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TECHNICAL MANUAL

OPERATION, MAINTENANCE, ILLUSTRATED PARTS BREAKDOWN

SYSTEM/STACK TESTER

MODEL PT1585

PART NO. 286823-000

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This copy is a reprint which includes current pages from Changes 1 through 5.

BASIC AND ALL CHANGES HAVE BEEN MERGED TO MAKE THIS A COMPLETE PUBLICATION.

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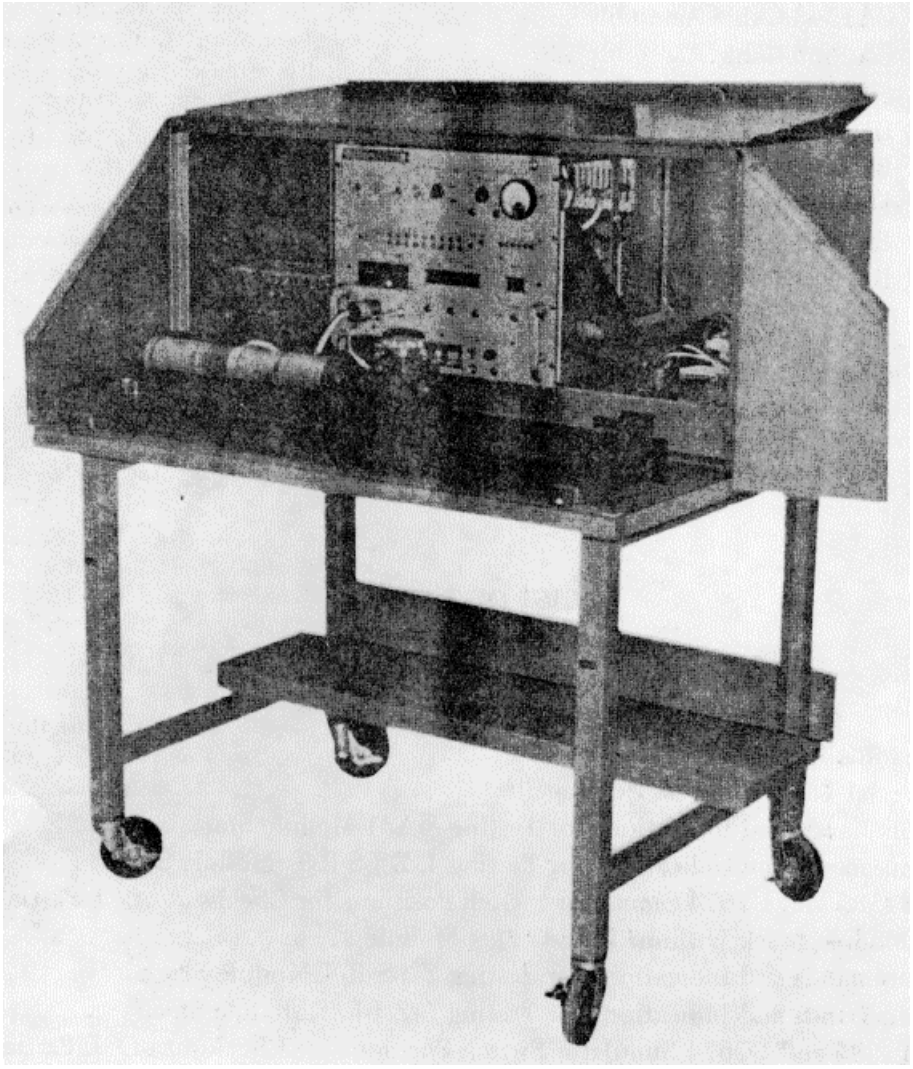

Figure 1-1. System/Stack Tester, Model PT1585.

SECTION I

INTRODUCTION

1-1. INTRODUCTION.

1-2. This manual is for the use of personnel responsible for operation, calibration, and maintenance of the PT1585 System Test Set. The PT1585 is a functional tester for module stacks used in MA31, MA33, MA37, MA124, MA125, MA,133, MA134, MA135, MA136, MA137, MA138, MA139, sensors and MA56, MA87, MA88 EXRAY's; or it may be used to test completely assembled sensors or EXRAY's. The manual is arranged as follows:

Section I	Introduction
Section II	Special tools and Test Equipment
Section III	Preparation for Use and Shipment
Section IV	Operation Instructions
Section V	Maintenance Instructions
Section VI	Diagrams
Section VII	Illustrated Parts Breakdown
Section VIII	Difference Data Sheets
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1-3. GENERAL.

1-4. The PT1585 System Test Set is capable of providing voltages and signals necessary to permit voltage, current, and power tests, plus functional checks of E,Z,L,J,S,R,T, and V modules may be performed and short code messages or status/count bits may be displayed. Audio signals may also be checked. Command Link (CL) module stacks are functionally checked by applying a series of commands from the PT1585 and checking response of the modules by use of indicators (lights or meter readings) on the PT1585 panel. Non-Command Link (NCL) module stacks are function-ally checked by supplying stimulation to the E module and checking the response of the modules by use of indicators on the PT1585 panel. Block diagrams in Figures 1-2 thru 1-9 show functional tests of the modules and sensors.

1-4A. The diagnostic indicators do not check functions of the engine detector module (TC662) and enable/disable module (TC659, TC660, or TC668) in the CAEDET family of sensors. To permit using these indicators to check other modules, the enable/disable module must be removed from the stack.

1-5. LEADING PARTICULARS.

1-6. The leading particulars of the PT1585 System Test Set are shown in Table 1-1.

Table 1-1. Leading Particulars

	Height	Width	Depth	Weight Packed	Weight Unpacked
Chassis & Panel Fixture Assembly	15 3/4 inches	19 inches	17 inches		
Power Requirements	105/125 VAC, 50400 Hz, 5 amperes				
Temperature Range: 60 F to 95 F					
Output Signal (Command) 316.5 MC					
Input Signal (Classified)					

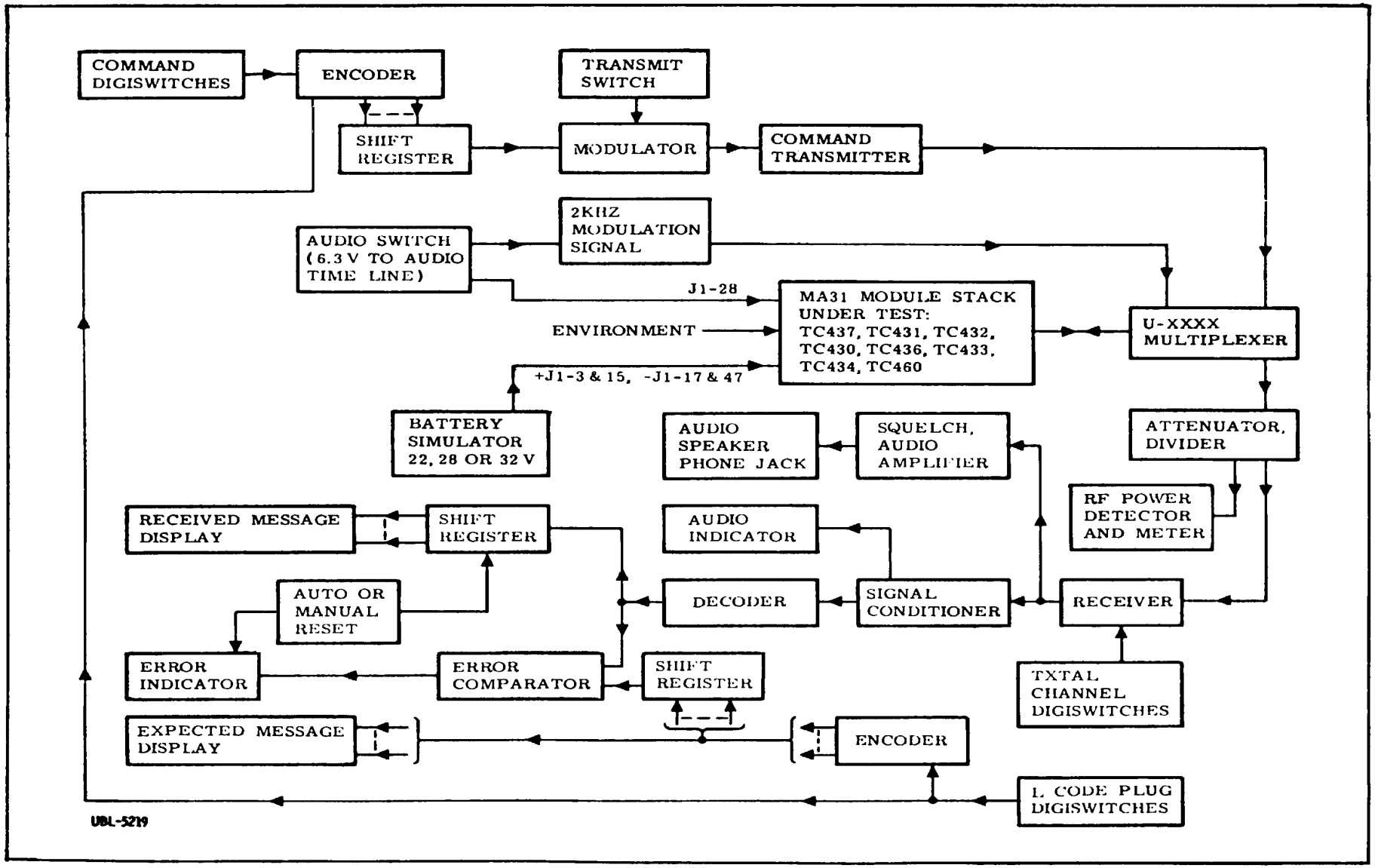


Figure 1-2. CL Module Stack Under Test.

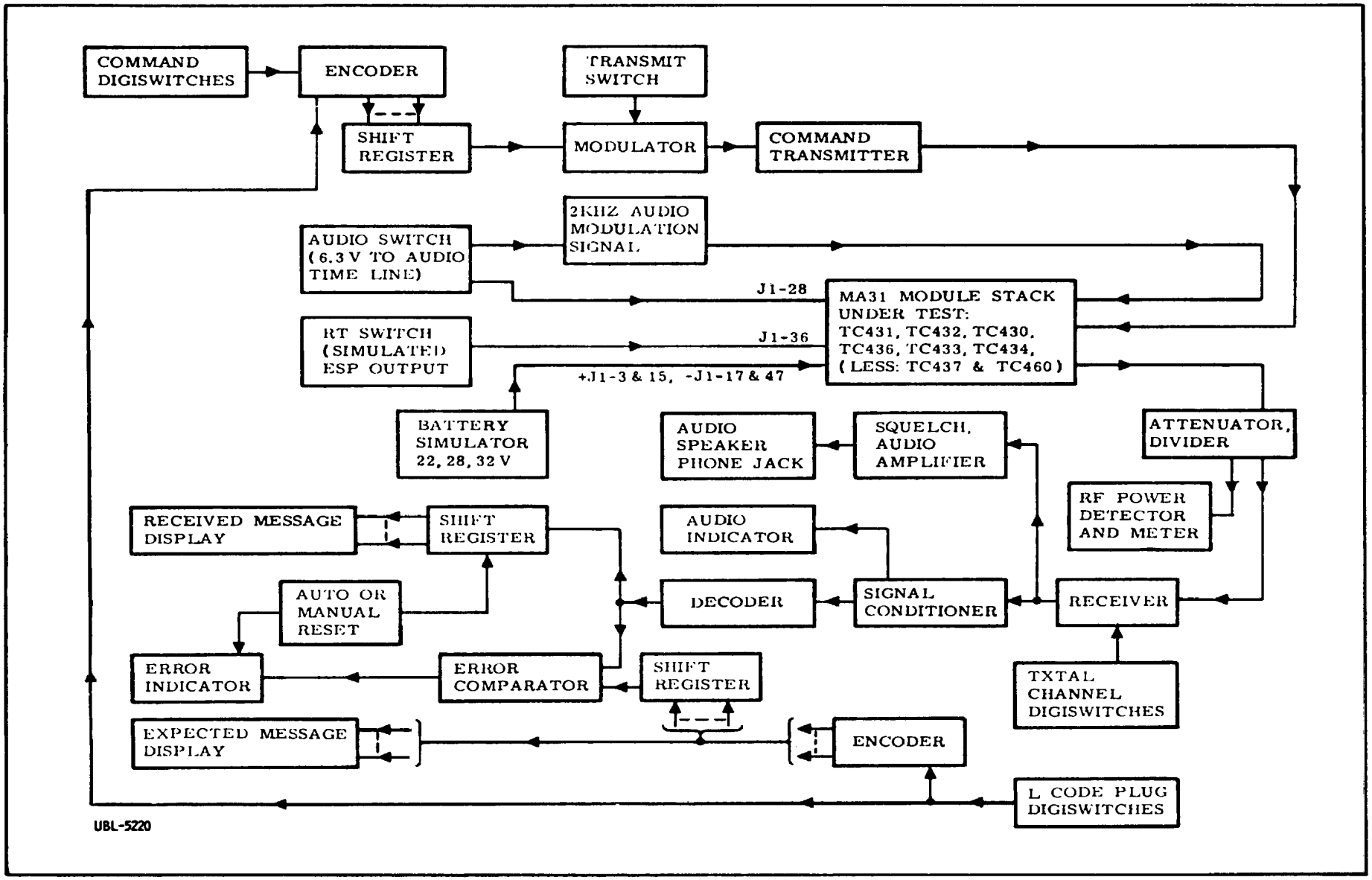


Figure 1-3. Partial CL Module Stack Under Test.

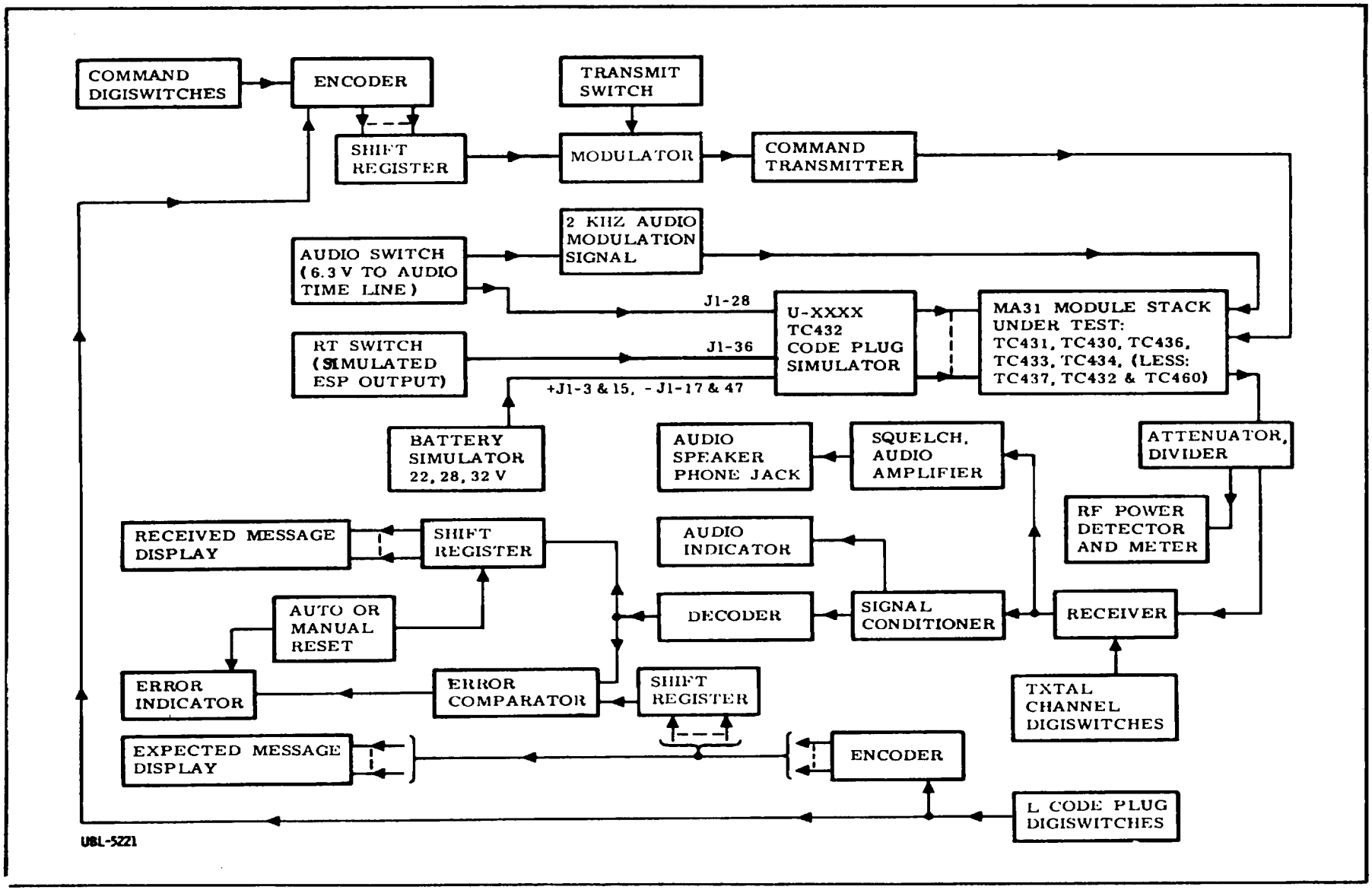


Figure 1-4. Partial CL Module Stack Under Test.

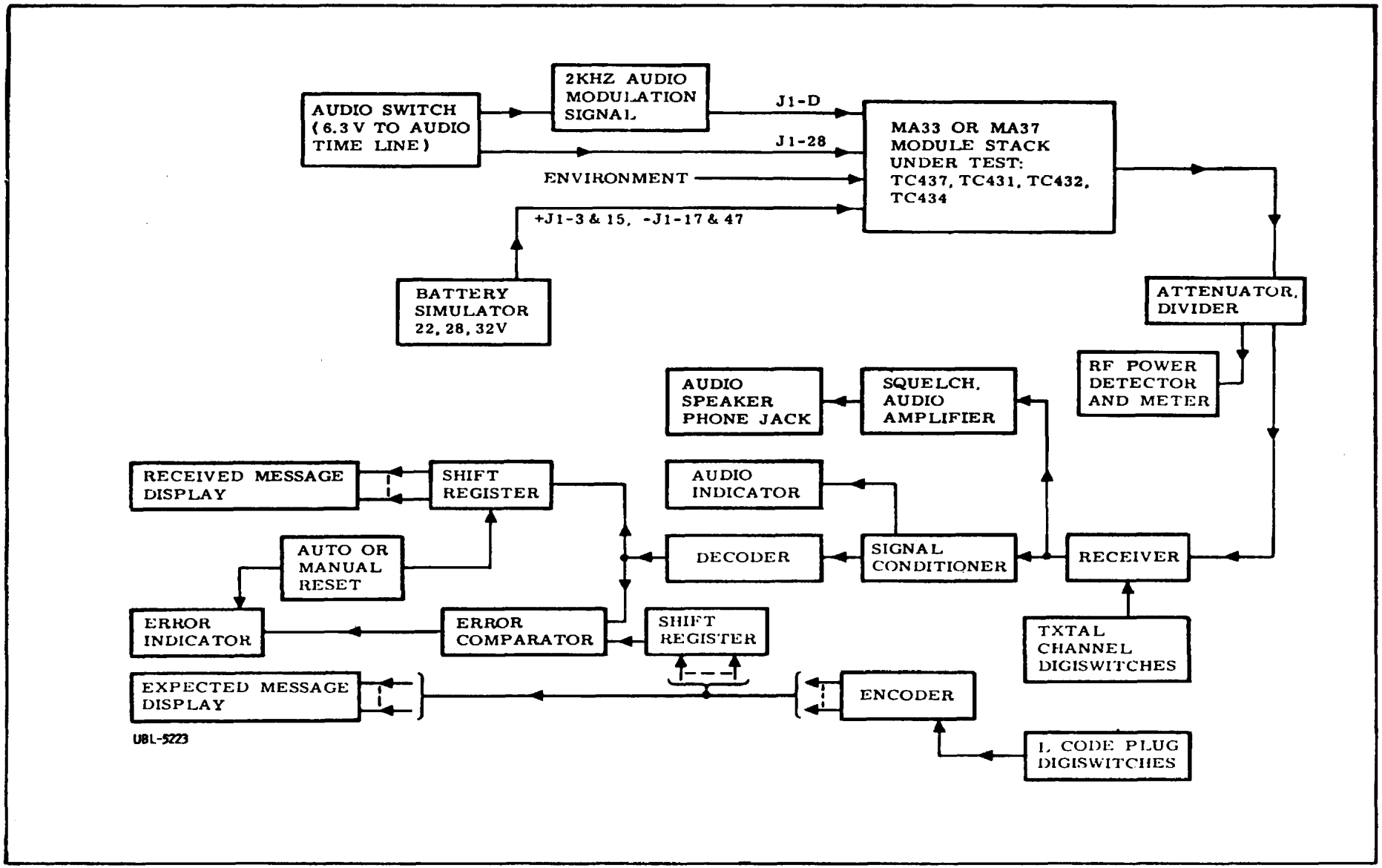


Figure 1-5. NCL Module Stack Under Test.

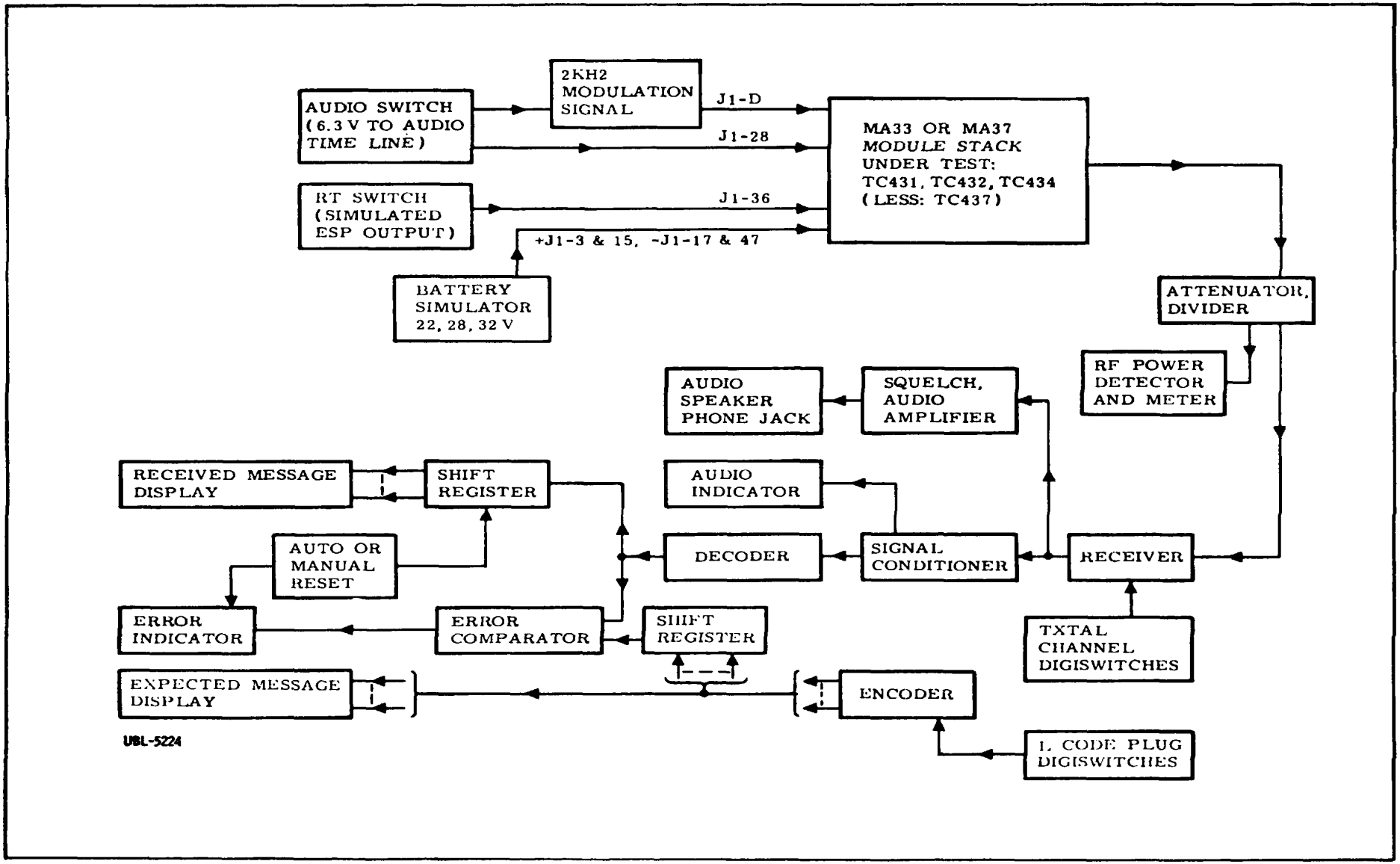


Figure 1-6. Partial NCL Module Stack Under Test.

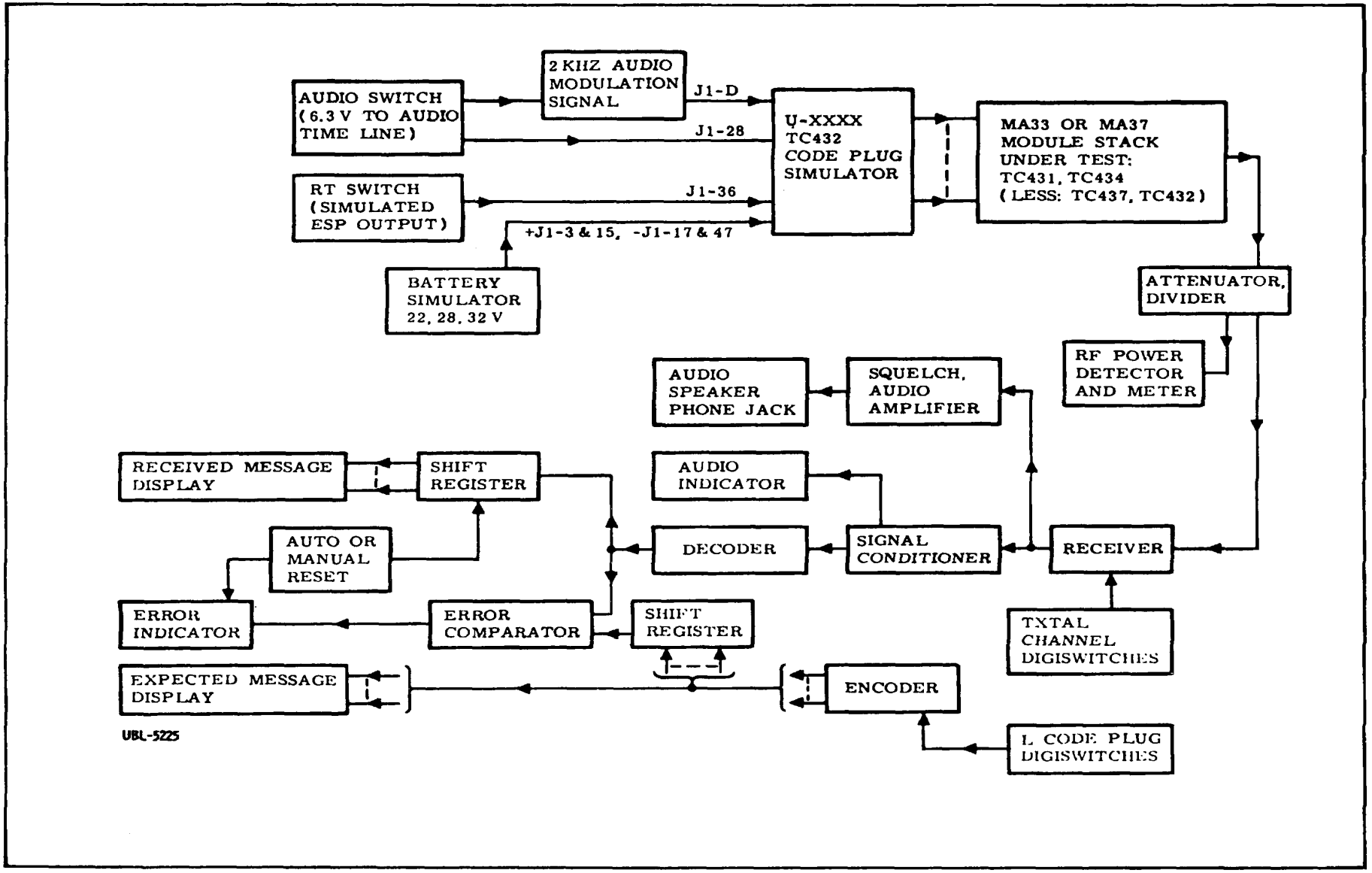


Figure 1-7. Partial NCL Module Stack Under Test.

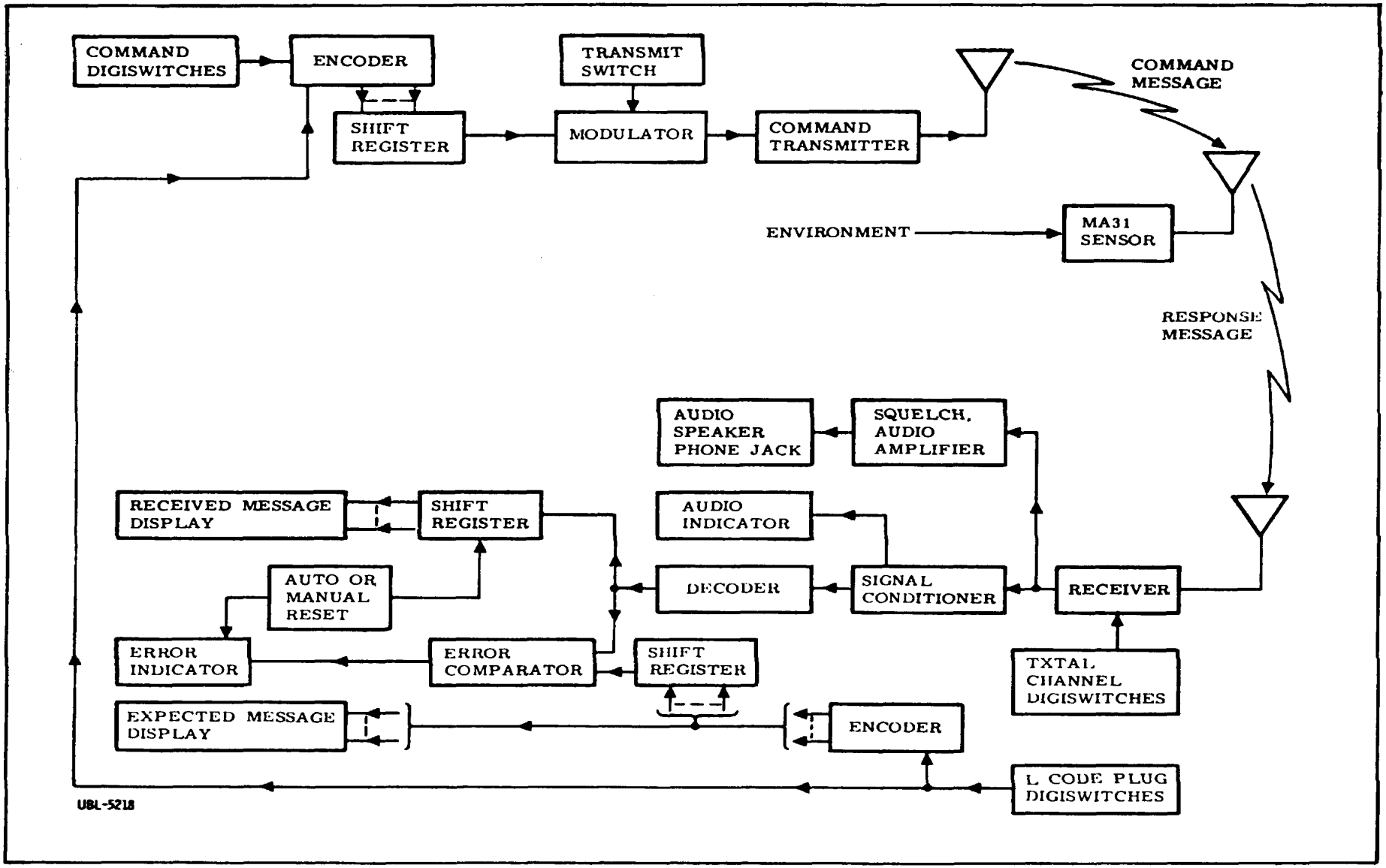


Figure 1-8. CL Sensor (MA31) Under Test.

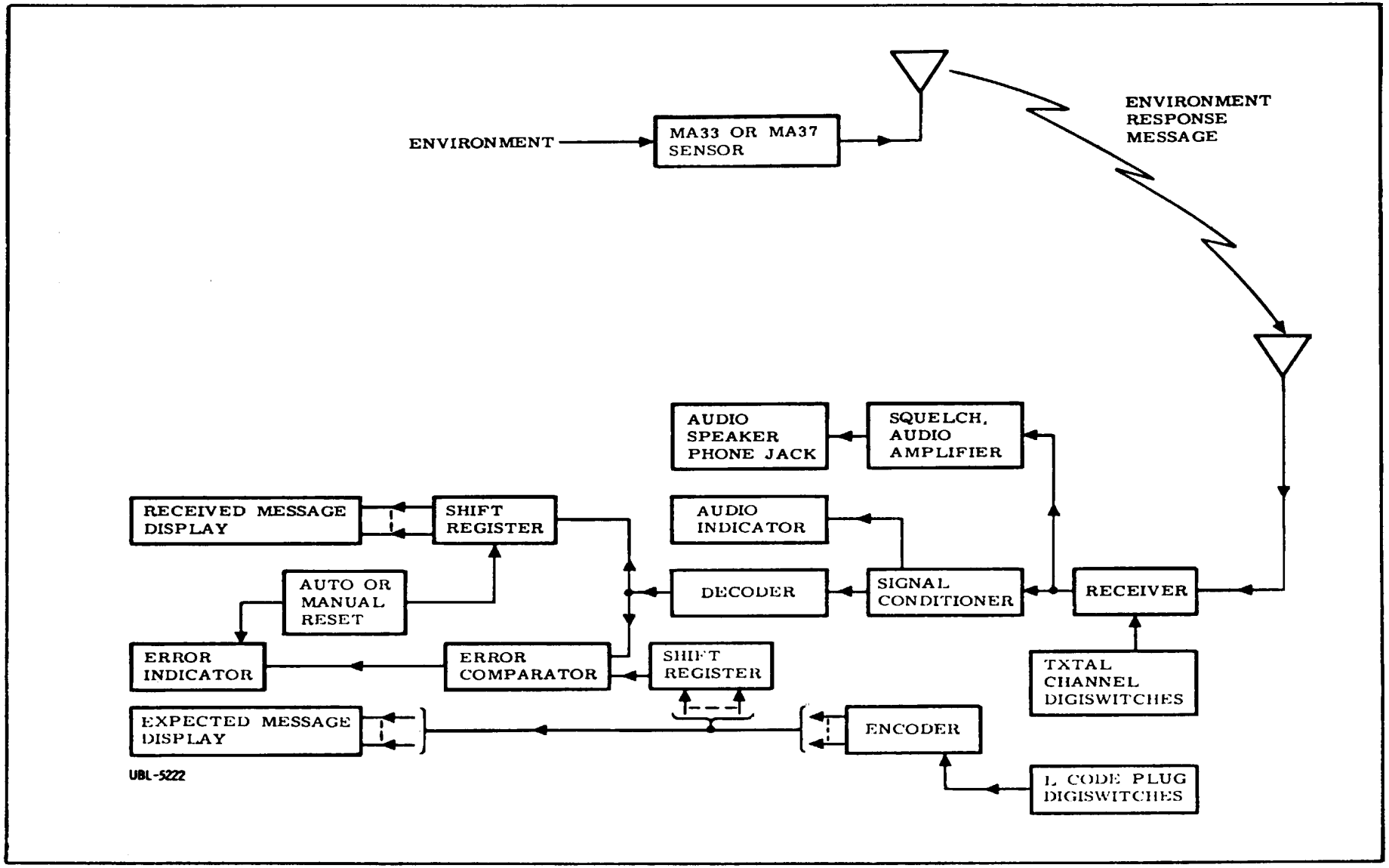


Figure 1-9. NCL Sensor (MA33 or MA37) Under Test.

SECTION II

SPECIAL TOOLS AND TEST EQUIPMENT

2-1. SPECIAL TOOLS AND TEST EQUIPMENT.

2-2. Table 2-1 shows special tools and test equipment required for calibration and/or maintenance of the PT1585 System Test Set. Equivalent items may be used

2-3. EXRAY stack tests require use of an emission generator, described in Resdel Engineering Corporation manual REC-M-155. Operation and Maintenance Manual for Radio Test Group OQ-60/OSQ-46.

Table 2-1. Special Tools and Test Equipment

Tool/Equipment Number	Figure No.	Nomenclature	Use and Application
VA-100A		Calibration Standards Corp., Model VA-100A Volt-Ammeter	Measure DC Voltage in range from 0-30 Volts at an accuracy of 0.5% full scale.
VA-100A		Calibration Standards Corp., Model VA-100A Volt-Ammeter	Measure current in ranges of 0-500 ma, 0-50 ma and 0-5 ma at an accuracy of 0.5% full scale.
1432-M		General Radio Co. Type No. 1432-M Decade Resistance Box	Provide selective resistance in 0-10 kilohm range for power supply current adjustments.
H-P 432 with H-P 478A mount		Hewlett-Packard Model 432 with HP 478A thermistor mount RF Power Meter	Power meter for 50 ohm coaxial cable measurements in a range of 0-10 milliwatts at 1% accuracy covering 100-350 MHz frequency range.
H-P 5246L with H-P 5253B plug-in		Hewlett-Packard Model 5246L with H-P 5253B plug-in Frequency Counter with plug-in	Count frequencies in a range of 0-400 MHz using a crystal time base.
533X-11		Singer Model 533X-11 Calibrator	Simulate engine noise for check of TC662 module.
208A		Hewlett-Packard Model 20A Oscillator	Provide source of audio for check of audio response

SECTION III

PREPARATION FOR USE AND RESHIPMENT

3-1. GENERAL.

3-2. This section provides information on unpackaging assembly and preparation for reshipment of the PT1585 System Test Set.

3-3. UNPACKAGING AND ASSEMBLY

3-4. Unpackage test set. If panel-chassis were removed for shipment, refer to Figure 3-1 for installed location of units. Figure 3-2 shows correct cabling of units.

3-5. PACKAGING FOR RESHIPMENT.

3-6.

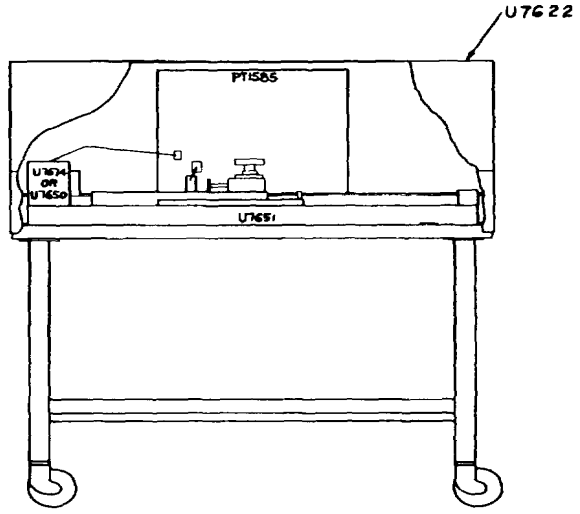


Figure 3-1. Installed Location of Units.

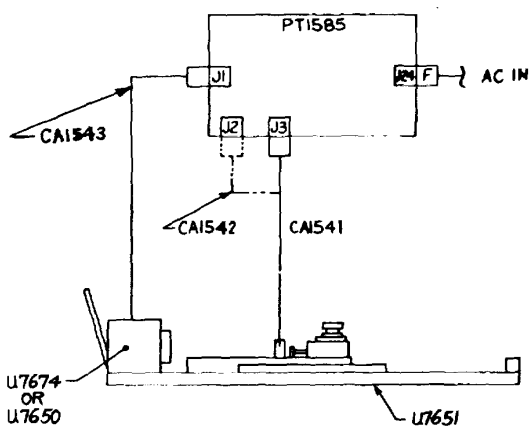


Figure 3-2. Cabling Hook-Up.

SECTION IV

OPERATION INSTRUCTIONS

4-1. GENERAL.

4-2. This section provides procedures for testing module stacks or assembled MA31, MA33, MA37 sensors and MA56, MA87, MA88 EXRAY's. (These procedures may be used in other sensor systems using the same modules.)

4-3. The MA31 is a Command Link (CL) sensor containing 9 modules placed in a sensor casing. Normally, eight of the modules are tested as a group (long stack) before final sensor assembly. In some cases, partial module stacks of less than 8 modules may be tested.

4-3A. The MA125, MA135, MA137, and MA133 are also CL sensors. These are ground sensors containing 10 modules each, 9 of which are tested in the long stack before final sensor assembly. In all cases, partial module stacks of less than 9 modules are tested. MA124 and MA133 are CL hangup sensors. containing 8 modules tested in the long stack; no partial attacks are tested.

4-4. The MA33 and MA37 are Non-Command stink (NCL) sensors containing 5 modules. Normally, four of the modules are tested as a group (short stack), before final sensor assembly. In some cases, partial module stacks of 2 or 3 modules may be tested. The MA134 (5 modules), MA136 (7 modules), and MA139 (7 modules), are NCL sensors

4-4A. The MA56, MA87 and MA88 EXRAY's are expendable relay sensors containing 6 modules. Normally the EXRAY is assembled and tested be-fore packaging. In some cases, partial module stacks may be tested.

4-5. Procedures in each of the following sections (e.g., 4-8, 4-9, etc) must be performed in the sequence given.

4-6. These general procedures describe the steps to be taken to locate and replace a defective module or modules if improper indications are received on the PT1585 during performance of the different stack tests.

1. If an incorrect indication is displayed on the PT1585 (figure 4-1), verify that the stack has been assembled correctly and that the PT1585 switches have been correctly set. If the module stack is correctly assembled and the switches are correctly set, and indications are still incorrect, perform procedures a through g described below.

NOTE

For each test described in the following sections, the modules most likely to cause a faulty indication are listed in order of decreasing probability. The module most likely to cause failure should be replaced first.

a. Turn BATTERY SIMULATOR switch OFF and replace the module most likely to be causing the faulty indication.

b. Turn BATTERY SIMULATOR switch ON.

c. Repeat all of the tests completed at the time of the faulty indication. If no incorrect indication is received, proceed to the next test.

d. If the test which first gave faulty indication continues to give a faulty indication, replace the module that is next most likely to be causing the faulty indication and repeat steps b through d.

e. If one of the repeated tests gives a faulty indication, turn BATTERY SIMULATOR switch OFF and replace the new module with a different one of the same type and repeat steps c through e.

f. Continue repeating the tests and replacing modules one at a time until a correct indication is received on the failed test. If all of the listed modules have been replaced and the stack still produces a faulty indication, replace each of the remaining modules, testing after each replacement.

g. If all of the modules have been replaced and the test still produces a faulty indication, repeat the tests with another PT1585, if available.

NOTE

On commandable sensors, if no response is received, command to 300 bits per second and then command to the desired mode (NRT or RT).

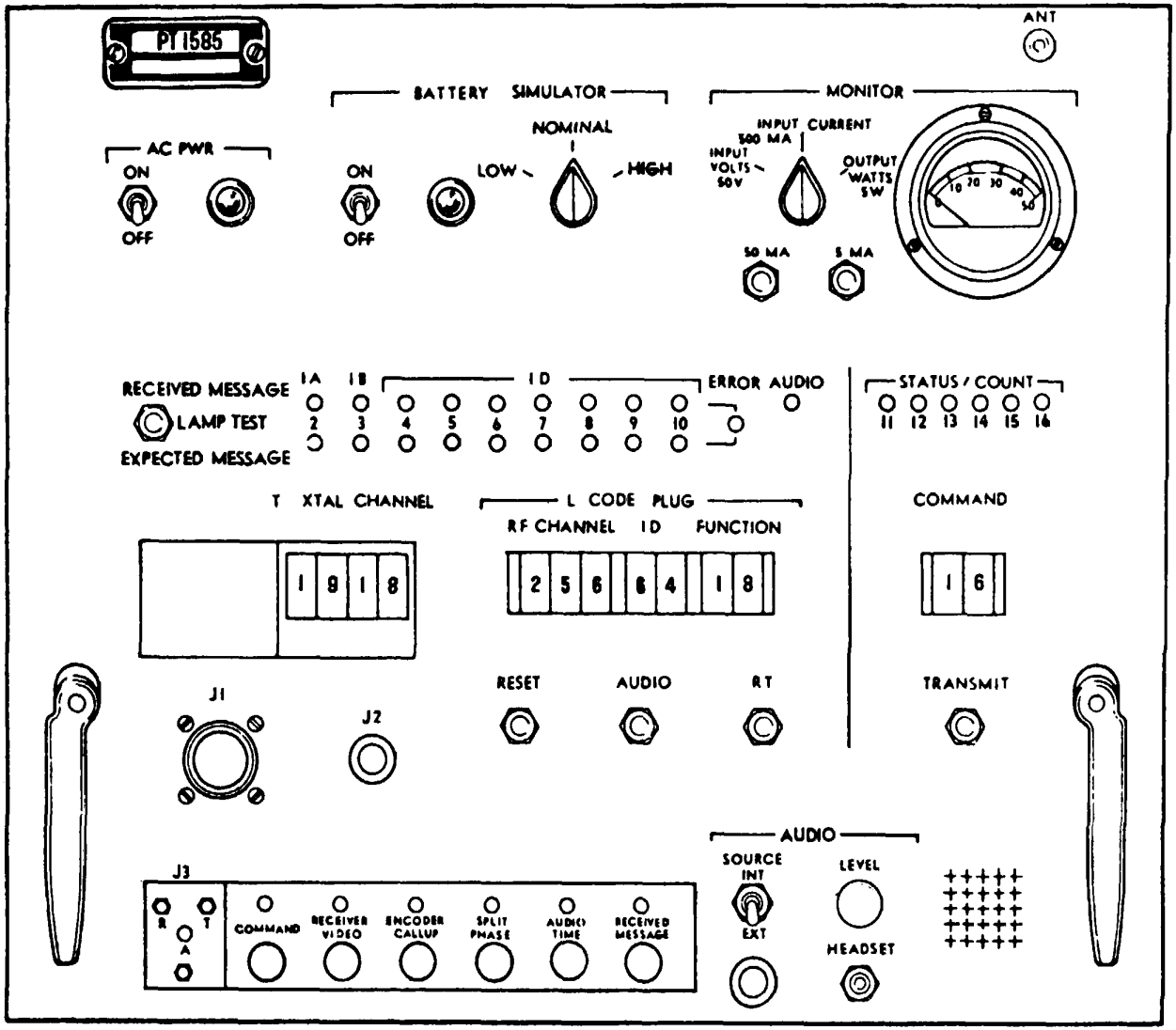


Figure 4-1. PT1585 Panel

4-7. If during a test no indication is displayed on the PT1585, i.e., if none of the RECEIVED MESSAGE or STATUS/COUNT lamps light, then it is possible to use the diagnostic indicators to determine the source of difficulty.

1. To check a stack with the diagnostic indicators, proceed as follows:

a. Turn the BATTERY SIMULATOR switch OFF.

b. Remove the E (or TC659, TC660, or TC688) module, if present, from the module stack.

c. Remate the remaining modules to the U7650 (or U7674).

d. Turn the BATTERY SIMULATOR switch ON.

e. Repeat the failed test and observe the status of the diagnostic indicator lamps. Check which of the diagnostic indicator lamps fails to light. The following list indicates which components are most likely at fault.

Lamp Not Lit	Probable Component Failure
COMMAND	PT1585
RECEIVER VIDEO	R
ENCODER CALLUP	L or J
SPLIT PHASE	Z
AUDIO TIME	L or J
RECEIVED MESSAG	T or Z or PT1585

f. Turn the BATTERY SIMULATOR switch OFF, replace the suspected faulty module and repeat steps d and e above.

g. If no indication is received on the failed test, turn the BATTERY SIMULATOR switch OFF and replace the second module if listed above and repeat steps d and e above.

h. If E (or TC659, TC660, or TC688) module was removed, reinstall in the module stack in its original position.

i. If replacement of modules does not produce the correct indications, repeat the test with another PT1585, if available.

4-8. ASSEMBLY OF MA31 LONG STACK (Figure 4-2).

1. PREPARATION OF PT1585.

a. Check that AC PWR and BATTERY SIMULATOR toggle switches are OFF.

b. Connect AC INPUT on rear of PT1585 to a 105/125-VAC, 50-400 Hz, 5-ampere outlet.

c. Turn AC PWR switch ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps may light.

d. If desired, connect headset to HEADSET jack.

e. Operate AUDIO SOURCE switch to INT position.

f. Turn AUDIO LEVEL KNOB clockwise at least one quarter turn from minimum level position.

g. Push LAMP TEST button and check that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO and STATUS/COUNT lamps come on.

h. After one minute for PT1585 warmup, momentarily push RESET button. Any lighted RECEIVED MESSAGE lamps will go out.

2. Install the U7650 connector assembly or the U7674 Code Plug Simulator on the U7651 fixture. If the U7674 is installed, place all U7674 switches to the OFF (center) position.

3. Connect P1 of U7650 or P1 of U7674 to J1 of PT1585.

4. Check that the module assembly mechanism on the U7651 is lifted up and placed back away from the tray so that it does not interfere with mating of the modules.

5. Mate the modules as follows:

a. Enter first seven numbers of code printed on tape on the L module into L CODE PLUG switches on PT1585 panel (figure 4-1).

b. Enter T module crystal channel number into T XTAL CHANNEL switches on PT1585. If channel number is not known, remove the white plug from end of T module. XTAL CHANNEL number is stamped on top of crystal. Reinstall the white plug.

c. Place E module (TC466 only) on U7651 tray. The male pins must point toward the U7650 (or U7674, if installed). Rotate module as necessary to align alignment marks and engage module with connector adapter.

d. Place remaining modules in U7651 tray one at a time in the following order: E-L-Z-J-S-R-T-V (see figure 4-2). Rotate module until alignment marks on it and preceding module are aligned, then mate modules.

e. Connect P1 of CA1542 to V module.

f. Connect P2 and P3 of CA1542 to J2 and J3 of PT1585.

g. Position the module assembly mechanism close to P1 to CA1542.

h. Carefully turn handwheel clockwise and check that all module connectors are aligned and are moving together. Continue to turn the hand-wheel clockwise until the modules are assembled. Hand-tighten handwheel.

4-9. TEST PROCEDURES FOR MA31 LONG STACK.

1. If testing a previously assembled module stack, enter the first seven numbers of the nine printed on the tape on the L module into the L CODE PLUG switches on the PT1585 panel. Also, enter the crystal channel number of the T module into the T XTAL CHANNEL switches on the PT1585 panel. If the crystal channel is known, it is necessary to remove the white plug on the end of the T module and read the number stamped on the crystal (the T module will have to be separated from the other modules in the stack). Reinstall white plug.

2. Turn BATTERY SIMULATOR selector switch on PT1585 to NOMINAL position and toggle switch to ON. BATTERY SIMULATOR lamp lights. Power is now applied to long stack under test (henceforth, the stack will be referred to as "unit").

3. Check standby current of unit as follows:

a. Turn MONITOR selector switch to INPUT CURRENT 500 MA position. Check that MONITOR meter does not deflect more than one minor scale division (meter should be reading less than 5 ma on a 500 ma scale).

b. Push and hold 50 MA button. Check that MONITOR meter does not deflect more than five minor scale divisions (5 ma on a 50 ma scale).

c. Push and hold 5 MA button. MONITOR meter now displays standby current of the unit on a 5 ma scale. Current must be less than or equal to 5 ma. If current is greater than 5 ma, any of the 8 modules may be at fault.

4. Check transmit current of unit as follows:

a. Push and hold AUDIO button until following indications are observed:

AUDIO lamp lights and a tone is heard.

MONITOR meter indicates 300-450 ma on a 500 ma scale.

b. If proper indications are not received, either T or Z module is most likely at fault.

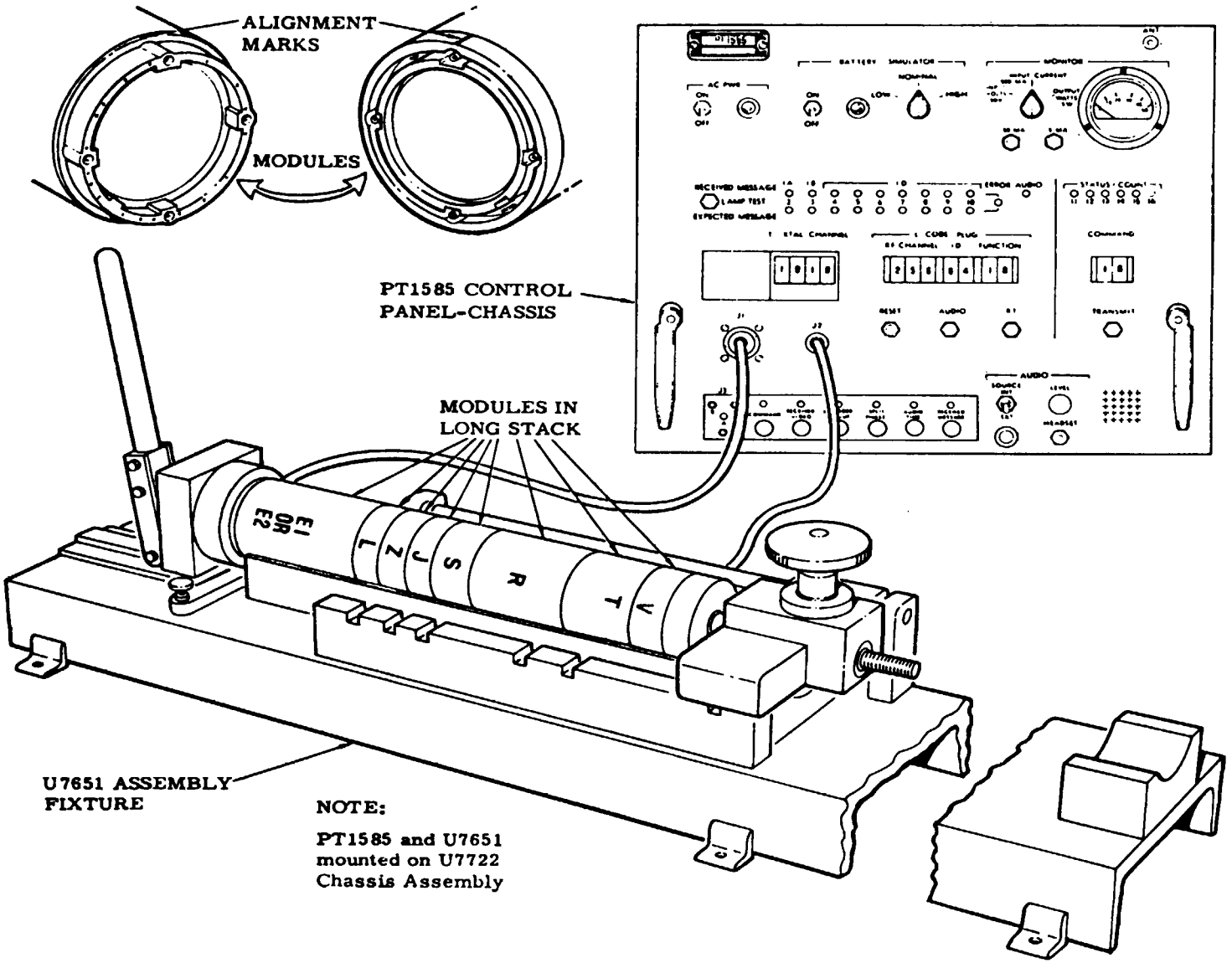


Figure 4-2. MA31 Long Stack Under Test

5. Check RF output of unit as follows:

a. Turn MONITOR selector switch to OUTPUT WATTS 5W position.

b. Push and hold AUDIO button until following indications are observed:

AUDIO lamp lights and a tone is heard.

MONITOR meter indicates 2 to 4 watts on a 5-watt scale. This is the RF output of the unit.

c. If proper indications are not received, the T module is most likely at fault.

6. Check command function of unit as follows:

a. If FUNCTION switches on PT1585 are set to 57, proceed to paragraph 7.

b. If FUNCTION switches on PT1585 are set to 77, proceed to paragraph 8.

7. Procedures if FUNCTION switches are set to 57.

a. Set the FUNCTION and COMMAND switches on the PT1585 to the positions shown for Test No. 1 in table 4-1.

b. Momentarily push TRANSMIT button. Some RECEIVED MESSAGE indicator lamps and STATUS/COUNT lamps should light.

c. Check the following:

The ERROR lamp must not light.

The six STATUS/COUNT lamps must indicate as shown in table 4-1.

d. If an improper indication is received, locate and replace the defective module or modules according to procedures in paragraph 4-6.

e. If no indication is received, locate and replace the defective module using the diagnostic indicators according to the procedures in paragraph 4-7.

f. Repeat steps a through e above for Tests 2 through 18 in sequence (table 4-1). Note that in the last test, in addition to the proper RECEIVED MESSAGE and STATUS/COUNT indications, the AUDIO lamp must light and a tone must be heard. The duration of the tone varies depending on how the code plug has been programmed.

8. Procedures if FUNCTION switches are set to 77.

a. Set the FUNCTION and COMMAND switches on the PT1585 to the positions shown for Test No. 3 in table 4-1.

b. Momentarily push TRANSMIT button. Some RECEIVED MESSAGE indicator lamps and STATUS/COUNT lamps should come on.

c. Check the following:

The ERROR lamp must not light.

The six STATUS/COUNT lamps must indicate as shown in table 4-1.

d. If an improper indication is received, locate and replace the defective module or modules according to procedures in paragraph 4-6.

e. If no indication is received, locate and replace the defective module using the diagnostic indicators according to procedures in paragraph 4-7.

f. Repeat steps a through e above for Tests 4 through 18 in sequence (table 4-1). Note that in the last test, in addition to the proper RECEIVED MESSAGE and STATUS/COUNT indications, the AUDIO lamp must light and a tone must be heard. The duration of the tone varies depending on how the code plug has been programmed.

9. Operate BATTERY SIMULATOR toggle switch to OFF.

10. Turn the handwheel of the module assembly mechanism counterclockwise to allow removal of module stack.

11. Operate U7650 (or U7674) lever to separate stack from U7650 (or 7674) connector adapter.

CAUTION

Hold module stack with both hands so that each module is supported. Failure to handle assembled module stack with care may result in breakage of connectors.

12. Disconnect P1 of CA1542 from V module and remove the module stack from the U7651. Place module stack in a loading tray.

4-10. ASSEMBLY OF L-Z-J-S-R-T PARTIAL STACK.

1. PREPARATION OF PT1585.

a. Check that AC PWR and BATTERY SIMULATOR toggle switches are OFF.

b. Connect AC INPUT on rear of PT1585 to a 105/125-VAC, 50-400 Hz, 5-ampere output.

c. Turn AC PWR switch ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps may light.

d. If desired, connect headset to HEADSET jack.

e. Operate AUDIO SOURCE switch to INT position.

f. Turn AUDIO LEVEL knob clockwise at least one quarter turn from minimum level position.

g. Push LAMP TEST button and check that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO, and STATUS/COUNT lamps come on.

h. After one minute for PT1585 warmup,, momentarily push RESET button. Any lighted RECEIVED MESSAGE lamps will to out.

2. Install the U7650 connector assembly or the U7674 Code Plug Simulator on the U7651 fixture. If the U7674 is installed, place all U7674 switches to the OFF (center) position.

3. Connect P1 of U7650 or P1 of U7674 to J1 of PT1585.

4. Check that the module assembly mechanism on the U7651 is lifted up and placed back away from the tray so it does not interfere with mating of the modules.

5. Mate the modules as follows:

a. Enter first seven numbers of code printed on tape on the L module into L CODE PLUG switches on PT1585 panel (figure 4-1).

b. Enter T module crystal channel number into T XTAL CHANNEL switches on PT1585. To determine channel number, remove white plug. XTAL CHANNEL number is stamped on top of crystal. Reinstall the white plug.

c. Place L module on U7651 tray. The male pins must point toward the U7650 (or U7674, if installed). Rotate module as necessary to align alignment marks and engage module with connector adapter.

d. Place remaining modules in U7651 tray one at a time in the following order: L-Z-J-S-R-T. Rotate module until alignment marks on it and preceding module are aligned, then mate modules.

e. Connect P1 of CA1541 to T module.

f. Connect P3 of CA1541 to J3 of PT1585.

TABLE 4-1

COMMANDS AND INDICATIONS FOR TESTING MA31 MODULE STACK

TEST NUMBER	PURPOSE	PT1585 SWITCH SETTINGS		INDICATION STATUS/COUNT LAMPS	MODULE MOST LIKELY DEFECTIVE
		FUNCTION	COMMAND		
1	(57 units only)	06	02	011001*	R,J,Z,E,L
2	(57 units only)	06	03	101001	R,J,Z,E,L
3	Send Status	06	02	101001	R,J,Z,E,L
4	Change Gain to 2	06	06	101010	J,E,Z
5	Change Gain to 3	06	06	100011	E,Z
6	Change Gain to 4	06	06	101100	E,Z
7	Change Gain to 5	06	06	100101	E,Z
8	Change Gain to 6	06	06	100110	E,Z
9	Change Gain to 1	06	06	101001	E,Z
10	Go to 75 pps	10	08	000000	J,Z

(Continued on next page; see footnotes at end of table.)

TABLE 4-1
(Continued)

TEST NUMBER	PURPOSE	PT1585 SWITCH SETTINGS FUNCTION	PT1585 SWITCH SETTINGS COMMAND	INDICATION STATUS/COUNT LAMPS	MODULE MOST LIKELY DEFECTIVE
11	Go to 300 pps	00	09	000000	J,Z
12	Send Audio	06	01	101001	J
13	Go to NRT	06	03	101001	J
14	Readout Stored Count	05	05	000000	J
15	Go to RT	06	04	011001	J
16	Operation Check	00	Tap unit for 10 sec**	000000	E,Z
17	Readout Stored Count	05	05	000001	J
18	Send Audio	03	01***	000000	S,T

*The digits 0 and 1 are used to indicate the status (OFF or ON) of each of the six STATUS/COUNT lamps. For example, an entry of 101001 in this column means that the six lamps, 11 through 16, should be respectively ON, OFF, ON, OFF, OFF, and ON.

**Leave COMMAND switches on 04 and do not push TRANSMIT button.

***In Addition to STATUS/COUNT lamp indication, AUDIO lamp must light and a tone must be heard.

g. Position the module assembly mechanism close to P1 of CA1541.

h. Carefully turn handwheel clockwise and check that all module connectors are aligned and are moving together. Continue to turn the hand-wheel clockwise until the modules are assembled. Hand-tighten handwheel.

4-11. TEST PROCEDURES FOR L-Z-J-S-R-T PARTIAL STACK.

1. If testing a previously assembled module stack, enter the first seven numbers of the nine printed on the tape on the I, module into the 1, CODE PLUG switches on the PT1585 panel. Also, enter the crystal channel number of the T module into the T XTAL CHANNEL switches on the PT1585 panel. If the crystal channel is unknown, it is necessary to remove the white plug on the end of the T module and read the number stamped on the crystal (the T module will have to be separated from the other modules in the stack). Reinstall white plug.

2. Turn BATTERY SIMULATOR selector switch on PT1585 to NOMINAL position and toggle switch to ON. BATTERY SIMULATOR lamp lights. Power is now applied to the stack under test (henceforth, the stack will be referred to as unit).

3. Check standby current of unit as follows:

a. Turn MONITOR selector switch to INPUT CURRENT 500 MA position. Check that MONITOR meter does not deflect more than one minor scale division (meter should be reading less than 5 ma on a 500 ma scale).

b. Push and hold 50 MA button. Check that MONITOR meter does not deflect more than five minor scale divisions (5 ma on a 50 ma scale).

c. Push and hold 5 MA button. MONITOR meter now displays standby current of the unit on a 5 ma scale. Current must be less than or equal to 5 ma. If current is greater than 5 ma, any of the 6 modules may be at fault.

4. Check transmit current of unit as follows:

a. Push and hold AUDIO button until following indications are observed:

AUDIO lamp lights and a tone is heard.

MONITOR meter indicates 300-450 ma on a 500 ma scale.

b. If proper indications are not received, either T or Z module is more likely at fault.

5. Check RF output of unit as follows:

a. Turn MONITOR selector switch to OUTPUT PWR 5W position.

b. Push and hold AUDIO button until following indications are observed:

AUDIO lamp lights and tone is heard.

MONITOR meter indicates 2 to 4 watts on a 5-watt scale.

This is the RF output of the unit.

c. If proper indications are not received, the T module is most likely at fault.

6. Check command function of unit as follows:

a. If FUNCTION switches on PT1585 are set to 57, proceed to paragraph 7.

b. If FUNCTION switches on PT1585 are set to 77, proceed to paragraph 8.

7. Procedures if FUNCTION switches are set to 57.

a. Set the FUNCTION and COMMAND switches on the PT1585 to the positions shown for Test No. 3 in table 4-2.

b. Momentarily push TRANSMIT button. Some RECEIVED MESSAGE indicator lamps and STATUS/COUNT lamps shall light.

c. Check the following:

The ERROR lamp must not light.

The six STATUS/COUNT lamps must indicate as shown in table 4-2.

d. If an improper indication is received, locate and replace the defective module or modules according to procedures given paragraph 4-6.

e. If no indication is received, locate and replace the defective module using the diagnostic indicators according to the procedures in paragraph 4-7.

f. Repeat steps a through e above for Tests 4 through 10 in sequence (table 4-2). Note that in the last test, in addition to the proper RECEIVED MESSAGE and STATUS/COUNT indications, the AUDIO lamp must light and a tone must be heard. The duration of the tone varies depending on how the code plug has been programmed.

8. Procedures if FUNCTION switches are set to 77.

a. Set the FUNCTION and COMMAND switches on the PT1585 to the position shown for Test No. 1 in table 4-2.

b. Momentarily push TRANSMIT button. Some RECEIVE MESSAGE indicator lamps and STATUS/COUNT lamps should come on.

c. Check the following:

The ERROR lamp must not light.

The six STATUS/COUNT lamps must indicate as shown in table 4-2.

d. If an improper indication is received, locate and replace the defective module or modules according to procedures given in paragraph 4-6.

e. If no indication is received, locate and replace the defective module using the diagnostic indicators according to the procedures in paragraph 4-7.

f. Repeat steps a through e above for Tests 2 through 10 in sequence (table 4-2). Note that in the last test, in addition to the proper RECEIVED MESSAGE and STATUS/COUNT indications, the AUDIO lamp must light and a tone must be heard. The duration of the tone varies depending on how the code plug has been programmed.

9. Operate BATTERY SIMULATOR toggle switch to OFF.

10. Turn the handwheel of the module assembly mechanism counterclockwise to allow removal of module stack.

11. Operate U7650 (or U7674) lever to separate stack from U7650 (or U7674) connector adapter.

CAUTION

Hold module stack with both hands so that each module is supported. Failure to handle assembled module stack with care may result in breakage of connectors.

12. Disconnect P1 of CA1541 from T module and remove the module stack from the U7651. Place module stack in a loading tray.

4-12. ASSEMBLY OF Z-J-S-R-T PARTIAL STACK.

1. PREPARATION OF PT1585.

a. Check that AC PWR and BATTERY SIMULATOR toggle switches are OFF.

b. Connect AC INPUT on rear of PT1585 to a 105/125-VAC, 50-400 Hz, 5-ampere outlet.

c. Turn AC PWR switch ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps may light.

d. If desired, connect headset to HEADSET jack.

e. Operate AUDIO SOURCE switch to INT position.

TABLE 4-2

COMMANDS AND INDICATIONS FOR TESTING L-Z-J-S-R-T MODULE STACK

TEST NUMBER	PURPOSE	PT1585 SWITCH SETTINGS		INDICATION STATUS/COUNT LAMPS	MODULE MOST LIKELY DEFECTIVE
		FUNCTION	COMMAND		
1	(77 units only)	06	02	100000*	R,J,Z,L
2	(77 units only)	06	04	010000	R,J,Z,L
3	Send Status	06	02	010000*	R,J,Z,L
4	Go to 75 pps	10	08	000000	J,Z
5	Go to 300 pps	00	09	000000	J,Z
6	Go to NRT	06	03	100000	J
7	Send Audio	06	01	100000	J
8	Readout Stored Count	05	05	000000	J
9	Go to RT	06	04	010000	J
10	Send Audio	03	01**	000000	S,T

*The digits 0 and 1 are used to indicate the status (OFF or ON) of each of the six STATUS/COUNT lamps. For example, an entry of 100000 in this column means that the six lamps, 11 through 16, should be respectively ON, OFF, OFF, OFF, OFF, and OFF.

**In addition to STATUS/COUNT lamp indication, AUDIO lamp must light and a tone must Ix heard.

f. Turn AUDIO LEVEL knob clockwise at least one quarter turn from minimum level position.

g. Push LAMP TEST button and check that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO and STATUS/COUNT lamps come on.

h. After one minute for PT1585 warmup, momentarily push RESET button. Any lighted RECEIVED MESSAGE lamps will go out.

2. Install the U7674 Code Plug Simulator on the U7651 fixture. Place all U7674 switches to the OFF (center) position.

3. Connect P1 of U7674 to J1 of PT1585.

4. Check that the module assembly mechanism on the U7651 is lifted up and placed back away from the tray so it does not interfere with mating of the modules.

