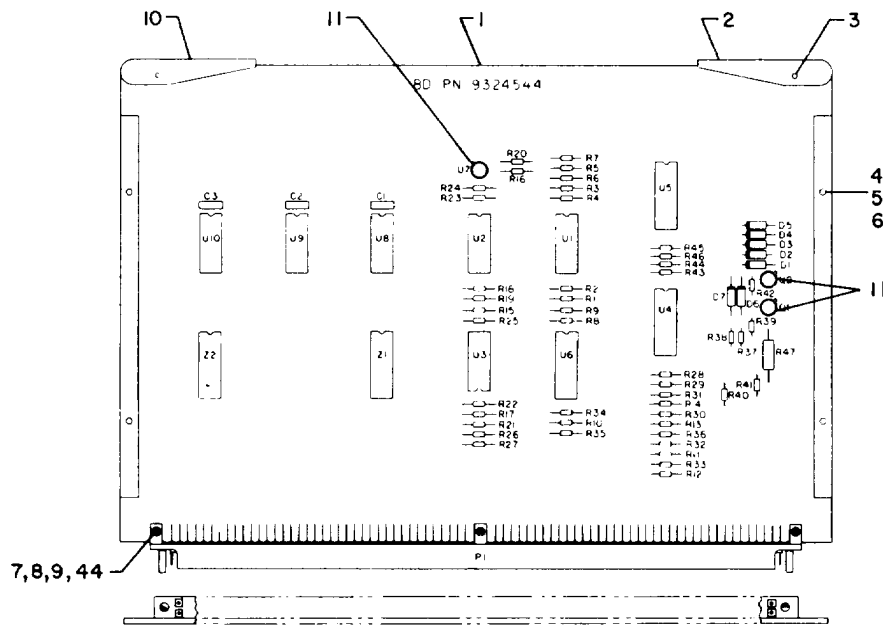
LEGEND

Ref Des	Item No	Ref Des	Item No	Ref Des	Item No	Ref Des	Item No
C1	12	D1	14	D23	14	R3	18
C2	12	D2	14	D24	14	R5	18
C3	12	D3	14	D25	14	R7	18
C4	12	D4	14	D26	14	R9	19
C5	12	D5	14	D27	14	R10	20
C6	12	D6	14	D28	14	R11	20
C7	12	D7	14	D29	14	R12	21
C8	12	D8	14	D30	14	R13	22
C9	12	D9	14	D31	14	R14	21
C10	12	D10	14	D32	14	U1	23
C11	12	D11	14	D33	14	U2	23
C12	12	D12	14	D34	14	U3	23
C13	12	D13	14	D35	14	U4	24
C14	12	D14	14	D36	14	U5	25
C15	12	D15	14	D37	14	Z1	26
C16	12	D16	14	D38	14	Z2	26
C17	12	D17	14	P1	11	Z3	26
C18	12	D18	14	K12	16	Z4	27
C19	12	D19	14	K13	16	Z5	27
C20	13	D20	14	K14	16	Z6	28
C21	13	D21	14	R1	17	Z7	28
C22	13	D22	14	R2	17		

NOTE: Ref Des not used K1 thru K11, P6 R4, R6 and R8

Figure C-18. Fuze OU Interface Circuit Card Assembly A11

(1) ILLUSTRATION (A) FIG. NO	(2) (B) ITEM NO	(3) SMR CODE	(4) FEDERAL STOCK	(5) PART NUMBER	(6) FSCM DESCRIPTION	(7) U/M	(8) QTY INC IN UNIT
TM9-4933-227-13&P							
(6)							
GROUP 0209 CIRCUIT CARD ASSY A11, FZ OU INTFC							
9324524-001							
C-18	1	XADZZ		9324557	19203	CIRCUIT BOARD	EA 1
C-18	2	PADZZ	4933-01-083-6061	9324549-1	19203	EXTRACTOR, CIRCUIT CARD	EA 1
C-18	3	PADZZ		MS171432	96906	PIN, SPRING	EA 2
C-18	4	PADZZ	4933-01-083-6063	9324546	19203	RETAINER, CIRCUIT CARD	EA 2
C-18	5	PADZZ	4933-01-083-6064	9324542	19203	PLATE, RETAINING	EA 2
C-18	6	PADZZ		64424	73734	SCREW, FH	EA 4
C-18	7	PADZZ		64448	73734	SCREW	EA 3
C-18	8	PADZZ		67541	73734	WASHER	EA 3
C-18	9	PADZZ	5310-00-105-4086	MS35650-314	96906	NUT, PLAIN, HEXAGON	EA 3
C-18	10	PADZZ	4933-01-083-6062	9324549-2	19203	EXTRACTOR, CIRCUIT CARD	EA 1
C-18	11	PADZZ		9324551-11	19203	CONNECTOR, PLUG, ELECTRICAL	EA 1
C-18	12	PADZZ	5910-00-144-4381	M39003/01-2305	81349	CAPACITOR, FIXED, ELE	EA 19
C-18	13	PADZZ	5910-00-214-6378	M39014/01-1576	81349	CAPACITOR, FIXED, CER	EA 3
C-18	14	PADZ	5961-00-938-1135	JAN1N4148	81349	SEMICONDUCTOR DEVICE, DIODE	EA 38
C-18	15	PADZZ	5310-00-804-0141	MS15795-801	96906	WASHER, FLAT	EA 8
C-18	16	PADZZ	5945-01-010-5767	M39016/13-057M	81349	RELAY, ARMATURE	EA 3
C-18	17	PADZZ	5905-01-035-5065	RCR05G103JS	81349	RESISTOR, FIXED, COMP	EA 2
C-18	18	PADZZ	5905-00-195-4074	RCR05G105JS	81349	RESISTOR, FIXED, COMP	EA 3
C-18	19	PADZZ	5905-00-458-9348	RCR05G181JS	81349	RESISTOR, FIXED, COMP	EA 1
C-18	20	PADZZ		RCR07G150JS	81349	RESISTOR, FIXED, COMP	EA 2
C-18	21	PADZZ	5905-00-482-7695	RCR05G242JS	81349	RESISTOR, FIXED, COMP	EA 2
C-18	22	PADZZ	5905-00-401-7427	RCR05G332JS	81349	RESISTOR, FIXED, COMP	EA 1
C-18	23	PADZZ	7025-01-074-1655	9324297	19203	MULTIPLEXER, ANALOG	EA 3
C-18	24	PADZZ	5962-01-066-0337	9324284	19203	MICROCIRCUIT, DIGITAL	EA 1
C-18	25	PADZZ	5962-01-075-3772	9324310	19203	MICROCIRCUIT, LINEAR	EA 1
C-18	26	PADZZ	5905-01-068-9313	M8340102M1002JA	81349	NETWORK, RESISTOR	EA 3
C-18	27	PADZZ		M8340101M6801JB	81349	NETWORK, RESISTOR	EA 2
C-18	28	PADZZ	5905-01-065-5934	M8340101M1002JB	81349	NETWORK, RESISTOR	EA 2
C-18	29	PADZZ	5999-01-015-3901	M38527/1-01D	81349	PAD, TRANSISTOR	EA 1



LEGEND

Ref Des	Item No	Ref Des	Item No	Ref Des	Item No
C1	13	R12	17	R36	25
C2	13	R13	16	R37	31
C3	13	R14	16	R38	31
D1	14	R15	18	R39	32
D2	14	R16	18	R40	33
D3	14	R17	30	R41	34
D4	14	R18	19	R42	35
D5	14	R19	19	R43	36
D6	14	R20	19	R44	36
D7	14	R21	19	R45	36
P1	12	R22	19	R46	36
Q1	15	R23	20	R47	37
Q2	15	R24	20	U1	38
R1	16	R25	21	U2	38
R2	16	R26	21	U3	39
R3	16	R27	22	U4	40
R4	16	R28	23	U5	40
R5	16	R29	24	U6	40
R6	16	R30	24	U7	41
R7	16	R31	25	U8	42
R8	16	R32	26	U9	42
R9	16	R33	27	U10	42
R10	16	R34	28	Z1	43
R11	17	R35	29	Z2	43

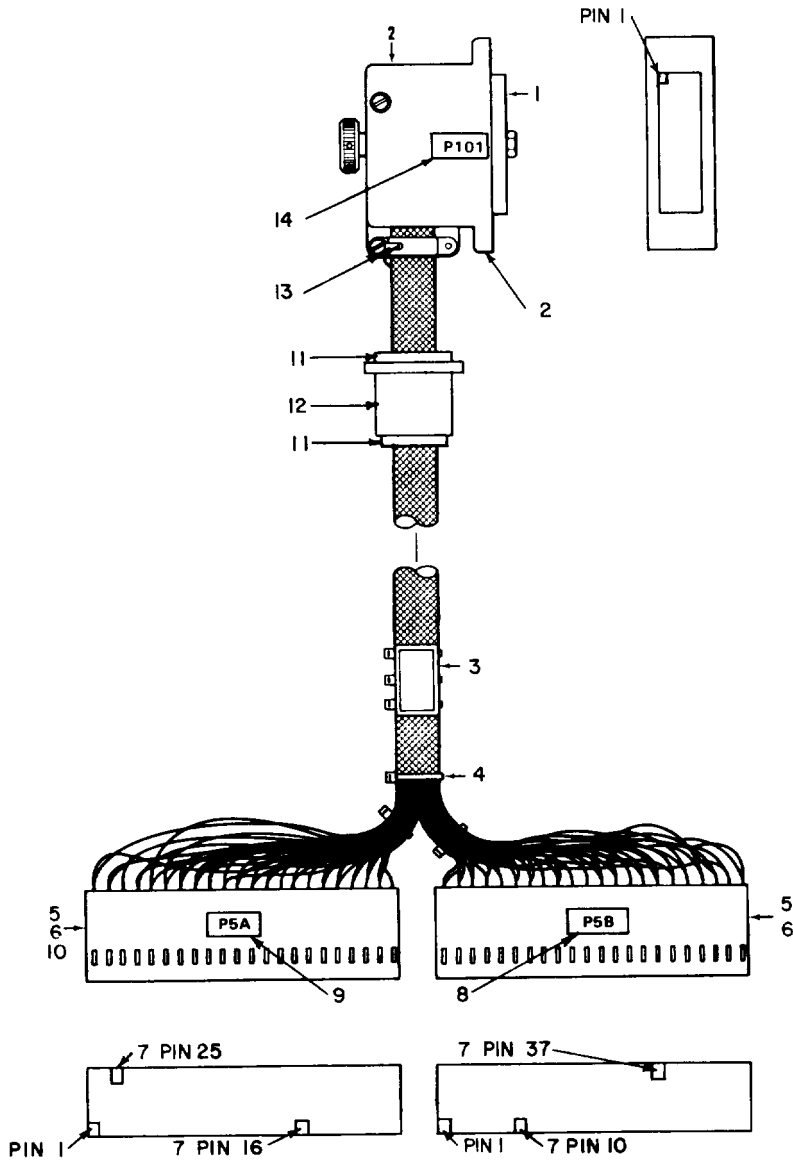
AR917846A

Figure C-19. Analog Circuit Card Assembly A12

(1) ILLUSTRATION (A) FIG. NO	(2) (B) ITEM NO	(3) SMR CODE	(4) FEDERAL STOCK	(5) PART NUMBER	(6) FSCM DESCRIPTION	(7) U/M	(8) QTY INC IN UNIT
TM9-4933-227-13&P							
(6)							
GROUP 0210 CIRCUIT CARD ASSY A12, ANALOG							
9324518-001							
C-19	1	XADZZ		9324544	19203	CIRCUIT BOARD	EA 1
C-19	2	PADZZ	4933-01-083-6061	9324549-1	19203	EXTRACTOR, CIRCUIT CARD	EA 1
C-19	3	PADZZ	5315-00-847-3735	MS16562-190	96906	PIN, SPRING	EA 2
C-19	4	PADZZ	4933-01-083-6063	9324546	19203	RETAINER, CIRCUIT CARD	EA 2
C-19	5	PADZZ	4933-01-083-6064	9324542	19203	PLATE, RETAINING	EA 2
C-19	6	PADZZ		64424	73734	SCREW, FH	EA 4
C-19	7	PADZZ		64448	73734	SCREW, FILM	EA 3
C-19	8	PADZZ		67541	73734	WASHER, LOCK	EA 3
C-19	9	PADZZ	5310-00-105-4086	MS35650-314	96906	NUT, PLAIN, HEXAGON	EA 3
C-19	10	PADZZ	4933-01-083-6062	9324549-2	19203	EXTRACTOR, CIRCUIT CARD	EA 1
C-19	11	PADZZ	5999-01-015-3901	M38527/1-01D	81349	PAD, TRANSISTOR	EA 3
C-19	12	PADZZ		9324551-12	19203	CONNECTOR PLUG, ELECTRICAL	EA 1
C-19	13	PADZZ	5910-00-214-6378	M39014/01-1576	81349	CAPACITOR, FIXED, CER	EA 3
C-19	14	PAD Z	5961-00-898-2183	JAN1N4946	81350	SEMICONDUCTOR DEVICE, DIODE	EA 7
C-19	15	PADZZ	5961-00-951-8757	JAN2N2222A	81350	TRANSISTOR	EA 2
C-19	16	PADZZ	5905-00-236-0895	RNC55H4992FS	81349	RESISTOR, FIXED, FILM	EA 12
C-19	17	PADZZ		RNC55H3402FS	81349	RESISTOR, FIXED, FILM	EA 2
C-19	18	PADZZ	5905-00-223-2741	RNC55H1002FS	81349	RESISTOR, FIXED, FILM	EA 2
C-19	19	PADZZ	5905-00-412-4048	RNC55H2002FS	81349	RESISTOR, FIXED, FILM	EA 5
C-19	20	PADZZ	5905-00-721-3678	RNC55H2491FS	81349	RESISTOR, FIXED, FILM	EA 2
C-19	21	PADZZ		RNC55H1822FS	81349	RESISTOR, FIXED, FILM	EA 2
C-19	22	PADZZ		RNC55H6041FS	81349	RESISTOR, FIXED, FILM	EA 1
C-19	23	PADZZ	5905-00-433-1095	RNC55H2053FS	81349	RESISTOR, FIXED, FILM	EA 1
C-19	24	PADZZ	5905-00-432-6362	RNC55H1183FS	81349	RESISTOR, FIXED, FILM	EA 2
C-19	25	PADZZ	5905-00-431-5151	RNC55H2003FS	81349	RESISTOR, FIXED, FILM	EA 2
C-19	26	PADZZ	5905-00-304-0161	RNC55H2373FS	81349	RESISTOR, FIXED, FILM	EA 1
C-19	27	PADZZ		RNC55H6812FS	81349	RESISTOR, FIXED, FILM	EA 1
C-19	28	PADZZ	5905-00-285-0621	RNC55H1743FS	81349	RESISTOR, FIXED, FILM	EA 1
C-19	29	PADZZ	5905-00-304-0159	RNC55H2153FS	81349	RESISTOR, FIXED, FILM	EA 1
C-19	30	PADZZ		RNC55H1652FS	81349	RESISTOR, FIXED, FILM	EA 1
C-19	31	PADZZ	5905-00-617-5093	RCR05G473JS	81349	RESISTOR, FIXED, COMP	EA 2
C-19	32	PADZZ	5905-00-180-8313	RCR05G243JS	81349	RESISTOR, FIXED, COMP	EA 1
C-19	33	PADZZ	5905-00-413-1200	RCR05G203JS	81349	RESISTOR, FIXED, COMP	EA 1
C-19	34	PADZZ	5905-00-466-1218	RCR05G822JS	81349	RESISTOR, FIXED, COMP	EA 1
C-19	35	PADZZ	5905-00-231-2917	RCR05G432JS	81349	RESISTOR, FIXED, COMP	EA 1
C-19	36	PADZZ	5905-00-458-9346	RCR05G104JS	81349	RESISTOR, FIXED, COMP	EA 4
C-19	37	PADZZ	5905-00-180-8303	RCR20G152JS	81349	RESISTOR, FIXED, COMP	EA 1
C-19	38	PADZZ	5962-01-066-1588	9324280	19203	MICROCIRCUIT, LINEAR	EA 2
C-19	39	PADZZ	5962-01-066-0337	9324284	19203	MICROCIRCUIT, DIGITAL	EA 1
C-19	40	PADZZ	7025-01-074-1655	9324297	19203	MULTIPLEXER ANALOG	EA 3

C-55/C-56 (BLANK)

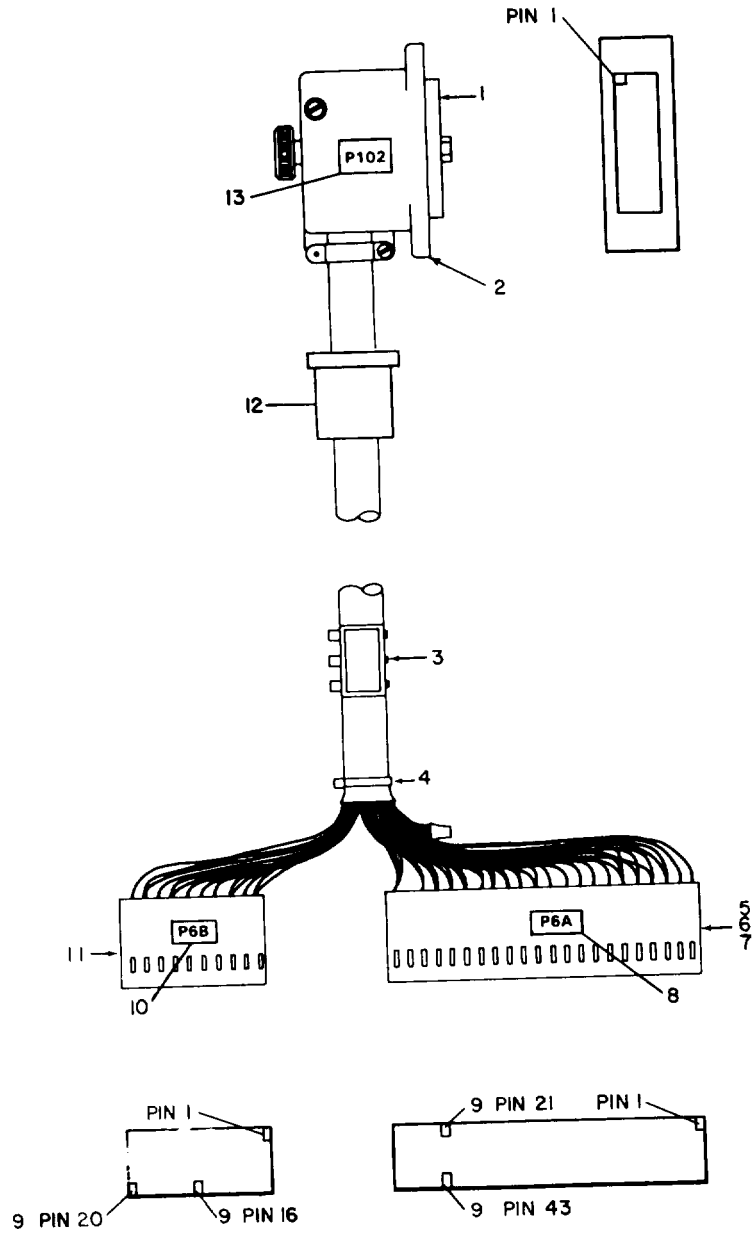
(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 0210 CIRCUIT CARD ASSY A12, ANALOG 9324518-001 (CONTINUED)			
C-19	41	PADZZ	5962-01-075-3772	9324310	19203	MICROCIRCUIT LINEAR		EA	1
C-19	42	PADZZ	5962-00-369-9839	M38510/00803BCB	81349	MICROCIRCUIT		EA	3
C-19	43	PADZZ	5905-01-068-9313	M8340102M1002JB	81349	NETWORK, RESISTOR		EA	2
C-19	44	PADZZ	5310-00-804-0141	MS15795-801	96906	WASHER, FLAT		EA	8



AR917847A

Figure C-20. OU J1 Test Cable Assembly W2

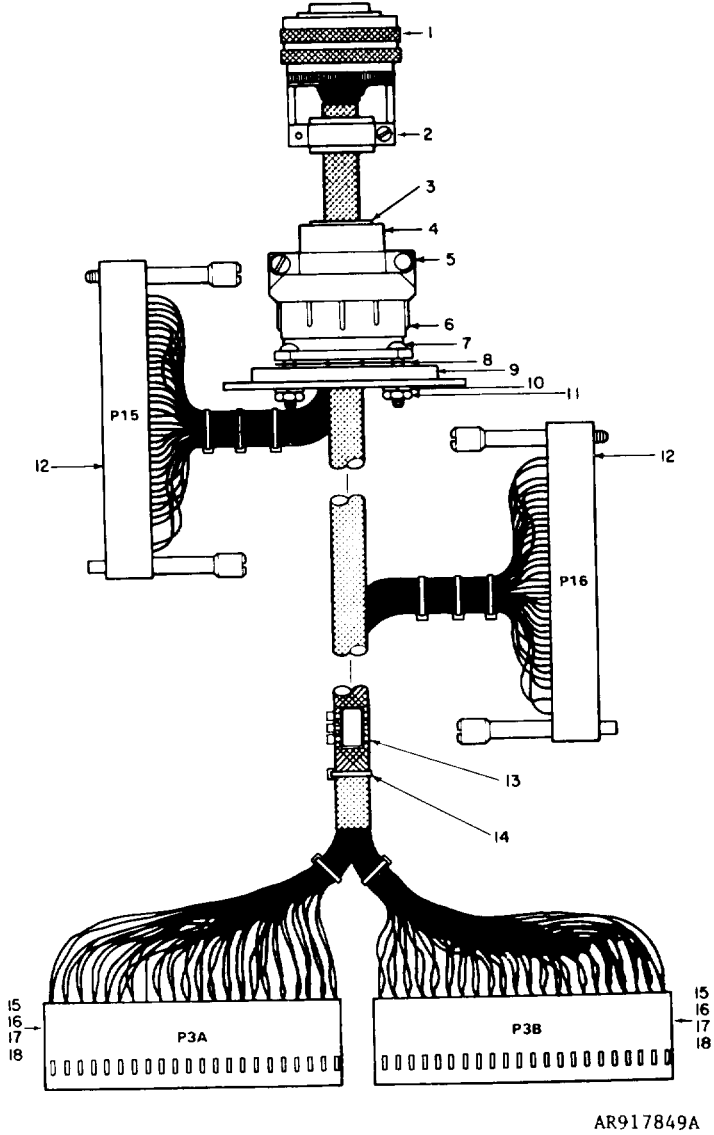
(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 0211 CABLE ASEMBLY W2, OUI1 TEST 9324511-001			
C-20	1	PADZZ	5935-01-083-4675	9324534-1	19203	CONNECTOR, RECEPTACLE, ELEC		EA	1
C-20	2	PADZZ	4933-01-083-6067	9324530	19203	BACKSHELL		EA	1
C-20	3	PADZZ		MS3368-4-9	96906	STRAP, TIEDOWN, TYPE II		EA	1
C-20	4	PADZZ		MS3367-4-9	96906	STRAP, TIEDOWN, TYPE I		EA	9
C-20	5	PADZZ	4933-01-083-0550	9324586-17	19203	CONNECTOR		EA	2
C-20	6	PADZZ	4933-01-083-0551	9324587-07	19203	INSERT, CONNECTOR		EA	75
C-20	7	PADZZ	4933-01-083-0553	9324587-05	19203	INSERT, CONNECTOR KEYING		EA	4
C-20	8	MDDZZ		9324479-11	19203	LABEL, CONNECTOR REF DES		EA	1
C-20	9	MDDZZ		9324479-10	19203	LABEL,CONNECTOR REF DES		EA	1
C-20	10	PADZZ		9324587-11	19203	INSERT, CONNECTOR		EA	3
C-20	11	PADZZ		MS3420-10	96906	SLEEVE		EA	1
C-20	12	PADZZ	5365-00-754-1562	MS3420-20	96906	SLEEVE		EA	1
C-20	13	PADZZ		MS35431-4	96906	LUG, SOLDER		EA	1
C-20	14	MDDZZ		9324479-25	19203	LABEL, CONNECTOR REF DES		EA	1



AR917848A

Figure C-21. OU J2 Test Cable Assembly W3

(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 0212 CABLE ASSEMBLY W3, OUJ2 TEST 9324519-001			
C-21	1	PADZZ		9324534-2	19203	CONNECTOR		EA	1
C-21	2	PADZZ	4933-01-083-6067	9324530	19203	BACKSHELL		EA	1
C-21	3	PADZZ		MS3368-4-9	96906	STRAP, TIEDOWN, TYPE II		EA	1
C-21	4	PADZZ		MS3367-4-9	96906	STRAP, TIEDOWN, TYPE I		EA	6
C-21	5	PADZZ	4933-01-083-0550	9324586-17	19203	CONNECTOR		EA	1
C-21	6	PADZZ	4933-01-083-0551	9324587-07	19203	INSERT, CONNECTOR		EA	55
C-21	7	PADZZ		9324587-11	19203	INSERT, CONNECTOR		EA	1
C-21	8	MDDZZ		9324479-12	19203	LABEL, CONNECTOR REF DES		EA	1
C-21	9	PADZZ	4933-01-083-0553	9324587-05	19203	INSERT, CONNECTOR KEYING		EA	4
C-21	10	MDDZZ		9324479-13	19203	LABEL, CONNECTOR REF DES		EA	1
C-21	11	PADZZ	4933-01-083-0546	9324586-01	19203	CONNECTOR		EA	1
C-21	12	PADZZ		MS3420-10	96906	SLEEVE		EA	1
C-21	13	MDDZZ		9324479-26	19203	LABEL,CONNECTOR REF DES		EA	1



AR917849A

Figure C-22. DU Test Cable Assembly W4

(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 0213 CABLE ASSEMBLY W4, DU TEST 9324510-001			
C-22	1	PADZZ	5935-01-049-2237	MS27467E23B35S	96906	CONNECTOR		EA	1
C-22	2	PADZZ	5935-01-005-6542	MS27506B23-1	96906	STRAIN RELIEF		EA	1
C-22	3	PADZZ	5365-00-141-6943	MS3420-16	96906	SLEEVE		EA	1
C-22	4	PADZZ	5365-00-754-1562	MS3420-20	96906	SLEEVE		EA	1
C-22	5	PADZZ	5935-00-502-4906	MS3057-20B	96906	CLAMP		EA	1
C-22	6	PADZZ		9324485	19203	SHELL		EA	1
C-22	7	PADZZ	5305-00-054-6656	MS51957-32	96906	SCREW, MACHINE		EA	4
C-22	8	PADZZ		9324491	19203	GASKET		EA	1
C-22	9	PADZZ		9324490	19203	PLATE		EA	1
C-22	10	PADZZ	5310-00-883-9385	MS35338-155	96906	WASHER, LOCK		EA	4
C-22	11	PADZZ	5310-00-616-8660	NAS671C6	80205	NUT, HEX		EA	4
C-22	12	PADZZ		M55302/62-A40L	81349	CONNECTOR		EA	2
C-22	13	PADZZ		MS3368-4-9	96906	STRAP, TIEDOWN, TYPE II		EA	1
C-22	14	PADZZ		MS3367-4-9	96906	STRAP, TIEDOWN, TYPE I		EA	13
C-22	15	PADZZ	4933-01-083-0550	9324586-17	19203	CONNECTOR		EA	2
C-22	16	PADZZ	4933-01-083-0551	9324587-07	19203	INSERT, CONNECTOR		EA	72
C-22	17	PADZZ	4933-01-083-0553	9324587-05	19203	INSERT, CONNECTOR KEYING		EA	3
C-22	18	PADZZ		9324587-11	19203	INSERT, CONNECTOR		EA	10

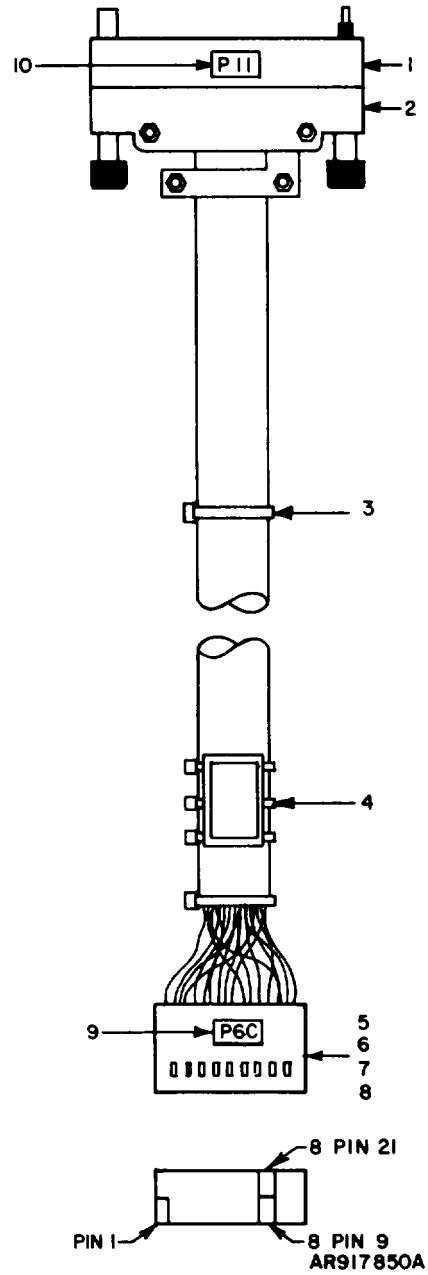


Figure C-23. Power Control Cable Assembly W5

(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 0214 CABLE ASSEMBLY W5, POWER CONTROL 9324588-001			
C-23	1	PADZZ	5935-01-079-8957	M55302/55-A20L	81349	CONNECTOR, RECEPTABLE, ELECTRICAL		EA	1
C-23	2	PADZZ	4933-01-083-6068	9324580	19203	HOOD, CONNECTOR		EA	1
C-23	3	PADZZ		MS3367-4-9	96906	STRAP, TIEDOWN, TYPE I		EA	4
C-23	4	PADZZ		MS3368-4-9	96906	STRAP, TIEDOWN, TYPE II		EA	1
C-23	5	PADZZ	4933-01-083-0547	9324586-03	19203	CONNECTOR		EA	1
C-23	6	PADZZ		9324587-11	19203	INSERT, CONNECTOR		EA	8
C-23	7	PADZZ	4933-01-083-0551	9324587-07	19203	INSERT, CONNECTOR		EA	6
C-23	8	PADZZ	4933-01-083-0553	9324587-05	19203	INSERT, CONNECTOR KEYING		EA	2
C-23	9	MDDZZ		9324479-14	19203	LABEL, CONNECTOR REF DES		EA	1
C-23	10	MDDZZ		9324479-15	19203	LABEL, CONNECTOR REF DES		EA	1

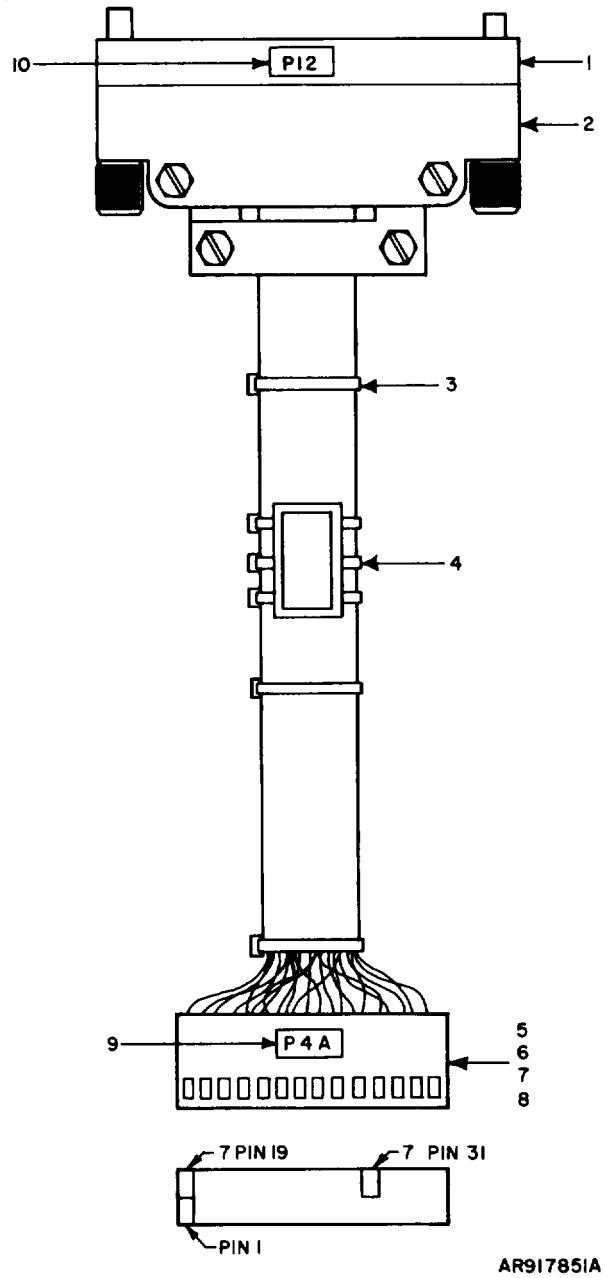


Figure C-24. Display Cable Assembly W6

(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 0215 CABLE ASSEMBLY W6, DISPLAY 9324589-001			
C-24	1	PADZZ		M55302/55-A36L	81349	CONNECT, RECEPTACLE, ELECTRICAL		EA	1
C-24	2	PADZZ		9324584	19203	HOOD, CONNECTOR		EA	1
C-24	3	PADZZ		MS3367-4-9	96906	STRAP, TIEDOWN, TYPE II		EA	10
C-24	4	PADZZ		MS3368-4-9	96906	STRAP, TIEDOWN, TYPE II		EA	1
C-24	5	PADZZ	4933-01-083-0548	9324586-09	19203	CONNECTOR		EA	1
C-24	6	PADZZ		9324587-11	19203	INSERT, CONNECTOR		EA	2
C-24	7	PADZZ	4933-01-083-0553	9324587-05	19203	INSERT, CONNECTOR KEYING		EA	2
C-24	8	PADZZ	4933-01-083-0551	9324587-07	19203	INSERT, CONNECTOR		EA	28
C-24	9	MDDZZ		9324479-7	19203	LABEL, CONNECTOR REF DES		EA	1
C-24	10	MDDZZ		9324479-16	19203	LABEL, CONNECTOR REF DES		EA	1

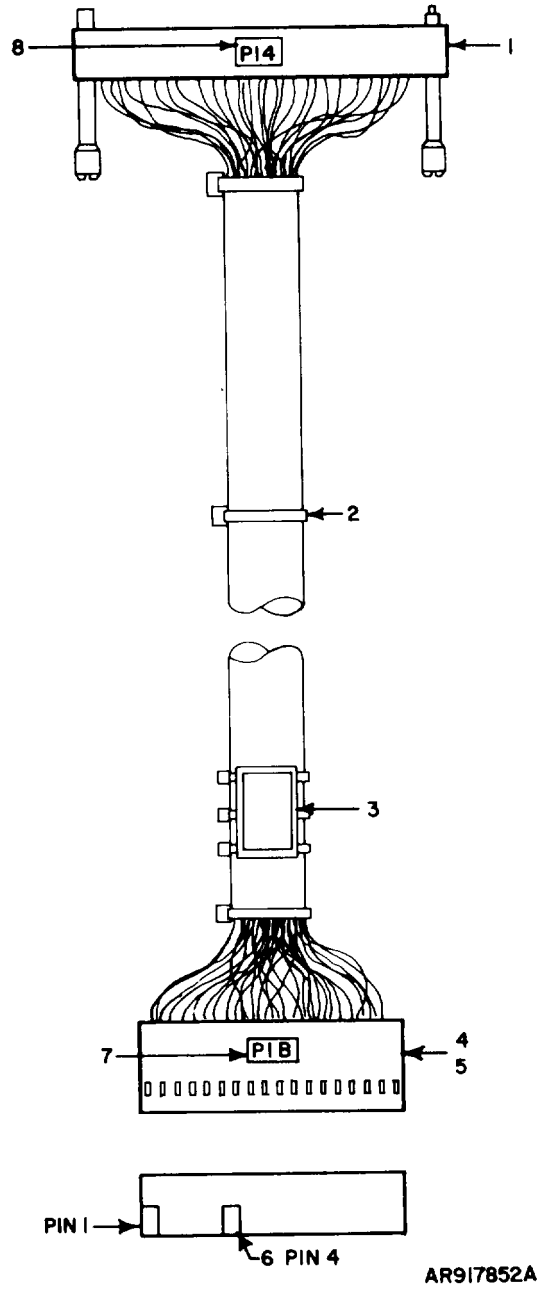


Figure C-25. I/O Cable Assembly W7

(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 0216 CABLE ASSEMBLY W7, I/O 9324601-001			
C-25	1	PADZZ		M55302/62-A44L	81349	CONNECTOR, RECEPTACLE, ELECTRICAL		EA	1
C-25	2	PADZZ		MS3367-4-9	96906	STRAP, TIEDOWN, TYPE I		EA	5
C-25	3	PADZZ		MS3368-4-9	96906	STRAP, TIEDOWN, TYPE II		EA	1
C-25	4	PADZZ	4933-01-083-0548	9324586-09	19203	CONNECTOR		EA	1
C-25	5	PADZZ	4933-01-083-0551	9324587-07	19203	INSERT, CONNECTOR		EA	35
C-25	6	PADZZ	4933-01-083-0553	9324587-05	19203	INSERT, CONNECTOR KEYING		EA	1
C-25	7	MDDZZ		9324479-2	19203	LABEL, CONNECTOR REF DES		EA	1
C-25	8	MDDZZ		9324479-18	19203	LABEL, CONNECTOR REF DES		EA	1