5. Mate the modules as follows:

a. Enter T module crystal channel number into T XTAL CHANNEL, switches on PT1585. To determine channel number, remove white plug from end of T module. XTAL CHANNEL number is stamped on top of crystal. Reinstall the white plug.

b. Place Z module on U7651 tray. The male pins must point toward the U7674. Rotate module as necessary to align alignment marks and engage module with connector adapter.

c. Place remaining modules in U7651 tray one at a time in the following order: Z-J-S-R-T. Rotate module until alignment marks on it and preceding module are aligned, then mate modules.

d. Connect P1 of CA1541 to T module.

e. Connect P3 of CA 1541 to J3 of PT11585.

f. Position the module assembly mechanism close to P1 of CA1541.

g. Carefully turn handwheel clockwise and check that all module connectors are aligned and are moving together. Continue to turn the handwheel clockwise until the modules are assembled. Hand-tighten handwheel.

4-13. TEST PROCEDURES FOR Z-J-S-R-T PARTIAL STACK.

1. If testing a previously assembled module stack, enter the crystal channel number of the T module into the T XTAL, CHANNEL switches on the PT1585 panel. If the crystal channel is unknown, it is necessary to remove the white plug on the end of the T module and read the number stamped on the crystal (the T module will have to be separated from the other modules in the stack). Reinstall white plug.

2. Set PT1585 and U7674 switches to Group 1 positions given in table 4-3.

3. Turn BATTERY SIMULATOR selector switch on PT1585 to NOMINAL position and toggle switch to ON. BATTERY SIMULATOR lamp lights. Power is now applied to the stack under test (henceforth, the stack will be referred to as "unit").

4. Check standby current of unit as follows:

a. Turn MONITOR selector switch to INPUT CURRENT 500 MA position. Check that MONITOR meter does not deflect more than one minor scale division (meter should be reading less than 5 ma on a 500 ma scale).

b. Push and hold 50 MA button. Check that NIONITOR meter does not deflect more than five minor scale divisions (5 ma on a 50 ma scale).

c. Push and hold 5 MA button. MONITOR meter now displays standby current of the unit on a 5 ma scale. Current must be less than or equal to 5 ma. If current is greater than 5 ma, any of the 5 modules may be at fault.

5. Check transmit current of unit as follows:

a. Push and hold AUDIO button until following indications are observed:

AUDIO lamp lights and a tone is heard.

MONITOR meter indicates 300-450 ma on a 500 ma scale.

b. If proper indications are not received, either T or Z module is most likely at fault.

6. Check RF output of unit as follows:

a. Turn MONITOR selector switch to OUT PUT PWR 5W position.

b. Push and hold AUDIO button until following indications are observed:

AUDIO lamp lights and a tone is heard.

MONITOR meter indicates 2 to 4 watts on a 5-watt scale. This is the RF output of the unit.

c. If proper indications are not received, the T module is most likely at fault.

7. GROUP 1 (Table 4-3).

a. Check that PT1585 and U7674 switches are set to Group 1 positions given in table 4-3.

b. Turn BATTERY SIMULATOR switch OFF, wait 5 seconds, and turn back ON.

c. Set the FUNCTION and COMMAND switches on the PT1585 to the positions given for Test No. 3 in table 4-4.

d. Momentarily push TRANSMIT button. Some RECEIVED MESSAGE indicator lamps and STATUS/COUNT lamps should come on.

e. Check the following:

The ERROR lamp must not light.

The six STATUS/COUNT lamps must indicate as shown in table 4-4.

f. If an improper indication is received, locate and replace the defective module or modules according to procedures given in paragraph 4-6.

g. If no indication is received, locate and replace the defective module using the diagnostic indicators according to procedures given in paragraph 4-7.

h. Repeat steps c through g above for Tests 4 through 10 in sequence. (table 44). Note that in the last test, in addition to the proper RECEIVED MESSAGE and STATUS/COUNT indications, the AUDIO lamp must light and a tone must be heard. The duration of the tone varies depending on audio switch position selected on U7674.

8. GROUP 2.

a. Turn BATTERY SIMULATOR switch OFF.

b. Set PT1585 and U7674 switches to Group 2 positions given in table 4-3.

c. Turn BATTERY SIMULATOR switch ON.

d. Set the FUNCTION and COMMAND switch on the PT1585 to the positions given for Test No. 1 in table 4-4.

e. Momentarily push the TRANSMIT button. Some RECEIVED MESSAGE indicator lamps and STATUS/COUNT lamps should come on.

f. Check the following:

The ERROR lamp must not light.

The six STATUS/COUNT lamps must indicate as shown in table 4-4.

g. If an improper indication is received, locate and replace the defective module or modules according to procedures given in paragraph 4-6.

h. If no indication is received, locate and replace the defective module using the diagnostic indicators according to procedures given in paragraph 4-7.

i. Repeat steps d through h above for Tests 2 through 10 in sequence (table 4-4).

Note that in the last test, in addition to the proper RECEIVED MESSAGE and STATUS/COUNT indications, the AUDIO lamp must light and a tone must be heard. The duration of the tone varies depending on audio switch position selected on U7674.

9. GROUP 3.

a. Turn BATTERY SIMULATOR switch OFF.

b. Set PT1585 and U7674 switches to Group 3 positions given in table 4-3.

c. Turn BATTERY SIMULATOR switch ON.

d. Repeat paragraph 8 steps d through i.

10. Turn the handwheel of the module assembly mechanism counterclockwise to allow removal of the module stack.

11. Operate the U7674 lever to separate the stack from the U7674 Code Plug Simulator.

CAUTION

Hold the module stack with both hands to that each module is supported. Failure to handle assembled module stack with care may result in breakage of connectors.

12. Disconnect P1 of CA1541 from T module and remove the module stack from the U7651. Place module stack in a loading tray.

4-14. ASSEMBLY OF L-Z-J-R-T PARTIAL STACK.

1. PREPARATION OF PT1585.

a. Check that AC PWR and BATTERY SIMULATOR toggle switches are OFF.

b. Connect AC INPUT on rear of PT1585 to a 105/125-VAC, 50-400 Hz, 5-ampere outlet.

c. Turn AC PWR switch ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps may light.

d. If desired, connect headset to HEADSET jack.

e. Operate AUDIO SOURCE switch to INT position.

f. Turn AUDIO LEVEL knob clockwise at least one quarter turn from minimum level position.

g. Push LAMP TEST button and check that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO and STATUS/COUNT lamps come on.

h. After one minute for PT1585 warmup, momentarily push RESET button. Any lighted RECEIVED MESSAGE lamps will go out.

2. Install the U7650 connector assembly or the U7674 Code Plug Simulator on the U7651 fixture. If the U7674 is installed, place all U7674 switches to the OFF (center) position.

3. Connect P1 of U7650 or P1 of U7674 to J1 of PT1585.

4. Check that the module assembly mechanism on the U7651 is lifted up and placed back away from the tray so it does not interfere with mating of the modules.

5. Mate the modules as follows:

a. Enter first seven numbers of code printed on tape on the L module into L CODE PLUG switches on PT1585 panel (figure 4-1).

b. Enter T module crystal channel number into T XTAL CHANNEL switches on PT1585. To determine channel number, remove white plug. X TAL CHANNEL number is stamped on top of crystal. Reinstall the white plug.

TABLE 4-3

PT 1585 AND U7674 SIMULATOR SWITCH POSITIONS FOR CHECK OUT OF CL, PARTIAL, MIODULE STACK WITHOUT L CODE PLUG MODULE

GROUP 1

PT1585 Switch Positions	RF CHANNEL	ID	FUNCTION
	221	01	57

U7674 Switch Positions	4	5	6	7	8	9	10
	0	1	0	1	0	1	0

IA	IB	BIT RATE	LCE	PNRT	AUDIO
OFF	OFF	OFF	OFF	0	5 or 10

13	14	15	1	2	3	4	5	6
0	1	0	1	1	0	1	0	1

GROUP 2

PT1585 Switch Positions	RF CHANNEL	ID	FUNCTION
	510	15	77

U7674 Switch Positions	4	5	6	7	8	9	10
	1	0	1	0	1	0	0

IA	IB	BIT RATE	LCE	PNRT	AUDIO
OFF	OFF	OFF	OFF	1	5 or 10

1	0	1	1	0	1	0	1	0

GROUP 3

PT1585 Switch Positions	RF CHANNEL	ID	FUNCTION
	510	16	77

U7674 Switch Positions	4	5	6	7	8	9	10
	1	0	1	0	1	1	1

IA	IB	BIT RATE	LCE	PNRT	AUDIO
OFF	OFF	OFF	OFF	1	5 or 10

13	14	15	1	2	3	4	5	6
1	0	1	1	0	1	0	1	0

TABLE 4-4

COMMANDS AND INDICATIONS FOR TESTING Z-J-S-R-T MODULE STACK

TEST NUMBER	PURPOSE	PT1585 SWITCH SETTINGS		INDICATION STATUS/COUNT LAMPS	MODULE MOST LIKELY DEFECTIVE
		FUNCTION	COMMAND		
1	(77 units only)	06	02	100000*	R,J,Z
2	(77 units only)	06	04	010000	R,J,Z
3	Send Status	06	02	010000*	R,J,Z
4	Go to 75 pps	10	08	000000	J,Z
5	Go to 300 pps	00	09	000000	J,Z
6	Go to NRT	06	03	100000	J
7	Send Audio	06	01	100000	J
8	Readout Stored Count	05	05	000000	J
9	Go to RT	06	04	010000	J
10	Send Audio	03	01**	000000	S,T

*The digits 0 and 1 are used to indicate the status (OFF or ON) of each of the six STATUS/COUNT lamps. For example, an entry of 100000 in this column means that the six lamps, 11 through 16, should be respectively ON, OFF, OFF, OFF, OFF, and OFF.

**In addition to STATUS/COUNT lamp indication, AUDIO lamp must light.

c. Place L module on U7651 tray. The male pins must point toward the U7650 (or U7674, if installed). Rotate module as necessary to align alignment marks and engage module with connector adapter.

d. Place remaining modules in U7651 tray, one at a time in the following order: L-Z-J-R-T. Rotate module until alignment marks on it and preceding module are aligned, then mate modules.

e. Connect P1 of CA1541 to T module.

f. Connect P3 of CA1541 to J3 of PT1585.

g. Position the module assembly mechanism close to P1 of CA1541.

h. Carefully turn handwheel clockwise and check that all module connectors are aligned and are moving together. Continue to turn the handwheel clockwise until the modules are assembled. Hand-tighten handwheel.

4-15. TEST PROCEDURES FOR L-Z-J-R-T PARTIAL STACK.

1. If testing a previously assembled module stack, enter the first seven numbers of the nine printed on the tape on the L module into the L CODE PLUG switches on the PT1585 panel. Also, enter the crystal channel number of the T module into the T XTAL CHANNEL switches on the PT1585 panel. If the crystal channel is unknown, it is necessary to remove the white plug on the end of the T module and read the number stamped on the crystal (the T module will have to be separated from the other modules in the stack). Reinstall white plug.

2. Turn BATTERY SIMULATOR selector switch on PT1585 to NOMINAL position and toggle switch to ON. BATTERY SIMULATOR lamp lights. Power is now applied to the stack under test (henceforth, the stack will be referred to as "unit").

3. Check standby current of unit as follows:

a. Turn MONITOR selector switch to INPUT CURRENT 500 MA position. Check that MONITOR meter does not deflect more than one minor scale division (meter should be reading less than 5 ma on a 500 ma scale).

b. Push and hold 50 MA button. Check that MONITOR meter does not deflect more than five minor scale divisions (5 ma on a 50 ma scale).

c. Push and hold 5 MA button. MONITOR meter now displays standby current of the unit on a 5 ma scale. Current must be less than or equal to 5 ma. If current is greater than 5 ma, any of the 5 modules may be at fault.

4. Check transmit current of unit as follows:

a. Push and hold AUDIO button until following indications are observed: AUDIO lamp lights and a tone is heard. MONITOR meter indicates 300 450 ma on a 500 ma scale.

b. If proper indications are not received, either T or Z module is most likely at fault.

5. Check RF output of unit as follows:

a. Turn MONITOR selector switch to OUTPUT PWR 5W position.

b. Push and hold AUDIO button until following indications are observed:

AUDIO lamp lights and a tone is heard.

MONITOR meter indicates 2 to 4 watts on a 5-watt scale. This is RF output of the unit.

c. If proper indications are not received, the T module is most likely at fault.

6. Check command function of unit as follows:

a. If FUNCTION switches on PT1585 are set to 57, proceed to paragraph 7.

b. If FUNCTION switches on PT1585 are set to 77, proceed to paragraph 8.

7. Procedures if FUNCTION switches are set to 57.

a. Set the FUNCTION and COMMAND switches on the PT1585 to the positions shown for Test No. 3 in table 4-5.

b. Momentarily push TRANSMIT button. Some RECEIVED MESSAGE indicator lamps and STATUS/COUNT lamps should light.

c. Check the following: The ERROR lamp must not light. The six STATUS/COUNT lamps must indicate as shown in table 4-5.

d. If an improper indication is received, locate and replace the defective module or modules according to procedures given in paragraph 4-6.

e. If no indication is received, locate and replace the defective module using the diagnostic indicators according to the procedures in paragraph 4-7.

f. Repeat steps a through e above for Tests 4 through 10 in sequence (table 4-5). Note that in the last test, in addition to the proper RECEIVED MESSAGE and STATUS/COUNT indications, the AUDIO lamp must light.

8. Procedures if FUNCTION switches are set to 77.

a. Set the FUNCTION and COMMAND switches on the PT1585 to the position shown for Test No. 1 in table 4-5.

b. Momentarily push TRANSMIT button. Some RECEIVE MESSAGE indicator lamps and STATUS/COUNT lamps should come on.

c. Check the following:

The ERROR lamp must not light.

The six STATUS/COUNT lamps must indicate as shown in table 4-5.

d. If an improper indication is received, locate and replace the defective module or modules according to the procedures given in paragraph 4-1.5.

e. If no indication is received, locate and replace the defective module using the diagnostic indicators according to the procedures in paragraph 4-1.6.

f. Repeat steps a through e above for Test 2 through 10 in sequence (table 4-5). Note that in the last test, in addition to the proper RECEIVED MESSAGE and STATUS/COUNT indications, the AUDIO lamp must light.

9. Operate BATTERY SIMULATOR toggle switch to OFF.

10. Turn the handwheel of the module assembly mechanism counterclockwise to allow removal of module stack.

11. Operate U7650 (or U7674) lever to separate stack from U7650 (or U7674) connector adapter.

CAUTION

Hold module stack with both hands so that each module is supported. Failure to handle assembled module stack with care may result in breakage of connectors.

12. Disconnect P1 of CA1541 from T module and remove the module stack from the U7651. Place module stack in a loading tray.

TABLE 4-5

COMMANDS AND INDICATIONS FOR TESTING L-Z-J-R-T MODULE STACK

TEST NUMBER	PURPOSE	PT1585 SWITCH SETTINGS		INDICATION STATUS/COUNT LAMPS	MODULE MOST LIKELY DEFECTIVE
		FUNCTION	COMMAND		
1	(77 units only)	06	02	100000*	R,J,Z,L
2	(77 units only)	06	04	010000	R,J,Z,L
3	Send Status	06	02	010000*	R,J,Z,L
4	Go to 75 pps	10	08	000000	J,Z
5	Go to 300 pps	00	09	000000	J,Z
6	Go to NRT	06	03	100000	J
7	Send Audio	06	01	100000	J
8	Readout Stored Count	05	05	000000	J
9	Go to RT	06	04	010000	J
10	Send Audio	03	01**	000000	T

*The digits 0 and 1 are used to indicate the status (OFF or ON) of each of the six STATUS/COUNT lamps. For example, an entry of 100000 in this column means that the six lamps, 11 through 16, should be respectively ON, OFF, OFF, OFF, OFF, and OFF.

**In addition to STATUS/COUNT lamp indication, AUDIO lamp must light. An AUDIO tone will heard.

4-16. ASSEMBLY OF Z-J-R-T PARTIAL STACK.

1. PREPARATION of PT1585.

a. Check that AC PWR and BATTERY SIMULATOR toggle switches are OFF.

b. Connect AC INPUT on rear of PT1585 to a 105/125-VAC, 50-400 Hz, 5-ampere outlet.

c. Turn AC PWR switch ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps may light.

d. If desired, connect headset to HEADSET jack.

e. Operate AUDIO SOURCE switch to INT position.

f. Turn AUDIO LEVEL knob clockwise at least one quarter turn from minimum level position.

g. Push LAMP TEST button and check that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO and STATUS/COUNT lamps come on.

h. After one minute for PT1585 warmup, momentarily push RESET button. Any lighted RECEIVED MESSAGE lamps will go out.

2. Install the U7674 Code Plug Simulator on the U7651 fixture. Place all U7674 switches to the OFF (center) position.

3. Connect P1 of U7674 to J of PT1585.

4. Check that the module assembly mechanism on the U7651 is lifted up and placed back away from the tray so it does not interfere with mating of the modules.

5. Mate the modules as follows:

a. Enter T module crystal channel number into T XTAL CHANNEL switches on PT1585. To determine channel number, remove white plug. XTAL CHANNEL number is stamped on top of crystal. Reinstall the white plug.

b. Place Z module on U7651 tray. The male pins must point toward the U7674. Rotate module as necessary to align alignment marks and engage module with connector adapter.

c. Place remaining modules in U7651 tray one at a time in the following order: Z-J-R-T. Rotate module until alignment marks on it and preceding module are aligned, then mate modules.

d. Connect P1 of CA1541 to T module.

e. Connect P3 of CA1541 to J3 of PT1585.

f. Position the module assembly mechanism close to P1 of CA1541.

g. Carefully turn handwheel clockwise and check that all module connectors are aligned and are moving together. Continue to turn the handwheel clockwise until the modules are assembled. Hand-tighten handwheel.

4-17. TEST PROCEDURES FOR Z-J-R-T PARTIAL STACK.

1. If testing a previously assembled module stack, enter the crystal channel number of the T module into the T XTAL CHANNEL switches on the PT1585 panel. If the crystal channel is unknown, it is necessary to remove the white plug on the end of the T module and read the number stamped on the crystal (the T module will have to be separated from the other modules in the stack). Reinstall white plug.

2. Set PT1585 and U7674 switches to Group 1 positions given in table 4-6.

3. Turn BATTERY SIMULATOR selector switch on PT1585 to NOMINAL position and toggle switch to ON. BATTERY SIMULATOR lamp lights. Power is now applied to the stack under test (henceforth, the stack will be referred to as "unit").

4. Check standby current of unit as follows:

a. Turn MONITOR selector switch to INPUT CURRENT 500 MA position. Check that MONITOR meter does not deflect more than one minor scale division (meter should be reading less than 5 ma on a 500 ma scale).

b. Push and hold 50 MA button. Check that MONITOR meter does not deflect more than five minor scale divisions (5 ma on a 50 ma scale).

c. Push and hold 5 MA button. MONITOR meter now displays standby current of the unit on a 5 ma scale. Current must be less than or equal to 5 ma. If current is greater than 5 ma, any of the four modules may be at fault.

5. Check transmit current of unit as follows:

a. Push and hold AUDIO button until following indications are observed:

AUDIO lamp lights and a tone is heard.

MONITOR meter indicates 300 450 ma on a 500 ma scale.

b. If proper indications are not received, either a T or Z module is most likely at fault.

6. Check RF output of unit as follows:

a. Turn MONITOR selector switch to OUTPUT PWR 5W position.

b. Push and hold AUDIO button until following indications are observed:

AUDIO lamp lights and a tone is heard.

MONITOR meter indicates 2 to 4 watts on a 5-watt scale. This is the RF output of the unit.

c. If proper indications are not received, the T module is most likely at fault.

7. GROUP 1 (Table 4-6).

a. Check that PT1585 and U7674 switches are set to Group 1 positions given in table 4-6.

b. Turn BATTERY SIMULATOR switch OFF, wait 5 seconds, and turn back ON.

c. Set the FUNCTION and COMMAND switches on the PT1585 to the positions given for Test No. 3 in table 4-7.

d. Momentarily push TRANSMIT button. Some RECEIVED MESSAGE indicator lamps and STATUS/COUNT lamps should come on.

e. Check the following:

The ERROR lamps must not light.

The six STATUS/COUNT lamps must indicate as shown in table 4-7.

f. If an improper indication is received, locate and replace the defective module or modules according to procedures given in paragraph 4-6.

g. If no indication is received, locate and replace the defective module using the diagnostic indicators according to procedures given in paragraph 4-7.

h. Repeat steps c through g above for Tests 4 through 10 in sequence (table 4-7). Note that in the last test, in addition to the proper RECEIVED MESSAGE and STATUS/COUNT indications, the AUDIO lamp must light.

8. GROUP 2.

a. Turn BATTERY SIMULATOR switch OFF.

b. Set PT1585 and U7674 switches to Group 2 positions given in table 4-6.

c. Turn BATTERY SIMULATOR switch ON.

d. Set the FUNCTION and COMMAND switches on the PT1585 to the positions given for Test No. 1 in table 4-7.

e. Momentarily push the TRANSMIT button. Some RECEIVED MESSAGE indicator lamps and STATUS/COUNT lamps should come on.

f. Check the following:

The ERROR lamps must not light.

The six STATUS/COUNT lamps must indicate as shown in table 4-7.

g. If an improper indication is received, locate and replace the defective module or modules according to procedures given in paragraph 4-6.

h. If no indication is received, locate and replace the defective module using the diagnostic indicators according to procedures given in paragraph 4-7.

i. Repeat steps d through h above for Tests 2 through 10 in sequence (table 4-7). Note that in the last test, in addition to the proper RECEIVED MESSAGE and STATUS/COUNT indications, the AUDIO lamp must light.

9. GROUP 3.

a. Turn BATTERY SIMULATOR switch OFF.

b. Set PT1585 and U7674 switches to Group 3 positions given in table 4-6.

c. Turn BATTERY SIMULATOR switch ON.

d. Repeat paragraph 8 steps d through i.

10. Turn BATTERY SIMULATOR switch to OFF.

11. Turn the handwheel of the module assembly mechanism counterclockwise to allow removal of the module stack.

12. Operate the U7674 lever to separate the stack from the U7674 Code Plug Simulator.

CAUTION

Hold the module stack with both hands so that each module is supported. Failure to handle assembled module stack with care may result in breakage of connectors.

13. Disconnect P1 of CA1541 from T module and remove the module stack from the U7651. Place module stack in a loading tray.

4-18. ASSEMBLY TEST OF MA31 SENSOR.

1. The following procedures assume that a fully assembled module stack, including a battery module, has been placed into a sensor casing. It is also assumed that tests described in paragraph 4-3 have been completed.

2. PREPARTION OF PT1585.

a. Check that AC PWR and BATTERY SIMULATOR switches are OFF.

b. Connect AC INPUT on rear of PT1585 to a 105/125-VAC, 50400 Hz, 5-ampere outlet.

c. Turn AC PWR switch ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps may light.

d. After one minute for PT1585 warmup, momentarily push RESET button. Any lighted RECEIVED MESSAGE lamps will go out.

3. Check that settings on L CODE PLUG switches and T XTAL CHANNEL switches on PT1585 panel agree with information furnished with sensor. The temporary tape placed on the outside of the sensor casing gives the L module settings.

NOTE

To minimize battery power loss during the following steps, perform the procedures as quickly as possible and return the nose plug to the battery.

4. Remove the nose plug which covers the actuate switch on the end of the battery module. When plug is removed, the battery is turned on and the sensor is active.

TABLE 4-6

PT1585 AND U7674 SIMULATOR SWITCH POSITIONS FOR CHECK OUT OF CL PARTIAL, MODULE STACK WITHOUT L CODE PLUG MODULE

GROUP 1

PT1585 Switch Positions	RF CHANNEL	ID	FUNCTION
	221	01	57

U7674 Switch Positions	4	5	6	7	8	9	10
	0	1	0	1	0	1	0

IA	IB	BIT RATE	LCE	PNRT	AUDIO
OFF	OFF	OFF	OFF	0	5 or 10

13	14	15	1	2	3	4	5	6
0	1	0	1	1	0	1	0	1

GROUP 2

PT1585 Switch Positions	RF CHANNEL	ID	FUNCTION
	510	15	77

U7674 Switch Positions	4	5	6	7	8	9	10
	1	0	1	0	1	0	0

IA	IB	BIT RATE	LCE	PNRT	AUDIO
OFF	OFF	OFF	OFF	1	5 or 10

13	14	15	1	2	3	4	5	6
1	0	1	1	0	1	0	1	0

GROUP 3

PT1585 Switch Positions	RF CHANNEL	ID	FUNCTION
	510	16	77

U7674 Switch Positions	4	5	6	7	8	9	10
	1	0	1	0	1	1	1

IA	IB	BIT RATE	LCE	PNRT	AUDIO
OFF	OFF	OFF	OFF	1	5 or 10

13	14	15	1	2	3	4	5	6
1	0	1	1	0	1	0	1	0

5. Check the MA31 sensor as follows:

a. Set PT1585 FUNCTION switches to 06.

b. Set PT1585 COMMAND switches to 04.

c. Momentarily push TRANSMIT button. Some RECEIVED MESSAGE and EXPECTED MESSAGE lamps should light.

d. Check the following: The ERROR lamp must not light. The six STATUS/COUNT lamps must indicate 011001.

e. Set FUNCTION switches to 00.

f. Tap unit for 10 seconds.

g. Check for the following: The ERROR lamp must not light. The six STATUS/COUNT lamps must indicate 000000.

h. If an improper indication or no indication is received, reinstall the nose plug on the battery, disassemble the sensor and repeat the procedures in section 4-9 to locate the defective module.

6. This completes the assembly test of the MA31. Reinstall the nose plug on the battery to turn the sensor off and to prevent battery drain.

4-19. ASSEMBLY OF MA33 OR MA37 SHORT STACK (Figure 4-3).

1. PREPARATION OF PT1585.

a. Check that AC PWR and BATTERY SIMULATOR toggle switches are OFF.

b. Connect AC INPUT on rear of PT1585 to a 105/125-VAC, 50-400 Hz, 5-ampere outlet.

c. Turn AC PWR switch ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps may light.

d. If desired, connect headset to HEADSET jack.

e. Operate AUDIO SOURCE switch to INT position.

f. Turn AUDIO LEVEL knob clockwise at least one quarter turn from minimum level position.

g. Push LAMP TEST button and check that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO and STATUS/COUNT lamps come on.

h. After one minute for PT1585 warmup, momentarily push RESET button. Any lighted RECEIVED MESSAGE lamps will go out.

2. Install the U7650 connector assembly or the U7674 Code Plug Simulator on the U7651 fixture. If the U7674 is installed, place all U7674 switches to the OFF (center) position.

3. Connect P1 of U7650 or P1 of U7674 to J1 of PT1585.

4. Check that the module assembly mechanism of the U7651 is lifted up and placed back away from the tray so it does not interfere with mating of the modules.

5. Mate the modules as follows:

a. Enter first seven numbers of code printed on tape on the L module into L CODE PLUG switches on PT1585 panel (figure 4-1).

b. Enter T module crystal channel number into T XTAL CHANNEL switches of PT1585. If the channel number is not known, remove white plug on end of T module using wide-blade screwdriver. XTAL CHANNEL number is stamped on top of crystal. Reinstall the white plug.

c. Place E module (TC472 or TC521) on U7651 tray. The male pins must point toward the U7650 (or U7674, if installed). Rotate module as necessary to align alignment marks and engage module with connector adapter.

d. Place remaining modules in U7651 tray one at a time in the following order: E-Z-L-T (figure 4-3). Rotate module until alignment marks on it and preceding module are aligned, then mate modules.

e. Connect P1 of CA1541 to T module.

f. Connect P3 of CA1541 to J3 of PT1585.

g. Position the module assembly mechanism close to P1 of CA1541.

h. Carefully turn handwheel clockwise and check that all module connectors are aligned are moving together. Continue to turn the handwheel clockwise until the modules are assembled. Hand tighten handwheel.

4-20. TEST PROCEDURES FOR MA33 OR MA37 SHORT STACK.

1. If testing a previously assembled module stack, enter the first seven numbers of the nine printed on the tape on the L module into the L CODE PLUG switches on the PT1585 panel. Also, enter the crystal channel number of the T module into the T XTAL CHANNEL switches on the PT1585 panel. If the crystal channel is unknown, it is necessary to remove the white plug on the end of the T module and read the number stamped on the crystal (the T module will have to be separated from the other modules in the stack). Reinstall white plug.

2. Turn BATTERY SIMULATOR selector switch on PT1585 to NOMINAL position and toggle switch to ON. BATTERY SIMULATOR lamp lights. Power is now applied to short stack under test (henceforth, the stack will be referred to as unit).

3. Check standby current of unit as follows:

a. Turn MONITOR selector switch to INPUT CURRENT 500 MA position. Check that MONITOR meter does not deflect more than one minor scale division (meter should be reading less than 1 ma on a 500 ma scale).

b. Push and hold 50 MA button. Check that MONITOR meter does not deflect more than one minor scale division (1 ma on a 50 ma scale).

c. Push and hold 5 MA button. MONITOR meter now displays standby current of the unit on a 5 ma scale. Current must be less than or equal to 1 ma. If current is greater than I ma, any of the 4 modules may be at fault.

4. Check transmit current of unit as follows:

a. Push and hold AUDIO button until following indications are observed:

AUDIO lamp lights and no tone is heard.

MONITOR meter indicates 300-450 ma on a 500 ma scale.

b. If proper indications are not received, either T or Z module is most likely at fault.

5. Check RF output of unit as follows:

a. Turn MONITOR selector switch to OUTPUT PWR 5 W position.

b. Push and hold AUDIO button until following indications are observed:

AUDIO lamp lights and no tone is heard.

MONITOR meter indicates 2 to 4 watts on a 5-watt scale. This is the RF output of the unit.

c. If proper indications are not received, the T module is most likely at fault.

6. Check operation of unit as follows:

a. Set PT1585 FUNCTION switches to 00.

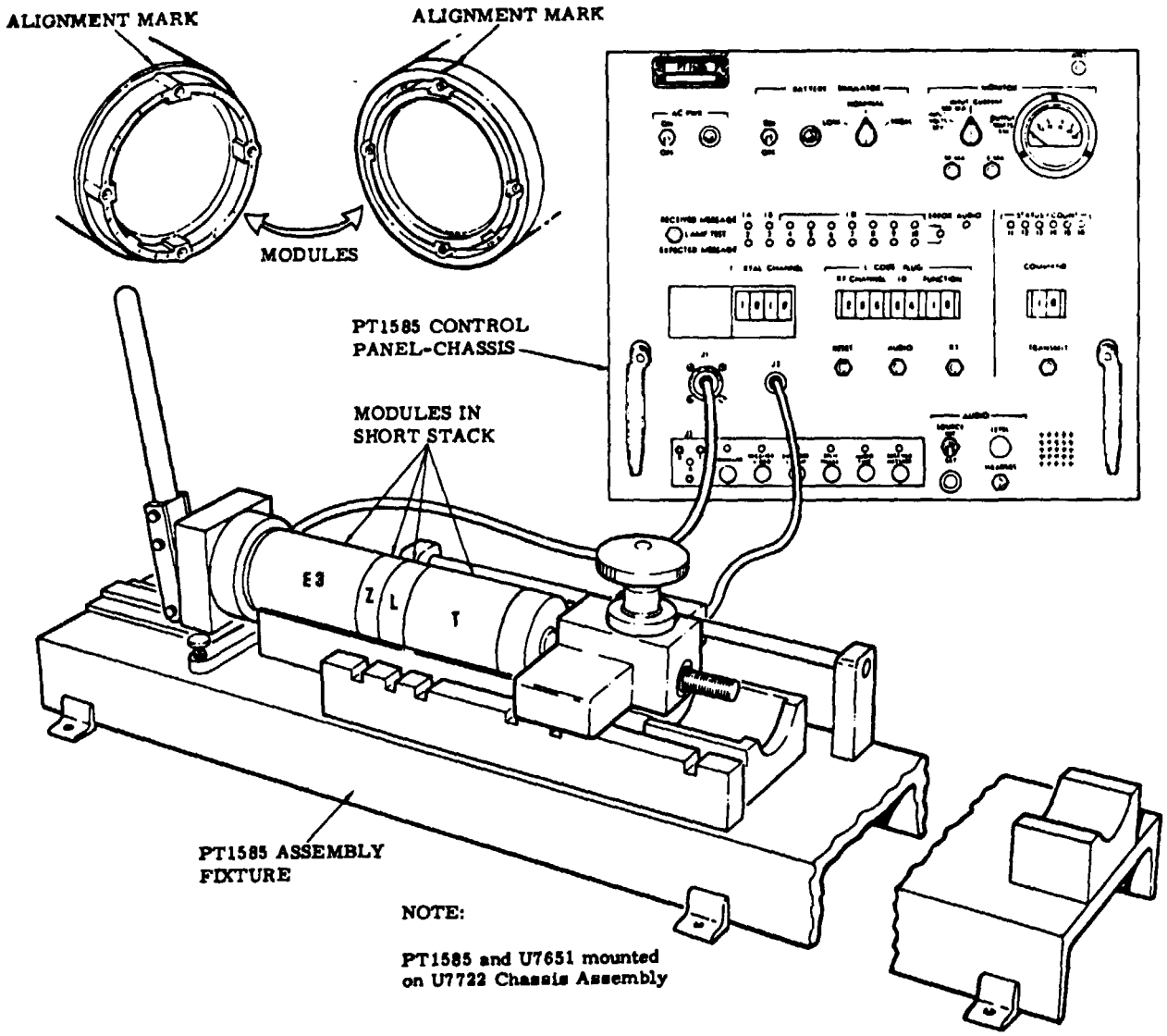


Figure 4-3. MA33/37 Short Stack Under Test

TABLE 4-7

COMMANDS AND INDICATIONS FOR TESTING Z-J-R-T MODULE STACK

TEST NUMBER	PURPOSE	PT1585 SWITCH SETTINGS		INDICATION STATUS/COUNT LAMPS	MODULE MOST LIKELY DEFECTIVE
		FUNCTION	COMMAND		
1	(77 units only)	06	02	100000*	R,J,Z,
2	(77 units only)	06	04	010000	R,J,Z,
3	Send Status	06	02	010000*	R,J,Z,
4	Go to 75 pps	10	08	000000	J,Z
5	Go to 300 pps	00	09	000000	J,Z
6	Go to NRT	06	03	100000	J
7	Send Audio	06	01	100000	J
8	Readout Stored Count	05	05	000000	J
9	Go to RT	06	04	010000	J
10	Send Audio	03	01**	000000	T

*The digits 0 and 1 are used to indicate the status (OFF or ON) of each of the six STATUS/COUNT lamps. For example, an entry of 100000 in this column means that the six lamps, 11 through 16, should be respectively ON, OFF, OFF, OFF, OFF, and OFF.

**In addition to STATUS/COUNT lamp indication, AUDIO lamp must light. An AUDIO tone will be heard.

b. Tap unit for 10 seconds. Some RECEIVED MESSAGE lamps should light. The ERROR lamp must not light.

c. If the ERROR lamp lights, the Z module is most likely at fault.

d. If an improper indication is received, locate and replace the defective module or modules according to procedures in paragraph 4-6.

e. If no indication is received, locate and replace the defective module using the diagnostic indicators according to the procedures in paragraph 4-7.

7. Operate BATTERY SIMULATOR toggle switch of OFF.

8. Turn the handwheel of the module assembly mechanism counterclockwise to allow removal of module stack.

9. Operate U7650 (or U7674) lever to separate stack from U7650 (or U7674) connector adapter.

CAUTION

Hold module stack with both hands so that each module is supported. Failure to handle assembled module stack with care may result in breakage of connectors.

10. Disconnect P1 of CA1541 from T module and remove the module stack from the U7651. Place module stack in loading tray.

4-21. ASSEMBLY OF Z-L-T PARTIAL STACK.

1. PREPARATION OF PT1585.

a. Check that AC PWR and BATTERY SIMULATOR toggle switches are OFF.

b. Connect AC INPUT on rear of PT1585 to a 105/125-VAC, 50-400 Hz, 5-ampere outlet.

c. Turn AC PWR switch ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps may light.

d. If desired, connect headset to HEADSET jack.

e. Operate AUDIO SOURCE switch to INT position.

f. Turn AUDIO LEVEL knob clockwise at least one quarter turn from minimum level position.

g. Push LAMP TEST button and check that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO and STATUS/COUNT lamps come on.

h. After one minute for PT1585 warmup, momentarily push RESET button. Any lighted RECEIVED MESSAGE lamps will go out.

2. Install the U7650 connector assembly or the U7674 Code Plug Simulator of the U7651 fixture. If the U7674 is installed, place all U7674 switches to the OFF (center) position.

3. Connect P1 of U7650 to P1 of U7674 to J1 of PT1585.

4. Check that the module assembly mechanism on the U7651 is lifted up and placed back away from the tray so it does not interfere with mating of the modules.

5. Mate modules as follows:

a. Enter first seven numbers of code printed on tape on the L module into L CODE PLUG switches on PT1585 panel (figure 4-1).

b. Enter T module crystal channel number into T XTAL CHANNEL switches on PT1585. To determine channel number, remove white plug from end of T module. XTAL CHANNEL number is stamped on top of crystal. Reinstall white plug.

c. Place Z module on UJ7651 tray. The male pins must point toward the 1U7650 (or U7674, if installed). Rotate module as necessary to align alignment marks and engage module with connector adapter.

d. Mate L module to Z module.

e. Mate T module to L module.

f. Connect P1 of CA1541 to T module.

g. Connect P3 of CA1541 to J3 of PT1585.

h. Position the module assembly mechanism close to PI of CA1541.

i. Carefully turn handwheel clockwise and check that all module connectors are aligned and are moving together. Continue to turn the handwheel clockwise until the modules are assembled. Hand-tighten handwheel.

4-22. TEST PROCEDURES FOR Z-L-T PARTIAL STACK.

1. If testing a previously assembled module stack, enter the first seven numbers of the nine printed on the tape on the 1, module into the 1, CODE PI,UG switches on the PT1585 panel. Also, enter the crystal channel number of the T module into the T XTAL CHANNEL switches on the PT 1585 panel. If the crystal channel is unknown, it is necessary to remove the white plug on the end of the T module and read the number stamped on the crystal (the T module will have to be separated from the other modules in the stack). Reinstall white plug.

2. Turn BATTERY SIMULATOR selector switch on PT1585 to NOMINAI, position and toggle switch to ON. BATTERY SIMULATOR lamp lights. Power is now applied to the stack under test (henceforth, the stack will be referred to as unit).

3. Check standby current of unit as follows:

a. Turn MONITOR selector switch to INPUT CURRENT 500 MA position. Check that MONITOR meter does not deflect more than one, minor scale division (meter should be reading less than 1 ma on a 500 ma scale).

b. Push and hold 50 MA button. Check that MONITOR meter does not deflect more than one minor scale division (1 ma on a 50 ma scale).

c. Push and hold 5 MA button. MONITOR meter now displays standby current of the unit on a 5 ma scale. Current must be less than or equal to 1 ma. If current is greater than I ma, any of the three modules may be at fault.

4. Check transmit current of unit as follows:

a. Push and hold AUDIO button until following indications are observed:

AUDIO lamp lights and a tone is heard.

MONITOR meter indicates 300-450 ma on a 500 ma scale.

b. If proper indications are not received, either T or Z module is most likely at fault.

5. Check RF output of unit as follows:

a. Turn MONITOR selector switch to OUTPUT PWR 5W position.

b. Push and hold AUDIO button until following indications are observed:

AUDIO lamp lights and a tone is heard.

MONITOR meter indicates 2 to 4 watts on a 5-watt scale. This is the RF output of the unit.

c. If proper indications are not received, the T module is most likely at fault.

6. Check operation of unit as follows:

a. Set PT1585 FUNCTION switches to 00.

b. Momentarily push the RT button on the PT1585. Some RECEIVED MESSAGE indicator lamps will light. The ERROR lamp must not light.

c. If the ERROR lamp lights, the Z module is most likely to be at fault.

d. If an improper indication is received, locate and replace the defective module or modules according to procedures in paragraph 4-6.

e. If no indication is received, locate and replace the defective module using the diagnostic in indicators according to the procedures in paragraph 4-7.

7. Operate BATTERY SIMULATOR toggle switch to OFF.

8. Turn the handwheel of the module assembly mechanism counterclockwise to allow removal of module stack.

9. Operate U7650 (or U7674) lever to separate stack from U7650 (or U7674) connector adapter.

CAUTION

Hold module stack with both hands so that each module is supported. Failure to handle assembled module stack with care may result in breakage of connectors.

10. Disconnect P1 of CA1541 from T module and remove the module stack from the U7651. Place module stack in a loading tray.

4-23. ASSEMBLY OF Z-T PARTIAL STACK.

1. PREPARATION OF PT1585.

a. Check that AC PWR and BATTERY SIMULATOR toggle switches are OFF.

b. Connect AC INPUT on rear of PT1585 to a 105/125-VAC, 50-400 Hz, 5-ampere outlet.

c. Turn AC PWR switch ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps may light.

d. If desired, connect headset to HEADSET jack.

e. Operate AUDIO SOURCE switch to INT position.

f. Turn AUDIO LEVEL knob clockwise at least one quarter turn from minimum level position.

g. Push LAMP TEST button and check that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO and STATUS/COUNT lamps come on.

h. After one minute for PT1585 warmup, momentarily push RESET button. Any lighted RECEIVED MESSAGE lamps will go out.

2. Install the U7674 Code Plug Simulator on the U7651 fixture. Place all U7674 switches to the OFF (center) position.

3. Connect P1 of U7674 to J1 of PT1585.

4. Check that the module assembly mechanism of the U7651 is lifted up and placed back away from the tray so it does not interfere with mating of the modules.

5. Mate the modules as follows:

a. Enter T module crystal channel number into T XTAL CHANNEL switches on PT1585. To determine channel number, remove white plug. XTAL CHANNEL number is stamped on top of crystal. Reinstall the white plug.

b. Place Z module on U7651 tray. The male pins must point toward the U7674. Rotate module as necessary to align alignment marks and engage module with connector adapter.

c. Mate T module to Z module.

d. Connect P1 of CA1541 to T module.

e. Connect P3 of CA1541 to J3 of PT1585.

f. Position the module assembly mechanism (lose to P1 of CA 1541.

g. Carefully turn handwheel clockwise and check that all module connectors are aligned and are moving together. Continue to turn the handwheel clockwise until the modules are assembled. Hand-tighten handwheel.

4-24. TEST PROCEDURES FOR Z-T PARTIAL STACK.

1. If testing a previously assembled module stack, enter the crystal channel number of the T module into the T XTAL, CHANNEL, switches on the PT1585 panel. If the crystal channel is unknown, it is necessary to remove the white plug on the end of the T module and read the number stamped on the crystal (the T module will have to be separated from the other modules in the stack). Reinstall white plug.

2. Set PT1585 and U7674 switches to Group 1 positions given in table 4-8.

3. Turn BATTERY SIMULATOR selector switch on PT1585 to NOMINAI, position and toggle switch to ON. BATTERY SIMULATOR lamp lights. Power is not applied to the stack under test (henceforth, the stack will be referred to as unit).

4. Check standby current of unit as follows:

a. Turn MONITOR selector switch to INPUT CURRENT 500 MA position. Check that MONITOR meter does not deflect more than one minor scale division (meter should be reading less than 1 ma on a 500 ma scale).

b. Push and hold 50 MA button. Check that MONITOR meter does not deflect more than one minor scale division (1 ma on a 50 ma scale).

c. Push and hold 5 MA button. MONITOR meter now displays standby current of the unit on a 5 ma scale. Current must be less than or equal to 1 ma. If current is greater than 1 ma, either module may be at fault.

5. Check transmit current of unit as follows:

a. Push and hold AUDIO button until following indications are observed:

AUDIO lamp lights and a tone is heard.

MONITOR meter indicates 300-450 ma on a 500 ma scale.

b. If proper indications are not received, either T or Z module may be at fault.

6. Check RF output of unit as follows:

a. Turn MONITOR selector switch to OUTPUT PWR 5W position.

b. Push and hold AUDIO button until following indications are observed:

AUDIO lamp lights and a tone is heard.

MONITOR meter indicates 2 to 4 watts on a 5-watt scale. This is the RF output of the unit.

c. If proper indications are not received, the T module is most likely at fault.

7. GROUP I (Table 4-8).

a. Check that PT1585 and U7674 switches are set to Group 1 positions given in table 4-8.

b. Turn BATTERY SIMUI,ATOR switch OFF, wait 5 seconds, and turn back ON.

c. Momentarily push the RT button on the PT1585. Some RECEIVED MESSAGE lamps should light. The ERROR lamp must not light.

d. If the ERROR lamp lights, the Z module is most likely at fault.

e. If an improper indication is received, locate and replace the defective module or modules according to procedures in paragraph 4-6.

f. If no indication is received, locate and replace the defective module using the diagnostic indicator according to the procedures in paragraph 4-7.

8. GROUP 2.

a. Turn BATTERY SIMULATOR switch to OFF.

b. Set PT1585 and U7674 switches to Group 2 positions given in table 4-8.

c. Turn BATTERY SIMULATOR switch ON.

d. Repeat paragraph 7, steps d through g.

9. GROUP 3.

a. Turn BATTERY SIMULATOR switch OFF.

b. Set PT1585 and U7674 switches to Group 3 positions given in table 4-8.

c. Turn BATTERY SIMULATOR switch ON.

d. Repeat paragraph 7, steps c through g.

10. Operate the BATTERY SIMULATOR switch to OFF.

11. Turn the handwheel of the module assembly mechanism counterclockwise to allow removal of the module stack.

12. Operate U7674 lever to separate stack from U7674 Code Plug Simulator.

CAUTION

Hold modules with both hands so that both modules are supported. Failure to handle assembled modules with care may result in breakage of connectors.

13. Disconnect P1 of CA1541 from T module and remove the module stack from the U7651. Place the module stack in a loading tray.

4-25. ASSEMBLY TEST OF MA33 OR MA37 SENSOR.

1. The following procedures assume that a fully assembled module stack, including a battery module, has been placed into a sensor casing. It is also assumed that tests described in paragraph 4-14 have been completed.

2. Preparation of PT1585.

a. Check that AC PWR and BATTERY SIMULATOR switches are OFF.

b. Connect AC INPUT on rear of PT1585 to a 105/125-VAC, 50-400 Hz, 5-ampere outlet.

c. Turn AC PWR switch ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps may light.

d. Push LAMP TEST button and check that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO and STATUS/COUNT lamps come on.

e. After one minute for PT1585 warmup, momentarily push RESET button. Any lighted RECEIVED MESSAGE lamps will go out.

3. Check that settings on L CODE PLUG switches and T XTAL CHANNEL switches on PT1585 panel agree with information furnished with sensor. The temporary tape placed on the outside of the sensor casing gives the L module settings.

NOTE

To minimize battery power loss during the following steps, perform the procedures as quickly as possible and return the nose plug to the battery.

4. Remove the nose plug which covers the actuate switch on the end of the battery module. When plug is removed, the battery is turned on and the sensor is active.

5. Check out the MA33 or MA37 sensor as follows:

a. Set PT1585 FUNCTION switches to 00.

b. Tap on sensor casing for 10 seconds.

c. Check the following: The ERROR lamp must not light.

d. If an improper indication is received, replace the nose plug on the battery, disassemble the sensor and repeat the procedures in section 4-14 to locate the defective module.

6. This completes the final assembly tests of the MA33 and MA37 sensors. Install nose plug on battery to turn sensor off and to prevent battery drain.

TABLE 4-8

PT1585 AND U7674 SIMULATOR SWITCH POSITIONS FOR CHECKOUT OF NCL PARTIAL MODULE STACK WITHOUT L CODE PLUG

GROUP 1

Pt1585 Switch Positions	RF CHANNEL	ID	FUNCTION
	221	01	01

U7674 Switch Positions	4	5	6	7	8	9	10
	0	1	0	1	0	1	0

IA	IB	BIT RATE	LCE	PNRT	AUDIO
0	1	0	0	0	5 or 10

CHANNEL CALL NO.

13	14	15	1	2	3	4	5	6
0	1	0	1	1	0	1	0	1

GROUP 2

PT1585 Switch Positions	RF CHANNEL	ID	FUNCTION
	510	15	06

U7674 Switch Positions	4	5	6	7	8	9	10
	1	0	1	0	1	0	0

IA	IB	BIT RATE	LCE	PNRT	AUDIO
1	0	0	1	0	5 or 10

CHANNEL CALL NO.

13	14	15	1	2	3	4	5	6
1	0	1	1	0	1	0	1	0

TABLE 4-8 (con't)

GROUP 3

PT1585 Switch Positions	RF CHANNEL	ID	FUNCTION
	510	16	13

U7674 Switch Positions	4	5	6	7	8	9	10
	1	0	1	0	1	1	1

IA	IB	BIT RATE	LCE	PNRT	AUDIO
1	1	1	0	0	5 or 10

CHANNEL CALL NO.

13	14	15	1	2	3	4	5	6
1	0	1	1	0	1	0	1	0

4-25A. STACK TEST FOR MA56 AND MA87 EXRAY'S.

1. STACK ASSEMBLY. Record channel number of both receiver and transmitter before assembling EXRAY stack.

a. Position U7650 Connector and Cable Assembly on end of U7651 Stack Assembly Fixture as shown in figure 4-3A. Secure by knurled screws.

b. Place TC533DW Timing and Destruct module on U7651 fixture so that connector end with pins is toward U7650. Carefully engage TC533DW to U7650.

c. Using alignment marks, similarly engage TC534A Decoder module to TC533DW.

d. Similarly assemble TC431 Encoder to TC534A.

e. Similarly assemble TC517 Receiver or TC596 Receiver, as applicable, to TC431.

f. Similarly assemble TC434 Transmitter or TC516 Transmitter, as applicable, to receiver.

g. Similarly assemble TC530 Diode Switch to -. transmitter.

2. PREPARATION OF EMISSION GENERATOR.

a. Calibrate emission generator as specified in Initial Checking and Adjustment of Equipment procedures in Operation and Maintenance Manual for Radio Test Set Group OQ-60/USQ-46.

b. Using same manual, set deviation and RF output.

c. Set RF OUTPUT ATTEN to 75 db in (figure 4-3A).

d. Set RF CHANNEL NUMBER to channel of receiver in EXRAY stack.

e. Rotate MESSAGE switch to position 1.

f. Rotate FSK switch to W/F position.

g. Set PROGRAM switches to 51.

3. PREPARATION OF PT1585.

a. Insure the AC PWR and BATTERY SIMULATOR toggle switches (figure 4-3A) are at OFF.

b. Set dials of L CODE PLUG switches as follows. Ignore RF CHANNEL dials, set ID to 51, and set FUNCTION to 00.

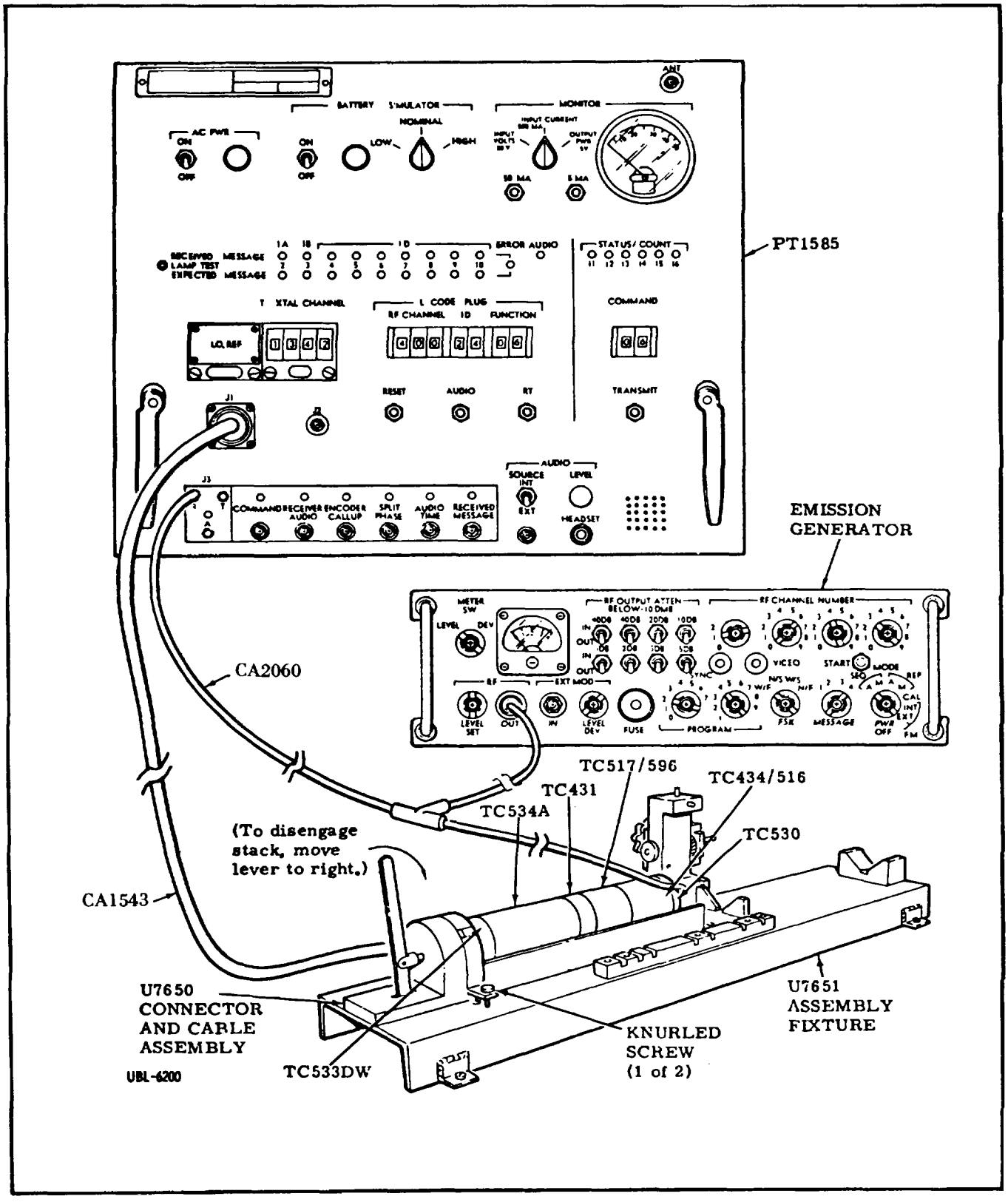


Figure 4-3A. EXRAY Stack Test Setup.

c. Connect AC INPUT on rear of PT1585 to a source of 115 ± 10 v.a.c., 50 to 400 Hz, 5 a.

d. Rotate MONITOR INPUT CURRENT switch to 500 MA position.

e. Connect U7650 cable to J1 of PT1585.

f. Operate AC PWR and BATTERY SIMULATOR toggle switches to ON.

g. Momentarily depress LAMP TEST switch. All RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO, and STATUS/COUNT lamps light while switch is pressed.

h. Momentarily depress 5 MA switch. The meter reads between 25 and 45 (2.5 to 4.5 ma.).

i. Connect CA2060 cable (figure 4-3A) as follows: No. 1 connector to TC530 in EXRAY stack, No. 2 connector to RF OUT receptacle on emission generator, No. 3 connector to J3-R on PT1585.

4. TEST PROCEDURE.

a. On emission generator, rotate MODE switch to REP/M.

b. On emission generator, depress START switch. On PT1585, RECEIVED MESSAGE lamps light to match lighted EXPECTED MESSAGE lamps (test 1, table 4-8A). release switch.

c. If red ERROR lamp lights, turn off power, replace decoder in EXRAY stack, turn on power, and repeat test. If this fails, similarly replace encoder module and repeat test. If this fails, similarly replace receiver module and repeat test.

d. Rotate BATTERY SIMULATOR switch on PT1585 to HIGH, and depress START switch on emission generator. On PT1585, RECEIVED MESSAGE lamps light to match lighted EXPECTED MESSAGE lamps (test 1, table 4-8A). Release switch.

e. If error lamp lights, turn off power, replace encoder in EXRAY stack, turn on power, and repeat test.

f. Rotate BATTERY SIMULATOR switch on PT1585 to LOW, and depress START switch on emission generator. On PT1585, RECEIVED MESSAGE lamps light to match lighted EXPECTED MESSAGE lamps (test 1, table 4-8A). Release switch.

g. If error lamp lights, turn off power, replace encoder in EXRAY stack, turn on power and repeat test.

h. For test 2, rotate BATTERY SIMULATOR switch to NOMINAL, set switches as shown in table 4-8A, and press START switch on emission generator. RECEIVED MESSAGE lamps light as shown in table 4-8A. Release switch.

i. Similarly reset switches and repeat test procedure for test 3 and test 4 to obtain the received bit patterns shown in table 4-8A.

j. Turn off power and disconnect cables.

k. Disengage module stack from U7650 by moving U7650 lever toward stack.

4-25B. CANOPY EXRAY ASSEMBLY.

1. Following stack test, complete part I information on Record of Assembly/Implantation (figure 4-3B).

a. Rotate module stack as a unit, if necessary to read data to be recorded.

b. Remove U7650 from U7651 so that module stack can be slid into module housing.

c. Test canopy EXRAY (COMMIKE III) battery in accordance with procedures in T.O. 31S9-419-1, using cable CA2061.

2. As necessary, remove load ring from module housing. Orient keys of TC533DW with keyways in end of housing, and slide stack into housing. Do not permit any part of stack to be unsupported during installation.

TABLE 4-8A
LAMP INDICATIONS FOR EXRAY STACK TEST SWITCH POSITIONS

EMISSION GENERATOR				PT1585			
				Received Bit Pattern*			
Message Switch	Program Switches	ID Switches	Function Switches	1A	1B	ID	Status/Count
1	51	51	00	0	0	01 0 1 0 0 1	0 0 0 0 0 0
2	23	23	05	0	1	1 1 0 1 1 1 0	0 1 0 1 0 1
3	46	46	06	1	0	1 0 0 0 1 1 0	1 0 1 0 1 0
4	29	29	03	1	1	1 1 1 1 1 1 1	0 0 0 0 0 0

* Indicated lamps represent a 0 bit if unlit, a 1 bit if lit

EXRAY - RECORD OF ASSEMBLY/IMPLANTATION

IMPORTANT: REMOVE THIS TAGE PRIOR TO IMPLANT

PART I - ASSEMBLING ORGANIZATION

Receiver Freq. Channel No._____

Transmit Freq. Channel No._____

TC517 Receiver Serial No. _____
TC434 Transmitter Serial No. _____
TC530 Diode Switch Serial No. _____
TC431 Encoder Serial No._____
TC534A Decoder Serial No. _____
TC533DW Timing & Destruct Module Serial No._____

PART II - EMPLOYING ORGANIZATION

Type of Battery Used _____
Date Implanted_____
Location of Implant_____
Unit & Individual Making Implant _____
Zulu Time of Implant _____
Type of Cable Used: Test, Hand Plant, Others_____
Type of Antenna_____

REMARKS:

Figure 4-3B. Record of Assembly/Implantation.

CAUTION

Overtightening the load ring will damage modules. In addition, MA56 must be supported during assembly to preclude damage by falling.

a. Reinstall load ring. Using end plug spanner wrench (P72785-000, figure 4-3C) with torque wrench (3/8-inch square drive), tighten load ring to 10 to 15 ft.-lb. Do not overtighten.

b. Position canopy EXRAY antenna/parachute housing on level working surface so that threaded end of extension assembly is up. Support assembly.

c. Lightly coat quad-X-seal with electrical insulating compound (DC-4). Install seal in packing ring groove of extension assembly.

d. Position module assembly near extension assembly, mate short pigtail to TC530 Diode Switch, (figure 4-3D).carefully position cable in groove of extension assembly, and position module assembly on extension assembly

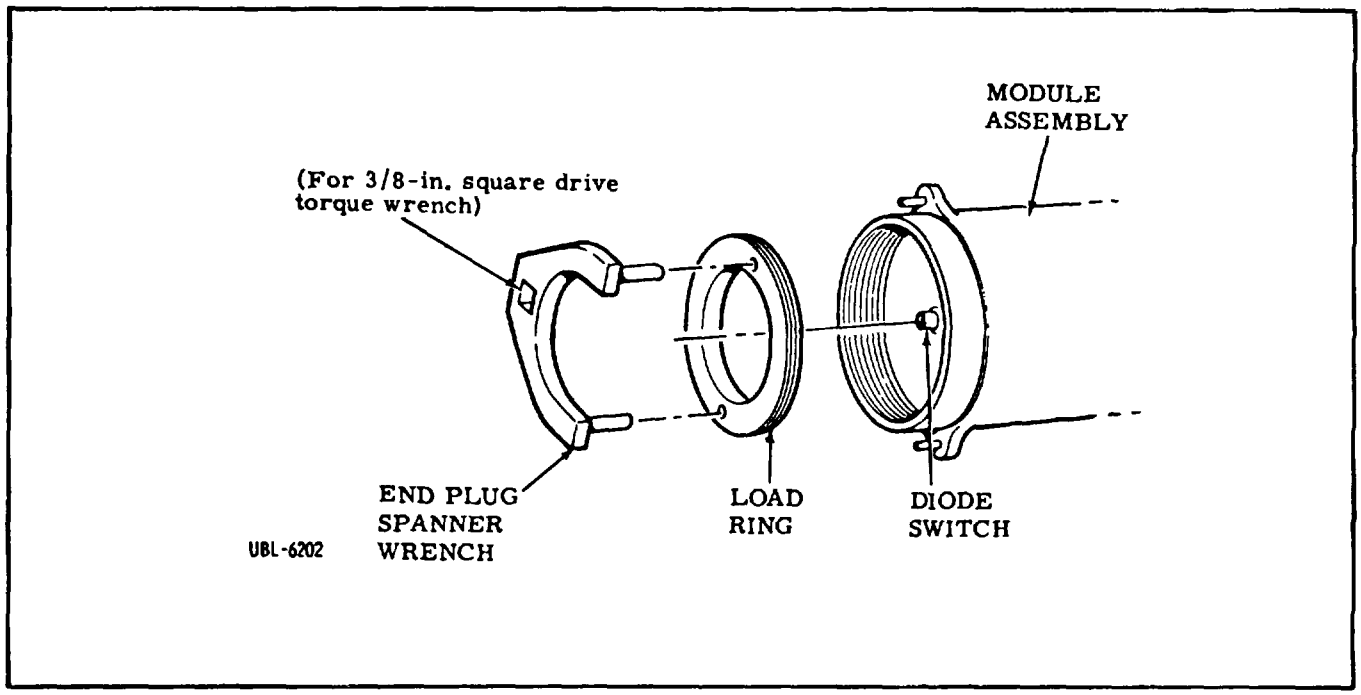


Figure 4-3C. MA56 EXRA Y Load Ring Installation

e. Mate power cable from extension assembly to bracket-mounted receptacle on module assembly.

f. Position canopy EXRAY (COMMIKE III) battery on battery adapter of module assembly so that 4 connectors mate properly. Be careful to support assembly, which is now top-heavy.

g. Apply antiseize compound CINDOL 2321 (Army 7269497/T-6120, E.F.H. Co.) to threads of extension assembly.

h. Install lower housing assembly with attached end cap. Use spanner wrenches (figure 4-3E) to screw housing onto extension assembly until secure; the quad-X-seal will be covered.

3. Insure that test enable screw at top of MA56 is tightened securely. The battery will be drained if the screw is loose.

a. Lift MA56 and shake to verify if battery is securely installed.

b. As necessary, tighten lower housing with spanner wrenches until no internal *movement of* the battery is sensed when MA56 is shaken.

4. MA56 operation may be tested before packaging as follows.

a. In accordance with T.O. 31S9-2USQ46-1, tune the Radio Frequency Monitor Set AN/USQ46A, (portable receiver) to the *transmitter channel* of MA56.

b. Remove test enable screw at forward end of MA56 (figure 4-3D)

NOTE

If it happens that the MA56 receiver and transmitter are tuned to the same frequency, the emission generator, EXRAY, and portatale must be so located that the portatale receives only the relayed transmission during test.

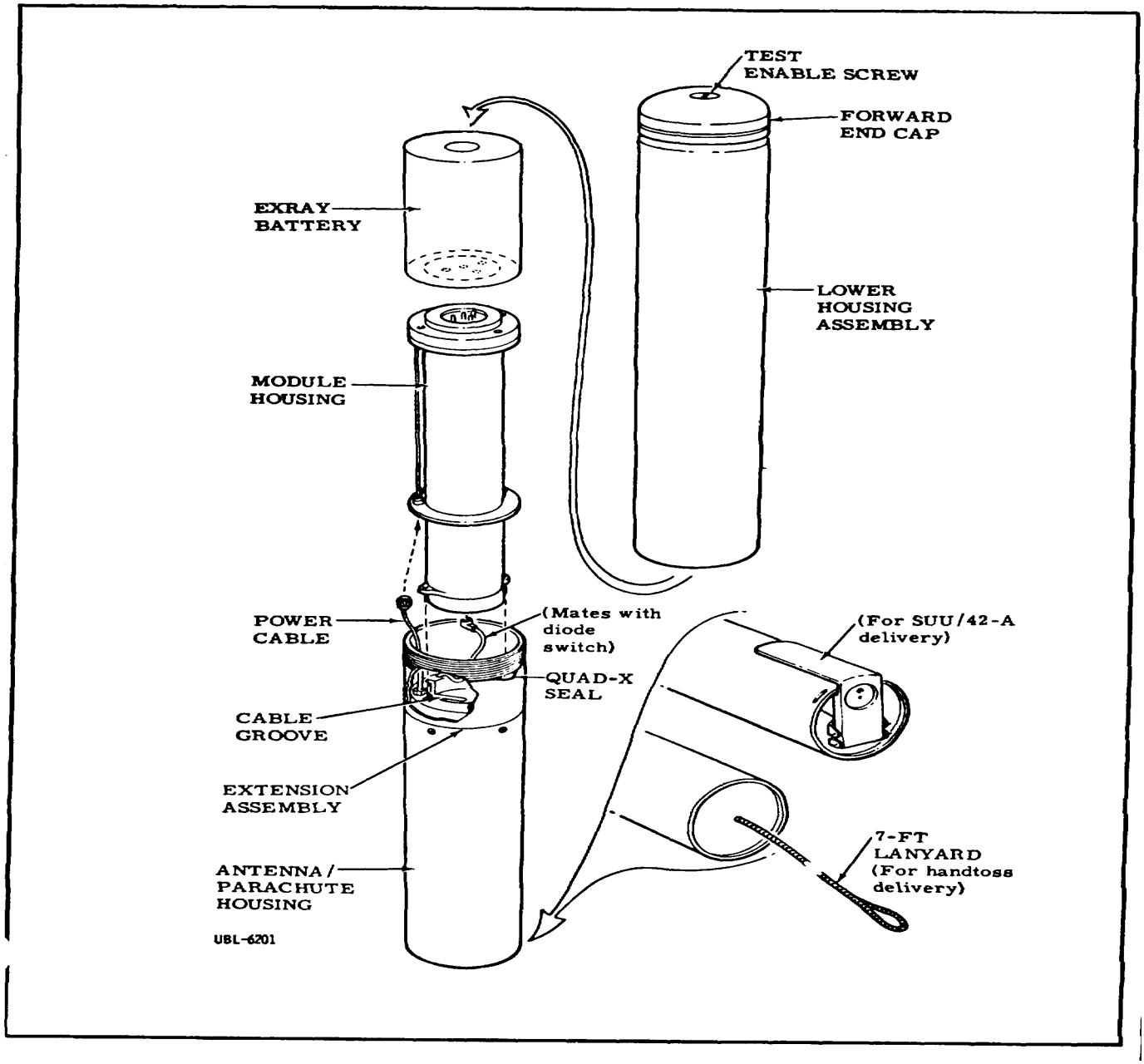


Figure 4-3D. MA56 EXRAY Exploded View

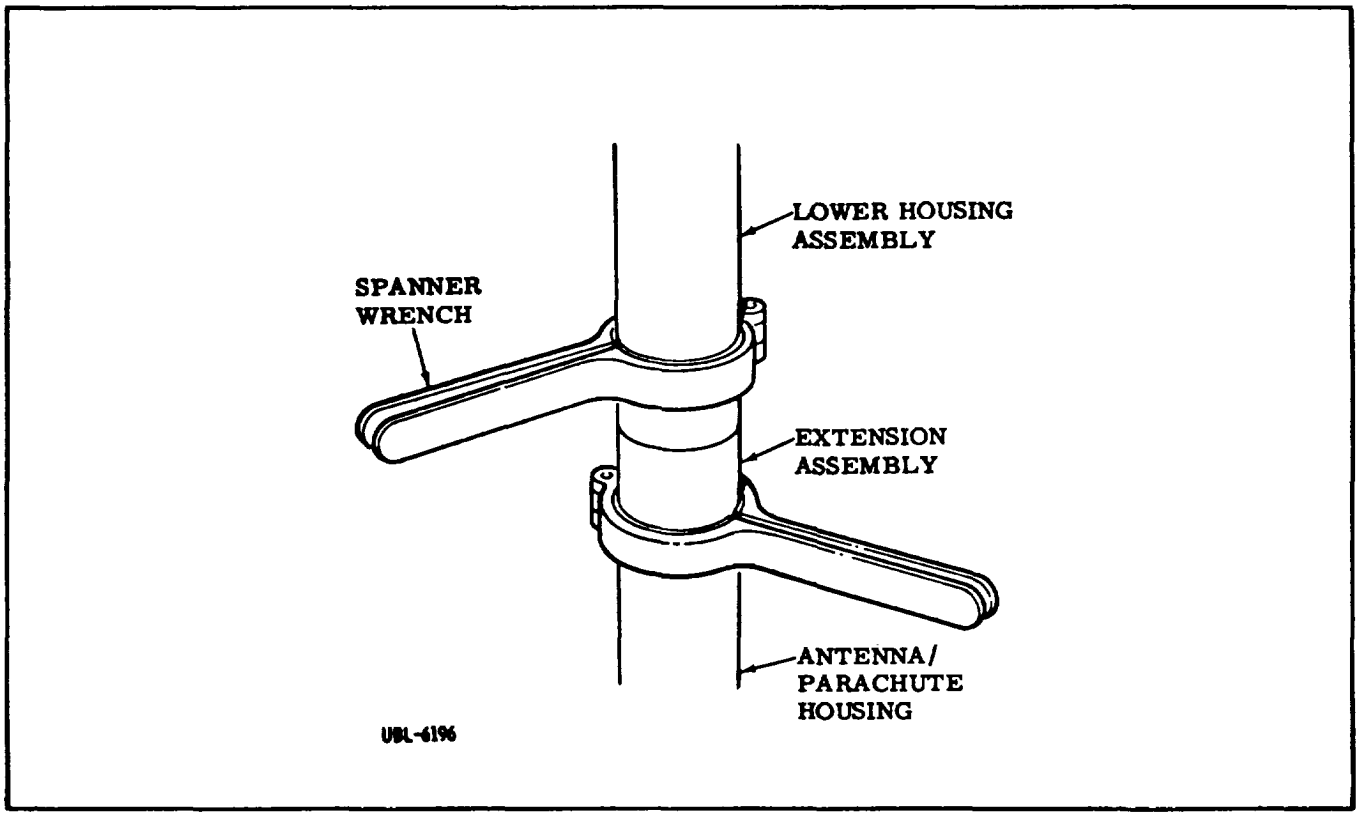


Figure 4-3E. MA56 EX

c. Using emission generator (paragraph 425A. 2.) or MA86 EXRAY Transmitter Test Unit (described in SM EXRAY-1), transmit signal on receiver channel of MA56. Insure that portatale receives signal.

d. Turn off equipment.

e. Install and tighten test enable screw of MA56 securely.

5. Install MA56, forward end first, in MA56 container (figure 4-3F). Screw cap on container. Insure that Record of Assembly/Implantation accompanies MA56.

4-25C. BACKPACK EXRAY ASSEMBLY

1. Following stack test, complete part I information on Record of Assembly/Implantation (figure *Y Case Assembly* 4-3B). Rotate module stack as a unit on U7651 fixture if necessary to read data to be recorded. Remove U7650 from U7651 so that module stack can be slid into module can.

2. As necessary, remove aft end cap assembly (figure 4-3G) from module can. Carefully slide assembled stack into can. Do not permit any part of stack to be unsupported during installation.

NOTE

Procedures in paragraphs 4-25C.3 and 425C.4 are alternatives. The aft end cap assembly P99556 with 6 screws on the aft face (figure 4-3H) is removable and permits later replacement of receiver or transmitter; the aft end cap P96683 with a groove around it is permanently fixed in the module can.

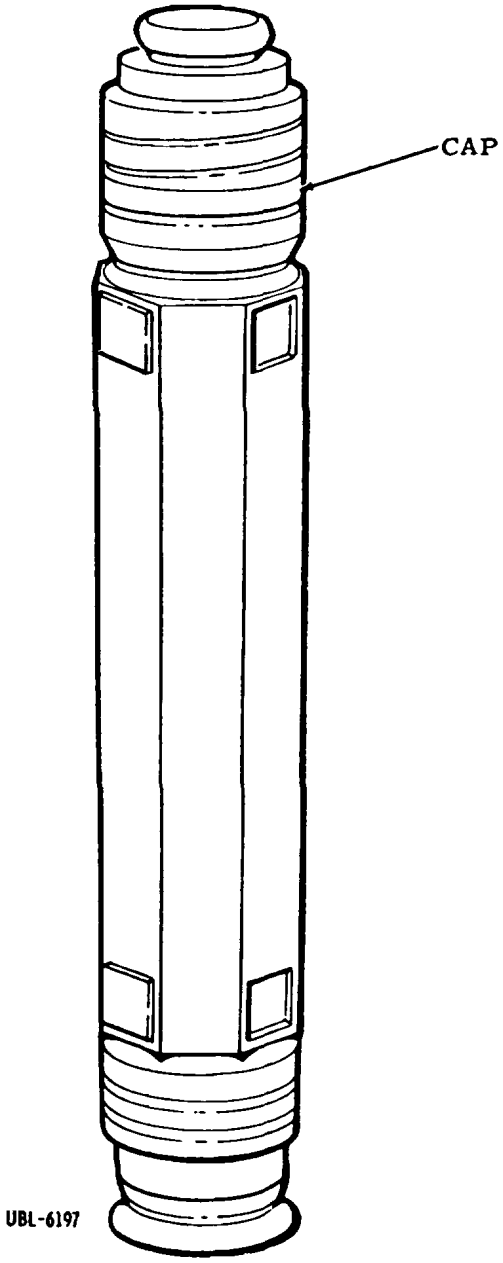


Figure 4-3F. MA56 Container

3. On aft end cap P96683, apply adhesive (EPON 934) to 1-inch band on aft end near D-ring (figure 4-3G). Place end cap on working surface, Drink down.

a. Supporting modules, invert module can near aft end cap, connect RF connector on end cap to TC530 Diode Switch, and position can on aft end cap.

b. Rotate can to align keys and keyways of TC533DW and forward end cap. When components are properly aligned, the module can drops over the aft end cap and is flush with it.

c. Keeping aft end cap flush with end of module can lift can.

d. Rotate aft end cap as necessary until D-rings are aligned within 1/8 inch.

e. Keeping D-rings aligned, position module can in special holding fixture (P/N P96371, figure 4-3G), aft end cap toward end with spring, and other end in adapter. D-rings on both end caps engage slots in fixture and adapter.

f. Using TC614 crimping tool, crimp module can approximately 3/8 inch from aft end: Tighten roller, rotate crimping tool, and repeat until can bottoms in groove of end cap (approximately 0.06 inch depth).

g. Using TV-Radio Service Solvent (G.C. Electronics) or equivalent thinner, clean excess adhesive from can.

4. To install aft end cap P99556, support modules in can and lift can so that closed end is up.

a. Manually rotate can or modules in can until keys and keyways are aligned at forward or upper end of can. Alignment in indicated by feel and by further insertion of modules in can approximately 1/8 inch.

b. Keeping modules in place, position can on working surface.

c. Mate RF connector of aft end cap to TC530 Diode Switch.

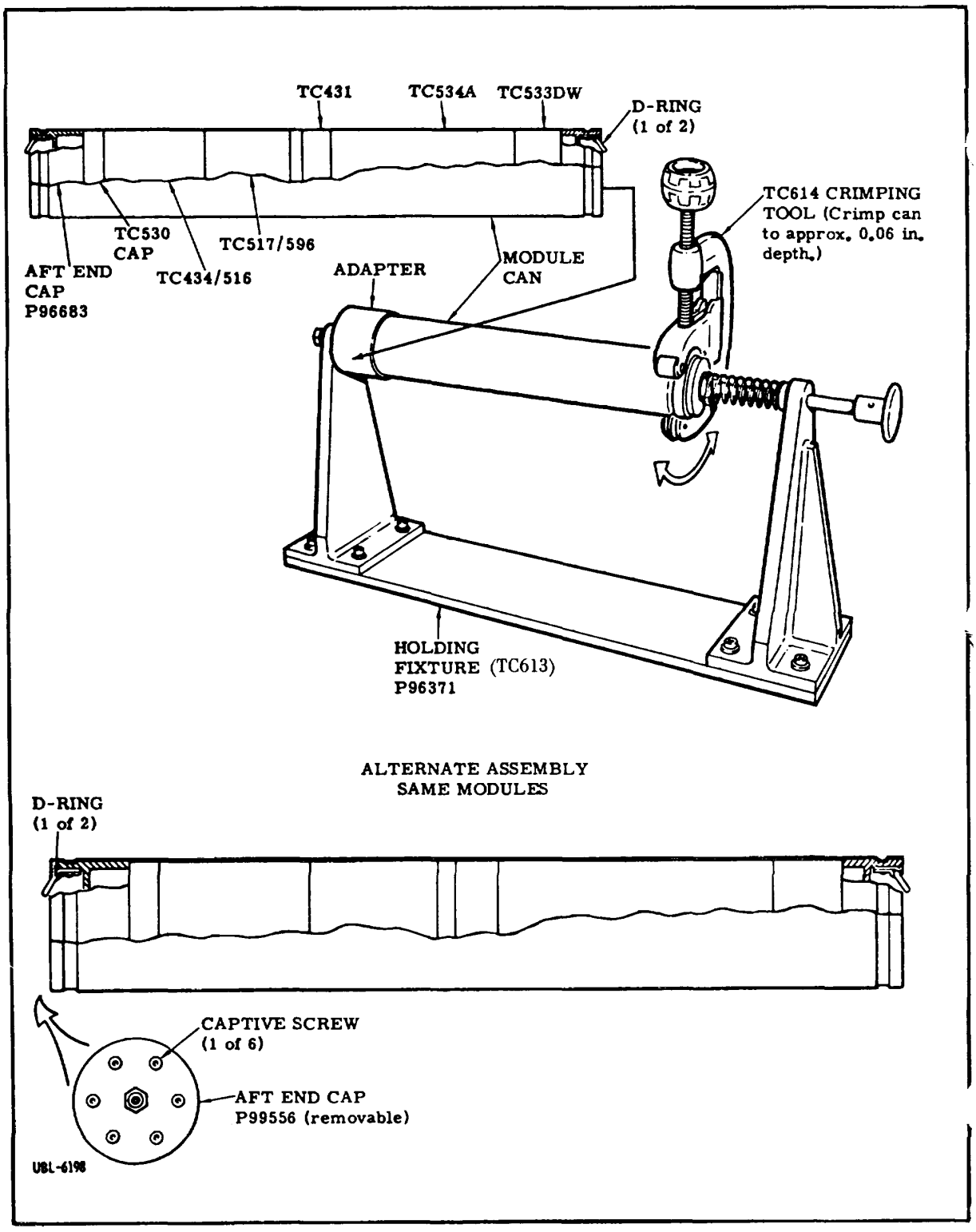


Figure 4-3G. MA87 EXRA Y Module Can Assembly

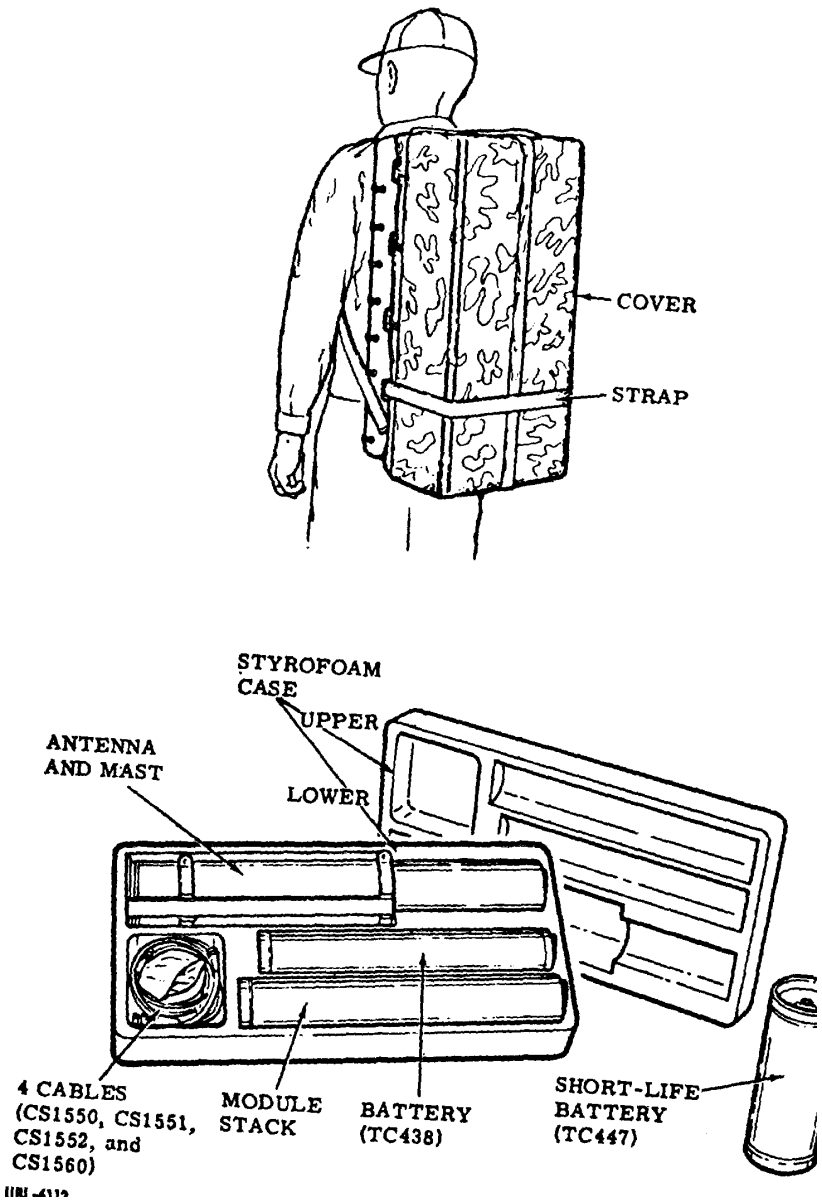


Figure 4-3H. MA87 EXRA Y Package

d. Install aft end cap, screws outward. Rotate cap until D-rings at both ends are aligned within 1/8 inch.

e. Using 7/64-inch hex key, tighten 6 captive cap screws in end cap securely. The secured segments compress a seal tightly against the inner surface of the module can.

5. Position module can in lower case of MA87 (figure 4-3H).

NOTE

Procedures in paragraphs 4-25C. 6 and 425C. 7 are alternates. If battery module (TC438 or TC447) is received in battery can P96674 with end caps installed, proceed to paragraph 4-25C. 7.

6. If battery is received as a module, test it in accordance with T.O. 31S9-4-19-1, using PT1580, CA 1120 cable, and tester adapter on P1.

a. Position forward and aft end cap assemblies on flat surface with D-rings down.

b. Apply adhesive (EPON 934) to end cap surfaces which will contact battery can. This adhesive has a 6-hour drying time.

c. Position TC438 after test in battery can P96674-000 or position TC447 after test in battery can P96674-100. Insert end with test enable switch onto aft end cap assembly.

d. Lift can and aft end cap; invert can and position connector end of battery onto forward end cap assembly.

e. Lift battery can with end caps in place and rotate either end cap until D-rings on both end caps are aligned within 1/8 inch.

f. Keeping D-rings aligned, position battery can in special holding fixture (P/N P96371, figure 4-3G) so that D-rings on both end caps engage slots in fixture.

g. Using TC614 crimping tool, crimp module can approximately 3/8 inch from each end. Tighten roller, rotate crimping tool, and repeat until can bottoms in groove of each end cap (approximately 0.06 inch depth).

h. Using TV-Radio Service Solvent (G.C. Electronics) or equivalent thinner, clean excess adhesive from can.

i. Remove battery can from holding fixture.

7. If battery is received in battery can with end caps installed, test battery in accordance with procedures in SM PT1580-2 and as follows.

a. As necessary, disconnect P2 of CA1120 cable from BATTERY connector on PT1580 panel.

b. Connect test cable furnished for EXRAY battery test to BATTERY connector on PT1580 and to connector on MA87 battery can.

c. Test battery and disconnect cable.

8. MA87 operation may be tested before packaging as follows.

CAUTION

The green-banded test cable CS1552 is the only one used in test, and the antenna assembly must not be extended. If the redbanded cable CS1551 is used, EXRAY will be disabled; if the antenna is extended it cannot be repackaged.

a. Connect RF connector of CS1552 to power connector on module can. Connect other end of CS1552 to battery can.

b. Connect RF lead of antenna assembly (not extended) to RF connector on module can.

c. Tune AN/USQ-46 Radio Frequency Monitor Set (portable receiver) to transmitter channel of MA87.

NOTE

If it happens that the MA87 receiver and transmitter are tuned to the same frequency, the emission generator, EXRAY, and portatale must be so located that the portatale receives only the relayed transmission during test.

d. Using emission generator (paragraph 425A. 2) or MA86 EXRAY Transmitter Test Unit (described in SM EXRAY-1) transmit signal on receiver channel of MA87. Insure that portatale receives signal.

e. Turn off equipment. Disconnect cables.

9. Package MA87 as follows.

a. Position battery can in lower case of MA87 (figure 4-3H).

b. Similarly, install cables and antenna assembly as shown in figure 4-3H.

c. Position upper case on lower case, install backpack cover and strap, and insure that Record of Assembly/Implantation accompanies package.

NOTE

The battery can and module can should not be deployed (e.g., immersed in water) within 6 hours of the time adhesive was applied.

4-25D. MA88 HI-RISE EXRAY STACK TEST.

1. Assemble module stack as specified in paragraph 4-25A.1. except that timing and destruct module is TC619 and diode switch is TC620.

2. Prepare emission generator and PT1585 and test stack as specified in paragraphs 4-25A.2. through 4-25A.4.

3. Test TC438 Battery as specified in T.O. 31S9-4-19-1, using PT1580, CA1120 cable, and tester adapter on P1.

4-25E. MA88 HI-RISE EXRAY ASSEMBLY.

Following stack test, complete part 1 information on Record of Assembly/Implantation (figure 4-3J).

1. Position spike case horizontally (front end supported) on working surface. Attach TC665 Assembly Trough (figure 4-3K) to rear end of case by several 1/4-28 by 3/4-inch socket head cap screws.

a. Level rear end of trough as necessary by adjusting movable leg.

b. If nose is not installed on case, apply room-temperature vulcanizing silicone rubber adhesive (silastic 140) to threads of aft nose section and install it; tighten securely by means of nose spanner wrench (P/N P69035).

c. Apply electrical insulating compound DC-4) to preformed packing (AN6227B-19), and position it in groove on face of aft nose section.

d. Install forward nose section by threading it on aft nose section; use 1-inch open-end wrench.

2. Position TC438 in trough, switch end toward spike case.

3. Position EXRAY module stack in trough so that TC619 module is toward battery connector. Carefully engage TC619 and battery, using module alignment marks.

NOTE

The battery is now furnishing power to the module stack. Completion of the assembly without delay will conserve battery power.

4. Position antenna cable dispenser and mast assembly in trough; handle carefully to insure that telescoped sections do not move relative to each other and igniter cable remains in grooves of outer mast section and cable dispenser. If necessary, slide module stack part way into spike case to permit convenient assembly.

EXRAY - RECORD OF ASSEMBLY/IMPLANTATION

IMPORTANT: REMOVE THIS TAG PRIOR TO IMPLANT

PART I - ASSEMBLING ORGANIZATION

Receiver Freq. Channel No._____

Transmit Freq. Channel No._____

TC517 Receiver Serial No._____
TC434 Transmitter Serial No._____
TC620 Diode Switch Serial No._____
TC431 Encoder Serial No._____
TC534A Decoder Serial No._____
TC619 Timing & Destruct Module Serial No._____

PART II - EMPLOYING ORGANIZATION

Type of Battery Used _____
Date Implanted _____
Location of Implant _____
Unit & Individual Making Implant _____
Zulu Time of Implant _____
Type of Antenna _____

REMARKS:

Figure 4-3J. Record of Assembly/Implantation (MA88)

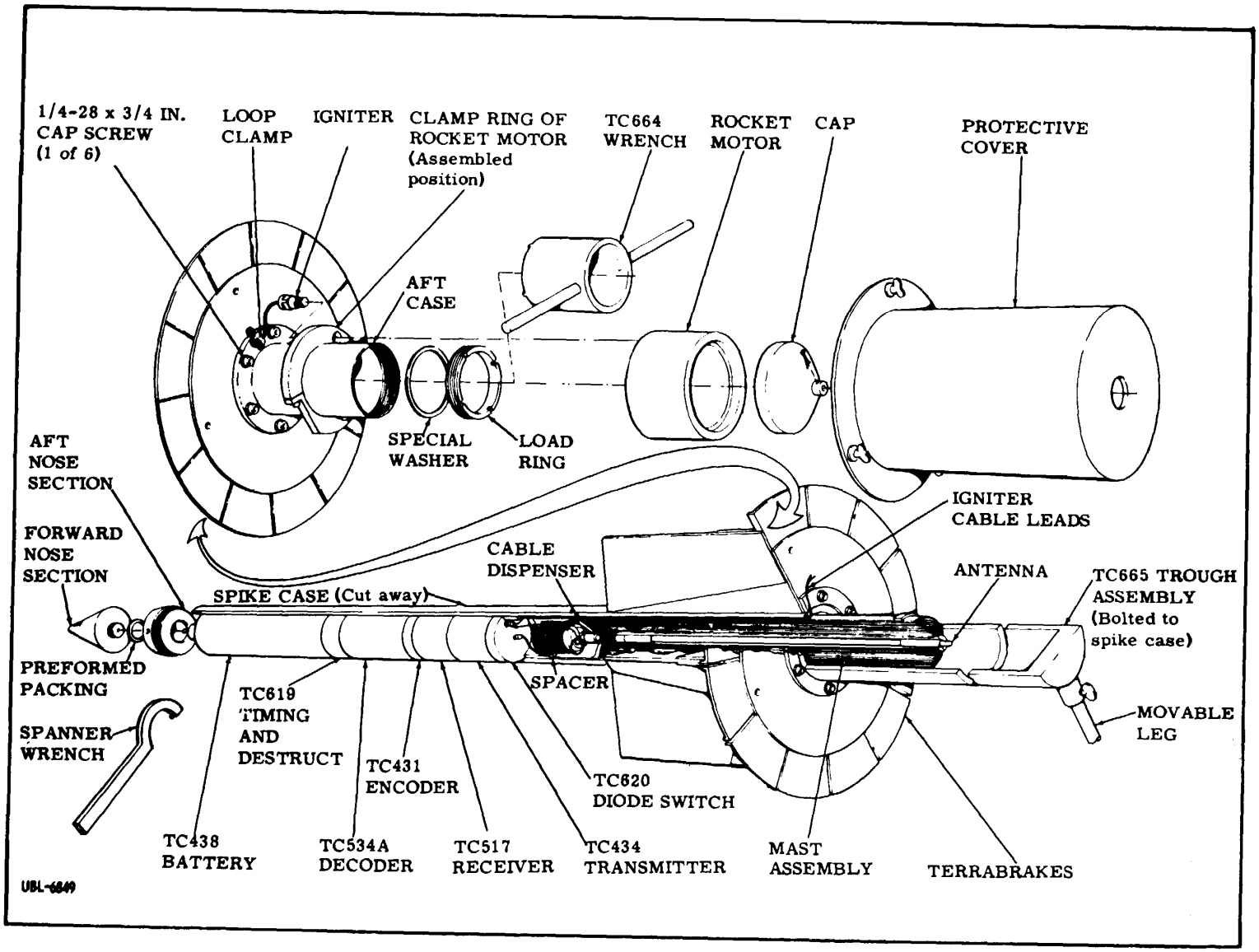


Figure 4-3K. TC665 Trough, Spike Case, and EXRA Y Components.

CAUTION

Cable damage may result if the igniter cable and antenna cable are twisted so as to contact each other.

5. Assemble as follows. Remove tape holding cables as necessary.

a. Position spacer between antenna cable dispenser and TC620. Rotate it as necessary to align notch (groove) with groove in dispenser.

b. Rotate mast assembly in trough as necessary to permit connecting cables without twisting them, and lead igniter cable and antenna cable ends through spacer toward TC620.

c. Connect antenna receptacle to center receptacle on TC620.

d. Connect igniter cable to outer receptacle on TC620. Do not disturb wire connected to igniter cable.

6. Check all connections between modules and cables from antenna cable dispenser and mast assembly to diode switch.

a. If all connections are properly made, seat spacer against TC620 and antenna dispenser against spacer.

b. Carefully push entire assembly into spike case until seated. Approximately 7 inches of the mast assembly extends beyond the case.

c. Remove trough assembly from spike case.

7. Before removing tape on end of mast sections, examine figure 4-3L and note the following conditions.

a. The cable dispenser houses antenna cable to provide for extension of 14 of the 15 antenna mast sections. This cable is coiled in a figure 8 on 2 plastic form guides and leads aft through the funnel end of the dispenser.

b. Antenna cable length of 21 inches plus choke are housed in the 3 small mast sections. The antenna is attached to section 1, the tip section.

The 21 inches of coaxial cable, from the base of the tip section, is coiled in 14 turns, and held by the choke, in the section 2 base.

c. Therefore, manual extension and forced return of mast sections to their assembled position, or any twisting of sections relative to each other, can result in antenna cable damage or faulty deployment of the EXRAY.

8. Install aft case as follows.

a. Carefully remove tape on aft end of mast sections. Avoid any extension of mast sections from assembly, and avoid twisting sections.

b. Install rubber gasket on spike case; align mounting holes.

c. Place aft case on mast sections with cable slot in aft case aligned with igniter cable from spike case.

d. Feed igniter cable through slot. Position aft case over mounting holes.

e. Install six 1/4-28 by 3/4-inch cap screws with flat washers. Tighten securely.

f. Position special washer, rubber side down, on antenna mast section.

g. Install load ring. Using TC664 wrench, tighten securely.

9. Perform system test as follows.

WARNING

The system test must be performed before igniter cables are spliced to igniter leads because, in event the system has faults and permits excessive current to flow, it is possible that the igniter might fire and extend mast sections on the bench. In other words, a personnel hazard could possibly arise from the system test if the igniter were installed.

a. Tune AN/USQ-46 Radio Frequency Monitor Set (portatale receiver) to transmitter channel of MA88.

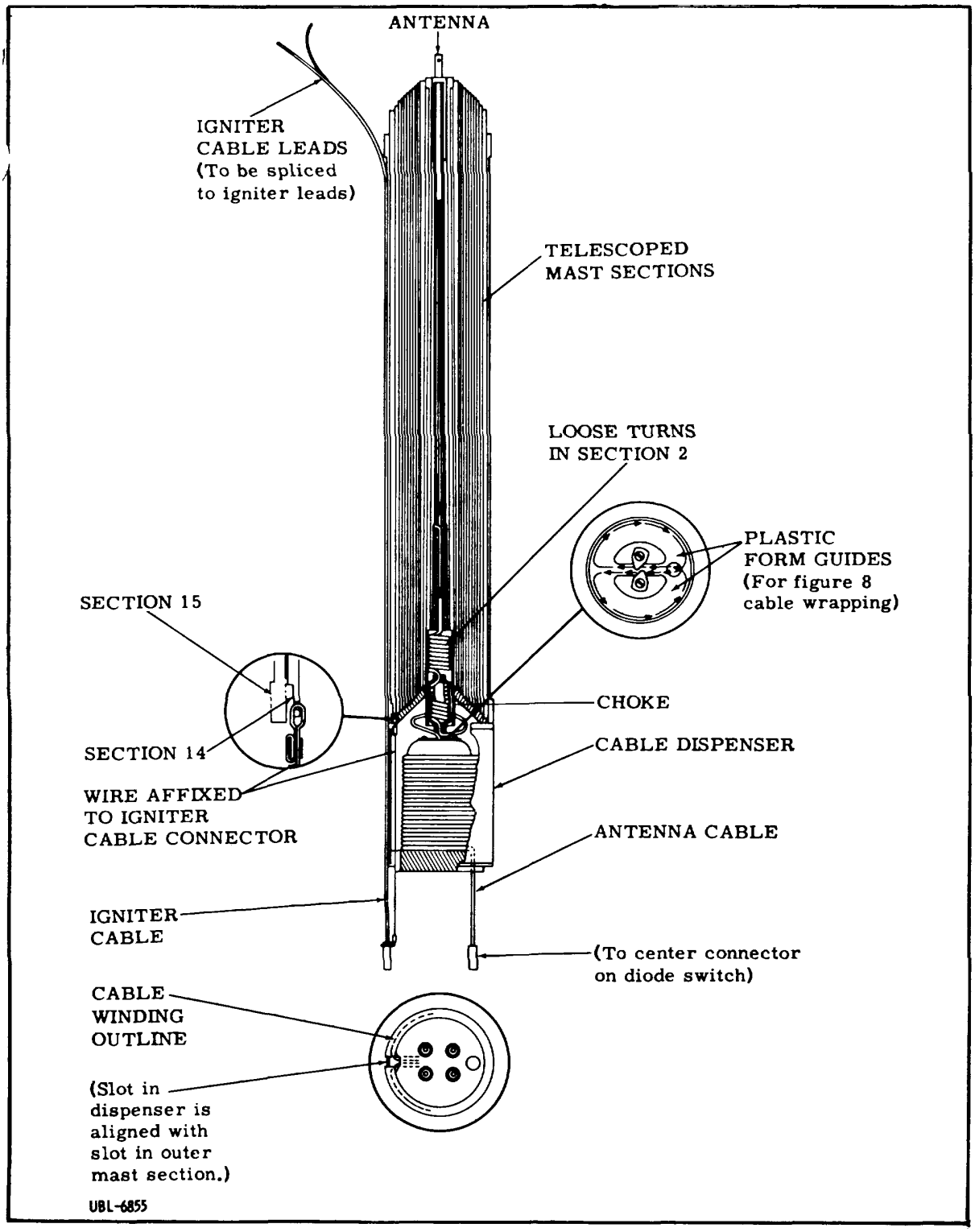


Figure 4-3L. Details of Antenna Cable Dispenser and Mast Assembly

b. Remove forward nose section to activate battery; use 1-inch open end wrench.

NOTE

If it happens that the MA88 receiver and transmitter are tuned to the same frequency, the emission generator, EXRAY, and portatale must be so located that the portatale receives only the relayed transmission during test.

c. Using emission generator (paragraph 4-25A.2.) or MIA86 EXRAY Transmitter Test Unit (described in SSM EXRAY-1), transmit signal on receiver channel of MA88. Insure that portatale receives signal.

d. Turn off equipment.

e. Insure that preformed packing in aft nose section is good; if necessary replace it.

f. Reinstall forward nose section; use 1-inch open end wrench, and tighten securely.

10. Check and install igniter as follows.

a. Remove shorting ring on igniter leads.

b. Using MB Electronics model 101-5BFG igniter tester or equivalent, insure that resistance is I + 0.2 ohms.

c. Remove 3/8-24 dummy igniter bolt from rocket motor.

d. Install igniter in motor mounting and finger-tighten.

11. Test igniter cable leads from antenna assembly by using voltmeter set on 30 or 50-volt scale. No voltage should be present.

12. Stand spike case on nose and vibrate slightly to seat mast sections on antenna cable dispenser (figure 4-3N). The rocket motor mounting tip of the mast section extends a maximum 1 inch from other mast sections.

13. Install motor on aft case as follows.

NOTE

The motor cap is secured to the motor only by 3 locking balls (figure 4-351). The cap must be held in place by tape and allowed to remain undisturbed until the load ring is tightened.

a. Slip motor on aft case; center cap of motor on antenna tip, and seat motor on aft end of aft case. The motor is seated when the cap does not wobble.

b. Using screwdriver, rotate antenna tip as necessary to align holes in antenna tip and motor cap.

c. Install cotter pin 3/4 inch long and 3/32 inch in diameter. Secure pin.

d. Rotate motor either way as necessary to insure a 30 to 45° offset of igniter from loop clamp location shown in figure 4-3K.

e. Using 5/32-inch hex key, tighten 10-32 cap screw in clamp ring of motor securely. Tighten 2 setscrew in ring also.

f. Remove tape holding cap on motor.

14. Using room-temperature vulcanizing silicone rubber adhesive (silastic 140), seal opening in aft case around igniter cable leads.

15. Splice igniter cable leads to igniter 1 at a time as follows. As necessary, cut igniter leads to 4 ± 1 inch length.

a. Using insulated feed-through terminal, insert 1 lead from igniter cable in terminal and crimp it.

b. Insert I lead from igniter in same terminal and crimp it.

c. Similarly insert and crimp leads in other terminal.

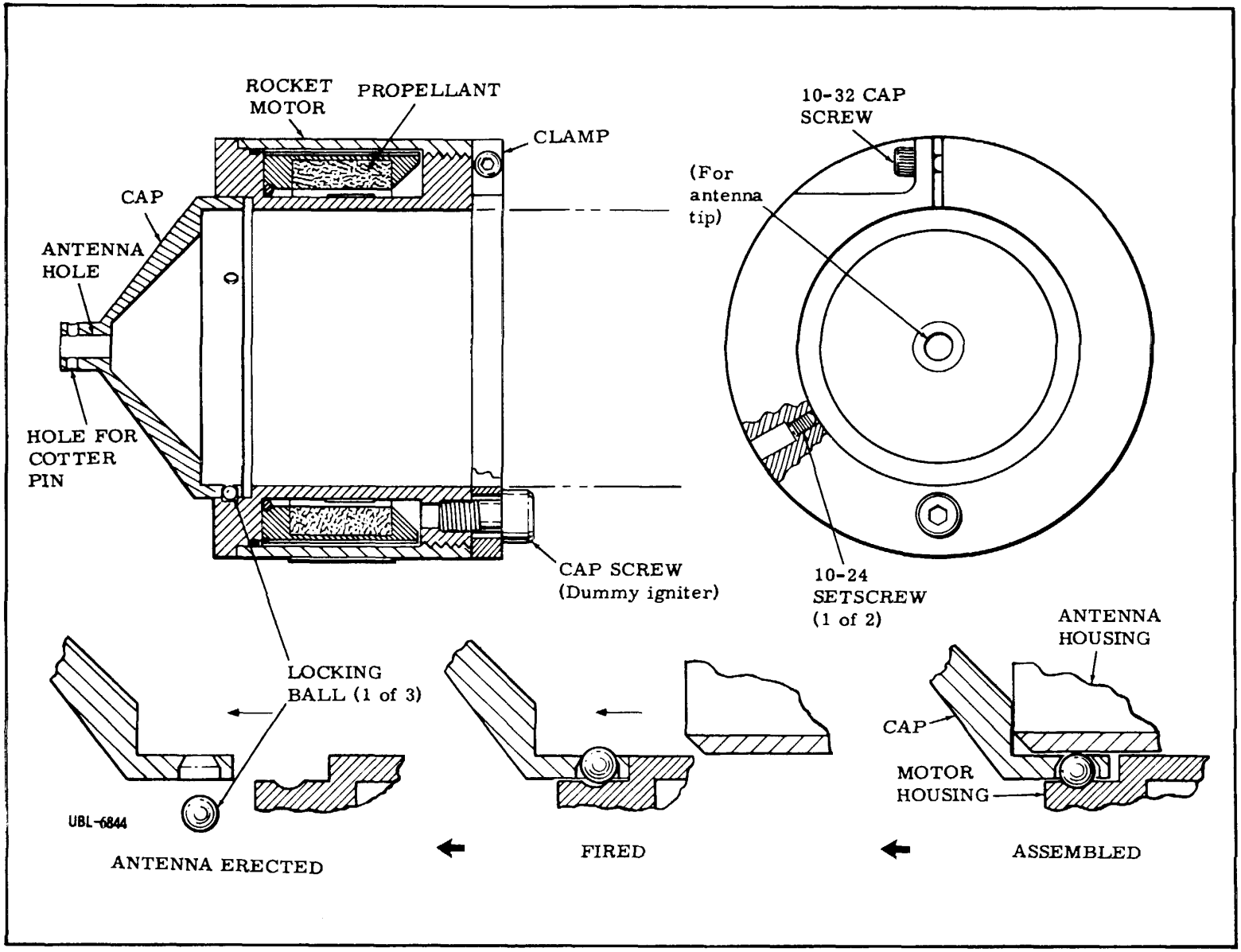


Figure 4-3M. Rocket Motor Details

d. Using 3/8-6 loop clamp and 6-32 by 1/4inch panhead machine screw, mount terminals on flange of aft case. Tighten screw securely.

16. Install protective cover by positioning cover on spike case and securing it with 3 Dzus fasteners.

17. Package MA88 (figure 4-3N) as directed by higher authority. Insure that Record of Assembly/ Implantation (figure 4-3J) accompanies MA88.

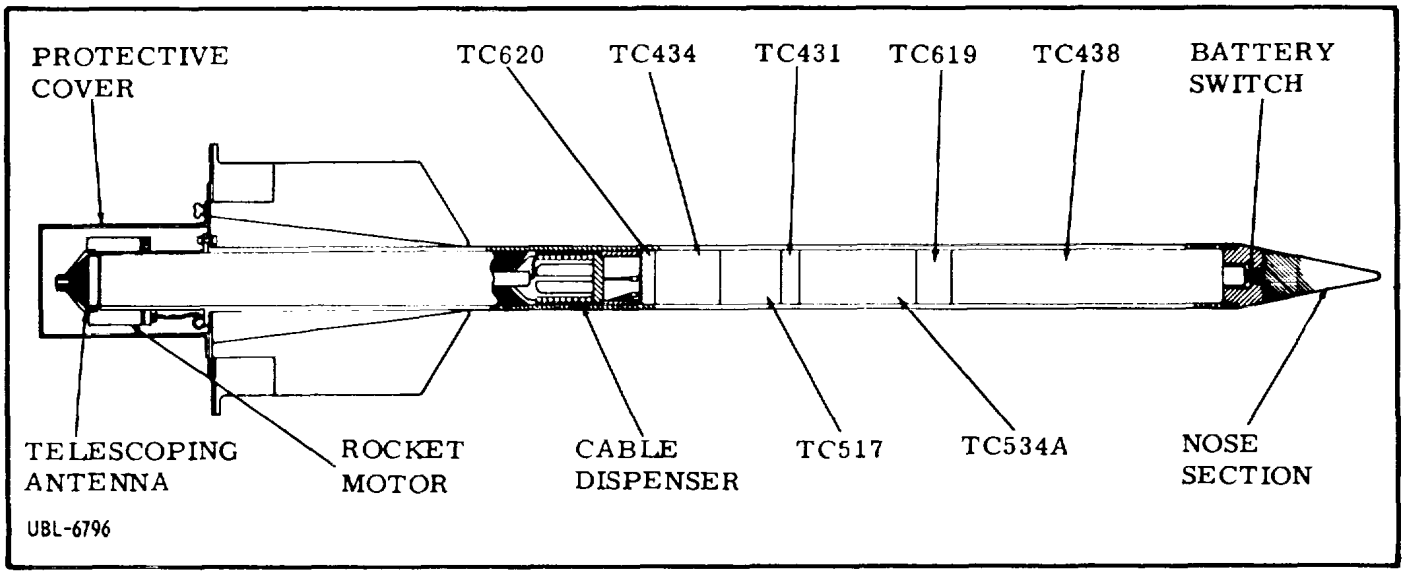


Figure 4-3N. Assembled Hi-Rise EXRAY

4-25F. Assembly of MA124 CAEDET (H) Long Stack

1. PREPARATION OF PT1585.

a. On PT1585 (figure 4-1), insure that AC PWR and BATTERY SIMULATOR toggle switches are at OFF.

b. At rear of PT1585, connect AC INPUT to source of 105 to 125 VAC 50 to 400 Hz, 5 amperes.

c. Operate AC PWR switch to ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps may light.

d. Rotate AUDIO LEVEL knob to a position approximately 1/4 turn from maximum. This knob may be adjusted later as desired for audibility.

e. Momentarily press LAMP TEST button to insure that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO, and STATUS/COUNT lamps light.

f. After 1-minute warmup, momentarily press RESET switch. Any lighted RECEIVED MESSAGE lamps go out.

2. Assemble fixtures as follows:

NOTE

Apply lubricant to cap screw threads used to attach V-block P/N 7242733.

a. Install U7650 connector assembly, extension fixture, and V-block fixtures on U7651 fixture as shown in figures 4-3P and 4-3Q.

b. Connect P1 of CA1543 to J1 of PT1585.

c. Lift handwheel of U7651 module assembly mechanism and rotate it away from module tray.

3. Mate modules in fixtures as follows.

a. Note markings on code plug for stack to be tested. On L CODE PLUG switches of PT1585, rotate RF CHANNEL thumbwheels to enter first 3 digits of code.

b. On ID thumbwheels, enter next 2 digits of code. (The following 2 digits are function, 57 or 77; note function code also for later use.)

CAUTION

TC659 can be damaged if a low impedance load is connected to the audio terminal (3, in figure 4-3R) of the transmitter. Connect cables only as shown in figure 4-3Q.

c. On T XTAL CHANNEL thumbwheels, enter channel number marked on T-module.

d. Starting at left end of stack shown in figure 4-3Q, place first module in U7651 tray so that male pins are at left and epoxy-filled groove in TC659 is upward. Similarly place remaining modules in tray; align keys and keyways in modules.

e. Feed right angle connector ends of cables shown in figure 4-3R and 4-3Q through housing, connect cables, and position housing on fixture.

f. Check alignment of fixtures, housing, and modules.

g. Position handwheel of U7651 near housing, turn handwheel clockwise, and mate modules. Continue turning until no gap remains between modules.

h. Assemble other components as shown in figure 43Q.

4-25G. Test Procedures for MA124 Long Stack

1. Insure that calibrator is not turned on. Set switches as follows:

a. Rotate BATTERY SIMULATOR switch to NOMINAL.

b. Center Hamlin magnet (H-34) longitudinally over epoxy-filled groove in TC659 module (figure 4-3Q).

c. On PT1585, operate BATTERY SIMULATOR toggle switch to ON. BATTERY SIMULATOR lamp lights. Power is now applied to the stack.

2. Check current drain (standby current) of stack as follows:

a. Rotate MONITOR selector switch to INPUT CURRENT 500 MA. Insure that MONITOR meter does not deflect more than 11/2 minor scale divisions (meter should read less than 15 ma. on 500-ma. scale).

b. Press and hold 50 MA button. Meter does not deflect more than 15 minor scale divisions, or 15 ma. on 50-ma. scale. Release button.

c. If current exceeded 15 ma., any module may be at fault.

3. Check transmitter current and power and audio response as follows:

a. If code plug function is 77, set PT1585 thumbwheels as indicated for test 1 in table 4-8B. If code plug function is 57, proceed to step *d* below.

b. Momentarily press TRANSMIT button.

c. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. ERROR lamp does not light. STATUS/COUNT lamps light as indicated in table 4-8B.

d. Set thumbwheels on PT1585 as indicated in table 4-8B for test 2.

e. Set oscillator to 50 uv. output at 1 kHz, and turn on oscillator.

f. Momentarily press TRANSMIT button and note MONITOR meter reading.

g. Meter reads 300 to 450 ma.

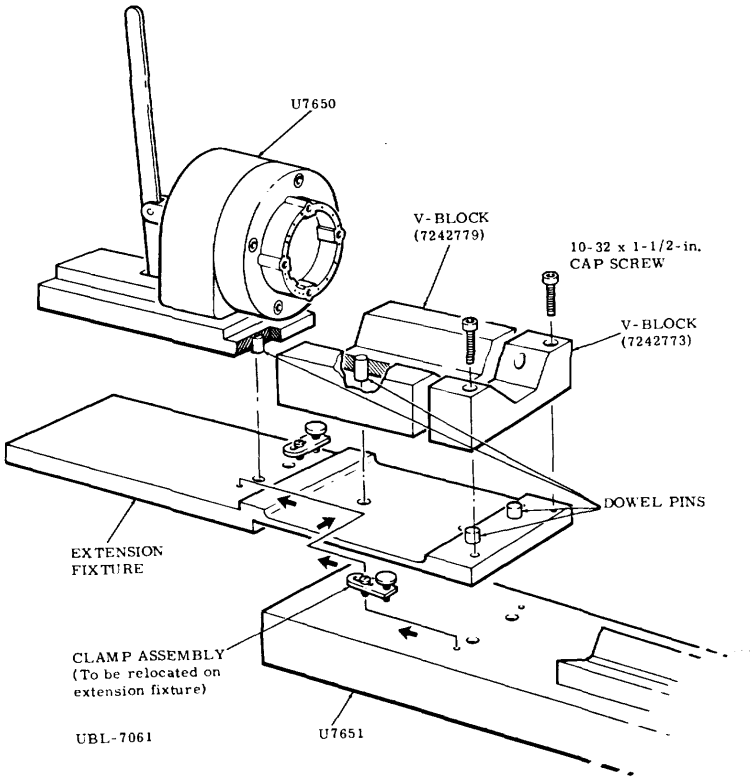


Figure 4-3P. Fixtures for Test Setups of CAEDET Family of Sensors.

Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps light. ERROR lamp does not light; STATUS/COUNT lamps light as shown in table 4-8B. AUDIO lamp lights. A 1,000-HZ tone is heard.

NOTE

The H-P 208A oscillator may have to be operated on battery power if AC line interference is observed.

h. Repeat test 2 in table 4-8B as necessary to check readings and responses just indicated.

i. Rotate MONITOR selector switch to OUTPUT WATTS 4W.

j. Momentarily press TRANSMIT button. Meter reads 2 to 4 w. on 5-w. scale. Other responses are the same as in step g above.

4. Check command functions by performing tests 3 through 12 in table 4-8B.

a. In each test, momentarily press TRANSMIT button. STATUS/COUNT lamps, and ERROR lamp does not light.

b. For test 9, no audio tone is heard.

5. Check TC662 and short message transmission by performing tests 13 and 14 in table 4-8B as follows:

a. Set calibrator REPETITION RATE HZ to LINE and output to -40 db above 1 uv/MHz. Turn on calibrator.

b. On PT1585, rotate FUNCTION thumbwheels to 00. Leave COMMAND thumbwheels at 04.

c. Gradually increase calibrator output until stack transmits. Output should be less that +35 db. The stack transmits approximately every 10 seconds. Some RECEIVED MESSAGE lamps light as before, but no ERROR or STATUS/COUNT lamp lights.

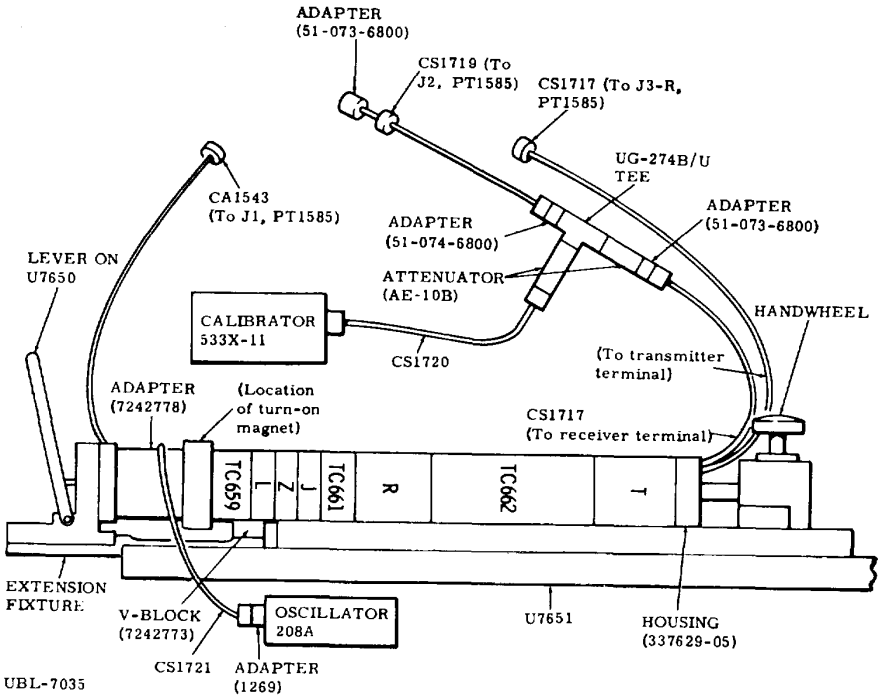


Figure 4-3Q. Test Setup for MA124 CAEDET (H)

NOTE

If activation's occur prior to turning on calibrator, replace TC662. If activation's persist, replace TC662 again. If activations still occur, RF interference is present and TC662 sensitivity cannot be checked.

d. Allow sensor to transmit 3 times and turn off calibrator.

e. Perform test 14, noting correct lamp indications as before.

f. Remove turn-on magnet from TC659.

COMMAND	PT1585 SETTINGS AND RESPONSE FUNCTION	COMMAND	STATUS/COUNT	MODULE MOST LIKELY AT FAULT IF TEST FAILS
1. Go to RT*	06	04	010000	R, J, Z, L
2. Send audio	03	01	000000**	R. J. Z. L. T, TC661
3. Status	06	02	010000	R, J, Z, L
4. Go to NRT	06	03	100000	R. J. Z. L
5. Status	06	02	100000	R, J, Z, L
6. Change gain	06	06	100000	J, Z
7. Go to 75 pps	10	08	000000	J, Z
8. Go to 300 pps	00	09	000000	J, Z
9. Send audio	06	01	100000	J
10. Go to NRT	06	03	100000	J
11. Read stored count	05	05	000000	J
12. Go to RT	06	04	010000	J
13. Operational check	00	***	000000	Z, TC662
14. Read stored count	05	05	000011	J, TC 662

*This command test is required only if the code plug is coded with a function 77; if coded with 57, omit test 1. In STATUS/COUNT column, a "O" indicates the lamp is off, an "L" indicates it is on.
**Repeat this test as often as required to permit check of transmitter current, transmitter power, and audio tone.
***Calibrator output causes stack to transmit (leave COMMAND thumbwheels at 04).

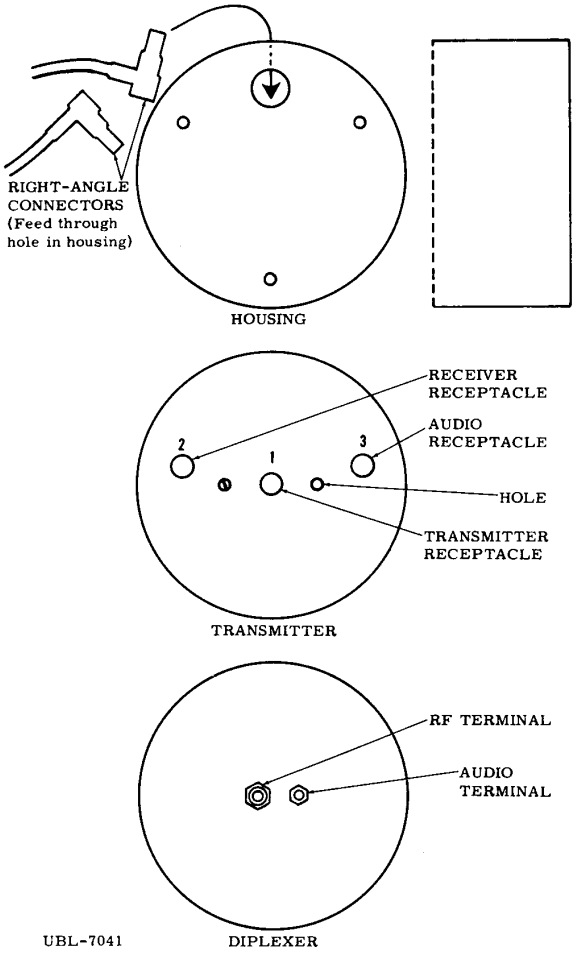


Figure 4-3R. Cabling to Transmitter or Diplexer.

6. Remove stack from test setup as follows:

a. Operate BATTERY SIMULATOR toggle switch to OFF. BATTERY SIMULATOR lamp goes out.

b. Turn handwheel on U7651 counterclockwise to release pressure on housing, and lift handwheel clear. Disengage stack from connector adapter by pulling TC659 free.

c. Leave modules connected for further assembly in sensor. As applicable, turn off and disassemble other equipment.

4-25*H.* Assembly Test of MA124 CAEDET (H)

1. The following procedures assume that test of the long stack has been completed and that the sensor has been completely assembled.

2. PREPARATION OF PT1585.

a. On PT1585 (figure 4-1), insure that AC 434Z Change 5 PWR and BATTERY SIMULATOR toggle switches are at OFF.

b. At rear of PT1585, connect AC INPUT to source of 105 to 125 VAC, 50 to 400 Hz, 5 amperes.

c. Operate AC PWR switch to ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps light.

d. Rotate AUDIO LEVEL knob to a position approximately 1/4 turn from maximum; this knob may later be adjusted as desired for audibility.

e. Momentarily press LAMP TEST button to insure that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO, and STATUS/COUNT lamps light.

f. After 1-minute warmup, momentarily press RESET switch. Any lighted RECEIVED MESSAGE lamps go out.

NOTE

The information unique to each sensor is marked on a tape attached to the sensor case.

g. Rotate PT1585 thumbwheels as necessary to enter T module numbers in T XTAL CHANNEL.

h. Similarly enter first 3 digits from code plug in RF CHANNEL and next 2 digits in ID.

i. Connect UHF antenna to J2 of PT1585.

j. Locate sensor not more than 10 feet from PT1585.

3. PROCEDURE.

NOTE

To minimize battery drain, perform assembly test as quickly as practicable after sensor is turned on.

a. Position turn-on fixture on windscreen end of sensor so that hook on one end seats on windscreen base plate for correct distancing. Rotate fixture until arrow on magnet assembly is aligned with parachute deployment timer in elongated hole of upper housing.

b. If code plug is coded with function 77, set PT1585 thumbwheels as indicated for test 1 in table 4-8B. If code plug is coded with function 57, proceed to step f below.

c. Momentarily press TRANSMIT button.

d. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light ERROR lamp must not light. STATUS/COUNT lamps light as shown in table 4-8B.

e. If an improper indication is received, disassemble sensor and repeat long stack test.

f. On PT1585, rotate FUNCTION thumbwheels to 03 and COMMAND thumbwheels to 01.

g. Momentarily press TRANSMIT button.

NOTE

Because of the close proximity of the PT1585 to the CAEDET microphone, feedback causes a tone to be generated. Generating this tone under these conditions indicates that the audio part of the sensor is operating properly.

h. A tone is heard. Tap sensor on windscreen. The tone is momentarily interrupted, indicating the sensor is operating properly.

i. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light.
AUDIO lamp lights. ERROR lamp must not light. STATUS/COUNT lamps light as shown in table 48B.

j. If an improper indication is received, disassemble sensor and repeat stack test.

k. Install UHF antenna on calibrator. Set REPETITION RATE HZ to LINE and output to -40 db above 1 uv/MHz. Turn on calibrator.

l. Set FUNCTION thumbwheels to 00.

m. Gradually increase calibrator output until sensor transmits. Output indicated on calibrator should be less than +50 db.

n. The sensor transmits approximately every 10 seconds. Some MESSAGE RECEIVED lamps light, matching EXPECTED MESSAGE lamps. No ERROR or STATUS/COUNT lamp lights.

o. If an improper indication is received, disassemble sensor and repeat stack test.

p. Remove turn-on fixture.

q. Turn off equipment.

425J. Assembly of MA125 CAEDET (G) Partial Stack

1. PREPARATION OF PT1585.

a. On PT1585 (figure 4-1), insure that AC PWR and BATTERY SIMULATOR toggle switches are at OFF

b. At rear of PT1585, connect AC INPUT to source of 105 to 125 VAC, 50 to 400 Hz, 5 amperes.

c. Operate AC PWR switch to ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps may light.

d. Rotate AUDIO LEVEL knob to a position approximately 1/4 turn from maximum. This knob may be adjusted later as desired for audibility.

e. Momentarily press LAMP TEST button to insure that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO, and STATUS/COUNT lamps light.

f. After 1-minute warmup, momentarily press RESET switch. Any lighted RECEIVED MESSAGE lamps go out.

2. Assemble fixtures as follows.

a. Install U7650 connector assembly, extension fixture, and V-block fixtures on U7651 fixture as shown in figures 43P and 4-3S for partial stack test.

b. Connect P1 of GA1543 to J1 of PT1585. thumbwheels of U7651 module assembly mechanism and rotate it away from module tray.

3. Mate modules in fixtures as follows.

a. Note markings on code plug for stack to be tested. ON L CODE PLUG switches of PT1585, rotate RF CHANNEL thumbwheels to enter first 3 digits of code.

b. ON ID thumbwheels, enter next 2 digits of code. (The following 2 digits are function, 57 or 77; note function code for later use.).

c. On T XTAL CHANNEL thumbwheels, enter channel number marked on T module.

d. Starting at left end of stack shown in figure 4-3S, place first module in tray so that male pins are to left, toward U7650. Similarly place other modules and housing; align marks and keys and keyways.

e. Feed right angle connector ends of cables as shown in figure 4-3R through housing, connect cables to transmitter and PT1585 (figure 4-3S), and position housing on fixture.

f. Check alignment of fixtures, housing, and modules.

g. Position handwheel of U7651 near housing, turn handwheel clockwise, and mate modules. Continue turning until no gap remains between modules.

4-25K. Test Procedures for MA125 Partial Stack

1. Set PT1585 switches as follows:

a. Rotate BATTERY SIMULATOR selector switch to NOMINAL.

b. Operate BATTERY SIMULATOR toggle switch to ON. BATTERY SIMULATOR lamp lights. Power is now applied to the stack.

2. Check current drain (standby current) of stack as follows:

a. Rotate MONITOR selector switch to INPUT CURRENT 500 MA. Insure that MONITOR meter does not deflect more than 1

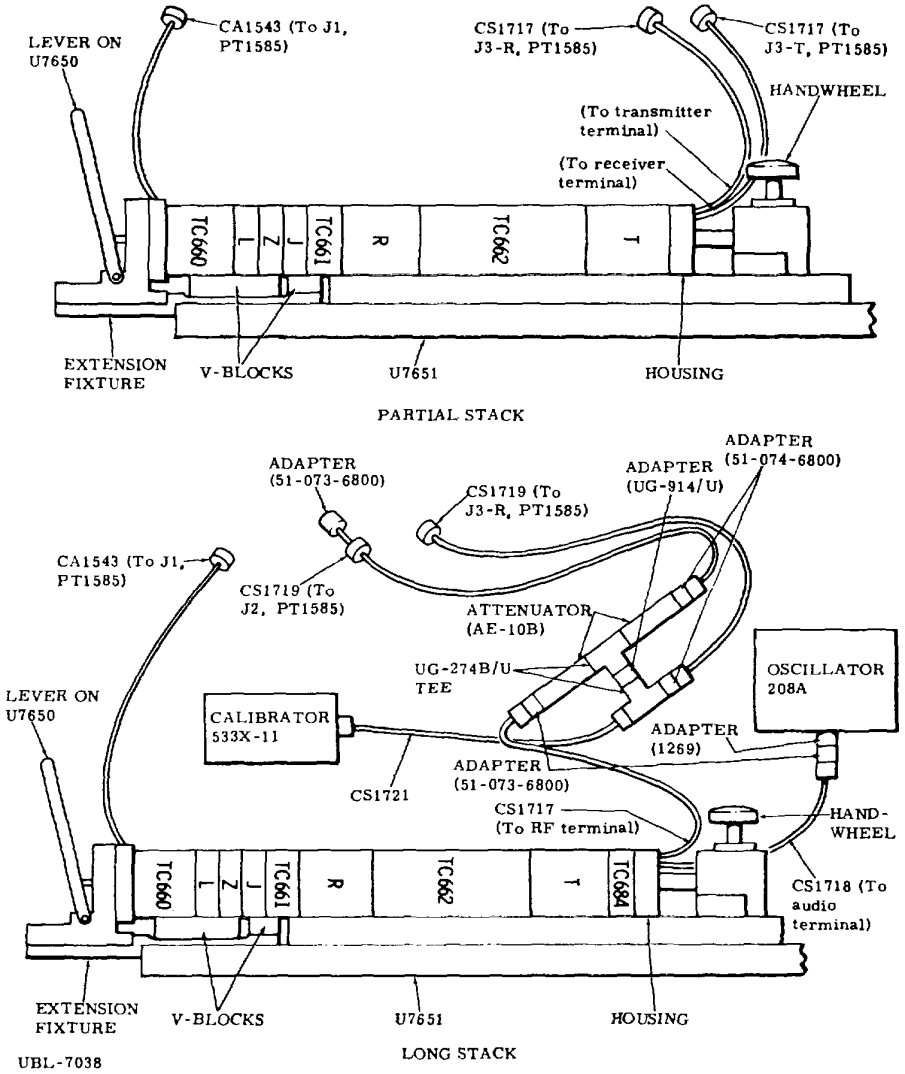


Figure 4-3S Test Setup for MA125 CAEDET (G).

minor scale division (meter should read less than 10 ma. on 500-ma. scale).

b. Press and hold 50 MA button. Meter does not deflect more than 10 minor scale divisions, or 10 ma. on 50 ma. scale. Release button.

c. If current exceeded 10 ma., any module may be at fault.

3. Check transmitter current and power as follows:

a. If code plug is coded with function 77, set PT1585 thumbwheels as indicated for test 1 in table 4-8B. If code plug function is 57, proceed to step d.

b. Momentarily press TRANSMIT button.

c. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. ERROR lamp does not light. STATUS/COUNT lamps light as indicated in table 4-8B.

d. Set thumbwheels on PT1585 as indicated in table 4-8B for test 2.

e. Momentarily press TRANSMIT button and note MONITOR meter reading.

f. Meter reads 300 to 450 ma. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps light. AUDIO lamp lights. ERROR lamp does not light; STATUS/ COUNT lamps light as shown in table 4-8B.

g. No audio tone is heard during test 1 or 2.

h. Repeat test 2 in table 48B as necessary to check readings and responses just indicated.

i. Rotate MONITOR selector switch to OUTPUT WATTS 5W.

j. Momentarily press TRANSMIT button. Meter reads 2 to 4 w. on 5-w. scale. Other responses are the same as in step f.

k. Operate BATTERY SIMULATOR toggle switch to OFF. BATTERY SIMULATOR lamp goes out.

4. Rotate handwheel of U7651 counterclockwise to release pressure on modules and housing. Lift handwheel clear of stack.

4-25L. Test Procedures for MA125 Long Stack

1. PREPARATION OF PT1585. On completion of partial stack test, continue as follows; if necessary prepare PT1585, turn it on, and test lamps as specified in paragraph 4-25J1.

a. Install TC684 by aligning connector receptacles.

b. Feed right angle connector ends through hole in housing as shown in figures 4-3R and 4-3S, connect cables to TC684, and position housing on fixture.

c. Assemble and connect equipment as shown in figure 4-3S for long stack test.

d. Check alignment of fixtures, housing, and modules.

e. Position handwheel of U7651 near housing; turn handwheel clockwise until no gap remains between modules.

f. Insure that calibrator is turned off.

g. Operate BATTERY SIMULATOR toggle switch to ON. BATTERY SIMULATOR lamp lights.

2. PROCEDURE.

a. If code plug function is 77, rotate thumbwheels on PT1585 as indicated in table 4-8B for test 1. If code plug function is 57, proceed to step d.

b. Momentarily press TRANSMIT button and note results.

c. Some MESSAGE RECEIVED lamps, matching EXPECTED MESSAGE lamps, light ERROR lamp does not light; STATUS/COUNT lamps light as shown for test 1 in table 4-8B.

d. Rotate thumbwheels as indicated for test 2 in table 4-8B.

e. Set oscillator to 50 uv. output at 1 kHz.

f. Momentarily press TRANSMIT button.

g. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. AUDIO lamp lights. ERROR lamp does not light. STATUS/COUNT lamps light as shown in table 4-8B. A 1,000 Hz tone is heard.

NOTE

The H-P 208A oscillator may have to be TM 11-6625-2514-141/T.O. 31S9 4 20-1 operated on battery power if AC line interference is observed.

h. Check command functions by performing tests 3 through 12 in table 4-8B. In each test, momentarily press TRANSMIT button. STATUS/COUNT lamps light as indicated, RECEIVED MESSAGE lamps light to match EXPECTED MESSAGE lamps, and ERROR lamp does not light.

i. For test 9, no audio tone is heard.

3. Check TC662 and short message transmission by performing tests 13 and 14 in table 4-8B as follows:

a. Set calibration REPETITION RATE HZ to LINE and output to -40 db above 1 uv/MHz. Turn on calibrator.

b. On PT-1585, rotate FUNCTION thumbwheels to 00. Leave COMMAND thumbwheels at 04.

c. Gradually increase calibrator output until stack transmits. Output should be less than +25 db. The stack transmits approximately every 10 seconds. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. The ERROR and STATUS/COUNT lamps do not light.

NOTE

If activations occur prior to turning on calibrator, replace TC662. If activations persist, replace TC662 again. If activations still occur, RF interference is present and TC662 sensitivity cannot be checked.

d. Allow stack to transmit 3 times and turn off calibrator.

e. Perform test 14 in table 4-8B, noting correct lamp indications as before.

4. Remove stack from test setup as follows:

a. Operate BATTERY SIMULATOR toggle switch to OFF. BATTERY SIMULATOR lamp goes out.

b. Turn handwheel on U7651 counterclockwise to release pressure on housing, light handwheel clear, and operate lever on U7650 to disengage fixture from stack.

c. Leave modules connected for further assembly in sensor. As applicable, turn off and disassemble other equipment.

4-25M. Assembly Test of MA125 CAEDET (G)

1. The following procedures assume that test of the long stack has been completed and that the sensor has been completely assembled.

2. PREPARATION OF PT1585.

a. On PT1585 (figure 4-1), insure that AC PWR and BATTERY SIMULATOR toggle switches are at OFF.

b. At rear of PT1585, connect AC INPUT to source of 105 to 125 VAC, 50 to 400 Hz, 5 amperes.

c. Operate AC PWR switch to ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps light.

d. Rotate AUDIO LEVEL knob to a position approximately ¼/4 turn from maximum. This knob may later be adjusted as desired for audibility.

e. Momentarily press LAMP TEST button to insure that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO, and STATUS/COUNT lamps light.

f. After 1-minute warmup, momentarily press RESET switch. Any lighted RECEIVED MESSAGE lamps go out.

NOTE

The information unique to each sensor is marked on a tape attached to the sensor case.

g. Rotate T XTAL CHANNEL thumbwheels as necessary to enter T module numbers.

h. Similarly enter first 3 digits from code plug in RF CHANNEL, and next 2 digits in ID.

i. Connect UHF antenna to J2 of PT1585.

j. Locate sensor not more than 10 feet from PT1585.

3. PROCEDURE.

NOTE

To minimize battery drain, perform assembly test as quickly as practicable after sensor is turned on.

a. Using suitable wrench, unscrew nose from tubular case approximately 3/8 inch.

b. If code plug is coded with function 77, set PT1585 thumbwheels as indicated for test 1 in table 4-8B. If code plug is coded with function 57, proceed to step f below.

c. Momentarily press TRANSMIT button.

d. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. ERROR lamp must not light. STATUS/COUNT lamps light as shown in table 4-8B for test 1.

e. If an improper indication is received, disassemble sensor and repeat stack test.

f. On PT1585, rotate FUNCTION thumbwheels to 03 and COMMAND thumbwheels to 01.

g. Momentarily press TRANSMIT button.

NOTE

Because of the close proximity of the PT1585 to the CAEDET microphone, feedback causes a tone to be generated. Generating this tone under these conditions indicates that the audio part of the sensor is operating properly.

h. A tone is heard. AUDIO lamp lights. Tap sensor on mast assembly. The tone is momentarily interrupted, indicating the sensor is operating properly.

i. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. ERROR lamp must not light. STATUS/COUNT lamps light as shown in table 4-8B.

j. If an improper indication is received, disassemble sensor and repeat stack test.

k. Install UHF antenna on calibrator. Set REPETITION RATE HZ to LINE and output to -40 db above 1 uv/MHZ. Turn on calibrator.

NOTE

Insure that sensor antenna radials are fully extended.

1. Set FUNCTION thumbwheels to 00.

m. Gradually increase calibrator output until sensor transmits. Output indicated on calibrator should be less than +50 db.

n. The sensor transmits approximately every 10 seconds. Some RECEIVED MESSAGE lamps light, matching EXPECTED MESSAGE lamps. No ERROR or STATUS/COUNT lamp lights.

o. If an improper indication is received, disassemble sensor and repeat stack test.

p. Thread nose back onto case until no gap remains. Tighten securely with suitable wrench.

4-25N. Assembly of MA133 AUDET (H) Long Stack

1. PREPARATION OF PT1585.

a. On PT1585 (figure 4-1), insure that AC POWER and BATTERY SIMULATOR toggle switches are at OFF.

b. At rear of PT1585, connect AC INPUT to source of 105 to 125 VAC 50 to 400 Hz, 5 amperes.

c. Operate AC PWR switch to ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps may light.

d. Rotate AUDIO LEVEL knob to a position approximately 1/4 turn from maximum. This knob may be adjusted later as desired for audibility.