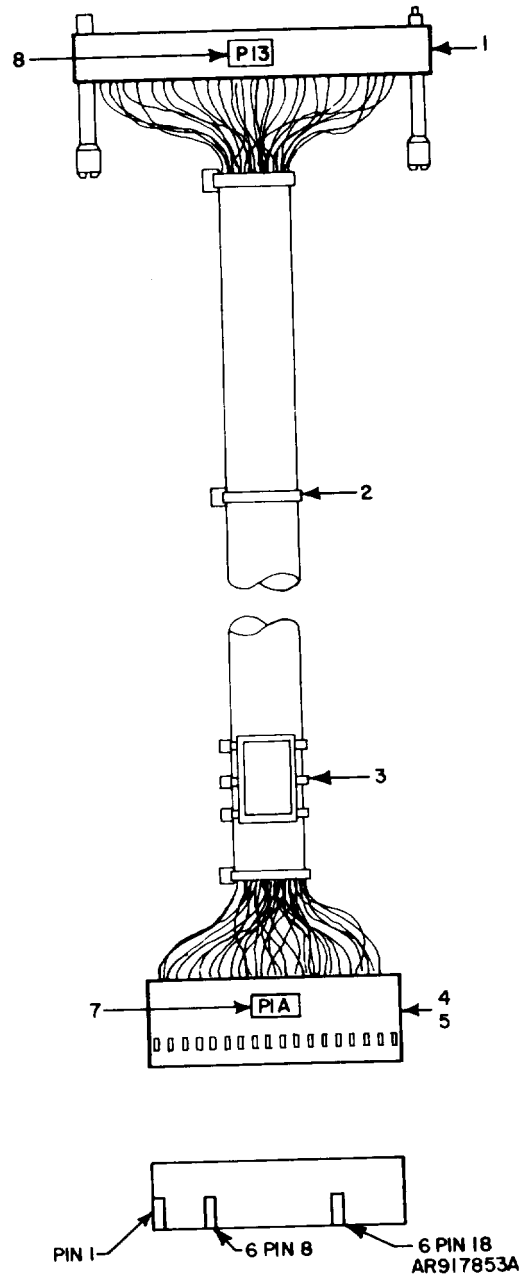
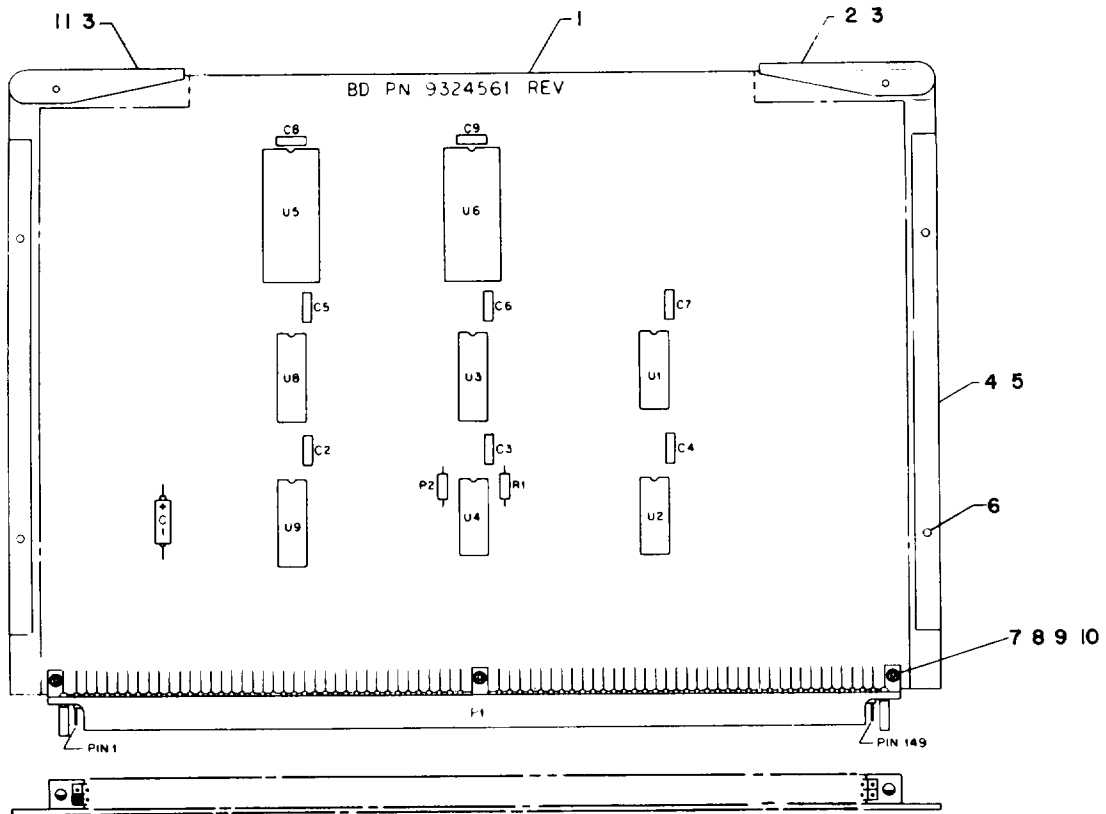


Figure C-26. I/O Cable Assembly W8

(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 0217 CABLE ASSEMBLY W8, I/O 9324590-001			
C-26	1	PADZZ		M55302/62-A44L	81349	CONNECTOR, RECEPTACLE, ELECTRICAL		EA	1
C-26	2	PADZZ		MS3367-4-9	96906	STRAP, TIEDOWN, TYPE I		EA	5
C-26	3	PADZZ		MS3368-4-9	96906	STRAP, TIEDOWN, TYPE II		EA	1
C-26	4	PADZZ		9324586-08	19203	CONNECTOR		EA	1
C-26	5	PADZZ	4933-01-083-0551	9324587-07	19203	INSERT, CONNECTOR		EA	39
C-26	6	PADZZ	4933-01-083-0553	9324587-05	19203	INSERT, CONNECTOR KEYING		EA	2
C-26	7	MDDZZ		9324479-1	19203	LABEL, CONNECTOR REF DES		EA	1
C-26	8	MDDZZ		9324479-17	19203	LABEL, CONNECTOR REF DES		EA	1



LEGEND

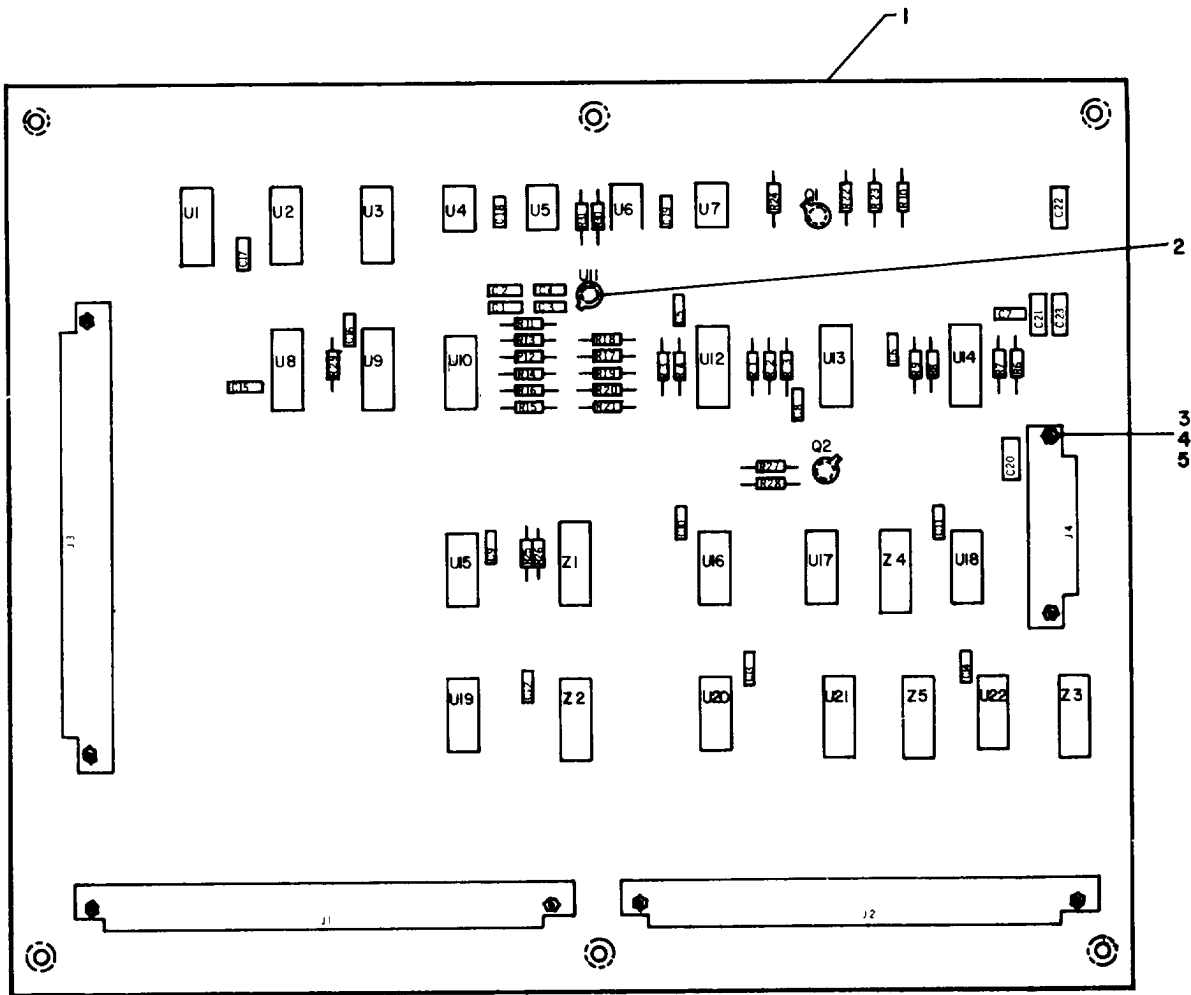
Ref Des	Item No	Ref Des	Item No
C1	12	R1	15
C2	13	R2	15
C3	13	U1	16
C4	13	U2	16
C5	13	U3	17
C6	13	U4	18
C7	13	U5	19
C8	13	U6	20
C9	13	U8	21
P1	14	U9	21

NOTE: Ref Des not used-C10, U7

AR917860

Figure C-27. Circuit Card Assembly A1, Memory

(1) ILLUSTRATION (A) FIG. NO	(2) (B) ITEM NO	(3) SMR CODE	(4) FEDERAL STOCK	(5) PART NUMBER	(6) FSCM DESCRIPTION	(7) USABLE ON CODE U/M	(8) QTY INC IN UNIT
					TM9-4933-227-13&P (6)		
					GROUP 0218 CIRCUIT CARD ASSY A1, MEMORY 9324516-001		
C-27	1	XADZZ		9324561	19203 CIRCUIT BOARD	EA	1
C-27	2	PADZZ	4933-01-083-6061	9324549-1	19203 EXTRACTOR, CARD	EA	1
C-27	3	PADZZ	5315-00-847-3435	MS15652-190	96906 PIN, SPRING	EA	2
C-27	4	PADZZ	4933-01-083-6063	9324546	19203 RETAINER, CIRCUIT CARD	EA	2
C-27	5	PADZZ	4933-01-083-6064	9324542	19203 PLATE, RETAINING	EA	2
C-27	6	PADZZ		66424	73734 SCREW, MACHINE	EA	4
C-27	7	PADZZ		64448	73734 SCREW, MACHINE	EA	3
C-27	8	PADZZ		67541	73734 WASHER, LOCK, SPLIT	EA	3
C-27	9	PADZZ	5310-00-105-4086	MS35650-314	96906 NUT, HEX	EA	3
C-27	10	PADZZ	5310-00-804-0141	MS15795-801	96906 WASHER, FLAT	EA	8
C-27	11	PADZZ	4933-01-083-6062	9324549-2	19203 EXTRACTOR, CARD	EA	1
C-27	12	PADZZ	5910-00-113-5475	M39003/01-2287	81349 CAPACITOR, ELCTLT	EA	1
C-27	13	PADZZ	5910-01-056-5472	M39014/01-1594	81349 CAPACITOR, CER, ER	EA	8
C-27	14	PADZZ		9324551-01	19203 CONNECTOR, ELECTRICAL	EA	1
C-27	15	PADZZ	5905-00-110-7620	RCR07G102JS	81349 RESISTOR, COMPOSITION	EA	2
C-27	16	PADZZ	5962-01-027-6863	M38510/30003BCB	81349 MICROCIRCUIT, DIGITAL	EA	2
C-27	17	PADZZ	5962-01-050-0918	M38510/30701BEB	81349 MICROCIRCUIT, DIGITAL	EA	1
C-27	18	PADZZ	5962-01-030-3146	M38510/30002BCB	81349 MICROCIRCUIT, DIGITAL	EA	1
C-27	19	PADZZ		9324486	19203 MICROCIRCUIT, DIGITAL	EA	1
C-27	20	PADZZ		9324487	19203 MICROCIRCUIT, DIGITAL	EA	1
C-27	21	PADZZ		M38510/32202BEB	81349 MICROCIRCUIT, DIGITAL	EA	2



LEGEND

AR926325

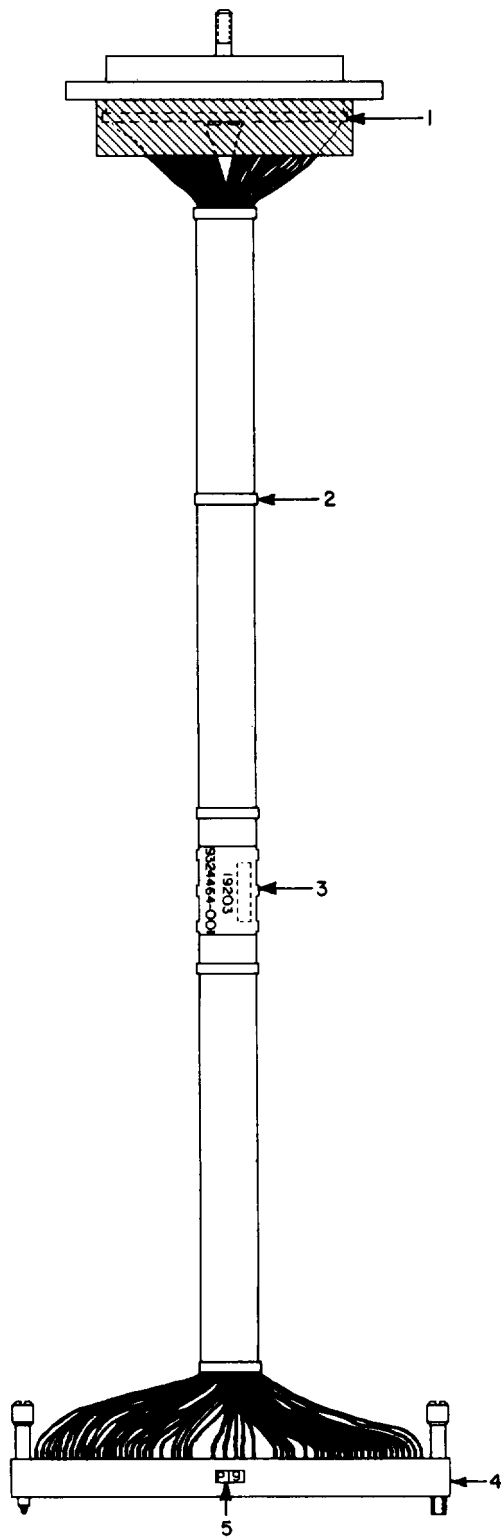
Ref Des	Item No	Ref Des	Item No	Ref Des	Item No	Ref Des	Item No
C1	6	C23	7	R16	22	U7	35
C2	6	J1	8	R17	24	U8	36
C3	6	J2	9	R18	24	U9	37
C4	6	J3	9	R19	25	U10	38
C5	6	J4	10	R20	26	U11	39
C6	6	Q1	11	R21	26	U12	40
C7	6	Q2	12	R22	27	U13	40
C8	6	R1	13	R23	28	U14	40
C9	6	R2	14	R24	29	U15	41
C10	6	R3	14	R25	29	U16	42
C11	6	R4	15	R26	29	U17	42
C12	6	R5	16	R27	29	U18	42
C13	6	R6	17	R28	28	U19	42
C14	6	R7	18	R29	30	U20	42
C15	6	R8	19	R30	31	U21	42
C16	6	R9	17	R31	31	U22	42
C17	6	R10	20	U1	32	Z1	43
C18	6	R11	21	U2	33	Z2	43
C19	6	R12	22	U3	34	Z3	43
C20	7	R13	23	U4	35	Z4	44
C21	7	R14	22	U5	35	Z5	44
C22	7	R15	22	U6	35		

Figure C-28. Self-Test Circuit Card Assembly A15

(1) ILLUSTRATION (A) FIG. NO	(2) (B) ITEM NO	(3) SMR CODE	(4) FEDERAL STOCK	(5) PART NUMBER	(6) FSCM DESCRIPTION	(7) USABLE ON CODE U/M	(8) QTY INC IN UNIT
					TM9-4933-227-13&P (6)		
					GROUP 0219 CIRCUIT CARD ASSEMBLY A15 SELF-TEST 9324477-001		
C-28	1	XADZZ		9324476	19203	CIRCUIT BOARD	EA 1
C-28	2	PADZZ		M38527/3-01	81349	PAD, TRANSISTOR	EA 3
C-28	3	PADZZ	5305-00-054-5648	MS51957-14	96906	SCREW, MACHINE	EA 8
C-28	4	PADZZ	5310-00-208-3786	NAS671C4	80205	NUT, HEXAGON	EA 8
C-28	5	PADZZ		MS35337-78	96905	WASHER, LOCK	EA 8
C-28	6	PADZZ	5910-00-214-6378	M39014/01-1576	81349	CAPACITOR, FIXED, CERAMIC	EA 19
C-28	7	PADZZ	5910-00-113-5475	M39003/01-2287	81349	CAPACITOR, FIXED, ELCTLT	EA 4
C-28	8	PADZZ		M55302/61-A70	81349	CONNECTOR, ELECTRICAL	EA 1
C-28	9	PADZZ		M55302/61-A66	81349	CONNECTOR, ELECTRICAL	EA 2
C-28	10	PADZZ		M55302/61-A20	81349	CONNECTOR, ELECTRICAL	EA 1
C-28	11	PADZZ	5961-00-951-8757	JAN2N2222A	81350	TRANSISTOR, NPN	EA 1
C-28	12	PADZZ	5961-00-925-3777	JAN2N2907A	81350	TRANSISTOR, PNP	EA 1
C-28	13	PADZZ	RNC55H1781FS	81349	81349	RESISTOR, FIXED, FILM	EA 1
C-28	14	PADZZ	5905-00-477-9176	RNC55H2001FS	81349	RESISTOR, FIXED, FILM	EA 2
C-28	15	PADZZ		RNC55H2670FS	81349	RESISTOR, FIXED, FILM	EA 1
C-28	16	PADZZ	5905-00-689-1290	RCR05G512JS	81349	RESISTOR, FIXED, COMPOSITION	EA 1
C-28	17	PADZZ		RNC55H3161FS	81349	RESISTOR, FIXED, FILM	EA 2
C-28	18	PADZZ	5905-00-138-3376	RNC55H1001FS	81349	RESISTOR, FIXED, FILM	EA 1
C-28	19	PADZZ		RNC55H3401FS	81349	RESISTOR, FIXED, FILM	EA 1
C-28	20	PADZZ		RCR07G392JS	81349	RESISTOR, FIXED, COMPOSITION	EA 1
C-28	21	PADZZ	5905-00-112-2181	RNC55H2101FS	81349	RESISTOR, FIXED, FILM	EA 1
C-28	22	PADZZ	5905-00-223-2741	RNC55H1002FS	81349	RESISTOR, FIXED, FILM	EA 4
C-28	23	PADZZ	5905-00-484-7874	RNC55H1210FS	81349	RESISTOR, FIXED, FILM	EA 1
C-28	24	PADZZ	5905-00-480-5196	RNC55H1501FS	81349	RESISTOR, FIXED, FILM	EA 2
C-28	25	PADZZ	5905-01-025-2021	RNC55H12R1FS	81349	RESISTOR, FIXED, FILM	EA 1
C-28	26	PADZZ	5905-00-244-8512	RNC55H10R0FS	81349	RESISTOR, FIXED, FILM	EA 2
C-28	27	PADZZ	5905-00-126-6683	RCR07G332JS	81349	RESISTOR, FIXED, COMPOSITION	EA 1
C-28	28	PADZZ	5905-00-110-7620	RCR07G102JS	81349	RESISTOR, FIXED, COMPOSITION	EA 2
C-28	29	PADZZ	5905-00-114-0708	RCR07G202JS	81349	RESISTOR, FIXED, COMPOSITION	EA 4
C-28	30	PADZZ	5905-00-429-8772	RNC55H4222FS	81349	RESISTOR, FIXED, FILM	EA 1
C-28	31	PADZZ	5905-00-106-1356	RCR07G152JS	81349	RESISTOR, FIXED, COMPOSITION	EA 2
C-28	32	PADZZ	5962-01-058-1539	M38510/30102BCB	81349	MIRCOCIRCUIT, DIGITAL	EA 1
C-28	33	PADZZ	5962-01-031-7030	M38510/30001BCB	81349	MIRCOCIRCUIT, DIGITAL	EA 1
C-28	34	PADZZ	5962-01-034-9832	M38510/31004BCB	81349	MIRCOCIRCUIT, DIGITAL	EA 1
C-28	35	PADZZ	5962-01-077-8968	9324366	19203	MIRCOCIRCUIT, DIGITAL	EA 4
C-28	36	PADZZ	5962-01-050-0918	M38510/30701BEB	81349	MIRCOCIRCUIT, DIGITAL	EA 1
C-28	37	PADZZ	5962-01-059-2592	M38510/31101BEB	81349	MIRCOCIRCUIT, DIGITAL	EA 1
C-28	38	PADZZ	5962-01-066-0337	9324284	19203	MIRCOCIRCUIT, DIGITAL	EA 1
C-28	39	PADZZ	5962-01-075-3772	9324310	19203	MIRCOCIRCUIT, ANALOG	EA 1
C-28	40	PADZZ		9324296	19203	MIRCOCIRCUIT, DIGITAL	EA 3

C-75/C-76 (BLANK)

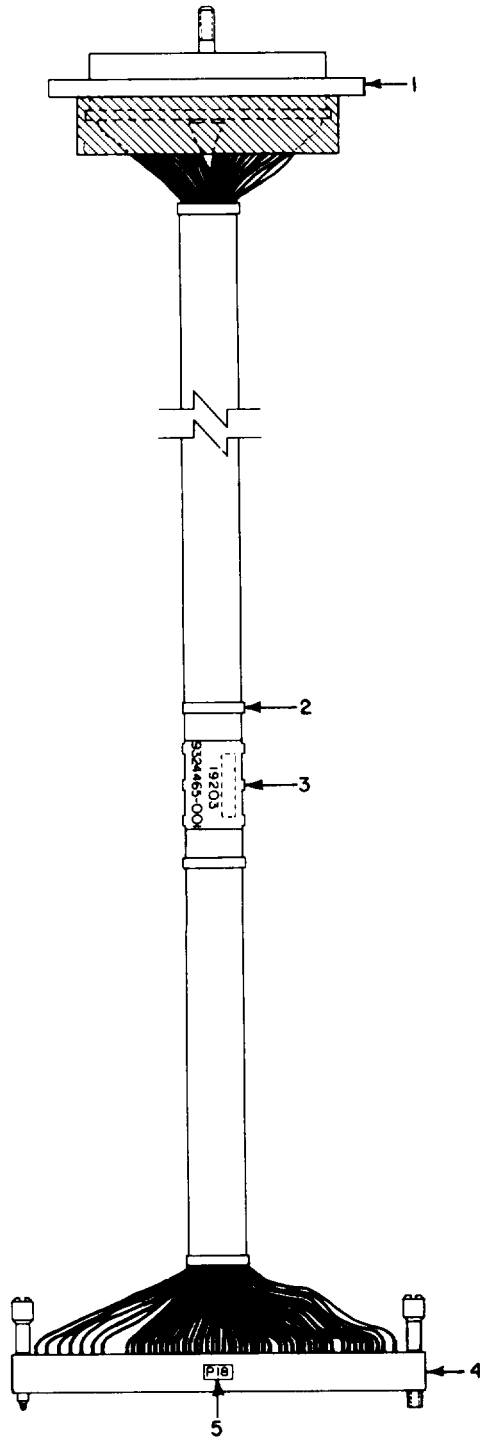
(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 0219 CIRCUIT CARD ASSEMBLY A15 SELF-TEST 9324477-001 (CONTINUED)			
C-28	41	PADZZ	5962-01-026-2493	M38510/30007BCB	81349	MIRCO CIRCUIT, DIGITAL		EA	1
C-28	42	PADZZ	5962-00-369-9839	M38510/00803BCB	81349	MIRCO CIRCUIT, DIGITAL		EA	7
C-28	43	PADZZ	5905-01-081-3641	M8340102M3901JA	81349	NETWORK, RESISTOR		EA	3
C-28	44	PADZZ		M8340102M3901JB	81349	NETWORK, RESISTOR		EA	2



AR926326

Figure C-29. OU J1 Self-Test Cable Assembly W10

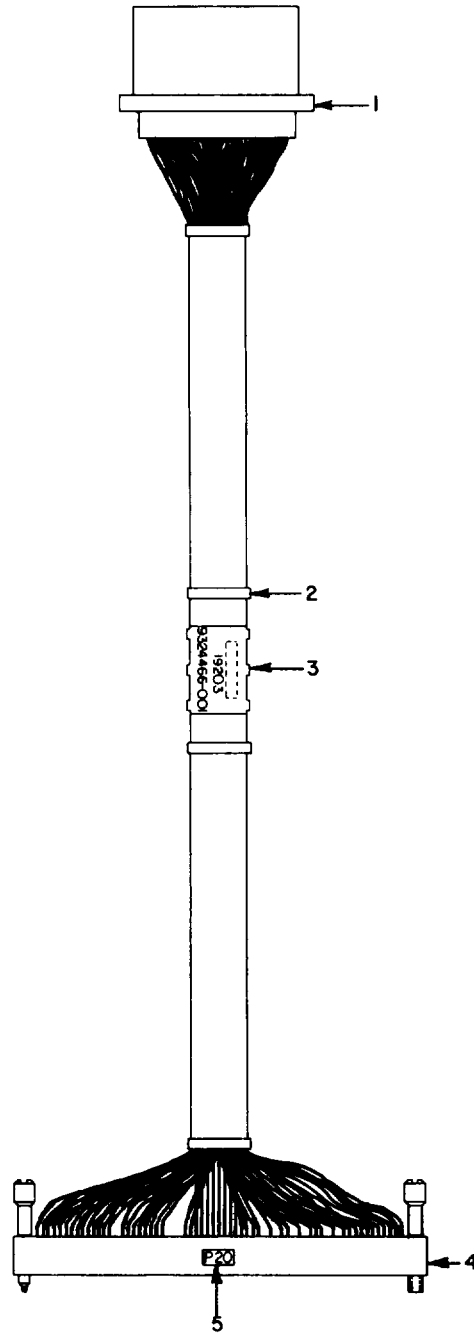
(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 0220, CABLE ASSEMBLY W10, OUI1 SELF-TEST 9324464-001			
C-29	1	PADZZ		M55302/62-A70M	81349	CONNECTOR, ELECTRICAL, PLUG		EA	1
C-29	2	PADZZ		MS3367-4-9	96906	STRAP, TIEDOWN, TYPE I		EA	5
C-29	3	PADZZ		MS3368-4-9	96906	STRAP, TIEDOWN, TYPE II		EA	1
C-29	4	PADZZ	5935-01-083-4677	9324529-1	19203	CONNECTOR, ELECTRICAL, RECEPTACLE		EA	1
C-29	5	MDDZZ		9324479-23	19203	LABEL, CONNECTOR, REF DES		EA	1



AR926327

Figure C-30. OU J2 Self-Test Cable Assembly W11

(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 0221 CABLE ASSEMBLY W11, OUI2 SELF-TEST 9324465-001			
C-30	1	PADZZ		M55302/62-A66M	81349	CONNECTOR, ELECTRICAL, PLUG		EA	1
C-30	2	PADZZ		MS3367-4-9	96906	STRAP, TIEDOWN, TYPE I		EA	4
C-30	3	PADZZ		MS3368-4-9	96906	STRAP, TIEDOWN, TYPE II		EA	1
C-30	4	PADZZ	5935-01-083-4676	9324529-2	19203	CONNECTOR, ELECTRICAL, RECEPTACLE		EA	1
C-30	5	MDDZZ		9324479-22	19203	LABEL, CONNECTOR REF DES		EA	1



AR926328

Figure C-31. DU Self Test Cable Assembly W12

(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 0222 CABLE ASSEMBLY W12, DU SELF-TEST 9324466-001			
C-31	1	PADZZ		M55302/62-A66M	81349	CONNECTOR, ELECTRICAL, PLUG		EA	1
C-31	2	PADZZ		MS3367-4-9	96906	STRAP, TIEDOWN, TYPE I		EA	4
C-31	3	PADZZ		MS3368-4-9	96906	STRAP, TIEDOWN, TYPE II		EA	1
C-31	4	PADZZ		MS27656E23B35P	96906	CONNECTOR, ELECTRICAL, RECEPTACLE		EA	1
C-31	5	MDDZZ		9324479-24	19203	LABEL, CONNECTOR REF DES		EA	1

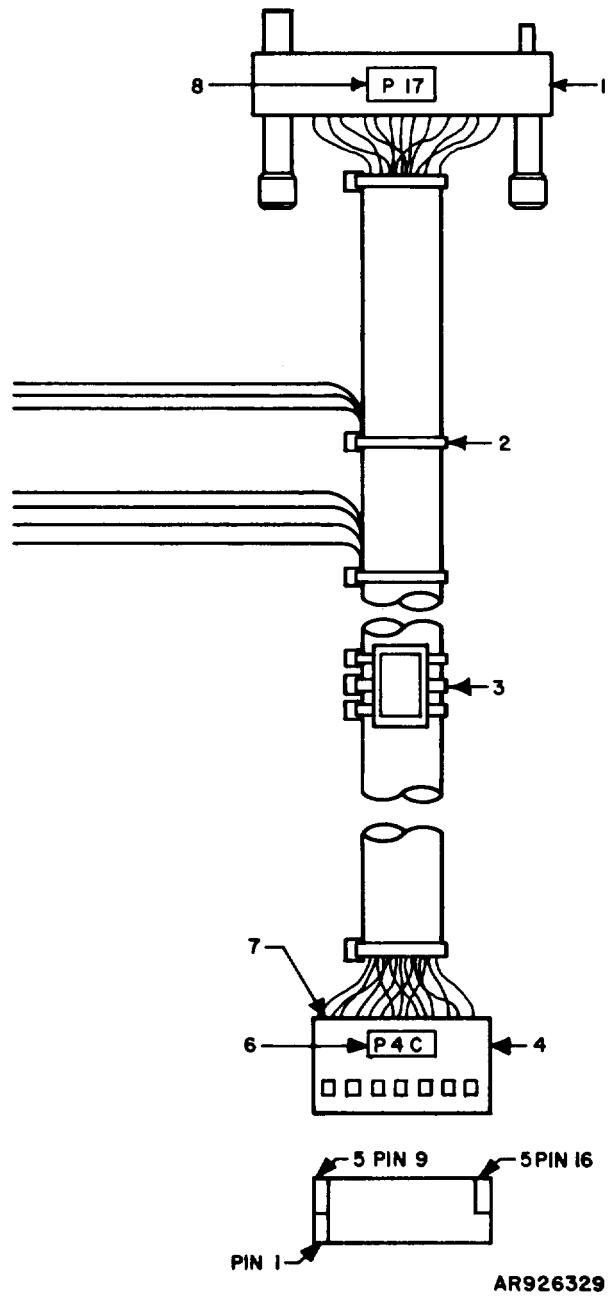
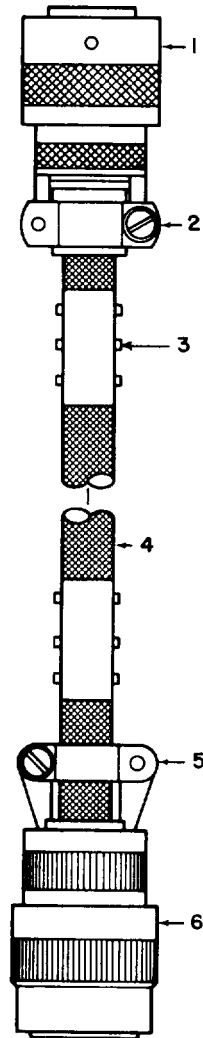


Figure C-32. Front Panel Harness Assembly W13

(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 0223 HARNESS ASSEMBLY W13, FRONT PANEL 9324458-001			
C-32	1	PADZZ		M55302/62-A20M	81349	CONNECTOR ELECTRICAL, PLUG		EA	1
C-32	2	PADZZ		MS3367-4-9	96906	STRAP, TIEDOWN, TYPE I		EA	10
C-32	3	PADZZ		MS3368-4-9	96906	STRAP, TIEDOWN, TYPE II		EA	1
C-32	4	PADZZ		9324587-11	19203	INSERT, CONNECTOR		EA	14
C-32	5	PADZZ	4933-01-083-0553	9324587-05	19203	INSERT, CONNECTOR KEYING		EA	2
C-32	6	MDDZZ		9324479-9	19203	LABEL, CONNECTOR REF DES		EA	1
C-32	7	PADZZ	4933-01-083-0549	9324586-15	19203	CONNECTOR, ELECTRICAL		EA	1
C-32	8	MDDZZ		9324479-21	19203	LABEL, CONNECTOR REF DES		EA	1



AR926324

Figure C-33. Power Cable Assembly W1

(1) ILLUSTRATION (A) FIG. NO	(B) ITEM NO	(2) SMR CODE	(3) FEDERAL STOCK	(4) PART NUMBER	(5) FSCM	TM9-4933-227-13&P (6) DESCRIPTION	USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 03 CABLE ASSEMBL W1, POWER 9324512-001			
C-33	1	PADZZ		MS3116E-12-35	96906	CONNECTOR, PLUG, ELEC		EA	1
C-33	2	PADZZ		BT06-EC-12	09922	STRAIN RELIEF		EA	1
C-33	3	PADZZ		MS3368-4-9	96906	STRAP, TIEDOWN, TYPE II		EA	2
C-33	4	PADZZ		C003MGF3/160365	81349	CABLE		FT	16
C-33	5	PADZZ		MS3417-12N	96906	CLAMP, CABLE, ELECTRICAL		EA	1
C-33	6	PADZZ		MS3476L12-3P	96906	CONNECTOR		EA	1

(1) ILLUSTRATION (A) FIG. NO	(2) (B) ITEM NO	(3) SMR CODE	(4) FEDERAL STOCK	(5) PART NUMBER	(6) FSCM DESCRIPTION	(7) USABLE ON CODE	(8) QTY INC IN UNIT
TM9-4933-227-13&P (6)							
GROUP 9999 BULK MATERIALS							
BULK	1	PADZZ	6145-01-013-7466	LW-C20(7)00	81349 WIRE STRANDED, AWG20, BLK	FT	V
BULK	2	PADZZ	6145-01-013-7809	LW-C20(7)03	81349 WIRE STRANDED, AWG20, RED	FT	V
BULK	3	PADZZ	6145-00-660-9313	LW-C20(7)U9	81349 WIRE STRANDED AWG20 WHT	FT	V
BULK	4	PADZZ	6145-00-548-2434	LW-C22(7)U0	81349 WIRE STRANDED, AWG22, BLK	FT	V
BULK	5	PADZZ	6145-00-681-8517	LW-C22(7)U9	81349 WIRE, STRANDED, AWG22, WHT	FT	V
BULK	6	PADZZ	6145-00-635-7798	LW-C26(7)U0	81349 WIRE STRANDED, AWG26, BLK	FT	V
BULK	7	PADZZ	6145-00-295-1291	LW-C26(7)U9	81349 WIRE, STRANDED, AWG26, WHT	FT	V
BULK	8	PADZZ		9324597-3	19203 SLEEVING, BRAID, EXPANDABLE	FT	V
BULK	9	PADZZ		QQB575-25/32	81348 BRAID, WIRE, TUBULAR, 25/32-IN. DIA	FT	V
BULK	10	PADZZ		QQB575-1-1/4	81348 BRAID, WIRE, TUBULAR, 1-1/4-IN. DIA	FT	V
BULK	11	PADZZ		QQB343-5/8	81348 BRAID, TUBULAR, COPPER, 5/8-IN. DIA	FT	V
BULK	12	PADZZ		M16878/4E18BLK	81349 WIRE, ELEC, TYPE E, AWG 18, BLK	FT	V
BULK	13	PADZZ		M16878/4E18RED	81349 WIRE, ELEC, TYPE E, AWG 18, RED	FT	V
BULK	14	PADZZ		M16878/4E22RED	81349 WIRE, ELEC, TYPE E, AWG 22, RED	FT	V
BULK	15	PADZZ		M16878/4E22ORN	81349 WIRE, ELEC, TYPE E, AWG 22, ORN	FT	V
BULK	16	PADZZ		M16878/4E22YEL	81349 WIRE, ELEC, TYPE E, AWG 22, YEL	FT	V
BULK	17	PADZZ		M16878/4E22GRN	81349 WIRE, ELEC, TYPE E, AWG 22, GRN	FT	V
BULK	18	PADZZ		M16878/4E22BLU	81349 WIRE, ELEC, TYPE E, AWG 22, BLU	FT	V
BULK	19	PADZZ		M16878/4E22VIO	81349 WIRE, ELEC, TYPE E, AWG 22 VIO	FT	V
BULK	20	PADZZ		M16878/4E26BLK	81349 WIRE, ELEC, TYPE E, AWG 26, BLK	FT	V
BULK	21	PADZZ		M16878/4E26RED	81349 WIRE, ELEC, TYPE E, AWG 26, RED	FT	V
BULK	22	PADZZ		M16878/4E26WHT	81349 WIRE, ELEC, TYPE E, AWG 26, WHT	FT	V
BULK	23	PADZZ		M16878/4E30WHT	81349 WIRE, WLMC, TYPE E, AWG 30, WHT	FT	V
BULK	24	PADZZ		M23053/5-3/4	81349 TUBING, HEAT-SHRINKABLE, 3/4-IN. DIA	FT	V
BULK	25	PADZZ		M23053/13-3/8	81349 TUBING, HEAT-SHRINKABLE, 3/8-IN DIA	FT	V
BULK	26	PADZZ		M16878	81349 WIRE, SHIELDED PAIR, AWG 26, WHT	FT	V
BULK	27	PADZZ		M81822/3-A30	81349 WIRE, SOLID, AWG 30	FT	V
BULK	28	PADZZ		RG-196A/U	81349 WIRE, SHIELDED, AWG26, WHT	FT	V
BULK	29	PADZZ		RG-174/U	81349 WIRE, SHIELDED, AWG26, WHT	FT	V