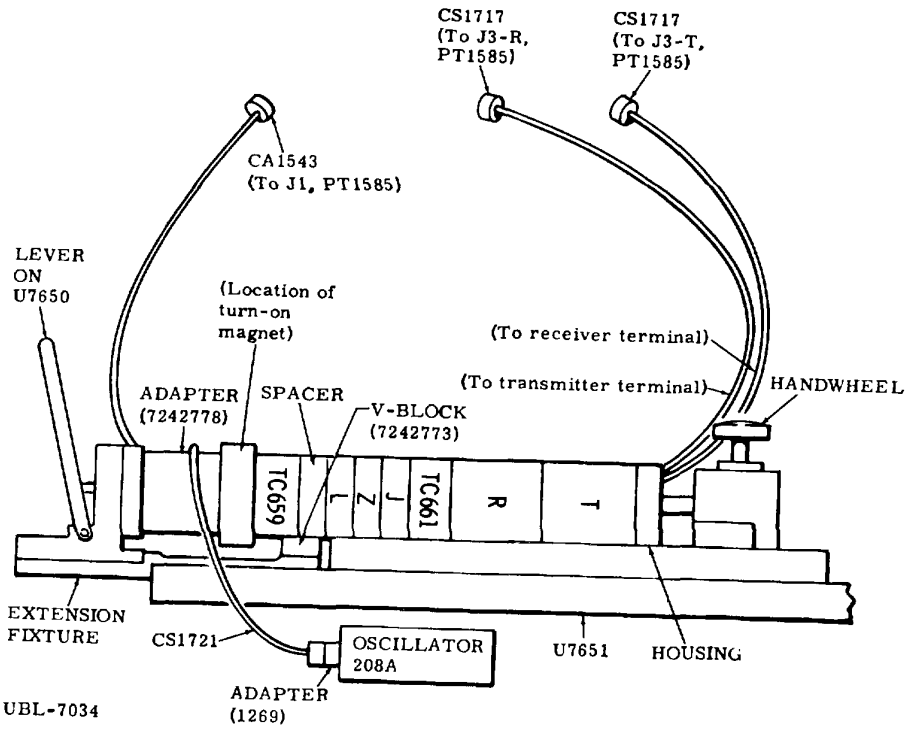


Figure 4-3T. Test Setup for MA 133 AUDET (H)

e. Momentarily press LAMP TEST button to insure that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO, and STATUS/COUNT lamps light.

f. After 1-minute warmup, momentarily press RESET switch. Any lighted RECEIVED MESSAGE lamps go out.

2. Assembly fixtures as follows:

a. Install U7650 connector assembly, extension fixture, and V-block fixtures on U7651 fixture as shown in figures 4-3P and 4-3T.

b. Connect P1 of CA1543 to J1 of PT1585.

c. Lift handwheel of U7651 module assembly mechanism and rotate it away from module tray.

3. Mate modules in fixtures as follows:

a. Note markings on code plug for stack to be tested. On L CODE PLUG switches of PT1585, rotate RF CHANNEL thumbwheels to enter first 3 digits of code.

b. On ID thumbwheels, enter next 2 digits of code. (The following 2 digits are function, 57 or 77; note function code also for later use).

c. On T XTAL CHANNEL thumbwheels, enter channel number marked on T module.

d. Starting at left end of stack shown in figure 4-3T, place first module in U7651 tray so that male pins are at left and epoxy-filled MA133 AUDET (H). groove in TC659 is upward. Similarly place remaining modules in tray; align keys and keyways in modules.

CAUTION

TC659 may be damaged if a low impedance load is connected to audio terminal (3, in figure 43R) of the transmitter. Connect cables only as shown on figure 43T.

e. Feed right angle connector ends of cables shown in figures 4-3R and 4-3T through housing, connect cables, and position housing on fixture.

f. Check alignment of fixtures, housing, and modules.

g. Position handwheel of U7651 near housing, connect cables, and position housing on fixture. Continue turning until no gap remains between modules.

h. Assemble other components as shown in figure 4-3T.

4-25P. Test Procedures for MA133 Long Stick

1. Set switches as follows:

a. Rotate BATTERY SIMULATOR selector switch to NOMINAL.

b. Center Hamlin magnet (H-34) longitudinally over epoxy-filled groove in TC 659 module (figure 4-3T).

c. On PT1585, operate BATTERY SIMULATOR toggle switch to ON. BATTERY SIMULATOR lamp lights. Power is now applied to the stack.

2. Check current drain (standby current) of stack as follows:

a. Rotate MONITOR selector switch to INPUT CURRENT 500 MA. Insure that MONITOR meter does not deflect more than 1 minor scale division (meter should read less than 10 ma. on 500-ma. scale).

b. Press and hold 50 MA button. Meter does not deflect more than 10 minor scale divisions, or 10 ma. on 50-ma. scale. Release button.

c. If current exceeded 10 ma., any module may be at fault.

3. Check transmitter current and power and audio response as follows:

a. If code plug function is 77, set PT1585 thumbwheels as indicated for test 1 in table 4-8B. If code plug function is 57, proceed to step d below.

b. Momentarily press TRANSMIT button.

c. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. ERROR lamp does not light. STATUS/COUNT lamps light as indicated in table 4-8B.

d. Set thumbwheels on PT1585 as indicated in table 4-8B for test 2.

e. Set oscillator to 50 uv. output at 1 kHz.

f. Momentarily press TRANSMIT button and note MONITOR meter reading.

g. Meter reads 300 to 450 ma. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. AUDIO lamp lights. ERROR lamp does not light; STATUS/ COUNT lamps light as shown in table 4-8B. A 1,000-Hz tone is heard.

NOTE

The HP 208A oscillator may have to be operated on battery power if AC line interference is observed.

h. Repeat test 2 in table 4-8B as necessary to check readings and responses just indicated.

i. Rotate MONITOR selector switch to OUTPUT WATTS 5W.

j. Momentarily press TRANSMIT button. Meter reads 2 to 4 w. on 5W scale. Other responses are the same as in step g above.

4. Check command functions by performing tests 3 through 12 in table 4-8B.

a. In each test, momentarily press TRANSMIT button. STATUS/COUNT lamps and ERROR lamp do not light.

b. For test 9, no audio tone is heard.

5. Remove stack from test setup as follows:

a. Operate BATTERY SIMULATOR toggle switch to OFF. BATTERY SIMULATOR lamp goes out.

b. Turn handwheel on U7651 counterclockwise to release pressure on housing, and lift handwheel clear. Disengage stack from connector adapter by pulling TC659 free.

c. Leave modules connected for further assembly in sensor. As applicable, turn off and disassemble other equipment.

4-25Q. Assembly Test of MA133 AUDET (H)

1. The following procedures assume that test of the long stack has been completed and that the sensor has been completely assembled.

2. PREPARATION OF PT1585.

a. On PT1585 (figure P1), insure that AC PWR and BATTERY SIMULATOR toggle switches are at OFF.

b. At rear of PT1585, connect AC INPUT to source of 105 to 125 VAC, 50 to 400 Hz, 5 amperes.

c. Operate AC PWR switch to ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps light.

d. Rotate AUDIO LEVEL knob counterclockwise to a position approximately 1/4 turn from maximum; this knob may later be adjusted as desired for audibility.

e. Momentarily press LAMP TEST button to insure that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO, and STATUS/COUNT lamps light.

f. After 1-minute warmup, momentarily press RESET switch. Any lighted RECEIVED MESSAGE lamps go out.

NOTE

The information unique to each sensor is marked on a tape attached to the sensor case.

g. Rotate PT1585 thumbwheels as necessary to enter T module numbers in T XTAL CHANNEL.

h. Similarly enter first 3 digits from code plug in RF CHANNEL and next 2 digits in ID.

i. Connect UHF antenna to J2 of PT1585.

j. Locate sensor not more than 10 feet from PT1585.

3. PROCEDURE.

NOTE

To minimize battery drain, perform assembly test as quickly as practicable after sensor is turned on.

a. Position turn-on fixture on windscreen end of sensor so that ring seats on windscreen base plate for correct distancing. Rotate fixture until magnet assembly is aligned with parachute deployment timer in elongated hole of upper housing.

b. If code plug is coded with function 77, set PT 1585 thumbwheels as indicated for test 1 in table 4-8B. If code plug is coded with function 57, proceed to step below.

c. Momentarily press TRANSMIT button.

d. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. ERROR lamp must not light. STATUS/COUNT lamps light as shown in table 4-8B for test 1.

e. If an improper indication is received, disassemble sensor and repeat long stack test.

f. On PT1585, rotate FUNCTION thumbwheels to 03 and COMMAND thumbwheels to 01.

g. Momentarily press TRANSMIT button.

NOTE

Because of the close proximity of the PT1585 to the AUDET microphone, feedback causes a tone to be generated. Generating this tone under these conditions indicates that the audio part of the sensor is operating properly.

h. A tone is heard. Tap sensor on windscreen. The tone is momentarily interrupted, indicating the sensor is operating properly.

i. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. AUDIO lamp lights. ERROR lamp must not light. No STATUS/COUNT lamps light.

j. If an improper indication is reached, disassemble sensor and repeat stack test.

k. Remove turn-on fixture.

l. Turn off equipment.

425R. Assembly of MA134 EDET (H) Partial Stack

1. PREPARATION OF PT1585.

a. On PT1585 (figure 4-1), insure that AC PWR and BATTERY SIMULATOR toggle switches are at OFF.

b. At rear of PT1585, connect AC INPUT to source of 105 to 125 VAC, 50 to 400 Hz, 5 amperes.

c. Operate AC PWR switch to ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps may light.

d. Momentarily press LAMP TEST button to insure that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO, and STATUS/COUNT lamps light.

e. After 1-minute warmup, momentarily press RESET switch. Any lighted RECEIVED MESSAGE lamps go out.

2. Assemble fixtures as follows:

a. Install U7650 connector assembly, extension fixture, and V-block fixture on U7651 fixture as shown in figures 4-3P and 4-3U for partial stack.

b. Connect P1 of CA1543 to J1 of PT1585.

c. Lift handwheel of U7651 module assembly mechanism and rotate it away from module tray.

3. Mate modules in fixtures as follows:

a. Note markings on code plug for stack to be tested. On L CODE PLUG switches of PT1585, rotate RF CHANNEL thumbwheels to enter first 3 digits of code.

b. On ID thumbwheels, enter next 2 digits of code.

c. On T XTAL CHANNEL thumbwheels, enter channel number marked on T module.

d. Starting at left end of stack shown in figure 4-3U, place first module in U7651 tray so that male pins are at left. Similarly place remaining modules in tray; align keys and keyways in modules.

e. Feed right angle connector ends of cables shown in figure 4-3R through housing, connect cables to transmitter and PT1585 (figure 43U), and position housing on fixture.

f. Check alignment of fixtures, housing, and modules.

g. Position handwheel of U765 near housing, turn handwheel clockwise and mate modules. Continue turning until no gap remains between modules.

CAUTION

T0659 may be damaged if a low impedance load is connected to audio terminal (3, in figure 4-3R) of the transmitter. Connect cables only as shown in figure 4-3U.

4-25S. Test Procedures for MA134 Partial Stack

1. Connect calibrator as shown in figure 43U.

Insure that calibration is not turned on. Set switches as follows.

a. Rotate BATTERY SIMULATOR switch to NOMINAL.

b. On PT1585, operate BATTERY SIMULATOR toggle switch to ON. BATTERY SIMULATOR lamp lights. Power is now applied to the stack.

2. Check current drain (standby current) of stack of follows:

a. Rotate MONITOR selector switch to INPUT CURRENT 500 MA. Insure that MONITOR meter does not deflect more than 1 minor scale division (meter should read less than 8 ma. on 500-ma. scale).

b. Press and hold 50 MA button. Meter does not deflect more than 8 minor scale divisions, or 8 ma. on 50-ma. scale. Release button.

c. If current exceeded 8 ma., any module may be at fault.

3. Check transmitter current and power as follows:

a. Press and hold AUDIO bottom and note MONITOR meter reading.

b. Meter reads 300 to 450 ma.

c. Release AUDIO button

d. Rotate MONITOR selector switch to OUTPUT WATTS 5W.

e. Press and hold AUDIO button. Meter reads 2 to 4 w. on 5-w. scale.

f. Operate BATTERY SIMULATOR toggle switch to OFF. BATTERY SIMULATOR lamp goes out.

g. Rotate handwheel of U7651 counterclockwise to release pressure on modules and housing. Lift handwheel clear of stack and operate U7650 lever.

4-25T. Test Procedures for MA134 EDET (H) Long Stack

1. PREPARATION OF PT1585. On completion of partial stack test, continue as follows; but if necessary, prepare PT1585, turn it on, and test lamps as specified in paragraph 4-25R (1).

a. Position T0659 module as shown in figure 4-3U; rotate stack and T0659 as necessary to align keys and keyways in modules and to locate epoxy-filled groove in TC659 upward.

b. Check alignment of fixtures, housing, and module.

c. Position handwheel of U7651 near housing, turn handwheel until no gap remains between modules.

d. Assemble other equipment as shown in figure 4-3U.

e. Insure that calibrator is turned off.

2. PROCEDURE.

a. Center Hamlin magnet (H-34), longitudinally over epoxy-filled groove in TC659 module (figure 4-3U).

b. On PT1585, operate BATTERY SIMULATOR toggle switch to ON. BATTERY SIMULATOR lamp lights. Power is now applied to the stack.

c. Rotate MONITOR selector switch to INPUT CURRENT 500 MA. Insure that MONITOR meter does not deflect more than 2 minor scale divisions (meter should read less than 12 ma. on 500-ma. scale).

d. Press and hold 50 MA button. Meter does not deflect more than 12 minor scale divisions, or 12 ma. on 50-ma. scale. Release button.

e. Set calibrator REPETITION RATE HZ to LINE and output to -40 db above 1 uv/MHz. Turn on calibrator.

f. On PT1585, rotate FUNCTION thumbwheels to 00.

g. Gradually increase calibrator output until stack transmits. Output should be less than 10 db. Some RECEIVED MESSAGE lamps light, matching EXPECTED MESSAGE lamps. ERROR and STATUS/COUNT lamps do not light. The stack transmits approximately every 10 seconds.

NOTE

If activations occur prior to turning on calibrator, replace TC662. If activations persist, replace TC662 again. If activations still occur, RF interference is present and TC662 sensitivity cannot be checked.

h. Remove turn-on magnet.

i. Operate BATTERY SIMULATOR toggle switch to OFF. BATTERY SIMULATOR lamp goes out.

j. Turn handwheel on U7651 counterclockwise to release pressure on housing, lift handwheel clear, and disengage stack by pulling TC659 from adapter.

k. Leave modules connected for further assembly in sensor. As applicable, turn off and disassemble other equipment.

4-25U. Assembly Test of MA134 EDET (H)

1. The following procedures assume that test of the long stack has been completed and that the sensor has been completely assembled.

2. PREPARATION OF PT1585.

a. On PT1585 (figure 4-1), insure that AC PWR and BATTERY SIMULATOR toggle switches are at OFF.

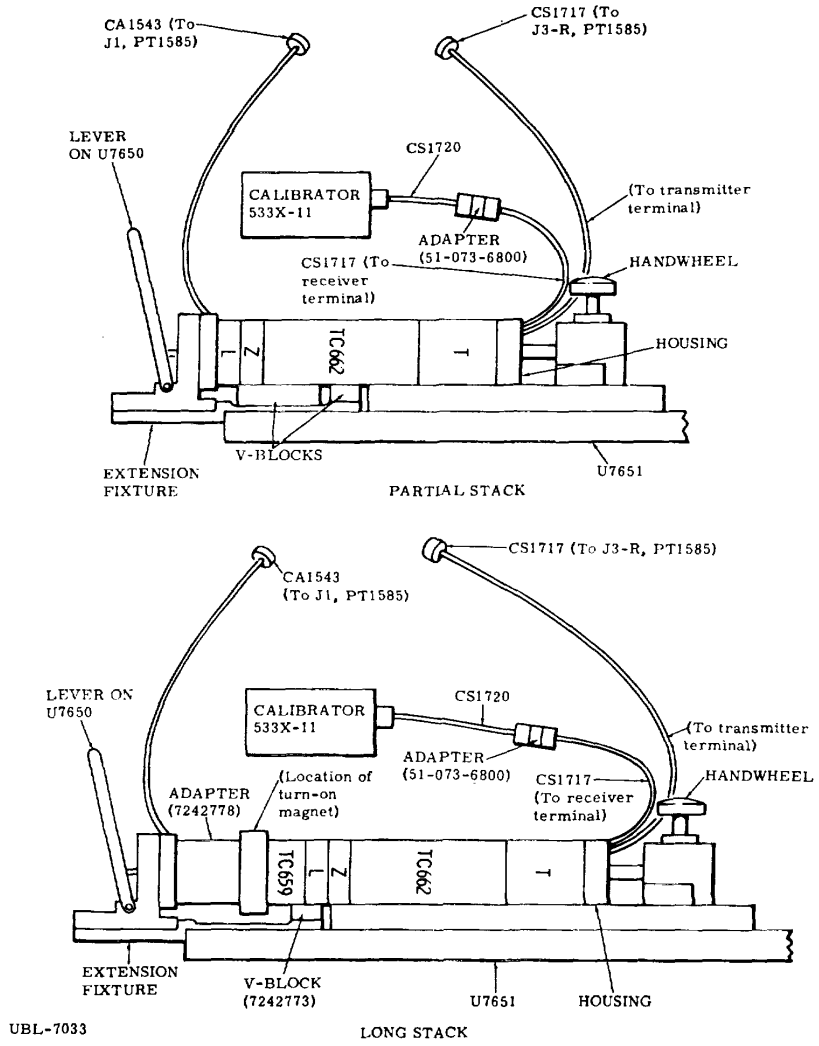


Figure 4-3U. Test Setup for MA134 EDET (H).

b. At rear of PT1585, connect AC INPUT to source of 105 to 125 VAC, 50 to 400 Hz, 5 amperes.

c. Operate AC PWR switch to ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps light.

d. Momentarily press LAMP TEST button to insure that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO, and STATUS/COUNT lamps light.

e. After 1-minute warmup, momentarily press RESET switch. Any lighted RECEIVED -MESSAGE lamps go out.

NOTE

The information unique to each sensor is marked on a tape attached to the sensor case .

f. Rotate PT1585 thumbwheels as necessary to enter T module numbers in T XTAL CHANNEL.

g. Similarly enter first 3 digits from code plug in RF CHANNEL and next 2 digits in ID.

h. Locate sensor not more than 10 feet from PT1585.

3. PROCEDURE.

NOTE

To minimize battery drain, perform assembly test as quickly as practicable after sensor is turned on.

a. Position turn-on fixture on windscreen end of sensor so that ring seats on windscreen base plate for correct distancing. Rotate fixture until magnet assembly is aligned with parachute deployment timer in elongated hole of upper housing.

b. Install UHF antenna on calibrator. Set REPETITION RATE HZ to LINE and output to -40 db above 1 uv/MHZ. Turn on calibrator.

c. Set FUNCTION thumbwheels to 00.

d. Gradually increase calibrator output until sensor transmits. Output indicated on calibrator should be less than -50 db.

e. The sensor transmits approximately every 10 seconds. Some RECEIVED MESSAGE lamps light, matching EXPECTED MESSAGE lamps. No ERROR or STATUS/COUNT lamp lights.

f. If an improper indication is received, disassemble sensor and repeat stack test.

g. Remove turn-on fixture.

h. Turn off equipment.

4-25V. Assembly of MA135 AUDET (G) Partial Stack

1. PREPARATION OF PT1585.

a. On PT1585 (figure 4-1), insure that AC PWR and BATTERY SIMULATOR toggle switches are at OFF. of 105 to 125 VAC, 50 to 400 Hz, 5 amperes.

c. Operate AC PWR switch to ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps may light.

d. Rotate AUDIO LEVEL knob to a position approximately 1/4 turn from maximum. This knob may be adjusted later as desired for audibility.

e. Momentarily press LAMP TEST button to insure that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO, and STATUS/COUNT lamps light.

f. After 1-minute warmup, momentarily press RESET switch. Any lighted RECEIVED MESSAGE lamps go out.

2. Assemble fixtures as follows:

a. Install U7650 connector assembly, extension fixture, and V-block fixtures on U7651 fixture as shown in figures 4-3P and 4-3V for partial stack test.

b. Connect P1 of CA1543 to J1 of PT1585.

c. Lift handwheel of U651 modules assembly mechanism and rotate it away from module tray.

3. Mate modules in fixtures as follows:

a. Note markings on code plug for stack to be tested. On L CODE PLUG switches of PT1585, rotate RF CHANNEL thumbwheels to enter first 3 digits of code.

b. On ID thumbwheels, enter next 2 digits of code. (The following 2 digits are function, 57 or 77; note function code for later use.)

c. On T XTAL CHANNEL thumbwheels, enter channel number marked on T-module.

d. Starting at left end of stack shown in figure 43V, place first module in tray so that male pins are to left, toward U7650. Similarly place other modules and housing; align marks and key and keyways.

e. Feed right angle connector ends of cables shown in figure 4-3R through housing, connect cables to transmitter and PT1585 (figure 43V), and position housing on fixtures.

f. Check alignment of fixtures, housing, and modules.

g. Position handwheel of U7651 near housing, turn handwheel clockwise, and mate modules. Continue turning until no gap remains between modules.

4-25W. Test Procedures for MA135 Partial Stack

1. Set PT1585 switches as follows:

a. Rotate BATTERY SIMULATOR switch to NOMINAL.

b. Operate BATTERY SIMULATOR toggle switch to ON. BATTERY SIMULATOR lamp lights. Power is now applied to the stack.

2. Check current drain (standby current) of stack as follows:

a. Rotate MONITOR selector switch to INPUT CURRENT 500 MA. Insure that MONITOR meter does not deflect more than 1/2 minor scale division (meter should not read more than 5 ma. on 500-ma. scale).

b. Press and hold 50 MA button. Meter does not deflect more than 5 minor scale divisions, or 5 ma. on 50-ma. scale. Release button.

c. Press and hold 5 MA button. Meter does not deflect more than full-scale on 5-ma. scale. Release button.

d. If current exceeded 5 ma., any module may be at fault.

3. Check transmitter current and power as follows:

a. If code plug is coded with function 77, set PT1585 thumbwheels as indicated for test 1 in table 4-8B. If code plug function is 57, proceed to step *d.*

b. Momentarily press TRANSMIT button.

c. Some RECEIVED MESSAGE lamps light as indicated in table 4-8B.

d. Set thumbwheels on PT1585 as indicated in table 4-9B for test 2.

e. Momentarily press TRANSMIT button and note MONITOR meter reading.

f. Meter reads 300 to 450 ma. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. AUDIO lamp lights. ERROR lamp does not light; STATUS/ COUNT lamps light as shown in table 4-8B.

g. No audio tone is heard during test 1 or 2.

h. Repeat test 2 in table 4-8B as necessary to check readings and responses just indicated.

i. Rotate MONITOR selector switch to OUTPUT WATTS 5W.

j. Momentarily press TRANSMIT button. Meter reads 2 to 4 w. on 5-w. scale. Other responses are the same as step above.

k. Operate BATTERY SIMULATOR toggle switch to OFF. BATTERY SIMULATOR lamp goes out.

4. Rotate handwheel of U7651 counterclockwise to release pressure on modules an housing. Lift handwheel clear of stack.

4-25X. Test Procedures for MA135 Long Stack

1. PREPARATION OF PT1585. On completion of partial stack test, continue as follows; if necessary prepare PT1585, turn it on, and test lamps as specified in paragraph 4-25V(1).

a. Assemble and connect equipment as shown in figures 4-3P and 4-3V for long stack test.

b. Install TC684 by aligning connector receptacles.

c. Feed right angle connector ends through hole in housing as shown in figures 4-3R and 4-3V, connect cables to TC684, and position housing fixtures.

d. Check alignment of fixtures, housing, and modules.

e. Position handwheel of U7651 near housing; turn handwheel clockwise until no gap remains between modules.

f. Operate BATTERY SIMULATOR toggle switch to ON. BATTERY SIMULATOR lamp lights; power is now applied to the stack.

2. PROCEDURE.

a. If code plug function is 77, rotate , thumbwheels on PT1585 as indicated in table TM 11-6625-2514-14-4-4-8B for test 1. If code plug function is 57, proceed to step *d.*

b. Momentarily press TRANSMIT button and note results.

c. Some MESSAGE RECEIVED lamps, matching EXPECTED MESSAGE lamps, light. ERROR lamp does not light; STATUS/COUNT lamps light as shown for test 1 in table 4-8*B.*

d. Rotate thumbwheels as indicated for test 2 in table 4-8B.

e. Set oscillator to 50 uv. output at 1 kHz, and turn on oscillator.

f. Momentarily press TRANSMIT button.

g. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. AUDIO lamp lights. ERROR lamp does not light. STATUS/COUNT lamps light as shown in table 4-8B. A 1,000-Hz tone is heard.

NOTE

The HP 208A oscillator may have to be operated on battery power if AC line interference is observed.

h. Check command functions by performing tests 3 through 12 in table 4-8B. In each test, STATUS/COUNT lamps light as indicated, RECEIVED MESSAGE lamps light to match EXPECTED MESSAGE lamps, and ERROR lamp does not light.

i. For test 9, no audio tone is heard.

3. Remove stack from test setup as follows:

a. Operate BATTERY SIMULATOR toggle switch to OFF. BATTERY SIMULATOR lamp goes out.

b. Turn handwheel on U7651 counterclockwise to release pressure on housing, lift handwheel clear, and operate lever on U7650 to disengage fixture from stack.

c. Leave modules connected for further assembly in sensor. As applicable, turn off and disassemble other equipment.

4-25Y. Assembly Test of MA135 AUDET (G).

1. The following procedures assume that test of the long stack has been completed and that the sensor has been completely assembled.

2. PREPARATION OF PT1585.

a. On PT1585 (figure 4-1), insure that AC PWR and BATTERY SIMULATOR toggle switches are at OFF.

b. At rear of PT1585, connect AC INPUT to source of 105 to 125 VAC, 50 to 400 Hz, 5 amperes.

c. Operate AC PWR switch to ON.

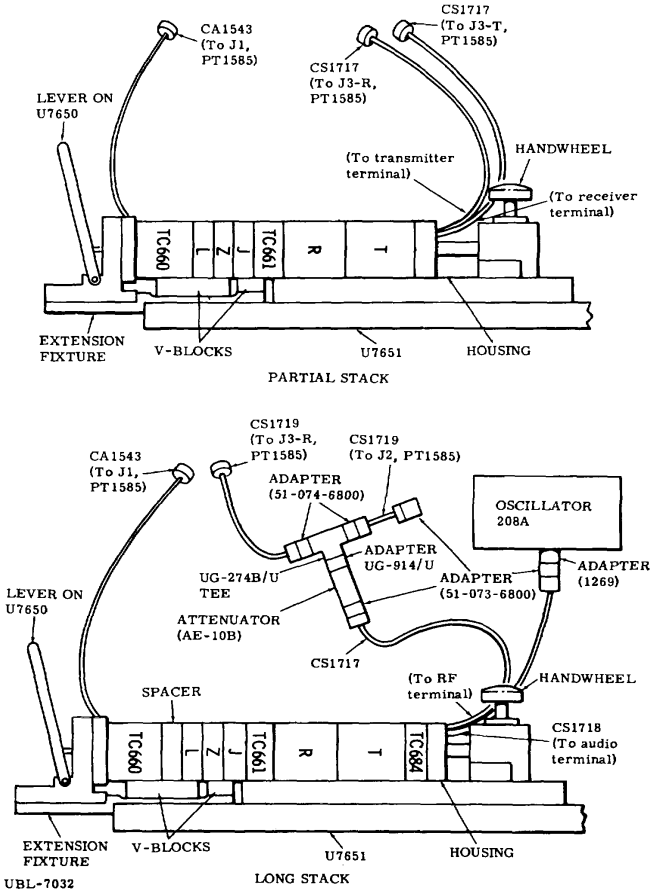


Figure 4-3V. Test Setup for MA135 AUDET (G)

AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps light.

d. Rotate AUDIO LEVEL knob to a position approximately /4 turn from maximum. This knob may later be adjusted as desired for audibility.

e. Momentarily press LAMP TEST button to insure that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO, and -STATUS/COUNT lamps light.

f. After 1-minute warmup, momentarily press RESET switch. Any lighted RECEIVED MESSAGE lamps go out.

NOTE

The information unique to each sensor is marked on tape attached to the sensor case.

g. Rotate T XTAL CHANNEL thumbwheels as necessary to enter T module numbers.

h. Similarly enter first 3 digits from code plug in RF CHANNEL and next 2 digits in ID.

i. Connect UHF antenna to J2 of PT1585.

j. Locate sensor not more than 10 feet from PT1585.

3. PROCEDURE.

NOTE

To minimize battery drain, perform assembly test as quickly as practicable after sensor is turned on.

a. Using suitable wrench unscrew nose from tubular case approximately 3/8 inch.

b. If code plug is coded with function 77, set PT1585 thumbwheels as indicated for test 1 in table 4-8B. If code plug is coded with function 57, proceed to step *f* below.

c. Momentarily press TRANSMIT button.

d. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. ERROR lamp must not light. STATUS/COUNT lamps light as shown in table 4-8B.

e. If an improper indication is received, disassemble sensor and repeat long stack test.

f. On PT1585, rotate FUNCTION thumbwheels to 03 and COMMAND thumbwheels to 01.

g. Momentarily press TRANSMIT button.

NOTE

Because of the close proximity of the PT1585 to the AUDET microphone, feedback causes a tone to be generated. Generating this tone under these conditions indicates that the audio part of the sensor is operating properly.

h. A tone is heard. Tap sensor on mast assembly. The tone is momentarily interrupted, indicating the sensor is operating properly.

i. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light AUDIO lamp lights. ERROR lamp must not light. STATUS/COUNT lamps light as shown in table 48B.

j. If an improper indication is received, disassemble sensor and repeat stack test.

k. Thread nose back onto case until no gap remains. Tighten securely with suitable Wrench.

l. Turn off equipment.

4-25Z. Assembly of MA135 EDET (G) Partial Stack

1. PREPARATION OF PT1585.

a. On PT 1585 (figure 4-1), insure that AC PWR and BATTERY SIMULATOR toggle switches are at OFF.

b. At rear of PT1585, connect AC INPUT to source of 105 to 125 VAC, 50 to 400 Hz, Hz, 5 amperes.

c. Operate AC PWR switch to ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps may light.

d. Momentarily press LAMP TEST button to insure that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO, and STATUS/COUNT lamps light.

e. After 1-minute warmup, momentarily press RESET switch. Any lighted RECEIVE MESSAGE lamps go out.

2. Assemble fixtures as follows:

a. Install U7650 connector assembly, extension fixture, and V-block fixtures on U7751 fixture as shown in figures 4-3P and 4-3W for partial stack test.

b. Connect P1 of CA1543 to J1 of PT1585.

c. Lift handwheel of U7651 module assembly mechanism and rotate it away from module tray.

3. Mate modules in fixtures as follows:

a. Note markings on code plug for stack to be tested. On L CODE PLUG switches of PR1585, rotate RF CHANNEL thumbwheels to enter first 3 digits of code.

b. On ID thumbwheels, enter next 2 digits of code. (The following 2 digits are function code; note them also for later use.)

c. On T XTAL CHANNEL thumbwheels, enter channel number marked on T-module.

d. Starting at left end of stack shown in figure 43W for partial stack, place first module in U7651 tray so that male pins are at left. Similarly place remaining modules in tray; align marks and keys and keyways in modules.

e. Feed right angle connector ends of cables shown in figure 4-3R through housing, connect cables to transmitter and PT1585 (figure 4-3W), and position housing on fixture.

f. Check alignment of fixtures, housing and modules.

g. Position handwheel of U7651 near housing, turn handwheel clockwise, and mate modules. Continue turning until no gap remains between modules.

4-25AA. Test Procedures For MA136 Partial Stack

1. Set switches as follows:

a. Rotate BATTERY SIMULATOR switch to NOMINAL.

b. On PT1585, operate BATTERY.

SIMULATOR toggle switch to ON. BATTERY SIMULATOR lamp lights. Power is now applied to the stack.

2. Check current drain (standby current) of stack as follows:

a. Rotate MONITOR selector switch to INPUT CURRENT 500 MA. Insure that MONITOR meter does not deflect more than 1 minor scale division (meter should read less than 8 ma. on 500ma. scale).

b. Press and hold 50 MA button. Meter does not deflect more than 8 minor scale divisions, or 8 ma. on 50-ma. scale. Release button.

c. If current exceeded 8 ma., any module may be at fault.

3. Check transmitter current and power as follows:

a. Press and hold AUDIO button and note MONITOR meter reading.

b. Meter reads 300 to 450 ma.

c. Release AUDIO button.

d. Rotate MONITOR selector switch to OUTPUT WATTS 5W.

e. Press and hold AUDIO button. Meter reads 2 to 4 w. on 5-w scale. Release button.

f. Operate BATTERY SIMULATOR toggle switch to OFF. BATTERY SIMULATOR lamp goes out.

g. Rotate handwheel of U7651 counterclockwise to release pressure on modules and housing. Lift handwheel clear of stack and operate U7650 lever.

4-25AB. Test Procedures for MA136 Long Stack

1. PREPARATION OF PT1585. On completion of partial stack test, continue as follows; but if necessary, prepare PT1585, turn it on, and test lamps as specified in paragraph 4-25Z(1).

a. Position TC660 and TC684 modules as shown in figure 4-3W for long stack test as necessary to align marks and keys and keyways in modules. Feed CS1717 cable through housing as indicated in figure 43R and connect it to RF terminal of TC684.

b. Check alignment of fixtures, housing, and module.

c. Position handwheel of U7651 near housing; turn handwheel until no gap remains between modules.

d. Insure that calibrator is turned off, and assemble remaining components as shown in figure 4-3W.

e. Operate BATTERY SIMULATOR switch on PT1585 to ON. BATTERY SIMULATOR lamp lights..

2.PROCEDURE.

a. Rotate MONITOR selector switch to INPUT CURRENT 500 MA. Insure that MONITOR meter does not deflect more than 1 minor scale division (meter should read less than 8 ma. on 500-ma. scale).

b. Press and hold 50 MA button. Meter does not deflect more than 8 minor scale divisions, or 8 ma. on 50-ma. scale. Release button.

c. Set calibrator REPETITION RATE HZ to LINE and output to -40 db above 1 uv/MHz. Turn on calibrator.

d. On PT1585, rotate FUNCTION thumbwheels to 00.

e. Gradually increase calibrator output until stack transmits. Output should be less than +25 db. Some RECEIVED MESSAGE lamps light, matching EXPECTED MESSAGE lamps. ERROR and STATUS/COUNT lamps do not light. The stack transmits approximately every 10 seconds.

NOTE

If activations occur prior to turning on calibrator, replace TC662. If activations persist, replace TC662 again. If activations still occur, RF interference is present and TC662 sensitivity cannot be checked.

f. Turn off calibrator.

g. Operate BATTERY SIMULATOR toggle switch to OFF. BATTERY SIMULATOR lamp goes out.

h. Turn handwheel on U7651 counterclockwise to release pressure on housing, lift handwheel clear, and disengage stack by operating U7650 lever.

i. Leave modules connected for further assembly in sensor. As applicable, turn off and disassemble other equipment.

4-25AC. Assembly Test MA136 EDET (G)

1. The following procedures assume that test of the long stack has been completed and that the sensor has been completely assembled.

2. PREPARATION OF PT1585.

a. On PT1585 (figure 4-1), insure that AC PWR and BATTERY SIMULATOR toggle switches are at OFF.

b. At rear of PT1585, connect AC INPUT to source of 105-125 VAC, 50 to 400 Hz, 5 amperes.

c. Operate AC PWR switch to ON. AC PWR, lamp lights. Various RECEIVED MESSAGE, and UNEXPECTED MESSAGE lamps light.

d. Momentarily press LAMP TEST button to insure that all RECEIVED MESSAGE,

EXPECTED MESSAGE, ERROR, AUDIO, and STATUS/COUNT lamps light.

e. After 1-minute warm-up, momentarily press RESET switch. Any lighted RECEIVED MESSAGE lamps go out.

NOTE

The information unique to each sensor is marked on a tape attached to the sensor case.

f. Rotate PT1585 thumbwheels as necessary to enter T module numbers in T XL CHANNEL.

g. Similarly enter first 3 digits from code plug in RF CHANNEL and next 2 digits in ID.

h. Locate sensor not more than 10 feet from LT1585.

3. PROCEDURE.

NOTE

To minimize battery drain, perform assembly test as quickly as practicable after sensor is turned on.

a. Using suitable wrench, unscrew nose from tubular case approximately 3/8 inch.

b. Install UHF antenna on calibrator. Set REPETITION RATE HZ to LINE and output to -40 db above 1 uv/MHz. Turn on calibrator.

c. Set FUNCTION thumbwheels to 00.

d. Gradually increase calibrator output until sensor transmits. Output indicated on calibrator should be less than +50 db.

e. The sensor transmits approximately every 10 seconds. Some RECEIVED MESSAGE lamps light, matching EXPECTED MESSAGE lamps. No ERROR or STATUS/COUNT lamp lights.

f. If an improper indication is received, disassemble sensor and repeat stack test.

g. Thread nose onto case until no gap remains. Tighten securely with suitable wrench.

h. Turn off equipment.

4-25AD. Assembly of MA137 SEISMIC CADET (G) Partial Stack

1. PREPARATION OF PT1585.

a. On PT1585 (figure 4-1), insure that AC PWR and BATTERY SIMULATOR toggle switches are at OFF.

b. At rear of PT1585, connect AC INPUT to source of 105 to 125 VAC, 50 to 400 HZ, 5 amperes.

c. Operate AC PWR switch to ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps may light.

d. Rotate AUDIO LEVEL knob to a position approximately 1/4 turn from maximum. This knob may be adjusted later as desired for audibility.

e. Momentarily press LAMP TEST button to insure that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO, and STATUS/COUNT lamps light.

f. After 1-minute warm-up, momentarily press RESET switch. Any lighted RECEIVED MESSAGE lamps go out.

2. Assemble fixtures as follows:

a. Install U7650 connector assembly, extension fixture, and V-block fixtures on U7651 fixture as shown in figures 4-3P and 4-3X for partial stack test.

b. Connect P1 of CA1543 to J1 of PT1585.

c. Lift handwheel of U7651 module assembly mechanism and rotate it away from module tray.

3. Mate modules in fixtures as follows:

a. Note markings on code plug of stack to be tested. On L CODE PLUG switches of PT1585, rotate RF CHANNEL thumbwheels to enter first 3 digits of code.

NOTE

Code plug markings are in the form: 426-55-00-1-3 The first 3 digits are RF 14 17

channel code; the next pair are ID's. In this example, 55 is the seismic ID and 14 is the engine detector ID, as shown in table 4-8C. The following 00/17 pairs of digits are sensor functions.

b. On ID thumbwheels, enter seismic ID shown on code plug of stack to be tested.

c. On T XTAL CHANNEL thumbwheels, enter channel number marked on T module.

d. Starting at left end of stack shown in figure 4-3X, place first module in tray so that male pins are to left, toward U7650. Similarly place other modules and housing; align marks and keys and keyways.

e. Feed right angle connector ends of cables shown in figure 4-3R through housing, connect cables to transmitter and PT1585 (figure 4-3X), and position housing on fixture.

f. Check alignment of fixtures, housing, and modules.

g. Position handwheel of U7651 near housing, turn handwheel clockwise, and mate modules. Continue turning until no gap remains between modules.

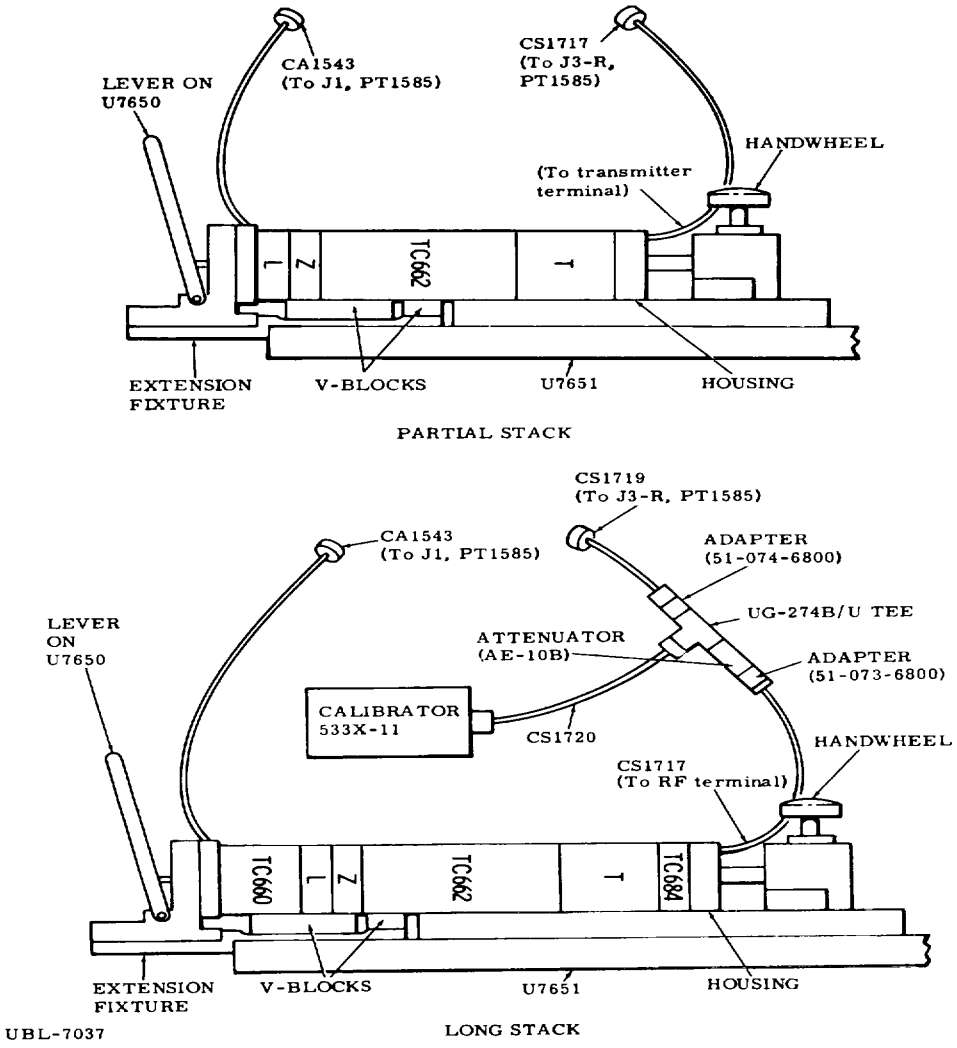


Figure 4-3W. Test Setup for MA136 EDET (G).

4-3AE. Test Procedures for MA137 Partial Stock

1. Set PT1585 switches as follows:

a. Rotate BATTERY SIMULATOR selector switch to NOMINAL.

b. Operate BATTERY SIMULATOR toggle switch to ON. BATTERY SIMULATOR lamp lights. Power is now applied to the stack.

2. Check current drain (standby current) of stack as follows:

a. Rotate MONITOR selector switch to INPUT CURRENT 500 MA. Insure that MONITOR meter does not deflect more than 1 minor scale division (meter should read less than 10 ma. on 500-ma. scale).

b. Press and hold 50 MA button. Meter does not deflect more than 10 minor scale divisions, or 10 ma. on 50-ma. scale. Release button.

c. If current exceeded 10 ma., any module may be at fault.

3. Check transmitter current and power as follows:

a. Rotate PT1585 FUNCTION thumb-wheels to 03 and COMMAND thumbwheels to 01.

b. Momentarily press TRANSMIT button and note MONITOR meter reading.

c. Meter reads 300 to 450 ma. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. AUDIO lamp lights. ERROR and STATUS/COUNT lamps do not light.

d. No audio tone is heard.

e. Repeat test by momentarily pressing TRANSMIT button as necessary to check readings and responses just indicated.

TABLE 4-8C

SEISMIC ID AND ENGINE DETECTOR ID, FOR SEISMIC CADET (G) AND SEISMIC EDIT (G) ONLY

COMMAND ID AND SEISMIC ID*	CORRESPONDING ENGINE DETECTOR ALARM ID**
02	03
05	06
08	09
12	13
15	16
18	19
22	23
25	26
28	29
32	33
35	36
38	39
42	43
45	46
48	49
51	01
52	04
53	07
54	11
55	14
56	17
57	21
58	24
59	27
62	63
64	31
65	34
66	37
67	41
68	44
69	47
71	61

The ID used to command a sensor is always identical to the ID in a message reporting a seismic disturbance or in any message of response to a command. The engine detection alarm ID will be received only in an RT. response ,message reporting engine noise detection.

f. Rotate MONITOR selector switch to OUTPUT WATTS 5W.

g. Momentarily press TRANSMIT button meter reads 2 to 4 w. on 5-w. scale. Other responses are the same as in step c.

h. Operate BATTERY SIMULATOR toggle switch to OFF. BATTERY SIMULATOR lamp goes out.

4. Rotate handwheel of U7651 counterclockwise to release pressure on modules and housing. Lift handwheel clear of stack.

4-25AF. Test Procedures for MA137 Long Stack

1. PREPARATION OF PT1585. On completion of partial stack test, continue as follows; if necessary prepare PT1585, turn it on, and test lamps as specified in paragraph 4-25AD (1).

a. Assemble and connect equipment as shown in figure 4-3X for long stack test.

b. Install TC684 by aligning connector receptacles.

c. Feed right angle connector ends through hole in housing as shown in figures 4-3R and 4-3X, connect cables to TC684, and position housing on fixture.

d. Check alignment of fixtures, housing, and modules.

e. Position handwheel of U7651 near housing; turn handwheel clockwise until no gap remains between modules.

f. Insure that calibrator is turned off.

g. Operate BATTERY SIMULATOR toggle switch to ON. BATTERY SIMULATOR lamp lights. Power is now applied to the stack.

2. PROCEDURE.

a. Insure that seismic ID shown on code plug (table 4-8C) is entered on ID thumbwheels of PT1585. Rotate thumbwheels for test 1 as indicated in table 4-8D.

b. Momentarily press TRANSMIT button and note results.

c. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. ERROR lamp does not light; STATUS/COUNT lamps light as shown for test 1 in table 4-8D.

d. Similarly check other command functions by performing tests 2 through 10 in table 4-8D. In each test, momentarily press TRANSMIT button. STATUS/COUNT lamps light as indicated in table 408D. RECEIVED MESSAGE lamps light, matching EXPECTED MESSAGE lamps. ERROR lamp does not light.

e. Perform operational check by setting PT1585 thumbwheels as indicated for test 11, table 4-8D. Tap sensor for 10 seconds and observe correct indications as indicated for test 11.

f. Set thumbwheels for test 12 in table 4-8D. Momentarily press TRANSMIT button. STATUS/COUNT lamps light as indicated. RECEIVED MESSAGE lamps light to match EXPECTED MESSAGE lamps; and ERROR lamp does not light.

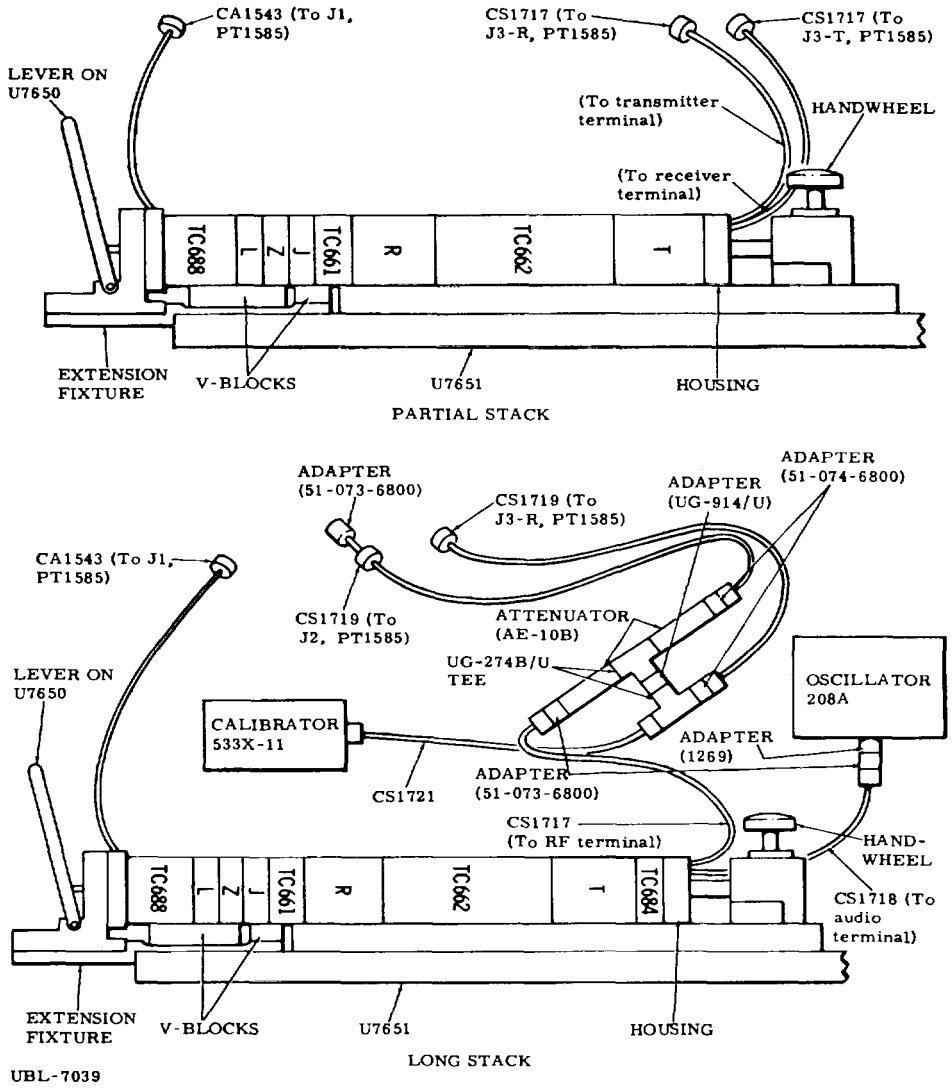


Figure 3-4X. Test Setup for MA137 Seismic CADET (G)

g. On PT1585, rotate ID thumbwheels to engine detector ID shown on code plug.

h. Set calibrator REPETITION RATE HZ to LINE and output to -40 db above 1 uv/MHz, for check of TC662 and short message transmission.

i. Perform test 13 specified in table 4-8D by setting indicated thumbwheels and gradually increasing calibrator output until stack transits; output should be less than +25 db.

NOTE

If activations occur prior to turning on calibrator, replace TC662. If activations persist, replace TC662 again. If activations still occur, RF interference is present and TC662 sensitivity cannot be checked.

j. Some RECEIVED MESSAGE lamps light as before, matching EXPECTED MESSAGE lamps; but no ERROR or STATUS/COUNT lamp lights. The stack transmits approximately every 10 seconds.

k. Allow stack to transmit three times and turn off calibrator.

1. Rotate ID thumbwheels to enter seismic ID shown on code plug.

m. Turn on oscillator and set output at 50 uv at 1 kHz.

n. Perform tests 14 and 15 shown in tab, 4-8D, noting correct lamp indications as before and, for test 15 only, a 1,000-Hz tone is heard. 1

NOTE

The H-P 208A oscillator may have to be

operated on battery power if AC line interference is observed.

3. Remove stack from test setup as follows:

a. Operate BATTERY SIMULATOR toggle switch to OFF. BATTERY SIMULATOR lamp goes out.

b. Turn handwheel on U7651 counterclockwise to release pressure on housing lift handwheel clear, and operate lever on U7650 to disengage fixture from stack.

TABLE 4-8D
TEST COMMANDS FOR MA137 and MA138

COMMAND		PT1585 SETTINGS AND RESPONSE			MODULE MOST LIKELY AT FAULT IF TEST FAILS
		FUNCTION	COMMAND	STATUS/COUNT	
1	Send status	06	02	010110*	R, J, Z, L, TC688
2	Go to NRT	06	03	100110	R, J, Z, L, TC688
3	Send status	06	02	100110	R, J, Z, L, TC688
4	Change gain	06	06	100110	J, Z, TC688
5	Go to 75 pps	10	08	000000	J, Z
6	Go to 300 pps	00	09	000000	J, Z
7	Send audio	06	01	100110	J
8	Go to NRT	06	03	100110	J
9	Read stored count	05	05	000000	J
10	Go to RT	06	04	010110	J
11	Operational check	00	**	000000*	Z, TC688
12	Read stored count	05	05	000001	J, TC688
13	Operational check	00	***	000000	Z, TC662
14	Read stored count	05	05	000100	J, TC662
15	Send audio	03	01****	000000	J, Z, TC661

*In this response column, a "0" indicates the lamp is off; a "I" indicates the lamp is on.
**Tap sensor for 10 seconds, leaving COMMAND switches at 04; do not press TRANSMIT button.
***Leave COMMAND switches at 05, but set ID switches to engine detector ID on code plug for test 13; following test, set ID switches to seismic ID shown on code plug.
****In addition to STATUS/COUNT lamp indications, AUDIO lamp must light and a tone must be heard.

c. Leave modules connected for further assembly in sensor. As applicable, turn off and disassemble other equipment.

4-25AG. ASSEMBLY TEST OF MA137 SEISMIC CADET (G)

1. The following procedures assume that test of the long stack has been completed and that the sensor has been completely assembled.

2. PREPARATION OF PT1585.

a. On PT1585 (figure 4-1), insure that AC PWR and BATTERY SIMULATOR toggle switches are at OFF.

b. At rear of PT1585, connect AC INPUT to source of 105 to 125 VAC, 50 to 400 Hz, 5 amperes.

c. Operate AC PWR switch to ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps light.

d. Rotate AUDIO LEVEL knob to a position approximately 1/4 turn from maximum. This knob may later be adjusted as desired for audibility.

e. Momentarily press LAMP TEST button to insure that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO, and STATUS/COUNT lamps light.

f. After 1-minute warm-up, monetarily press RESET switch. Any lighted RECEIVED MESSAGE lamps go out.

NOTE

The information unique to each sensor is marked on a tape attached to the sensor case.

g. Rotate T XTAL CHANNEL thumbwheels as necessary to enter T module numbers.

h. Similarly enter first 3 digits from code plug in RF CHANNEL.

i. Connect UHF antenna to J2 of PT1585.

j. Locate sensor not more than 10 feet from PT1585.

k. Insure that calibrator is off.

3. PROCEDURE.

NOTE

To minimize battery drain, perform assembly test as quickly as practicable after sensor is turned on.

a. Using suitable wrench, unscrew nose from tubular case approximately 3/8 inch.

b. On PT1585, rotate FUNCTION thumbwheels to 00. On ID thumbwheels, enter seismic ID.

c. Tap sensor.

d. Sensor transmits after approximately 10 seconds. RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. ERROR and STATUS/COUNT lamps do not light.

e. If an improper indication is received, disassemble sensor and repeat long stack test.

f. On PT1585, rotate FUNCTION thumbwheels to 03 and COMMAND thumbwheels to 01.

g. Momentarily press TRANSMIT button.

NOTE

Because of the close proximity of the PT1585 to the CADET microphone, feedback causes a tone to be generated. Generating this tone under these conditions indicates that the audio part of the sensor is operating properly.

h. A tone is heard. Tap sensor on mast assembly. The tone is momentarily interrupted, indicating the sensor is operating properly.

i. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. AUDIO lamp lights. ERROR lamp must not light. STATUS/COUNT lamps do not light.

j. If an improper indication is received, disassemble sensor and repeat stack test.

k. Set ID thumbwheels to engine detector ID.

1. Install UHF antenna on calibrator. Set REPETITION RATE HZ to LINE and output to -40 db above 1 uv/MHz. Turn on calibrator.

NOTE

Insure that sensor antenna radials are fully extended.

m. Set FUNCTION thumbwheels to 00.

n. Gradually increase calibrator output unit sensor transmits. Output indicated on calibrator should be less than +50 db.

o. The sensor transmits approximately every 10 seconds. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. No ERROR or STATUS/COUNT lamp lights.

NOTE

If an improper indication is received, disassemble sensor and repeat stack test.

p. Thread nose back onto case until no gap remains. Tighten securely with suitable wrench.

q. Turn off equipment.

4-25AH. Assembly of MA138 SEISMIC AUDET (G) Partial Stack

1. PREPARATION OF PT1585.

a. On PT1585 (figure 4-1), insure that AC PWR and BATTERY SIMULATOR toggle switches are at OFF.

b. At rear of PT1585, connect AC INPUT to source of 105 to 125 VAC 50 to 400 Hz, 5 amperes.

c. Operate AC PWR switch to ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps may light.

d. Rotate AUDIO LEVEL, knob to a position approximately 1/4 turn from maximum. This knob may be adjusted later as desired for audibility.

e. Momentarily press LAMP TEST button to insure that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO, and STATUS/COUNT lamps light.

f. After 1-minute warm-up, momentarily press RESET switch. Any lighted RECEIVED MESSAGE lamps go out.

2. Assemble fixtures as follows:

a. Install U7650 connector assembly, extension fixture, and V-block fixtures on U7651 fixture as shown in figures 4-3P and 4-3Y for partial stack test.

b. Connect P1 of CA1543 to J1 of PT1585.

c. Lift handwheel of U7651 module assembly mechanism and rotate it away from module tray.

3. Mate modules in fixtures as follows:

a. Note markings on code plug of stack to be tested. On L CODE PLUG switches of PT1585, rotate RF CHANNEL thumbwheels to enter first 3 digits of code.

NOTE

Code plug markings are in the form: 426-55-00-1-3 The first 3 digits are RF 14 17 channel code; the next pair are ID's. In this example, 55 is the seismic ID and 14 is the engine detector ID (not used in AUDET). The following 00/17 pairs of digits are sensor function.

b. On ID thumbwheels, enter seismic ID shown on code plug of stack to be tested.

c. On T XTAL CHANNEL thumbwheels, enter channel number marked on T module.

d. Starting at left end of stack shown in figure 4-3Y, place first module in tray so that male pins are to left, toward U7650. Similarly place other modules and housing; align marks and keys and keyways.

e. Feed right angle connector ends of cables shown in figure 4-3R through housing, connect cables to transmitter and PT1585 (figure 4-3Y), and position housing on fixture.

f. Check alignment of fixtures, housing, and modules.

g. Position handwheel of U7651 near housing, turn handwheel clockwise, and mate modules. Continue turning until no gap remains between modules.

4-25AJ. Test Procedures for MA138 Partial Stack

1. Set PT1585 switches as follows:

a. Rotate BATTERY SIMULATOR selector switch to NOMINAL.

b. Operate BATTERY SIMULATOR toggle switch to ON. BATTERY SIMULATOR lamp lights. Power is now applied to the stack.

2. Check current drain (standby current) of stack as follows:

a. Rotate MONITOR selector switch to INPUT CURRENT 500 MA. Insure that MONITOR meter does not deflect more than 1/2 minor scale division (meter should read less than 5 ma. on 500-ma. scale).

b. Press and hold 50 MA button. Meter does not deflect more than 5 minor scale divisions, or 5 ma. on 50-ma. scale. Release button.

c. Press and hold 5 MA button. Meter does not deflect more than full-scale on 5-ma. scale. Release button.

d. f current exceeded 5 ma., any module may be at fault.

3. Check transmitter current and power as follows:

a. Rotate PT1585 FUNCTION thumb-wheels to 03 and COMMAND thumbwheels to 01.

b. Momentarily press TRANSMIT button and note MONITOR meter reading.

c. Meter reads 300 to 450 ma. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. AUDIO lamp lights. ERROR and STATUS/COUNT lamps do not light.

d. No audio tone is heard.

e. Repeat test by momentarily pressing TRANSMIT button as necessary to check readings and responses just indicated.

f. Rotate MONITOR selector switch to OUTPUT WATTS 5W.

g. Momentarily press TRANSMIT button. Meter reads 2 to 4 w. on 5-w. scale. Other responses are the same as in c above.

h. Operate BATTERY SIMULATOR toggle switch to OFF. BATTERY SIMULATOR lamp goes out.

4. Rotate handwheel of U7651 counterclockwise to release pressure on modules and housing. Lift handwheel clear of stack.

4-25AK. Test Procedures for MA138 Long Stack

1. PREPARATION OF PT1585. On completion of partial stack test, continue as follows; if necessary prepare PT1585, turn it on, and test lamps as specified in paragraph 4-25AH, 1.

a. Assemble and connect equipment as shown in figure 43Y for long stack test.

b. Install TC684 by aligning connector receptacles.

c. Feed right angle connector ends through hole in housing as shown in figure 4-4R, connect cables to TC684, and position housing on fixture.

d. Check alignment of fixtures, housing, and modules.

e. Position handwheel of U7651 near housing; turn handwheel clockwise until no gap remains between modules.

f. Operate BATTERY SIMULATOR toggle switch to ON. BATTERY SIMULATOR lamp lights. Power is now applied to the stack.

2. PROCEDURE.

a. Insure that seismic ID shown on code plug is entered on ID thumbwheels of PT1585. Rotate other thumbwheels as indicated for test 1 in table 4-8D.

b. Set oscillator to 50 uv output at 1 kHz.

c. Momentarily press TRANSMIT button.

d. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. ERROR lamp does not light. STATUS/COUNT lamps light as indicated in table 4-8D.

e. Similarly check other command functions by performing tests 2 through 10 in table 4-8D. In each test, momentarily press TRANSMIT button. STATUS/COUNT lamps light as indicated in table 4-8D, RECEIVED MESSAGE lamps light, matching EXPECTED MESSAGE lamps. ERROR lamp does not light.

f. Perform operational check by setting PT1585 thumbwheels as indicated for test 11, table 4-8D. Tap sensor for 10 seconds and observe correct indications as shown for test 11.

g. Set thumbwheels for test 12 in table 4-8D. Momentarily press TRANSMIT button. STATUS/COUNT lamps light as indicated; RECEIVED MESSAGE lamps light to match EXPECTED MESSAGE lamps; and ERROR lamp does not light.

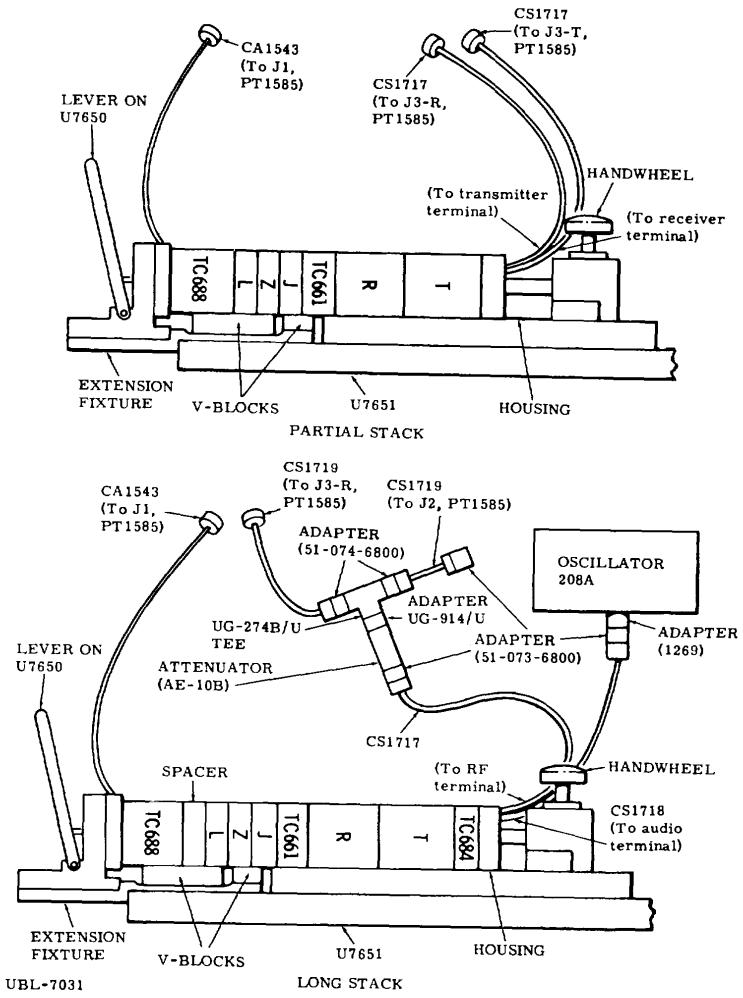


Figure 4--3Y. Test Setup for MA138 Seismic AUDET (G)

h. Perform test 15 shown in table 48D, noting correct lamp indications. A 1,000-Hz tone is heard.

NOTE

The H-P 208A oscillator may have to be operated on battery power if AC line interference is observed.

3. Remove stack from test setup as follows:
   a. Operate BATTERY SIMULATOR toggle switch to OFF. BATTERY SIMULATOR lamp goes out.
   b. Turn handwheel on U7651 counterclockwise to release pressure on housing, lift handwheel clear, and operate lever on U7650 to disengage fixture from stack.
   c. Leave modules connected for further assembly in sensor. As applicable, turn off and disassemble other equipment.

4-25AL. ASSEMBLY TEST OF MA138 SEISMIC AUDET (G).

1. The following procedures assume that test of the long stack has been completed and that the sensor has been completely assembled.
2. PREPARATION OF PT1585.

a. On PT1585 (figure 4-1), insure that AC PWR and BATTERY SIMULATOR toggle switches are at OFF.

b. At rear of PT1585, connect AC INPUT to source of 105 to 125 VAC, 50 to 400 Hz, 5 amperes.

c. Operate AC PWR switch to ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps light.

d. Rotate AUDIO LEVEL knob to a position approximately 1/4 turn from maximum. This knob may later be adjusted as desired for audibility.

e. Momentarily press LAMP TEST button to insure that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO, and STATUS/COUNT lamps light.

f. After 1-minute warm-up, monetarily press RESET switch. Any lighted RECEIVED MESSAGE lamps go out.

NOTE

The information unique to each sensor is marked on a tape attached to the sensor case.

g. Rotate T XTAL CHANNEL thumb-wheels as necessary to enter T module numbers.

h. Similarly enter first 3 digits from code plug in RF CHANNEL.

i. Connect UHF antenna to J2 of PT1585.

j. Locate sensor not more than 10 feet from PT1585.

3. PROCEDURE.

NOTE

To minimize battery drain, perform assembly test as quickly as practicable after sensor is turned on.

a. Using suitable wrench, unscrew nose from tubular case approximately 3/8 inch.

b. On PR1585, rotate FUNCTION thumbwheels to 00. On ID thumbwheels, enter seismic ID.

c. Tap sensor.

d. Sensor transmits after approximately 10 seconds. RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. ERROR and STATUS/COUNT lamps do not light.

e. If an improper indication is received, disassemble sensor and repeat long stack test.

f. On PT1585, rotate FUNCTION thumbwheels to 03 and COMMAND thumb-wheels to 01.

g. Momentarily press TRANSMIT button.

NOTE

Because of the close proximity of the PT1585 to the AUDET microphone, feedback causes a tone to be generated. Generating this tone under these conditions indicates that the audio part of the sensor is operating properly.

h. A tone is heard. Tap sensor on mast assembly. The tone is momentarily interrupted, indicating the sensor is operating properly.

i. Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. AUDIO lamp lights. ERROR lamp must not light. STATUS/COUNT lamps do not light.

j. If an improper indication is received, disassemble sensor and repeat stack test.

k. Thread nose back onto case until no gap remains. Tighten securely with suitable wrench.

1. Turn off equipment.

4-25AM. Assembly of MA139 SEISMIC EDIT (G) Partial Stack

1. PREPARATION OF PT1585.

a. On PT1585 (figure 4-1), insure that AC PWR and BATTERY SIMULATOR toggle switches are at OFF.

b. At rear of PT1585, connect AC INPUT to source of 105 to 125 VAC 50 to 400 Hz, 5 amperes.

c. Operate AC PWR switch to ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps may light.

d. Momentarily press LAMP TEST button to insure that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO, and STATUS/COUNT lamps light.

e. After 1-minute warm-up, momentarily press RESET switch. Any lighted RECEIVED MESSAGE lamps go out.

2. Assemble fixtures as follows:

a. Install U7650 connector assembly, extension fixture, and V-block fixtures on U7651 fixture as shown in figures 4-3P and 4-3Z.

b. Connect P1 of CA1543 to J1 of PT1585.

c. Lift handwheel of U7651 module assembly mechanism and rotate it away from module tray.

3. Mate modules in fixtures as follows:

a. Note markings on code plug for stack to be tested.

On L CODE PLUG switches of PT1585, rotate RF CHANNEL thumbwheels to enter first 3 digits of code.

NOTE

Code plug markings are in the form: 100-51-00-1-1 The first 3 digits are RF channel code; the next pair are ID's. In this example, 51 is the seismic ID and 01 is the engine detector ID, as shown in table 48C. The next 2 digits (00) are sensor function.

b. On ID thumbwheels, enter seismic ID shown on code plug of stack to be tested.

c. On T XTAL CHANNEL thumbwheels, enter channel number marked on T module.

d. Starting at left end of partial stack shown in figure 4-3Z, place first module in U7651 tray so that male pins are at left. Similarly place remaining modules in tray; align marks and key and keyways in modules.

e. Feed right angle connector ends of cables shown in figure 4-3R through housing, connect cables to transmitter and PT1585 (figure 4-3Z), and position housing on fixture.

f. Check alignment of fixtures, housing, and modules.

g. Position handwheel of U7651 near housing, turn handwheel clockwise, and mate modules. Continue turning until no gap remains between modules.

4-25AN. Test Procedures for MA139 Partial Stack

1. Set switches as follows:

a. Rotate BATTERY SIMULATOR switch to NOMINAL.

b. On PT1585, operate BATTERY SIMULATOR toggle switch to ON. BATTERY SIMULATOR lamp lights. Power is not applied to the stack.

2. Check current drain (standby current) of stack as follows:

a. Rotate MONITOR selector switch to INPUT CURRENT 500 MA. Insure that MONITOR meter does not deflect more than 1 minor scale division (meter should read less than 8 ma. on 500-ma. scale).

b. Press and hold 50 MA button. Meter does not deflect more than 8 minor scale divisions, or 8 ma. on 50-ma. scale. Release button.

c. If current exceeded 8 ma., any module may be at fault.

3. Check transmitter current and power as follows:

a. Press and hold AUDIO button and note MONITOR meter reading.

b. Meter reads 300 to 450 ma. Release but- ton.

c. Rotate MONITOR selector switch to OUTPUT WATTS 5W.

d. Press and hold AUDIO button. Meter reads 2 to 4 w. on 5-w. scale. Release button.

e. Operate BATTERY SIMULATOR toggle switch to OFF. BATTERY SIMULATOR lamp goes out.

f. Rotate handwheel of U7651 counterclockwise to release pressure on modules and housing. Lift handwheel clear of stack and operate U7650 lever.

4-25AP. Test Procedures for MA139 Long Stack

1. PREPARATION OF PT1585. On completion of partial stack test, continue as follows; but if necessary, prepare PT1585, turn it on, and test lamps as specified in paragraph 4-25AM1.

a. Position TC688 and TC684 modules as shown in figure 4-3Z for long stack test as necessary to align marks and keys and keyways in modules. Feed CS1717 cable through housing as indicated in figure 43R and connect it to RF terminal of TC684.

b. Check alignment of fixture, housing, and module.

c. Position handwheel of U7651 near housing; turn handwheel until no gap remains between modules.

d. Insure that calibrator is turned off; and assemble remaining components as shown in figure 4-3Z.

e. Operate BATTERY SIMULATOR switch on PT1585 to ON. BATTERY SIMULATOR lamp lights. Power is now applied to the stack.

2. PROCEDURE.

a. Insure that seismic ID shown on code plug is entered on PT1585 ID thumbwheels.

b. Rotate MONITOR selector switch to INPUT CURRENT 500 MA. Insure that MONITOR meter does not deflect more than 1 minor scale division (meter should read less than 8 ma. on 500-ma. scale).

c. Press and hold 50 MA button. Meter does not deflect more than 8 minor scale divisions, or 8 ma. on 50-ma. scale. Release button.

d. On PT1585, rotate FUNCTION thumbwheels to 00.

e. Tap sensor stack for approximately 10 seconds.

f. Stack transmits in approximately 10 seconds.

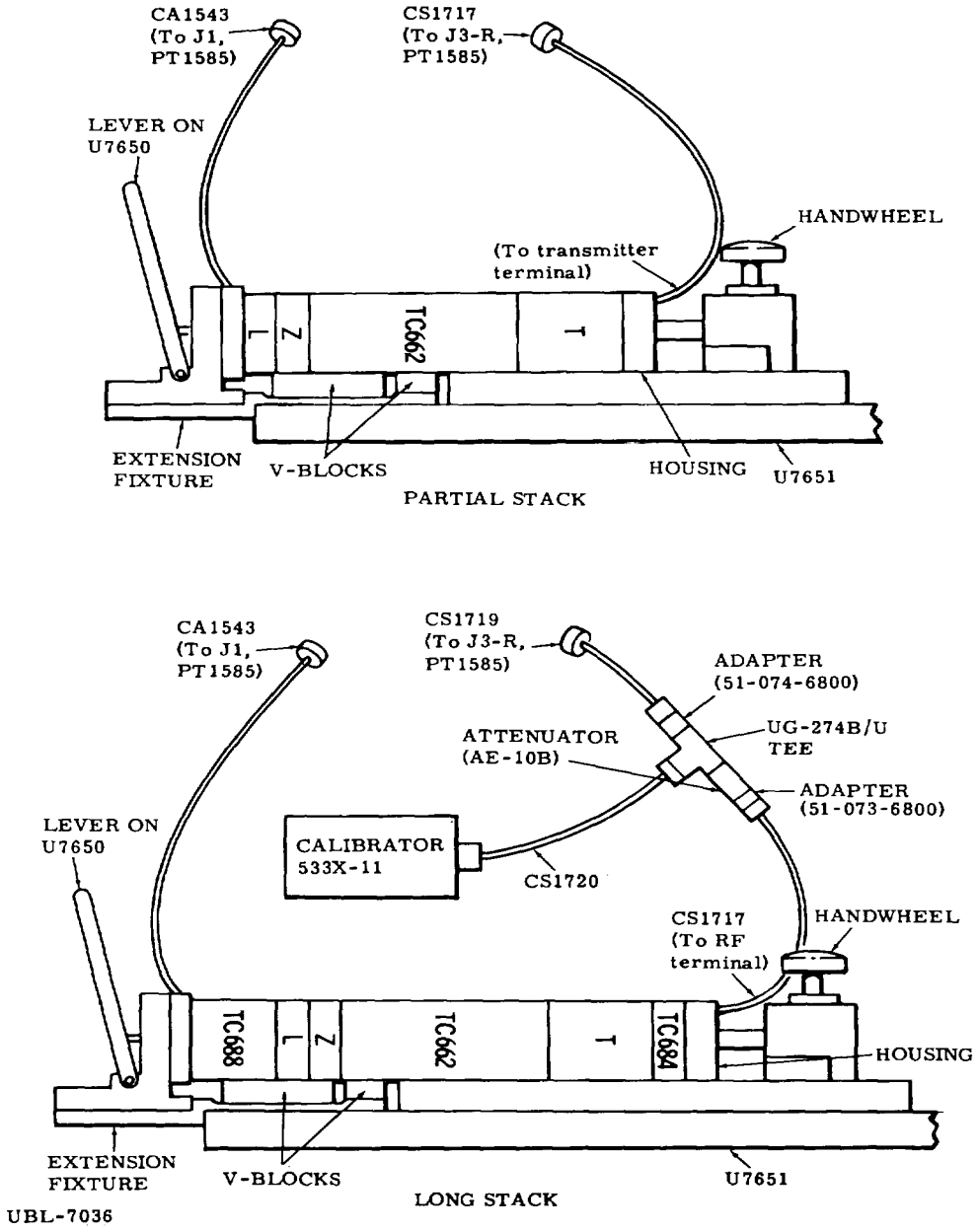


Figure 4-3Z. Test Setup for MA139 Seismic EDIT (G).

Some RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. ERROR and STATUS/COUNT lamps do not light.

g. Set calibrator REPETITION RATE HZ to LINE and output to -40 db above 1 uv/MHz. Turn on calibrator.

h. On PT1585, rotate ID thumbwheels to engine detector ID.

i. Gradually increase calibrator output until stack transmits. Output should be less than +25 db. Some RECEIVED MESSAGE lamps light, matching EXPECTED MESSAGE lamps. ERROR and STATUS/COUNT lamps do not light. The stack transmits approximately every 10 seconds.

NOTE

If activations occur prior to turning on calibrator, replace TC662. If activations persist, replace TC662 again. If activations still occur, RF interference is present and TC662 sensitivity cannot be checked.

j. Turn off calibrator.

k. Operate BATTERY SIMULATOR toggle switch to OFF. BATTERY SIMULATOR lamp goes out.

1. Turn handwheel on U7651 counterclockwise to release pressure on housing, lift handwheel clear, and disengage stack by operating U7650 lever.

m. Leave modules connected for further assembly in sensor. As applicable, turn off and disassemble other equipment.

4-25AQ. Assembly Test of MA139 SEISMIC EDIT (G)

1. The following procedures assure that test of the long stack has been completed and that the sensor has been completely assembled.

2. PREPARATION OF PT1585.

a. On PT1585 (figure 4-1), insure that AC PWR and BATTERY SIMULATOR toggle switches are at OFF.

b. At rear of PT1585, connect AC INPUT to source of 105 to 125 VAC, 50 to 400 Hz, 5 amperes.

c. Operate AC PWR switch to ON. AC PWR lamp lights. Various RECEIVED MESSAGE and EXPECTED MESSAGE lamps light.

d. Momentarily press LAMP TEST button to insure that all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO, and STATUS/COUNT lamps light.

e. After 1-minute warm-up, momentarily press RESET switch. Any lighted RECEIVED MESSAGE lamps go out.

NOTE

The information unique to each sensor is marked on a tape attached to the sensor case.

f. Rotate T XTAL CHANNEL thumb-wheels as necessary to enter T module numbers.

g. Similarly enter first 3 digits from code lug in RF CHANNEL.

h. Locate sensor not more than 10 feet from 1585.

3. PROCEDURE.

NOTE

To minimize battery drain, perform assembly test as quickly as practicable after sensor is turned on.

a. Using suitable wrench, unscrew nose from tubular case approximately 3/8 inch.

b. On PT1585, rotate FUNCTION thumbwheels to 00. Rotate ID thumbwheels to enter seismic ID.

c. Tap sensor until sensor transmits.

d. Sensor transmits approximately 10 seconds. RECEIVED MESSAGE lamps, matching EXPECTED MESSAGE lamps, light. ERROR and STATUS/COUNT lamps do not light.

e. If an improper indication is received, disassemble sensor and repeat long stack test.

f. Rotate ID thumbwheels to enter engine detector ID.

g. Install UHF antenna on calibrator. Set REPETITION RATE HZ to LINE and output to -40 db above 1 uv/MHz. Turn on calibrator.

NOTE

Insure that sensor antenna radials are fully extended.

h. Gradually increase calibrator output until sensor transmits. Output indicated on calibrator should be less than +50 db.

i. The sensor transmits approximately every 10 seconds. Some RECEIVED MESSAGE lamps light, matching EXPECTED MESSAGE lamps. No ERROR or STATUS/COUNT lamp lights.

NOTE

The sensor may transmit seismic activations which appear as error messages.

j. If an improper indication is received, disassemble sensor and repeat stack test.

k. Thread nose back onto case until no gap remains. Tighten securely with suitable wrench.

1. Turn off equipment.

TABLE 4-9. CONTROLS AND INDICATORS

CONTROL OR INDICATOR	FUNCTION
AC PWR switch	Turn AC power ON or OFF.
AC PWR light	Lights when AC power is ON.
BATTERY SIMULATOR ON-OFF switch	Turns Battery Simulator ON or OFF.
BATTERY SIMULATOR light	Lights when BATTERY SIMULATOR switch is ON.
BATTERY SIMULATOR selector switch	Selects LOW, NOMINAL or HIGH voltage output from the Battery Simulator.
MONITOR meter	Meter used to monitor input voltage or current and output power (watts).
MONITOR selector switch	Selects input voltage, input current or output power to be displayed on meter.
50 MA push-button switch	Selects a meter shunt to provide a 50 ma full-scale range on the meter.
5 MA push-button switch	Selects a meter shunt to provide a 5 ma full-scale range on the meter.
ANT connection	Connection for an external antenna to the PT1585 panel.

TABLE 4-9. CONTROLS AND INDICATORS (cont'd)

CONTROL OR INDICATOR	FUNCTION
J2 connector	Used to connect the PT1585 Panel to the Connector Head during diagnostic testing of a stack/sensor.
RESET switch	Push-button switch used to reset the PT1585 ready for test.
AUDIO switch	Push-button switch used to turn on the T module in a partial stack.
RT switch	Push-button switch used for simulating an environmental stimulation during testing of NCI, partial stacks.
J3 connector	Used to connect the PT1585 panel to the Connector Head during diagnostic testing of a stack/sensor.
TRANSMIT switch	Push-button switch for sending a command transmission to a stack/sensor.
Diagnostic Indicators	A row of six red indicators near bottom of PT1585 panel used to help locate a module which prevents a stack response.
COMMAND:	Indicator lights whenever RT or Transmit pushbuttons are actuated on PT1585 panel. Failure to light indicates tester malfunction.
RECEIVER VIDEO:	E module must be removed from stack for monitoring this signal. Indicator lights when an R module video output is sensed in response to a command transmission from the PT1585. Failure to light may indicate R module malfunction.
ENCODER CALL UP:	E module must be removed from stack for monitoring this signal. Indicator lights whenever the command transmission received from the PT1585 agrees with L module coding as determined by the J module. Failure to light may indicate an L or J module malfunction. Operator error in setting of switches on PT1585 panel could also 1a responsible.

TABLE 4-9. CONTROLS AND INDICATORS (cont'd)

CONTROL OR INDICATOR	FUNCTION
LAMP TEST push-button switch	Turns ON all RECEIVED MESSAGE, EXPECTED MESSAGE, ERROR, AUDIO and STATUS/ COUNT lights.
RECEIVED MESSAGE lamps	Upper row of lamps numbered 2 thru 10 on PT1585 panel. Indicate the response received from a stack/sensor under test. Light ON indicates a 1 bit and light OFF indicates a 0 bit.
EXPECTED MESSAGE lamps	Lower row of lamps numbered 2 thru 10 on PT1585 panel. Expected message is preset by ID and FUNCTION switches on PT1585 panel. Lamp ON indicates a 1 bit and lamp OFF indicates a 0 bit.
ERROR lamp	Lights to indicate a difference between EXPECTED MESSAGE and RECEIVED MESSAGE.
AUDIO lamp	Lights to indicate presence of audio time in received message.
STATUS/COUNT lamps	A portion of the received message displayed by lamps 11 thru 16 on PT1585 panel. When used to indicate STATUS, lamps 11 and 12 indicate RT or NRT operating mode and lamps 13 thru 16 indicate E module sensitivity or gain When used to indicate COUNT, lamps 11 thru 16 represent the total number (binary of stored events sensed by the E module after being zeroed in NRT.
T XTAL CHANNEL switches	Four switches on the PT1585 panel used to set the four digit crystal channel number which represents the T module transmitting frequency.
L CODE PLUG switches	Seven switches on the PT1585 panel used to set the first seven digits of the nine digit number (on tape) on the side of the L module to be tested. Three switches set RF CHANNEL, two switches set ID and two switches set the FUNCTION.
COMMAND switches	Two switches used to set the coded command that is transmitted by the PT1585.
J 1 connector	Used to connect the Code Plug Simulator or the Connector Head to the PT1585 Panel.

TABLE 4-9. CONTROLS AND INDICATORS (cont'd)

CONTROL OR INDICATOR	FUNCTION
Diagnostic Indicators	
SPLIT PHASE:	E module must be removed from stack for monitoring this signal. Indicator lights whenever Z module output is sensed Failure to light may indicate a Z module malfunction.
AUDIO TIME:	E module must be removed from stack for monitoring this signal. Indicator lights whenever an audio response message is sensed. Failure to light may indicate an L or J module malfunction.
RECEIVED MESSAGE:	Indicator lights whenever the PT1585 receives a stack transmission. Failure to light may indicate a T module or tester malfunction.
AUDIO controls	
SOURCE INT	Selects internal 2 kHz or externally provided audio signal.
LEVEL:	Adjusts the audio level.
J38 connector	Used to connect external audio signal to PT1585.
HIEADSET:	Socket for connection headset to monitor audio signal during testing.

4-26. OPERATION.

Operation of the PT1585 is controlled by logic circuitry. Inputs to the tester, both from the tester panel and from units tested, pass through appropriate circuitry and are reduced to displayable legible information. Logic circuitry is shown on the. schematic diagrams Figure 6-1 In the following brief descriptions, sheets of the schematic diagrams are referenced as appropriate. For purposes of logic diagram presentation, exclusive use is made of the logic symbology defined in American Standard ASA Y32.14 "Graphic Symbols for Logic Diagrams". It is assumed that maintenance personnel troubleshooting logic circuits in the PT1585 are familiar with this symbology and are generally knowledgeable in logic circuits.

4-27. MODULATOR LOGIC (Ref. Figure 6-1 Sheet 2).

4-28. FUNCTION.

a. To provide command transmitter modulation in required format.

b. To determine command message parity bit.

c. To supply a 2-ktlz square wave for audio modulation.

d. To supply a 10-kHz output for timing in Received Data Logic.

4-29. OPERATION.

a. When a "transmit command" signal is received, a 10-kHz modulation signal is output for a duration of 8 milliseconds. A continuous 4-kHz output from A10 (D4022) is divided down by flip flops on A24 (D4003) to derive the required 8-millisecond enable for the 10-kHz modulation (figure 4-4).

b. The 20-bit command is translated into a modulation signal beginning 10 milliseconds after the "transmit command" signal is received. This timing is controlled by the flip flop on A26 whose output is pin 39. This flip flop returns to its initial state 5 milliseconds after data modulation begins coincident with the time required to output 20 bits at a 4-kHz rate (figure 4-4).

c. Pulse width control for a "O" or "1" transmission is derived from 4 kHz and 20 kHz outputs from A10 (D4022) such that the output at A17-35 for a "0" is 75 microseconds and the output at A17-38 for a "1" is 175 microseconds (figure 4-5).

d. Flip flop A24 whose output is pin 23 changes state each time a logic "1" is transmitted. Therefore, its output reflects whether an even or odd number of "l's" have been transmitted and determines parity for the transmitted message.

4-30. DATA FOR TRANSMISSION LOGIC (Ref. Figure 6-1 Sheet 3).

4-31. FUNCTION.

a. To convert Command Code from S5 and S6 to a 4-bit straight binary equivalent for storage in shift register A21 (D4208).

b. To convert RF Channel Code from S11, S12, and S13 for storage in A21. The first digit binary output from S13 required no conversion, but second and third digits from S11 and S12 are converted to a 5-bit straight binary equivalent prior to storage in A21.

c. To accept ID code from Code Converter Logic for storage in A21.

d. To control shift register A21 for parallel storage of the above data prior to command transmission and serial output at DT1 during command transmission.

e. To output parity from A18-32 terminating command transmission.

f. To monitor and display the presence of certain signals for diagnostic purposes.

4-32. OPERATION.

a. Code conversion from two binary coded digits to straight binary is accomplished on A22 using full adders.

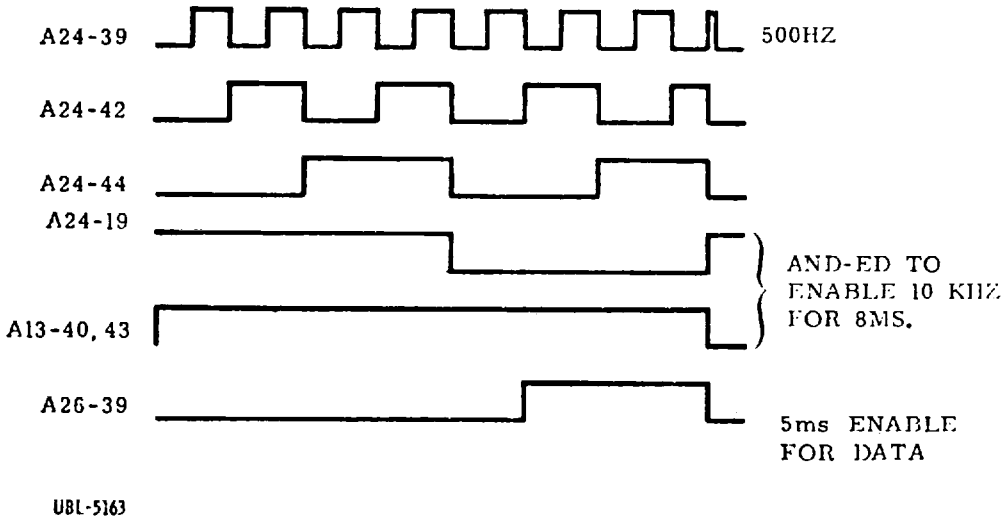


Figure 4-4 . Command Format

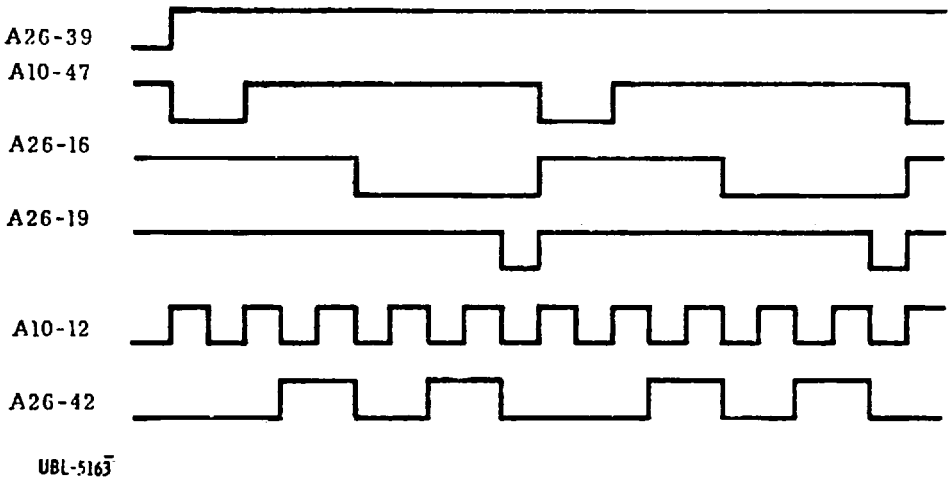


Figure 4-5. Command Bit Timing

b. Shift register A21 (D4208) allows for parallel data entry when input A21-ll is low and serial output when A21-11 is high. In either mode, a clock input at A21-40 is required.

c. During command transmission, the logic "O" (stored at A21-33 prior to transmission) is shifted through the register until it is output at A21-26. At this time, the output at DTI is determined by the parity control from A18-32.

d. Prior to this time, at least one input to the 19-input gate on A18 was "low " and therefore A18-32 was held in its "high" state. At the time parity is output, A18-32 is under direct control of parity input at A18-30 since all other gate inputs are "high".

4-33. RECEIVED DATA LOGIC (Ref. Figure 6-1 Sheet 4).

4-34. FUNCTION.

a. To buffer receiver output while providing squelch control and audio amplification.

b. To decode split phase message as received for storage in shift register A12 (D4208).

c. To display received message.

d. To compare first nine bits following the frame bit of the received message with the corresponding expected message bits.

e. To display results of comparison if error is sensed.

f. To preset logic for receiving a long or short code at 75 or 300 pps.

g. To clear automatically or preset system with each message received.

4-35. OPERATION.

a. Signal Conditioner A5. This specially designed card provides the necessary buffering, audio amplification and squelch control. The squelch output is "low" when receiver video is absent and "high" when video is present.

b. Decoder. As data is received in split phase form, it is decoded for comparison with the expected message and storage in shift register A12. Figure 4-6 illustrates decoding logic behavior for a typical input.

c. Decoder Clock Pulse. The decoder provides a clock pulse synchronized with the data at 75 or 300 pps. Duration of each clock pulse is approximately equal to three-fourths of a period relative to the incoming data rate. The required timing is derived from A10 (D4022) which outputs a 20-kHz signal subsequently divided down by flip flops on A7 (D4003). Function switch S8 and associated gates on All (D4004) allow for selection of the appropriate timing control for an input data rate of 75 or 300 pps. Figure 4-7 illustrates how a 2.4 millisecond clock pulse is generated for an input data rate of 300 pps.

d. Logic Preset for Long or Short Code Input. Function switch S7 and associated gates on All (D4004) switch data to either of two points in the shift register A12 depending upon code length. This is done such that the ID code for example will always be displayed by the same indicator group.

e. Shift Register. Shift register A12 (D4208) is used to store expected data in parallel prior to receipt of the frame bit. Upon receiving the frame bit, shift register control (A9-4) is switched to disable any further parallel entry and thereby enable the register for sequential input data storage and sequential output of previously stored expected data. The expected data in sequential form is used for comparison against the received data as illustrated in figure 4-8 .

f. Comparator. As data is received, it is compared with the expected data (shifted out of register A 12 as received data is shifted in) using an exclusive OR gate A16 (D4025) whose output is pin 16. When inputs at A16-13 and -14 are unequal, A16-16 goes to its "high" state unless inhibited by A16-40 (used to disable comparator after the first nine bits following the frame bit). A "high" output at A16-16 coincident with the trailing edge of an input at A9-40 results in a change in flip flop output. Figure 4-8 illustrates comparator operation. The comparator disable control allows comparison of only the first nine

bits received following the frame bit. When a short code is received, all bits following the frame bit will be compared unless more than the expected number are received. In such a case, the comparator error indicator would not respond to the additional bits. The received message display would, however, indicate the receipt of additional bits by virtue of a left shift(s). For a long code, the last six bits are not compared automatically since they are not known in terms of what bits to expect for all cases. Figure 4-9 illustrates control of the comparator inhibit which also serves to enable audio modulation for the unit under test when Command switches S5 and S6 are set to "01".

4-36. ID CODE CONVERTER LOGIC (Ref. Figure 6-1 Sheet 5).

4-37. FUNCTION.

a. To convert front panel ID switch output code to special code defined in figure 4-11.

b. To provide indicator lamp drive for the ID in bit form.

c. To supply input to shift register (part of Received Data Logic) for ultimate comparison against identification code supplied by the unit under test.

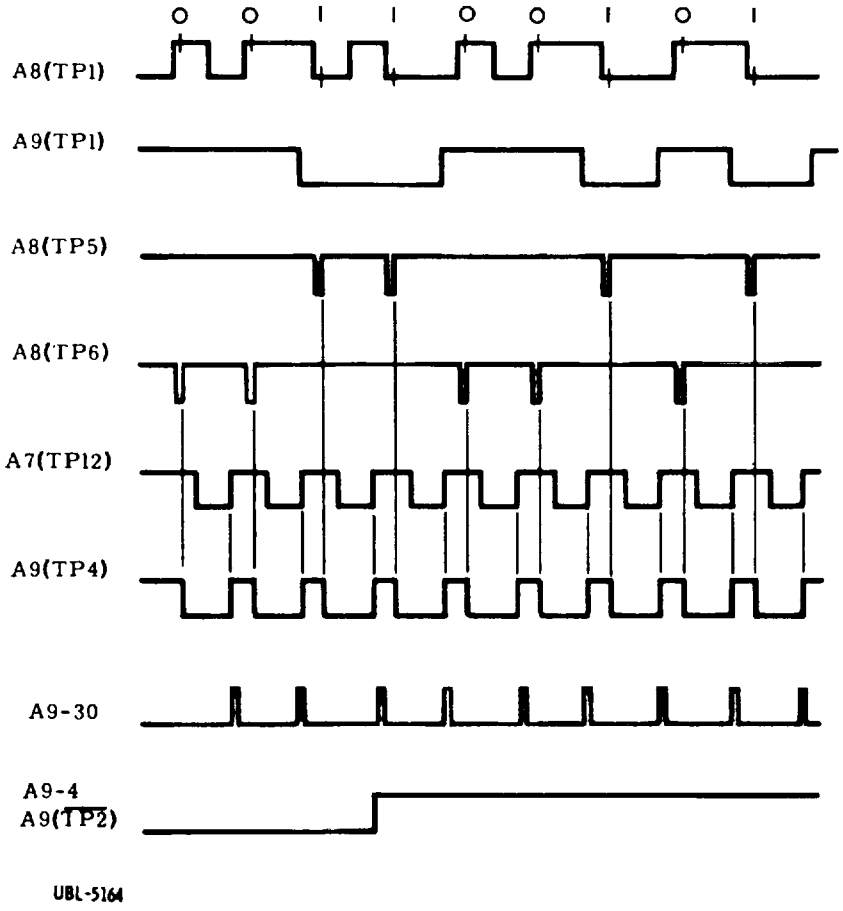


Figure 4-6 . Split Phase Decoder

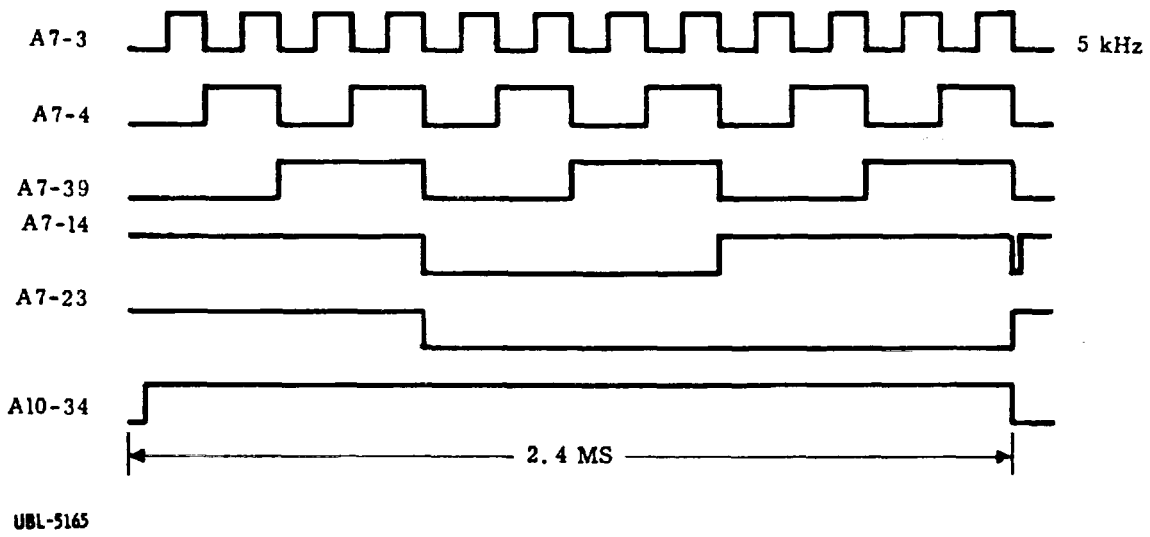


Figure 4-7. Decoder Clock Pulse Timing

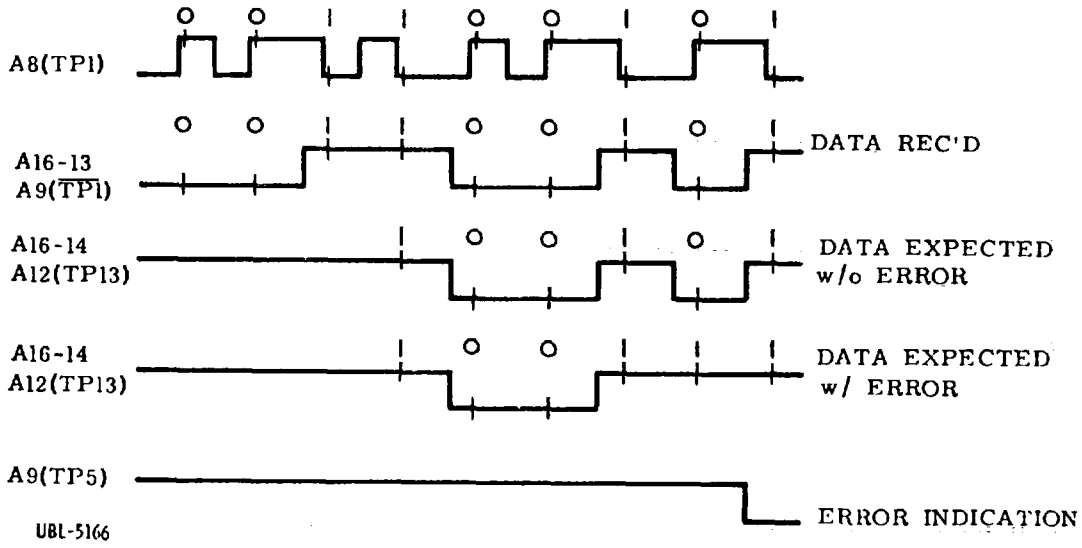


Figure 4-8 . Comparator

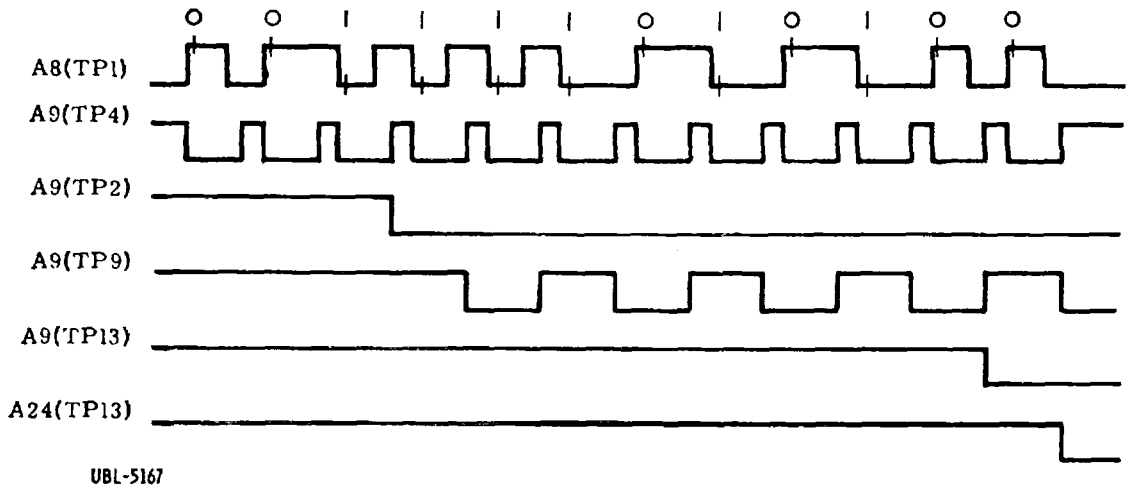


Figure 4-9 . Comparator Inhibit/Audio Modulation Enable

4-38. OPERATION.

4-39. The gating used to convert code is a direct implementation of the logic equations tabulated in figure 4-10. These equations define the required bit states for all legitimate ID codes included in figure 4-11. Note that S9 and S10 provide a low logic level output when the corresponding decimal digit is true. Therefore, only one output from S9 or S10 can be low at any one time.

4-40. Lamp drivers on A27 (D4036) and located on the right hand side of the referenced logic all have a dashed line input connected to an amplifier whose input is A27-42. This is the lamp test control and should turn on all related lamps when at its "low" state.

CC54 = (D1 + D2) + (D4 + D5) (lU4 + U5 + U6 + U7 + U8 + U9) + D6(U8 + U9).

CC53 = (D0 + D2) + (D4 + D5) (U1 + U2 + U3 + U7 + U8 + U9) + D6(U7 + U9).

CC52 = (D0 + D1 + D2 + D3) (U4 + U5 + U6 + U7 + U8 + U9) + D5(U2 + U3 + U5 + U6 + U8 + U19) + D6(U5 + U6).

CC49 = (D0+ D1 + D2 + D3) (U1 + U2 + U3 + U7 + U8 + U9) + D5(U1 + U3 + U4 + U6 + U7 + U9) + D6(U4 + U6).

CC51= (D0+D1 +D2 +D3 + D4) (U2 + U3 + U5 + U6 +U8 + U9)+ D6(U2 +U3).

CC44 = (D0+D+D2+D3+D4)(U1 +U3+U4+U6+U7+U9)+D6(U1 +U3).

NOTES:

1. References above such as CC54 are found directly in the logic drawing.

2. "D1" corresponds to the decade switch, S10, being set to position "1". "U1" would correspond to the units switch, S9, being set to the "1" position.

Figure 4-10. Code Conversion Logic Equations

DECIMAL ID	CODED EQUIVALENT	DECIMAL ID	CODED EQUIVALENT
1	111(010101)	21	311(110101)
2	112	22	312
3	113	23	313
4	121	24	321
5	1.22	25	322
6	123	26	323
7	131	27	331
8	132	28	332
9	133	29	333
11	211	31	011
12	212	32	012
13	213	33	013
14	221	34	021
15	222	35	022
16	223	36	023
17	231	37	031
18	232	38	032
19	233	39	033

Figure 4-11. Decimal ID and Coded Equivalents (Sheet 1 of 2)

DECIMAL ID	CODED EQUIVALENT	DECIMAL ID	CODED EQUIVALENT
41	101(010001)	56	230
42	102	57	310
43	103	58	320
44	201	59	330
45	202	61	001(000001)
46	203	62	002
47	301	63	003
48	302	64	010
49	303	65	020
51	110	66	030
52	120	67	100
53	130	68	200
54	210	69	300
55	220	71	000

Figure 4-1 1. Decimal ID and Coded Equivalents (Sheet 2 of 2)

SECTION V
MAINTENANCE INSTRUCTIONS

5-1. GENERAL.

5-2. This section provides guidance for preventive maintenance to aid the technician in maintaining the test set at optimum operating condition. Should a failure occur, procedures are also

5-3. PREVENTIVE MAINTENANCE

5-4. Table 5-1 provides guidance for a visual inspection with appropriate corrective action.

Table 5-1. Visual Inspection

INSPECT FOR:	CORRECTIVE ACTION
Dirt, grease or other foreign material	Clean with suitable solvent.
Moisture, mildew or fungus	Clean, treat the affected area to preclude recurrence.
Burned or damaged insulation or components	Repair or replace as necessary.
Faulty electrical contacts	Repair as necessary.
Loose Plug-in components	Repair as necessary or replace the faulty component.
Loose cable connections	Tighten connectors or replace as necessary.
Binding or sticking mechanical parts	Repair or replace as necessary.
Loose or broken wires	Repair as necessary.

5-5. After visually inspecting the equipment and repairing as necessary, calibrate the test set in accordance with procedures contained in 5-13 thru 5-22.

5-6. TROUBLESHOOTING.

5-7. When a malfunction is observed, connect an accepted stack of the type being tested when the malfunction occurred.

5-8. Repeat procedural steps to isolate the trouble to the tester or the stack.

5-9. If the tester is considered defective, attempt to eliminate the trouble without making extensive checks or dismantling equipment by:

a. Examining cable connections for tightness.

b. Verifying connection to power source.

c. Determining that power source is still activated.

d. Cleaning switch contacts by operating switch controls rapidly several times with power off.

e. Checking proper installation and condition of lamps.

5-10. If the preceding checks fail to identify the malfunction, normal troubleshooting procedure of the circuit(s) involved becomes necessary. Referral to the Functional and Schematic diagrams (Section VI) and review of the Theory of Operation (Section IV) will aid in isolating the trouble.

5-11. Upon completion of any repair or replacement of parts on the Stack Tester, a functional operational check must be performed to ensure that all troubles have been corrected.

5-12. If any of the repair action involved components or assemblies in calibrated, the Test Set must be calibrated to ensure that future tests of stacks/sensors produce valid results.

5-13. CALIBRATION.

5-14. Calibration is invalidated by shipment, removal from use and subsequent storage, expiration of a one year interval since last calibration, replacement of a component in a calibrated circuit, any abnormal handling, poor records or any other condition which causes doubt as to the accuracy of the PT1585.

NOTE

The calibration procedures must be performed in the sequence given.

5-15. CALIBRATION PROCEDURES.

1. Initial conditions:

a. PT1585 AC PWR switch OFF.

b. PT1585 BATTERY SIMULATOR power switch OFF.

c. No cables connected to PT1585 front or rear panel connectors.

d. PT1585 chassis removed from cabinet and placed on suitable work bench.

e. Remove top cover from PT1585 chassis. Remove smaller plate covering power supplies. Remove rear cover and disconnect fan from J39.

2. Preparation of PT1585 for calibration:

a. Check that AC P'WR and BATTERY SIMULATOR toggle switches are OFF.

WARNING

AC voltage is present at several points on chassis.

b. Connect AC INPUT on rear of PT1585 to a 105/125-VAC, 50-400 Hz, 5-ampere outlet.

c. Operate AC PWR switch to ON. AC PWR lamp lights. Various EXPECTED MESSAGE and RECEIVED MESSAGE lamps may light.

d. Momentarily push RESET button. RECEIVED MESSAGE lamps go out.

e. Allow 15-minute warm-up time before proceeding.

5-16. CALIBRATION OF POWER SUPPLIES PS1, PS2, PS3, PS4, PS5, and PS6.

1. Calibration of PS1 (+5 VD():

a. Connect calibration voltmeter to J16 (+) and J 17 (-).

b. Adjust screw on top of PSI as necessary so that calibration voltmeter indicates 5 +0.1 volts. If specified voltage cannot be obtained, refer to paragraph 5-16.7.

c. Slowly turn CR5 voltage adjust screw counterclockwise until calibration voltmeter indication suddenly drops.

d. Turn screw clockwise 2 complete revolutions.

e. Turn AC PWR switch OFF and back ON. This resets the CR5 overvoltage protector circuit. Calibration voltmeter must indicate 5 +0.1 volts.

f. Disconnect calibration voltmeter from J16 and J17.

2. Calibration of PS2 (+5 VDC):

a. Connect calibration voltmeter to J20 (+) and J21 (-).

b. Adjust screw on top of PS2 as necessary so that calibration voltmeter indicates 5 ±0.1 volts. If specified voltage cannot be obtained, refer to paragraph 5-16.7.

c. Slowly turn CR4 voltage adjust screw counterclockwise until calibration voltmeter indication suddenly drops.

d. Turn screw clockwise 2 complete revolutions.

e. Turn AC PWR switch OFF and back ON. This resets the CR4 overvoltage protector circuit. Calibration voltmeter must indicate 5 +0.1 volts.

f. Disconnect calibration voltmeter from J20 and J21.

3. Calibration of PS3 (-5 VDC):

a. Connect calibration voltmeter to J15 (+) and J14 (-).

b. Adjust screw on top of PS3 as necessary so that calibration voltmeter indicates 5 ±0.1 volts. If specified voltage cannot be obtained, refer to paragraph 5-16.7.

c. Slowly turn CR2 voltage adjust screw counterclockwise until calibration voltmeter indication suddenly drops.

d. Turn screw clockwise 2 complete revolutions.

e. Turn AC PWR switch OFF and back ON. This resets the CR2 overvoltage protector circuit. Calibration voltmeter must indicate 5 +0.1 volts.

f. Disconnect calibration voltmeter from J14 and J15.

4. Calibration of PS4 (10 VDC):

a. Connect calibration voltmeter to J18 (+) and J 19 (-).

b. Adjust screw on top of PS4 as necessary so that calibration voltmeter indicates 10 ±0.1 volts. If specified voltage cannot be obtained, refer to paragraph 5-16.7.

c. Slowly turn CR3 voltage adjust screw counterclockwise until calibration voltmeter indication suddenly drops.

d. Turn screw clockwise 2 complete revolutions.

e. Turn AC PWR switch OFF and back ON. This resets the CR3 overvoltage protector circuit. Calibration voltmeter must indicate 10 ±0.1 volts.

f. Disconnect calibration voltmeter from J18 and J19.

5. Calibration of PS5 (22, 26, and 30 VDC):

a. Connect calibration voltmeter to J12 (+) and J13 (-). Turn BATTERY SIMULATOR selector switch to LOW and turn MONITOR selector switch to INPUT VOLTS. Zero the MONITOR meter.

b. Turn BATTERY SIMULATOR switch ON. BATTERY SIMULATOR lamp lights.

c. Adjust 22-32 VDC screw on top of PS5 as necessary so that calibration voltmeter indicates 22 ±0.1 volts. If specified voltage cannot be obtained, refer to paragraph 5-16.7.

d. MONITOR meter must indicate 21 to 23 volts. If there is no meter deflection, M1, R3, or S2 is probably defective and should be replaced. If meter deflects but is out of tolerance, R3 is probably defective.

e. Turn BATTERY SIMULATOR selector switch to NOMINAL. Adjust 26V potentiometer screw on PS5 sub-chassis as necessary so that calibration voltmeter indicates 26 ± 0.1 volts. MONITOR meter must indicate 25 to 27 volts.

f. Turn BATTERY SIMULATOR selector switch to HIGH. Adjust 30V potentiometer screw on PS5 sub-chassis as necessary so that calibration voltmeter indicates 30 ±0.1 volts. MONITOR meter must indicate 29 to 31 volts.

g. Slowly turn CR6 voltage adjust screw counterclockwise until calibration voltmeter indication suddenly drops.

h. Turn screw clockwise 2 complete revolutions.

i. Turn AC PWR switch OFF and back ON. This resets the CR6 overvoltage protector circuit. Calibration voltmeter must indicate 30 ±0.1 volts.

j. Disconnect calibration voltmeter from J12 and J13.

6. Calibration of PS6 (+5.5 VDC):

a. Connect calibration voltmeter to J22 (+) and J23 (-).

b. Adjust screw at top of PS6 as necessary so that calibration voltmeter indicates 5.5 ±0.1 volts.

c. Disconnect calibration voltmeter from J22 and J23.

7. Reference for paragraph I through paragraph 5.

a. Adjust screw on associated over-voltage protector clockwise two complete turns. For example, overvoltage protector CR5 is associated with PSI.

b. Turn AC PWR switch OFF and back ON.

c. Proceed with appropriate procedure if now possible. Otherwise, refer to Section V.

5-17. CALIBRATION OF MONITOR METER INPUT CURRENT RANGES (5, 50, 500 Milliamperes).

1. Preliminary procedures:

a. Turn MONITOR range switch to INPUT CURRENT and turn BATTERY SIMULATOR switch to LOW.

b. Set the calibration ammeter for 0-500 milliamperes or greater range.

c. Set calibration Decade Resistance box to maximum resistance.

d. Connect calibration ammeter to J25 (+) and to the calibration Decade Resistance box (-). Connect other terminal of the calibration Decade Resistance box to J13.

2. Calibration of INPUT CURRENT (0-5 milliampere) range:

a. Push and hold 5 MA button.

b. Adjust the calibration Decade Resistance box as necessary to obtain a calibration ammeter indication of 4.50 ±.01 ma.

c. Adjust CURRENT potentiometer near CR5 as necessary to obtain a MONITOR meter indication of 4.5 +0.1 ma on a 5 ma scale.

d. Adjust the calibration Decade Resistance box as necessary to obtain a calibration ammeter indication of 3.00 ±0.01 ma.

e. MONITOR meter should indicate 2.9 to 3.1 ma on a 5 ma scale.

f. If MONITOR meter reading is not within proper limits, M1, CR7, R22, S1, R16, R19, R17, R7, R18 or S20 should be replaced if found defective.

3. Calibration of INPUT CURRENT (0-50 milliampere) range:

a. Push 50 MA button.

b. Adjust the calibration Decade Resistance box as necessary to obtain a calibration ammeter indication of 45.0 ±0.1 ma.

c. MONITOR meter should indicate 44 to 46 ma on a 50 ma scale.

d. Adjust the calibration Decade Resistance boxes as necessary to obtain a calibration ammeter indication of 30.0 ±0.1 ma.

e. MONITOR meter should indicate 29 to 31 ma on a 50 ma scale.

f. If MONITOR meter reading is not within proper limits, M1, CR7, R22, S1, R17, R18, R7, or S21 should be replaced if found defective.

4. Calibration of INPUT CURRENT (500 milliampere) range:

a. Adjust the calibration Decade Resistance box as necessary to obtain a calibration ammeter indication of 400 ±4 ma.

b. MONITOR meter should indicate 390 to 410 ma on a 500 ma scale.

c. If MONITOR meter reading is not within proper limits M1, CR7, S1, R22, or R7 should be replaced if found defective.

d. Operate BATTERY SIMULATOR switch to OFF. Lamp goes out.

e. Disconnect calibration ammeter and Decade Resistance box from J25 and J13.

5-18. COMMAND TRANSMITTER OUTPUT POWER CHECK.

1. To check command transmitter output power:

a. Turn MONITOR selector switch to OUT-PUT PWR. Turn BATTERY SIMULATOR switch to HIGH.

b. Turn PT1585 upside down and remove bottom cover.

c. Disconnect P6 from the output BNC connector of TR1 and connect the output of TR1 to the input of the calibration power meter.

d. Turn calibration power meter range switch to 3MW.

e. Push and hold Transmit button. Calibration power meter must indicate between 1 and 2.4 MW. If it does not, TR1 or S14 should be replaced if found defective.

f. Write down value of power meter reading, as this will be referred to in paragraph 5-19.1.*e*.

g. Disconnect calibration power meter from output BNC connector of TR1.

5-19. CALIBRATION OF MONITOR METER OUTPUT PWR RANGE (0-5 Watts).

1. To calibrate the output power monitor meter:

a. Loosen holding clamp on DS32 attenuator. Disconnect DS32 attenuator from DC1 IN- PUT and remove attenuator from the chassis.

b. Disconnect P1 from DS32.

c. Connect an extension cable between DC1 INPUT and output BNC of TR1.

d. Turn PT1585 upright.

e. Push TRANSMIT button. Adjust the RF PWR potentiometer screw on power supply sub-chassis as necessary to obtain a MONITOR meter indication within ±1 minor division of TRI power reading recorded earlier.

f. Turn PT1585 on side. Disconnect extension cable from DC1 INPUT and connect to DS32 attenuator. Connect output of DS32 to calibration power meter.

g. Select 0.01 mw scale on calibration power meter.

h. Multiply TR1 power output recorded earlier by 0.001. Record new value.

i. Push TRANSMIT button. Calibration power meter must indicate the new value recorded above within ±2 minor scale divisions.

j. Disconnect DS32 from extension cable and calibration power meter and reinstall DS32 in the PT1585 between P1 and DC1 INPUT.

k. Reinstall DS32 holding clamp.

5-20. COMMAND TRANSMITTER FREQUENCY CY CHECK (TR1).

1. To check command transmitter frequency:

a. Connect calibration counter input to BNC connector of TR1. Set counter for an expected indication of 316,500 KHz.

b. Push and hold TRANSMIT switch. Counter indication must be 316,500 ±5 KHz. If not, S14 or TR1 should be replaced if found defective.

c. Release TRANSMIT switch. Counter indication must go to 0 ±50 Hz. If not, S14 or TRI should be replaced if found defective.

d. Disconnect from output BNC connector of TR1 and reconnect P6 to TR1.

5-21. ATTENUATOR SETTING CHECK.

1. To check attenuator setting:

a. With PT1585 on its side, check that the attenuation setting switched IN on DS33 adds to 80 db (4 each 20-db switches on IN position).

b. (Check that the attenuation setting switched IN on DS34 adds to 57 db.

c. Reinstall PT1585 bottom cover and turn PT1585 upright.

5-22. RECEIVER FREQUENCY CHECK.

1. To check receiver frequency:

a. Connect standard frequency counter to J30 on rear of PT1585 after removal of BNC cap.

b. Set counter to measure 6.25 KHz.

c. Counter should read 6.250 ±.002 KHz. If frequency is out of tolerance, oscillator Y1 is defective.

d. Disconnect counter from J30 and connect to J31 after removal of BNC cap.

e. Set frequency counter to measure 134 MHz. Counter should read 134.250 ±0.004 MHz. If frequency is out of tolerance, Y1 is defective.

f. Disconnect counter from J31. Replace BNC caps on J30 and J31. Operate AC PWR switch of OFF. Lamp goes out. Disconnect AC power cable from rear of PT1585. Replace power supply sub-chassis cover. Connect P39 to J39 and install rear cover with fan. Install top cover.

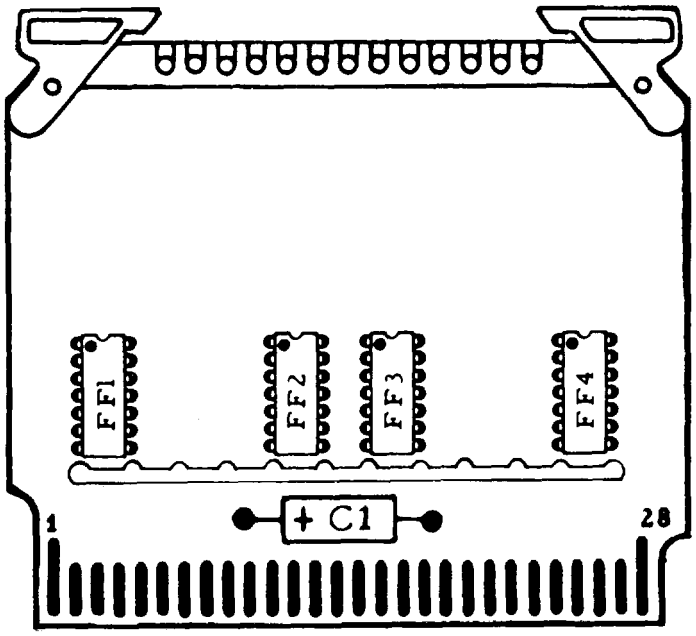


Figure 5-1. D4003 Printed circuit card.

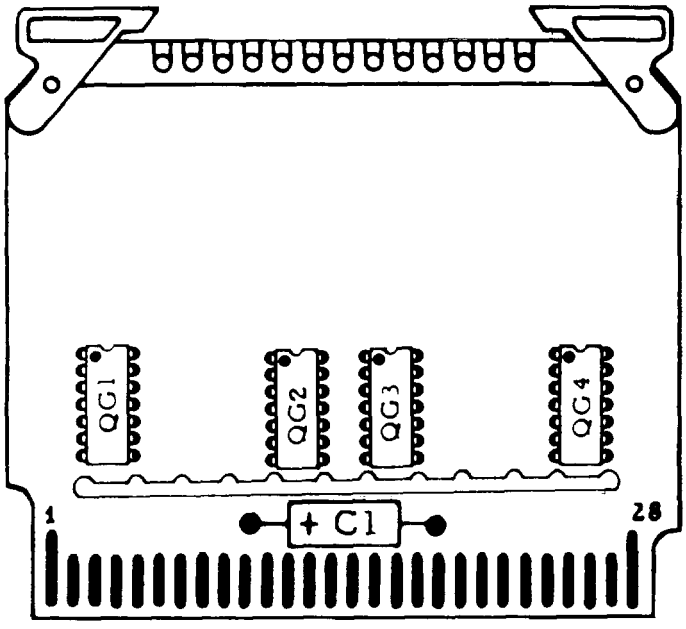


Figure 5-2. D4004 Printed Circuit Card.

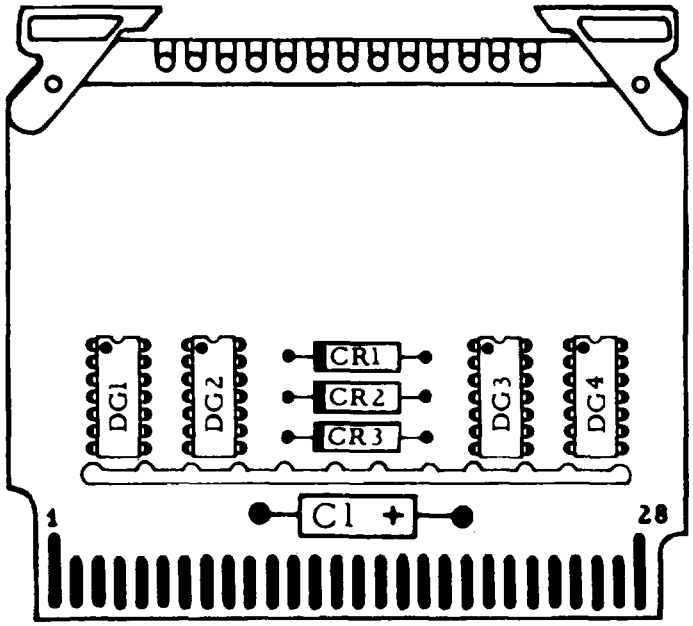


Figure 5-3. D4007 Printed Circuit Card.

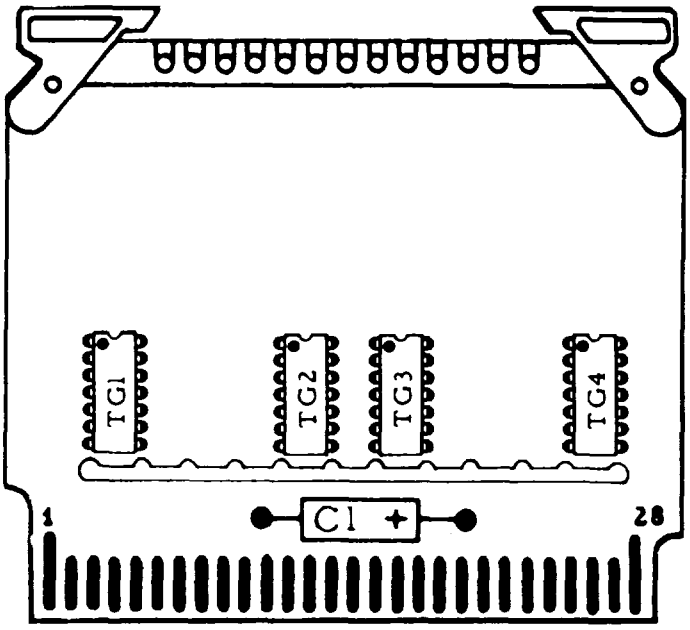


Figure 5-4. D4008 Printed Circuit Card.

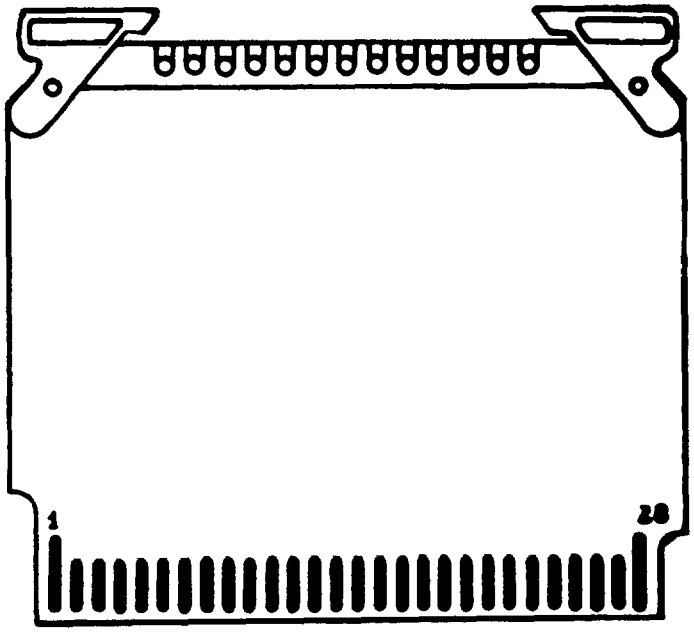


Figure 5-5. D4022 Printed Circuit Card.

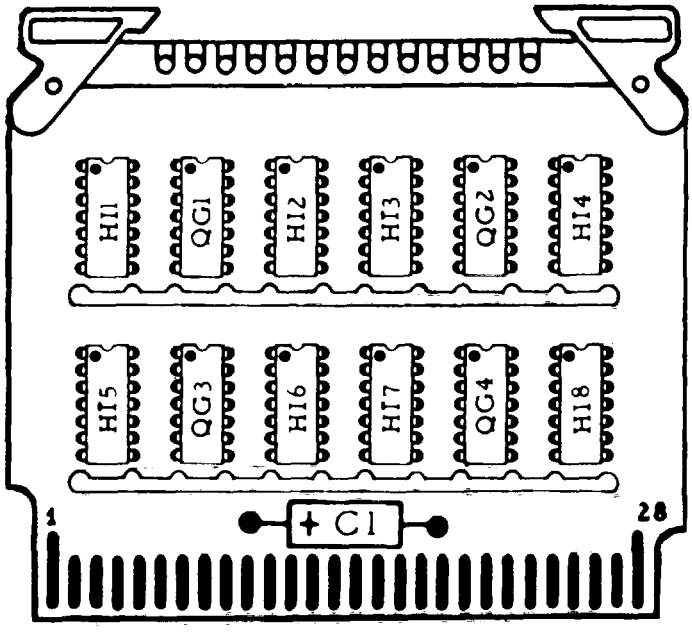


Figure 5-6. D4025 Printed Circuit Card.

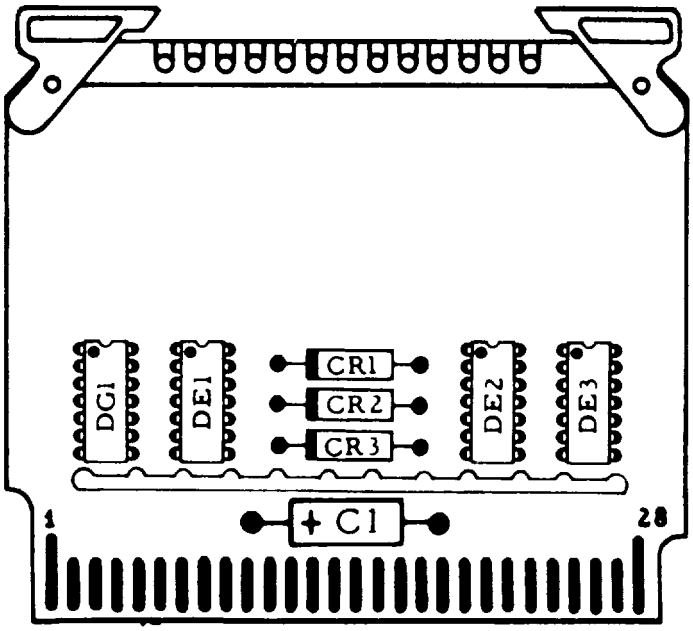


Figure 5-7. D4031 Printed Circuit Card.

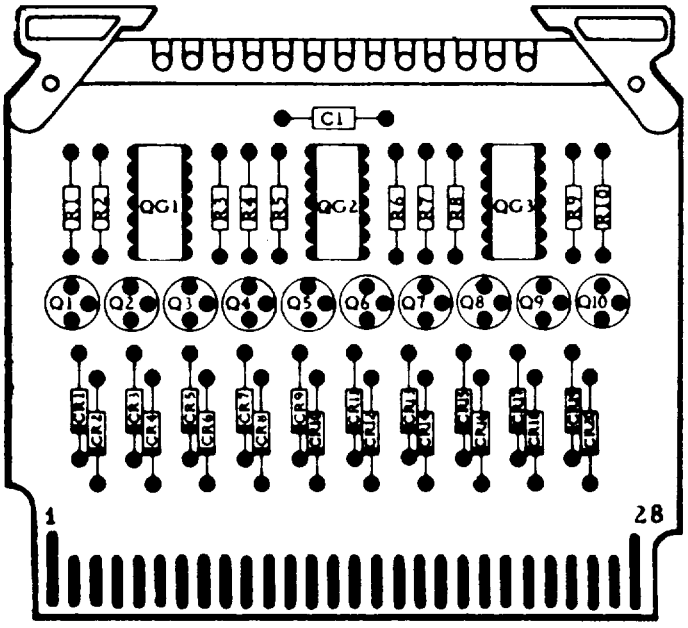


Figure 5-8. D4036 Printed Circuit Card.

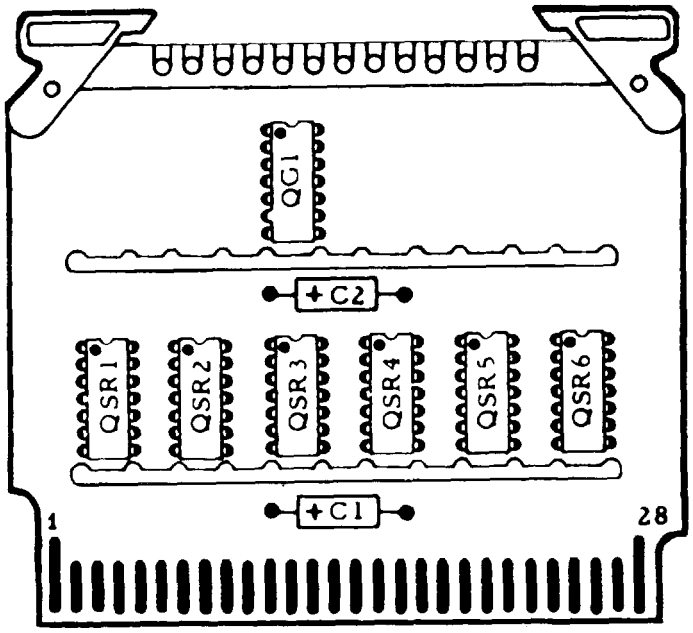


Figure 5-9. D4208 Printed Circuit Card.

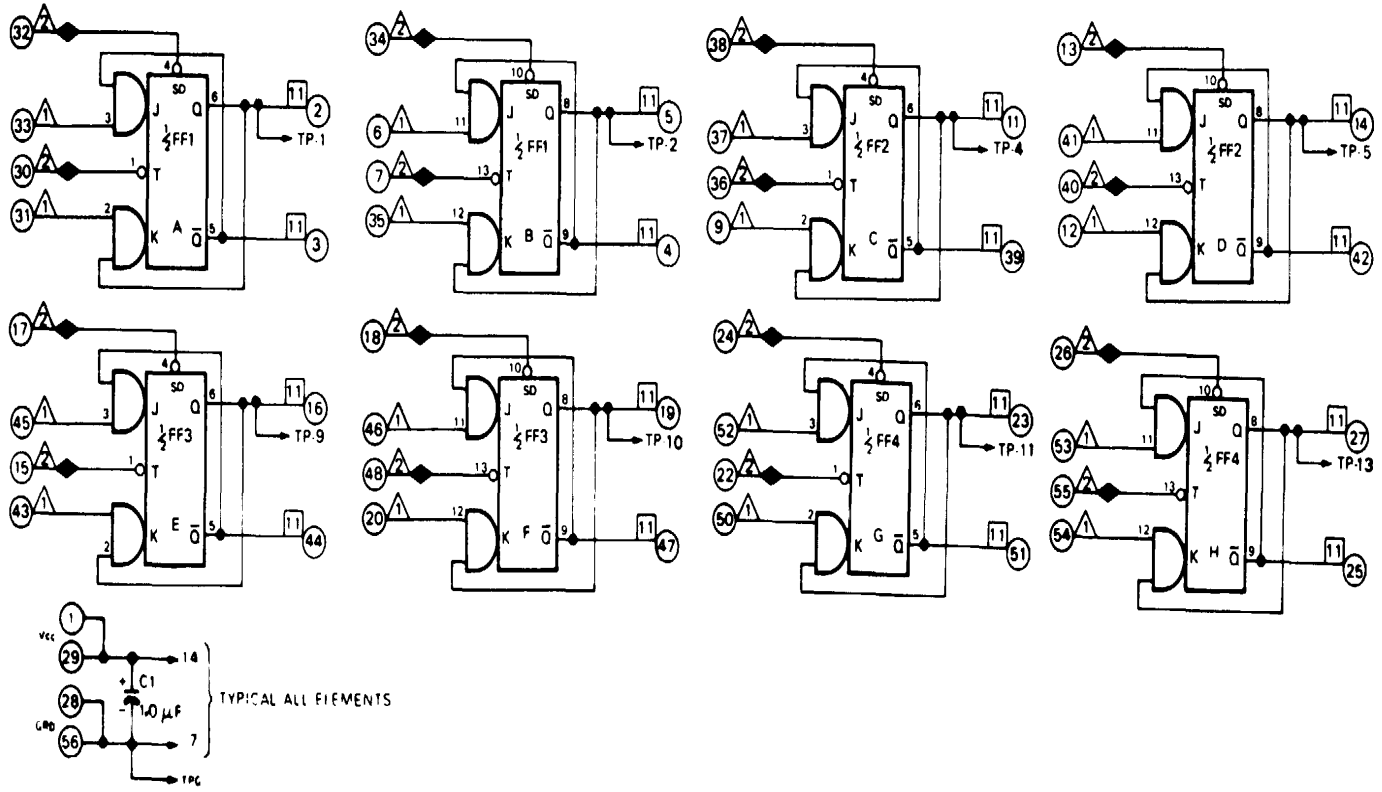
SECTION VI
DIAGRAMS

6-1. GENERAL

6-2. This section contains schematic and logic diagrams for the System/Stack Tester, PT1585. Schematic diagrams are included for the printed circuit boards used in the tester,
.

6-3. DIAGRAM INDEX

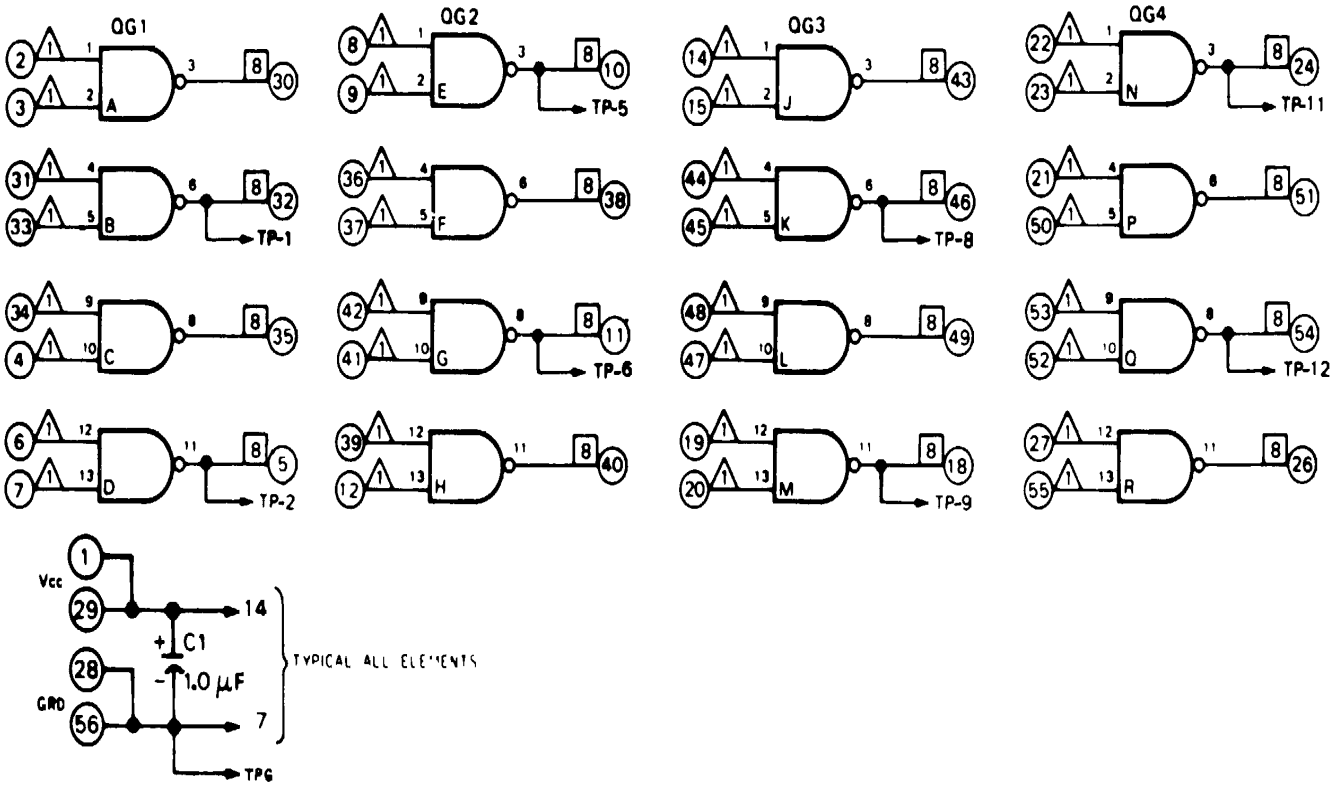
6-4. The following index is provided to facilitate location of diagrams contained within this section.



Symbol denotes input. Number denotes DTL load'units.