NATIONAL STOCK NUMBER INDEX

STOCK NUMBER	FIGURE NO	ITEM NO	STOCK NUMBER	FIGURE NO	ITEM NO
5905-00-003-5782	16	20	5910-00-214-6378	19	13
5305-00-054-5647	9	6	5910-00-214-6378	28	6
5305-00-054-5648	3	23	5905-00-223-2741	19	18
5305-00-054-5648	7	2	5905-00-223-2741	28	22
5305-00-054-5648	28	3	5930-00-227-5098	4	20
5305-00-054-5649	9	2	5905-00-231-2917	19	35
5305-00-054-5649	11	8	5905-00-236-0895	19	16
5305-00-054-5649	13	2	5905-00-244-8512	28	26
5305-00-054-5650	4	13	5905-00-255-9304	16	16
5305-00-054-5651	3	5	5905-00-285-0621	19	28
5305-00-054-6652	3	68	6145-00-295-1291	BULK	7
5305-00-054-6652	10	8	5905-00-304-0159	19	29
5305-00-054-6652	11	5	5905-00-304-0161	19	26
5305-00-054-6654	3	50	5962-00-361-8732	13	44
5305-00-054-6654	4	26	5962-00-361-8732	14	25
5305-00-054-6654	8	15	5962-00-369-9839	14	24
5305-00-054-6654	10	3	5962-00-369-9839	16	29
5305-00-054-6656	4	10	5962-00-369-9839	19	42
5305-00-054-6656	8	2	5962-00-369-9839	28	42
5305-00-054-6656	22	7	5905-00-401-7426	4	23
5310-00-058-2951	3	28	5905-00-401-7426	14	14
5305-00-059-3360	3	27	5905-00-401-7427	18	22
5305-00-068-5407	3	31	5905-00-401-7432	16	15
5305-00-068-5407	4	37	5905-00-412-0758	15	14
5305-00-071-1322	3	3	5905-00-412-4048	19	19
5305-00-071-1322	8	27	5905-00-413-1200	19	33
5310-00-105-4086	14	9	5905-00-428-8504	4	22
5310-00-105-4086	15	9	5905-00-429-8772	28	30
5310-00-105-4086	16	9	5962-00-430-2740	12	58
5310-00-105-4086	17	9	5905-00-431-5151	19	25
5310-00-105-4086	18	9	5905-00-432-6362	19	24
5310-00-105-4086	19	9	5905-00-433-1095	19	23
5310-00-105-4086	27	9	5905-00-458-9346	19	36
5905-00-106-1356	14	33	5905-00-458-9348	15	15
5905-00-106-1356	28	31	5905-00-458-9348	18	19
5905-00-106-3666	17	17	5905-00-458-9500	15	29
5905-00-110-7620	7	8	5910-00-460-0850	9	8
5905-00-110-7620	17	26	5910-00-460-0850	5	4
5905-00-110-7620	27	15	5905-00-466-1218	19	34
5905-00-110-7620	28	28	5905-00-477-9176	26	14
5905-00-112-2181	26	21	5905-00-480-5196	28	24
5910-00-113-5475	7	6	5905-00-482-7695	18	21
5910-00-113-5475	27	12	5905-00-484-7874	28	23
5910-00-113-5475	28	7	5910-00-495-0042	16	12
5905-00-114-0708	28	29	5935-00-502-4906	22	5
5905-00-114-5343	17	15	5310-00-543-2410	3	8
5905-00-126-6683	17	14	5310-00-543-2410	4	17
5905-00-126-6683	28	27	5310-00-543-2410	8	6
5905-00-138-3376	16	21	6145-00-548-2434	BULK	4
5905-00-138-3376	28	18	5310-00-595-6211	3	22
5365-00-141-6943	22	3	5310-00-595-6211	7	3
5910-00-144-4381	18	12	5310-00-595-6211	13	4
5905-00-180-8303	15	30	5310-00-616-8660	4	6
5905-00-180-8303	19	37	5310-00-616-8660	22	11
5905-00-180-8313	19	32	5905-00-617-5091	14	15
5310-00-193-7577	9	4	5905-00-617-5091	16	19
5905-00-195-4074	18	18	5905-00-617-5093	19	31
5905-00-203-1478	9	12	5905-00-629-3102	9	13
5310-00-208-3786	7	4	6145-00-635-7798	BULK	6
5310-00-208-3786	9	3	6145-00-660-9313	BULK	3
5310-00-208-3786	13	3	6145-00-681-8517	BULK	5
5310-00-208-3786	28	4	5905-00-689-1290	14	13
5910-00-214-6378	15	12	5905-00-689-1290	28	16
5910-00-214-6378	16	13	5305-00-719-5064	3	12
5910-00-214-6378	17	12	5305-00-719-5064	4	2
5910-00-214-6378	18	13	5305-00-719-5064	8	14

NATIONAL STOCK NUMBER INDEX (CONT.)					
STOCK NUMBER	FIGURE NO	ITEM NO	STOCK NUMBER	FIGURE NO	ITEM NO
5905-00-721-3678	16	17	5962-01-031-7030	14	26
5905-00-721-3678	19	20	5962-01-031-7030	28	33
5310-00-722-5998	10	7	5962-01-034-9832	12	59
5365-00-754-1562	20	12	5962-01-034-9832	28	34
5365-00-754-1562	22	4	5905-01-035-5065	14	16
5305-00-763-7822	3	60	5905-01-035-5065	18	17
5305-00-763-7827	3	58	5935-01-049-2237	22	1
5305-00-770-2579	3	18	5962-01-050-0916	14	28
5310-00-804-0141	14	31	5962-01-050-0918	12	41
5310-00-804-0141	15	27	5962-01-050-0918	14	22
5310-00-804-0141	16	18	5962-01-050-0918	15	19
5310-00-804-0141	17	25	5962-01-050-0918	16	30
5310-00-804-0141	18	15	5962-01-050-0918	27	17
5310-00-804-0141	19	44	5962-01-050-0918	28	36
5310-00-804-0141	27	10	5305-01-052-3302	8	19
5315-00-817-0612	3	17	5905-01-056-2148	17	18
5315-00-847-3435	27	3	5910-01-056-5472	7	7
5315-00-847-3735	14	3	5910-01-056-5472	14	12
5315-00-847-3735	15	3	5910-01-056-5472	27	13
5315-00-847-3735	16	3	5962-01-058-1539	12	60
5315-00-847-3735	17	3	5962-01-058-1539	13	33
5315-00-847-3735	19	3	5962-01-058-1539	28	32
5310-00-883-9385	4	5	5962-01-059-2592	15	18
5310-00-883-9385	22	10	5962-01-059-2592	28	37
3439-00-892-4408	ESNL	3	5999-01-064-9543	14	30
5961-00-698-2163	19	14	5905-01-065-5934	18	28
4820-00-898-3003	2	3	5962-01-065-7026	12	42
5935-00-904-0778	4	16	5962-01-065-7026	13	34
5961-00-925-3777	28	12	5962-01-065-7026	14	23
5310-00-933-8118	9	7	5962-01-066-0337	16	28
5310-00-934-9748	3	9	5962-01-066-0337	17	20
5310-00-934-9748	8	5	5962-01-066-0337	18	24
5310-00-934-9761	3	16	5962-01-066-0337	19	39
5961-00-938-1135	16	14	5962-01-066-0337	28	38
5961-00-938-1135	18	14	5962-01-066-1588	16	27
5961-00-951-8757	19	15	5962-01-066-1588	19	38
5961-00-951-8757	28	11	5962-01-066-1590	16	22
5305-00-988-7602	4	33	1090-01-068-0442	15	16
5340-00-992-8139	2	5	5905-01-068-9313	17	23
5340-00-993-0879	2	4	5905-01-068-9313	18	26
5935-01-005-6542	22	2	5905-01-068-9313	14	29
5945-01-010-5767	9	11	5905-01-068-9313	15	26
5945-01-010-5767	17	13	5905-01-068-9313	16	32
5945-01-010-5767	18	16	5905-01-068-9313	19	43
6145-01-013-7466	BULK	1	5961-01-073-5463	9	9
6145-01-013-7809	BULK	2	7025-01-074-1655	17	19
5430-01-014-0535	2	2	7025-01-074-1655	18	23
5999-01-015-3901	16	33	7025-01-074-1655	19	40
5999-01-015-3901	17	24	5962-01-075-3772	16	26
5999-01-015-3901	18	29	5962-01-075-3772	17	21
5999-01-015-3901	19	11	5962-01-075-3772	18	25
5935-01-023-3018	9	10	5962-01-075-3772	19	41
5905-01-025-2021	28	25	5962-01-075-3772	28	39
5962-01-026-2493	28	41	4933-01-076-6770	4	14
5962-01-027-6863	12	43	4933-01-076-6771	3	53
5962-01-027-6863	13	31	4933-01-076-6772	3	42
5962-01-027-6863	14	20	4933-01-076-6773	3	40
5962-01-027-6863	15	23	5933-01-076-6793	8	20
5962-01-027-6863	16	25	4933-01-076-6794	8	16
5962-01-027-6863	27	16	4933-01-076-6795	8	21
5962-01-030-3146	15	24	4933-01-076-6872	3	37
5962-01-030-3146	27	18	4933-01-076-6902	3	41
5962-01-030-6352	16	24	4933-01-076-6903	3	39
5962-01-031-7030	7	10	4933-01-076-6904	88	8
5962-01-031-7030	12	45	5962-01-077-8968	28	35
5962-01-031-7030	12	57	5962-01-077-8969	9	14

NATIONAL STOCK NUMBER INDEX (CONT.)

STOCK NUMBER	FIGURE NO	ITEM NO	STOCK NUMBER	FIGURE NO	ITEM NO
5962-01-077-8969	16	23	5962-01-083-4684	14	19
5935-01-079-8957	23	1	5962-01-083-4684	15	20
5999-01-079-9252	3	6	5962-01-083-4685	15	17
5925-01-080-2484	4	19	5999-01-083-4686	9	5
5905-01-081-3641	28	43	5999-01-083-4687	3	45
4933-01-083-0541	1	3	5999-01-083-4688	3	44
4933-01-083-0542	3	63	5999-01-083-4689	3	43
4933-01-083-0543	6	3	5999-01-083-4690	3	38
4933-01-083-0544	4	30	4933-01-083-6061	12	6
4933-01-083-0545	4	32	4933-01-083-6061	13	5
4933-01-083-0546	5	1	4933-01-083-6061	14	2
4933-01-083-0546	21	11	4933-01-083-6061	15	2
4933-01-083-0547	23	5	4933-01-083-6061	16	2
4933-01-083-0548	24	5	4933-01-083-6061	17	2
4933-01-083-0548	25	4	4933-01-083-6061	18	2
4933-01-083-0549	32	7	4933-01-083-6061	19	2
4933-01-083-0550	20	5	4933-01-083-6061	27	2
4933-01-083-0550	21	5	4933-01-083-6062	12	17
4933-01-083-0550	22	15	4933-01-083-6062	13	23
4933-01-083-0551	5	2	4933-01-083-6062	14	10
4933-01-083-0551	20	6	4933-01-083-6062	15	10
4933-01-083-0551	21	6	4933-01-083-6062	16	10
4933-01-083-0551	22	16	4933-01-083-6062	17	19
4933-01-083-0551	23	7	4933-01-083-6062	18	10
4933-01-083-0551	24	8	4933-01-083-6062	19	10
4933-01-083-0551	25	5	4933-01-083-6062	27	11
4933-01-083-0551	26	5	4933-01-083-6063	14	4
4933-01-083-0553	5	3	4933-01-083-6063	16	4
4933-01-083-0553	20	7	4933-01-083-6063	17	4
4933-01-083-0553	21	9	4933-01-083-6063	18	4
4933-01-083-0553	22	17	4933-01-083-6063	19	4
4933-01-083-0553	23	8	4933-01-083-6063	27	4
4933-01-083-0553	24	7	4933-01-083-6064	14	5
4933-01-083-0553	25	6	4933-01-083-6064	15	5
4933-01-083-0553	26	6	4933-01-083-6064	16	5
4933-01-083-0553	32	5	4933-01-083-6064	17	5
4933-01-083-0554	1	4	4933-01-083-6064	18	5
5305-01-083-4661	8	22	4933-01-083-6064	19	5
5305-01-083-4662	4	31	4933-01-083-6064	27	5
5355-01-083-4665	4	21	4933-01-083-6066	8	17
5330-01-083-4666	4	15	4933-01-083-6067	20	2
5330-01-083-4669	3	34	4933-01-083-6067	21	2
5330-01-083-4670	3	62	4933-01-083-6068	23	2
5975-01-083-4671	8	35	4933-01-083-6071	8	34
5365-01-083-4674	6	11	4933-01-083-6072	8	24
5935-01-083-4675	20	1	4933-01-083-6073	8	25
5935-01-083-4676	30	4	4933-01-083-6078	3	26
5935-01-083-4677	29	4	4933-01-084-0423	8	23
6250-01-083-4678	4	12	4933-01-084-0431	1	2
6695-01-083-4679	3	61	4933-01-710-8243	3	47
5340-01-083-4680	4	36	4933-01-710-8244	3	48
5935-01-083-4682	3	30	4933-01-710-8245	3	81
5935-01-083-4683	3	35	4933-01-710-8247	3	14
			4933-01-710-8248	3	54
			5596-21-050-0918	13	45

NATIONAL PART NUMBER INDEX

PART NUMBER	FSCM	FIG NO	ITEM NO	PART NUMBER	FSCM	FIG NO	ITEM NO
AN960-101	88044	3	29	MS27183-5	96906	8	3
B106-EC-12	09922	33	2	MS27183-5	96906	11	4
CD03MGF3/160365	81349	33	4	MS27418-2B	96906	8	29
CR60A/018.432MHZ	16224	12	71	MS27467E23B35S	96906	22	1
EMS68001	16224	12	48	MS27506B23-1	96906	22	2
EMS72261	16224	12	21	MS27656E23B35P	96906	31	4
JANTX1N752A	81350	12	70	MS3057-20B	96906	22	5
JAN1N4105	81349	9	9	MS3110E12-3P	96906	4	16
JAN1N4148	81349	16	14	MS3116E-12-3S	96906	33	1
JAN1N4148	81349	18	14	MS3367-4-9	96906	5	6
JAN1N4946	81350	19	14	MS3367-4-9	96906	20	4
JAN2N2222A	81350	19	15	MS3367-4-9	96906	21	4
JAN2N2222A	81350	28	11	MS3367-4-9	96906	22	14
JAN2N2907A	81350	28	12	MS3367-4-9	96906	23	3
JAN4N23A	81349	14	27	MS3367-4-9	96906	24	3
LW-C20(7)00	81349	BULK	1	MS3367-4-9	96906	25	2
LW-C20(7)03	81349	BULK	2	MS3367-4-9	96906	26	2
LW-C20(7)09	81349	BULK	3	MS3367-4-9	96906	29	2
LW-C22(7)00	81349	BULK	4	MS3367-4-9	96906	30	2
LW-C22(7)09	81349	BULK	5	MS3367-4-9	96906	31	2
LW-C26(7)00	81349	BULK	6	MS3367-4-9	96906	32	2
LW-C26(7)09	81349	BULK	7	MS3367-4-9	96906	ESML	19
MS0035431-3	96906	4	8	MS3368-4-9	96906	5	4
MS15652-190	96906	27	1	MS3368-4-9	96906	20	3
MS15795-801	96906	14	31	MS3368-4-9	96906	21	3
MS15795-801	96906	15	27	MS3368-4-9	96906	22	13
MS15795-801	96906	16	18	MS3368-4-9	96906	23	4
MS15795-801	96906	17	25	MS3368-4-9	96906	24	4
MS15795-801	96906	18	15	MS3368-4-9	96906	25	3
MS15795-801	96906	19	44	MS3368-4-9	96906	26	3
MS15795-801	96906	27	10	MS3368-4-9	96906	29	3
MS15795-803	96906	3	22	MS3368-4-9	96906	30	3
MS15795-803	96906	7	3	MS3368-4-9	96906	31	3
MS15795-803	96906	13	4	MS3368-4-9	96906	32	3
MS15795-805	96906	10	7	MS3368-4-9	96906	33	3
MS15795-806	96906	3	56	MS3417-12B	96906	33	5
MS16555-42	96906	3	17	MS3420-10	96906	20	11
MS16562-190	96906	14	3	MS3420-10	96906	21	12
MS16562-190	96906	15	3	MS3420-16	96906	22	3
MS16562-190	96906	16	3	MS3420-20	96906	20	12
MS16562-190	96906	17	3	MS3420-20	96906	22	4
MS16562-190	96906	19	3	MS3476L12-3P	96906	33	6
MS16995-26	96906	4	33	MS35207-263	96906	3	36
MS16996-16	96906	3	31	MS35207-68	96906	3	27
MS16996-16	96906	4	37	MS35333-36	96906	9	4
MS17121-5	96906	12	4	MS35337-78	96906	28	5
MS171432	96906	12	7	MS35337-81	96906	3	28
MS171432	96906	13	6	MS35338-132	96906	8	31
MS171432	96906	18	3	MS35338-135	96906	9	7
MS20426AL2-4	96906	12	9	MS35338-136	96906	3	15
MS20426AD2-8	96906	13	9	MS35338-136	96906	8	10
MS20470AD2-6	96906	12	14	MS35338-136	96906	10	2
MS20470AD2-6	96906	13	18	MS35338-155	96906	4	5
MS20470AD2-8	96906	12	3	MS35338-155	96906	22	10
MS20470AD2-8	96906	13	13	MS35338-40	96906	3	8
MS21208-A-20	96906	8	28	MS35338-40	96906	4	17
MS25693-12	96906	8	19	MS35338-40	96906	8	6
MS25089-308	96906	4	20	MS35431-4	96906	20	13
MS25281-B09	96906	3	59	MS35649-242	96906	4	18
MS25281-B05	96906	3	57	MS35649-244	96906	3	9
MS25281-B06	96906	3	66	MS35649-244	96906	8	5
MS24281-B07	96906	3	10	MS35649-262	96906	10	5
MS25261-B08	96906	3	65	MS35649-264	96906	3	16
MS25281-B12	96906	3	20	MS35649-64	96906	8	9
MS25281-B14	96906	3	32	MS35650-304	96906	3	33
MS25281-B16	96906	3	49	MS35650-314	96906	14	9
MS25281-B6	96906	8	13	MS35650-314	96906	15	9
MS27183-4	96906	11	7	MS35650-314	96906	16	9

NATIONAL PART NUMBER INDEX (CONT.)

PART NUMBER	FSCM	FIG NO	ITEM NO	PART NUMBER	FSCM	FIG NO	ITEM NO
MS35650-314	96906	17	9	M38510/07701BCB	81349	13	41
MS35650-314	96906	18	9	M38510/10405BCB	81349	15	21
MS35650-314	96906	19	9	M38510/16301BEB	81349	6	5
MS35650-314	96906	27	9	M38510/16303BCB	81349	13	38
MS51957-13	96906	8	33	M38510/30001BCB	81346	12	45
MS51957-13	96906	9	6	M38510/30001BCB	81349	7	10
MS51957-14	96906	3	23	M38510/30001BCB	81349	12	57
MS51957-14	96906	7	2	M38510/30001BCB	81349	14	26
MS51957-14	96906	28	3	M38510/30001BCB	81349	28	33
MS51957-15	96906	9	2	M38510/30002BCB	81349	15	24
MS51957-15	96906	11	8	M38510/30002BCB	81349	27	16
MS51957-15	96906	13	2	M38510/30003BCB	81349	12	43
MS51957-16	96906	4	13	M38510/30003BCB	81349	13	31
MS51957-17	96906	3	5	M38510/30003BCB	81349	14	20
MS51957-19	96906	3	4	M38510/30003BCB	81349	15	23
MS51957-28	96906	3	68	M38510/30003BCB	81349	16	25
MS51957-28	96906	10	8	M38510/30003BCB	81349	27	16
MS51957-28	96906	11	5	M38510/30005BCB	81349	16	24
MS51957-30	96906	3	50	M38510/30007BCB	81349	28	41
MS51957-30	96906	4	26	M38510/30102BCB	81349	12	60
MS51957-30	96906	8	15	M38510/30102BCB	81349	13	33
MS51957-30	96906	10	3	M38510/30102BCB	81349	28	32
MS51957-31	96906	3	55	M38510/30301BCB	81349	12	44
MS51957-32	96906	4	10	M38510/30501BCB	81349	13	42
MS51957-32	96906	8	2	M38510/30605BCB	81349	13	40
MS51957-32	96906	22	7	M38510/30701BEB	81349	12	41
MS51957-33	96906	4	11	M38510/30701BEB	81349	13	45
MS51957-45	96906	8	30	M38510/30701BEB	81349	14	22
MS51959-14	96906	3	60	M38510/30701BEB	81349	15	19
MS51959-16	96906	4	29	M38510/30701BEB	81349	16	30
MS51959-16	96906	8	7	M38510/30701BEB	81349	27	17
MS51959-18	96906	3	58	M38510/30701BEB	81349	28	36
MS51959-28	96906	4	34	M38510/31001BCB	81349	14	21
MS51959-30	96906	3	12	M38510/31004BCB	81349	12	59
MS51959-30	96906	4	2	M38510/31004BCB	81349	28	34
MS51959-30	96906	8	14	M38510/31101BEB	81349	15	18
MS51959-45	96906	3	18	M38510/31101BEB	81349	28	37
MS51960-65	96906	3	3	M38510/31303BCB	81349	14	28
MS51960-65	96906	8	27	M38510/31504BEB	81349	12	42
MS5302/61-A40	81349	7	5	M38510/31504BEB	81349	13	34
M16878	81349	BULK	26	M38510/31504BEB	81349	14	23
M16878/4E18BLK	81349	BULK	12	M38510/32202BEB	81349	14	17
M16878/4E18RED	81349	BULK	13	M38510/32202BEB	81349	27	21
M16878/4E22BLU	81349	BULK	18	M38510/32203BEB	81349	7	9
M16878/4E22GRN	81349	BULK	17	M38510/32203BEB	81349	14	18
M18678/4E22ORN	81349	BULK	15	M38510/32204BCB	81349	13	39
M16878/4E22RED	81349	BULK	14	M38527/1-01D	81349	16	33
M16878/4E22VIO	81349	BULK	19	M38527/1-01D	81349	17	24
M16878/4E22YEL	81349	BULK	16	M38527/1-01D	81349	18	29
M16878/4E26BLK	81349	BULK	20	M38527/1-01D	81349	19	11
M16878/4E26RED	81349	BULK	21	M38527/2-05D	81349	14	30
M16878/4E26WHT	81349	BULK	22	M38527/3-01	81349	28	2
M16878/4E30WHT	81349	BULK	23	M39003/01-2287	81349	7	6
M23053/13-3/8	81349	BULK	25	M39003/01-2287	81349	27	12
M23053/5-3/4	81349	BULK	24	M39003/01-2287	81349	28	7
M23377	81349	ESML	9	M39003/01-2305	81349	18	12
M38510/00801BCB	81349	13	44	M39003/01-2356	81349	16	12
M38510/00801BCB	81349	14	25	M39003/01-2357	81349	9	8
M38510/00803BCB	81349	14	24	M39003/01-2494	81349	13	25
M38510/00803BCB	81349	16	29	M39014/01-1357	81349	12	20
M38510/00803BCB	81349	19	42	M39014/01-1357	81349	14	32
M38510/00803BCB	81349	28	42	M39014/01-1357	81349	15	13
M38510/01602BCB	81349	12	58	M39014/01-1495	81349	12	18
M38510/07001BCB	81349	12	51	M39014/01-1513	81349	12	19
M38510/07001BCB	81349	13	35	M39014/01-1576	81349	15	12
M38510/07003BCB	81349	12	68	M39014/01-1576	81349	16	13
M38510/07003BCB	81349	13	43	M39014/01-1576	81349	17	12
M38510/07006BCB	81349	12	49	M39014/01-1576	81349	18	13

NATIONAL PART NUMBER INDEX (CONT.)

PART NUMBER	FSCM	FIG NO	ITEM NO	PART NUMBER	FSCM	FIG NO	ITEM NO
M39014/01-1576	81349	14	13	RCR07G102JS	81349	27	15
M39014/01-1576	81349	28	6	RCR07G102JS	81349	28	28
M39014/01-1594	81349	7	7	RCR07G103JS	81349	17	17
M39014/01-1594	81349	14	12	RCR07G105JS	81349	17	16
M39014/01-1594	81349	27	13	RCR07G150JS	81349	18	20
M39014/05-2256	81349	6	2	RCR07G152JS	81349	14	33
M39014/05-2855	81349	13	24	RCR07G152JS	81349	28	31
M39016/13-057M	81349	9	11	RCR07G182JS	81349	17	15
M39016/13-057M	81349	17	13	RCR07G202JS	81349	28	29
M39016/13-057M	81349	18	16	RCR07G332JS	81349	17	14
M55302/55-A20L	81349	23	1	RCR07G332JS	81349	28	27
M55302/55-A36L	81349	24	1	RCR07G392JS	81349	28	20
M55302/56-B20	81349	9	10	RCR20G1R0JS	81349	17	18
M55302/56-B36	81349	6	4	RCR20G152JS	81349	19	37
M55302/61-A20	81349	28	10	RCR20G272JS	81349	4	23
M55302/61-A66	81349	28	9	RCR20G272JS	81349	14	14
M55302/61-A70	81349	28	8	RCR20G392JS	81349	17	27
M55302/62-A20M	81349	32	1	RG-174/U	81349	BULK	29
M55302/62-A40L	81349	22	12	RG-196A/U	81349	BULK	28
M55302/62-A44L	81349	25	1	RLR07C1000GP	81349	12	29
M55302/62-A44L	81349	26	1	RLR07C1001GP	81349	12	23
M55302/62-A66M	81349	30	1	RLR07C1001GP	81349	13	28
M55302/62-A66M	81349	31	1	RLR07C1002GP	81349	12	27
M55302/62-A70M	81349	29	1	RLR07C1003GP	81349	12	30
M81822/3-A30	81349	BULK	27	RLR07C1202GP	81349	12	24
M8340101M1002JB	81349	18	28	RLR07C2400GP	81349	12	32
M8340101M6801JB	81349	18	27	RLR07C2401GP	81349	12	33
M8340102M1001JA	81349	7	11	RLR07C2701GP	81349	12	28
M8340102M1002JA	81349	17	23	RLR07C3301GP	81349	12	35
M8340102M1002JA	81349	18	26	RLR07C3302GP	81349	12	26
M8340102M1002JB	81349	14	29	RLR07C3303GP	81349	12	25
M8340102M1002JB	81349	15	26	RNC55H10RGFS	81349	28	26
M8340102M1002JB	81349	16	32	RNC55H1001FS	81349	16	21
M8340102M1002JB	81349	19	43	RNC55H1001FS	81349	28	18
M8340102M2201JB	81349	17	22	RNC55H1002FS	81349	19	18
M8340102M3901JA	81349	28	43	RNC55H1002FS	81349	28	22
M8340102M3901JA	81349	28	44	RNC55H1003FS	81349	16	15
NAS671C4	80205	7	4	RNC55H1183FS	81349	19	24
NAS671C4	80205	9	3	RNC55H12R1FS	81349	28	25
NAS671C4	80205	13	3	RNC55H1210FS	81349	28	23
NAS671C4	80205	28	4	RNC55H1242FS	81349	16	16
NAS671C6	80205	4	6	RNC55H1431FS	81349	9	13
NAS671C6	80205	22	11	RNC55H1501FS	81349	28	24
QQ8343-5/8	81349	BULK	11	RNC55H1652FS	81349	19	30
QQ8575-1-1/4	81348	BULK	10	RNC55H1743FS	81349	19	28
QQ8575-25/32	81348	BULK	9	RNC55H1781FS	81349	28	13
RCR05G102JS	81349	15	29	RNC55H1822FS	81349	19	21
RCR05G103JS	81349	14	16	RNC55H2001FS	81349	28	14
RCR05G103JS	81349	18	17	RNC55H2002FS	81349	19	19
RCR05G104JS	81349	19	36	RNC55H2003FS	81349	19	25
RCR05G105JS	81349	18	18	RNC55H2053FS	81349	19	23
RCR05G152JS	81349	15	30	RNC55H2101FS	81349	28	21
RCR05G181JS	81349	15	15	RNC55H2153FS	81349	19	29
RCR05G181JS	81349	18	19	RNC55H2373FS	81349	19	26
RCR05G203JS	81349	19	33	RNC55H2430FS	81349	9	12
RCR05G242JS	81349	18	21	RNC55H2491FS	81349	16	17
RCR05G243JS	81349	19	32	RNC55H2491FS	81349	19	20
RCR05G332JS	81349	18	22	RNC55H2670FS	81349	28	15
RCR05G432JS	81349	19	35	RNC55H3161FS	81349	28	17
RCR05G472JS	81349	14	15	RNC55H3401FS	81349	28	19
RCR05G472JS	81349	16	19	RNC55H3402FS	81349	19	17
RCR05G473JS	81349	19	31	RNC55H3921FS	81349	16	20
RCR05G510JS	81349	15	14	RNC55H4222FS	81349	28	30
RCR05G512JS	81349	14	13	RNC55H4992FS	81349	19	16
RCR05G512JS	81349	28	16	RNC55H6041FS	81349	19	22
RCR05G827JS	81349	19	34	RNC55H6812FS	81349	19	27
RCR07G102JS	81349	7	6	RV4NAYS202A	81349	4	22
RCR07G102JS	81349	17	26	RWR81S2500FP	81349	12	34

NATIONAL PART NUMBER INDEX (CONT.)

PART NUMBER	FSCM	FIG		PART NUMBER	FSCM	ITEM	
		NO	NO			NO	NO
RWR81S47ROFP	81349	12	31	9324307	19203	15	20
SM63WRAP3 .031	81348	ESML	3	9324310	19203	16	26
TTE489YEL	81348	ESML	10	9324310	19203	17	21
TYPE AR	81349	ESML	1	9324310	19203	18	25
TYPE II, GRADE N	81349	ESML	7	9324310	19203	19	41
TYPE 11, SIZE S	81349	ESML	2	9324310	19203	28	39
TYPE RA	81348	ESML	4	9324311	19203	15	16
TYPE RMA	81348	ESML	5	9324315	19203	15	17
WC-D6-140	96906	3	11	9324324	19203	4	28
WC-D6-140	96906	8	12	9324327	19203	ESML	6
ZP-5031-47	98376	2	1	9324366	19203	28	35
ZSP2-2004	98376	2	4	9324453	19203	8	32
ZSP2-204	98376	2	5	9324456	19203	11	1
ZSP3-003	98376	2	2	9324457	19203	15	28
ZSP6-037-4	98376	2	3	9324458-001	19203	3	52
26307FEDSTD595	81348	ESML	12	9324461	19203	10	10
37038FEDSTD595A	81348	ESML	11	9324463-001	19203	10	6
64424	73734	14	6	9324464-001	19203	3	25
64424	73734	15	6	9324465-001	19203	3	24
64424	73734	16	6	9324466-001	19203	3	7
64424	73734	17	6	9324468	19203	12	37
64424	73734	18	6	9324469	19203	12	39
64424	73734	19	6	9324470	19203	12	38
64448	73734	14	7	9324471	19203	12	40
64448	73734	15	7	9324472	19203	15	25
64448	73734	16	7	9324473	19203	4	4
64448	73734	17	7	9324474	19203	4	3
64448	73734	18	7	9324476	19203	28	1
64448	73734	19	7	9324477-001	19203	3	67
64448	73734	27	7	9324479-1	19203	26	7
66424	73734	27	6	9324479-10	19203	20	9
67541	73734	14	8	9324479-11	19203	20	8
67541	73734	15	8	9324479-12	19203	21	8
67541	73734	16	8	9324479-13	19203	21	10
67541	73734	17	8	9324479-14	19203	23	9
67541	73734	18	8	9324479-15	19203	23	10
67541	73734	19	8	9324479-16	19203	24	10
67541	73734	27	8	9324479-17	19203	26	8
923621-001	16224	12	15	9324479-18	19203	25	8
923621-001	16224	13	10	9324479-2	19203	25	7
923621-007	16224	12	16	9324479-21	19203	32	8
923621-008	16224	12	11	9324479-22	19203	30	5
923621-008	16224	13	19	9324479-23	19203	29	5
923621-009	16224	12	12	9324479-24	19203	31	5
923621-009	16224	13	11	9324479-25	19203	20	14
9324172	19203	3	6	9324479-26	19203	21	13
9324199	19203	ESML	15	9324479-7	19203	24	9
9324200	19203	ESML	13	9324479-8	19203	5	7
9324261	19203	ESML	16	9324479-9	19203	32	6
9324265	19203	4	27	9324481-1	19203	10	9
9324270	19203	12	52	9324481-2	19203	10	4
9324277	19203	ESML	20	9324484	19203	4	24
9324280	19203	16	27	9324485	19203	22	6
9324280	19203	19	38	9324486	19203	27	19
9324284	19203	16	28	9324487	19203	27	20
9324284	19203	17	20	9324489	19203	3	13
9324284	19203	18	24	9324490	19203	22	9
9324284	19203	19	39	9324491	19203	22	8
9324284	19203	28	38	9324492	19203	11	3
9324289	19203	16	22	9324493	19203	4	25
9324291	19203	15	22	9324495	19203	7	1
9324292	19203	9	14	9324496-001	19203	3	21
9324292	19203	16	23	9324497	19203	4	7
9324296	19203	28	40	9324499-28	19203	8	18
9324297	19203	17	19	9324499-40	19203	8	17
9324297	19203	18	23	9324501	19203	4	14
9324297	19203	19	40	9324502	19203	1	4
9324307	19203	14	19	9324503-1	19203	1	5

NATIONAL PART NUMBER INDEX (CONT.)

PART NUMBER	FSCM	INDEX		PART NUMBER	FSCM	INDEX	
		FIG NO	ITEM NO			FIG NO	ITEM NO
9324503-2	19203	1	1	9324549-1	19203	27	2
9324504-001	19203	3	1	9324549-2	19203	12	17
9324505	19203	4	1	9324549-2	19203	13	23
9324506	19203	5	5	9324549-2	19203	14	10
9324507-001	19203	3	64	9324549-2	19203	15	10
9324508	19203	8	1	9324549-2	19203	16	10
9324509-001	19203	1	3	9324549-2	19203	17	10
9324510-001	19203	3	14	9324549-2	19203	18	10
9324511-001	19203	3	26	9324549-2	19203	19	10
9324512-001	19203	1	2	9324549-2	19203	27	11
9324513	19203	8	20	9324550	19203	16	1
9324514-001	19203	8	35	9324551-01	19203	27	14
9324515-001	19203	3	45	9324551-10	19203	17	11
9324516-001	19203	3	46	9324551-11	19203	18	11
9324517-001	19203	3	44	9324551-12	19203	19	12
9324518-001	19203	3	38	9324551-7	19203	14	11
9324519-001	19203	3	37	9324551-8	19203	15	11
9324520-001	19203	3	42	9324551-9	19203	16	11
9324521-001	19203	3	43	9324552	9203	8	16
9324522-001	19203	3	40	9324553	19203	8	21
9324523-001	19203	3	41	9324554	19203	15	1
9324524-001	19203	3	39	9324555	19203	14	1
9324525	19203	4	19	9324556	19203	17	1
9324526-001	19203	3	2	9324557	19203	18	1
9324527	19203	3	9	9324558	19203	8	28
9324528	19203	4	30	9324561	9203	27	1
9324529-1	19203	29	4	9324562	19203	12	63
9324529-2	19203	30	4	9324563	19203	6	3
9324530	19203	20	2	9324566	19203	3	34
9324530	19203	21	2	9324567	19203	3	62
9324531-1	19203	3	35	9324569	19203	11	6
9324531-2	19203	3	30	9324570	19203	11	2
9324533	19203	4	36	9324573	19203	4	15
9324534-1	19203	20	1	9324575-1	19203	8	22
9324534-2	19203	21	1	9324575-2	19203	8	23
9324536	19203	4	21	9324576-001	19203	8	8
9324536	19203	6	1	9324577	19203	9	1
9324537	19203	3	61	9324578	19203	9	15
9324538	19203	3	63	9324579	19203	9	5
9324542	19203	14	5	9324580	19203	23	2
9324542	19203	15	5	9324581	19203	16	31
9324542	19203	16	5	9324582	19203	4	12
9324542	19203	17	5	9324584	19203	24	2
9324542	19203	18	5	9324586-01	19203	5	1
9324542	19203	19	5	9324586-01	19203	21	11
9324542	19203	27	5	9324586-03	19203	23	5
9324543-1	19203	4	31	9324586-08	19203	26	4
9324543-2	19203	4	32	9324586-09	19203	24	5
9324544	19203	19	1	9324586-09	19203	25	4
9324545-1	19203	8	34	9324586-15	19203	32	7
9324545-2	19203	8	24	9324586-17	19203	20	5
9324545-3	19203	8	25	9324586-17	19203	21	5
9324546	19203	14	4	9324586-17	19203	22	15
9324546	19203	16	4	9324587-01	19203	5	2
9324546	19203	17	4	9324587-05	19203	5	3
9324546	19203	18	4	9324587-05	19203	20	7
9324546	19203	19	4	9324587-05	19203	21	9
9324546	19203	27	4	9324587-05	19203	22	17
9324547-06	19203	8	11	9324587-05	19203	23	8
9324547-16	19203	4	35	9324587-05	19203	24	7
9324549-1	19203	12	6	9324587-05	19203	25	6
9324549-1	19203	13	5	9324587-05	19203	26	6
9324549-1	19203	14	2	9324587-05	19203	32	5
9324549-1	19203	15	2	9324587-07	19203	20	6
9324549-1	19203	16	2	9324587-07	19203	21	6
9324549-1	19203	17	2	9324587-07	19203	22	16
9324549-1	19203	18	2	9324587-07	19203	23	7
9324549-1	19203	19	2	9324587-07	19203	24	8

NATIONAL PART NUMBER INDEX (CONT.)

PART NUMBER	FSCM	INDEX		PART NUMBER	FSCM	INDEX	
		FIG NO	ITEM NO			FIG NO	ITEM NO
9324587-07	19203	25	5	965224-A01	16224	13	26
9324587-07	19203	26	5	965229-001	16224	13	15
9324587-11	19203	20	10	965229-003	16224	13	12
9324587-11	19203	21	7	965229-004	16224	13	7
9324587-11	19203	22	18	965229-005	16224	13	16
9324587-11	19203	23	6	965229-006	16224	13	20
9324587-11	19203	24	6	965229-007	16224	13	22
9324587-11	19203	32	4	965260-001	16224	12	5
9324588-001	19203	3	51	985115-802	16224	12	46
9324589-001	19203	3	54	985115-816	16224	12	50
9324590-001	19203	3	47	985115-824	16224	12	66
9324592-001	19203	3	53	985115-826	16224	12	55
9324593	19203	8	4	985115-826	16224	13	30
9324594	19203	10	1	985115-828	16224	12	56
9324596-32	19203	4	9	985115-851	16224	12	36
9324597-3	19203	BULK	8	985115-855	16224	12	47
9324601-001	19203	3	48	985115-855	16224	13	32
936966-A01	16224	13	17	985115-859	16224	13	37
955229-002	16224	13	21	985115-880	16224	12	62
963966-A01	16224	12	8	985164-367	16224	12	69
964528-003	16224	12	1	985165-216	16224	12	54
964529-001	16224	12	13	985165-217	16224	12	53
964530-001	16224	12	10	985193-032	16224	12	64
964530-001	16224	13	8	985193-032	16224	13	36
964530-002	16224	12	2	985193-602	16224	12	61
964534-A01	16224	12	22	985311-001	16224	12	65
964534-A02	16224	13	27	986313-001	16224	12	67
965221-001	16224	13	1	985802	16224	13	29
965222	16224	13	14				

Section III. SPECIAL TOOLS LIST

There are no special tools required at this time.

**APPENDIX D
EXPENDABLE SUPPLIES AND MATERIALS LIST**

Section I. INTRODUCTION

D-1. Scope. This appendix lists expendable supplies and material you will need to operate and maintain the Test Set. These items are authorized to you by CTA 50-970, Expendable Items (Except Medical, Class V, Repair Parts, and Heraldic Items).

D-2. Explanation of Columns.

a. Column 1 - Item Number. This number is assigned to the entry in the listing and is referenced in the narrative instructions to identify the material (e.g., "Use cleaning compound, item 5, Appendix F).

b. Column 2 - Level. This column identifies the lowest level of maintenance that requires the listed item.

- O - Aviation Unit Maintenance
- F - Aviation Intermediate Maintenance
- D - Depot

c. Column 3 - National Stock Number. This is the National stock number assigned to the item. Use it to request or requisition the item.

d. Column 4 - Description. the Federal item name and, if required, the description to identify the item. The last line for each item indicates the part number followed by the Federal Supply Code for Manufacturer (FSCM) in parentheses, if applicable.

e. Column 5 - Unit of Measure (U/M). Indicates the measure used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr). If the unit of measure differs from the unit of issue, requisition the lowest unit of issue that will satisfy your requirements.

Table D-1. Expendable Supplies and Materials

(1) ITEM NUMBER	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) DESCRIPTION	(5) U/M
1	F,D	3439-00- 892-4408	Coating, Conformal, Type AR	Qt
2	F,D		Tape, lacing, Style 20, Finish B, Type II, Size 5	Ft
3	F,D		Solder, SN63WRAP3 .031	Lb
4	F,D		Flux, Type RA	Ea
5	F,D		Flux, Type RMA	Ea
6	F,D		Ink black, marking, 9324327	Pt
7	F,D		Compound, sealing, Type II, Grade N	Pt
8	F,D		Brush, soft bristle	Ea
9	D		Primer, epoxy, polyamide, M23377	
10	F,D		Enamel, gloss, yellow (13538 per fed., TT#489YEL	
11	F,D		Paint, lusterless black, 37038FEDSTD595A	
12	F,D		Enamel, gray semi-gloss, 26307FEDSTD595	
13	F,D		Adhesive, epoxy, 9324200	
14	F,D		Wire, wicking	
15			Ink, white, marking, 9324199	
16	F,D		Compound, thermal conducting, 9324261	
17	F,D		Cloth, soft	
18	F,D		Alcohol, Isopropyl	Ea
19	F,D		Strap, tiedown, Type 1, MS3367-4-9	
20	F,D		Adhesive, sealant, 9324277	Ea

APPENDIX E SCHEMATIC DIAGRAMS

E-1. Scope. The Test Subassembly cable and connector configuration drawing, figure FO-1, shows cable assembly-card cage points of interface. Figures FO-2 through FO-28 are schematic diagrams of the Test Set major components, cables, and circuit assemblies. Figure 7-2 shows the major assemblies located on the back of the front panel, and some of their cable connectors and points of interface with major assemblies. Cable - Connector Schedule, Table 7-5, lists major cable connections and their points of interface.

E-2. General. The reference designation of each cable assembly and circuit assembly is

given on the face of its respective schematic diagram. The same reference and cable connector designations are called out throughout the figures listed in paragraph E-1. Connector designations of cable assemblies which interface at the card cage are listed in table 7-5. Connector designations of circuit assemblies interfacing at the card cage correspond to the circuit assembly reference designations; e.g., Memory Assembly A1 plugs into slot A1 of the card cage assembly, interfacing with the card cage motherboard at XA1.

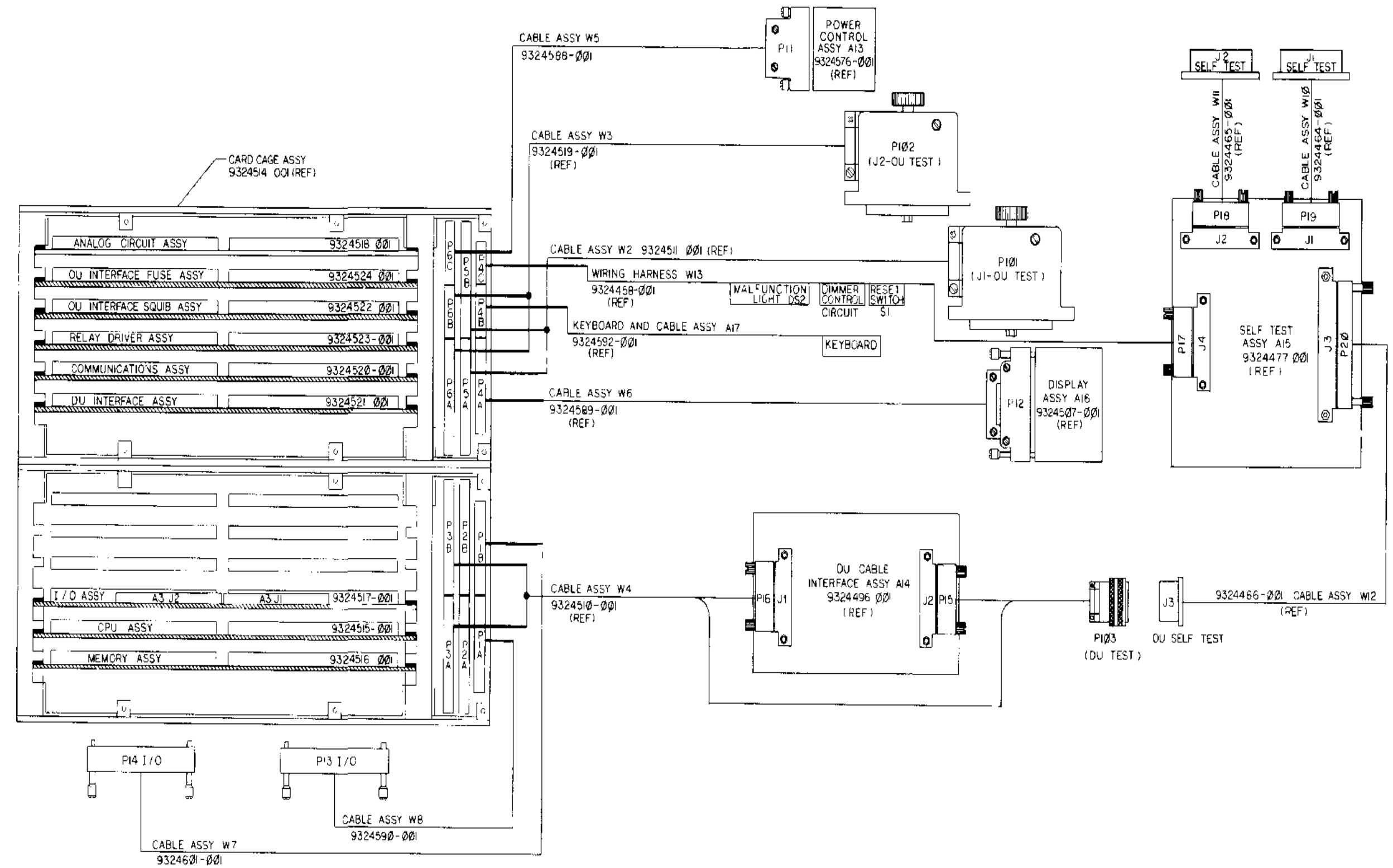
APPENDIX F - MALFUNCTION CODES.

The following is a list of MALFUNCTION (RESULT Display) Codes that may appear when testing the Test Set and the assemblies that may cause the codes to appear. Refer to chapter 7 for the complete procedure.

MALFUNCTION (RESULT Display Code)	Replacement Sequence	Assembly	Page
1477	1	Self-Test Assembly A15	7-9
	2	Cable Assembly W2, OUJ1 Test	
1515	1	CPU Assembly A2	7-10
	2	Relay Driver Assembly A9	
	3	I/O Assembly A3	
	4	DU Interface Assembly A7	
	5	Cable Assembly W2, OUJ1 Test	
1518	1	Analog Assembly A12	7-13
	2	CPU Assembly A2	
	3	Self-Test Assembly A15	
	4	Cable Assembly Ws, OUJ1 Test	
1520	1	Communications Assembly A8	7-15
	2	I/O Assembly A3	
	3	DU Interface Assembly A7	
	4	Self-Test Assembly A15	
	5	Cable Assembly W4, DU Test	
1521	1	DU Interface Assembly A7	7-18
	2	I/O Assembly A3	
	3	Self-Test Assembly A15	
	4	Cable Assembly W4, DU Test	
1522	1	OU Squib Interface Assembly A10	7-21
	2	Relay Driver Assembly A9	
	3	I/O Assembly A3	
	4	Self-Test Assembly A15	
	5	Cable Assembly W3, OUJ2 Test	
1523	1	Relay Driver Assembly A9	7-24
	2	I/O Assembly A3	
	3	CPU Assembly A3	
	4	Cable Assembly W2, OUJ1 Test	
1524	1	OU Fuse Interface Assembly A11	7-26
	2	Relay Driver Assembly A9	
	3	I/O Assembly A3	
	4	Self-Test Assembly A15	
	5	Cable Assembly W3, OUJ2 Test	
2515	1	CPU Assembly A2	7-29
	2	Relay Driver Assembly A9	
	3	I/O Assembly A3	
	4	Cable Assembly W2, OUJ1 Test	
	5	Self-Test Assembly A15	
2518	1	PS1, PS2, PS3, K1	7-31
	2	Analog Assembly A12	
	3	CPU Assembly A2	
	4	I/O Assembly A3	
	5	Self-Test Assembly A15	
	6	Cable Assembly W2, OUJ1 Test	
	7	Cable Assembly W4, DU Test	
2521	1	DU Interface Assembly A7	7-35
	2	DU Cable Interface Assembly A14	
	3	Self-Test Assembly A15	
	4	CPU Assembly A2	
	5	Cable Assembly W4, DU Test	

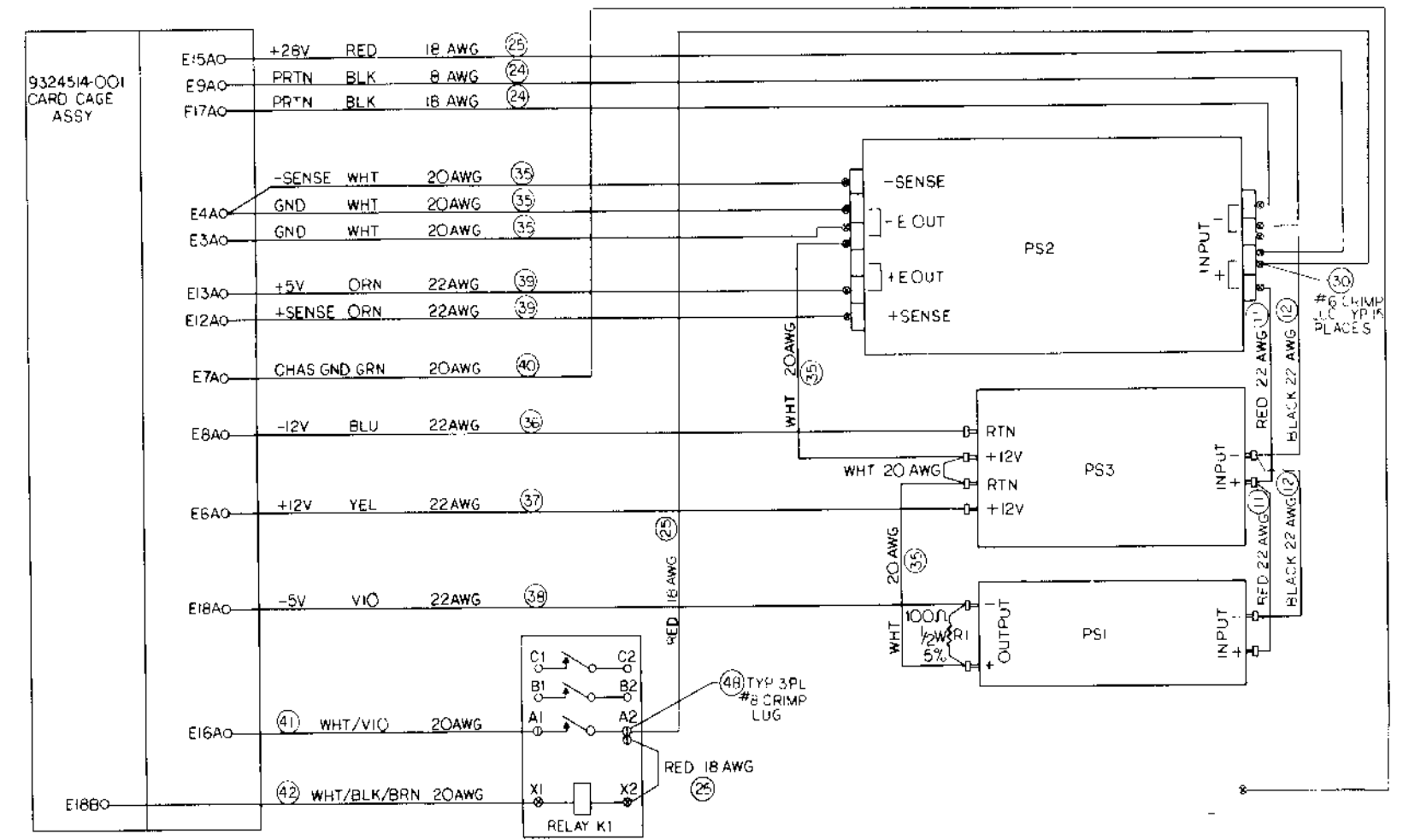
APPENDIX F - MALFUNCTION CODES (CONT.)

MALFUNCTION (RESULT Display Code)	Replacement Sequence	Assembly	Page
2524	1	OU Fuse Interface Assembly A11	7-38
	2	Relay Driver Assembly A9	
	3	I/O Assembly A3	
	4	Self-Test Assembly A15	
	5	Cable Assembly W3, OUJ2 Test	
	6	Cable Assembly W2, OUJ1 Test	
3515	1	CPU Assembly A2	7-42
	2	Power Control Assembly A13	
	3	DU Interface Assembly A7	
	4	Self-Test Assembly A15	
	5	Cable Assembly W4, DU Test	
	6	Cable Assembly W2, OUJ1 Test	
3521	1	DU Interface Assembly A7	7-46
	2	Communications Assembly A8	
	3	Self-Test Assembly A15	
	4	DU Cable Interface Assembly A14	
	5	Cable Assembly W4, DU Test	
	6	Cable Assembly W2, OUJ1 Test	
3524	1	OU Fuse Interface Assembly All	7-50
	2	Relay Driver Assembly A9	
	3	I/O Assembly A3	
	4	Self-Test Assembly A15	
	5	Cable Assembly W3, OUJ2 Test	
4515	1	CPU Assembly A2	7-53
	2	Memory Board Assembly A1	
	3	I/O Assembly A3	
	4	DU Interface Assembly A7	
	5	Communications Assembly A8	
4521	1	DU Interface Assembly A7	7-56
	2	Self-Test Assembly A15	
	3	Cable Assembly W4, DU Test	
5515	1	CPU Assembly A2	7-58



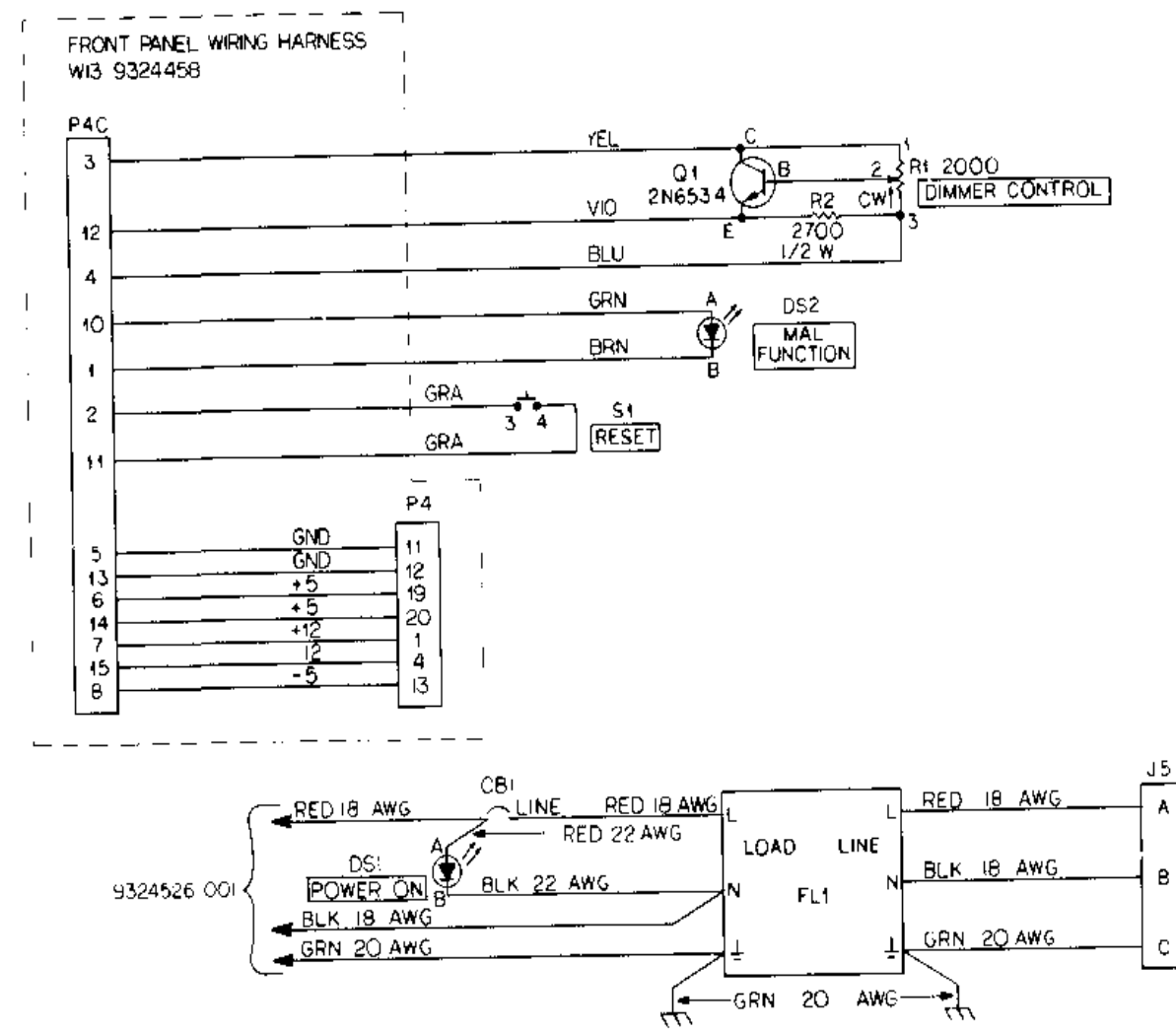
AR917773A

Figure FO-1. Test Set Subassembly Connector and Cable Configuration



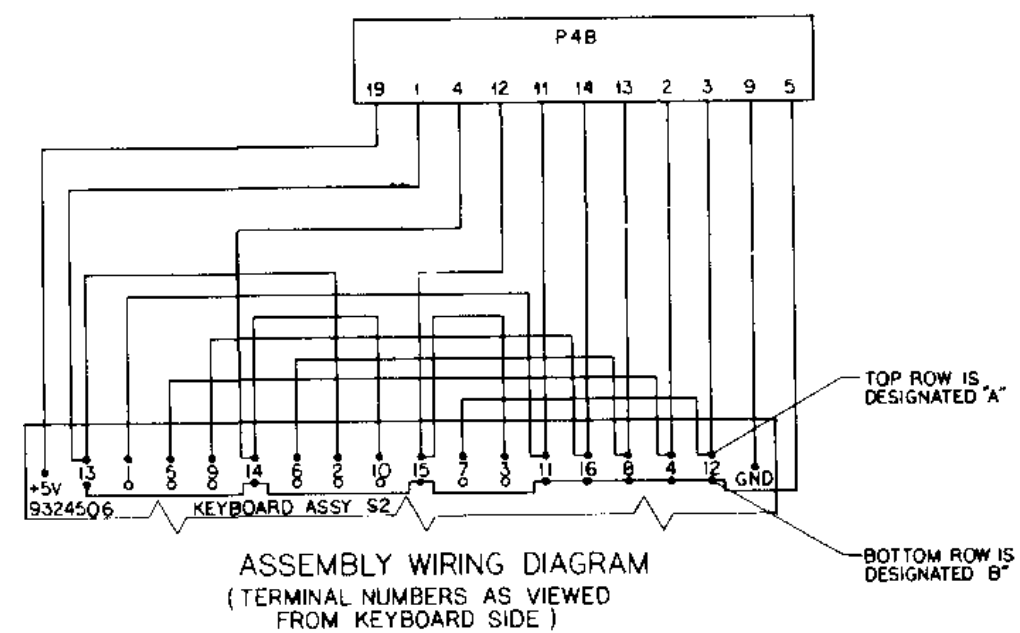
AR926339

Figure FO-2. Test Set Subassembly Schematic Diagram (Sheet 1 of 2)



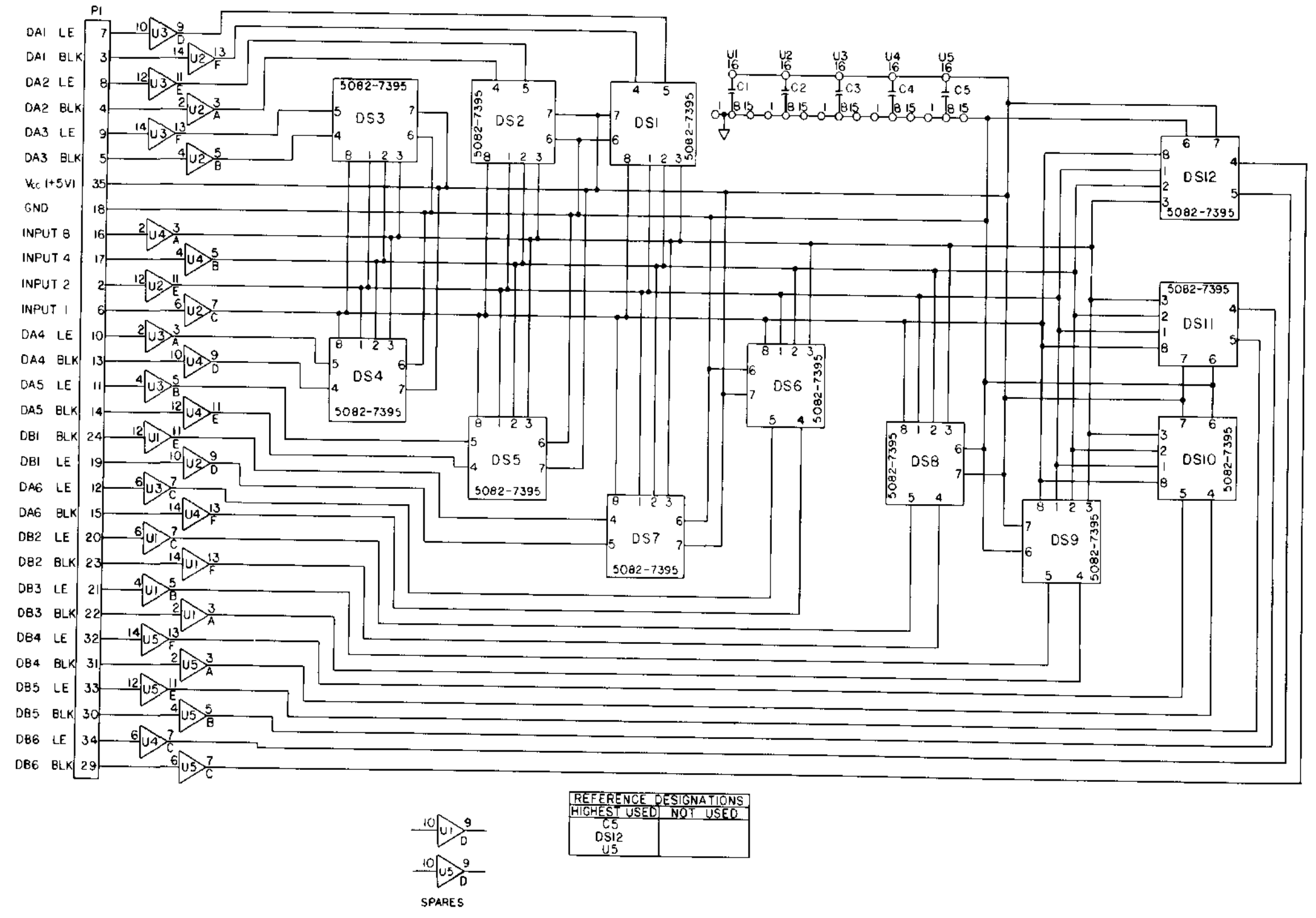
AR926340

Figure FO-2A. Test Set Subassembly Schematic Diagram (Sheet 2 of 2)



AR917782

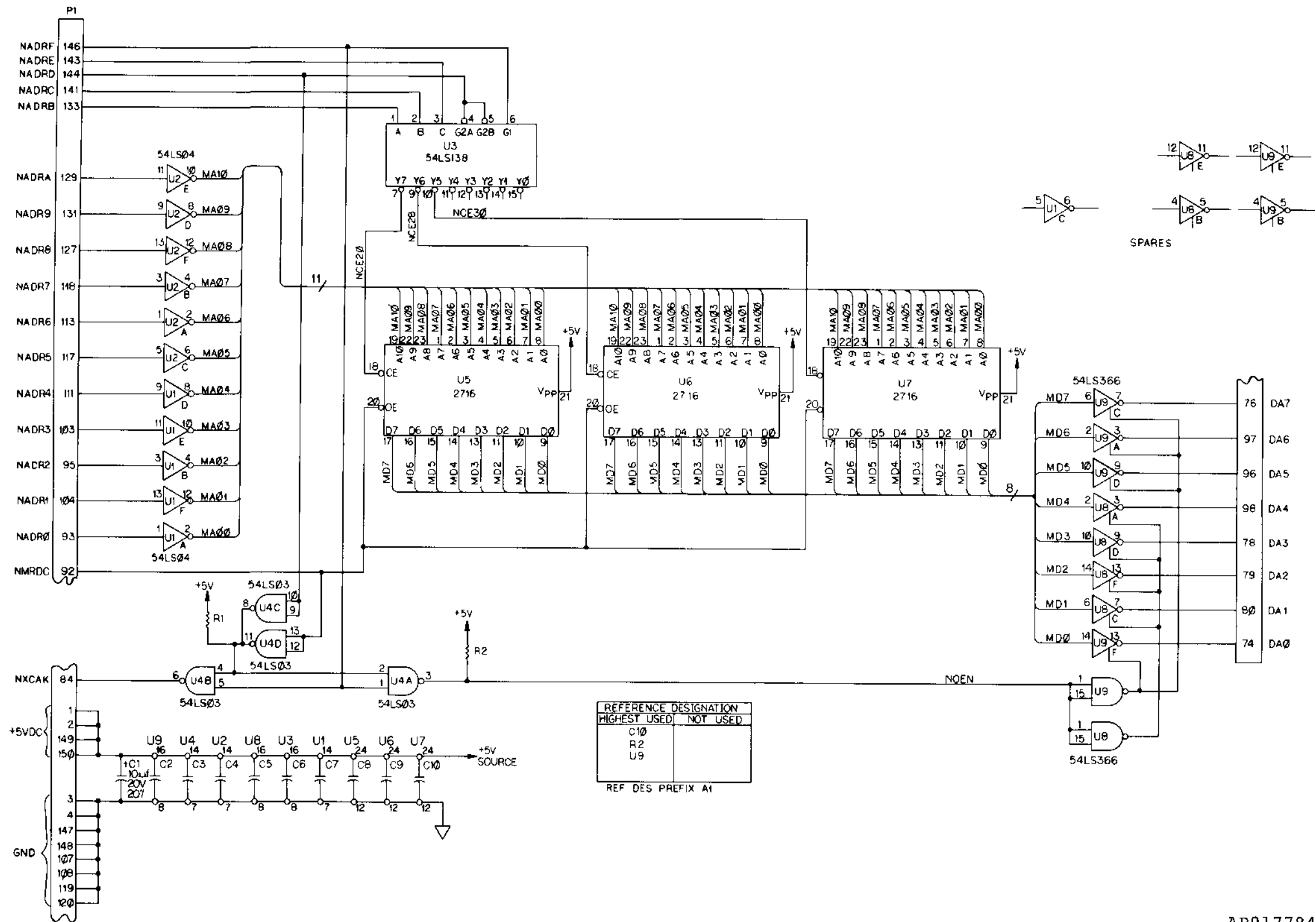
Figure FO-3. *Keyboard
and Cable Assembly
Schematic Diagram*



REFERENCE DESIGNATIONS	
HIGHEST USED	NOT USED
C5	
DS12	
U5	

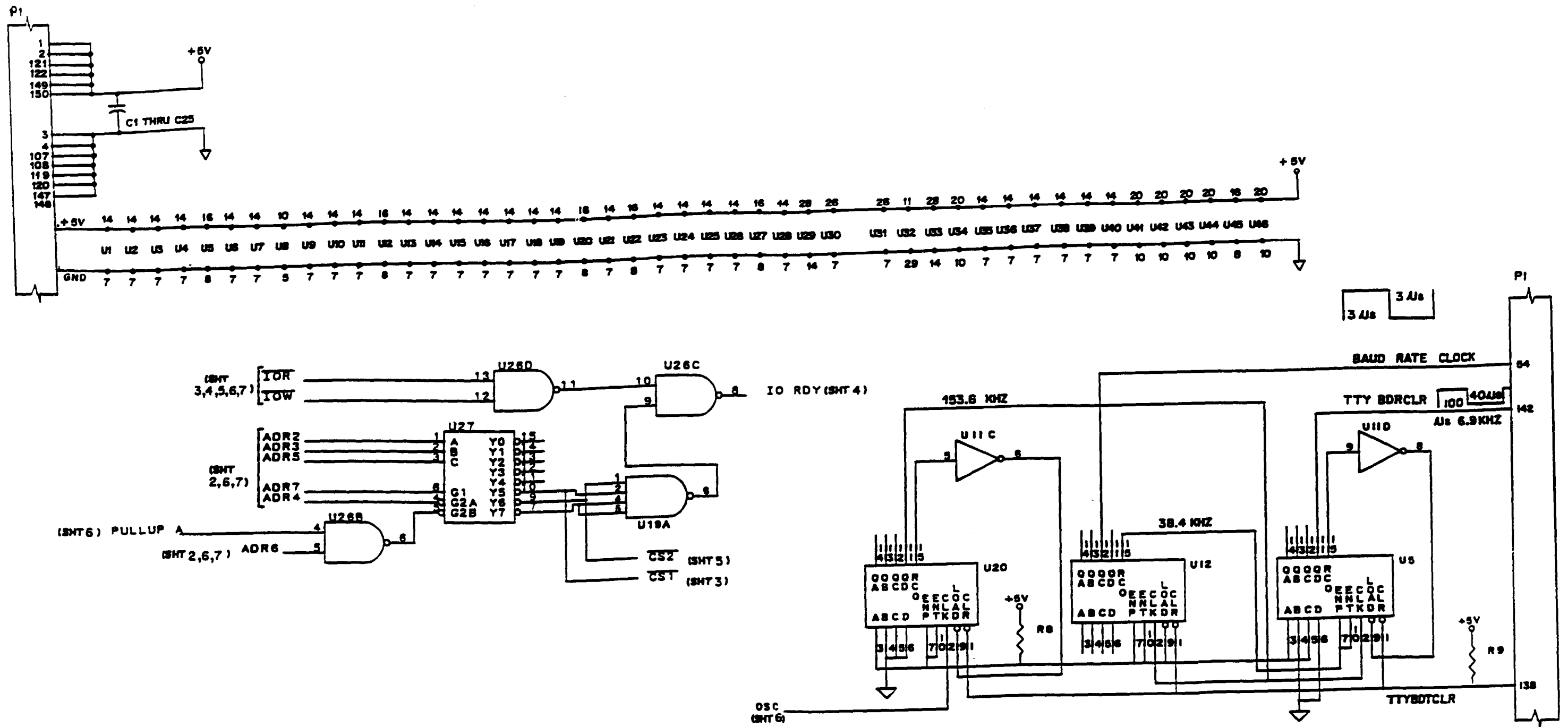
SPARES

AR917783
 Figure FO-4. Display Assembly Schematic Diagram



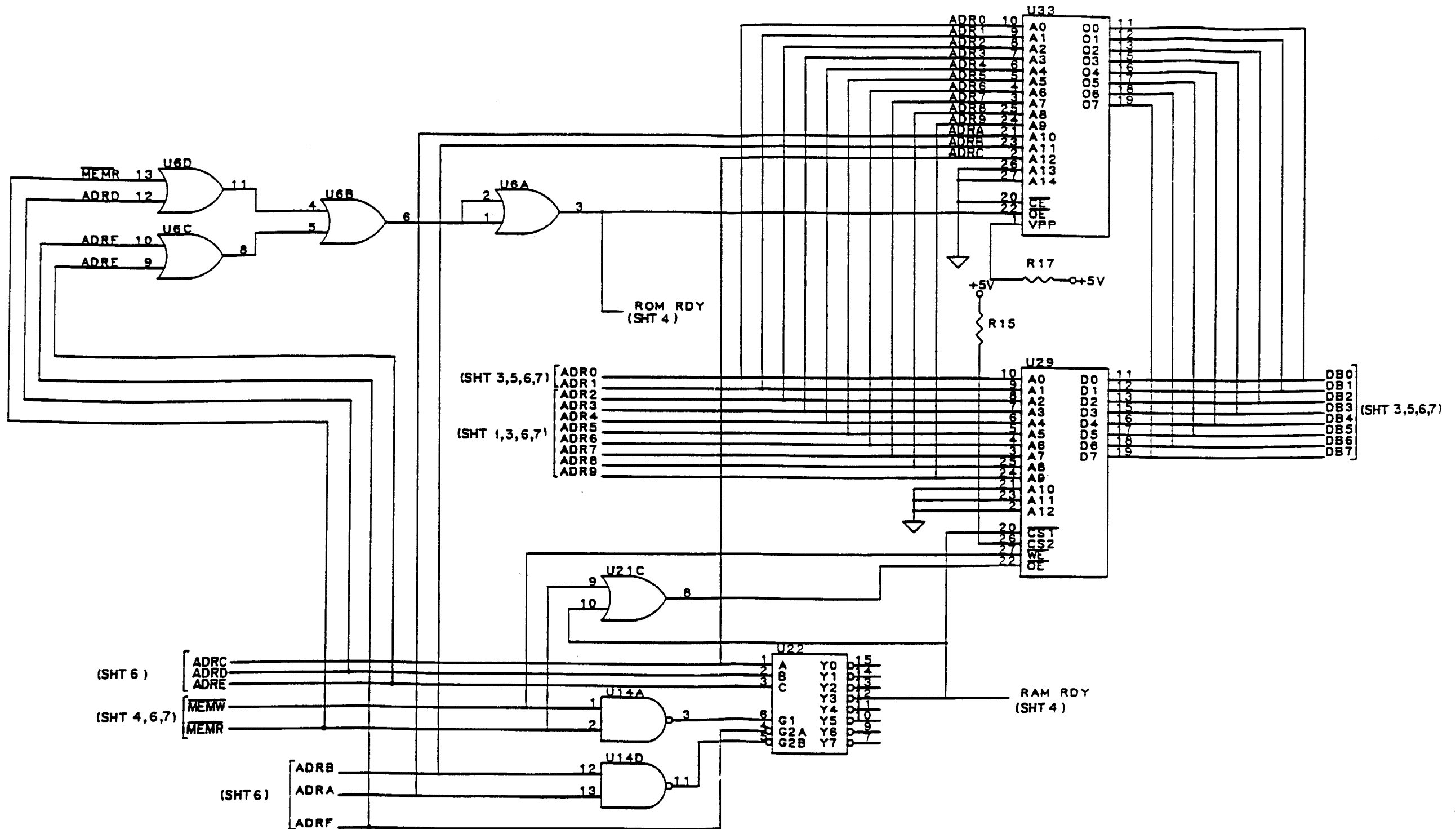
AR917784

Figure FO-5. Memory Assembly A1 Schematic Diagram



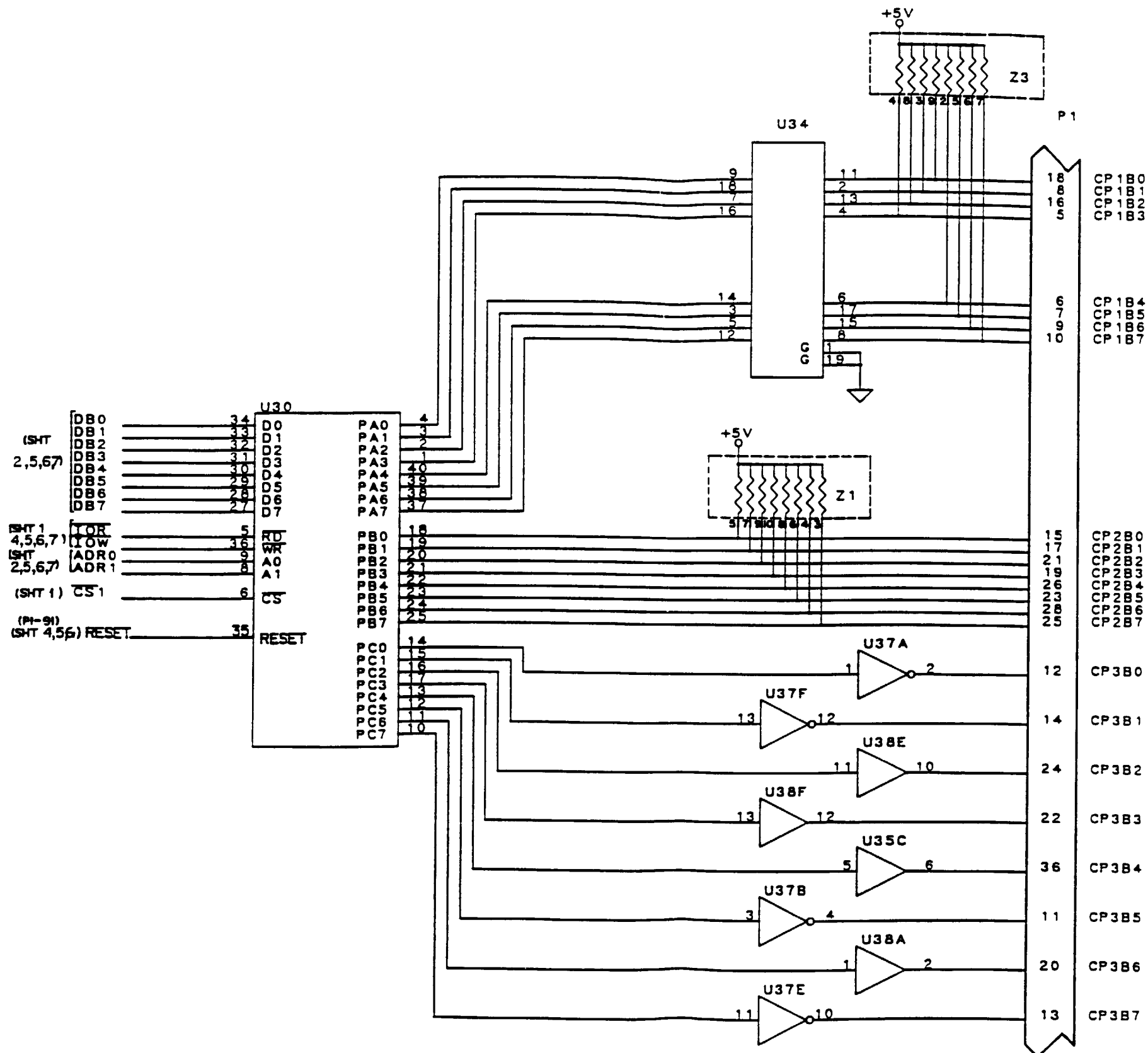
Change 2

Figure FO-6. CPU Assembly A2 Schematic Diagram (Sheet 1 of 7)