Symbol denotes output. Number denotes quantity DTL load units output will drive.

6-2. D4003 Logic Diagram.



Symbol denotes input. Number denotes DTL load units.

Symbol denotes output. Number denotes quantity DTL load units output will drive.

Figure 6-3. D4004 Logic Diagram.

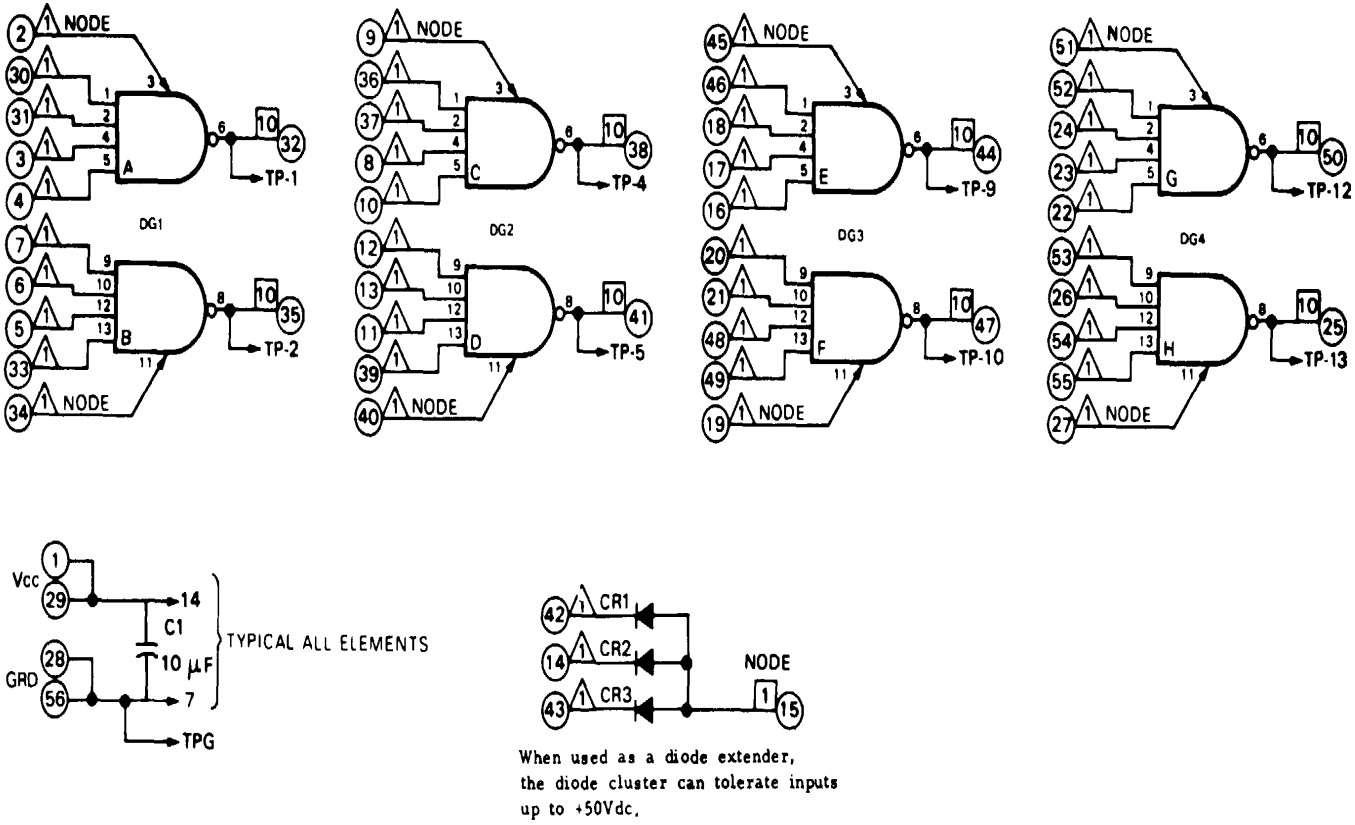


Figure 6-4. D4007 Logic Diagram.

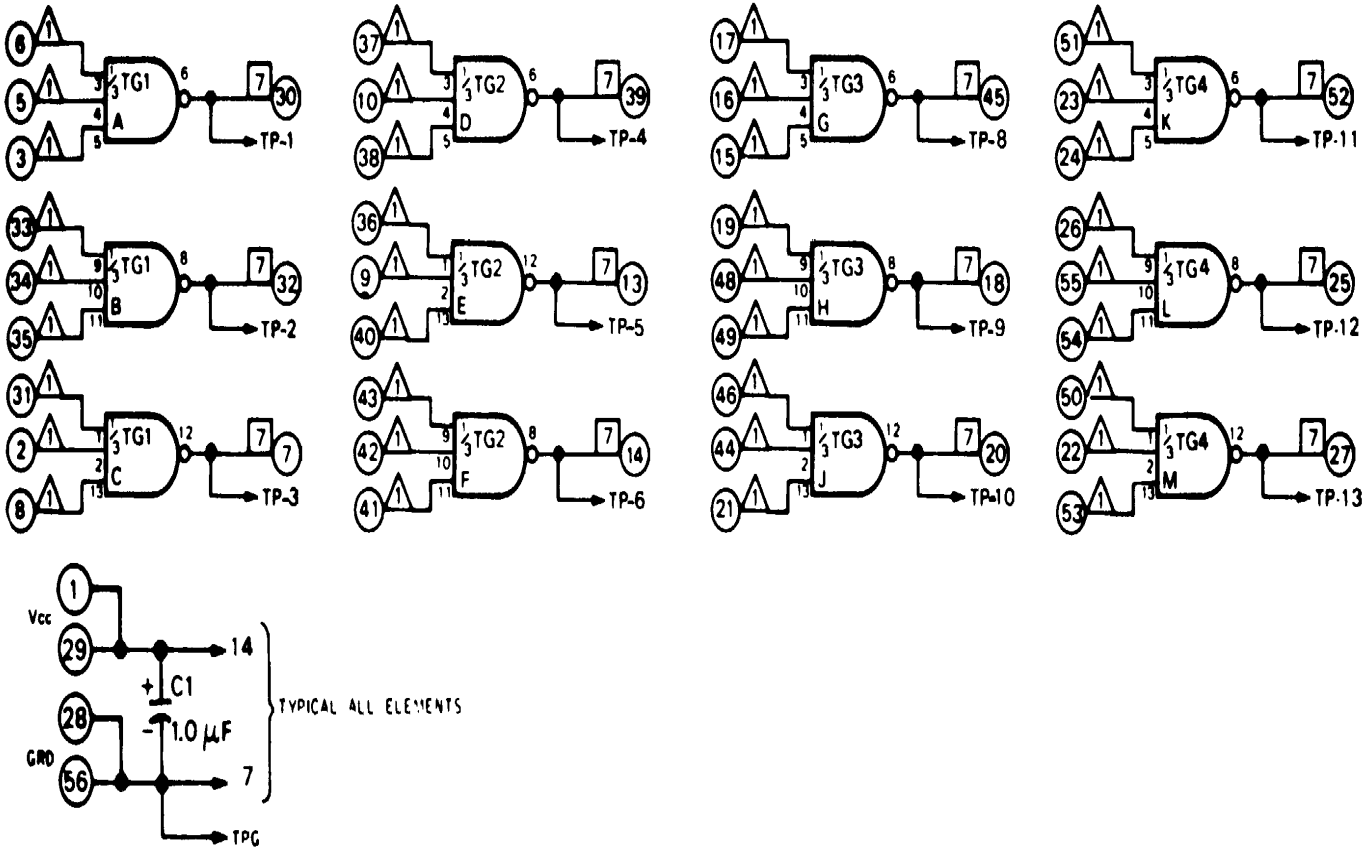


Figure 6-5. D4008 Logic Diagram.

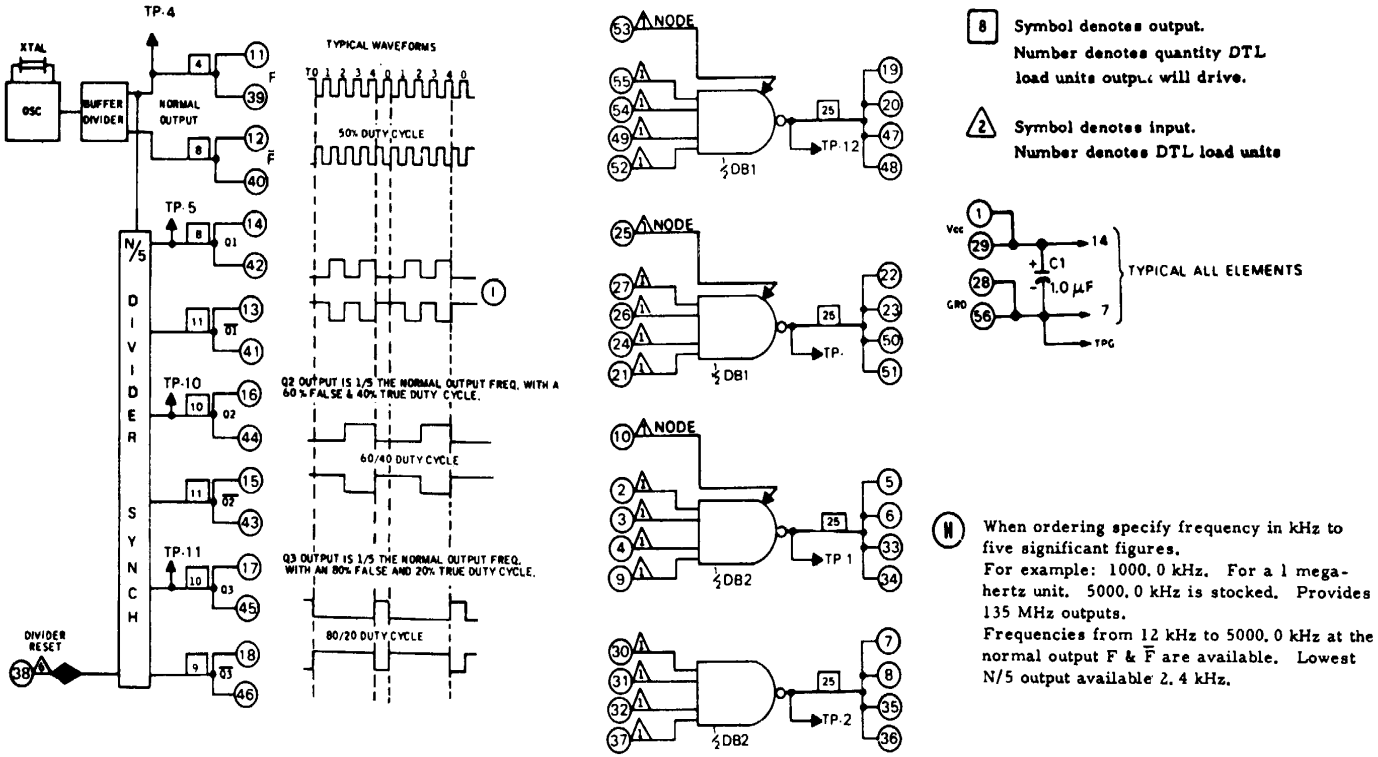
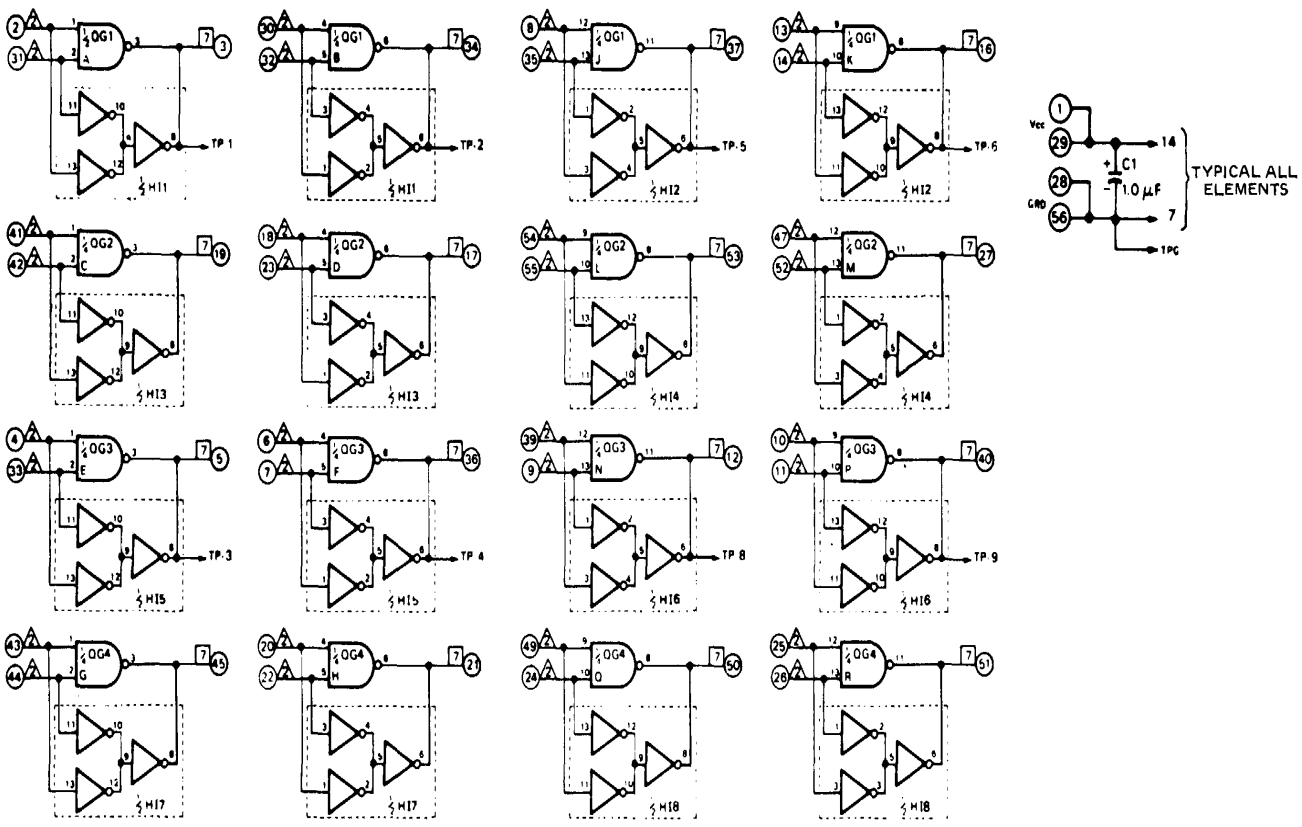


Figure 6-6. D4022 Logic Diagram.



Symbol denotes input. Number denotes DTL load units.

Symbol denotes output. Number denotes quantity DTL load units output will drive.

Figure 6-7. D4025 Logic Diagram.

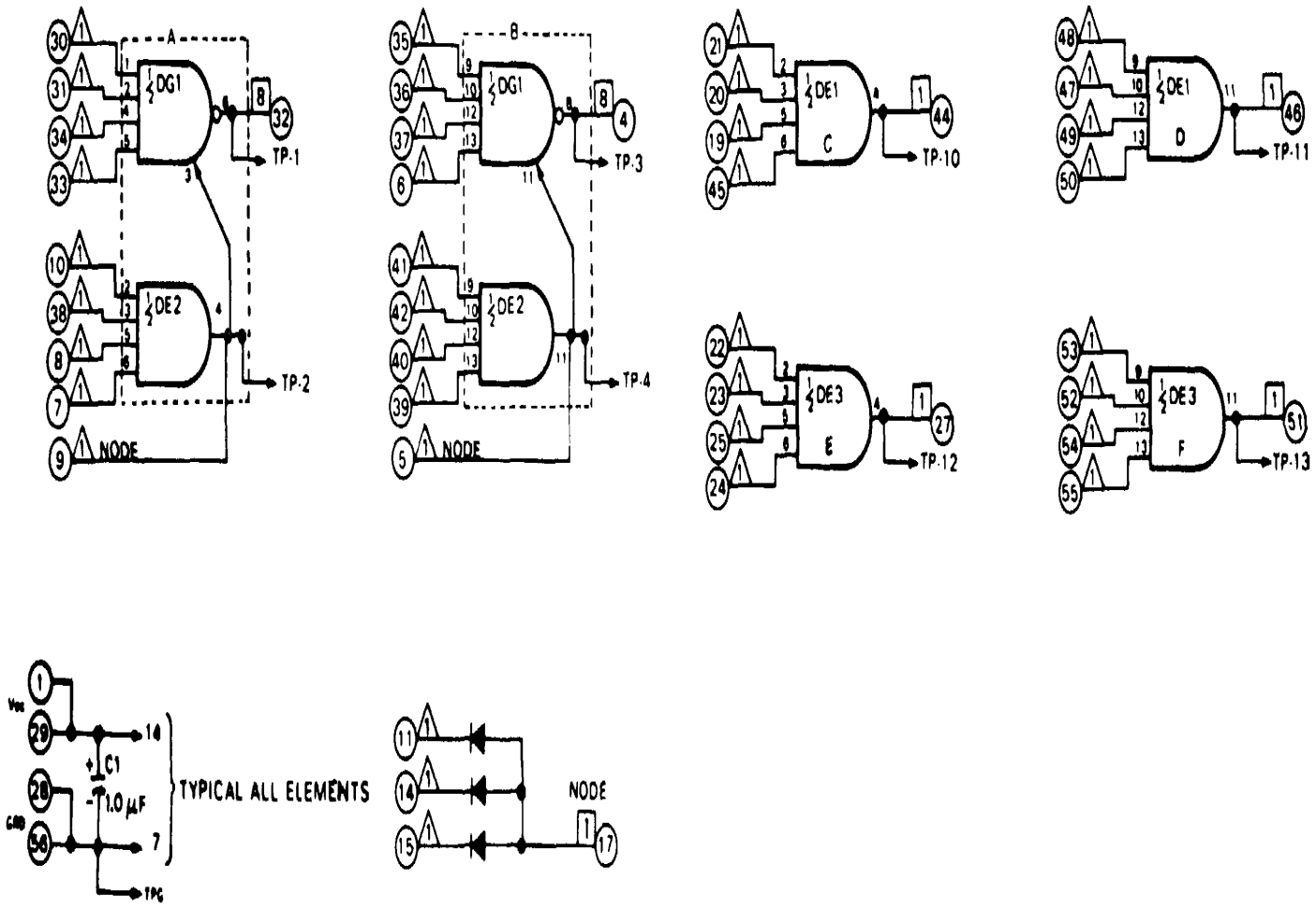


Figure 6-8. D4031 Logic Diagram.

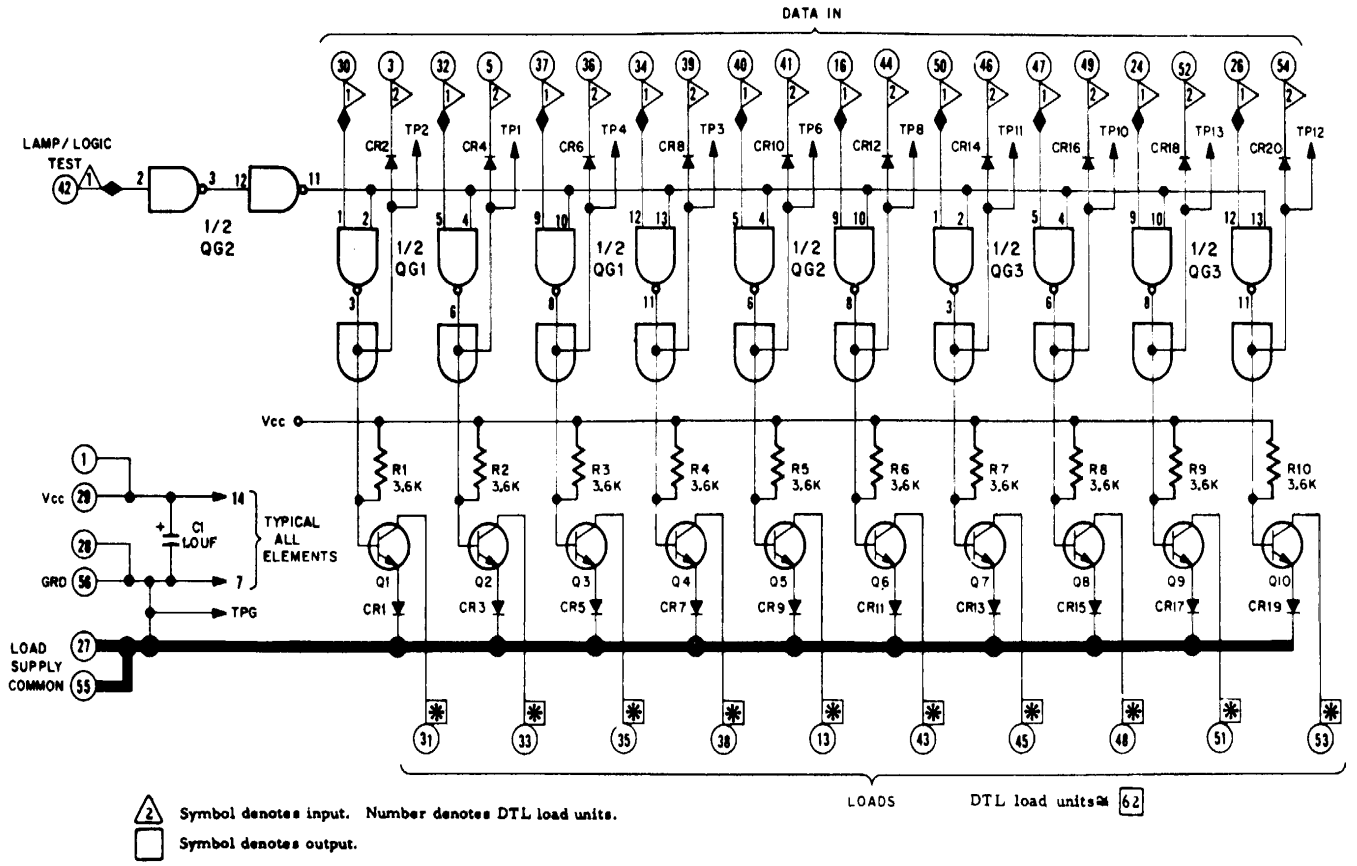
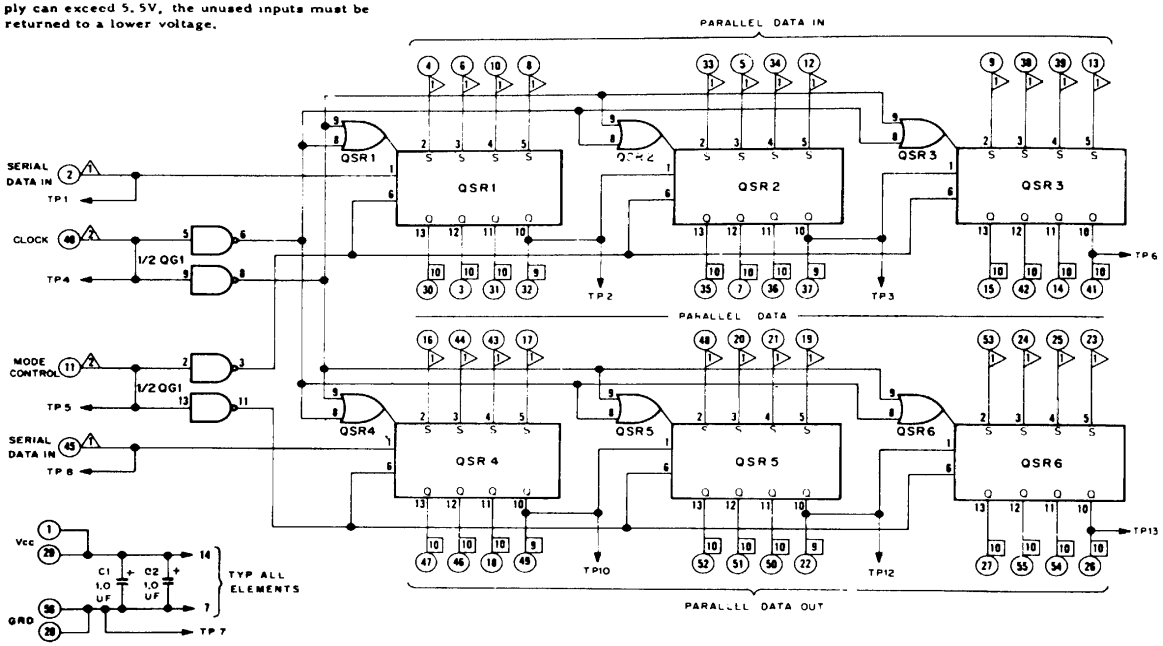


Figure 6-9 D4036 Logic Diagram.

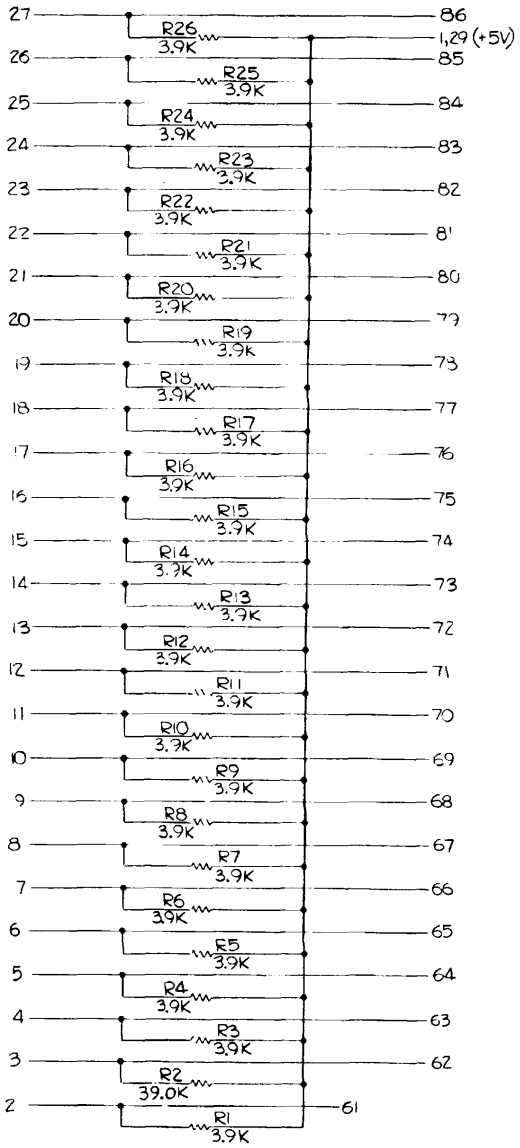
Unused inputs should not be left open. They can either be tied to used inputs or returned to the supply voltage. If the inputs are returned to the supply voltage, care should be taken to ensure that the supply voltage does not exceed the maximum rated input voltage of 5.5V. If the supply can exceed 5.5V, the unused inputs must be returned to a lower voltage.



Symbol denotes input. Number denotes TTL load units. (See app. note on DTL loading.)

Symbol denotes output. Number denotes quantity DTL and TTL load units output will drive.

Figure 6-10 D4208 Logic Diagram



6-13. A 15 Card Schematic Diagram.

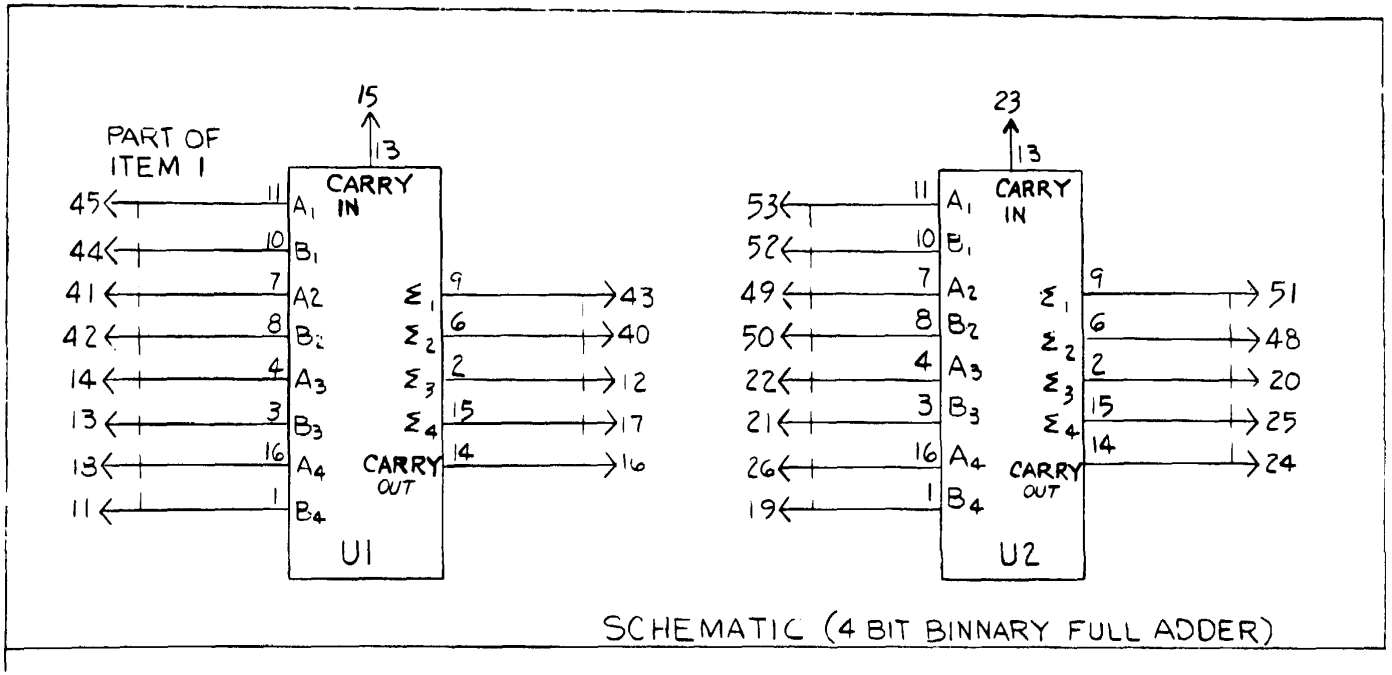
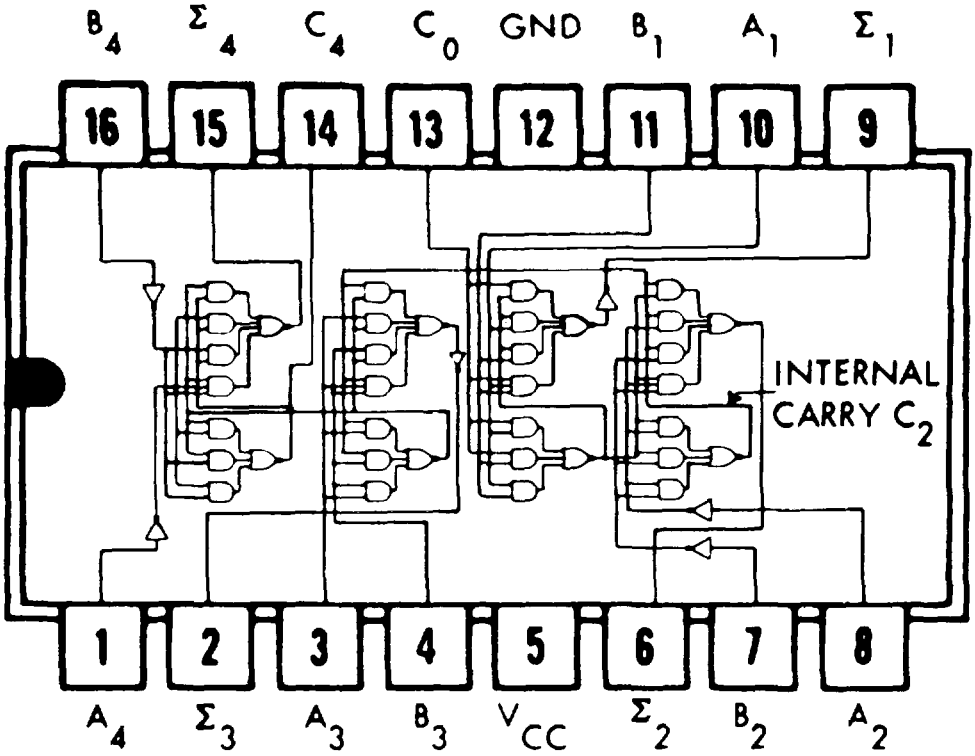


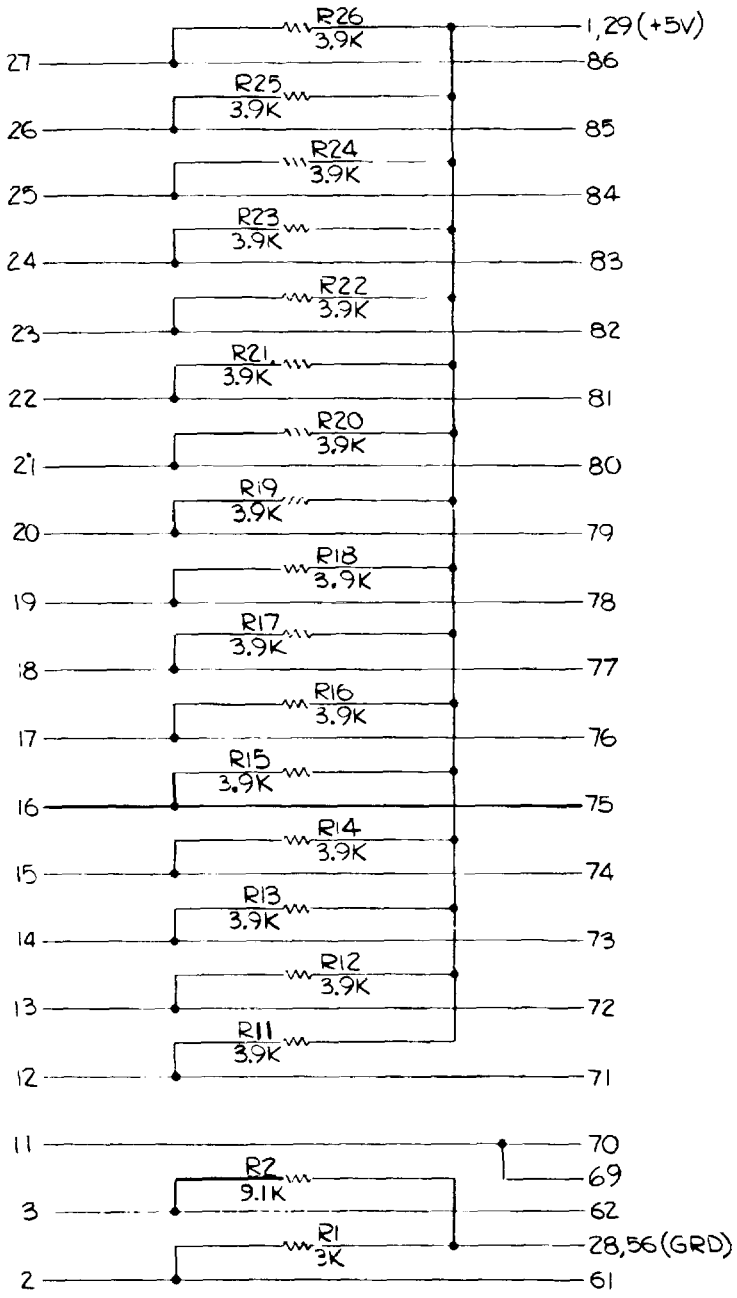
Figure 6-14. A22 Card Logic Diagram (1 of 2).



INPUT				OUTPUT					
				WHEN $C_0 = 0$ / WHEN $C_2 = 0$			WHEN $C_0 = 1$ / WHEN $C_2 = 1$		
A_1 / A_3	B_1 / B_3	A_2 / A_4	B_2 / B_4	Σ_1 / Σ_3	Σ_2 / Σ_4	C_2 / C_4	Σ_1 / Σ_3	Σ_2 / Σ_4	C_2 / C_4
0	0	0	0	0	0	0	1	0	0
1	0	0	0	1	0	0	0	1	0
0	1	0	0	1	0	0	0	1	0
1	1	0	0	0	1	0	1	1	0
0	0	1	0	0	1	0	1	1	0
1	0	1	0	1	1	0	0	0	1
0	1	1	0	1	1	0	0	0	1
1	1	1	0	0	0	1	1	0	1
0	0	0	1	0	1	0	1	1	0
1	0	0	1	1	1	0	0	0	1
0	1	0	1	1	1	0	0	0	1
1	1	0	1	0	0	1	1	0	1
0	0	1	1	0	0	1	1	0	1
1	0	1	1	1	0	1	0	1	1
0	1	1	1	1	0	1	0	1	1
1	1	1	1	0	1	1	1	1	1

NOTE 1: Input conditions at A_1, A_2, B_1, B_2, and C_0 are used to determine outputs Σ_1 and Σ_2, and the value of the internal carry C_2. The values at C_2, A_3, B_3, A_4, and B_4, are then used to determine outputs Σ_3, Σ_4, and C_4.

Figure 6-14. A22 Card Logic Diagram and Truth Table (2 of 2).



6-15. A23 Card Schematic Diagram.

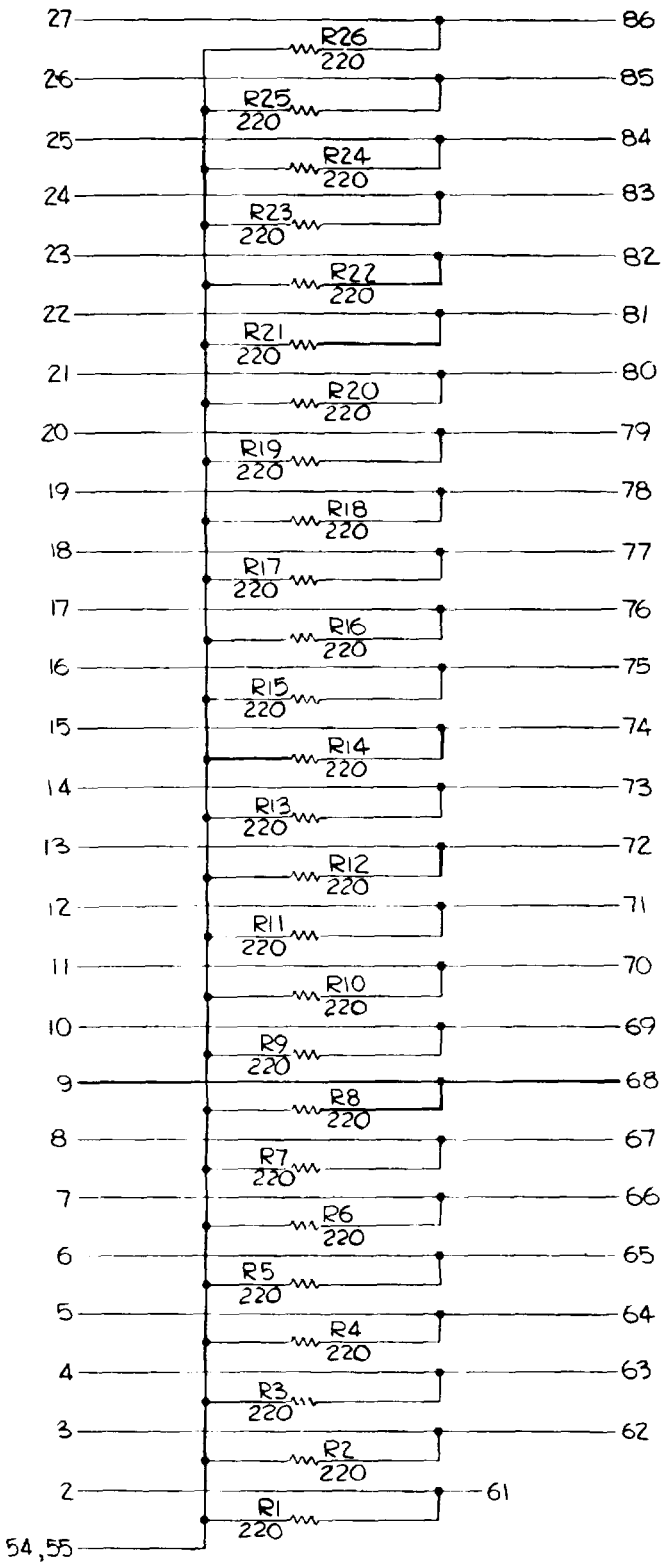


Figure 6-16. A30 Card Schematic Diagram.

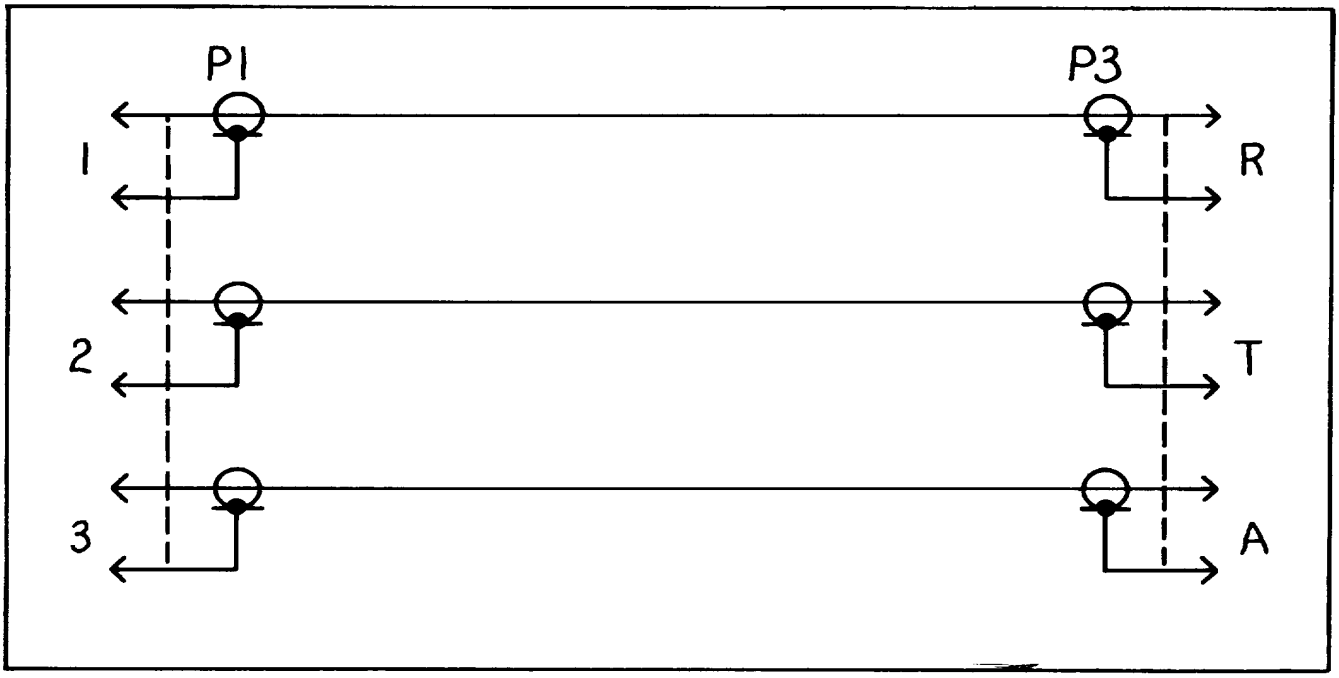


Figure 6-18. CA 1541 Cable Diagram.

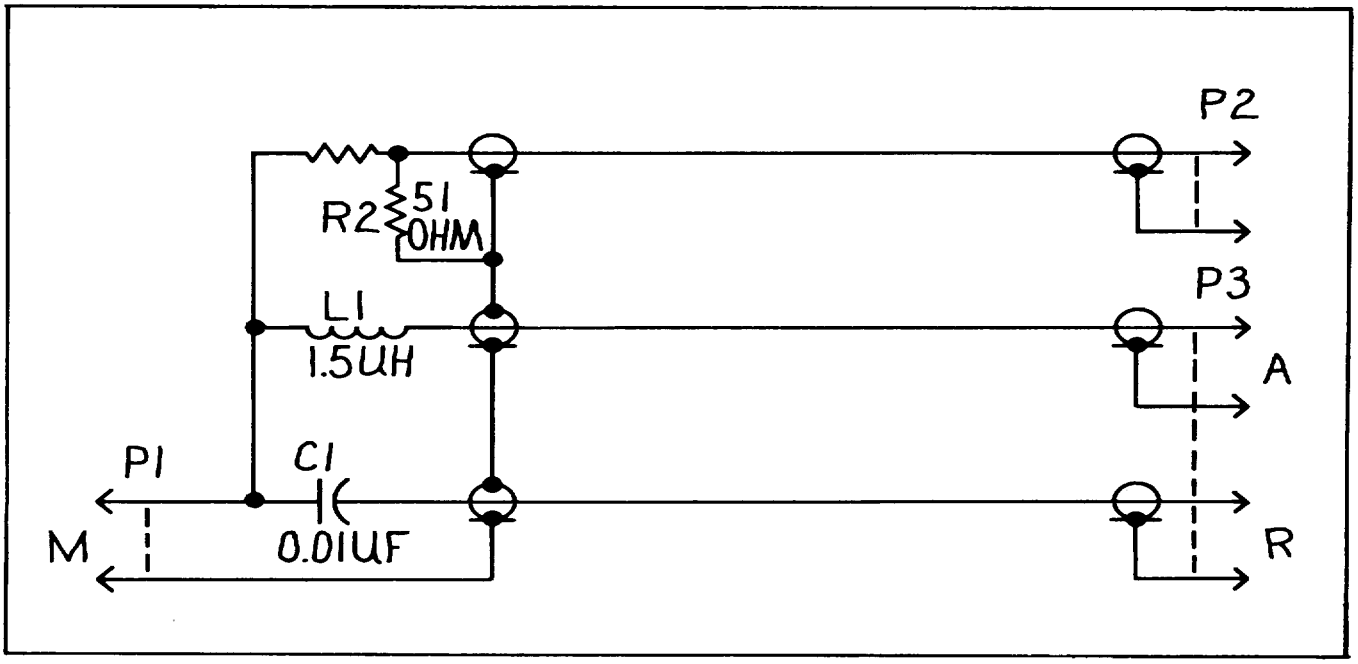


Figure 6-19. CA 1542 Cable Diagram.

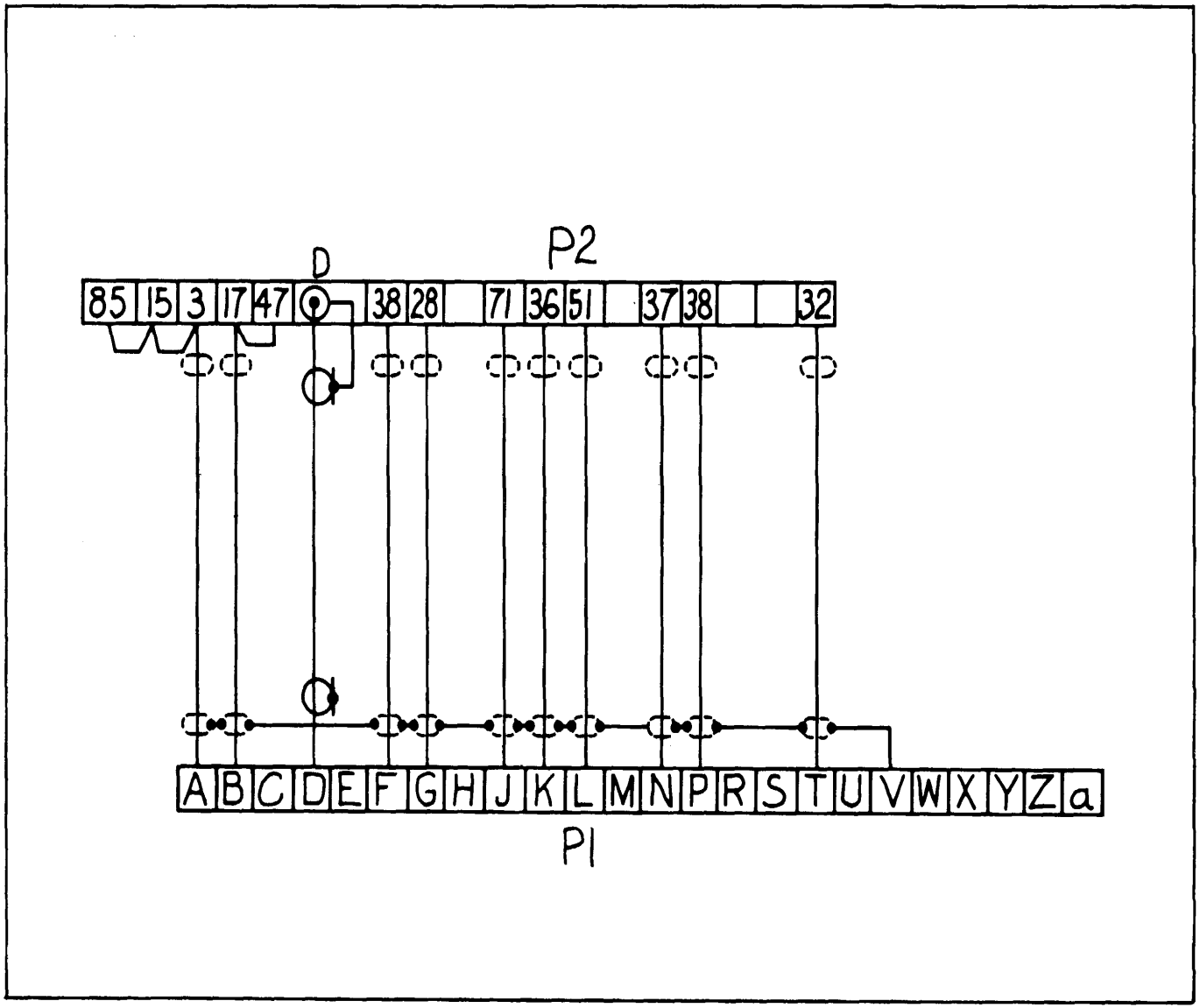


Figure 6-20. CA 1543 Cable Diagram.

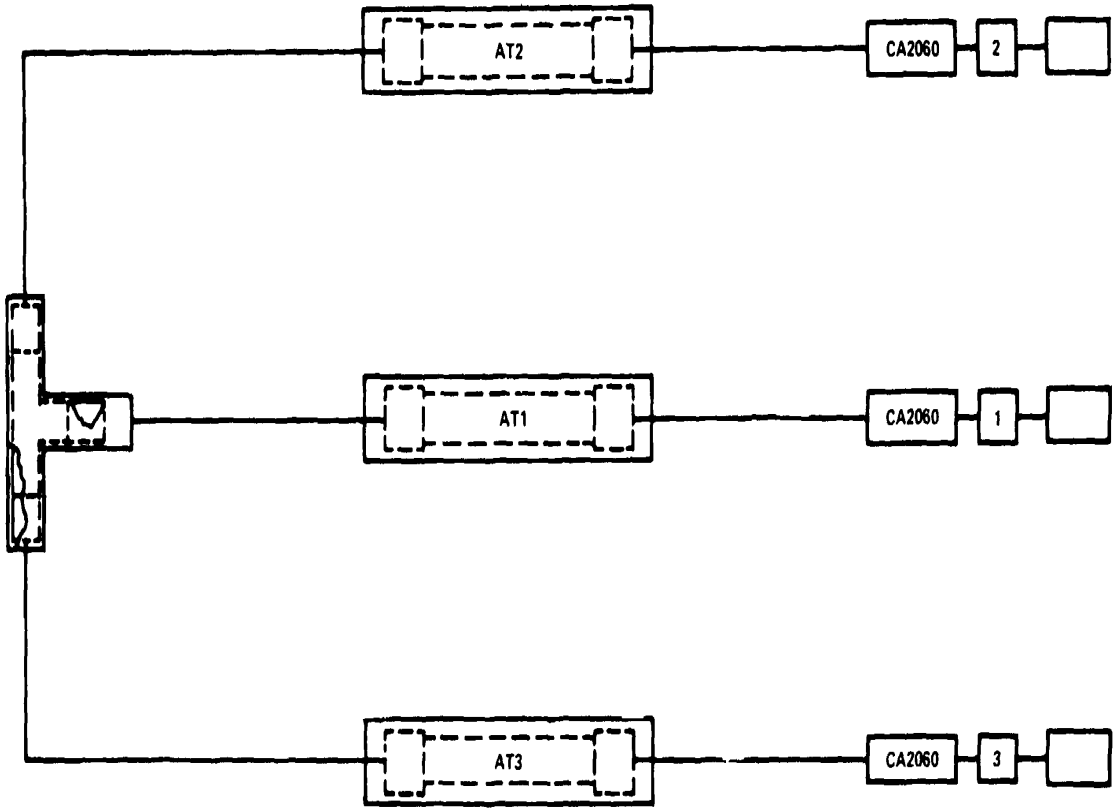


Figure 6-20A. CA2060 Cable Diagram

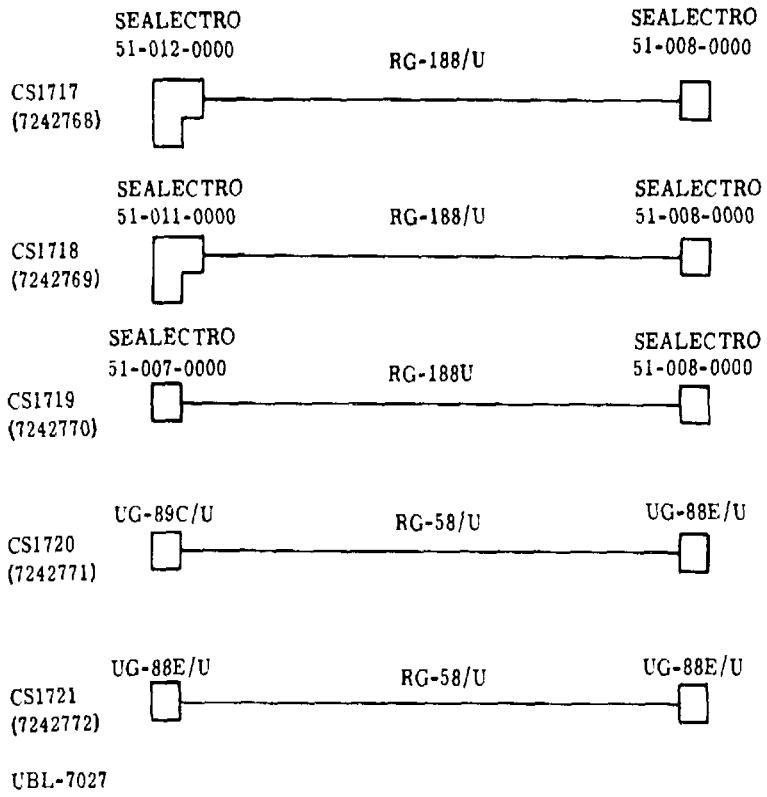


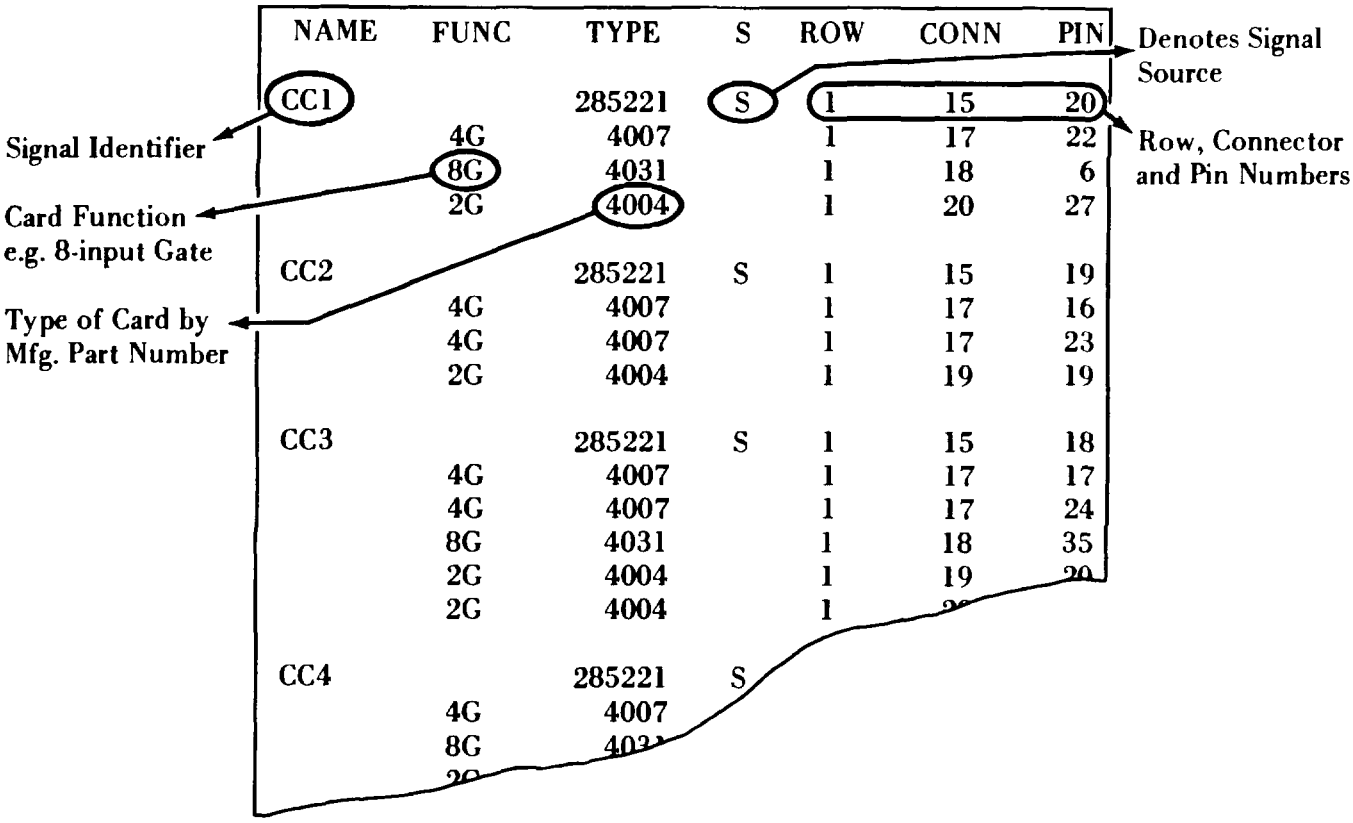
Figure 6-20B. Cable Diagrams for CS1717, CS 1718, CS1719, CS1720, and CS1721.

6-5. The printed circuit card rack used in the PT1585Tester is a computer wired assembly, therefore no wire identification appears on the wires. If a wire is broken or inadvertently removed, identification of a wire is possible only through pin-to-pin connection of the wire. During trouble-shooting, if card rack wiring is identified as the source of trouble, pin-to-pin continuity checks must be utilized to pinpoint an exact location of the difficulty.

WARNING

Extreme care must be used during troubleshooting or maintenance to avoid shorting-out or breaking wires on the card rack connectors.

Table 6-2 provides pin-to-pin information necessary for troubleshooting or replacement of wires. The Table identifies the signal name by an alpha-numeric code assigned to each signal on the logic diagrams. Figure 6-21 shows how to use information provided in the wire list to determine pin-to-pin connection of wires as the computer connected them.



6-21. Wire List Explanation.

Table 6-1. CARD LOCATION LIST

CARD TYPE	ROW	CONN
285222	1	5
286861	1	6
4003	1	7
4008	1	8
4003	1	9
4022	1	10
4004	1	11
4208	1	12
4004	1	13
4004	1	14
285221	1	15
4025	1	16
4007	1	17
4031	1	18
4004	1	19
4004	1	20
4208	1	21
285247	1	22
285235	1	23
4003	1	24
4008	1	25
4003	1	26
4036	1	27
4036	1	28
4036	1	29
285223	1	30

Table 6-2. Computer Wire List

NAME	FUNC	TYPE	S	ROW	CONN	PIN
CC1		285221	S	1	15	20
	4G	4007		1	17	22
	8G	4031		1	18	6
	2G	4004		1	20	27
CC2		285221	S	1	15	19
	4G	4007		1	17	16
	4G	4007		1	17	23
	2G	4004		1	19	19
CC3		285221	S	1	15	18
	4G	4007		1	17	17
	4G	4007		1	17	24
	8G	4031		1	18	35
	2G	4004		1	19	20
	2G	4004		1	20	55
CC4		285221	S	1	15	17
	4G	4007		1	17	20
	8G	4031		1	18	36
	2G	4004		1	20	47
CC5		285221	S	1	15	16
	4G	4007		1	17	18
	4G	4007		1	17	21
	2G	4004		1	19	41
CC6		285221	S	1	15	15
	4G	4007		1	17	48
	EX	4031		1	18	11
	8G	4031		1	18	40
	2G	4004		1	19	42
	2G	4004		1	20	48
CC7		285221	S	1	15	14
	4G	4007		1	17	14
	8G	4031		1	18	41
	4G	4031		1	18	52
	2G	4004		1	20	36
CC8		285221	S	1	15	13
	4G	4007		1	17	42
	EX	4031		1	18	14
	4G	4031		1	18	53
	2G	4004		1	19	4

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
CC9		285221	S	1	15	12
	4G	4007		1	17	43
	EX	4031		1	18	15
	8G	4031		1	18	42
	4G	4031		1	18	54
	2G	4004		1	19	34
	2G	4004		1	20	37
DT1	4G	4007		1	17	37
	3G	4008		1	25	15
	3G	4008	S	1	25	18
DT2	4G	4007		1	17	30
	SR	4208		1	21	5
		285235	S	1	23	27
DT3	SR	4208		1	21	34
		285247	S	1	22	43
DT4		285247	S	1	22	40
	SR	4208		1	21	12
DT5	SR	4208		1	21	9
		285247	S	1	22	12
DT6		285235	S	1	23	21
	SR	4208		1	21	38
DT7		285235	S	1	23	20
	SR	4208		1	21	39
DT8	SR	4208		1	21	13
		285235	S	1	23	19
DT9		285235	S	1	23	18
	SR	4208		1	21	21
ML1	JK	4003	S	1	7	27
	JK	4003		1	7	30
	3G	4008		1	25	33
ML2	CD	4022		1	10	21
	3G	4008		1	25	24
	3G	4008	S	1	25	25

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
ML3	JK	4003		1	7	55
	CD	4022	S	1	10	12
	JK	4003		1	26	40
ML4	CD	4022	S	1	10	45
	CD	4022		1	10	49
	SR	4208		1	21	40
ML6	CD	4022	S	1	10	47
	4G	4007		1	17	5
	4G	4007		1	17	10
	JK	4003		1	24	30
	JK	4003		1	26	13
	JK	4003		1	26	17
	JK	4003		1	26	18
	JK	4003		1	26	30
	JK	4003		1	26	43
ML7	4G	4007		1	17	4
	3G	4008		1	25	3
	JK	4003	S	1	26	2
ML8	4G	4007		1	17	3
	3G	4008	S	1	25	52
	3G	4008		1	25	54
ML9	3G	4008		1	25	41
	JK	4003	S	1	26	5
RD5		285222	S	1	5	31
	2G	4004		1	11	44
	JK	4003		1	24	26
	3G	4008		1	25	26
	JK	4003		1	26	24
	JK	4003		1	26	26
RD6	2G	4004	S	1	11	46
	LD	4036		1	28	47
RD7	JK	4003		1	9	34
	JK	4003		1	9	38
		285221	S	1	15	2
	JK	4003		1	9	32
	JK	4003	S	1	26	27

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
RD8	CD	4022	S	1	10	50
	3G	4008		1	8	6
RD9	3G	4008		1	8	16
	3G	4008	S	1	8	30
	3G	4008		1	8	34
	3G	4008		1	8	43
	JK	4003		1	9	31
CC00		285221	S	1	15	27
	4G	4007		1	17	11
	4G	4007		1	17	53
CC10	3G	4008		1	8	50
		285221	S	1	15	26
	4G	4007		1	17	12
CC11	2G	4004	S	1	19	30
	2G	4004		1	19	31
	2G	4004		1	20	8
CC12	3G	4008		1	8	22
	2G	4004	S	1	19	5
	2G	4004	S	1	19	32
CC13	2G	4004		1	19	6
	2G	4004	S	1	19	35
CC14	4G	4007	S	1	17	4
	2G	4004		1	19	8
	2G	4004		1	19	33
CC15	4G	4007	S	1	17	41
	2G	4004		1	19	9
	2G	4004		1	19	14
	2G	4004		1	20	39
CC16	4G	4007	S	1	17	15
	4G	4007		1	17	19
CC17	EX	4031	S	1	18	17
	4G	4007		1	17	45
CC18	2G	4004	S	1	19	10
	2G	4004		1	19	36

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
CC19	4G	4007	S	1	17	44
	2G	4004		1	19	47
	2G	4004		1	19	53
CC20	3G	4008		1	8	53
		285221	S	I	1 5	25
	4G	4007		1	17	13
	4G	4007		1	17	54
CC21	2G	4004		1	19	37
	2G	4004	S		19	40
	2G	4004	S	1	1 9	54
CC22	2G	4004	S	1	19	11
	2G	4004		1	19	12
CC23	2G	4004		1	19	45
	2G	4004	S	1	1 9	43
CC24	2G	4004	S	1	19	46
	2G	4004		1	19	48
	2G	4004		1	20	23
CC25	2G	4004		1	19	50
	2G	4004	S	1	1 9	49
CC26	2G	4004	S	1	19	24
	2G	4004		1	19	21
CC27	2G	4004		1	19	22
	2G	4004	S	1	19	18
CC28	4G	4007	S	1	17	50
	2G	4004		1	20	9
	2G	4004		1	20	12
CC29	4G	4007		1	17	55
	2G	4004	S	1	20	10
	2G	4004	S	1	20	11
CC30		285221	S	1	15	24
	4G	4007		1	17	39
CC31	2G	4004		1	20	41
	2G	4004	S	1	20	38

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
CC32	4G	4007		1	17	51
	4G	4031	S	1	18	51
CC34	2G	4004		1	20	44
	2G	4004	S	1	20	40
CC35	8G	4031	S	1	18	4
	2G	4004		1	20	15
	2G	4004		1	20	22
CC36	2G	4004	S	1	20	18
	2G	4004	S	1	20	43
	2G	4004		1	20	45
CC37	2G	4004	S	1	20	49
	2G	4004		1	20	19
CC39	2G	4004	S	1	20	24
	2G	4004		1	20	21
CC40		285221	S	1	15	23
	2G	4004		1	19	2
	2G	4004		1	19	44
CC42	2G	4004	S	1	20	26
	2G	4004		1	20	52
CC43	2G	4004	S	1	20	54
	2G	4004		1	20	50
CC44	SR	4208		1	12	48
	2G	4004		1	13	36
	EO	4025		1	16	33
	2G	4004	S	1	20	51
	SR	4208		1	21	16
CC45	EO	4025	S	1	16	5
	EO	4025		1	16	8
CC46	EO	4025		1	16	39
	EO	4025	S	1	16	37
CC47	EO	4025	S	1	16	12
	EO	4025		1	16	7

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
CC48	SR	4208		1	12	17
	2G	4004		1	13	42
	EO	4025	S	1	16	36
CC49	SR	4208		1	12	21
	2G	4004		1	13	6
	EO	4025		1	16	32
	2G	4004	S	1	20	46
	SR	4208		1	21	43
CC50		285221	S	1	15	22
	2G	4004		1	19	3
	2G	4004		1	20	2
CC51	SR	4208		1	12	20
	2G	4004		1	13	8
	EO	4025		1	16	4
	2G	4004	S	1	19	51
	SR	4208		1	21	44
CC52	SR	4208		1	12	19
	2G	4004		1	13	34
	EO	4025		1	16	30
	2G	4004	S	1	19	38
	SR	4208		1	21	17
CC53	SR	4208		1	12	53
	2G	4004		1	13	31
	EO	4025		1	16	31
	4G	4007	S	1	17	25
	SR	4208		1	21	48
CC54	3G	4008	S	1	8	27
	SR	4208		1	12	24
	2G	4004		1	13	2
	EO	4025		1	16	2
	SR	4208		1	21	20
CC55	EO	4025		1	16	9
	EO	4025	S	1	16	3
CC56	2G	4004	S	1	13	30
	LD	4036		1	27	30

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
CC57	LD	4036		1	27	32
	2G	4004	S	1	13	32
CC58	LD	4036		1	27	37
	2G	4004	S	1	13	35
CC59	LD	4036		1	27	34
	2G	4004	S	1	13	5
CC60	2G	4004		1	20	31
		285221	S	1	15	21
CC61	LD	4036		1	27	40
	2G	4004	S	1	13	10
CC62	LD	4036		1	27	16
	2G	4004	S	1	13	38
CC63	LD	4036		1	27	50
	2G	4004	S	1	13	11
CC64	LD	4036	S	1	27	31
		285223		1	30	27
CC65		285223		1	30	26
	LD	4036	S	1	27	33
CC66	LD	4036	S	1	27	35
		285223		1	30	25
CC67		285223		1	30	24
	LD	4036	S	1	27	38
CC68		285223		1	30	23
	LD	4036	S	1	27	13
CC69		285223		1	30	22
	LD	4036	S	1	27	43
CC7O	LD	4036	S	1	27	45
		285223		1	30	21
CC71		285223		1	30	20
	LD	4036	S	1	27	48

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
CC72	LD	4036	S	1	27	51
		285223		1	30	19
CC73	EO	4025	S	1	16	34
	EO	4025		1	16	35
DT10	SR	4208		1	21	19
		285247	S	1	22	51
DT11		285247	S	1	22	48
	SR	4208		1	21	53
DT12		285247	S	1	22	20
	SR	4208		1	21	24
DT13	SR	4208		1	21	25
		285247	S	1	22	25
DT14	3G	4008		1	25	21
	SR	4208	S	1	21	26
DT15	3G	4008	S	1	25	20
	3G	4008		1	25	19
DT16	3G	4008		1	25	48
	8G	4031	S	1	18	32
DT17	SR	4208	S	1	21	54
	4G	4031		1	18	49
DT18	SR	4208	S	1	21	55
	4G	4031		1	18	48
DT19	4G	4031		1	18	47
	SR	4208	S	1	21	27
DT20	8E	4031		1	18	9
	4G	4031	S	1	18	27
	4G	4031	S	1	18	44
	4G	4031	S	1	18	46
DT21	SR	4208	S	1	21	22
	4G	4031		1	18	25

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
DT22	SR	4208	S	1	21	50
	4G	4031		1	18	24
DT23	4G	4031		1	18	23
	SR	4208	S	1	21	51
DT24	4G	4031		1	18	22
	SR	4208	S	1	21	52
DT25	4G	4031		1	18	45
	SR	4208	S	1	21	49
DT26	4G	4031		1	18	21
	SR	4208	S	1	21	18
DT27	SR	4208	S	1	21	46
	4G	4031		1	18	20
DT28	SR	4208	S	1	21	47
	4G	4031		1	18	19
DT29	8G	4031		1	18	38
	SR	4208	S	1	21	41
	SR	4208		1	21	45
DT30	8G	4031		1	18	10
	SR	4208	S	1	21	14
DT31	SR	4208	S	1	21	42
	8G	4031		1	18	8
DT32	8G	4031		1	18	7
	SR	4208	S	1	21	15
DT33	SR	4208	S	1	21	37
	8G	4031		1	18	34
DT34	SR	4208	S	1	21	36
	8G	4031		1	18	33
DT35	SR	4208	S	1	21	7
	8G	4031		1	18	31
DT36		285247		1	22	45
		285235	S	1	23	26

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
DT37		285247		1	22	14
		285247		1	22	44
		285235	S	1	23	23
DT38		285235	S	1	23	25
		285247		1	22	42
DT40		285247		1	22	13
		285235	S	1	23	24
DT43	4G	4007		1	17	31
		285235	S	1	23	22
DT44		285235	S	1	23	17
		285247		1	22	53
DT45		285247		1	22	50
		285235	S	1	23	16
DT46		285247		1	22	21
		285235	S	1	23	15
DT47		285247		1	22	22
		285247		1	22	52
		285235	S	1	23	14
DT49		285247		1	22	26
		285247		1	22	49
		285235	S	1	23	13
ML10	4G	4007		1	17	6
	4G	4007		1	17	8
	SR	4208		1	21	11
	JK	4003		1	26	7
	JK	4003	S	1	26	39
ML11	JK	4003		1	26	15
	JK	4003	S	1	26	42
	JK	4003		1	26	48
ML12	JK	4003		1	26	20
	JK	4003	S	1	26	44
ML13	4G	4007			17	7
	JK	4003	S	1	26	16

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
ML14	JK	4003	S	1	26	19
	4G	4007		1	17	36
ML15	2G	4004		1	13	44
	4G	4007	S	1	17	38
	3G	4008		1	25	8
ML16	JK	4003		1	24	22
	2G	4004	S	1	13	46
ML17	4G	4007	S	1	17	35
	3G	4008		1	25	2
ML18	2G	4004		1	13	14
	2G	4004		1	13	39
	3G	4008		1	25	9
	3G	4008	S	1	25	14
ML19		286861		1	6	35
	2G	4004	S		13	43
	JK	4003		1	24	17
	JK	4003		1	24	18
	JK	4003		1	24	24
	3G	4008		1	25	35
ML20	3G	4008	S	1	25	13
	3G	4008	S	1	25	39
	JK	4003		1	26	38
ML21	JK	4003	S	1	24	39
	JK	4003		1	24	40
	3G	4008		1	25	37
ML22	2G	4004	S	1	13	40
	JK	4003		1	24	13
	JK	4003		1	24	32
	JK	4003		1	24	34
	JK	4003		1	24	38
ML23	JK	4003	S	1	24	14
	JK	4003		1	26	36
ML24	JK	4003		1	24	1 5
	JK	4003	S	1	24	42
	3G	4008		1	25	38

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
ML25	JK	4003	S	1	24	44
	JK	4003		1	24	48
	3G	4008		1	25	10
ML26	JK	4003		1	26	9
	JK	4003	S	1	24	47
ML27	JK	4003	S	1	24	19
	3G	4008		1	25	34
ML28	3G	4008	S	1	25	32
	3G	4008		1	25	31
ML29	3G	4008	S	1	25	7
		286861		1	6	30
ML30		285235		1	23	2
	3G	4008	S	1	25	30
ML31	4G	4007	S	1	17	32
		285235		1	23	3
ML34	JK	4003	S	1	24	23
	8G	4031		1	18	30
ML35	4G	4007		1	17	33
	3G	4008	S	1	25	45
ML36	JK	4003		1	24	7
	JK	4003	S	1	24	3
ML37	JK	4003		1	24	36
	JK	4003	S	1	24	4
ML38		285235		1	23	11
		286861	S	1	6	41
RD10	3G	4008	S	1	8	32
		285222	S	1	5	27
	3G	4008		1	8	31
RD11	3G	4008		1	8	10
	3G	4008		1	8	9
		285222	S	1	5	26
	3G	4008	S	1	8	7

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
RD12	3G	4008		1	8	36
	3G	4008	S	1	8	45
	JK	4003		1	9	33
RD13	3G	4008		1	8	48
	3G	4008	S	1	8	13
RD14	3G	4008		1	8	40
	JK	4003	S	1	9	3
	JK	4003		1	9	35
	2G	4004		1	11	6
	2G	4004		1	11	34
	EO	4025		1	16	13
RD15	3G	4008		1	8	42
	JK	4003	S	1	9	2
RD16	JK	4003		1	7	13
	JK	4003		1	7	17
	JK	4003		1	7	18
	JK	4003		1	7	24
	JK	4003		1	7	32
	JK	4003		1	7	34
	JK	4003		1	7	38
	CD	4022	S	1	10	34
	EO	4025		1	16	41
RD17	3G	4008		1	8	41
	3G	4008	S	1	8	39
RD18	2G	4004		1	20	34
	2G	4004	S	1	1 9	26
RD20	2G	4004	S	1	20	5
	2G	4004		1	20	4
RD21	3G	4008	S	1	8	14
	3G	4008		1	8	19
RD22	JK	4003	S	1	9	11
	CD	4022		1	10	9
	SR	4208		1	12	40
RD23	JK	4003		1	9	36
	3G	4008	S	1	8	18

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
RD24	JK	4003	S	1	7	23
	3G	4008		1	8	49
RD26	JK	4003	S	1	9	4
	JK	4003		1	9	13
	SR	4208		1	12	11
RD27	JK	4003		1	9	12
	EO	4025	S	1	16	16
	EO	4025	S	1	16	40
RD31	EO	4025		1	16	14
	SR	4208	S	1	12	26
RD32	SR	4208		1	12	23
		285221	S	1	15	6
	3G	4008		1	25	53
RD33	SR	4208		1	12	25
		285221	S	1	15	7
	3G	4008		1	25	22
RD34	2G	4004		1	11	3
	2G	4004		1	11	4
		285221	S	1	15	8
RD35	2G	4004		1	11	7
	2G	4004		1	11	33
		285221	S	1	15	9
RD37	2G	4004		1	11	2
	2G	4004		1	11	31
	SR	4208	S	1	12	7
	2G	4004		1	14	37
RD38	2G	4004	S	1	11	30
	2G	4004		1	11	36
RD39	2G	4004		1	11	9
	2G	4004	S	1	11	35
RD40	SR	4208		1	12	45
	2G	4004	S	1	11	38

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
RD41	2G	4004	S	1	11	10
	SR	4208		1	12	2
RD42	JK	4003		1	7	7
	JK	4003	S	1	7	3
RD43	JK	4003	S	1	7	4
	JK	4003		1	7	36
RD44	JK	4003		1	7	40
	JK	4003	S	1	7	39
RD45	JK	4003	S	1	7	42
	JK	4003		1	7	15
RD46	JK	4003	S	1	7	44
	JK	4003		1	7	48
RD47	JK	4003	S	1	7	19
	2G	4004		1	11	39
RD48	2G	4004		1	11	14
	2G	4004	S	1	11	11
RD49	2G	4004	S	1	11	40
	2G	4004		1	11	15
RD50		285221	S	1	15	10
	2G	4004		1	11	41
RD51	2G	4004		1	11	12
		285221	S	1	15	11
RD52	JK	4003		1	7	22
	2G	4004	S	1	11	43
RD53	2G	4004	S	1	11	5
	2C	4004		1	11	37
RD54	2G	4004		1	11	8
	2G	4004	S	1	11	32
RD55	2G	4004		1	14	3
	SR	4208	S	1	12	30

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
RD56	LD	4036		1	28	30
	2G	4004	S	1	14	30
RD57	2G	4004		1	14	33
	SR	4208	S	1	12	3
RD58	LD	4036		1	28	32
	2G	4004	S	1	14	32
RD59	SR	4208	S	1	12	31
	2G	4004		1	14	4
RD60	LD	4036		1	28	37
	2G	4004	S	1	14	35
RD61	SR	4208	S	1	12	32
	2G	4004		1	14	7
RD62	LD	4036		1	28	34
	2G	4004	S	1	14	5
RD63	SR	4208	S	1	12	35
	2G	4004		1	14	9
RD64	LD	4036		1	28	40
	2G	4004	S	1	14	10
RD65	2G	4004	S	1	14	38
	LD	4036		1	28	16
RD66	2G	4004		1	14	15
	SR	4208	S	1	12	47
RD67	LD	4036		1	28	24
	2G	4004	S	1	1 4	43
RD68	SR	4208	S	1	12	46
	2G	4004		1	14	45
RD69	LD	4036		1	28	26
	2G	4004	S	1	14	46
RD70	SR	4208	S	1	12	18
	2G	4004		1	14	47

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
RD71	LD	4036		1	29	30
	SG	4004	S	1	14	49
RD72	SR	4208	S	1	12	49
	2G	4004		1	14	20
RD73	LD	4036		1	29	32
	2G	4004	S	1	14	18
RD74	SR	4208	S	1	12	52
	2G	4004		1	14	23
RD75	2G	4004	S	1	14	24
	LD	4036		1	29	37
RD76	SR	4208	S	1	12	51
	2G	4004		1	14	50
RD77	LD	4036		1	29	34
	2G	4004	S	1	14	51
RD78	2G	4004		1	14	52
	SR	4208	S	1	12	50
RD79	LD	4036		1	29	40
	2G	4004	S	1	1 4	54
RD80	SR	4208	S	1	1 2	22
	2G	4004		1	14	55
RD81	2G	4004	S	1	14	26
	LD	4036		1	29	16
RD82	SR	4208	S	1	1 2	27
	2G	4004		1	14	12
RD83	LD	4036		1	29	50
	2G	4004	S	1	14	40
RD84	JK	4003		1	9	17
	JK	4003		1	9	18
	JK	4003		1	9	24
	JK	4003		1	9	26
	CD	4022	S	1	10	36
	2G	4004		1	14	2

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
	2G	4004		1	14	6
	2G	4004		1	14	8
	2G	4004		1	14	14
	2G	4004		1	14	19
	2G	4004		1	14	21
	2G	4004		1	14	22
	2G	4004		1	14	27
	2G	4004		1	14	31
	2G	4004		1	14	34
	2G	4004		1	14	36
	2G	4004		1	14	39
	2G	4004		1	14	44
	2G	4004		1	14	48
	2G	4004		1	14	53
RD85	CD	4022		1	10	30
	JK	4003	S	1	9	5
RD86	JK	4003	S	1	9	14
	LD	4036		1	28	50
RD89	2G	4004		1	20	7
	2G	4004	S	1	20	35
	3G	4008		1	25	42
	JK	4003		1	26	34
	JK	4003		1	26	35
RD91	JK	4003		1	26	54
	JK	4003	S	1	26	23
RD92		285222	S	1	5	16
	CD	4022		1	10	24
	JK	4003		1	26	55
RD93	JK	4003		1	9	48
	JK	4003	S	1	9	44
RD94	JK	4003	S	I	9	47
	JK	4003		1	9	22
RD95	JK	4003			9	51
	JK	4003		1	9	55
RD96	JK	4003	S	1	9	25
	JK	4003		1	24	54

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
RD97	EO	4025		1	16	10
	JK	4003	S	1	24	25
	3G	4008		1	25	50
RD98	3G	4008	S	1	25	27
	3G	4008		1	25	51
RD99		285223		1	30	18
	LD	4036	S	1	2t	31
CCN50	2G	4001		1	19	52
	2G	4004		1	20	1-I
	2G	4004	S	1	20	30
CCN60	2G	4004		1	19	7
	2G	4004		1	19	23
	2G	4004		1	19	39
	2G	4004		1	20	’0
	2G	4004	S	1	20	32
	2G	4004		1	20	42
	2G	4004		1	20	53
PWRN5		285222		1	5	15
		2868361		1	6	48
RD100	LD	4036	S	1	28	313
		285223		1	30	17
RD101	LD	1036	S	1	28	35
		285223		1	30	16
RD102	LD	4036	S	1	28	38
		285223		1	30	15
RD103		285223		1	30	14
	LD	41036	S	1	28	13
RD104	LD	4036	S	1	28	13
		285’23		1	30	13
RD105		285223		1	30	12
	LD	4036	S	1	28	25
RD106	LD	4036	S	1	28	48
		285223		1	30	11

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
RD107	LD	4036	S	1	28	51
		285223		1	30	10
RD108		285223		1	30	9
	LD	1036	S	1	28	53
RD109		285223		1	30	8
	LD	4036	S	1	29	31
RD110		285223		1	30	7
	LD	4036	S	1	29	33
RD11		285223		1	30	6
	LD	4036	S	1	29	35
RD112		285223		1	30	5
	LD	4036	S	1	29	38
RD113	LD	4036	S	1	29	13
		285223		1	30	4
RD114	LD	4036	S	1	29	43
		285223		1	30	3
RD115	LD	4036	S	1	29	45
		285223		1	30	2
RD116		285221	S	1	15	5
	LD	4036		1	27	47
RD117		285221	S	1	15	4
	LD	4036		1	27	24
RD118		285235	S	1	23	12
	LD	4036		1	27	42
	LD	4036		1	28	42
	LD	4036		1	29	42
RD119	JK	4003		1	9	15
	JK	4003	S	1	9	39
	JK	4003		1	9	40
	EO	4025		1	16	43
	JK	4003		1	24	55

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
RD120	JK	4003		1	9	7
	JK	4003		1	9	30
	EO	4025	S	1	16	45
	EO	4025	S	1	16	51
RD121	EO	4025		1	16	25
	EO	4025	S	1	16	19
RD123		285221	S	1	15	3
	2G	4004		1	19	27
	2G	4004		1	20	6
RD130	2G	4004		1	11	42
	JK	4003	S	1	7	14
RD131	JK	4003		1	26	22
	JK	4003	S	1	26	25
RD132	CD	4022		1	10	26
	JK	4003	S	1	26	51
GD0109	JK	4003		1	9	6
	JK	4003		1	9	41
	GD	4003	S	1	9	56
GD0112	SR	4208		1	12	4
	SR	4208		1	12	5
	SR	4208		1	12	6
	SR	4208		1	12	8
	SR	4208		1	12	9
	SR	4208		1	12	10
	SR	4208		1	12	12
	SR	4208		1	12	16
	SR	4208		1	12	33
	SR	4208		1	12	34
	SR	4208		1	12	43
	SR	4208		1	12	44
	GD	4208	S	1	12	56
GD0121	SR	4208		1	21	33
	GD	4208	S	1	21	56

Table 6-2. Computer Wire List (Cont)

NAME	FUNC	TYPE	S	ROW	CONN	PIN
GD0122		285247	S	1	22	15
		285247	S	1	22	56
		285247	S	1	22	19
		285247	S	1	22	54
		285247	S	1	22	46
		285247	S	1	22	41
		285247	S	1	22	23
GD0124	GD	4003	S	1	24	56
	JK	4003		1	24	53
GD0126	JK	4003		1	26	37
	JK	4003		1	26	45
	JK	4003		1	26	46
GD		4003	S	1	26	56
VC0122		285247		1	22	39
		285247	S	1	22	29
		285247		1	22	47

6-6. The following wires have been added to the computer wired rack. They do not have wire numbers or signal names assigned and therefore are shown FROM a connector pin TO a connector pin.

Table 6-3. Wire List

FROM		**TO**	
CONN	PIN	CONN	PIN
A6	46	A24	39
A6	45	A24	47
A6	44	A26	11
A6	43	A26	39
A6	31	A8	20
A6	10	A13	44
A6	52	A10	50
A8	21	A24	4
A8	44	A24	19
A8	46	A24	44

SECTION VII

ILLUSTRATED PARTS BREAKDOWN

PART I

INTRODUCTION

1-1. GENERAL.

1-2. This illustrated parts breakdown lists and illustrates the replaceable components, assemblies and detail parts in the PT1585 Sensor/Stack Tester, manufactured for San Antonio Air Material Area, Kelly Air Force Base, Texas. This illustrated parts breakdown is intended for use in requisitioning and identifying parts. Maintenance procedures for these items are covered in Section V.

1-3. This illustrated parts breakdown is divided into four parts:

Part I	-	Introduction
Part II	-	Numerical Index
Part III	-	Reference Designation Index
Part IV	-	Group Assembly Parts List

1-4. NUMERICAL INDEX.

1-5. The Numerical Index, Part II, is an index of all part numbers in the Group Assembly Parts List, Part IV.

1-6. MFR PART NUMBER COLUMN.

1-7. This column contains each part number listed in the group assembly parts list, arranged in alphabetical and numerical order. Part number arrangement in this column is from left to right, one letter or number at a time, until the order of numerical listing is determined. The part numbers are arranged by the extreme left hand character in the following order of precedence:

a. Letters A through Z

b. Numerals 0 through 9

The second and succeeding characters from left to right determine the subsequent order of precedence of a part number, as follows:

a. Space (blank column)

b. Diagonal (Slant)

c. Point (period)

d. Dash (-)

e. Letters A through Z

f. Numerals 0 through 9

NOTE

Alphabetical O's are considered numeric zeros.

1-8. FIG. AND INDEX NO. COLUMN.

1-9. The data in this column identifies and locates the parts in the Group Assembly Parts List, Part IV. The number preceding the dash is the figure number and the number following the dash is the index number. Where no index number is listed, the part number appears in the figure shown but is not indexed. Each occurrence of a part number in Part IV is indicated in this column.

1-10. QUANTITY PER ARTICLE.

1-11. This column lists the quantity of the listed part or assembly used in that location.

1-12. REFERENCE DESIGNATION INDEX.

1-13. The Reference Designation Index, Part III, provides all the reference designation assigned to parts and assemblies in the equipment.

1-14. REFERENCE DESIGNATION COLUMN.

1-15. This column lists the electrical designations in alphanumeric order.

1-16. FIG. AND INDEX NO. COLUMN.

1-17. The data in this column identifies and locates the parts in the Group Assembly Parts List, Part IV. The number preceding the dash is the figure number and the number following the dash is the index number.

1-18. MFR PART NUMBER COLUMN.

1-19. This column lists the appropriate part number that appears in the group assembly parts list.

1-20. GROUP ASSEMBLY PARTS LIST.

1-21. The Group Assembly Parts List, Part IV, provides illustrations of the equipment with accompanying parts lists. Index numbers on the parts lists correspond to those on the illustrations. A part can be identified if its part number, description, or physical configuration is known.

1-22. FIG. AND INDEX NO. COLUMN.

1-23. This column lists the assigned figure and index number of each part or assembly in the list and its associated illustration.

1-24. MFR PART NUMBER COLUMN.

1-25. This column lists the contractor's part numbers or vendor's part number is listed when applicable. If the item has not been assigned a part number, the words NO NUMBER appear in this column.

1-26. DESCRIPTION COLUMN.

1-27. This column provides the name and identifying description for the listed assemblies or parts followed by the five digit manufacturer's code in parenthesis. The indention arrangement of this column under the number 1 through 7 is used to show the relationship of a part or assembly to another part or assembly. Attaching parts are listed immediately following the assembly or part they attached. Attaching parts are preceded by the words (ATTACHING PARTS). The symbol (---*---) is used to denote the end of the attaching parts and the continuation of the listing.

1-28. MANUFACTURER'S CODES.

1-29. The manufacturer's codes used in this manual are:

00929 Microlab Inc.
570 West Mt. Pleasant Ave.
Livingston, N.J. 07039

01002 General Electric Co.
Capacitor Dept.
John St.
Hudson Falls, N.Y. 12839

01295 Texas Instruments Inc.
Semiconductor-Components
Division
13500 North Central Expressway
Dallas, Tx. 75231

03296 Nylon Molding Corp.
40 Brown St.
Springfield, N. J. 07081

04713 Motorola Semiconductor
Products, Inc.
5005 East McDowell Road
Phoenix, Ariz. 85008

04713 Pomona Electronics Co., Inc.
1500 E. 9th Street
Pomona, Cal. 91766

05397 Union Carbide Corp.
Linde Division Kemet Dept.
11901 Madison
Cleveland, Ohio 45246

05791 Lyn-Tron Inc.
5350 Rivrtn.
North Hollywood, Cal. 91601

07589	Argonne Electronic Mfg. Co. New York, N.Y
07618	Dorsett Electronics Inc. 6916 E. 13th Tulsa, Okla.
08717	Sloan Co. P.O. Box 367 Sun Valley, Cal 91353
08806	General Electric Co. Miniature Lamp Dept. Nela Park Cleveland, Ohio 44112
09023	Cornell-Dubilier Electric Corp. Electrolytics and Paper Tubular Division 2562 Dalrymple Sanford, N.C
10199	Bay Products Division of American Metal Works Somerset-Gurney Streets Philadelphia, Pa. 19134
10412	Resdel Engineering Corp. 990 S. Fair Oaks Ave. Pasadena, Cal.
11237	Chicago Telephone of California Inc. 1010 Sycamore South Pasadena, Cal.
12139	PIC Design Corp. 7335 Van Nuys Van Nuys, Cal.
12617	Hamlin Inc. Grove and Lake Streets Lake Mills, Wis. 53551
13850	Technipower Inc. South Norwalk, Conn.
15849	USECO Inc. Mt. Vernon, NY
17465	Cutler-Hammer Inc. 1661 Industrial Wy. Belmont, Cal 94002
17870	Daven-Manchester Division of Thomas A. Edison Industries McGraw-Edison Co. 400 Canal St. Manchester, N.H. 03101
17919	Displayers Inc. 635 W. 54th St. New York, N.Y
18324	Signetics Corp. 680 W. Maude Ave. Sunnyvale, Cal
22599	Elastic Stop Nut Corp. of America Fastener Division P.O. Box 7707 Van Nuys, Cal.
23042	Texscan Corp. 51 S. Koweba Lane Indianapolis, Ind. 46201
28480	Hewlett-Packard Co. 1501 Page Mill Road Palo Alto, Cal. 94304
37942	Mallory P.R. and C. Inc. 3029 East Washington St. P.O. Box 327 Indianapolis, Ind. 46206
71286	Camloc Fastener Corp. 22 Spring Valley Rd. Paramus, N.J
71400	Bussman Mfg. Division of McGraw-Edison Co. 2538 W. University St. St. Louis, Mo.
71468	ITT Cannon Electric Inc. 3208 Humbolt St. Los Angeles, Cal. 90031
71785	Cinch Mfg. Co. and Howard B. Jones Div. 1026 S. Homan Ave. Chicago, Ill.
72619	Dialight Corp. 60 Stewart Ave. Brooklyn, N.Y 11237
74574	Hubbell Harvey 100 State St. Bridgeport, Conn. 06603
74970	Johnson E. F. Co. 297 Tenth Ave. SW Waseca, Minn. 56093
75915	Littlefuse Inc. 800 E. Northwest Hwy. Des Plaines, Ill. 60016
76487	Millen James Mfg. Co. Inc. 150 Exchange St. Malden, Mass. 02148
77820	Bendix Corp. The Scintilla Division Sidney, NY 13838
77969	Rubbercraft Corp. of Calif. Ltd. 1800 W. 220th St. Torrance, Cal.
80063	Army Electronics Command Fort Monmouth, N.J 07703
80103	Lamdba Electronics Corp. Huntington, NY
80145	API Instructions Co. 7100 Wilson Mills Road Chesterland, Ohio 44026
80294	Bourns Inc. 6135 Magnolia Ave. Riverside, Cal. 92506

80331	Utah-American Corp. 1124 E. Franklin St. Huntington, Ind. 46750
81312	Winchester Electric Division Litton Industries Inc. Main Street and Hillside Avenue Oakville, Conn.
81349	Military Specifications Promulgated by Standardization Div. Directorate of Logistic Services, DSA
82389	Switchcraft Inc. 5527 N. Elston Ave. Chicago, Ill. 60030
83330	Smith Herman H. Inc. 2334 Nostrand Ave. Brooklyn, NY 11210
84411	TRW Capacitor Division 112 W. First St. Ogallala, Neb.
88869	Singer Company Instrumentation Division 3211 La Cienega Blvd. Los Angeles, Cal 90016
90697	Remington Rand Division of Sperry Rand Corp. 222 Willian Elmira, NY
91929	Honeywell Inc. Micro Switch Division Freeport, Ill.
92702	IMC Magnetics Corp. Eastern Division 570 Main St. Westbury, Long Island, NY
94144	Raytheon Co. Components Division Industrial Components Operation 465 Centre Quincy, Mass. 01269
94375	Automatic Metal Products Co. 315 Berry Brooklyn, NY
97525	Electronic Engineering Co. of Calif. Santa Anna, Cal.
98291	Sealectro Corp. 225 Hoyt Mamaroneck, NY 10544
98376	Zero Mfg. Co. Burbank, Cal.
98750	SAAMA Kelly Air Force Base, Tex. 91766

99862 Carr Lane Mfg. Co. Inc.
4202 Krause Court
St. Louis, Mo.

99899 Narda Microwave Corp. The
Plainview L.I., NY 11803

1-30. SOURCE CODE COLUMN.

1-31. This column contains the source code assigned for the assembly or part listed. Definitions of the codes are as follows:

a. Code P identifies parts which may be requisitioned and installed by any level of maintenance consistent with the Command's authorized scope of maintenance. Code P is applied to parts on which usage is anticipated or known. Restricted (emergency) service manufacture of code P items is considered practical but may be accomplished only after confirmation of nonavailability from supply sources.

b. Code PD identifies parts which may be requisitioned and installed by AF activities authorized depot-level maintenance only. Code PD is applied to parts which usage is anticipated or known. Restricted (emergency) service manufacture of code PD parts is considered practical but may be accomplished only after confirmation of nonavailability from supply sources.

c. Code P1 identifies parts which may be requisitioned and installed by any maintenance level consistent with the Command's authorized scope of maintenance. Code P1 is applied to parts on which usage is anticipated or known, and which service manufacture is considered impractical.

d. Code PID identifies parts which may be requisitioned and installed by AF activities authorized depot-level maintenance only. Code P1D is applied to parts on which usage is anticipated or known, and which service manufacture is considered impractical.

e. Code P2 identifies insurance-type spare parts which can be installed by any AF activity consistent with the Command's authorized scope of maintenance. This code is applied to parts which are basically structural and for which no usage is anticipated or known, and which require special tools, templates and/or jigs and are very difficult, impractical, or uneconomical to manufacture by AF activities. These items are not subject to periodic replacement or wearout but may require infrequent replacement as a result of accidents or other unexpected occurrences. Delayed procurement items, as defined in AMCM 400-1, are included under this code.

f. Code P2D identifies insurance-type parts which may be installed by AF activities which are authorized depot-level maintenance only. This code is applied to parts as described under code P2 and to delayed procurement items referenced in AFLCM 400-1.

g. Code M identifies parts, the manufacture and installation of which is within the capabilities of field maintenance activities; and to which all of the following conditions apply:

(1) Procurement is not justified because of low usage or peculiar storage and installation factors. Needs are to be met by local manufacture only as required.

(2) Their manufacture does not require tools, equipment, or skills not normally authorized at field maintenance level.

(3) Does not require test equipment not normally authorized at field maintenance level.

(4) Does not require material not normally available in Air Force inventory.

h. Code M identifies parts which can be manufactured at activities authorized depot-level maintenance facilities and to which all of the following conditions apply:

(1) Procurement is not justified because of low usage or peculiar storage and installation factors. The needs or base activities are to be met by requisitioning from the geographical AMA, LSM AMA, or IM AMA/AFD.

(2) Their manufacture is beyond capabilities of field maintenance activities.

(3) Their manufacture does not require tools or equipment not normally authorized at all AMAs.

i. Code A identifies items capable of being assembled at any level of maintenance and is applied to assemblies of two or more parts, the majority of which are purchased and/or service manufactured.

j. Code Al identifies assemblies which can be assembled at AF activities authorized depot-level maintenance only and is applied to assemblies described under code A.

k. Code X is applied to main structural members or similar parts, which, if required, would suggest extensive repair. The need for a part or parts coded X (wing spars, center section structure, etc.) should normally result in a recommendation to retire the article from service.

l. Code X1 identifies parts applicable at any level of maintenance consistent with the Command's authorized scope of maintenance and for which it is more feasible to obtain the next higher assembly; for example, an integral detail part such as a welded segment inseparable from its assembly; a part machined in a matched set; or a part of any assembly which, if required, would suggest extensive reconditioning of such assembly. In some cases, code X1 may be used to indicate an integral detail part of an assembly which has no anticipated usage and as an assembly was source-coded M or M1.

m. Code X1D identifies parts described under the X1 code but which are applicable to AF activities authorized depot-level maintenance only.

n. Code X2 identifies parts applicable to any level of maintenance consistent with the Command's authorized scope of maintenance for which there is no anticipated usage, and which are impractical for service manufacture. This type of item will not be stocked. Such parts shall be obtained from reclamation or, if not available from this source, requisitioned through normal supply channels together with supporting justification for one-time procurement and immediate use. Repeated requests shall justify a change to a code P1 or P2, as applicable, if considered economical and feasible to procure and stock such parts.

o. Code X2D identifies parts described under the X2 code by which are applicable to AF activities authorized depot-level maintenance only. Repeated requests for such parts shall justify a change to a P1D or P2D code, as applicable, if considered economical and feasible to procure and stock such parts.

p. Code U is applied to installation drawings, diagrams, instruction sheets, field-service drawing numbers, and parts not otherwise of supply significance, including obsolete parts, which cannot be procured or service manufactured.

q. Code C is applied to kits' containing parts that have a specific period of time (cure-date) to remain in storage without affecting their serviceability and are subject to deterioration due to aging or exposure. The cure-date for the kit is established on the shortest life item within the kit. C-Kit contains parts required for maintenance and overhaul and will be used in conjunction with Overhaul (Code D) Repair Kits and/or Minor or Field (Code F) Repair Kits, as applicable.

r. Code D is applied to kits which are available only to maintenance activities authorized to perform depot or major overhaul. These kits do not contain cure-dated parts.

s. Code F is applied to kits which are available to maintenance activities authorized to perform minor or field repair, including overhaul activities in support of field activities. These kits do not contain cure-dated parts.

t. Code KC is applied to items which are components of a C-Kit.

u. Code KD is applied to items which are components of a D-Kit.

v. Code KF is applied to items which are components of an F-Kit.

w. Code KB is applied to items which are components of both an F-Kit and a D-Kit.

1-32. REPAIR CODE COLUMN.

1-33. This column contains the repair code assigned for the assembly or part listed. Definitions of the codes are as follows:

a. Code S No repair. Code S identifies items which are nonrepairable and have no reclamation value. When these items fail they will be disposed of at user level as condemned material.

b. Code B No repair recondition. Code B identifies assemblies or parts that will be reconditioned at the user level by adjusting, cleaning, soldering broken connections, etc. If these items cannot be returned to serviceable condition by such means they will be disposed of at user level as condemned material. No repair parts or tools are specially procured for maintenance of these items.

c. Code F Field level maintenance. Code F identifies items which will be repaired by the field level maintenance activities. Normal servicing will be done by organization level maintenance. Selected parts, tools and technical order data are procured and provided to applicable field level maintenance activities for repair of these items. No specialty repair activity (SRA) is established for these items. If they cannot be returned to serviceable condition by the field level maintenance activity with parts and tools provided, they will be disposed of as condemned material. High value and critical items, however, will be turned in to supply and disposition instructions obtained from the applicable IM.

d. Code D Limited field repair; depot overhaul. Code D identifies items on which a limited degree of repair can be accomplished by field level maintenance activities. Normal servicing will be done at organization level. SRA is established for overhaul of these items. A range of repair parts, tools, and technical order data consistent with the capabilities of repair are procured and provided to applicable field maintenance activities. Because of the design characteristic and complexity of repair; the degree of repair which is authorized on these items at field maintenance level is necessarily determined by the degree of technical skills required and the cost of special tools, special test equipment, spare parts and the predicted frequency of failure generation. If these items cannot be returned to serviceable condition with authorized parts and tools, they will be returned to supply for shipment to the designated SRA.

e. Code DM Limited field repair; mobile depot overhaul. Code DM identifies items to which all the conditions of code D apply except that repair beyond field capability will be done by the Mobile Depot Activity (MDA). If the MDA cannot repair these items, they will determine whether these items should be condemned or sent to the SRA.

f. Code L Depot level maintenance only. Code L identifies items that will be repaired only at designated SRA. Repair parts and tools for repair are procured and provided only to these authorized activities. Required functional checkout and bench check equipment may be provided to applicable organization and field maintenance activities for accomplishing external adjustment or calibration and verifying serviceability of these items. If they are found unserviceable they will be turned in to supply for shipment to SRA.

g. Code LM Depot level maintenance only; mobile depot activity. Code LM identifies items to which all conditions of code L apply except that repair will be accomplished by MDA. If MDA cannot repair these items, they will determine whether these items should be returned and sent to the SRA.

1-34. UNITS PER ASSY COLUMN.

1-35. This column lists the quantity of the listed part or assembly used at the given location. The abbreviation "REF" in this column indicates that the assembly or subassembly has been listed previously in the Group Assembly Parts List.

1-36. USABLE ON-CODE COLUMN.

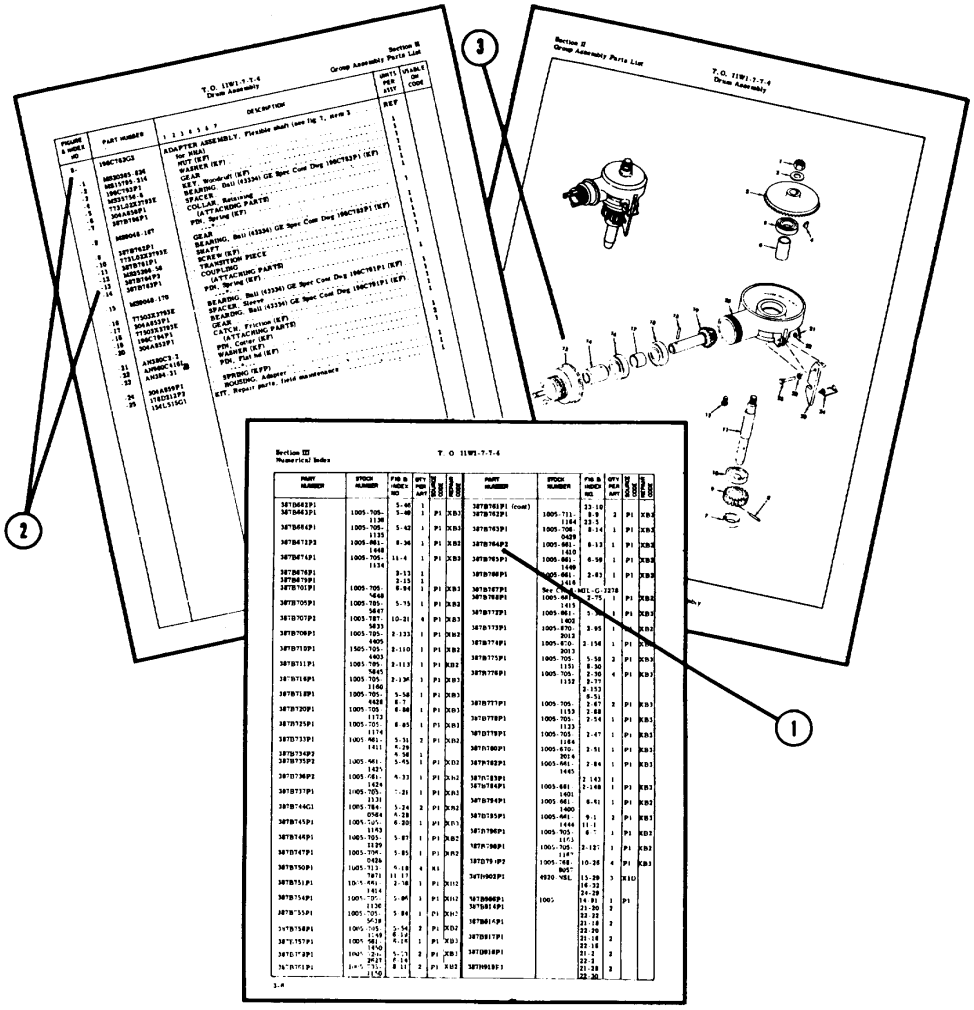
1-37. This column indicates the usability of parts within specific assemblies or subassemblies; such assemblies are always first-line listings. Where the USABLE ON-CODE column is blank, the part is applicable to all articles covered by this breakdown.

1-38. EXPLANATION OF SYMBOLS AND ABBREVIATIONS.

1-39. The symbols and abbreviations used in the illustrated parts breakdown are as follows:

---*---	End of attaching parts
AR	As required
ARS	As required per system
NHA	Next Higher Assembly

HOW TO USE THE ILLUSTRATED PARTS BREAKDOWN



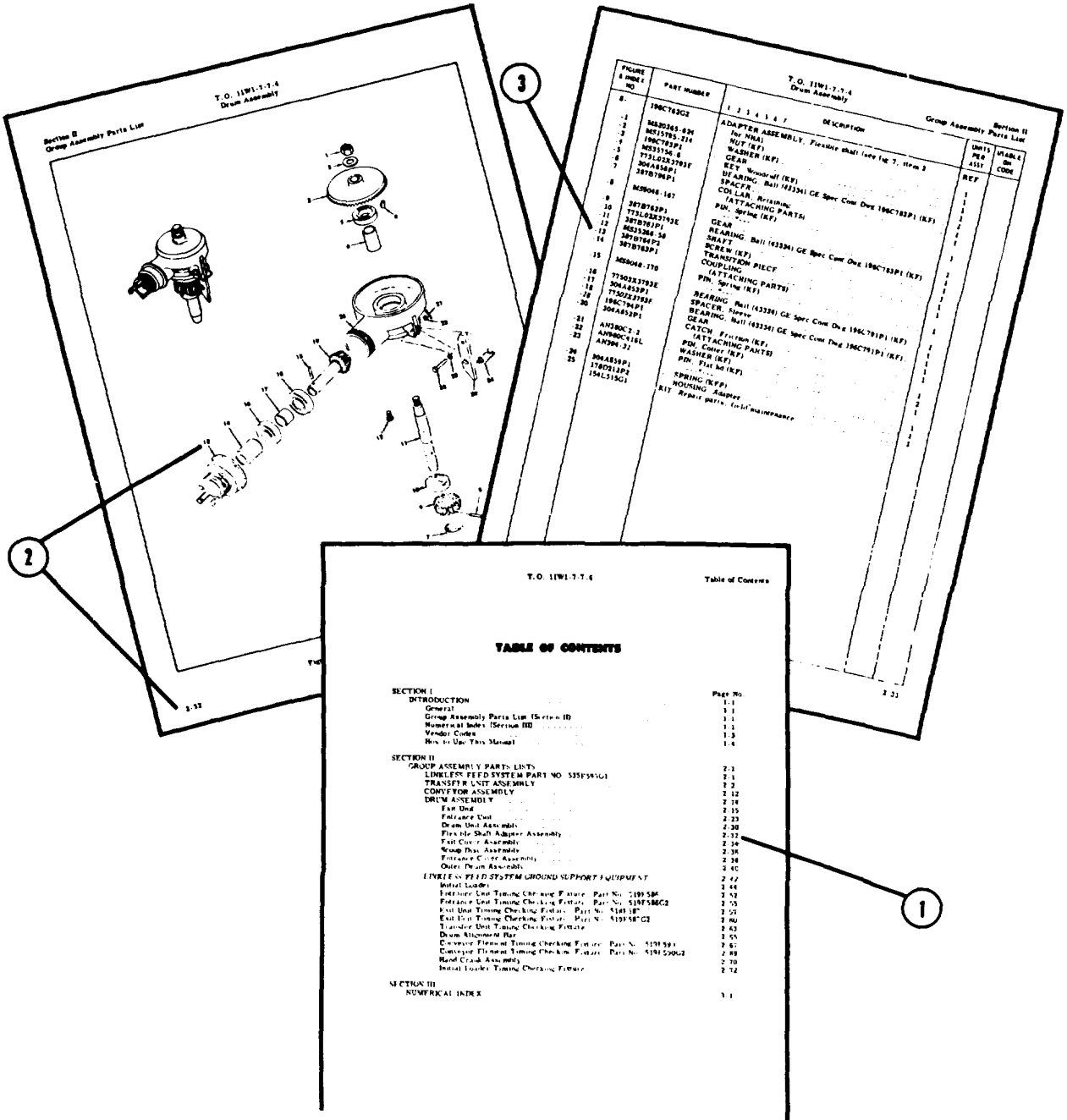
WHEN THE PART NUMBER IS KNOWN

1. When the part number is known, refer to Section II Numerical Index. Locate the part number and note the figure and index number assigned to the part number.

2. Turn to the figure number indicated and locate the index number referenced in the Numerical Index.

3. If a pictorial representation of the part, or its location is desired, refer to the same index number on the accompanying illustration.

HOW TO USE THE ILLUSTRATED PARTS BREAKDOWN



WHEN THE PART NUMBER IS NOT KNOWN

1. Determine the function and application of the part required. Turn to the Table of Contents and select the most appropriate title. Note the illustration page number.
2. Turn to the page indicated and locate the desired part on the illustration.
3. From the illustration, obtain the index number assigned to the part desired. Refer to the accompanying description for specific information regarding the part.

SECTION VII

ILLUSTRATED PARTS BREAKDOWN

PART II

NUMERICAL INDEX

PART NO.	FIG. & INDEX NO.	QTY PER ART
AB40B	10-20	1
AE-10B	24-K	2
AGC1	9-13	2
AN 122696	6-12	1
AN122717	2-6	1
AN122717	3-21	1
AN122721	2-8	1
AN315-3R	12-42	3
AN315-3R	12-49	3
AN565C8113	6-20	2
AN960-41L	13-4	3
AN960-8	3-13	4
AR109	16-27	1
A2A	7-20	1
A81420SS	6-6	1
BC2206F-2	9-	1
CK06CW103K	14-1	1
CK06BX103K	16-11	2
CK06BX104K	16-6	2
CK06BX104K	17-4	1
CK06BX223K	16-12	1
CK06BX683K	16-8	1
CL1GB	12-83	1
CL11320	12-80	1
CL123	12-77	1
CL18220	12-76	1
CL23312	12-82	1
CL24306	12-79	1
CL254	12-78	5
CSR13BF226M	16-7	1
CSR13BF334M	16-10	2
CSR13BF474M	16-9	2
DA4TB	10-19	1
DBMF9W4S	9-8	1
DBMF13W3S	9-9	2
D4003	8-	4
D4004	8-	5
D4007	8-	1
D4008	8-	2
D4022	8-	1
D4025	8-	1
D4031	8-	1
D4036	8-	3
D4208	8-	2
FXRAD30N	10-5	1
G51HB	10-36	ARS
H-34	24-J	1

PART NO.	FIG. & INDEX NO.	QTY PER ART
HP10	7-4	1
H4812	8-27	1
LM0V1	8-15	1
LM0V1	8-17	1
LM0VI	8-18	1
LM0V2	8-16	1
LM0V3	8-19	1
LM219	8-9	1
MILC39012/21	7-17	7
MILC39012/21-0002	9-10	2
MILI7444	5-4	ARS
MILI7444	13-13	ARS
MILI7444	14-11	ARS
MILI7444	15-4	ARS
MILW16878	15-5	ARS
MC832P	16-3	1
MC832P	17-3	4
MC846P	17-1	3
MS16562-218	6-7	1
MS16555-606	6-16	1
MS16997-32	3-32	4
MS16997-33	3-33	4
MS16997-36	2-2	4
MS16977-36	3-26	4
MS16997-58	6-9	3
MS16977-60	6-14	2
MS16997-77	6-27	2
MS16997-78	6-22	4
MS16997-78	6-28	4
MS16997-80	6-30	3
MS16997-84	6-24	2
MS20257-2-700	3-6	1
MS20257-4-2075	12-18	1
MS20257-4-2075	12-26	1
MS20257-4-4813	12-5	2
MS20426D3-4	12-8	32
MS20426D3-4	12-21	8
MS20426D3-4	12-29	8
MS20426D3-5	12-38	14
MS20426D3-5	12-46	6
MS20426D3-5	12-53	6
MS20426D3-6	12-9	38
MS20426D3-6	12-11	6
MS20426D3-6	12-36	16
MS20426D3-7	12-22	8

PART NO.	FIG. & INDEX NO.	QTY PER ART
MS20426D3-7	12-30	8
MS20470D3-7	12-60	100
MS21044N04	12-14	2
MS21044N06	3-2	5
MS21044N06	3-7	4
MS21044N08	3-27	4
MS21044N08	3-34	4
MS21919DG	10-4	1
MS24515-685	7-28	1
MS24515-685	7-29	1
MS24515-685	7-32	24
MS24621-29	3-10	7
MS25307-222	7-36	2
MS3057-6B	3-49	1
MS3057-6B	15-2	1
MS3057-12B	3-50	1
MS3420-6	13-8	1
MS3420-6	14-10	1
MS35173	10-14	1
MS35177-49	7-14	1
MS35177-49	7-31	1
MS35190-238	3-3	5
MS35190-254	3-5	2
MS35206-203	2-16	4
MS35206-204	3-36	4
MS35206-212	12-13	2
MS35206-213	2-14	2
MS35206-213	3-43	1
MS35206-215	6-32	6
MS35206-215	6-37	6
MS35206-213	3-45	1
MS35206-221	13-3	3
MS35206-227	3-8	4
MS35206-243	3-40	10
MS35206-243	12-62	1
MS35206-243	12-66	2
MS35206-243	12-73	2
MS35206-245	3-12	8
MS35207-260	12-70	4
MS35207-262	12-41	3
MS35207-262	12-48	3
MS35338-23	12-64	1
MS35338-23	12-68	2
MS35338-23	12-75	2
MS35338-24	12-43	3
MS35338-24	12-50	3
MS35338-24	12-71	4
MS35340-40	13-5	3
MS35340-42	3-14	8
MS35340-42	3-41	10
MS35368-3068	10-9	1
MS35436-32	14-6	1
MS35460-17	23-D	2
MS35495-94	12-39	15
MS35649-42	13-6	3
MS35649-202	12-81	2
MS35649-282	12-63	1
MS35649-282	12-67	2
MS35649-282	12-74	2
MS51029-38	2-15	4
MS51838-198	3-19	1
M39012/16-0001	10-13	1
M39012/16-0001	10-17	1
M39012/16-0001	10-18	1
M39012/16-0001	10-22	1
No Number	3-48	1
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No Number	8-3	REF
No Number	9-1	1
No Number	10-1	1
No Number	13-	1
No Number	13-	1
No Number	14-	1
No Number	14-	1
NAS1081C3A8N	6-1	1
NAS1081-08A4N	3-17	1
NAS1081-08A4N	3-24	4
NAS1081-08B6	2-4	1
NE51H	7-37	1
NE526A	16-2	1
N05	8-25	6
N072	10-35	3
N5000-87	64	2
PL5.1-3.0A	8-5	1
PL5.1-.375A	8-7	1
PL5.1-.75A	8-6	1
PL6.1-1.5A	8-10	1
PL9.8-.2A	8-8	1
PT00A20-24S	7-13	1
PT06P8-3P	9-4	1
PT06P18-28S	8-3	1

PART NO.	FIG. & INDEX NO.	QTY PER ART
PT06P20-24P	15-1	1
PT00-8-3S	10-37	1
PT06-10-98S	10-16	1
PT100-18-28P	8-3	1
P69901	15-7	1
P867J15-2-0	7-5	1
QQW343	5-3	ARS
RBR52CE100R0F	11-10	1
RBR52CE1003F	11-4	1
RBR52CE20000F	11-12	1
RBR52CE5R00F	11-9	1
RCR07GFS13J	14-3	1
RCR07GF10J	14-4	1
RCR07GF101J	17-9	2
RCR07GF103J	16-26	1
RCR07GF103J	17-8	8
RCR07GF120J	16-23	1
RCR07GF163J	7-8	2
RCR07GF201J	16-20	2
RCR07GF201J	17-10	6
RCR07GF272J	16-22	2
RCR07GF273J	16-21	1
RCR07GF510J	16-25	1
RCR07GF5111J	16-24	1
RCR07GF621J	16-19	1
RC05GF201J	5-1	29
RC05GF302J	20-1	1
RC05GF392J	18-1	25
RC05GF392J	20-3	16
RC05GF393J	18-2	1
RC05GF471J	21-1	26
RC05GF912J	20-2	1
RC20GF102J	11-7	1
RC20GF103J	11-6	1
RC20GF104J	11-5	1
RC20GF300J	7-19	1
RC20GF510J	11-8	1
RC20GF561J	11-11	1
RC20GF755J	10-31	1
RC42GF151J	10-30	1
RER65G1R00	10-27	1
RER65G10R0	10-26	1
RER65GR100	10-28	1
RER70G49R9	10-29	1
RG188A/U	13-14	ARS
RG188A/U	14-12	ARS
RW79U1R00F	16-17	1

PART NO.	FIG. & INDEX NO.	QTY PER ART
RW74U2R00F	16-18	1
R22J35KS	11-2	1
SP25A	7-22	1
SP380A	16-1	1
SP380A	17-2	1
SA50	10-15	1
SA50	10-24	1
SN7483N	19-1	2
TAN36BJ010MM	16-5	1
UG-247B/U		2
UG-914/U	24-D	1
UG1034U	10-8	1
UG201A/U	10-3	1
UG201A/U	10-7	1
1N270	11-3	1
1N270	16-13	1
1N914	5-2	43
1N914	16-14	2
1N914	17-5	1
102SKIFB2A	7-32	24
102SKIFB2G	7-29	1
102SKIFB2R	7-28	1
10-442475TA383 TYPE 3	3-23	1
10-442480TA386	3-29	1
10-442481-12	15-6	1
51-073-6800	24-G	3
51-074-6800	24-H	2
108-902	8-11	5
108-903	8-12	6
108-904	8-13	1
108-906	8-14	1
1269	24-F	1
170927-003	7-1	1
198550-001	2-13	1
198550-001	3-38	1
198550-001	6-36	1
198550-001	12-12	1
198571-004	6-38	1
198571-004	9-15	1
198571-004	12-32	1
2N1711	16-16	1
2N1711	17-7	2
2N3055	16-15	1
2N3502	17-6	2
2PB299-T2	7-23	3
2PB299-T2	7-33	2
2005D	5-5	115
2025	2-12	1

PART NO.	FIG. & INDEX NO.	QTY PER ART
2025	3-46	2
2106	8-32	4
2122	8-30	4
2182-16	3-35	1
2182-16	15-3	1
212-12	12-20	13
212-12	12-28	13
212-12	12-37	7
22NA21-22-02	12-45	3
22NA21-22-02	12-52	3
22NM26	3-37	4
224S1-101M	3-24	1
224S1-102M	8-22	1
224S1-102M	8-23	1
224S1-103M	8-21	1
252-10K	7-21	I
255	7-30	1
2600-6	12-7	25
28GB3	7-34	2
29F631	16-4	1
285221-000	8-	1
285221	18-	REF
285222-000	8-	1
285222	16-	REF
285223-000	8-	1
285223	21-	REF
285235-000	8-	1
285235	20-	REF
285247-000	8-	1
285247	19-	REF
286823	1-	REF
286861-000	8-	1
286861	17-	REF
3060-20	10-6	1
30-3229	12-10	3
337024-000	14	1
337024-000	7-	REF
337024	8-	REF
337024-000	9-	REF
337024-000	10-	REF
337024-01	8-4	1
337024-03	8-2	1
337024-05	10-25	1
337024-11	7-12	1
337024-13	8-28	1
337024-14	8-28	1
337024-17	9-11	1
337024-21	8-31	9
337024-23	8-33	6
337024-30	8-29	1
337024-30	11-	REF
337024-33	9-2	1
337024-45	8-26	1
337024-53	7-6	1
337461-000	1-1	1
337461-000	2-	REF
337461-05	2-1	1
337461-07	2-3	1
337461-10	2-11	1
337461-11	2-9	1
337461-13	2-5	1
337461-15	2-7	1
337461-17	2-10	1
337462	6-15	1
337462-000	1-3	1
337462-000	6-	REF
337462-03	6-31	1
337462-10	6-39	1
337462-11	6-34	1
337462-13	6-29	1
337462-15	6-13	1
337462-17	6-21	1
337462-23	6-3	1
337462-27	6-8	1
337462-35	6-33	1
337462-37	6-17	1
337462-41	6-10	1
337462-43	6-19	1
337462-45	6-25	1
337462-50	6-11	1
337462-51	6-23	1
337462-51	6-26	1
337462-70	6-18	1
337462-100	6-2	1
337493-000	1-2	1
337493-000	3-	REF
337493-01	3-18	1
337493-03	3-20	1
337493-05	3-30	1
337493-07	3-22	1

PART NO.	FIG. & INDEX NO.	QTY PER ART
337493-10	3-11	1
337493-10	5-	REF
337493-11	3-4	2
337493-13	3-39	1
337493-15	3-9	1
337493-15	4-	REF
337493-17	3-1	1
337493-21	347	1
337493-23	3-31	1
337493-25	3-25	1
337493-27	3-16	1
337493-31	3-28	1
337493-33	5-6	1
337629	1-	1
337629	13-	REF
337629-01	13-12	1
337629-03	13-9	1
337629-05	13-10	1
337629-07	13-7	1
337630	1-	1
337630	14-	REF
337630-01	14-14	1
337630-03	14-8	1
337630-05	14-9	1
337632	1-	1
337632	15-	REF
337632-000	2-17	1
337663-000	1-5	1
337663-000	12-	REF
337663-01	12-2	1
337663-03	12-3	1
337663-05	12-4	1
337663-07	12-55	1
337663-10	12-1	1
337663-11	12-16	1
337663-11	12-24	1
337663-13	12-17	1
337663-13	12-25	1
337663-15	12-34	1
337663-17	12-44	1
337663-17	12-51	1
337663-21	12-69	1
337663-23	12-59	10
337663-25	12-19	ARS
337663-25	12-27	ARS

PART NO.	FIG. & INDEX NO.	QTY PER ART
337663-27	12-6	2
337663-30	12-54	1
337663-31	12-35	1
337663-33	12-58	1
337663-35	12-57	1
337663-37	12-56	5
337663-41	12-72	1
337663-43	12-65	1
337663-45	12-61	1
337663-50	12-23	1
337663-60	12-15	1
337663-80	12-40	1
337663-80	12-47	1
337663-110	12-33	1
342001	9-13	2
350D106X9035R2	9-6	3
3-140	9-5	1
4PB11T2	7-24	1
4362PB36	12-31	1
4604	14-2	1
5082-4400	7-15	6
51-010-000	14-15	2
51-010-0000	13-11	3
51-012-0000	13-2	3
51-077-000	7-16	3
51-077-0000	13-1	3
52410-995	7-35	1
52410-995	7-37	1
5278	9-12	1
52-043-000	14-7	1
6008	6-35	2
6206MW	7-25	5
6218MW	7-27	2
6257MW	7-26	2
663F105-94W	9-3	1
70-2-2G	7-3	1
70-5-1G	7-2	2
7201	9-14	1
7242766	24-C	1
7242768	22-A	2
7242769	22-B	1
7242770	22-C	2
7242771	22-D	1
7242772	22-E	1
7242773	23-B	1
7242774	23-A	1

PART NO.	FIG. & INDEX NO.	QTY PER ART
7242778	24-A	1
7242779	23-C	1
7242781	24-B	1
750	3-42	1
750	3-44	1
750	7-7	2
750	9-7	6
750	10-32	1
750	10-33	1
750	10-34	1
756	14-5	5
757	7-35	1
80555-1	7-10	1
81558-1	7-11	1
819B1800W	10-2	1
819B1800W	10-11	1
819B1800W	10-12	1
819B1800W	14-13	1

PART NO.	FIG. & INDEX NO.	QTY PER ART
8368	3-15	4
8471A	10-10	1
872635	11-1	1
8866K1	4-2	15
8867K1	4-1	7
8868K4	7-18	1
93A444	10-21	1
9012-101-0000	8-20	2
933	7-9	1

SECTION VII

ILLUSTRATED PARTS BREAKDOWN

PART III

REFERENCE DESIGNATION INDEX

REF DES	FIG & INDEX NO.	PART NUMBER
A5	8	285222-000
A5A1	16-1	SP380A
A5A2	16-2	NE526A
A5A3	16-3	MC832P
A5C1	16-4	29F631
A5C2	16-5	TAN36BJ010MM
A5C3	16-6	CK06BX104K
A5C4	16-7	CSR13BF226M
A5C5	16-8	CK06BX683K
A5C6	16-6	CK06BX104K
A5C7	16-9	CSR13BF474M
A5C8	16-10	CSR13BF334M
A5C9	16-9	CSR13BF474M
A5C10	16-10	CSR13BF334M
A5C11	16-11	CK06BX103K
A5C12	16-11	CK06BX103K
A5C13	16-12	CK06BX223K
A5CR1	16-13	1N270
A5CR2	16-14	1N914
A5CR3	16-14	1N914
A5Q1	16-15	2N3055
A5Q2	16-16	2N1711
A5R1	16-17	RW79U1R00F
A5R2	16-18	RW74U2R00F
A5R3	16-19	RCR07GF621J
A5R4	16-20	RCR07GF201J
A5R5	16-21	RCR07GF273J
A5R6	16-22	RCR07GF272J
A5R7	16-23	RCR07GF120J
A5R8	16-24	RCR07GF511J
A5R9	16-25	RCR07GF510J
A5R10	16-26	RCR07GF103J
A5R11	16-22	RCR07GF272J
A5R12	16-20	RCR07GF201J
A5T1	16-27	AR109
A6	8	286861-000
A6A1	17-1	MC846P
A6A2	17-1	MC846P
A6A3	17-2	SP380A
A6A4	17-1	MC846P
A6A5	17-3	MC832P
A6A6	17-3	MC832P
A6A7	17-3	MC832P
A6A8	17-3	MC832P
A6C1	17-4	CK06BX104K
A6CR3	17-5	1N914
A6Q1	17-6	2N3502
A6Q2	17-6	2N3502
A6Q3	17-7	2N1711
A6Q4	17-7	2N1711
A6R1	17-8	RCR07GF103J
A6R2	17-8	RCR07GF103J
A6R3	17-9	RCR07GF101J
A6R4	17-9	RCR07GF101J
A6R5	17-8	RCR07GF103J
A6R6	17-8	RCR07GF103J
A6R7	17-8	RCR07GF103J
A6R8	17-10	RCR07GF201J
A6R9	17-10	RCR07GF201J
A6R10	17-10	RCR07GF201J
A6R11	17-10	RCR07GF201J
A6R12	17-8	RCR07GF103J
A6R13	17-8	RCR07GF103J
A6R14	17-8	RCR07GF103J
A6R15	17-10	RCR07GF201J
A6R16	17-10	RCR07GF201J
A7	8	D4003
A8	8	D4008
A9	8	D4003
A10	8	D4022
A11	8	D4004
A12	8	D4208
A13	8	D4004
A14	8	D4004
A15	8	285221-000
A15R1	18-1	RC05GF392J
A15R2	18-2	RC05GF393J
A15R3	18-1	RC05GF392J
A15R4	18-1	RC05GF392J
A15R5	18-1	RC05GF392J
A15R6	18-1	RC05GF392J
A15R7	18-1	RC05GF392J
A15R8	18-1	RC05GF392J
A15R9	18-1	RC05GF392J
A15R10	18-1	RC05GF392J
A15R11	18-1	RC05GF392J
A15R12	18-1	RC05GF392J
A15R13	18-1	RC05GF392J
A15R14	18-1	RC05GF392J
A15R15	18-1	RC05GF392J
A15R16	18-1	RC05GF392J
A15R17	18-1	RC05GF392J
A15R18	18-1	RC05GF392J
A15R19	18-1	RC05GF392J
A15R20	18-1	RC05GF392J
A15R21	18-1	RC05GF392J

REF DES	FIG & INDEX NO.	PART NUMBER
A15R22	18-1	RC05GF392J
A15R23	18-1	RC05GF392J
A15R24	18-1	RC05GF392J
A15R25	18-1	RC05GF392J
A15R26	18-1	RC05GF392J
A16	8	D4025
A17	8	D4007
A18	8	D4031
A19	8	D4004
A20	8	D4004
A21	8	D4208
A22	8	285247-000
A22U1	19-1	SN7483N
A22U2	19-1	SN7483N
A23	8	285235-000
A23R1	20-1	RC05GF302J
A23R2	20-2	RC05GF912J
A23Rll	20-3	RC05GF392J
A23R12	20-3	RC05GF392J
A23R13	20-3	RC05GF392J
A23R14	20-3	RC05GF392J
A23R15	20-3	RC05GF392J
A23R16	20-3	RC05GF392J
A23R17	20-3	RC05GF392J
A23R18	20-3	RC05GF392J
A23R19	20-3	RC05GF392J
A23R20	20-3	RC05GF392J
A23R21	20-3	RC05GF392J
A23R22	20-3	RC05GF392J
A23R23	20-3	RC05GF392J
A23R24	20-3	RC05GF392J
A23R25	20-3	RC05GF392J
A23R26	20-3	RC05GF392J
A24	8	D4003
A25	8	D4008
A26	8	D4003
A27	8	D4036
A28	8	D4036
A29	8	D4036
A30	8	285223-000
A30R1	21-1	RC05GF471J
A30R2	21-1	RC05GF471J
A30R3	21-1	RC05GF471J
A30R4	21-1	RC05GF471J
A30R5	21-1	RC05GF471J
A30R6	21-1	RC05GF471J
A30R7	21-1	RC05GF471J
A30R8	21-1	RC05GF471J
A30R9	21-1	RC05GF471J
A30R10	21-1	RC05GF471J
A30R11	21-1	RC05GF471J
A30R12	21-1	RC05GF471J
A30R13	21-1	RC05GF471J
A30R14	21-1	RC05GF471J
A30R15	21-1	RC05GF471J
A30R16	21-1	RC05GF471J
A30R17	21-1	RC05GF471J
A30R18	21-1	RC05GF471J
A30R19	21-1	RC05GF471J
A30R20	21-1	RC05GF471J
A30R21	21-1	RC05GF471J
A30R22	21-1	RC05GF471J
A30R23	21-1	RC05GF471J
A30R24	21-1	RC05GF471J
A30R25	21-1	RC05GF471J
A30R26	21-1	RC05GF471J
A31	8	337024-30
A31C5	11-1	872635
A31C6	11-2	R22J35KS
A3]CR7	11-3	1N270
A31R3	11-4	RBR52CE1003F
A31R4	11-5	RC20GF104J
A31R5	11-6	RC20GF103J
A31R6	11-7	RC20GF102J
A31R9	11-8	RC20GF510J
A31R18	11-9	RBR52CE5R00F
A31R19	11-10	RBR52CE100R0F
A31R21	11-8	RC20GF510J
A31R24	11-11	RC20GF561J
A31R25	11-7	RC20GF102J
A31R26	11-12	RBR52CE20000F
B1	10	BC2206F-2
C1	10-6	872640-0
C2	10-6	872640-0
C3	10-6	872640-0
C4	10-3	663F105-94W
C5	7	872640-0
C6	7	R22J35KS
CP1	8-19	DA4TB
CP2	8-14	MS35173
CP3	8-8	UG1034/U
CP4	8-7	UG201A/U
CP5	8-9	MS35368-3068
CP6	7-16	51-077-000
CP7	7-16	51-077-000

REF DES	FIG & INDEX NO.	PART NUMBER
CP8	7-16	51-077-000
CP9	7-31	MS35177-49
CP10	7-14	MS35177-49
CP11	8-3	UG201A/U
CR1	8-4	8471A
CR2	9-15	LM0V2
CR3	9-16	LM0V2
CR4	9-17	LM0V2
CR5	9-18	LM0V2
CR6	9-19	LM0V3
CR7	7	1N270
DC1	8-6	3060-20
DS1	7	MS24515-685
DS2	7	MS24515-685
DS3	7	MS24515-685
DS4	7	MS24515-685
DS5	7	MS24515-685
DS6	7	MS24515-685
DS7	7	MS24515-685
DS8	7	MS24515-685
DS9	7	MS24515-685
DS10	7	MS24515-685
DS11	7	MS24515-685
DS12	7	MS24515-685
DS13	7	MS24515-685
DS14	7	MS24515-685
DS15	7	MS24515-685
DS16	7	MS24515-685
DS17	7	MS24515-685
DS18	7	MS24515-685
DS19	7	MS24515-685
DS20	7	MS24515-685
DS21	7	MS24515-685
DS22	7	MS24515-685
DS23	7	MS24515-685
DS24	7	MS24515-685
DS25	7	MS24515-685
DS26	7	MS24515-685
DS30	7	757
DS31	7	NE51H
DS32	7	FXRAD30N
DS33	7	SA50
DS34	7	SA50
DS35	7	5082-4400
DS36	7	5082-4400
DS37	7	5082-4400
DS38	7	5082-4400
DS39	7	5082-4400
DS40	7	5082-4400
DS41	7	AB40B
E1	8-32	750
E2	8-33	750
E3	8-34	750
E4	10-6	750
E5	10-6	750
E6	10-6	750
E7	10-6	750
E8	7-7	750
E9	7-7	750
E10	10-14	7201
E11	10-6	750
E12	10-6	750
F1	10-13	AGC1
F2	10-13	AGC1
FL1	9-20	9012-101-0000
FL2	9-20	9012-101-0000
J1	7-13	PT00A20-24S
J3		
J4	7-20	A2A
J12	9-11	108-902
J13	9-12	108-903
J14	9-13	108-904
J15	9-12	108-903
J16	9-11	108-902
J17	9-12	108-903
J18	9-11	108-902
J19	9-12	108-903
J20	9-11	108-902
J21	9-12	108-903
J22	9-11	108-902
J23	9-12	108-903
J24	10-12	5278
J25	9-14	108-906
J26	10-9	DBMF13W3S
J27	10-8	DBMF9W4S
J28	10-9	DBMF13W3S
J29	9-3	PT00-18-28P
J30	10-11	MILC39012/21-0002
J31	10-11	MILC39012/21-0002
J32	7-17	MILC39012/21-0002
J33	7-17	MILC39012/21-0002
J34	7-17	MILC39012/21-0002
J35	7-17	MILC39012/21-0002
J36	7-17	MILC39012/21-0002
J37	7-17	MILC39012/21-0002
J38	7-17	MILC39012/21-0002

REF DES	FIG & INDEX NO.	PART NUMBER
J39	8-37	PT00-8-3S
LS1	7-22	SP25A
M1	7-30	255
P1	8-2	819B1800W
P2	8-11	819B1800W
P3	8-12	819B1800W
P4	8-13	M39012/16-0001
P5	8-16	355243-00
P6	8-22	M39012/16-0001
P7	8-17	M39012/16-0001
P8	8-18	M39012/16-0001
P9	8-23	
P29	9-3	PT06P18-28S
P30		M39012/16-0001
P31		51-007-000
P32		M39012/16-0001
P33		51-007-000
P34		51-007-000
P39	10	PT06P8-3P
PS1	9-5	PL5.1-3.0A
PS2	9-6	PL5.1-.75A
PS3	9-7	PL5.1-.375A
PS4	9-8	PL9.8-.2A
PS5	9-9	LM219
PS6	9-10	PL6.1-1.5A
R1	7-8	RCR07GF163J
R2	7-8	RCR07GF163J
R3	11	RBR52CE10003F
R4	11	RC20GF104J
R5	11	RC20GF103J
R6	11	RC20GF102J
R7	8-28	RER65GR100
R8	8-29	RER70G49R9
R9	11	RC20GF510J
R10	8-31	RC20GF510J
R11	8-30	RC42GF151J
R12	9-23	224S1-102M
R13	9-22	224S1-102M
R14	9-21	224S1-103M
R15	7-21	252-10K
R16	8-26	RER65GR1R00
R17	8-27	RER65G1R00
R18	11	RBR52CE5R00F
R19	11	RER52CE100R0F
R21	11	RC20GF510J
R22	9-24	224S1-101M
R23	7-19	RC20GF300J
R24	11	RC20GF561J
R25	11	RC20GF102J
R26	11	RBR52CE20000F
R27	8	RBR52CE5R00F
RE1	7-10	80555-1
S1	7-24	28GB3
S2	7-34	28GB3
S3	7-36	MS25307-222
S4	7-36	MS25307-222
S5	7-25	6206MW
S6	7-25	6206MW
S7	7-26	6257MW
S8	7-26	6257MW
S9	7-27	6218MW
S10	7-27	6218MW
S11	7-25	6206MW
S12	7-25	6206MW
S13	7-25	6206MW
S14	7-23	2PB299T2
S15	7-23	2PB299T2
S16	7-24	4PB11T2
S17	7-23	2PB299T2
S18	7-9	933
S19	7-18	8868K4
S20	7-33	2PB299T2
S21	7-33	2PB299T2
TB1	10-5	3-140
TR1	8-21	93A444
XDS1	7-32	102SKIFB2A
XDS2	7-32	102SKIFB2A
XDS3	7-32	102SKIFB2A
XDS4	7-32	102SKIFB2A
XDS5	7-32	102SKIFB2A
XDS6	7-32	102SKIFB2A
XDS7	7-32	102SKIFB2A
XDS8	7-32	102SKIFB2A
XDS9	7-32	102SKIFB2A
XDS10	7-32	102SKIFB2A
XDS11	7-32	102SKIFB2A
XDS12	7-32	102SKIFB2A
XDS13	7-32	102SKIFB2A
XDS14	7-32	102SKIFB2A
XDS15	7-32	102SKIFB2A
XDS16	7-32	102SKIFB2A
XDS17	7-32	102SKIFB2A
XDS18	7-32	102SKIFB2A
XDS19	7-28	102SKIFB2R
XDS20	7-29	102SKIFB2G
XDS21	7-32	102SKIFB2A