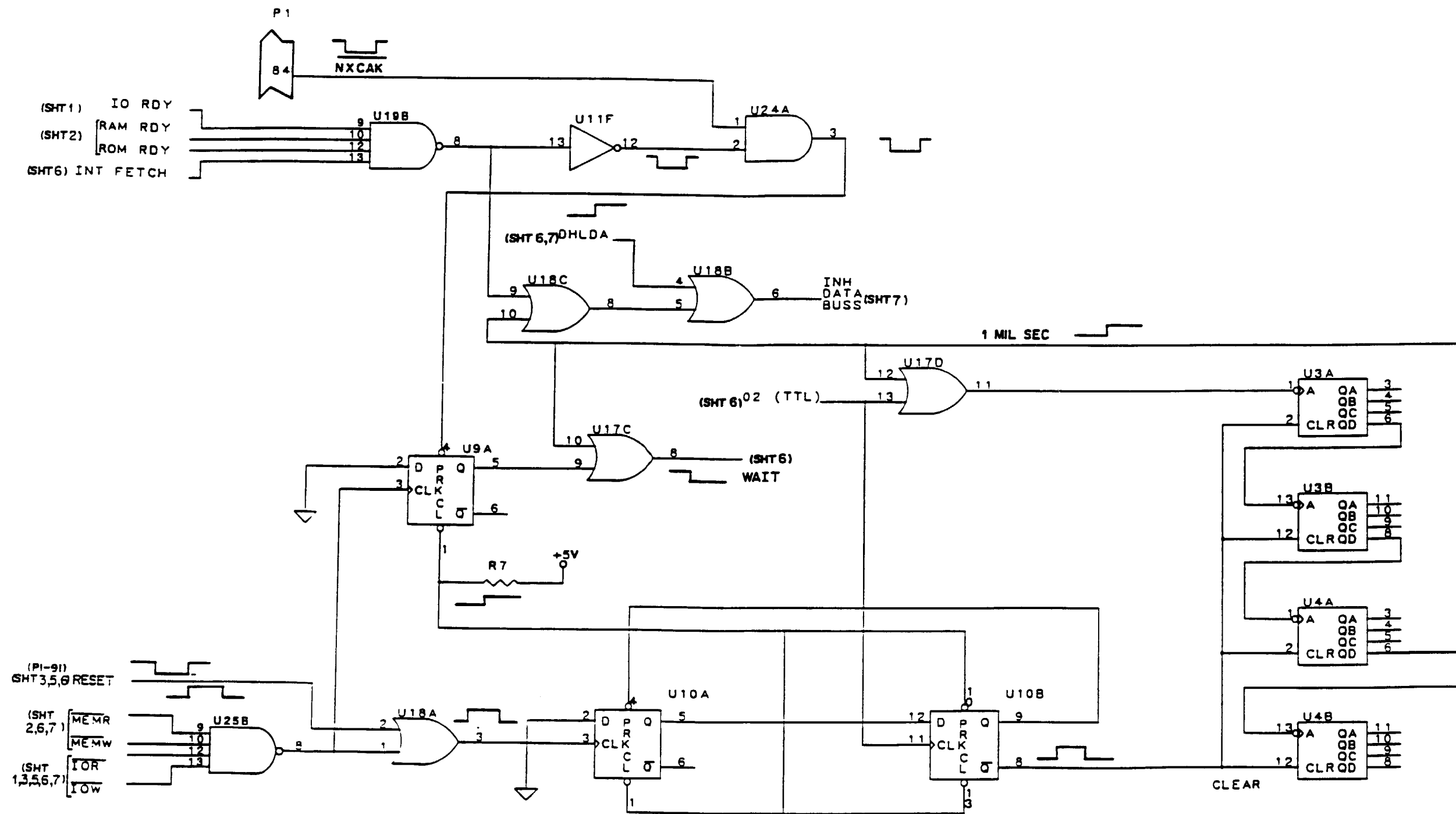
Change 2

Figure FO-6. CPU
Assembly A2
Schematic Diagram
(Sheet 2 of 7)



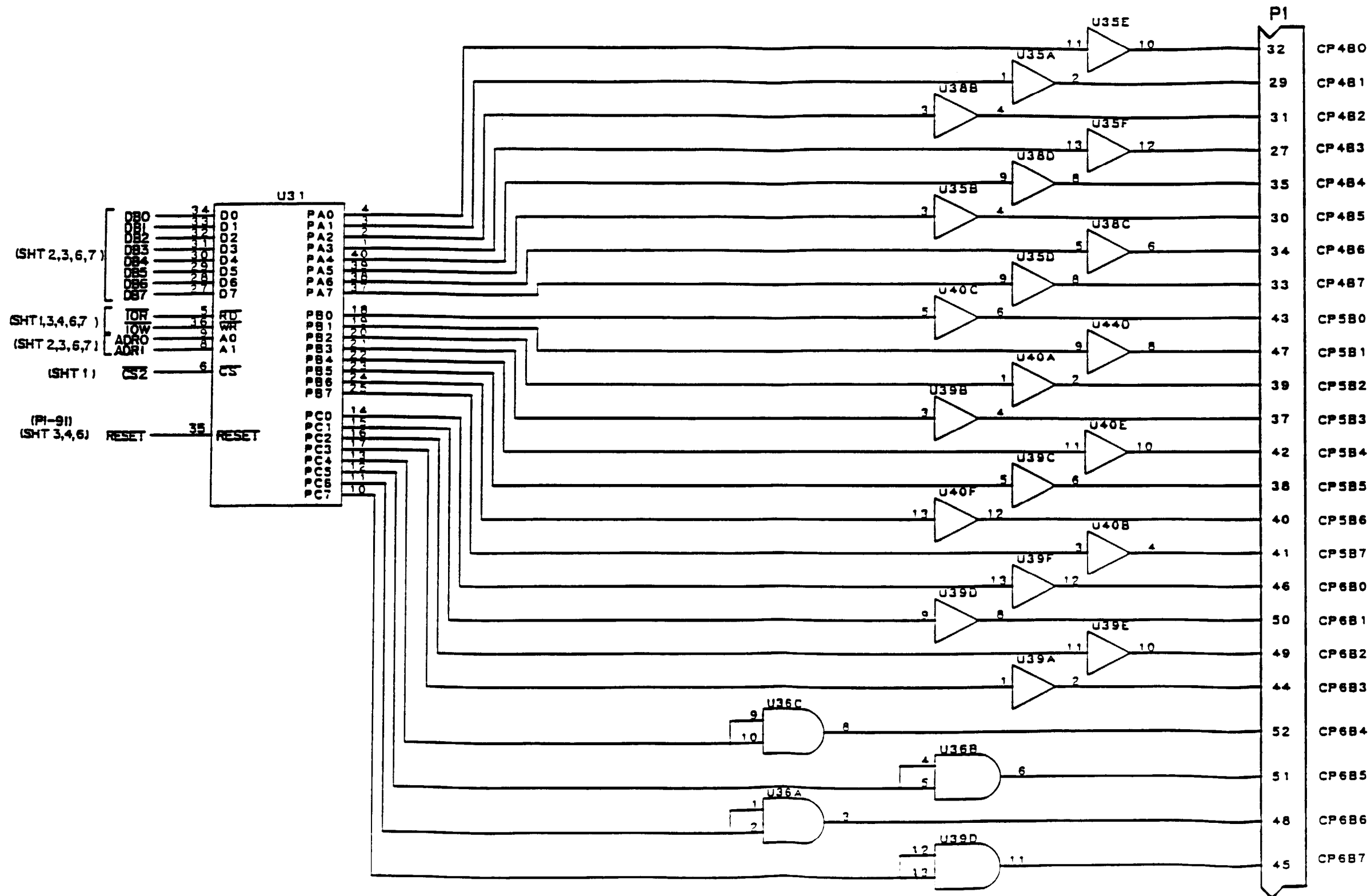
Change 2

Figure FO-6. CPU
Assembly A2
Schematic Diagram
(Sheet 3 of 7)



Change 2

Figure FO-6. CPU Assembly A2 Schematic Diagram (Sheet 4 of 7)



Change 2

Figure FO-6. CPU
Assembly A2
Schematic Diagram
(Sheet 5 of 7)

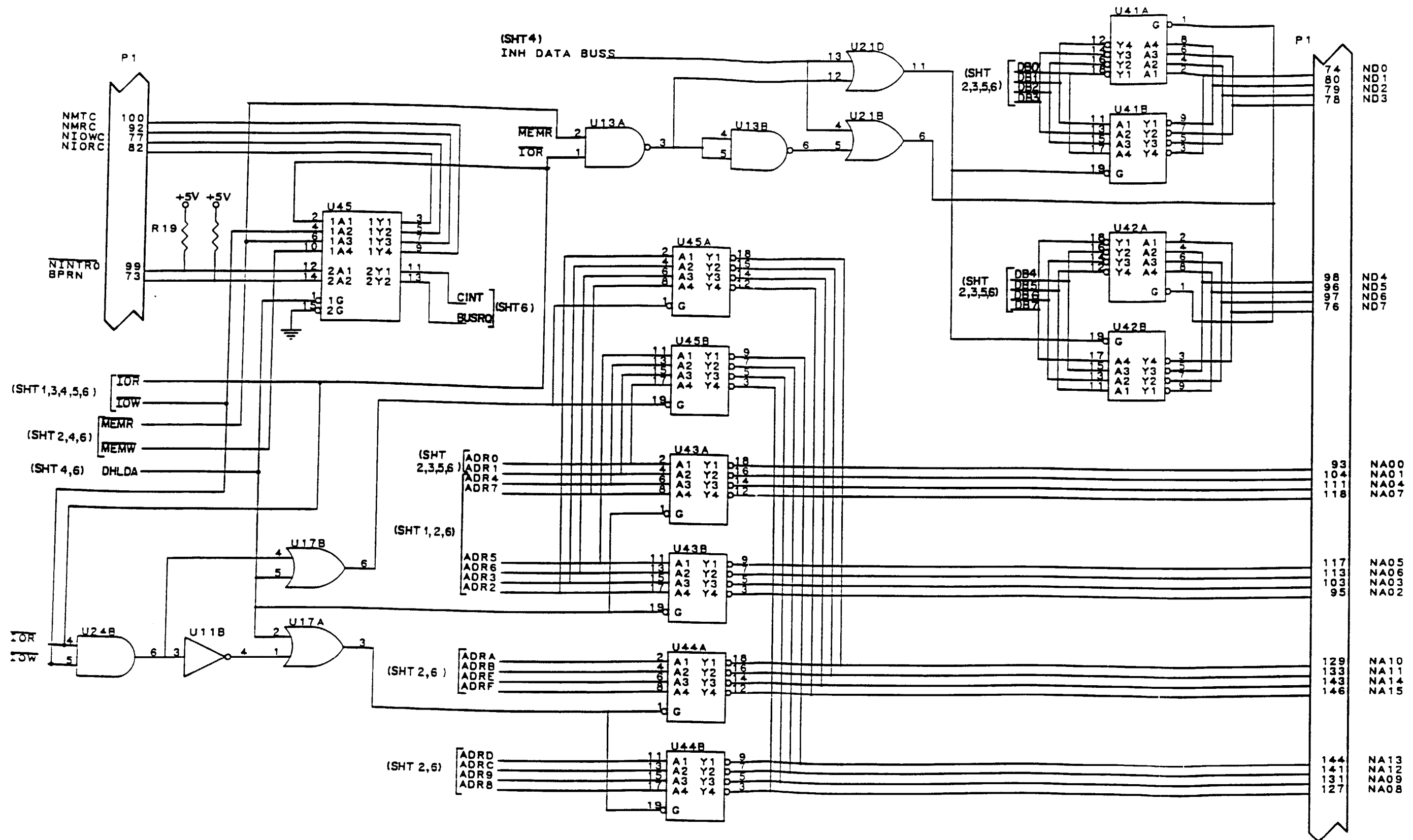
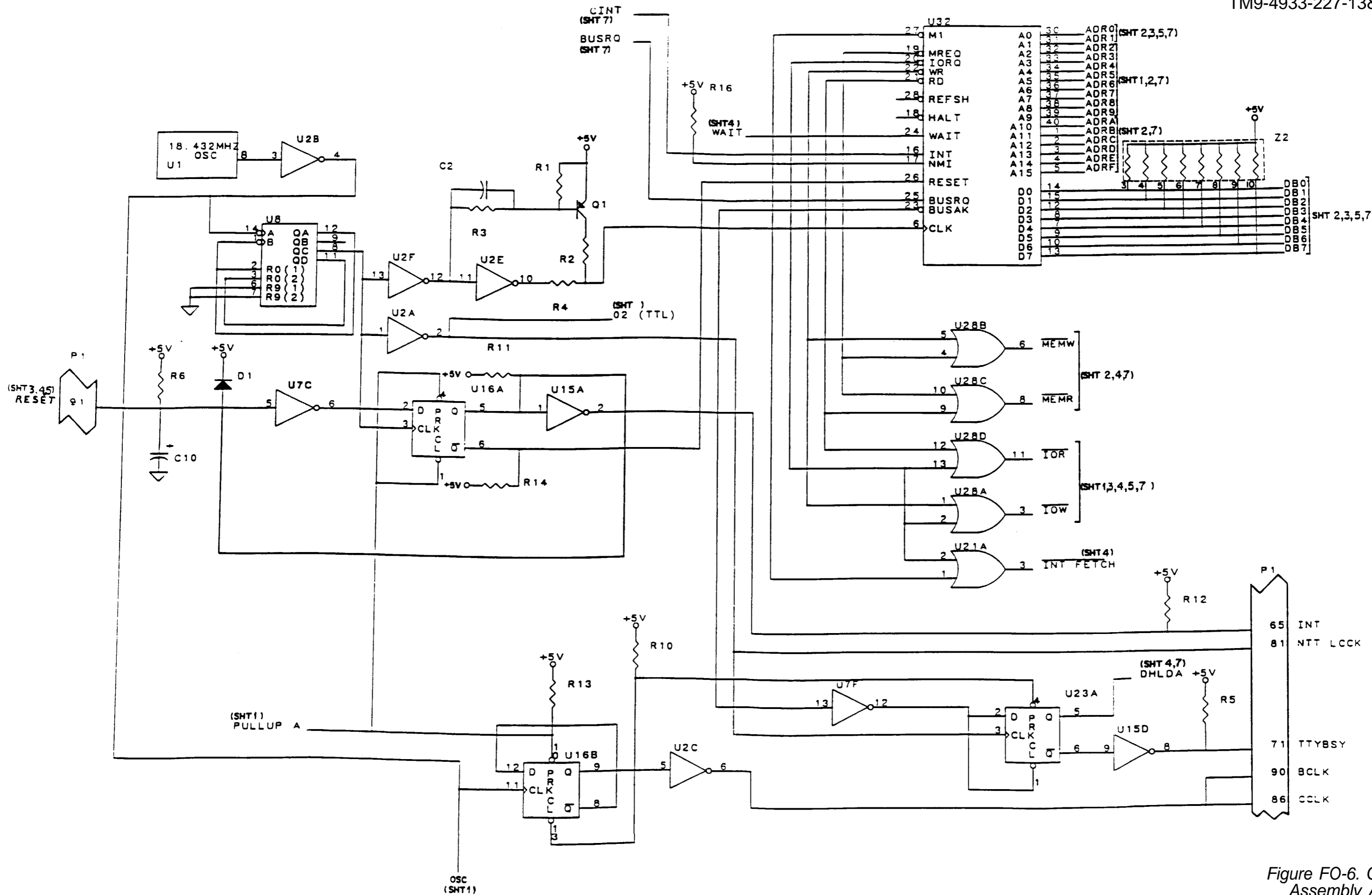


Figure FO-6. CPU Assembly A2 Schematic Diagram (Sheet 6 of 7)



Change 2

Figure FO-6. CPU Assembly A2 Schematic Diagram (Sheet 7 of 7)

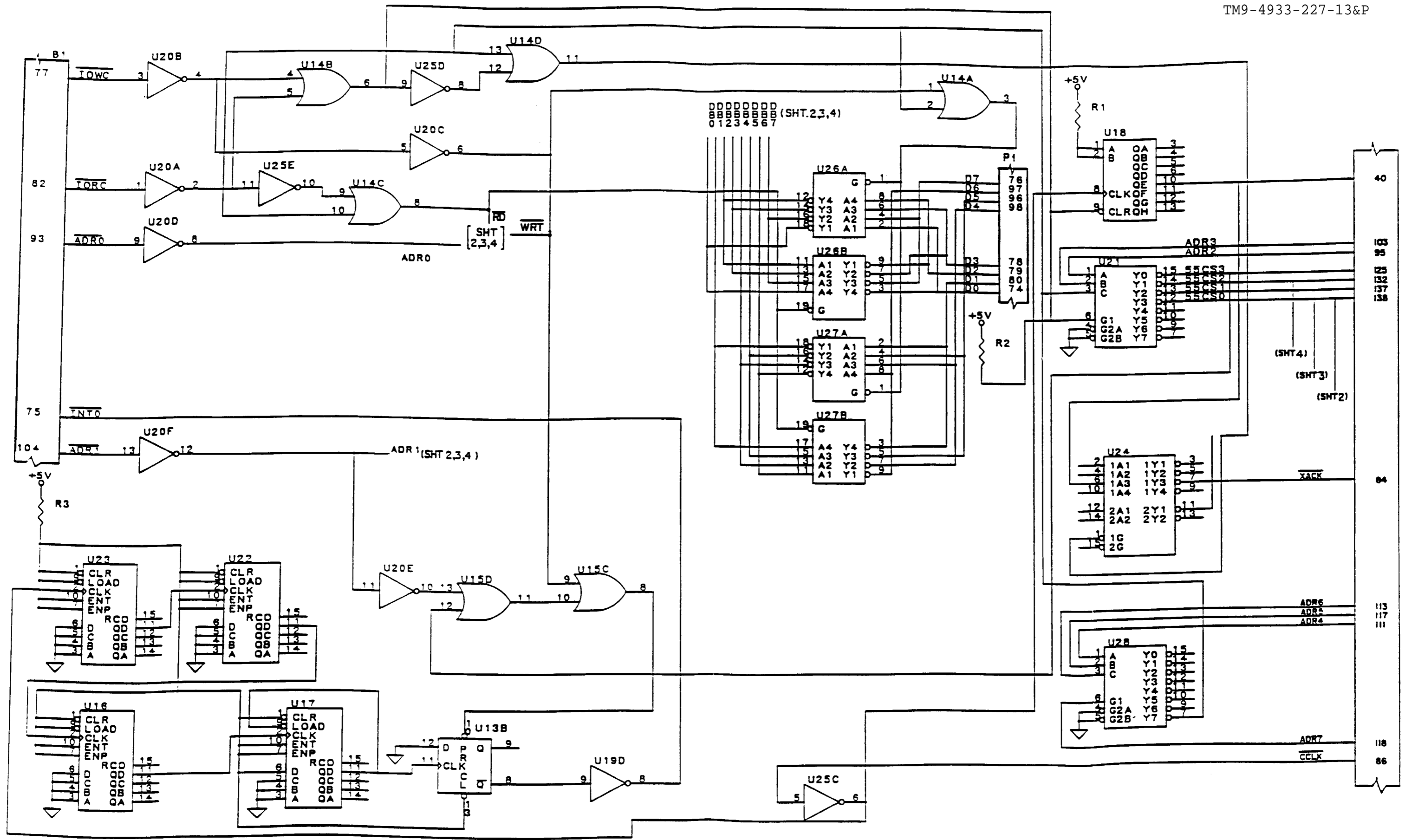


Figure FO-7 I/O Assembly A3
Schematic Diagram
(Sheet 1 of 4)
Change 2

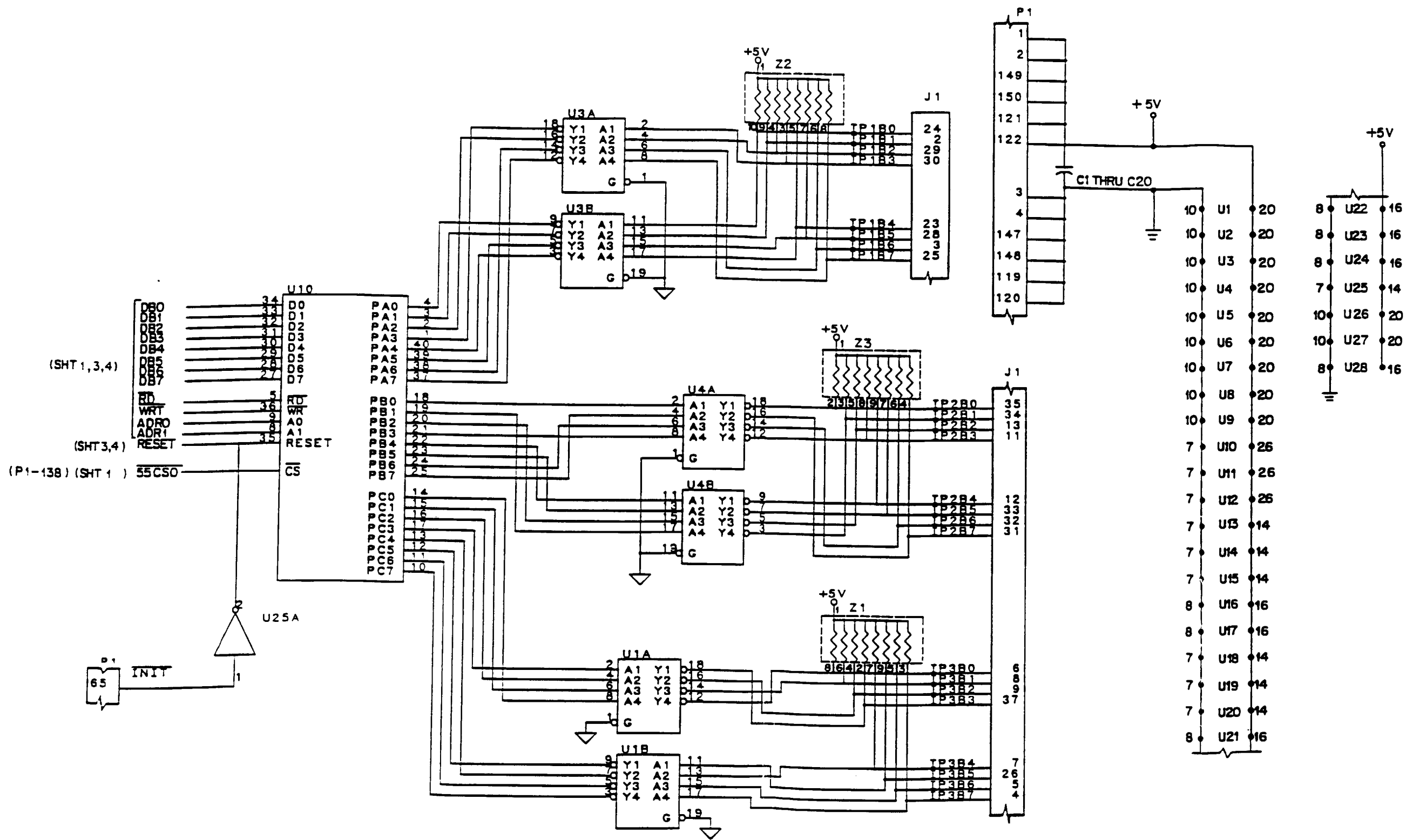


Figure FO-7 I/O Assembly A3
Schematic Diagram
(Sheet 2 of 4)

Change 2

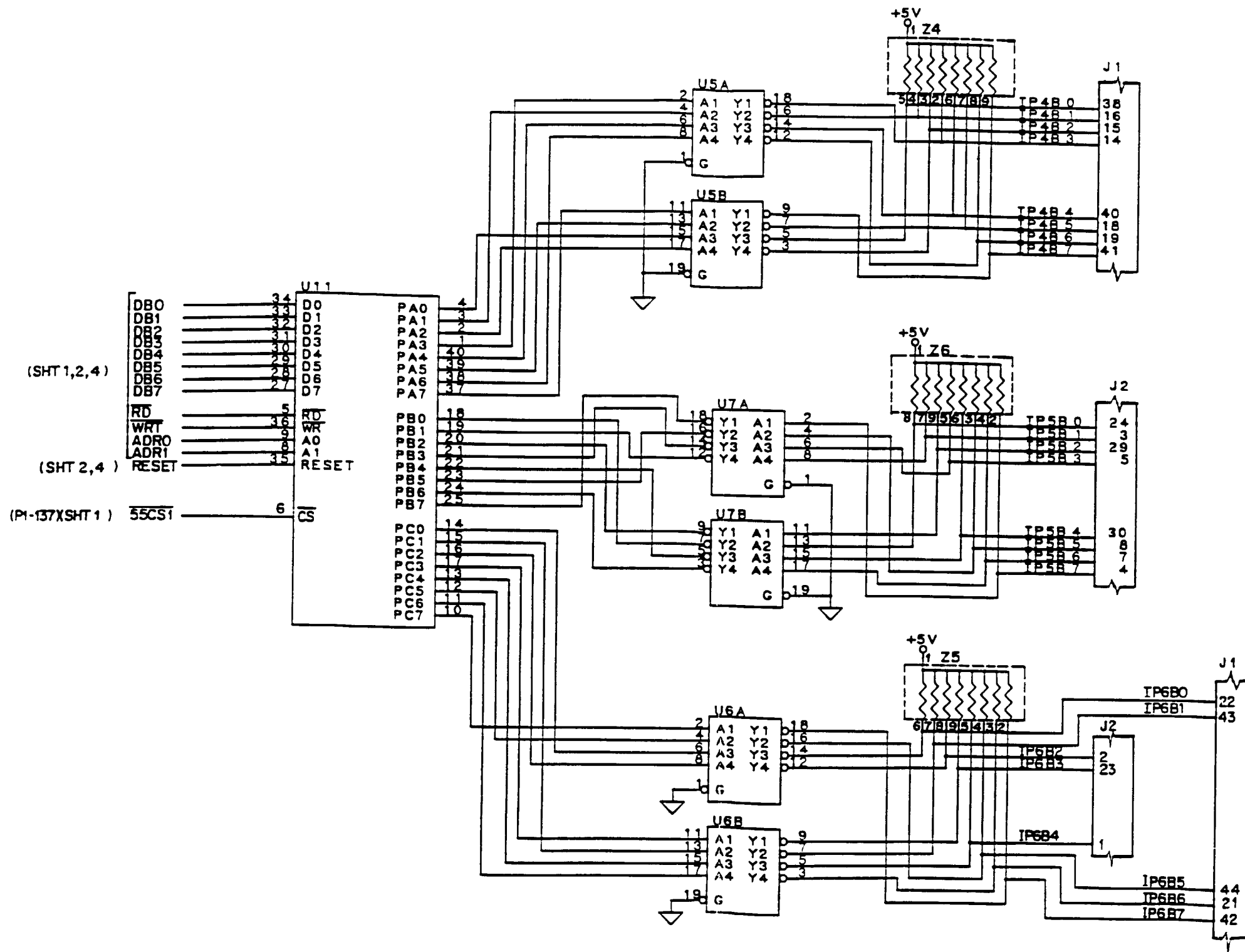


Figure FO-7 I/O Assembly A3
 Schematic Diagram
 (Sheet 3 of 4)

Change 2

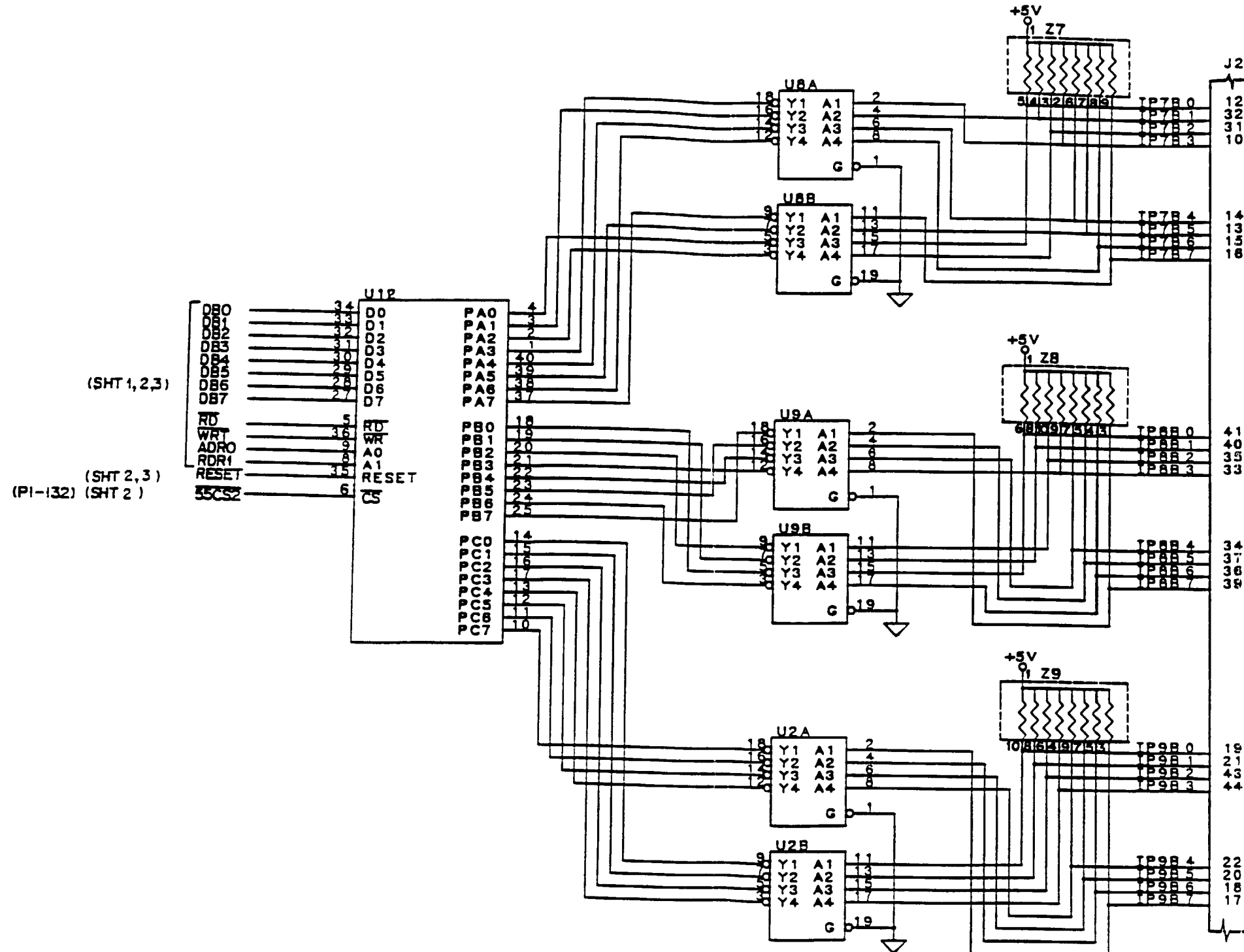
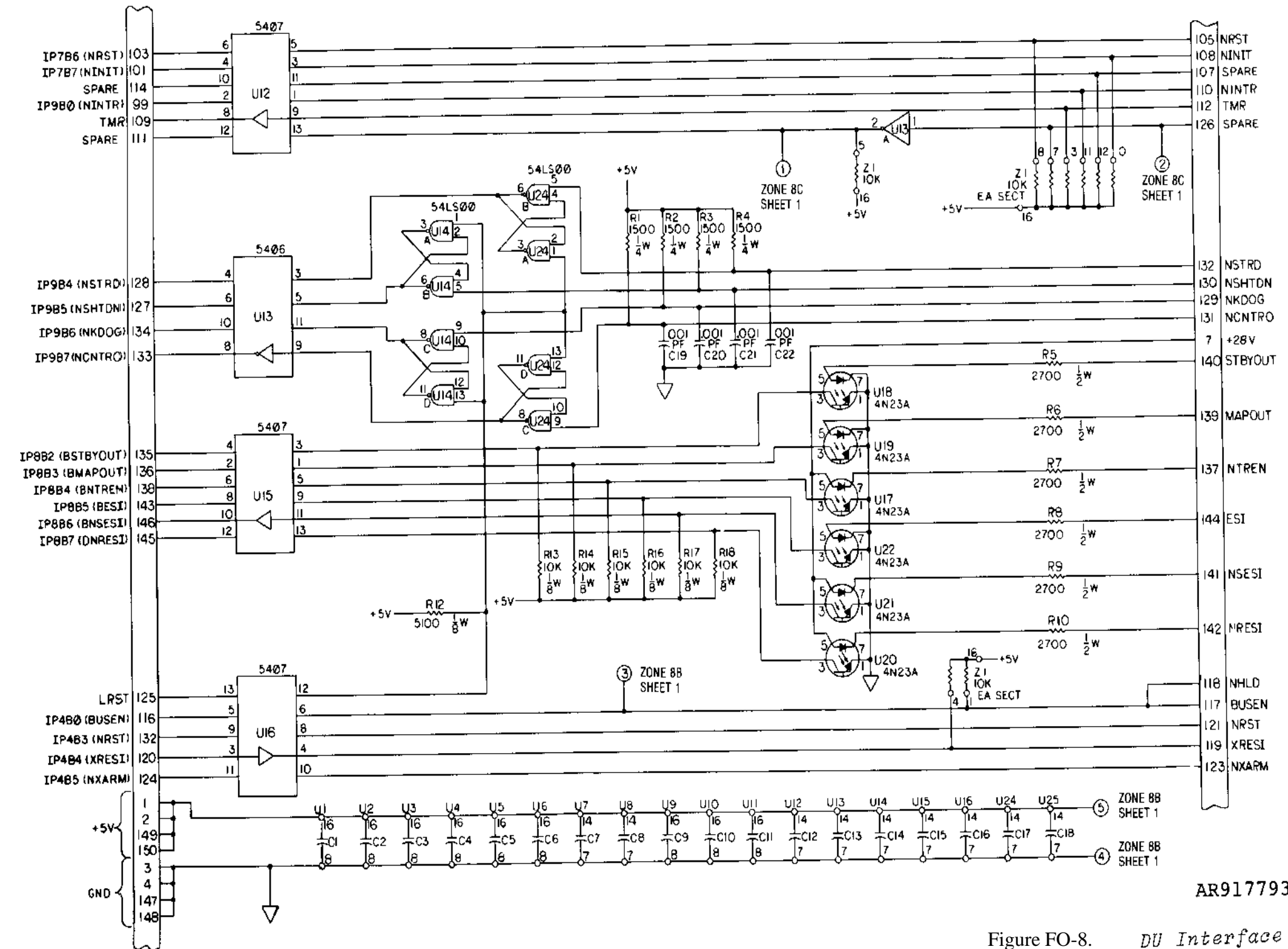


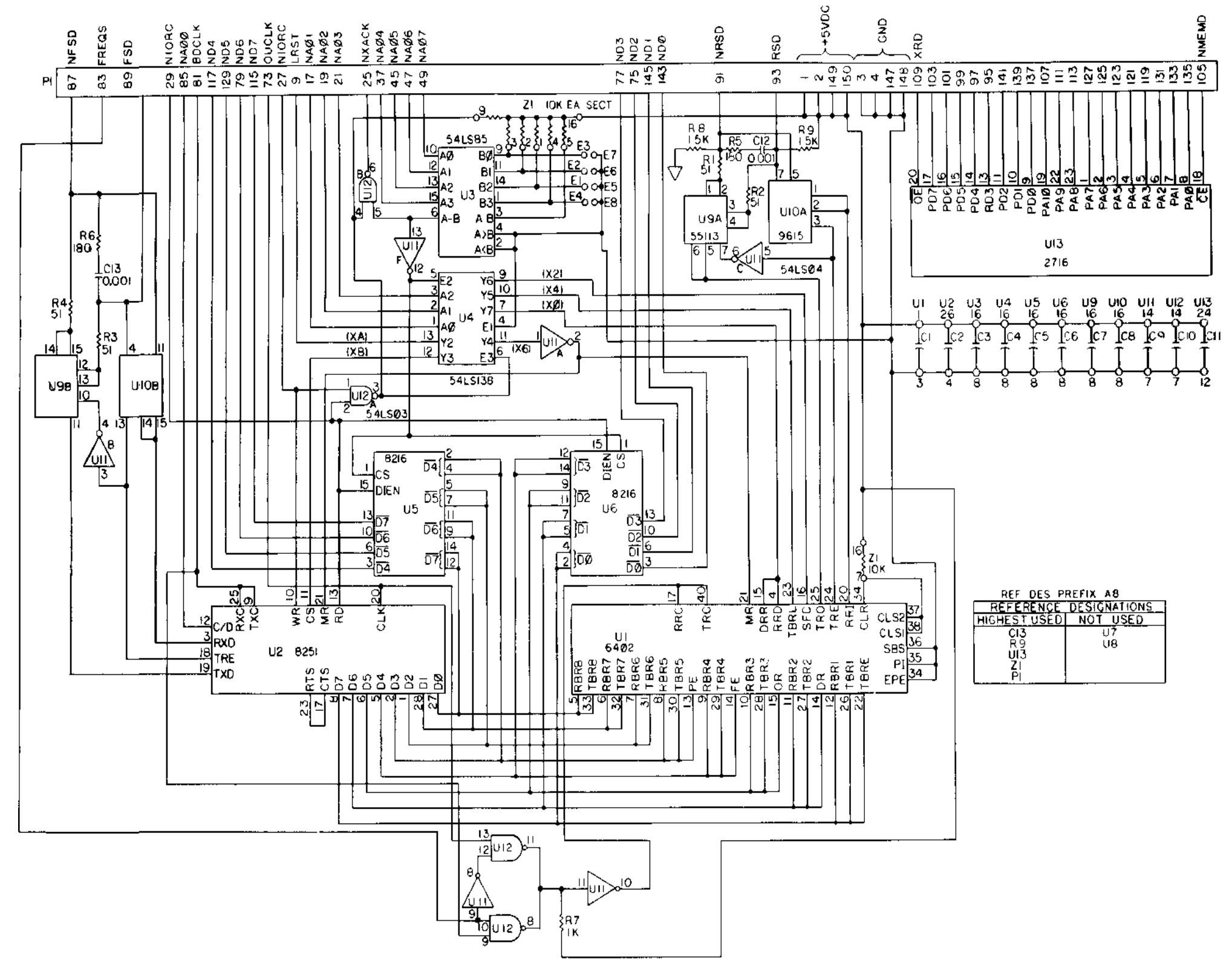
Figure F0 - 7 I/O Assembly A3
Schematic Diagram
(Sheet 4 of 4)

Change 2



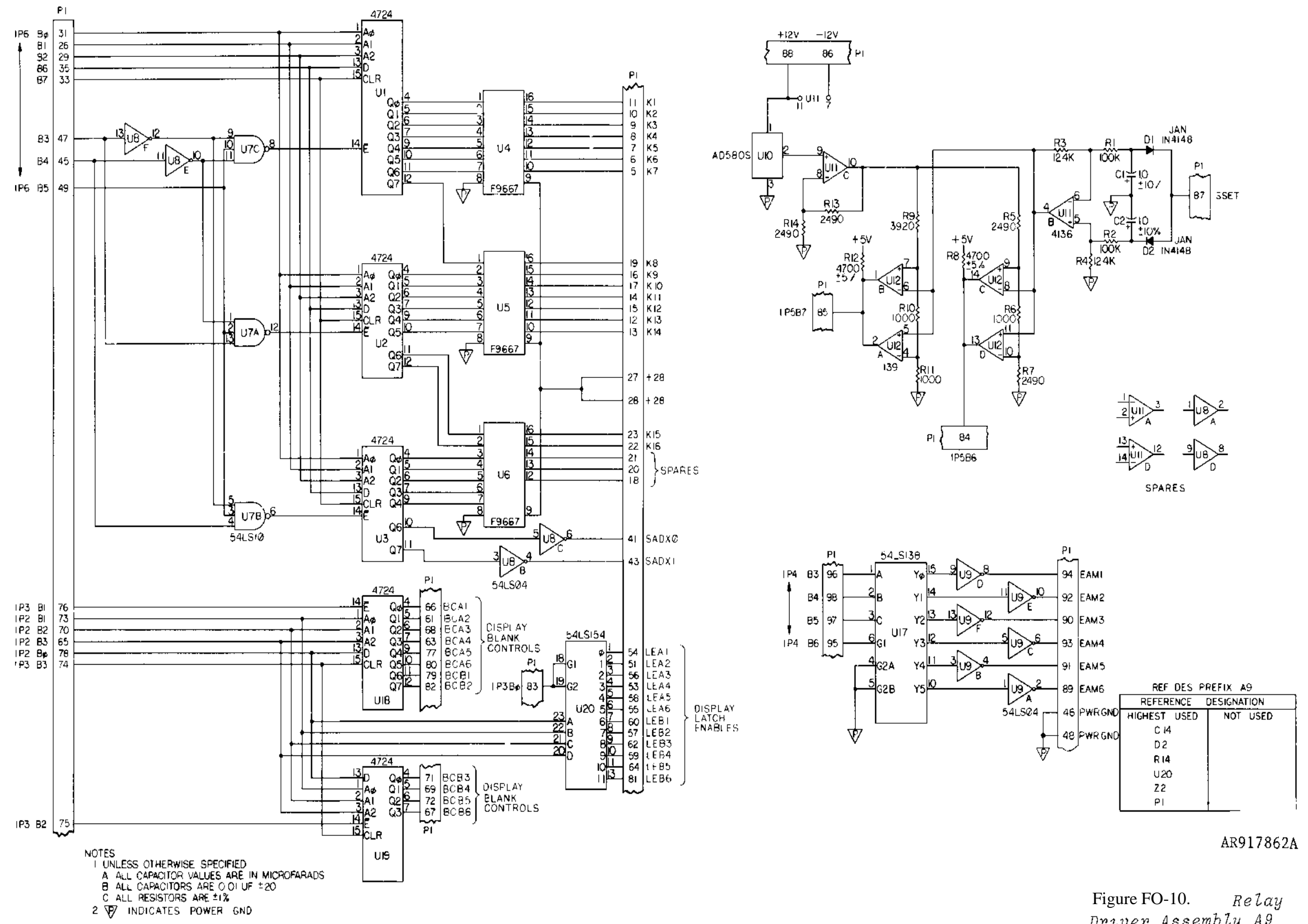
AR917793

Figure FO-8. DU Interface Assembly A7 Schematic Diagram (Sheet 2 of 2)



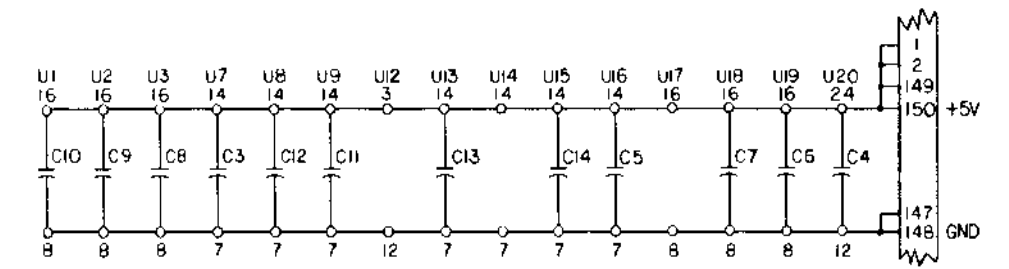
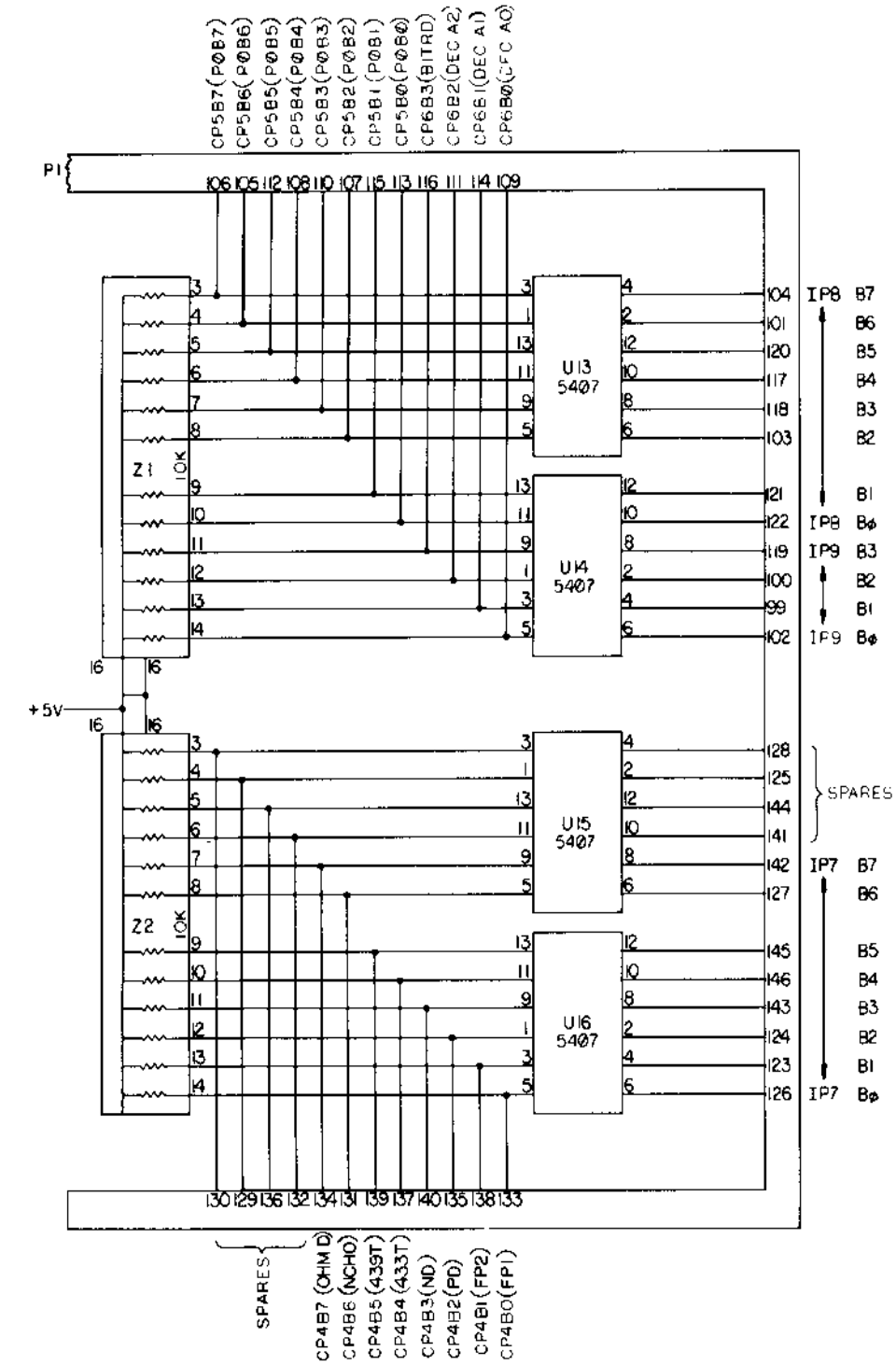
AR917856

Figure FO-9. Communications Assembly A8 Schematic Diagram



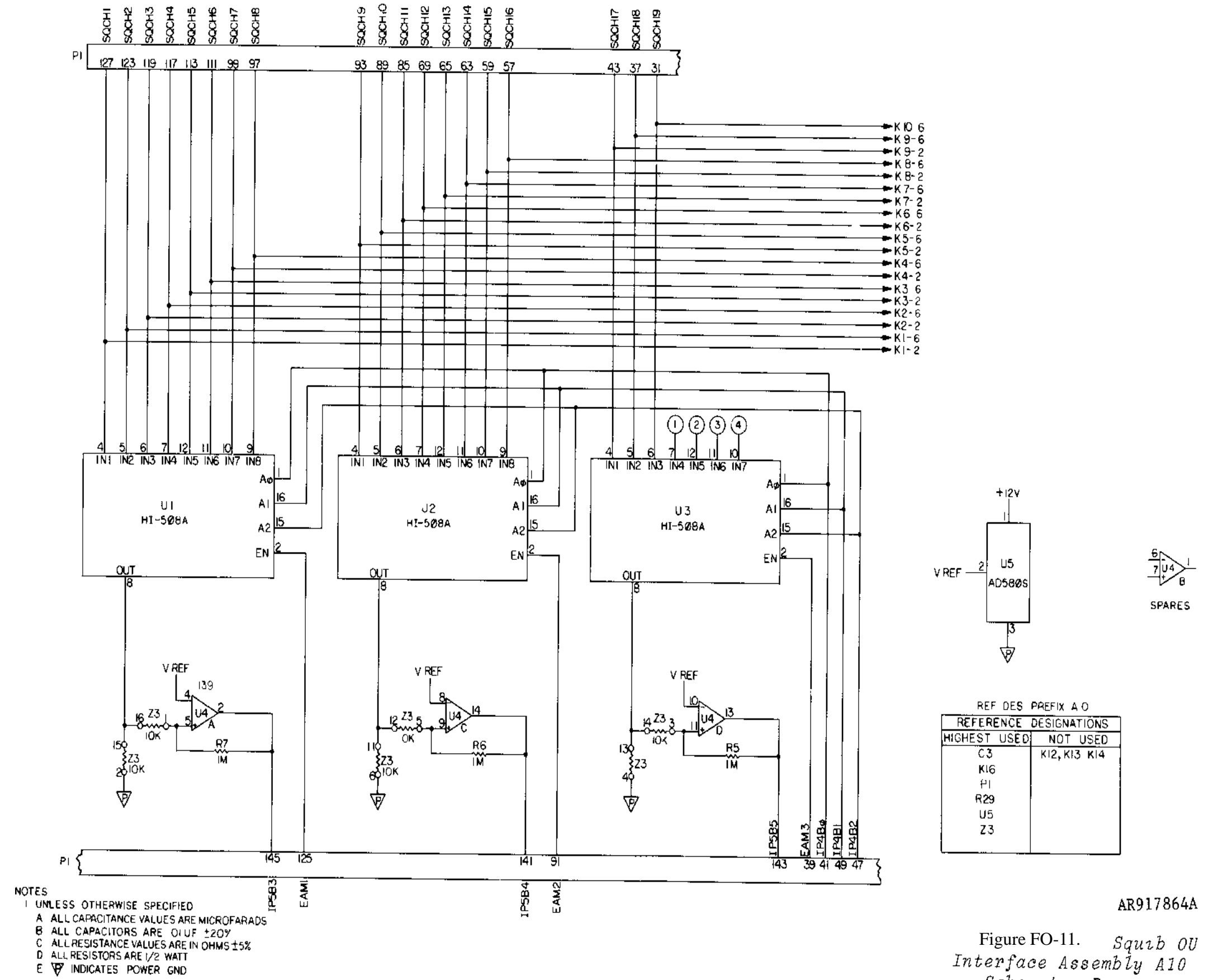
AR917862A

Figure FO-10. Relay Driver Assembly A9 Schematic Diagram (Sheet 1 of 2)



AR917863

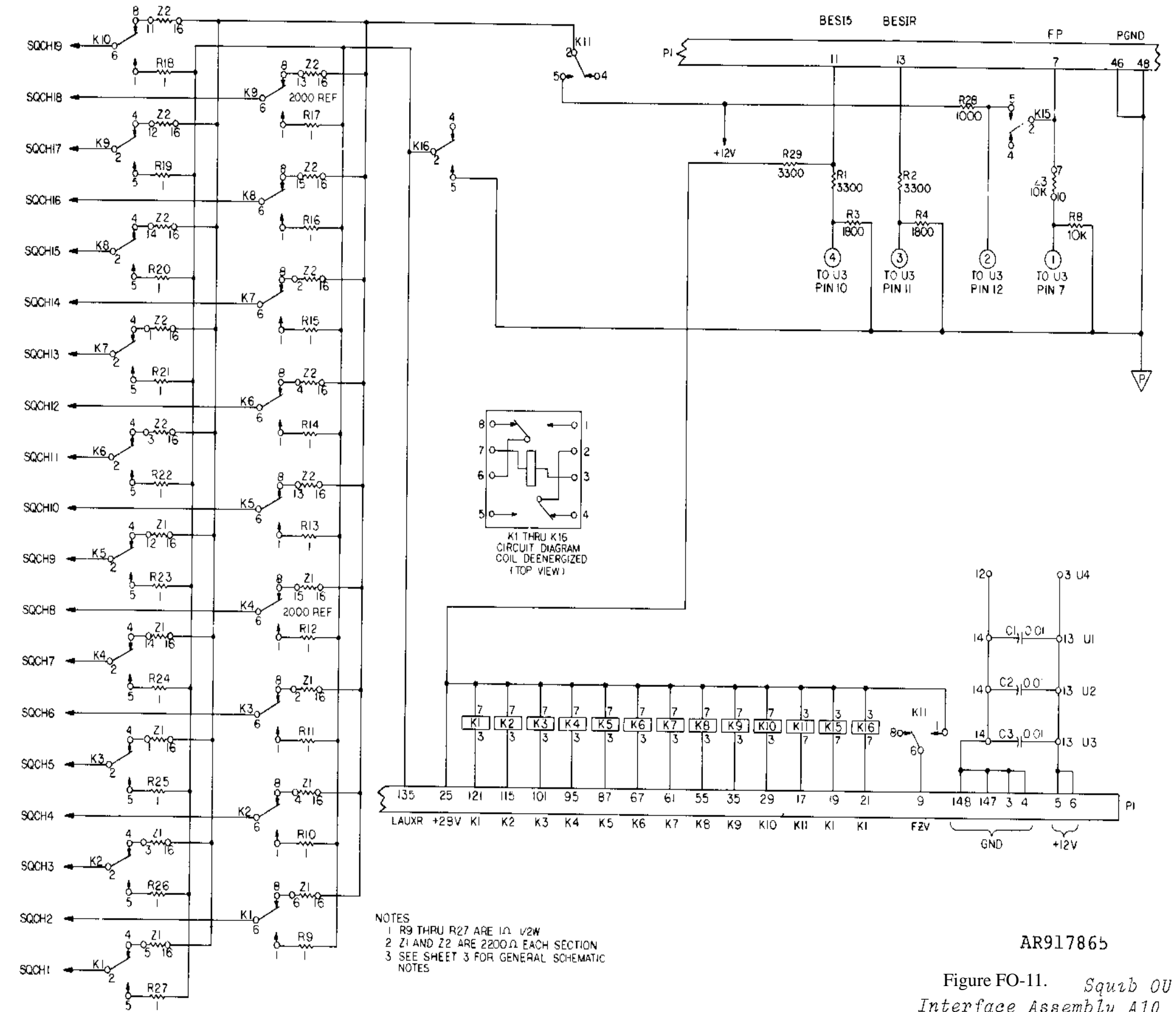
Figure FO-10. Relay Driver Assembly A9 Schematic Diagram (Sheet 2 of 2)



- NOTES
- 1 UNLESS OTHERWISE SPECIFIED
 - A ALL CAPACITANCE VALUES ARE MICROFARADS
 - B ALL CAPACITORS ARE 01 UF ±20%
 - C ALL RESISTANCE VALUES ARE IN OHMS ±5%
 - D ALL RESISTORS ARE 1/2 WATT
 - E ▽ INDICATES POWER GND

AR917864A

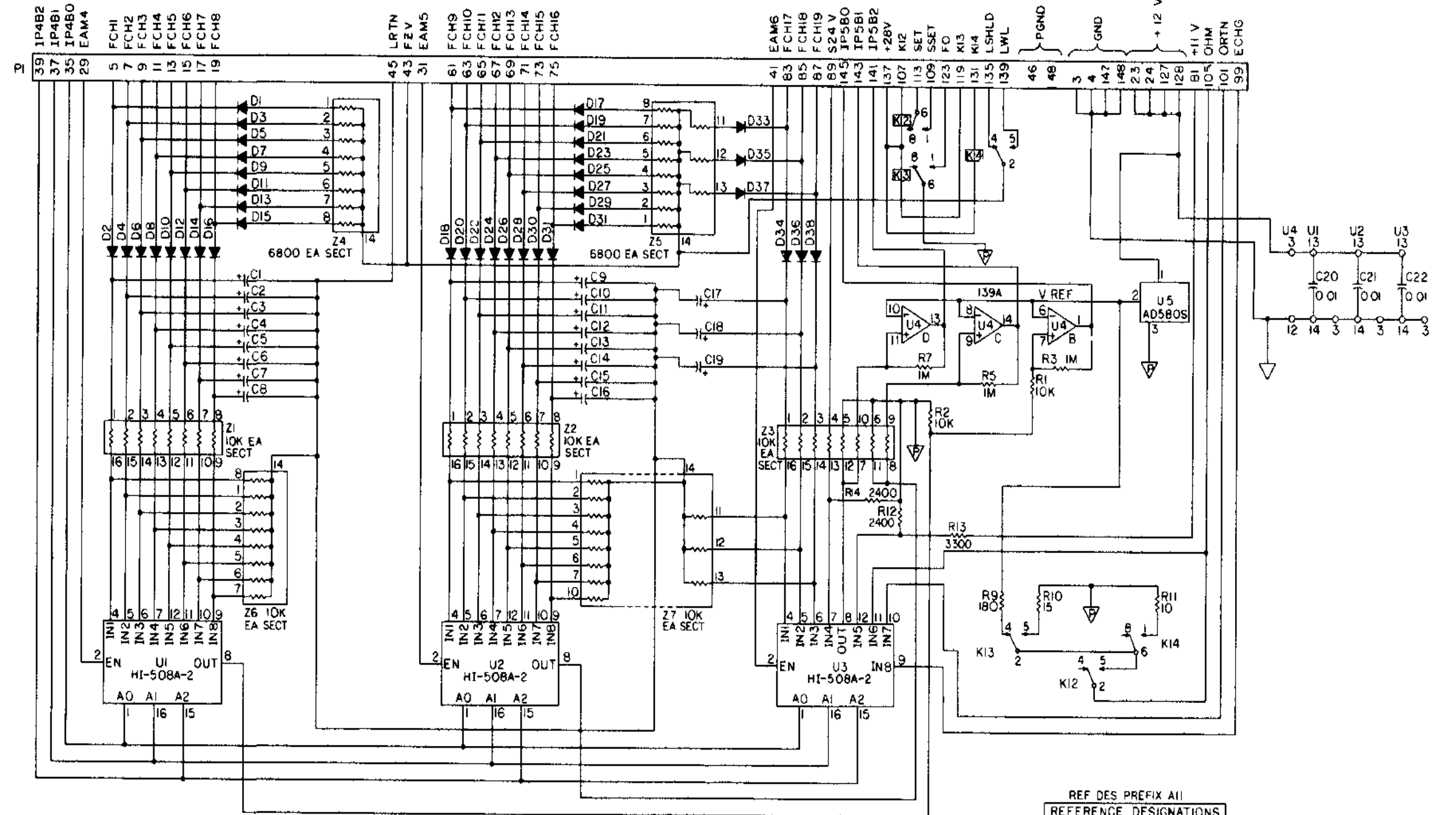
Figure FO-11. Squib OU Interface Assembly A10 Schematic Diagram (Sheet 1 of 2)




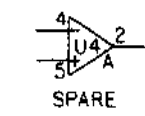
NOTES
 1 R9 THRU R27 ARE 1/2 W
 2 Z1 AND Z2 ARE 2200Ω EACH SECTION
 3 SEE SHEET 3 FOR GENERAL SCHEMATIC NOTES

AR91786b

Figure FO-11. Squib OU Interface Assembly A10 Schematic Diagram (Sheet 2 of 2)



NOTES
 UNLESS OTHERWISE SPECIFIED
 A ALL RESISTANCE VALUES ARE IN OHMS ±5%
 B ALL RESISTORS ARE 1/8 WATT
 C CAPACITANCE VALUES ARE IN MICROFARADS.
 D CAPACITORS ARE 6.8UF 35V ±20%
 E ALL DIODES ARE 1N4148
 F  INDICATES POWER GND

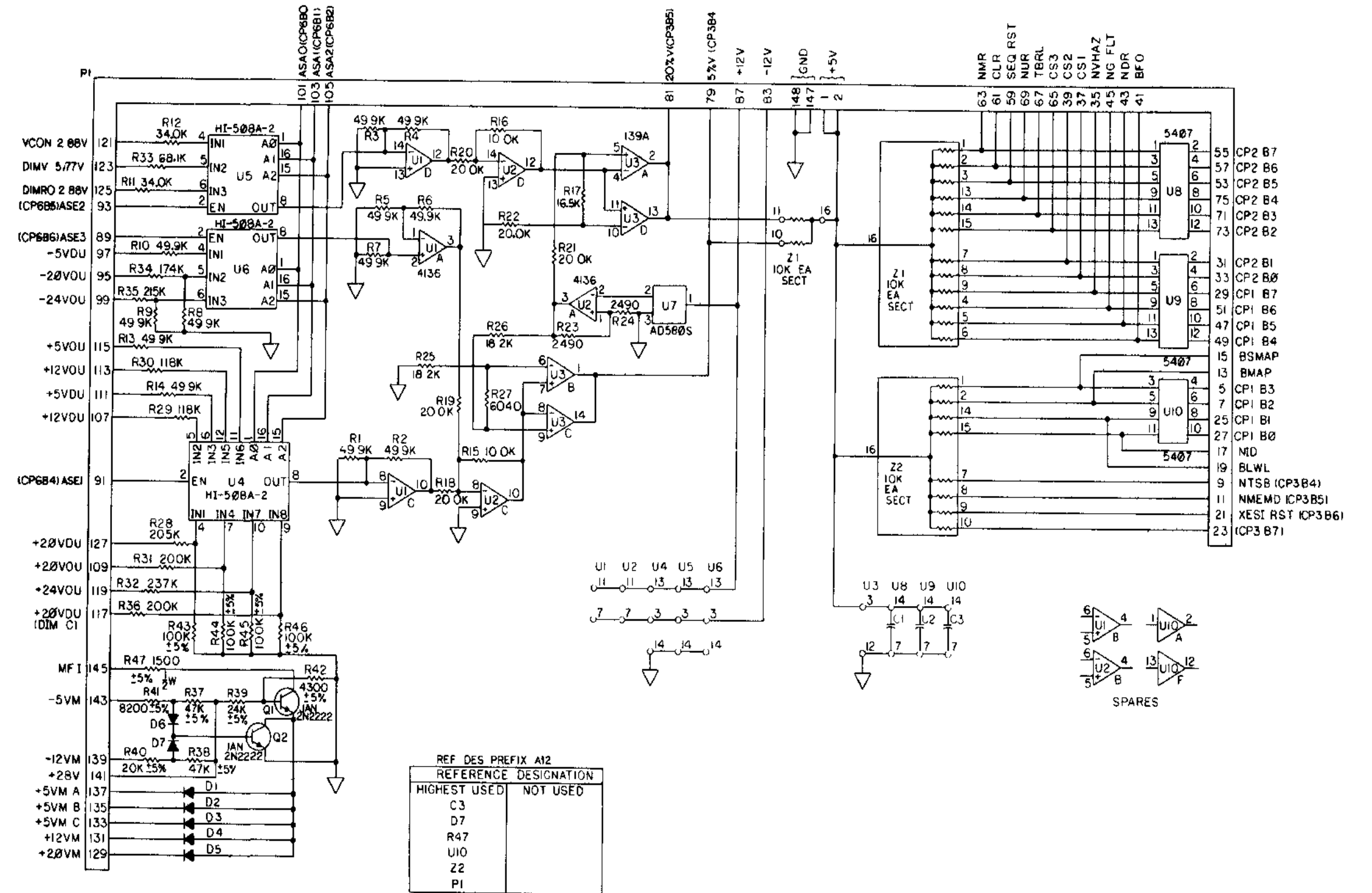


REF DES PREFIX A11

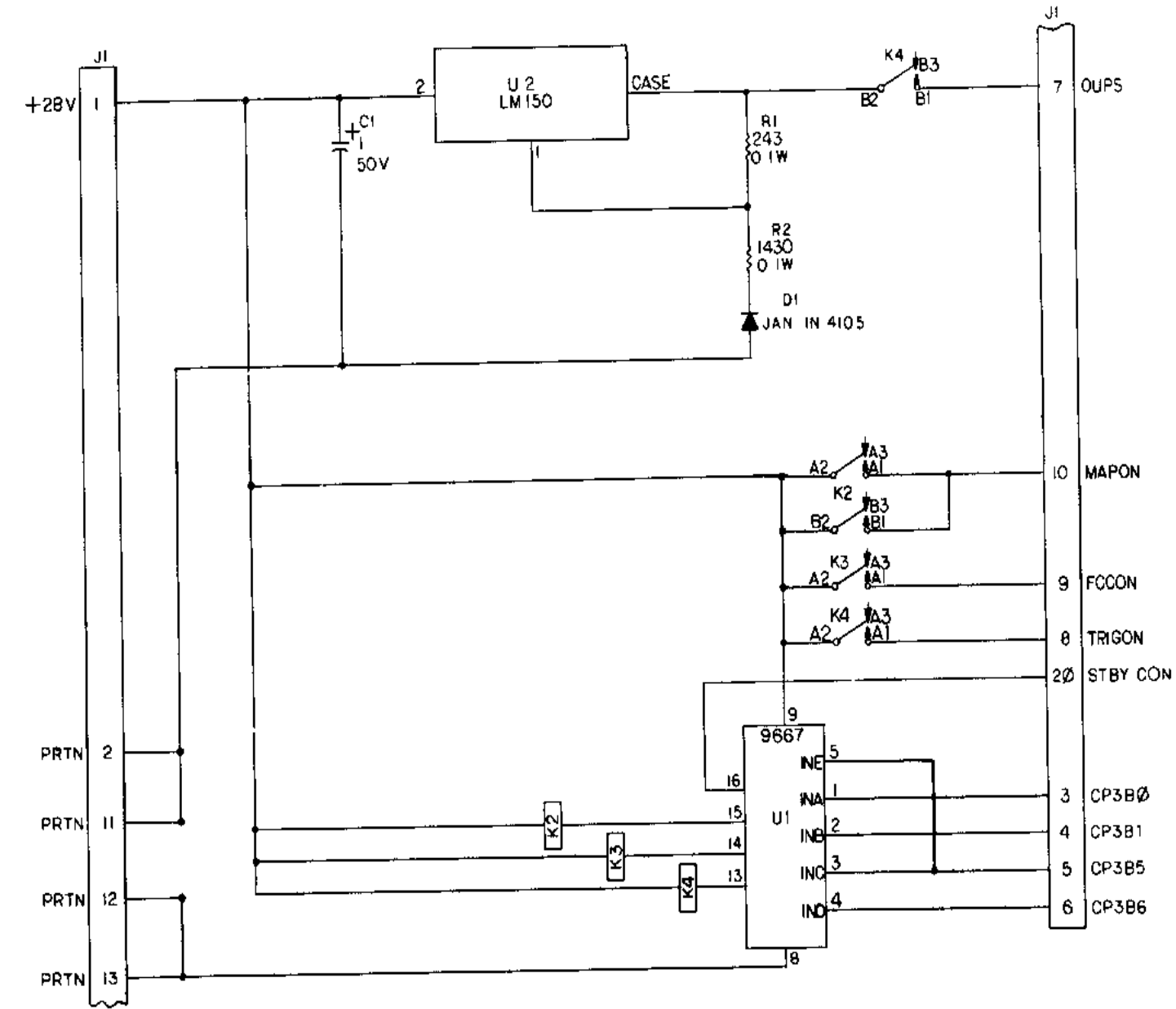
REFERENCE DESIGNATIONS	
HIGHEST USED	NOT USED
C22	K1 THRU K11
D38	R4
K14	R6
R14	RB
U5	
Z7	

AR917866A

Figure FO-12. Fuze OU Interface Assembly A11 Schematic Diagram



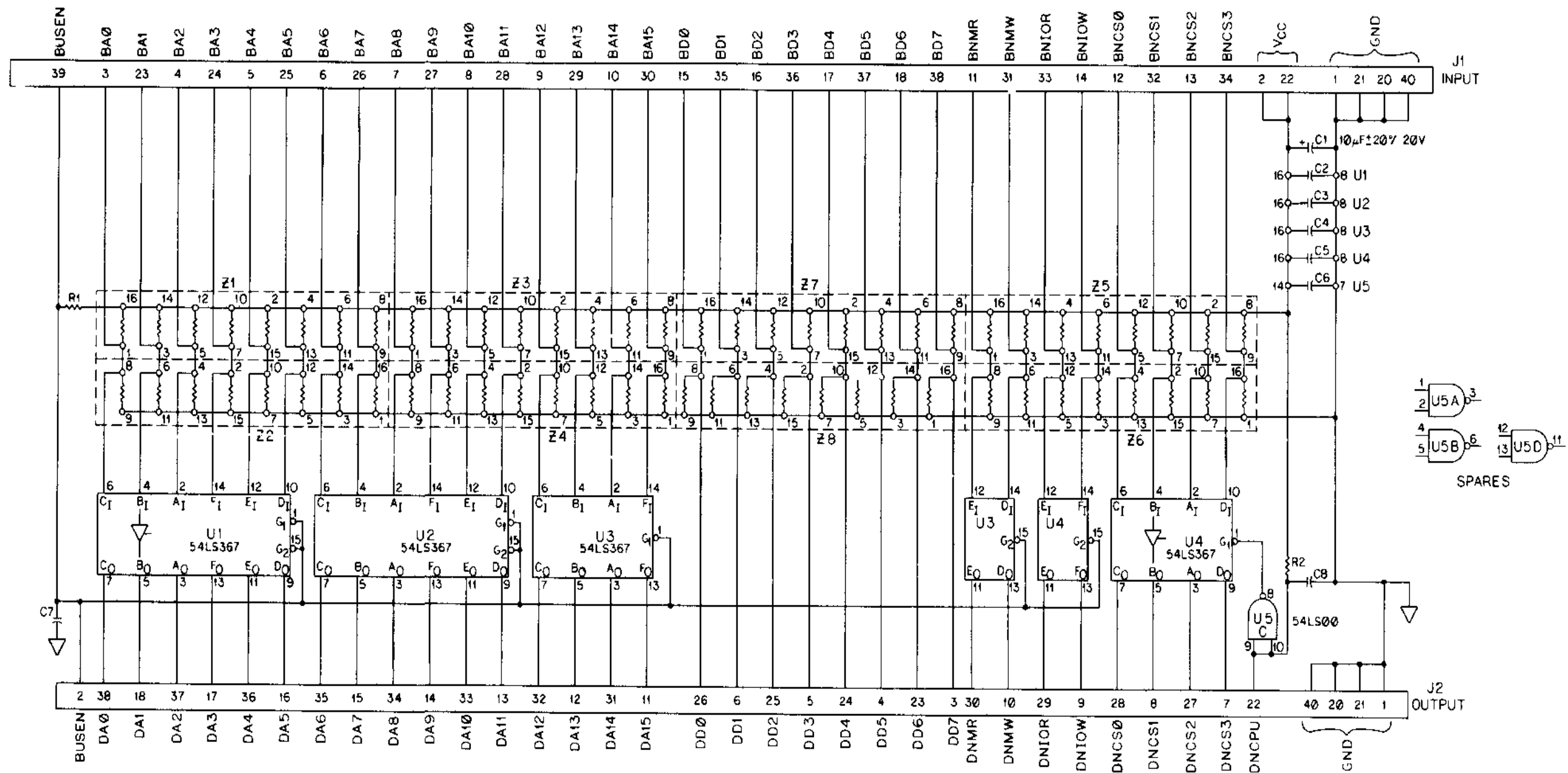
AR917867
Figure FO-13. Analog
Circuit Assembly A12
Schematic Diagram



REF DES PREFIX A13	
REFERENCE	DESIGNATIONS
HIGHEST USED	NOT USED
C1	
D1	
J1	
K4	K1
R2	
U2	

AR917868A

Figure FO-14. Power Control Assembly A13 Schematic Diagram



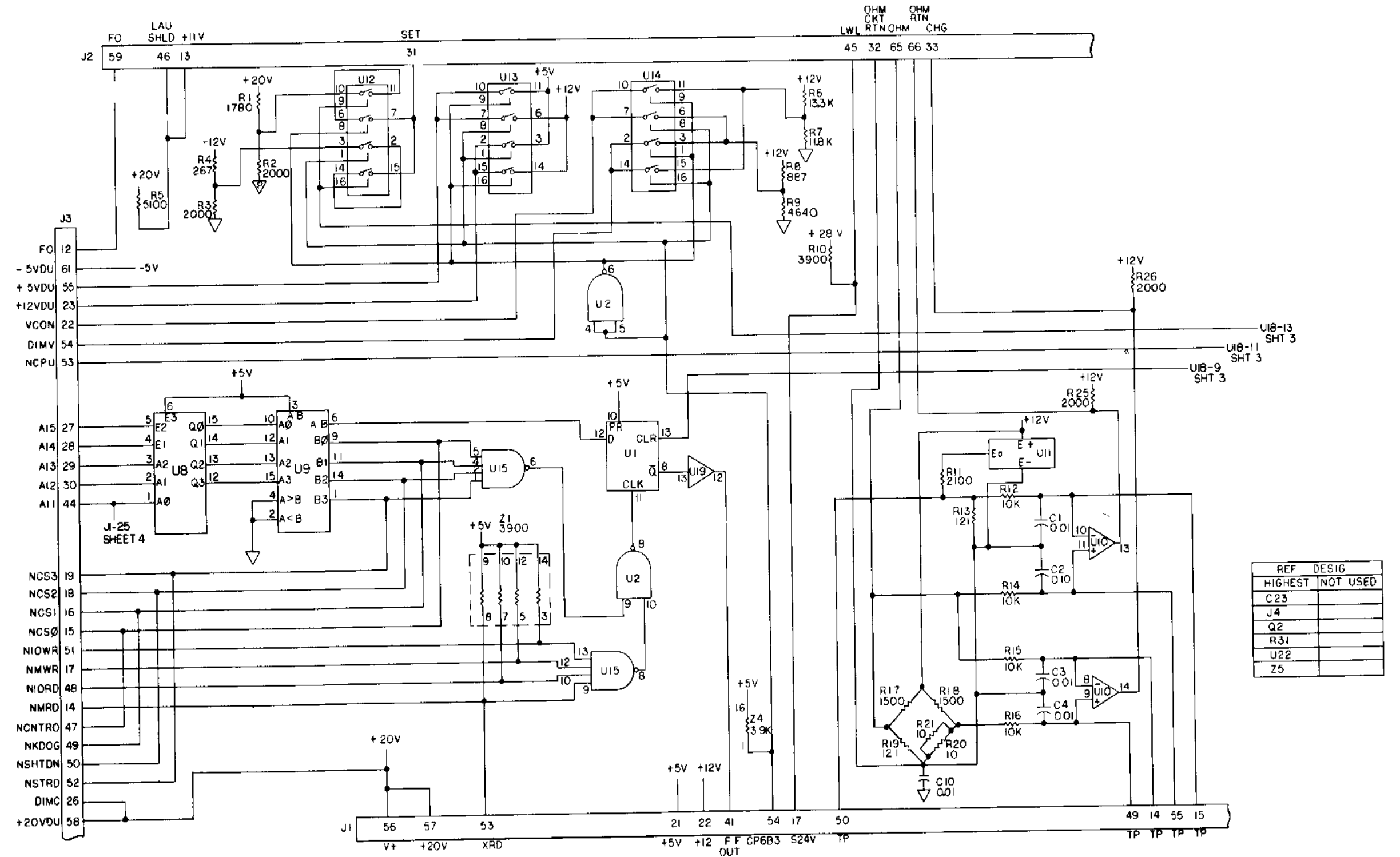
- NOTES
- UNLESS OTHERWISE SPECIFIED
 - ALL CAPACITOR VALUES ARE IN MICROFARADS
 - ALL CAPACITORS ARE 0.1μF ±5% 50V
 - ALL RESISTOR VALUES ARE IN OHMS
 - ALL RESISTORS ARE 1K ±5% 1/4W
 - Z1 THRU Z7 ARE 1K ±5% PER SECTION
 - SEE SHEET 1 FOR GENERAL NOTES

REFERENCE DESIGNATION	
HIGHEST USED	NOT USED
C8	
R2	
U5	
Z8	
J2	

REF DES PREFIX A1

AR917869A

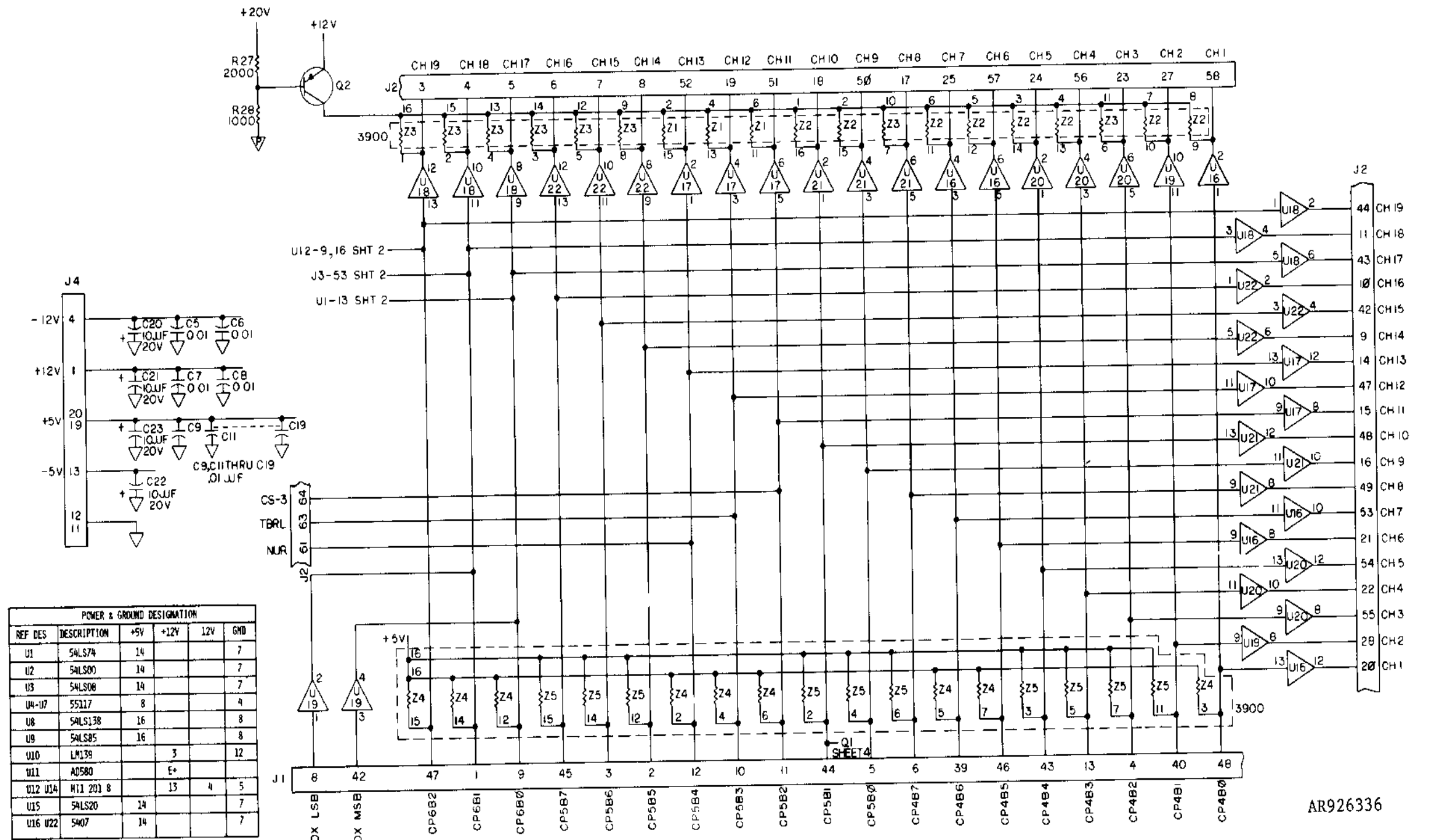
Figure FO-15. DU Cable Interface Assembly A14 Schematic Diagram



NOTES (CONT)
 5 UNLESS OTHERWISE SPECIFIED
 A ALL RESISTANCE VALUES ARE IN OHMS ± 5%
 B ALL RESISTORS ARE 1/4 WATT
 C CAPACITANCE VALUES ARE IN MICROFARADS
 D CAPACITORS ARE 0.01 µF, 50V
 6 RESISTORS R1-R21 ARE 1%, 1 WATT, EXCEPTIONS ARE R5 AND R10

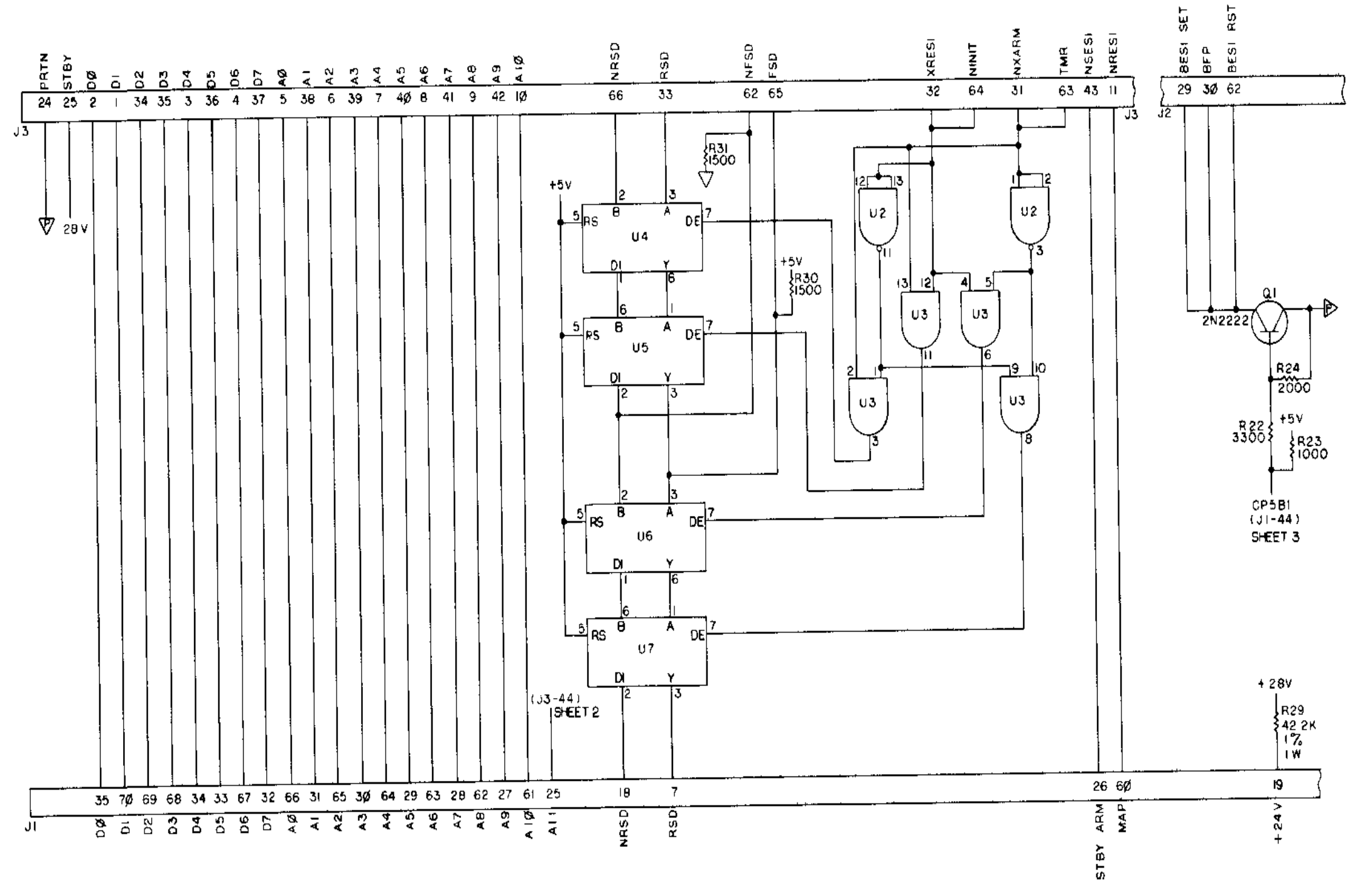
FOR POWER AND GROUND DESIGNATION SEE SHEET 3

Figure FO-16. Self Test Assembly A15 Schematic Diagram (Sheet 1 of 3)



NOTES (CONT)
 7 ↓ INDICATES SIGNAL RETURN
 ↓ INDICATES POWER RETURN

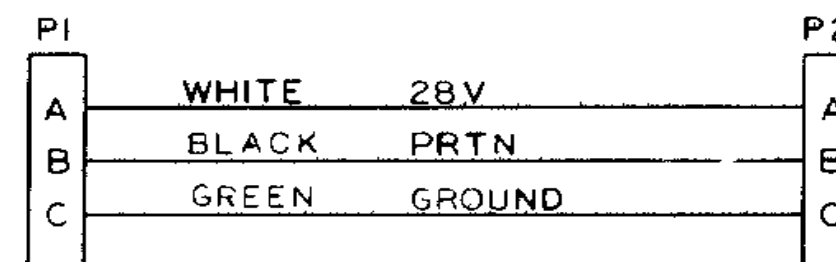
Figure FO-16. Self Test Assembly A15 Schematic Diagram (Sheet 2 of 3)



FOR POWER AND GROUND DESIGNATION
SEE SHEET 3

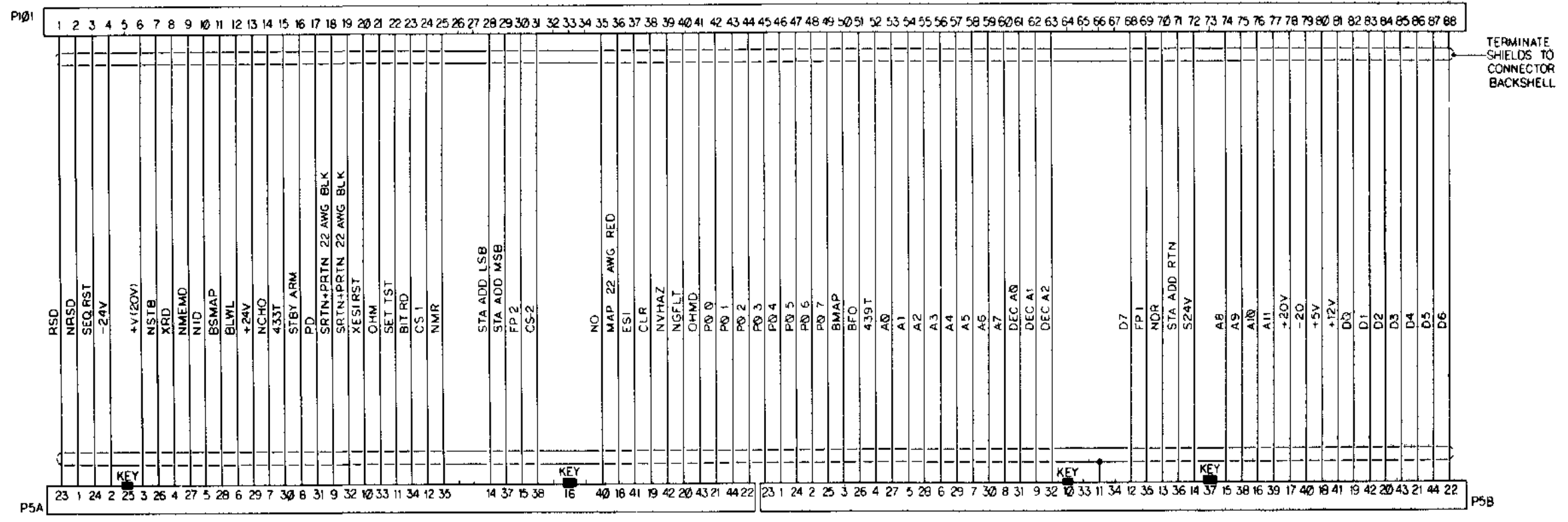
AR932337

Figure FO-16. Self Test Assembly A15
Schematic Diagram (Sheet 3 of 3)



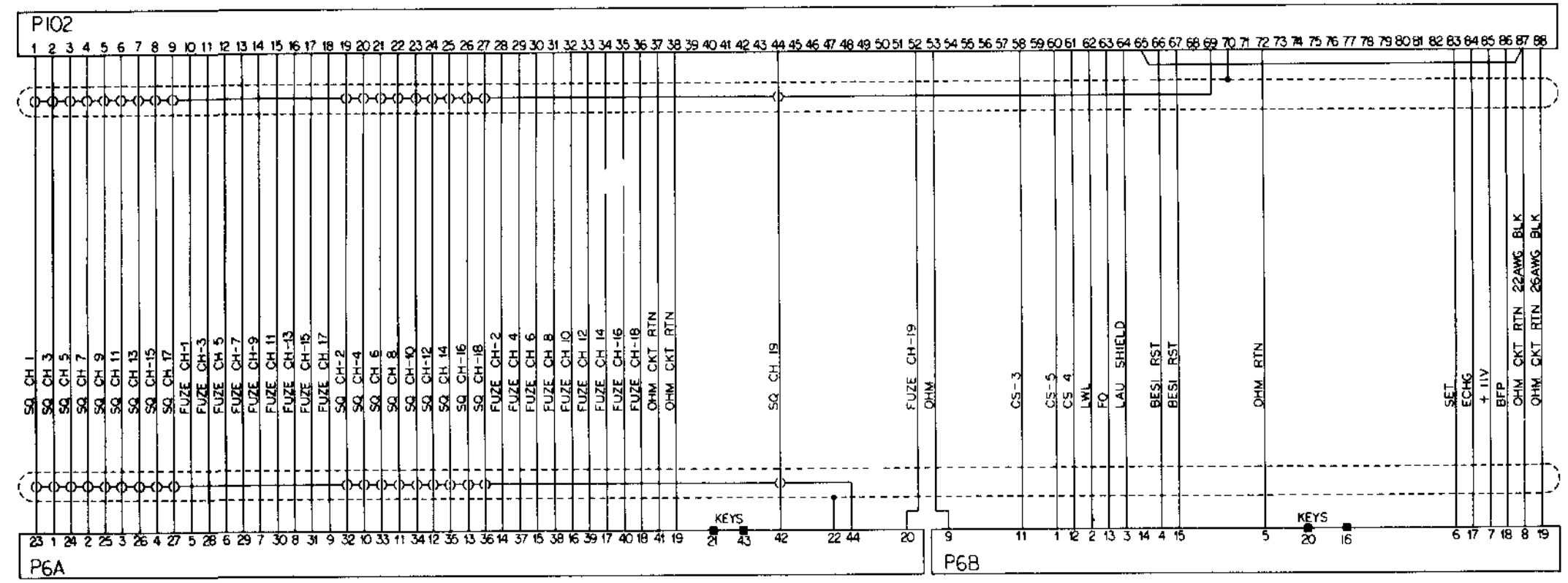
AR917870

Figure FO-17. *Power
Cable Assembly W1
Schematic Diagram*



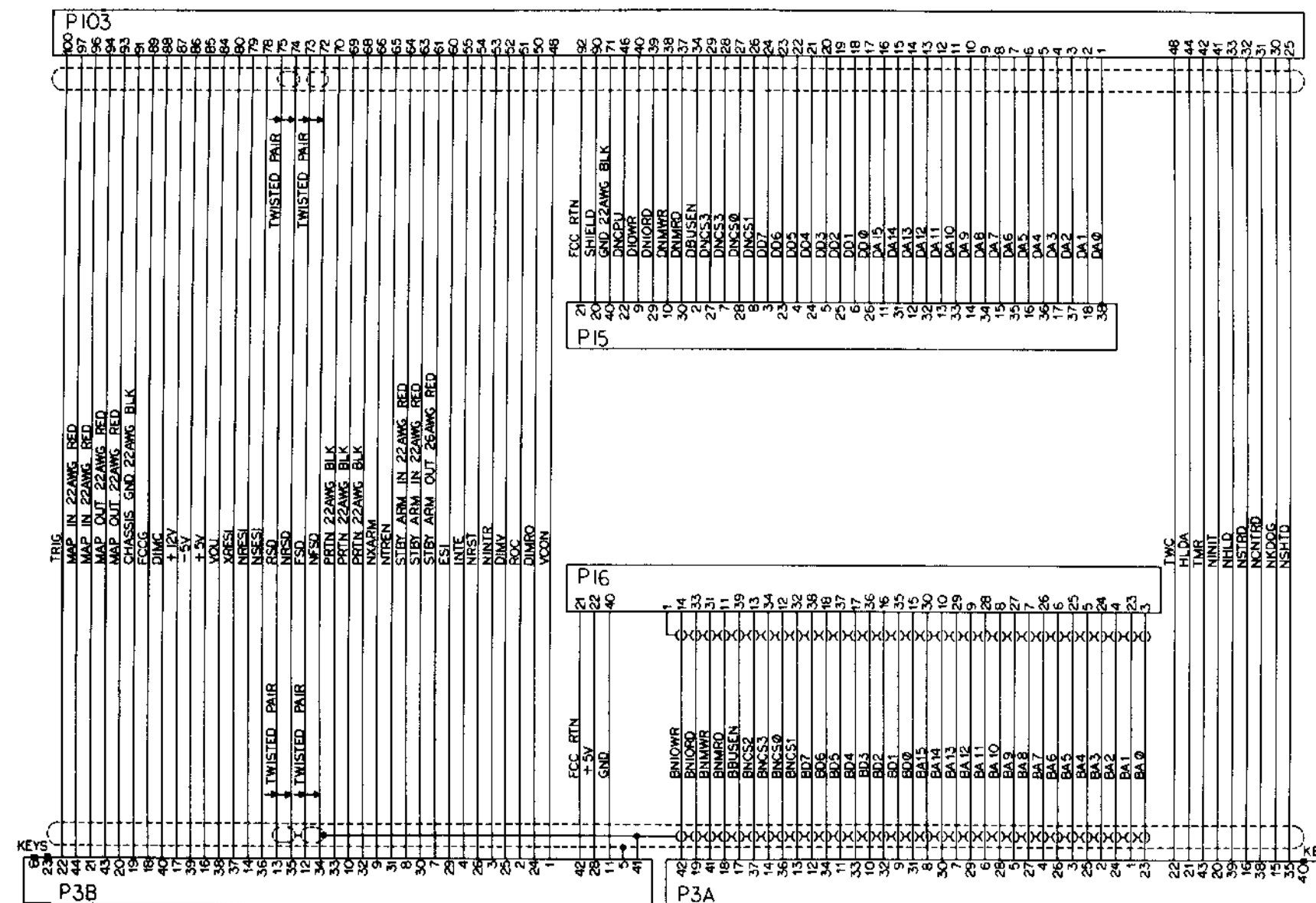
AR917871

Figure FO-18. OU J1 Test Cable Assembly W2 Schematic Diagram



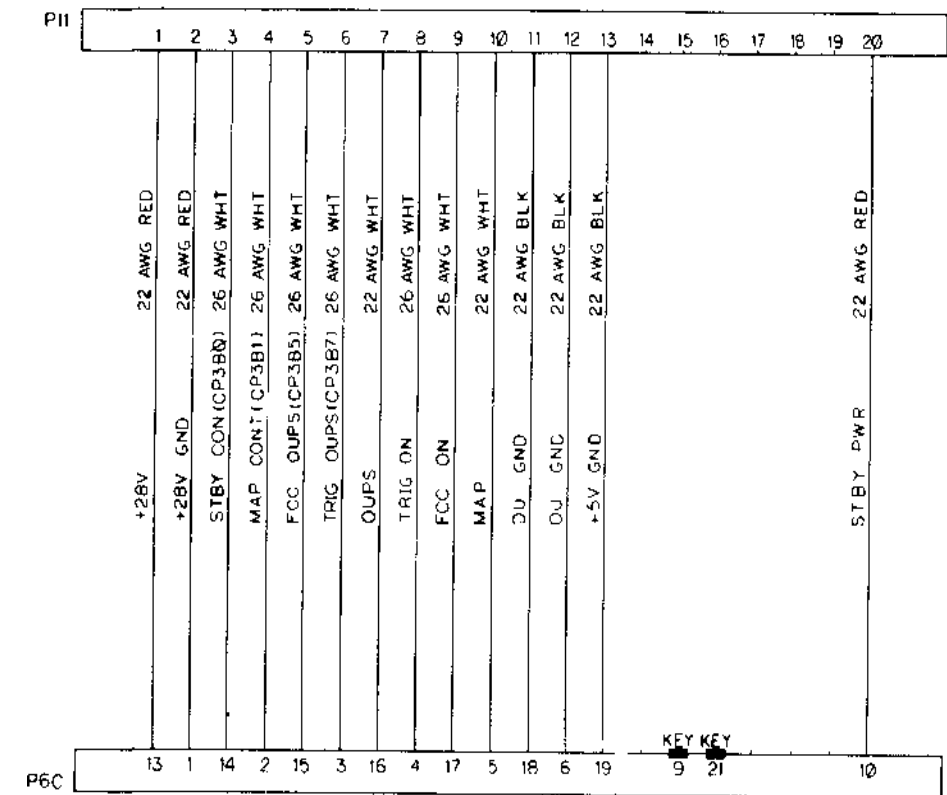
AR917872

Figure FO-19. OU J2 Test Cable Assembly W3 Schematic Diagram



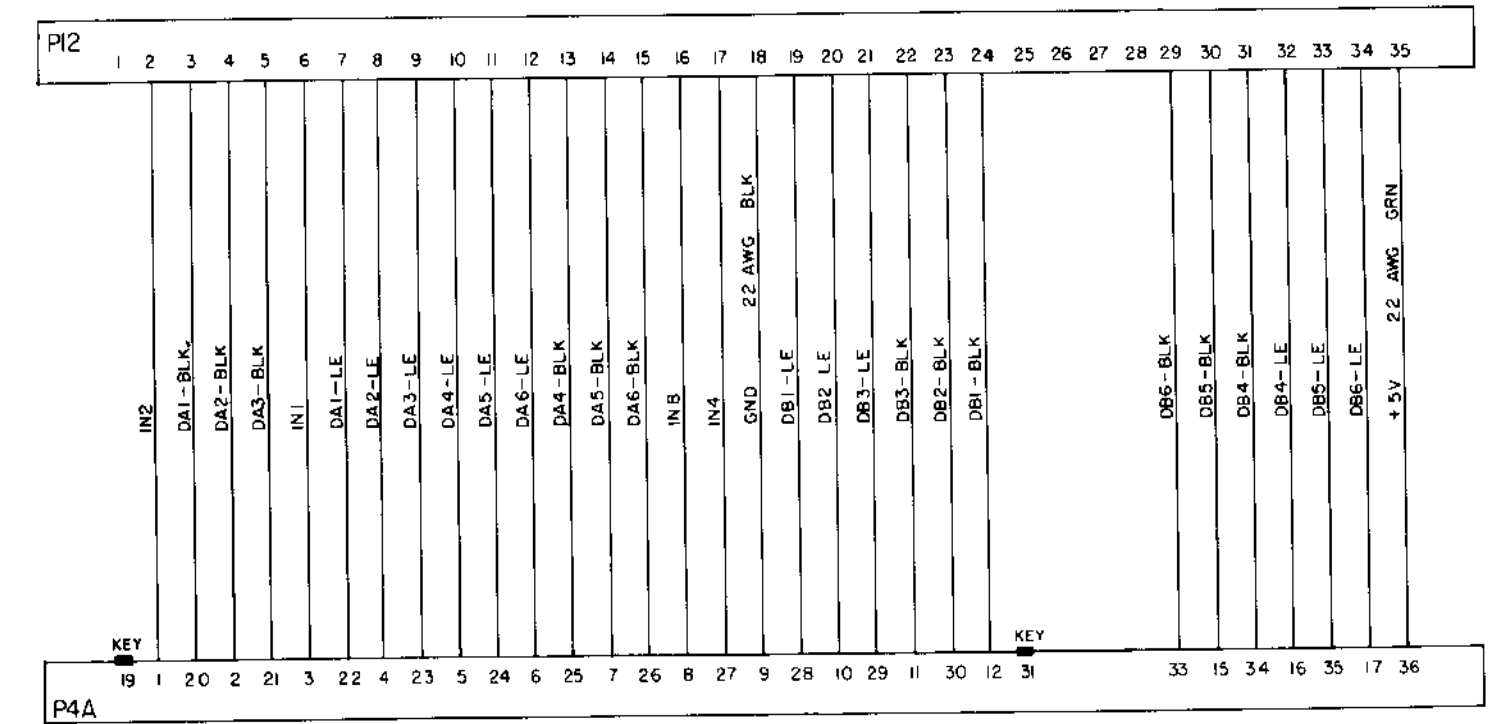
AR917873

Figure FO-20. DU Test Cable Assembly W4 Schematic Diagram



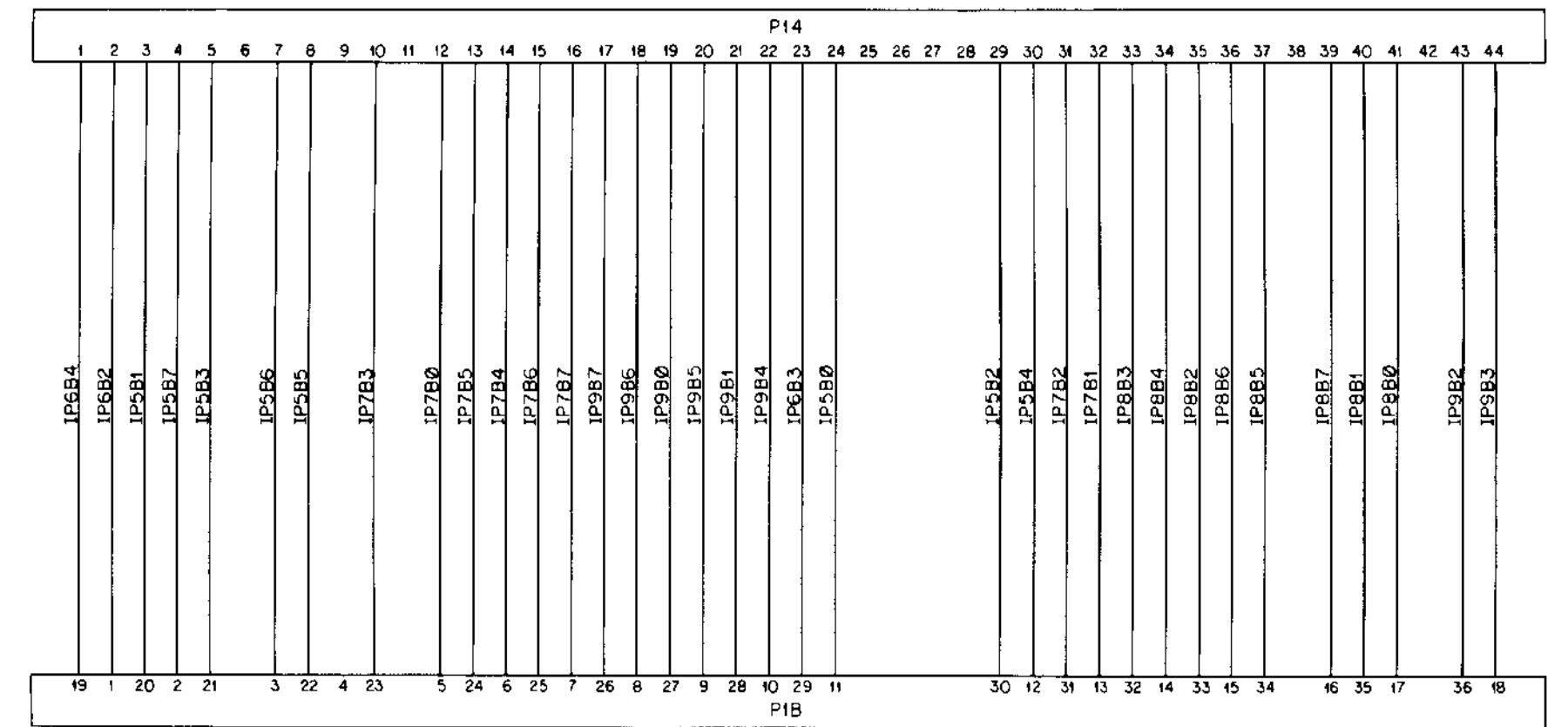
AR917874

Figure FO-21 Power Control Cable Assembly W5 Schematic Diagram



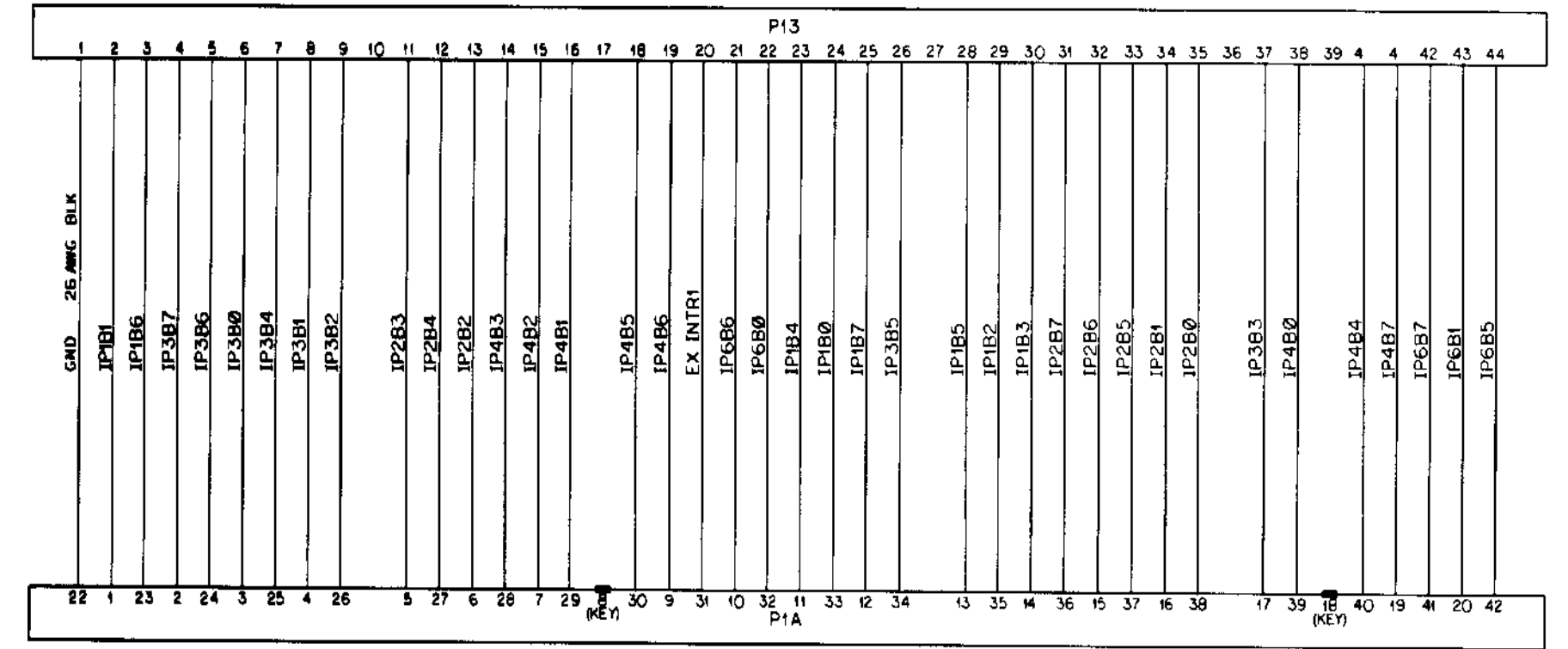
AR917875

Figure FO-22. Display Cable Assembly W6 Schematic Diagram



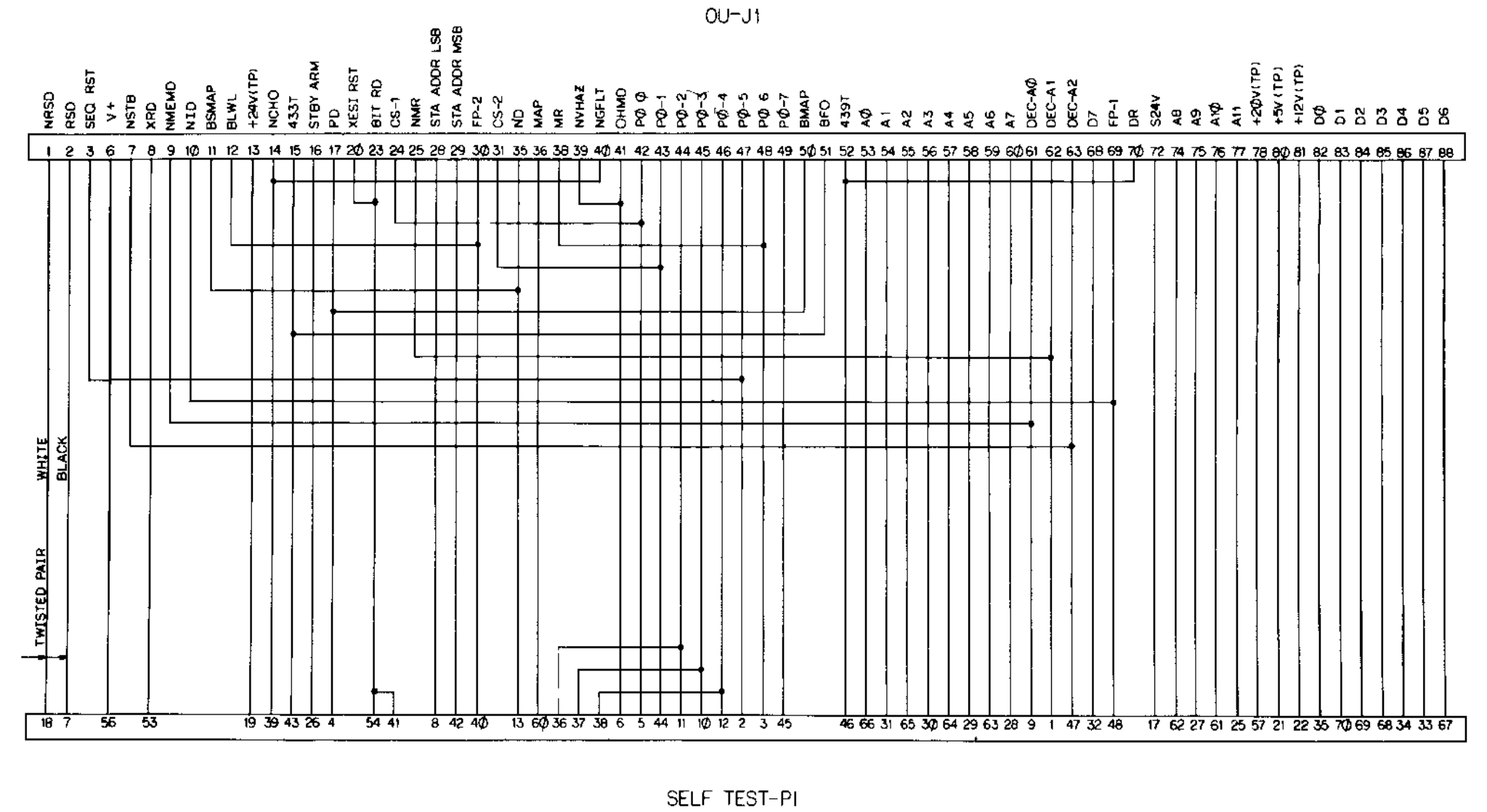
AR917876

Figure FO-23. I/O
Cable Assembly W7
Schematic Diagram



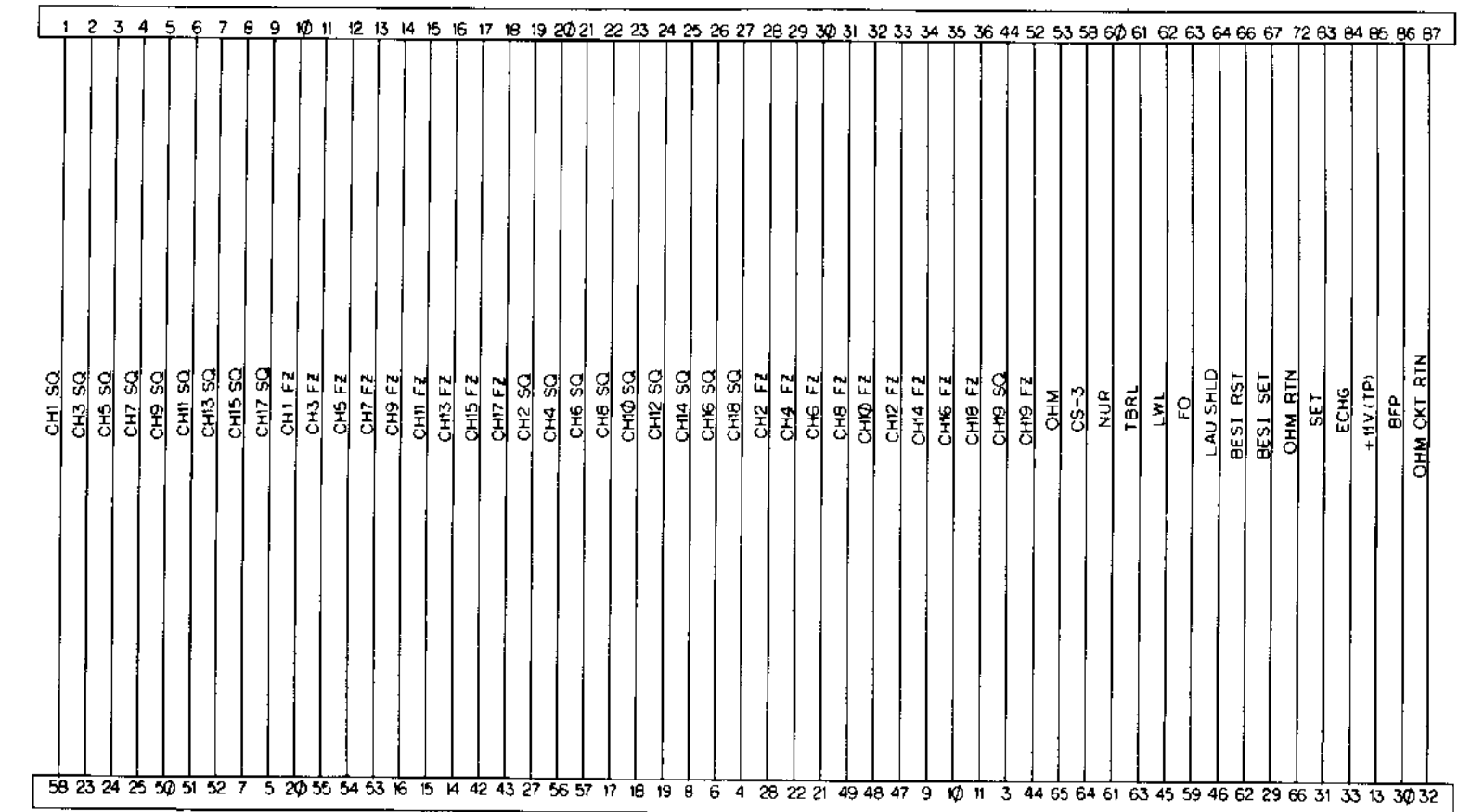
AR917771

Figure FO-24. I/O
Cable Assembly W8
Schematic Diagram



AR926310
Figure FO-25. OU J1
Self-Test
Cable Assembly W10
Schematic Diagram

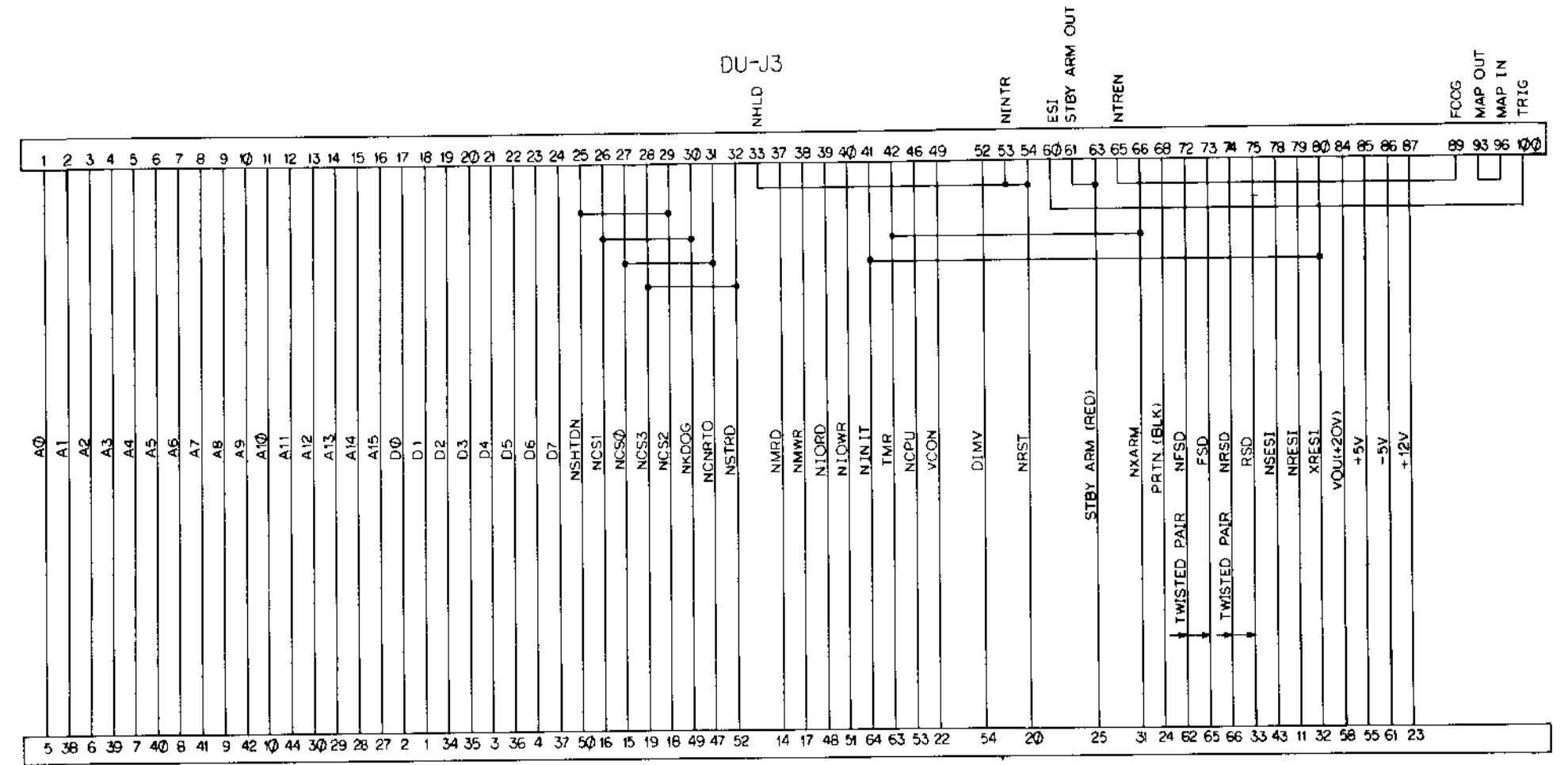
SELF TEST
OU-J2



SELF TEST-P2

AR926311

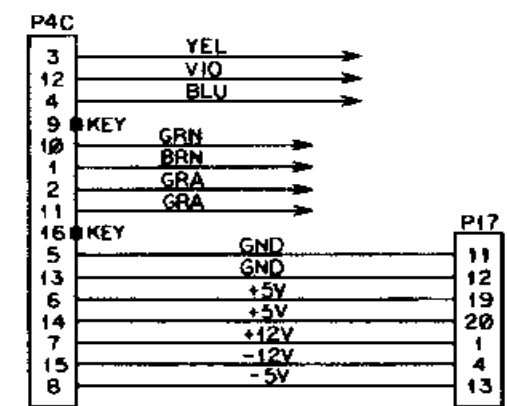
Figure FO-26. OU J2
Self-Test
Cable Assembly W11
Schematic Diagram



SELF TEST-P3

AR926312

Figure FO-27. DU Self-Test Cable Assembly W12 Schematic Diagram



WIRING DIAGRAM
NOTE 3

AR926313

Figure FO-28 *Cable*
Assembly W13
Schematic Diagram

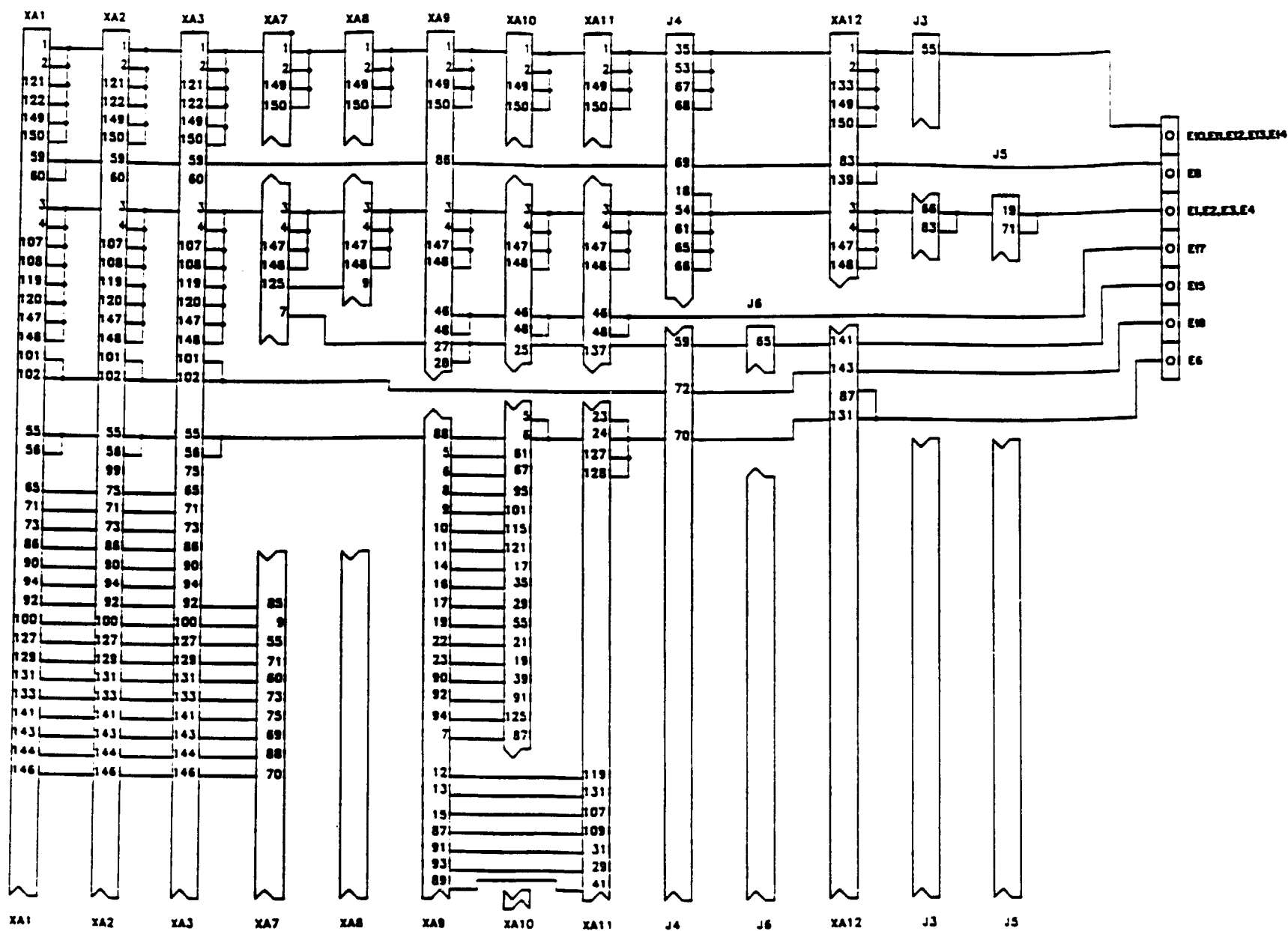


Figure FO-29. Motherboard
Wiring Assembly
Schematic Diagram
(Sheet 1 of 5)

Change 2

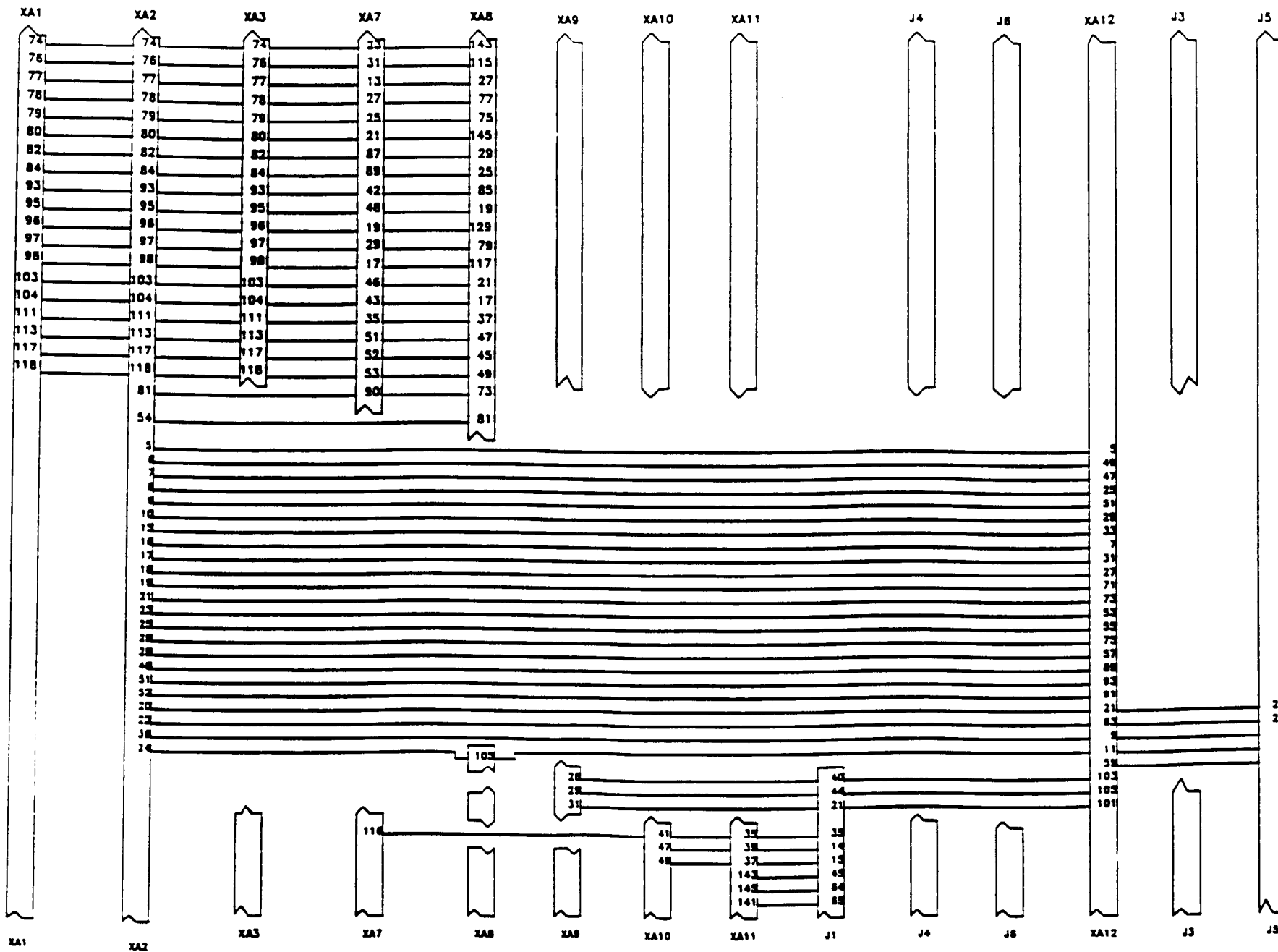


Figure FO-29. Motherboard Wiring Assembly Schematic Diagram (Sheet 2 of 5)

Change 2

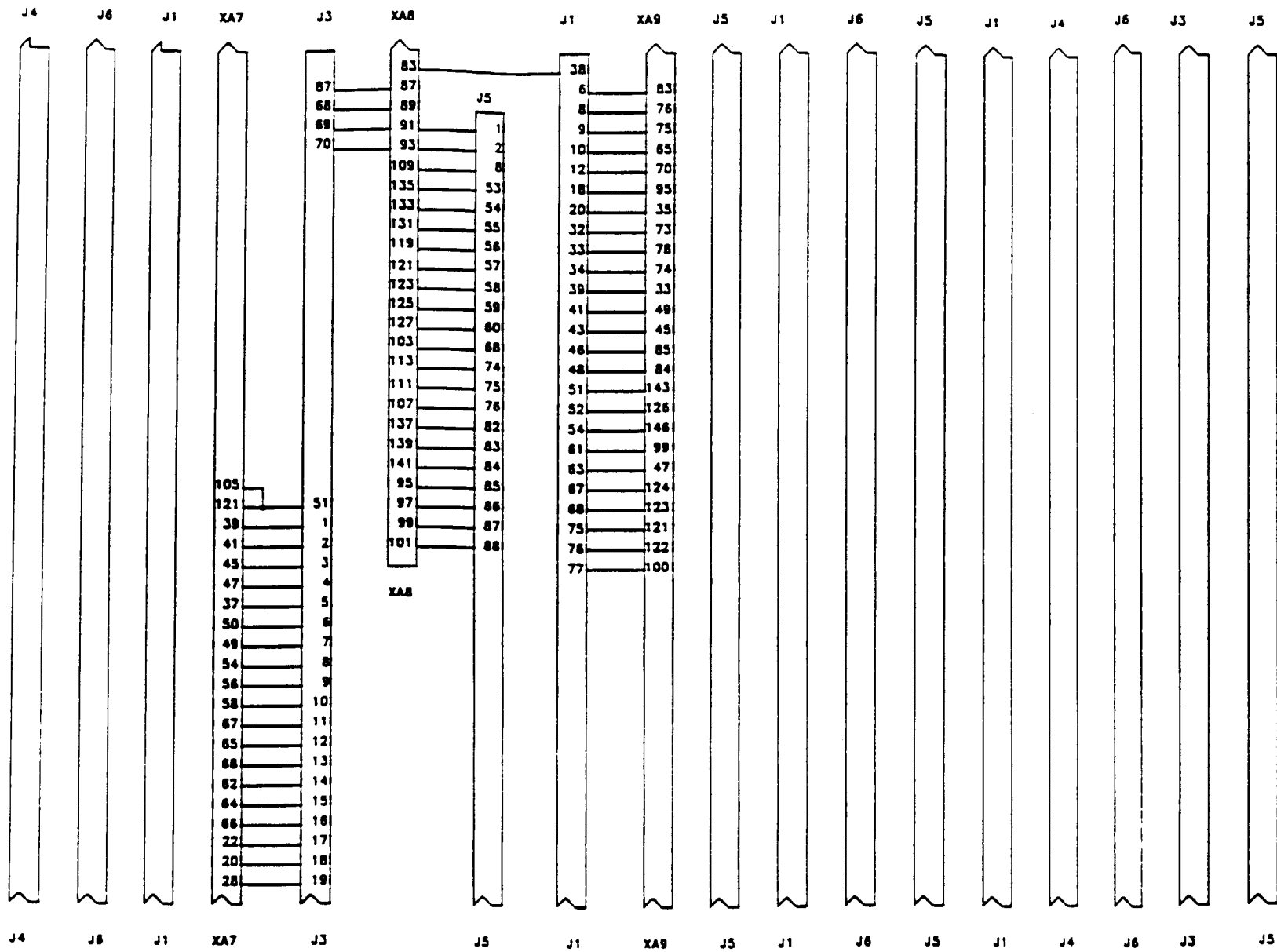


Figure FO-29. Motherboard
Wiring Assembly
Schematic Diagram
(Sheet 3 of 5)

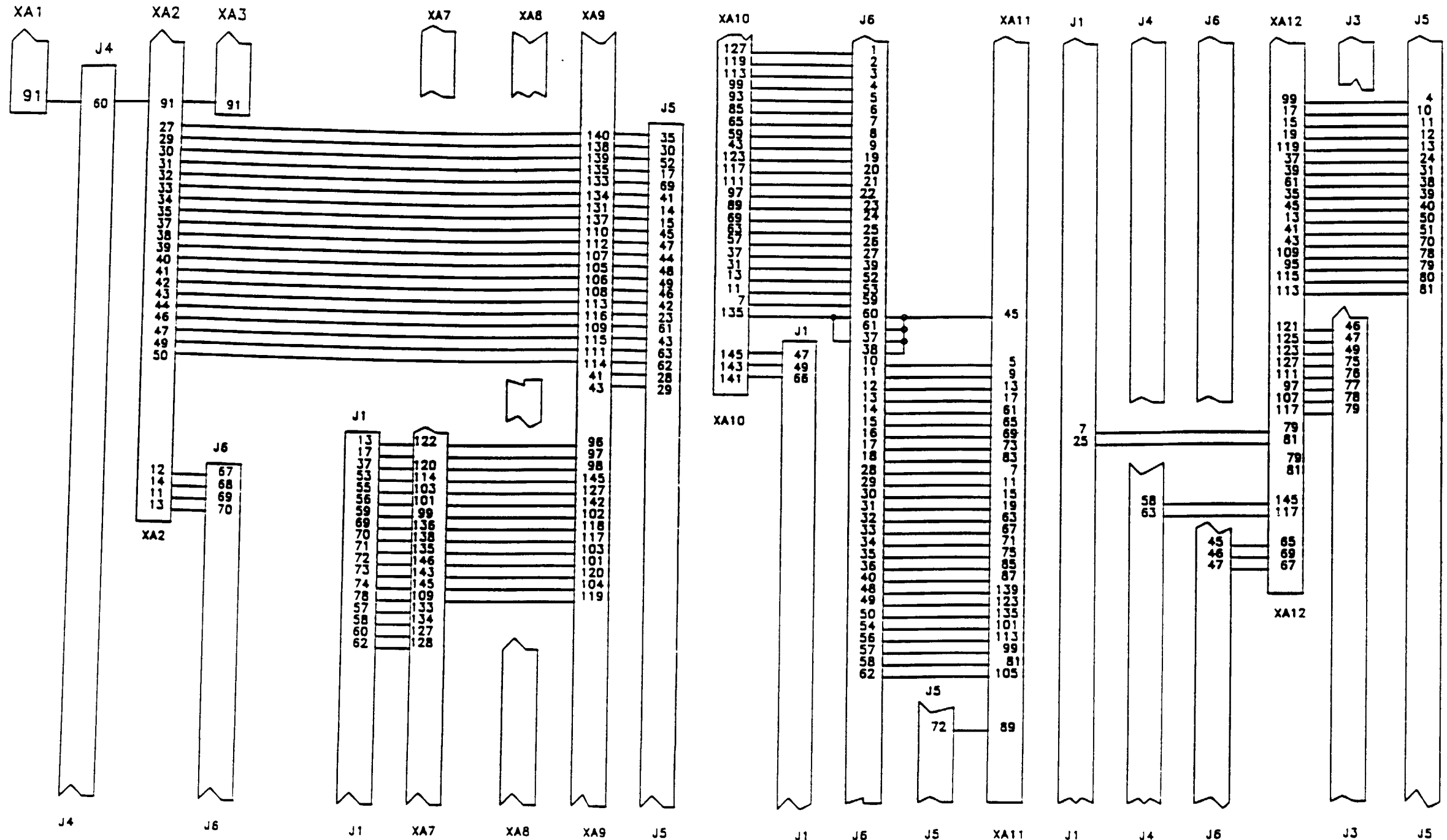


Figure FO-29. Motherboard Wiring Assembly Schematic Diagram (Sheet 4 of 5)

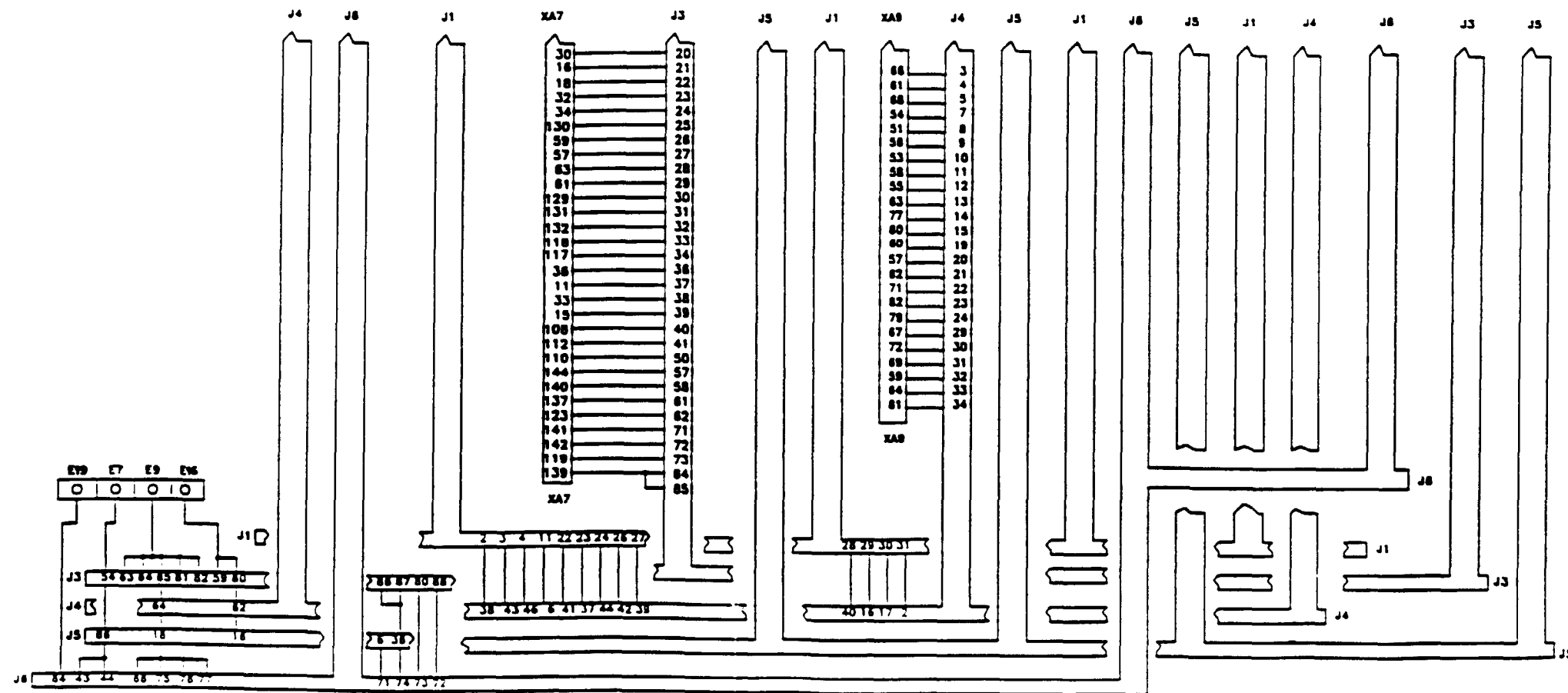


Figure FO-29, Motherboard
Wiring Assembly
Schematic Diagram
(Sheet 5 of 5)

Change 2

By Order of the Secretary of the Army:

E. C. MEYER
General, United States Army
Chief of Staff

Official:

ROBERT M. JOYCE
Brigadier General, United States Army
The Adjutant General

DISTRIBUTION:

To be distributed in accordance with DA Form 12-31 (qty req block no. 292 and 294 (MOD) and 203 and 304 (PROD) Operator, DS & GS requirements for AH-1S)

*U.S. GOVERNMENT PRINTING OFFICE: 1994 - 300-421 (82231)

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL!

SOMETHING WRONG WITH THIS PUBLICATION?

FROM (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER
TM 9-4933-227-13&P

PUBLICATION DATE
3 Sep 96

PUBLICATION TITLE
Test Set, Rocket Management Sub-System M135

BE EXACT PIN-POINT WHERE IT IS

PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO
---------	------------	-----------	----------

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

TEAR ALONG PERFORATED LINE

PRINTED NAME GRADE OR TITLE AND TELEPHONE NUMBER

SIGN HERE

DA FORM 2028-2
1 JUL 79

PREVIOUS EDITIONS ARE OBSOLETE
AMSMC OP-103-85

PS --IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS

FILL IN YOUR
UNITS ADDRESS



DEPARTMENT OF THE ARMY

OFFICIAL BUSINESS



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 82 ROCK ISLAND IL

POSTAGE WILL BE PAID BY ROCK ISLAND ARSENAL



**Director
Armament and Chemical Acquisition
and Logistics Activity
ATTN: AMSTA-AC-NML
Rock Island, IL 61201-9948**



TEAR ALONG PERFORATED LINE

FILL IN YOUR
UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

TEAR ALONG PERFORATED LINE

OFFICIAL BUSINESS

FILL IN YOUR
UNIT'S ADDRESS

FOLD BACK

TEAR ALONG PERFORATED LINE

DEPARTMENT OF THE ARMY

OFFICIAL BUSINESS

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN... JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT. FOLD IT AND DROP IT IN THE MAIL!

SOMETHING WRONG WITH THIS PUBLICATION?

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER
TM 9-4933-227-13&P

PUBLICATION DATE
26 Oct 81

PUBLICATION TITLE
Test Set, Rocket Management Subsystem, XML35

BE EXACT... PIN-POINT WHERE IT IS

PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

PRINTED NAME, GRADE OR TITLE AND TELEPHONE NUMBER

SIGN HERE

FILL IN YOUR
UNIT'S ADDRESS

FOLD BACK

TEAR ALONG PERFORATED LINE

DEPARTMENT OF THE ARMY

OFFICIAL BUSINESS

THE METRIC SYSTEM AND EQUIVALENTS

LINEAR MEASURE

1 Centimeter = 10 Millimeters = 0.01 Meters = 0.3937 Inches
 1 Meter = 100 Centimeters = 1000 Millimeters = 39.37 Inches
 1 Kilometer = 1000 Meters = 0.621 Miles

SQUARE MEASURE

1 Sq Centimeter = 100 Sq Millimeters = 0.155 Sq Inches
 1 Sq Meter = 10,000 Sq Centimeters = 10.76 Sq Feet
 1 Sq Kilometer = 1,000,000 Sq Meters = 0.386 Sq Miles

WEIGHTS

1 Gram = 0.001 Kilograms = 1000 Milligrams = 0.035 Ounces
 1 Kilogram = 1000 Grams = 2.2 Lb
 1 Metric Ton = 1000 Kilograms = 1 Megagram = 1.1 Short Tons

CUBIC MEASURE

1 Cu Centimeter = 1000 Cu Millimeters = 0.06 Cu Inches
 1 Cu Meter = 1,000,000 Cu Centimeters = 35.31 Cu Feet

LIQUID MEASURE

1 Milliliter = 0.001 Liters = 0.0338 Fluid Ounces
 1 Liter = 1000 Milliliters = 33.82 Fluid Ounces

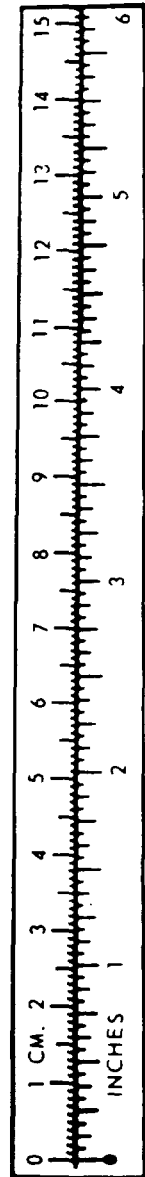
TEMPERATURE

$5/9 (^{\circ}\text{F} - 32) = ^{\circ}\text{C}$
 212^o Fahrenheit is equivalent to 100^o Celsius
 90^o Fahrenheit is equivalent to 32.2^o Celsius
 32^o Fahrenheit is equivalent to 0^o Celsius
 $9/5 \text{ C}^{\circ} + 32 = \text{F}^{\circ}$

APPROXIMATE CONVERSION FACTORS

<u>TO CHANGE</u>	<u>TO</u>	<u>MULTIPLY BY</u>
Inches	Centimeters	2.540
Feet	Meters	0.305
Yards	Meters	0.914
Miles	Kilometers	1.609
Square Inches	Square Centimeters	6.451
Square Feet	Square Meters	0.093
Square Yards	Square Meters	0.836
Square Miles	Square Kilometers	2.590
Acres	Square Hectometers	0.405
Cubic Feet	Cubic Meters	0.028
Cubic Yards	Cubic Meters	0.765
Fluid Ounces	Milliliters	29.573
Pints	Liters	0.473
Quarts	Liters	0.946
Gallons	Liters	3.785
Ounces	Grams	28.349
Pounds	Kilograms	0.454
Short Tons	Metric Tons	0.907
Pound-Feet	Newton-Meters	1.356
Pounds per Square Inch	Kilopascals	6.895
Miles per Gallon	Kilometers per Liter	0.425
Miles per Hour	Kilometers per Hour	1.609

<u>TO CHANGE</u>	<u>TO</u>	<u>MULTIPLY BY</u>
Centimeters	Inches	0.394
Meters	Feet	3.280
Meters	Yards	1.094
Kilometers	Miles	0.621
Square Centimeters	Square Inches	0.155
Square Meters	Square Feet	10.764
Square Meters	Square Yards	1.196
Square Kilometers	Square Miles	0.386
Square Hectometers	Acres	2.471
Cubic Meters	Cubic Feet	35.315
Cubic Meters	Cubic Yards	1.308
Milliliters	Fluid Ounces	0.034
Liters	Pints	2.113
Liters	Quarts	1.057
Liters	Gallons	0.264
Grams	Ounces	0.035
Kilograms	Pounds	2.205
Metric Tons	Short Tons	1.102
Newton-Meters	Pound-Feet	0.738
Kilopascals	Pounds per Square Inch	0.145
Kilometers per Liter	Miles per Gallon	2.354
Kilometers per Hour	Miles per Hour	0.621



TA089991

DEPARTMENT OF THE ARMY
US ARMY PUBLICATIONS DISTRIBUTION CENTER
1555 WOODSON ROAD
ST. LOUIS, MISSOURI 63114-6181

UPS SHIPPER NO. MO. 681-611

OFFICIAL BUSINESS
DO NOT FORWARD OR RETURN-ADDRESS COR

EXECUTIVE DIRECTOR M0497

USAMC LOG SPT ACTV

ATTN AMXLS-AP

REDSTONE ARS

AL 35898-7466

DA PUBLICATION FORM NUMBER		TM 9-4933-227-13&P		002		CHG DATE	
LOCATION	QUANTITY	UNIT OF ISSUE	ACTION	ISSN DATE			
B-1	2	ID					
ITEM NO	2716-66	ELECTRICAL	29333				

BATCH 83 ZONE 4



USAPDC-S LABEL-265 (01 OCTOBER 93) PREVIOUS EDITION MAY BE USED TILL EXHAUSTED