REF DES	FIG & INDEX NO.	PART NUMBER
XDS22	7-32	102SKIFB2A
XDS23	7-32	102SKIFB2A
XDS24	7-32	102SKIFB2A
XDS25	7-32	102SKIFB2A
XDS26	7-32	102SKIFB2A

REF DES	FIG & INDEX NO.	PART NUMBER
XDS30	7-35	52410-995
XDS31	7-37	52410-995
XF1	10-13	342001
XF2	10-13	342001
Y1	7-11	80546

SECTION VII

ILLUSTRATED PARTS BREAKDOWN

PART IV

GROUP ASSEMBLY PARTS LIST

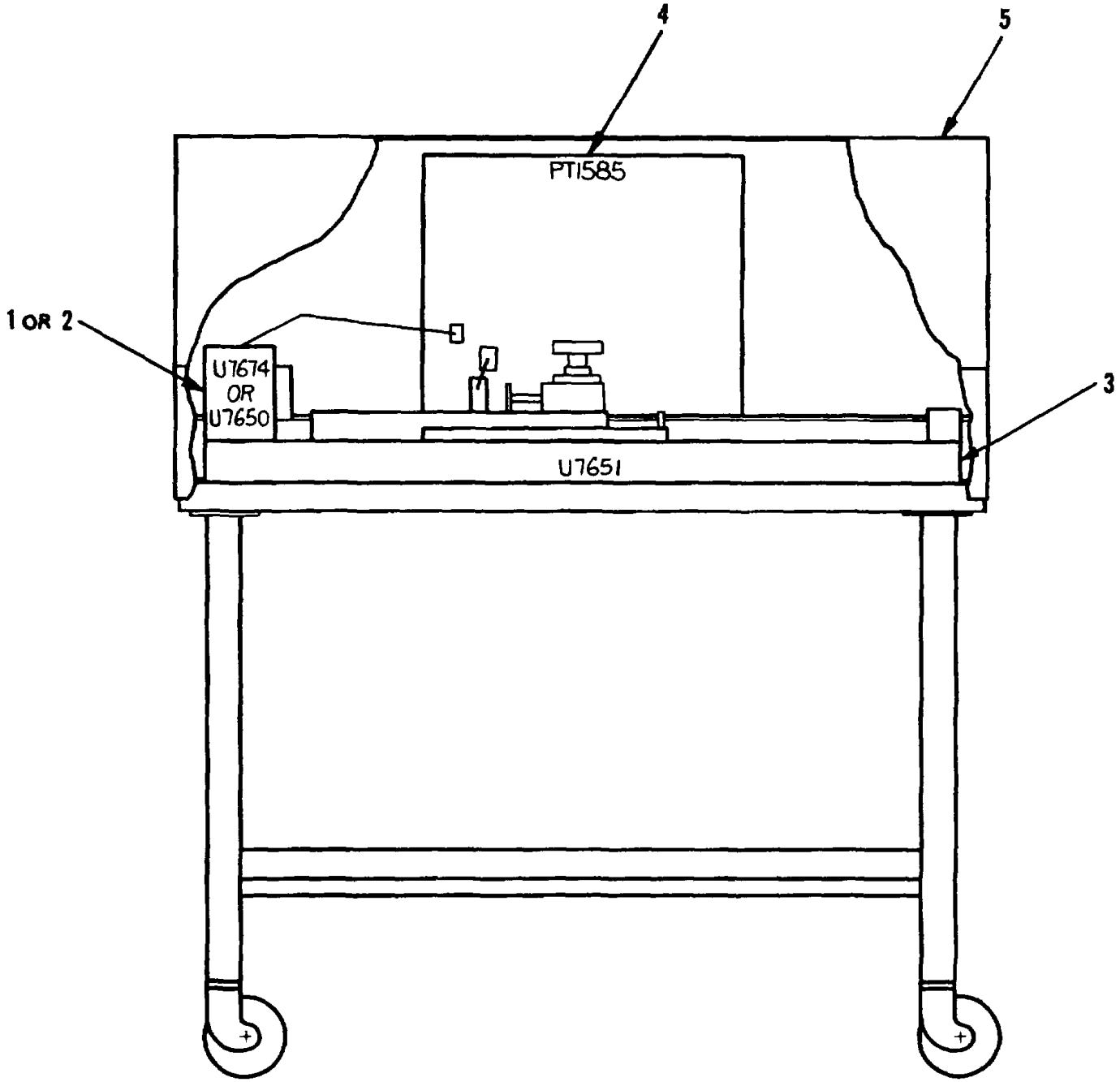

Figure 1. PT1585 Sensor/Stack Tester

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
1-	286823	SENSOR/STACK TESTER, PT1585.....		D	REF	
1	337461-000	.CONNECTOR HEAD, Cable, U7650 ..... (80063) (see fig 2 for breakdown)	P1	B	1	
2	337493-000	.SIMULATOR, Code plug, U7674..... (80063) (see fig 3 for breakdown)	P1	D	1	
3	337462-000	.FIXTURE, Assembling, U7651..... (80063) (see fig 6 for breakdown)	X2	F	1	
4	337024-000	.TESTER, CL Stack, Phase 3, PT1585..... (80063) (see fig 7 for breakdown)	X1	D	1	
5	337663-000	.CHASSIS ASSEMBLY, U7722..... (80063) (see fig 12 for breakdown)	X1	D	1	
	337629	.CABLE ASSEMBLY, CA1541 ..... (see fig 13 for breakdown)	P1	F	1	
	337630	.CABLE ASSEMBLY, CA1542 ..... (see fig 14 for breakdown)	P1	F	1	
	337632	.CABLE ASSEMBLY, CA1543 ..... (see fig 15 for breakdown)	P1	F	1	
	338289	.CABLE ASSEMBLY, CA2060 ..... (see fig 15A for breakdown)			1	
	7242768	CABLE ASSEMBLY, CS1717 ..... (Note: For breakdown of following items see fig. 22)	P1	F	2	
	7242769	CABLE ASSEMBLY, CS1718	P1	F	1	
	7242770	CABLE ASSEMBLY, CS1719	P1	F	2	
	7242771	CABLE ASSEMBLY, CS1720	P1	F	1	
	7242772	CABLE ASSEMBLY, CS1721	P1	F	1	
	7242773	FIXTURE, V-Block..... (Note: For breakdown of following items see fig 23)	P1	NB	1	
	7242774	FIXTURE, Extension	P1	NB	1	
	7242779	FIXTURE, V-Block.....	P1	NB	1	
	7242766	FIXTURE, Turn-On..... (Note: For breakdown of following items see fig 24)	P1	B	1	
	7242781	ANTENNA, UHF.....	P1	B	1	
		H-34 MAGNT.....	P1	B	1	
	51-073-6800	ADAPTER, Connector, Plug to plug.....	P1	B	3	
	51-074-6800	ADAPTER, Connector, Plug to jack	P1	B	2	
	1269	ADAPTER, Connector.....	P1	B	1	
	AB-1OB	ATTENUATOR, 10 db.....	P1	B	2	
	UG-274B/U	ADAPTER, Connector (Tee)	P1	B	2	
	UG-914/U	ADAPTER, Connector.....	P1	B	1	
	NS35460-17	SCREW, Cap, socket head, 10-32 x 1 1/2 in	P1	B	2	

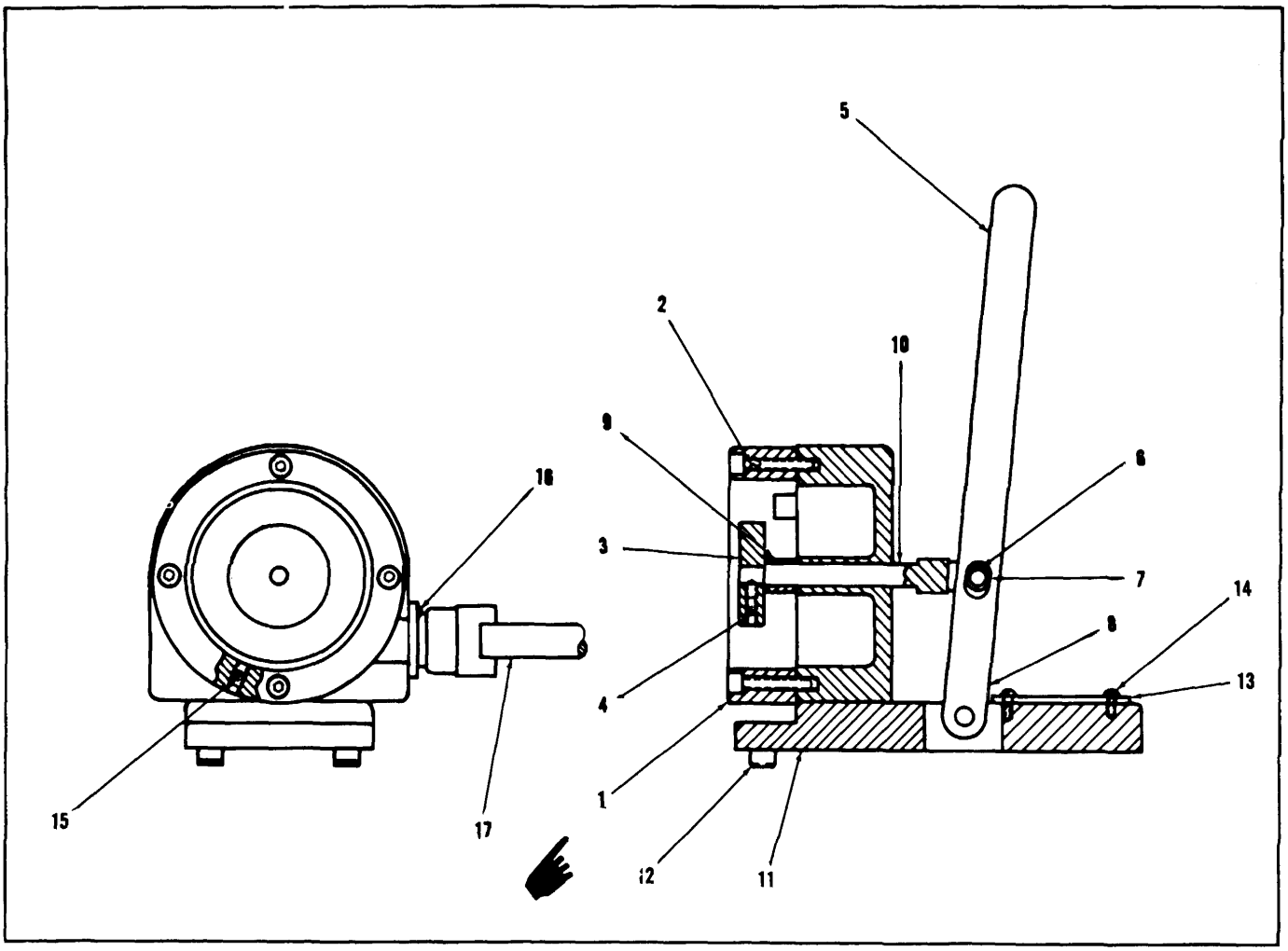

Figure 2. U7650 Cable Connector Head

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
2-	337461-000	CONNECTOR HEAD, Cable, U7650 ..... (80063) (see fig 1 for NHA)	P1	B	REF	
1	337461-05	.RING, A1. Tbg, Rod or PL,..... 6061-T6, (QQ-A-200/8) (ATTACHING PARTS)	X2	S	1	
2	MS16997-36	.SCREW, Cap, socket head, ... 8-32 x 1.000 in.	P1	S	4	
3	337461-07	.DISC, A1. Rod, 6061-T6, ... 1.500 +0.003 in. dia., (QQ-A-200/8) (ATTACHING PARTS)	X2	S	1	
4	NAS1081-08B6	.SETSCREW, Self Locking, ... socket drive, cone point, 8-32 x 0.375 in.	P1	S	1	
5	337461-13	.LEVER, A1. Flat Bar 6061-T6 ..... 0.250 +0.002 in thick x 0.625 +0.003 in. wide (QQ-A-200/8) (ATTACHING PARTS)	X2	S	1	
6	AN122717	.PIN, Headless, straight ..... 0.2500 in. dia. x 0.500 in. lg.	P1	S	1	
7	337461-15	.SPACER, Brass Rod, comp 22, ... 1/211, 0.375 +0.002 in. dia.	M	S	1	
8	AN122721	.PIN, Headless, straight, ... 0.2500 in. dia. x 1.000 in. lg.	P1	S	1	
9	337461-11	.SPACER, A1. Tbg, 6061-T6, 0.500..... ± 0.003 in. OD x 0.344 ± 0.003 in. ID, (QQ-A-200/8)	M	S	1	
10	337461-17	.CLEVIS, Steel Bar, CF, C1015-C1020,..... (QQ-S-634) 0.500 + 0.000, - 0.002 in. dia.	M	S	1	
11	337461-10	.BASE SUBASSEMBLY	X2	B	2	
12	2025	..JIG BUTTON (12139).....	X2	S	1	
13	198550-001	..PLATE, Identification (80063) ..... (ATTACHING PARTS)	X2	S	1	
14	MS35206-213	..SCREW, Mach, panhead, ... 4-40 x 0.250 in.	P1	S	2	
15	MS51029-38	..SETSCREW, Self locking ..... socket drive, flat point, 10-24 x 0.375 in. lg.	P1	S	4	
16	MS35206-203	SCREW, Machine, pan head, ... 2-56 x 0.250 in. lg.	P1	S	4	
17	337632-000	CABLE ASSEMBLY, CA1543	P1	F	1	

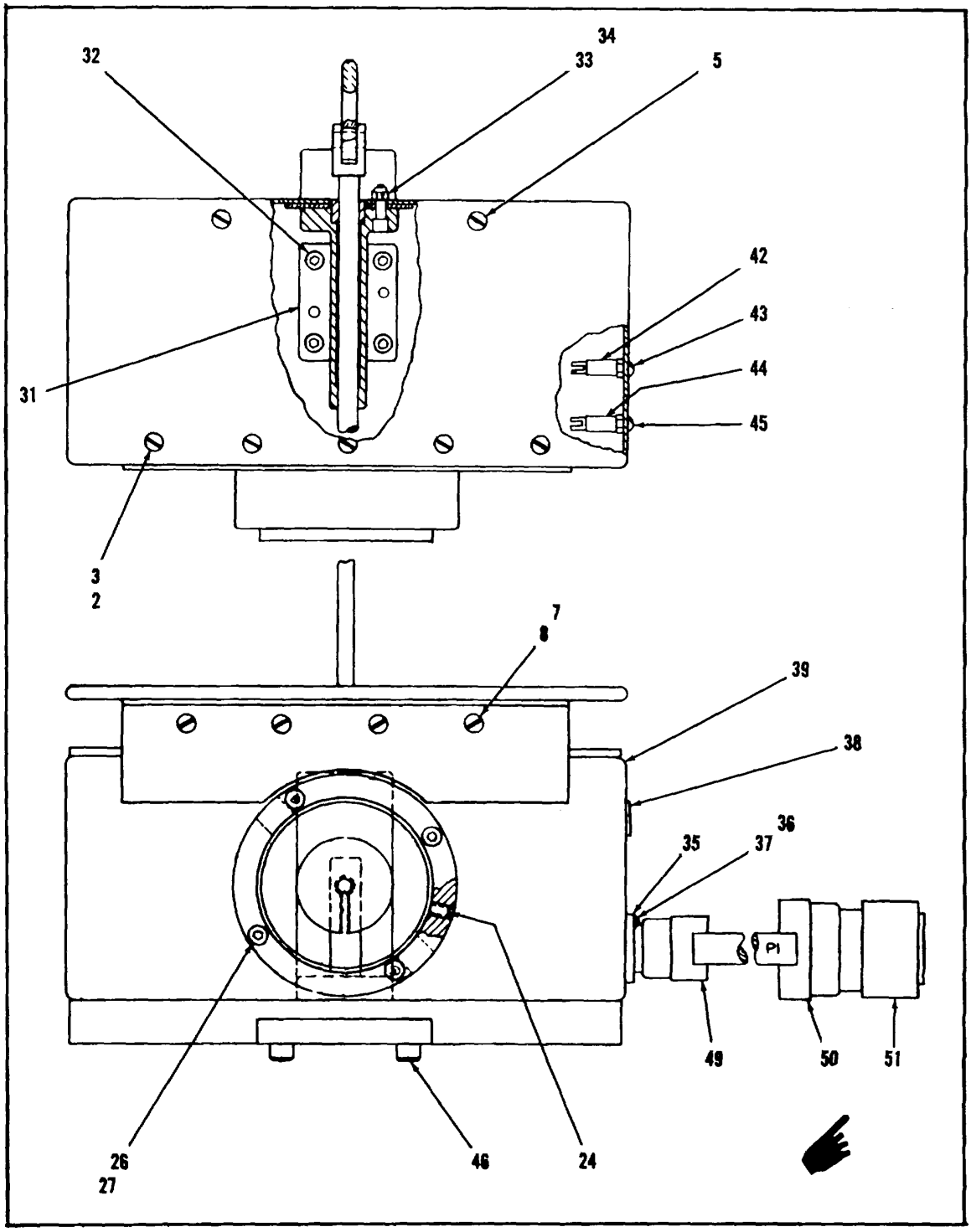

Figure 3. U7674 Simulated Code Plug (1 of 2)

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
3-	337493	PLUG, Code, simulated, U7674 ..... (See fig. 1 for NHA)			REF	
1	337493-17	COVER, Sh. acrylate, plastic ..... Gr. 3, clr and trans., 0.250 in. + 0.020in.- 0.040 in. thick (ATTACHING PARTS)	M	S	1	
2	MS21044N06	.NUT, Self-lkg, hex., 6-32	P1	S	5	
3	MS35190-238	.SCREW, Mach., fl hd., ... 6-32 x 0.500 in lg. ---*---	P1	S	5	
4	337493-11	.SPACER, Rnd., Al., 6061-T6 ..... (QQ-A-200/8) 0.500 in. ±0.002 in. dia. (ATTACHING PARTS)	M	S	2	
5	MS35190-254	.SCREW, Mach., fl hd., ... 8-32 x 0.625 in lg.	P1	S	2	
6	MS20257-2-700	.HINGE, Butt, 1.062 in..... open width (ATTACHING PARTS)	P1	S	1	
7	MS21044N06	.NUT, Self-lkg., hex, 6-32	P1	S	4	
8	MS35206-227	.SCREW, Mach., pan hd., ... 6-32 x 0.312 in lg.	P1	S	4	
9	337-493-.15	.COVER, Sh., Al., 6061-T6..... (QQ-A-250/11) 0.090 in ±0.005 in thk. (see fig. 4 for breakdown) (ATTACHING PARTS)	X2	B	1	
10	MS24621-29	.SCREW, Self-tapping, thd forming,..... Type B, N 8, 0.375 in. lg.	P1	S	7	
11	337493-10	.COMPONENT ASSEMBLY (see fig. 5 for.... breakdown) (ATTACHING PARTS)	P1	F	1	
12	MS35206-245	.SCREW, Mach., pan had, ... 8-32 x 0.500 in. lg.	P1	S	8	
13	AN960-8	.WASHER, Flat, No. 8.....	P1	S	4	
14	MS35340-42	.WASHER, Lock, No. 8	P1	S	8	
15	8368	.SPACER, 1.25 in lg. x 8-32 ..... (83330)	M	S	4	
16	337493-27	.DISC, Rnd., Al., 6061-T6..... (QQ-A-200/8) 1.500 in. ±0.003 in dia. (ATTACHING PARTS)	M	S	1	
17	NAS1081-08A4N	.SETSCREW, Self-locking, 8-32 x ..... 0.25 in lg., flat point	P1	S	1	

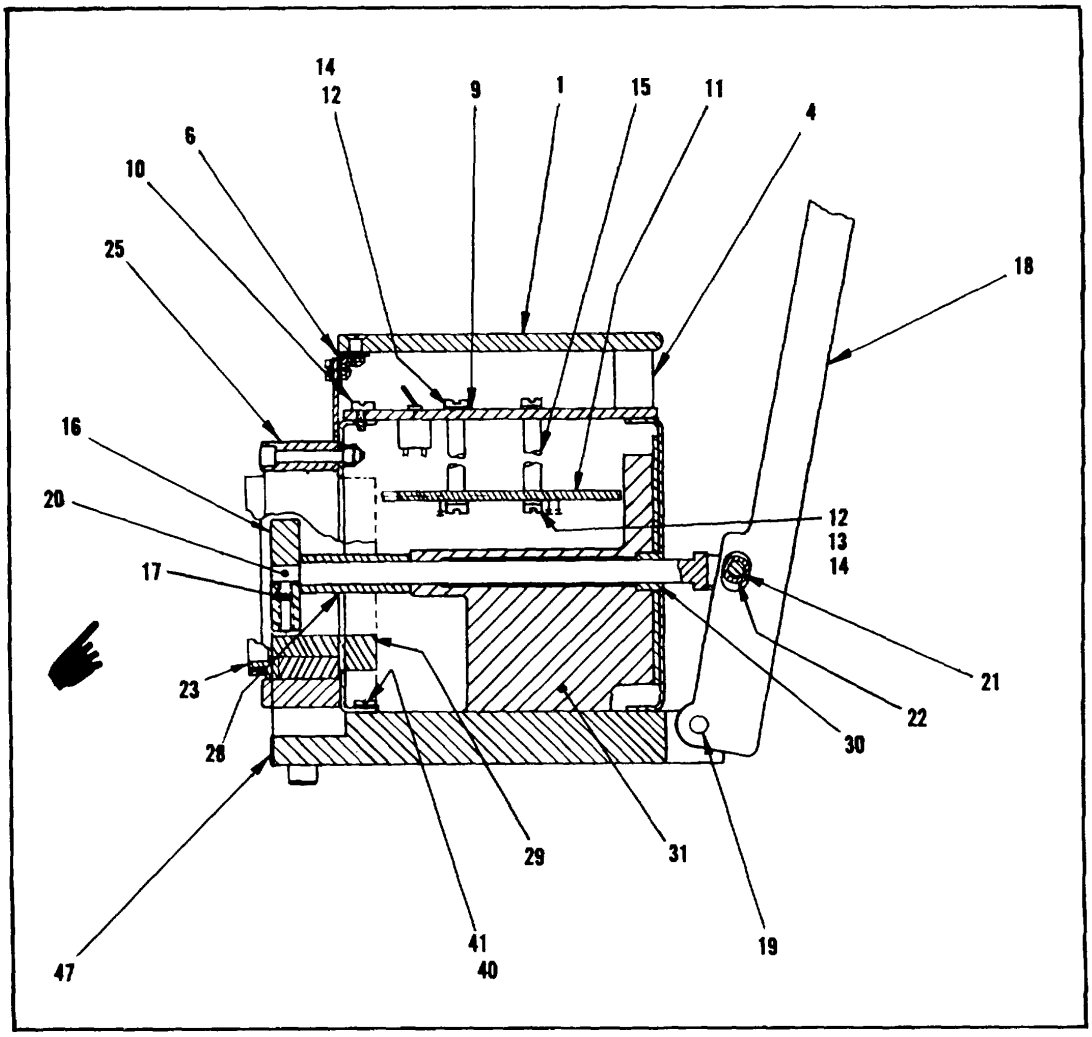

Figure 3. U7674 Simulated Code Plug (2 of 2)

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
3- 18	337493-01	.LEVER, Pl., Al., 6061-T6 ..... QQ-A-250/11) 1/4 in. thk. (ATTACHING PARTS)	M	S	1	
19	MS51838-198	.PIN, Straight, headless, ... 0.250 in. x 1.500 in. lg. ---*---	P1	S	1	
20	337493-03	.ROD, Bar, Cres 303, (QQ-S-763..... Cond A) 0.500 in. ±0.002 in. dia. (ATTACHING PARTS)	M	S	1	
21	AN122717	.PIN, Straight, headless, ... 0.250 in. x 0.500 in. lg.	P	S	1	
22	337493-07	.BUSHING, Rod, brass, (QQ-B-626)..... Comp 22, 1/2 11, 0.375 in. ±0.002 in. dia. ---*---	M	S	1	
23	10-442475(TA 383 Type) (10-442475 TA383 Type)	.ADAPTER, Conn. (77820) ..... (ATTACHING PARTS)	X2	S	1	
24	NAS1081-08A4N	.SETSCREW, Self-locking, 8-32 ..... x 0.25 in. lg., flat point	P1	S	4	
25	337493-25	.RING, Rnd, Al., 2024-T4 (QQ-A-200/3)..... 3.500 in. + 0.032 in. - 0.016 in. dia. (ATTACHING PARTS)	M	S	1	
26	MS16997-36	.SCREW, Cap, socket head, 8-32..... x 1.00 in. lg.	P1	S	4	
27	MS21044N08	.NUT, Hex, self-locking, 8-32 ..... ---*---	P1	S	4	
28	337493-31	.BUSHING, Tubing, Al., 6061-T6 ..... (WW-T-700/6D) 1/2 in. OD x 0.058 wall thk.	M	S	1	
29	10-442480(TA 386) (10-442480 TA386) (J1)	.CONNECTOR, Recp., elec. (77820).....	P1	B	1	
30	337493-05	.BUSHING, Rnd. Al., 6061-T6..... (QQ-A-200/8) 0.500 in. ±0.002 in. dia.	M	S	1	
31	337493-23	.FITTING, Plate, alum., 6061-T6 ..... (QQ-250/1 1) 1.500 in. ±0.045 in. thk. (ATTACHING PARTS)	M	S	I	
32	MS16997-32	.SCREW, Cap, socket hd., 8-32 x ..... . 0.500 lg.	P1	S	4	

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
3 - 33	MS16997-33	.SCREW, Cap, socket head, 8-32 x 0.625 in. lg.	P1	S	4	
34	MS21044N08	.NUT, Hex, self-locking, 8-32	P1	S	4	
35	2182-16	.RECEPTACLE, Conn., dummy (71468)	P1	S	1	
		(ATTACHING PARTS)				
36	MS35206-204	.SCREW, Mach., pan head, 2-56 x 0.312 in. lg.	P1	S	4	
37	22NM-26	.NUT, Self-lkg., hex, 2-56 (22599) (22NM26)	P1	S	4	
38	198550-001	.PLATE, Identification (80063)	X2	S	1	
39	337493-13	.HOUSING, Sh., Al., 6061-T6 (QQ-A-250/11) 0.063 in. +0.005 in. thk.	M	S	1	
		(ATTACHING PARTS)				
40	MS35206-243	.SCREW, Mach., pan hd., 8-32 x 0.375 in. lg.	P1	S	10	
41	MS35340-42	.WASHER, Lock, No. 8	P1	S	10	
42	750 (El)	.TERMINAL, Stand-off (81312)	M	S	1	
		(ATTACHING PARTS)				
43	MS35206-213	.SCREW, Mach., pan head, 4-40x 0.250 in. lg.	P1	S	1	
44	750 (E2)	.TERMINAL, Stand-off (81312)	M	S	1	
		(ATTACHING PARTS)				
45	MS35206-213	.SCREW, Mach., pan head, 4-40 x 0.250 in. lg.	P1	S	1	
46	2025	.JIG BUTTON, Precision (12139)	X2	S	2	
47	337493-21	.BASE, P1., Al., 6061-T6 (QQ-A-250/11) 3/4 in. thk.	M	S	1	
48	No Number	.CABLE ASSEMBLY	M	F	1	
49	MS3057-6B	.ADAPTER, Cable to Conn.	P1	S	1	
50	MS3057-12B	.ADAPTER, Cable to conn	P1	S	1	
51	PT06A-20-24P	.CONNECTOR (77820)			1	

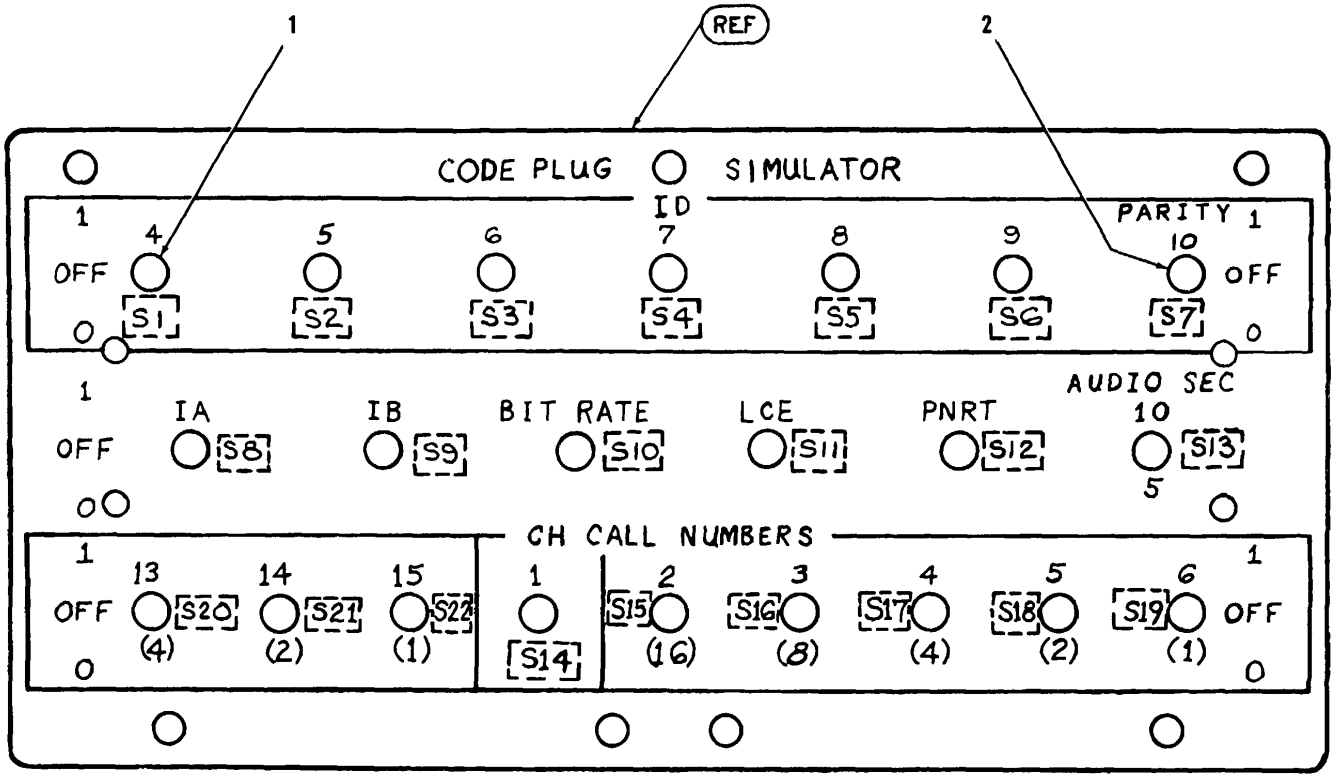

Figure 4. Cover

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
4-	337493-15	COVER, Sh. Al., 6061-T6..... (QQ-A-250/11) 0.090 in. + 0.005 in. thk. (see fig. 3 for NHA)	M	S	REF	
1	8867K1	.SWITCH, Toggle (17465)..... S1-S6 & S13	P1	S	7	
2	8866K1	.SWITCH, Toggle (17465)..... S7-S12, S-14 - S-22	P1	S	15	

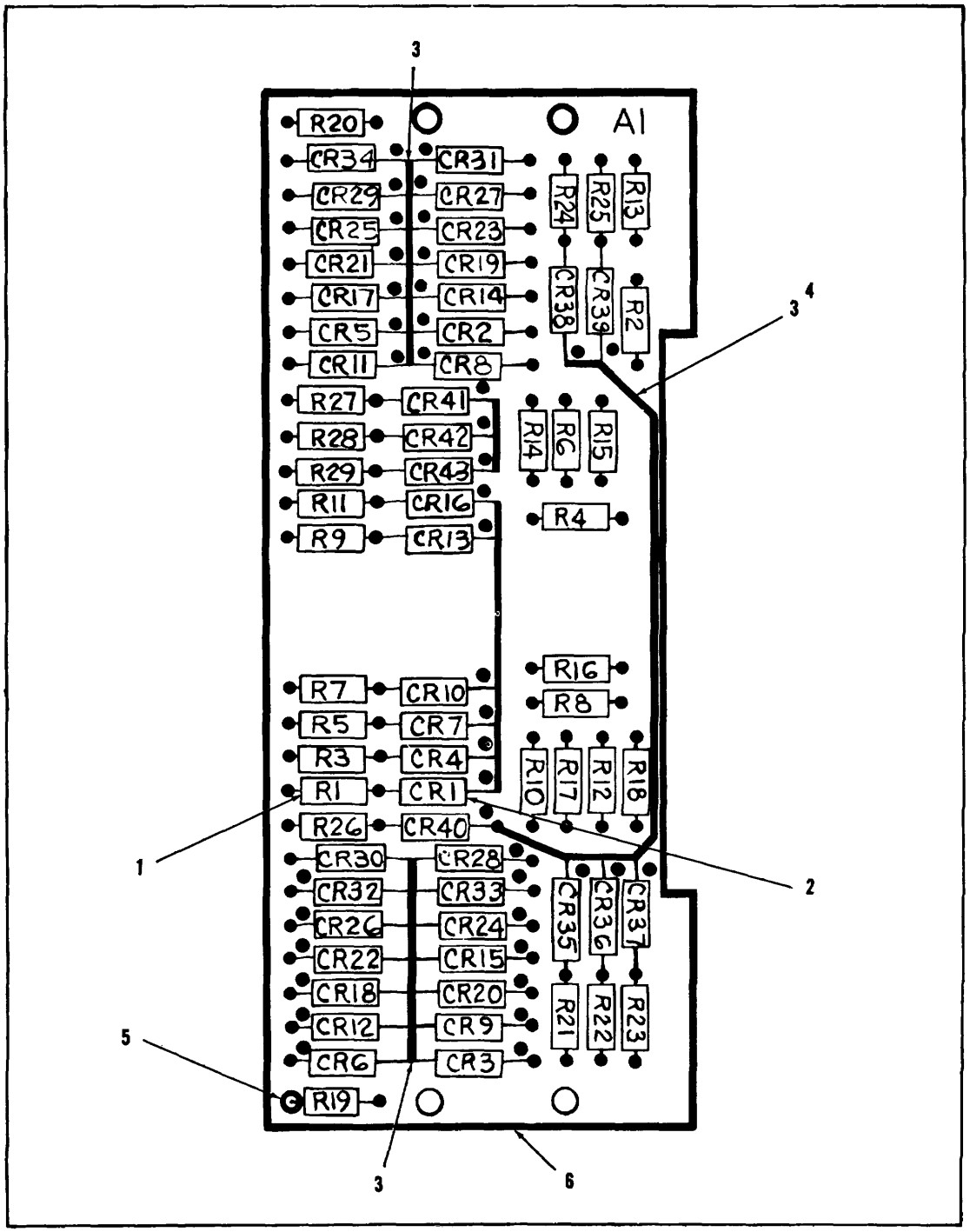

Figure 5. Component Assembly

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
5-	337149.3-10	COMPONENT ASSEMBLY (See fig. 3..... for NHA)		REF		
1	RCO5GF201J (RI -R29)	RESISTOR, Fixed, comp., 200 ohm ..... ±5%, 1/8 W (per MIL-R-11/11) (81349)	P1	S	29	
2	1N914 (CR 1-CR43)	SEMICONDUCTOR DEVICE, Diode ..... (81349)	P1	S	43	
3	QQ-W-343 (QQNW343)	WIRE, Copper, No. 20 AWG (0.032 in.) ..... Type S	P1	S	ARS	
4	MIL-I-7444	SLEEVING, Insulation, vinyl.....	P1	S	ARS	
5	2005D	TERMINAL, Stud (15849)	X2	S	115	
6	337493-33	CIRCUIT BOARD, Sh., phenolic, ... plstc. (MIL -P-15035, Type FBE) 0.125 in. ± 0.008 in. thk.	P1	F	1	

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
6-	337462	FIXTURE, Assembling, U7651 (see fig. 1 . .. for NHA)			REF	
1	NAS1081C3A8N .	SETSCREW, Flat pt., 10-32 x ..... 1/2 in. lg.	P1	S	1	
2	337462-100	SHAFT	X2	S	1	
3	337462-23	BRACKET, Alum. bar or plate, 6061-T6..... (QQ-A-250/11) (QQ-A-200/11)	M	S	1	
4	N5000-87	RING, Retaining, Truarc Inc	X2	S	2	
5	A-81420-SS	BUSHING, Ball (96881).....	X2	S	2	
6	337462-30	KNOB ..... (ATTACHING PARTS)	P1	S	1	
7	MS16562-218	PIN, Spring, corrosion resistant ..... steel, 3/32 in. dia. x 1 in. lg.	P1	S	1	
8	337462-27	ADAPTER, Alum. round, 6061-T6,..... 2.750 in. +0.008 in. dia. (QQ-A-200/8) (ATTACHING PARTS)	M	S	1	
9	MS16997-58	SCREW, Cap, socket head, 1/4-20 x ..... 1/2 in. lg.	P1	S	3	
10	337462-41	ROD, Steel, corrosion resistant,..... round, Type 303 (QQ-S-763)	M	S	1	
11	337462-50	GEAR ..... (ATTACHING PARTS)	X2	S	1	
12	AN122696	PIN, Dowel, 1/8 in. dia. x ..... 7/8 in. lg.	P1	S	1	
13	337462-15	RAIL, Alum. bar or plate, 6061-T6,..... 1.500 in. +.045 thick (QQ-A-200/8, bar) (QQ-A-250/11, plate) (ATTACHING PARTS)	M	S	1	
14	MIS16977-60	SCREW, Cap, socket head, 1/4-20 x ¾..... in. lg.	P1	S	2	
15	337462-25	KNOB, Alum. round, 6061-T6, 1.500 ..... in. +0.0025 in. dia. (QQ-A-200/8) (ATTACHING PARTS)	P1	S	1	
16	MIS16555-606	PIN, Dowel, 1/16 in. dia. x 1/2 in. lg.	P	S	1	
17	337462-37	ROD, Steel, corrosion resistant ..... round, Type 303, 0.3750 in. + 0.0005 in. dia. (QQ-S-763)	M	S	1	

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
6- 18	337462-70	GEAR	X2	S	1	
19	337462-43	BUSHING, Steel, corrosion resistant, ... Type 303, (QQ-S-763) (ATTACHING PARTS)	X2	S	1	
20	AN565C8H3	SETSCREW, Full dog pt., 8-32 x ..... 3/16 in. lg.	P1	S	2	
21	337462-17	BRACKET, Alum. bar or plate, 6061-T6..... 1.500 in. +0.045 in. thick (QQ-A-200/8, bar) (QQ-A-250/11, plate) (ATTACHING PARTS)	M	S	1	
22	MS16997-78	SCREW, Cap, socket head, 5/16-18 x ¾ ..... in. lg.	P1	S	8	
23	337462-51	GUIDE, Plastic, Nylatron G.S. (L-P-410)..... (ATTACHING PARTS)	X2	S	1	
24	MS16997-84	SCREW, Cap, socket head, 5/16-18 ..... x 2 in. lg.	P1	S	2	
25	337462-45	GUIDE, Plastic, Nylatron G.S. (L-P-410)..... (ATTACHING PARTS)	X2	S	1	
26	MS16997-78	SCREW, Cap, socket head, 5/16-18 ..... x 3/4 in. lg.	P1	S	4	
27	337462-47	GUIDE, Plastic, Nylatron G.S. (L-P-410)..... (ATTACHING PARTS)	X2	S	1	
28	MS16997-77	SCREW, Cap, socket head, 5/16-18 ..... x 5/8 in. lg.	P1	S	2	
29	337462-13	TRACK, Alum. bar or plate, 6061-T6, ... 1.000 in. ± 0.035 in. thick, (QQ-A-200/8, bar) (QQ-A-200/11, plate) (ATTACHING PARTS)	M	S		
30	MS16977-80	SCREW, Cap, socket head, ... 5/16-18 x 1 in. ig.	P1	S	3	
31	337462-03	COVER, Alum. plate, 6061-T6, ... 0.064 in. ± 0.005 in. thick (QQ-A-250/11) (ATTACHING PARTS)	M	S	1	
32	MS35206-215	SCREW, Machine, pan head, 4-40 x ..... 3/8 in. lg.	P1	S	6	

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
6- 33	337462-35	KNOB, Steel, corrosion resistant, round ..... Type 303, 0.750 in. ± 0.001 in. dia. (QQ-S-763)	X2	S	1	
34	337462-11	BRACKET, Alum. bar or plate, 6061-T6, ... 1.000 in. + 0.035 in. thick (QQ-A-200/8 bar) (QQ-A-250/11, plate)	M	S	1	
35	6008	CLAMP ASSEMBLY (12139)			2	
36	198550-001	PLATE, Identification (80063) ..... (ATTACHING PARTS)	X2	S	1	
37	MS35206-215	SCREW, Machine, pan head, 440 ..... x 3/8 in. lg.	P1	S	6	
38	198571-004	LABEL, Identification (80063)	X2	S	1	
39	337462-10	BASE ASSEMBLY.....	X2	S	1	
40	337462-21	BRACKET, Alum. bar or plate 6061-T6 (QQ-A-250/11) (QQ-A-200/8)			1	
41	337462-01	PLATE, Alum. sheet, 6061-T6..... 0.064 + 0.005 thk. (QQ-A-250/11) (ATTACHING PARTS)			1	
42	MS35206-228	SCREW, Mach. pan hd. 4-40 x ..... 3/8 in. lg.			2	
43	337462-05	PLATE, Alum. plate, 6061-T6, ... 0.064 ± 0.005 thk (QQ-A-250/11)			1	
44	286855-000	CHART (80063).....			1	
45	AN122731	PIN, Dowel, 5/16 dia x 3/4 lg			12	

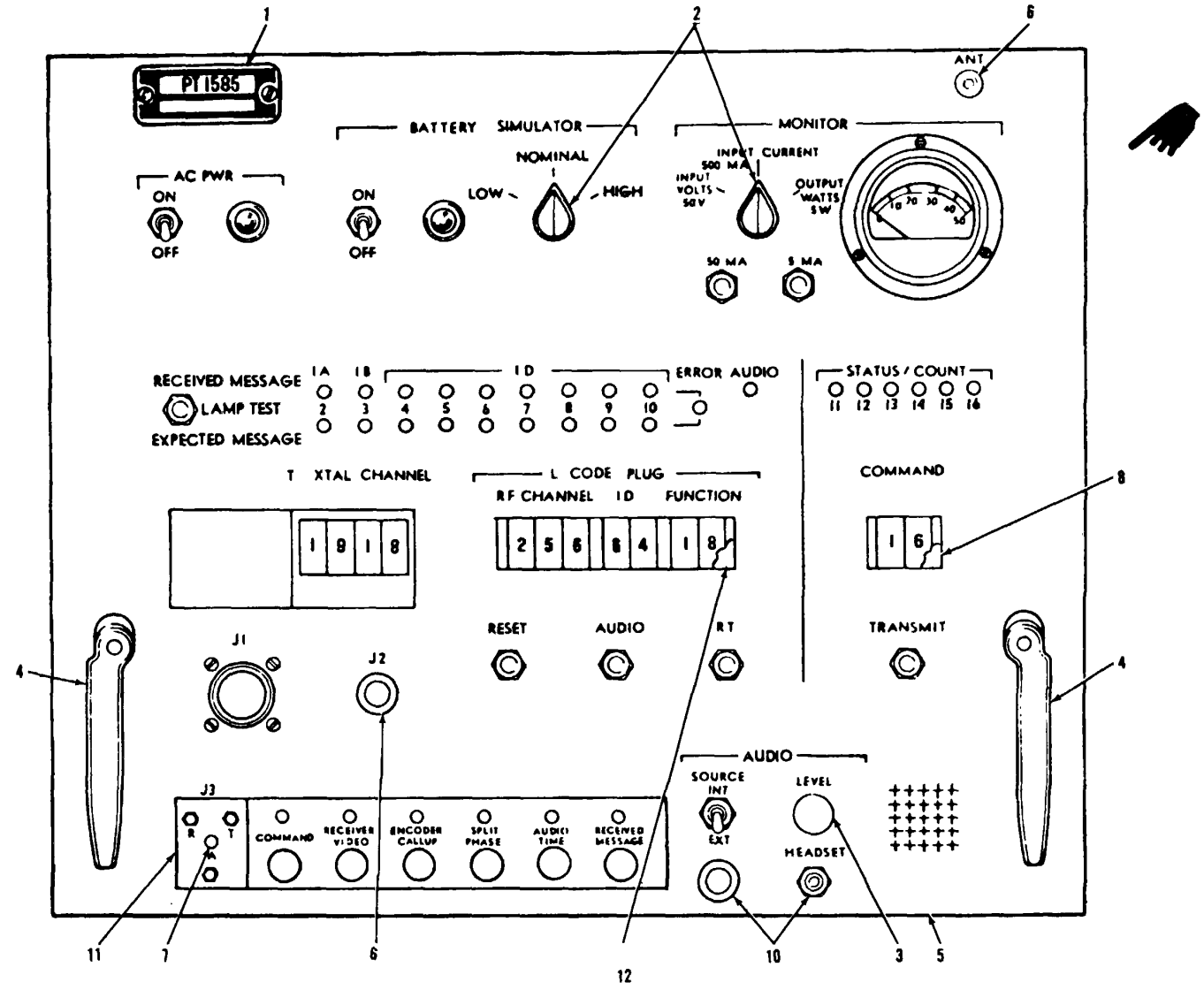

Figure 6A. PT1585 Phase 3 CL Stack Tester

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
6A-	337024-000	STACK TESTER, CL, Phase 3, PT1585 ..... (see fig. 1 for NHA)			REF	
1	170927-003	PLATE, Identification			1	
2	70-5-1G	KNOB			1	
3	70-2-2G	KNOB			1	
4	HP-10	HANDLESET			1	
5	P867J-15-2-0	CHASSIS, Electrical			1	
6	337024-25	DISC, Nylon rod, L-P-410, 0.750 ..... +0.005 thk. - 0.000			1	
7	337024-43	. PIN, Index, 3/16 dia, SAE 4130 STL ..... rod, MIL-S-6758, hardness ROC C28-30			1	
8	189055-2	SWITCH, Hardware			1	
9	189005-8	SWITCH, Hardware			1	
10	2158	INSULATOR, Washer, shouldered			8	
11	337024-50	CONNECTOR ASSEMBLY			1	
12	C193263	SPACER, Switch			2	

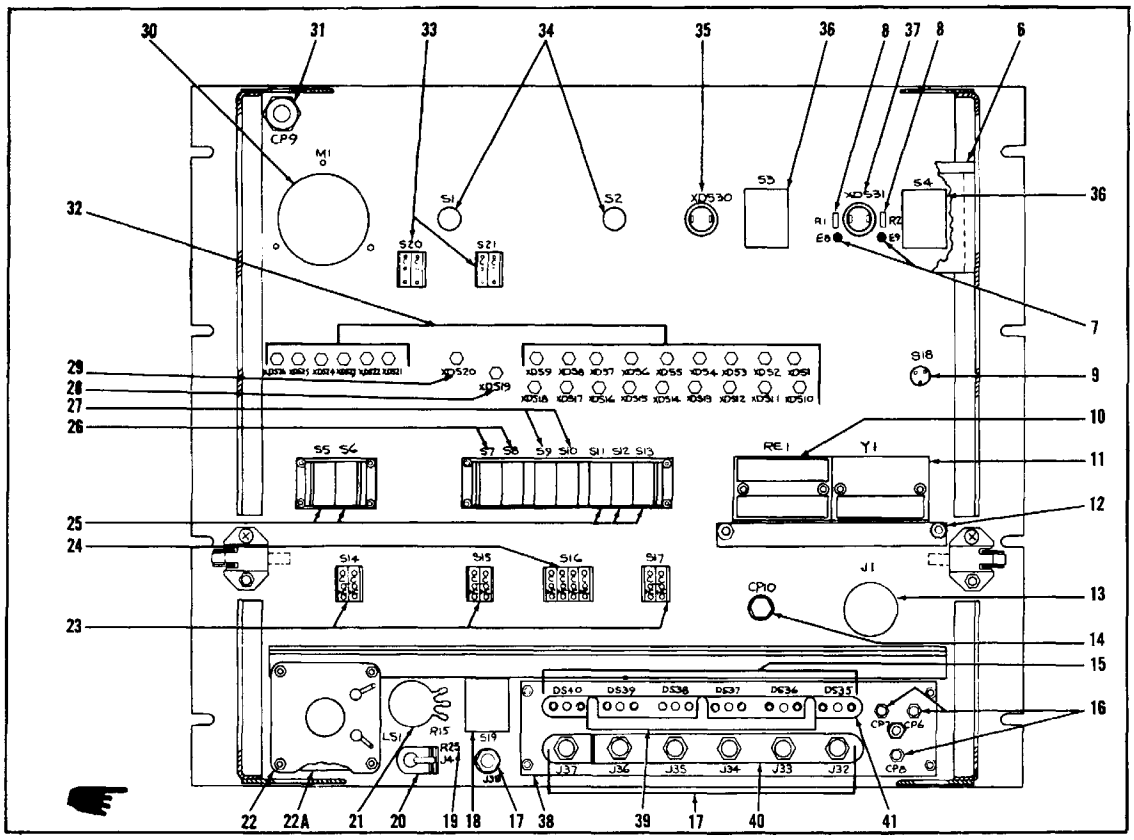

Figure 7. PT1585 Phase 3 CL Stack Tester

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
7-	337024	STACK TESTER, CL, Phase 3, PT1585 ..... (see fig. 1 for NHA)			REF	
1	Deleted					
2	Deleted					
3	Deleted					
4	Deleted					
5	Deleted					
6	337024-53	COVER, Plastic sheet, Lucite, ... 1/4 in. thk.	M	S	1	
7	750	TERMINAL, Stand-off (81312)	M	S	2	
8	RCRO7GF163J	RESISTOR, Fixed, comp., 16K , ... 1/4 W, ±5% (MIL-R-39008/1) (81349)	P1	S	2	
9	933	SWITCH, Push (82389)	P1	S	1	
10	80555-1	RECEIVER, Narrow band (10412)	P1	D	1	
11	81558-1	LO, Ref, Assy(10412)..... (same as modified 80546-1)	P1	F	1	
12	337024-11	. STRIP, Stl. plate, 4130, (MIL-S-18729)..... 0.250 in. ±0.005 in. thk.	M	S	1	
13	PT00A-20-24S (PT00A20-24S)	CONNECTOR, Recp., elect. (77820	P1	S	1	
14	MS3517749	ADAPTER, UG-492D/U (98921)	P1	S	1	
15	5082-4400	EMITTER, Visible, solid state (28480)	P1	S	6	
16	51-077-000	CONNECTOR, R.F., coax (98291)..... .	P1	S	3	
17	MIL-C-39012/21- . 0002 (MILC39012/21-0002)	CONNECTOR, Recp., elect. (77820)..... .	P1	S	7	
18	8868K4	SWITCH, Toggle (17465).....	P1	S	1	
19	RC20GF300J	RESISTOR, Fixed, comp., 30 ohm, ... 1/2 W, ±5%, (MIL-R-11/3) (81349)	P1	S	1	
20	A2A	JACK, Telephone (37942).....	P1	S	1	
21	252-10K	RESISTOR, Variable (11237)	P1	S	1	
22	SP25A	SPEAKER (80331).....	P1	S	1	
22A	337024-27	STRIP, Alum. sht. 2024-T4 ..... QQ-A-250/5, 0.090 + 0.005 thk.			1	

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
7- 23	2PB299-T2 (2PB299T2)	SWITCH, Push (91929)	P1	S	3	
24	4PB11-T2 (4PB11T2)	SWITCH, Push (91929)	P1	S	1	
25	6202MW	SWITCH, Rotary, thumbwheel (97525)	P1	S	5	
26	6257MW	SWITCH, Rotary, thumbwheel (97525)	P1	S	2	
27	6218MW	SWITCH, Rotary, thumbwheel (97525)	P1	S	2	
28	102SKI-FB2-R (102SKIFB2R)	LIGHT, Indicator (08717).....	P1	S	1	
	MS24515-685	LAMP, Incandecent (08717).....	P1	S	1	
29	(102SKIFB2G)	102SKI-FB2-G..... Light, Indicator (08717)		P1	S	1
	MS24575-685	LAMP, Incandecent (08717).....	P1	S	1	
30		255 METER, 0-50 ma, 1K (80145)	P1	S	1	
31	MS3517749	ADAPTER, UG-492D/U (98921)	P1	S	1	
32	102SKI-FB2-A (102SKIFB2A)	LIGHT, Indicator (08717).....	P1	S	24	
	MS24515-685	LAMP, Incandescent (08717).....	P1	S	1	
33	2PB299-T2 (2PB299T2)	SWITCH, Push (97929)	P1	S	2	
34	28-GB-3 (28GB3)	SWITCH, Rotary (17870)	P1	S	2	
35	52410-995	LIGHT, Indicator (72619).....	P1	S	1	
	757	. LAMP, Incandescent (08806).....	P1	S	1	
36	MS25307-222	SWITCH, Toggle	P1	S	2	
37	2410-995	LIGHT, Indicator (72619).....	P1	S	1	
	NE-51H (NE51H)	LAMP, Glow (08806)	P1	S	1	
38	337024-35	PLATE, Nylon sheet, L-P-410, ... 0.250 ± 0.010 thk.			1	
39	337024-37	RETAINER, Alum. sht. 6061-T4, ... QQ-A-250/11, 0.032 ± 0.005 thk.			1	
40	337024-41	STRIP, Alum. sht. 2024-T4, QQ-A-250/5 .... 0.032 ± 0.005 thk.			1	
41	337024-10	. STRIP ASSY			1	

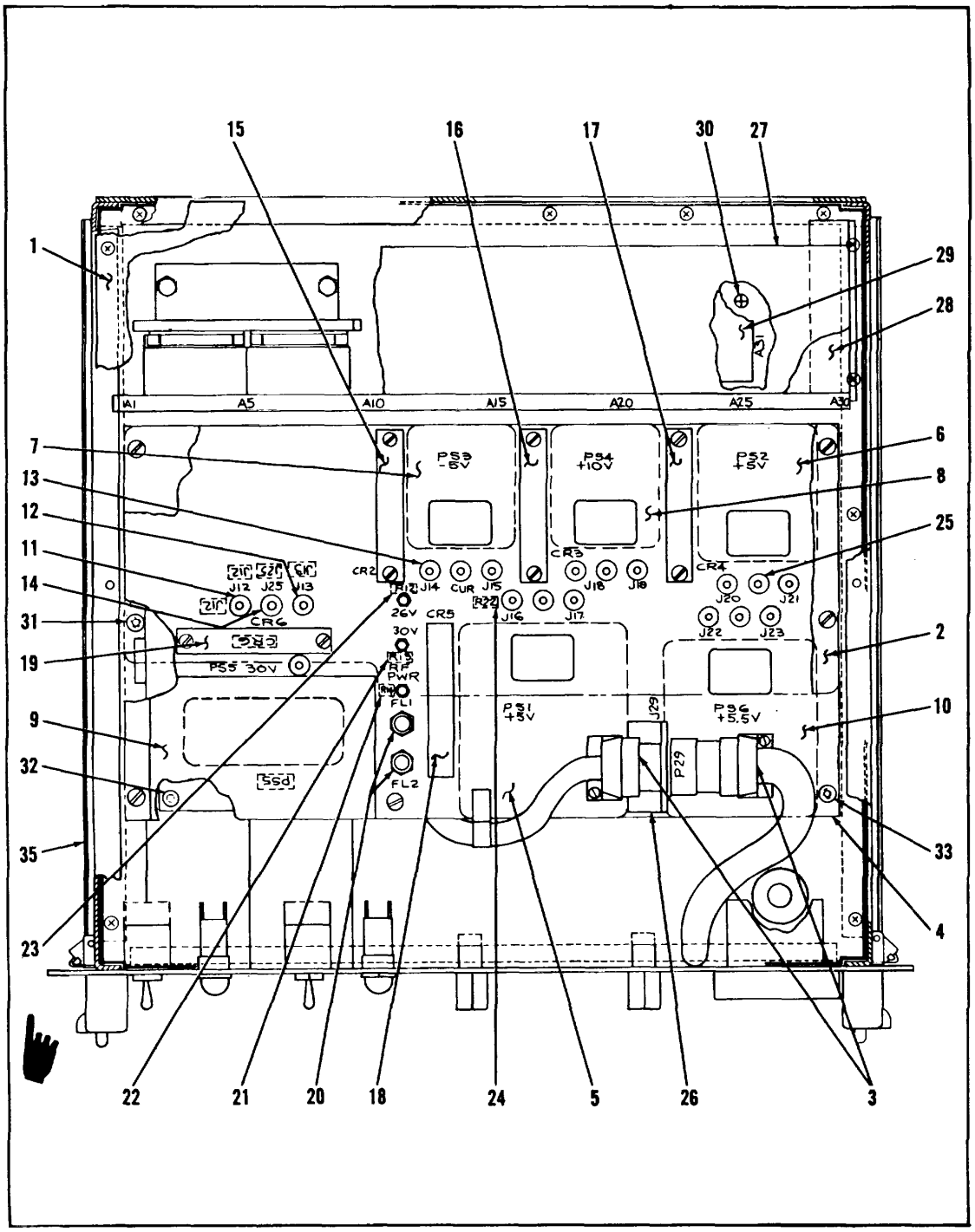

Figure 8 PT1585 Phase 3 CL Stack Tester

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
8-	337024-000	STACK TESTER, CL, Phase 3, PT1585 ..... (see fig. 1 for NHA)			REF	
1	No Number	. COVER, Top	X2	B	1	
2	337024-03	PLATE, Alum. Sht., 2024-T4 ..... (QQ-A-250/5) 0.063 in. +0.005 in. thk.	M	B	1	
3	No Number	CONNECTOR ASSEMBLY	A	F	REF	
	PT100-18-28P (77820)	CONNECTOR, Receptacle, electrical	P1	S	1	
	PT06-P-18-28S (PT06P18-28S)	CONNECTOR, Plug, electrical (77820)	P1	S	1	
4	337024-01	CHASSIS, Alum. sht., 2024-T4 ..... (QQ-A-250/5) 0.187 in.+0.005 in. thk.	X2	B	1	
5	PL-5.1-3.OA (PL5.1-3.OA)	POWER SUPPLY (13850)	P1	F	1	
6	PL-5.1-.75A (PL5.1-.75A)'	POWER SUPPLY (13850)	P1	F	1	
7	PL-5.1-.375A (PL5.1-.375A)	POWER SUPPLY (13850)	P1	F	1	
8	PL-9.8-.2A (PL9.8-.2A)	POWER SUPPLY (13850)	P1	F	1	
9	LM219	POWER SUPPLY (80103)	P1	F	1	
10	PL-6.1-1.5A (PL6.1-1.5A)	POWER SUPPLY (13850)	P1	F	1	
11	108-902	JACK, Banana (74970)	P1	S	5	
12	108-903	JACK, Banana (74970)	P1	S	6	
13	108-904	JACK, Banana (74970)	P1	S	1	
14	108-906	JACK, Banana (74970)	P1	S	1	
15	LMOV-1 (LMOV1)	PROTECTOR, Overvoltage (80103)	P1	S	1	
16	LMOV-2 (LMOV2)	PROTECTOR, Overvoltage (80103)	P1	S	1	
17	LMOV-1 (LMOV1)	PROTECTOR, Overvoltage (80103)	P1	S	1	
18	LMOV-1 (LMOV1)	PROTECTOR, Overvoltage (80103)	P1	S	1	
19	LMOV-3 (LMOV3)	PROTECTOR, Overvoltage (80103)	P1	S	1	
20	9012-101-0000	FILTER, Suppression (72982).....	P1	S	2	

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
8- 21	224S-1-103M (224S1-103M)	RESISTOR, Variable (80294)	P1	S	1	
22	224S-1-102M (224S1-102M)	RESISTOR, Variable (80294)	P1	S	1	
23	224S-1-102M (224S1-102M)	RESISTOR, Variable (80294)	P1	S	1	
24	224S-1-101OM (224S 1-101M)	RESISTOR, Variable (80294)	P1	S	1	
25	No. 5	GROMMET, Rubber (77969).....	P1	S	6	
26	33702445	BRACKET, Alum. sht., 6061-T6, ... (QQ-A-250/11) 0.125 in. ±0.010 in. thk.	M	B	1	
27	114812	CARD RACK (97525).....	X2	B	1	
	(A5)	285222-000 SIGNAL CONDITIONER (80063..... (see fig. 16 for breakdown)	P1	S	1	
	(A6)	286861-000 DIAGNOSTIC (80063) ..... (see fig. 17 for breakdown)	P1	S	1	
(A7, A9, A24, A26)	D4003	FLIP FLOPS, Eight JK (97525)	P1	S	4	
(A8, A25)	D4008	NAND GATES, Twelve 3-input..... (97525)	P1	S	2	
(A10)	D4022	CRYSTAL OSCILLATOR, With..... N/5 divider and output drivers (97525)	P1	S	1	
(A1, A13, A14, A19, A20)	D4004 (97525)	NAND GATES, Sixteen 2-input	P1	S	5	
(A12, A21)	D4208	SIFT REGISTER, Gated serial, dual ..... twelve bit (97525)	P1	S	2	
(AI5)	285221-000	RESISTOR ENTRANCE CARD (80063) ..... (see fig. 18 for breakdown)	P1	S	1	
(A16)	D4025	EXCLUSIVE OR CIRCUITS, Sixteen..... (97525)	P1	S	1	
(AI7)	D4007	NAND GATES, Eight 4-input and ..... one 3-input diode cluster (97525)	P1	S	1	
(A18)	D4031	NAND GATES, Two 8-input and four ..... 4-input and one 3-input expanders (97525)	P1	S	1	

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
(A22)	285247-000	FULL ADDER (80063)..... (see fig. 19 for breakdown)	P1	S	1	
(A23)	2852354000	RESISTOR CARD (80063)..... (see fig. 20 for breakdown)	P1	S	1	
(A27, A28, A29)	D4036	LAMP DRIVERS, Ten 100 ma (97525)	P1	S	3	
(A30)	285223-000	RESISTOR EXIT CARD (80063) ..... (see fig. 21 for breakdown)	P1	S	1	
8- 28	337024-13	BRACKET, Left, Alum. sht., 3003-H14,..... (QQ-A-200/2) 0.125 in. ±0.010 in. thk.	M	B	1	
	337024-14	BRACKET, Right, .Alum. sht., 3003-H14 ..... (QQ-A-200/2) 0.125 in. +0.010 in. thk.	M	B	1	
29	337024-30	BOARD ASSEMBLY, Component..... (80063) (see fig. 11 for breakdown)	P1	F	1	
30	2122	SPACER, Sleeve 6-32 x 1/2 in. lg. (83330)	M	S	4	
31	337024-21	. SPACER, Alum. rod, 2024-T4,..... (QQ-A-200/3) 0.375 in. ±0.005 in. dia.	M	S	9	
32	2106	SPACER, Sleeve (83330)	M	S	4	
33	337024-23	SPACER, Hexagonal stk., brass ..... comp. 22 1/2 H, 0.375 in. ±0.003 in.	M	S	6	
34	337024-07	STAND, Nylon sht. L-P-410, 1.000± ..... 0.010 thk.			1	
35	C-114-18	SLIDE CHASSIS, Stationary			1 pr.	

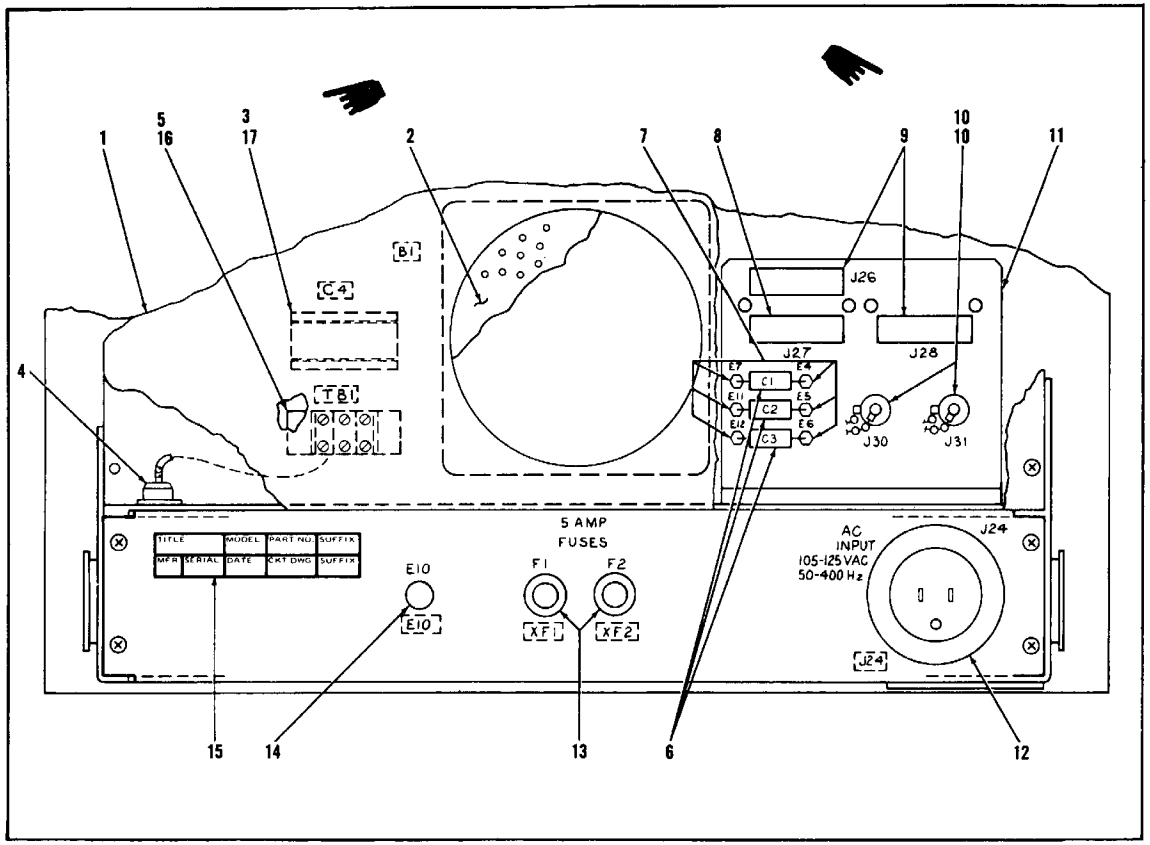

Figure 9. PT1585 Phase 3 CL Stack Tester

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
9-						
	337024-000	STACK TESTER, CL, Phase 3, PT7585 ..... (see fig. 1 for NHA)			REF	
1	No Number	COVER, Rear	X2	B	1	
2	337024-33	VENT, Alum. sht., perforated, 0.125 in ..... ±0.010 in. thk.	X2	B	1	
	BC2206F-2	FAN, Ventilating (not illustrated) ..... (92702)	P1	B	1	
3	663F-105-94W (663F105-94W)	CAPACITOR, Mylar dielectric, ... 1.0 mfd, 400V (84411)	P1	S	1	
4	PT06P-8-3P (PT06P8-3P)	CONNECTOR, Plug (77820)	P1	S	1	
5	3-140	TERMINAL BOARD (71785)	P1	B	1	
6	350D106 X9035R2	CAPACITOR, Fixed, tantalum, ... 10 mfd, 35V (81349)	P1	S	3	
7	750	TERMINAL, Stand-off (81312)	M	S	6	
8	DBMF-9W4S (1)DM53742-5001	. CONNECTOR, Receptacle (71468)	P1	S	1	
9	DBMF-13W3S (2)DM53742-5001	CONNECTOR, Receptacle (71468)	P1	S	2	
10	MIL-C-390121 21-0002 (MILC39012/ 21-0002)	. CONNECTOR, Receptacle, ... electrical (81349)	P1	S	2	
10A	CW-123/U	CAP, Elect., conn, BNC (11636)			4	
11	337024-17	. BRACKET, Alum. plate, 2024-T4 ..... (QQ-A-250/4) 0.250 in. thk.	M	B	1	
12	5278 electrical (74545)	. CONNECTOR, Receptacle	P1	S	1	
13	342001	. HOLDER, Fuse (75915)	P1	S	2	
	AGC-1	FUSE, Cartridge (71400)	P1	S	2	
14	7201	. TERMINAL, Stud (05791)	M	S	1	
15	198571-004	. LABEL (80063)	X2	S	1	
16	337024-51	SPACER, Plastic sht. phenolic, ... MIL-P-15035 type FBE 1/8 thk.			1	
17	100-300-13-7	CLIP, Electrical			1	

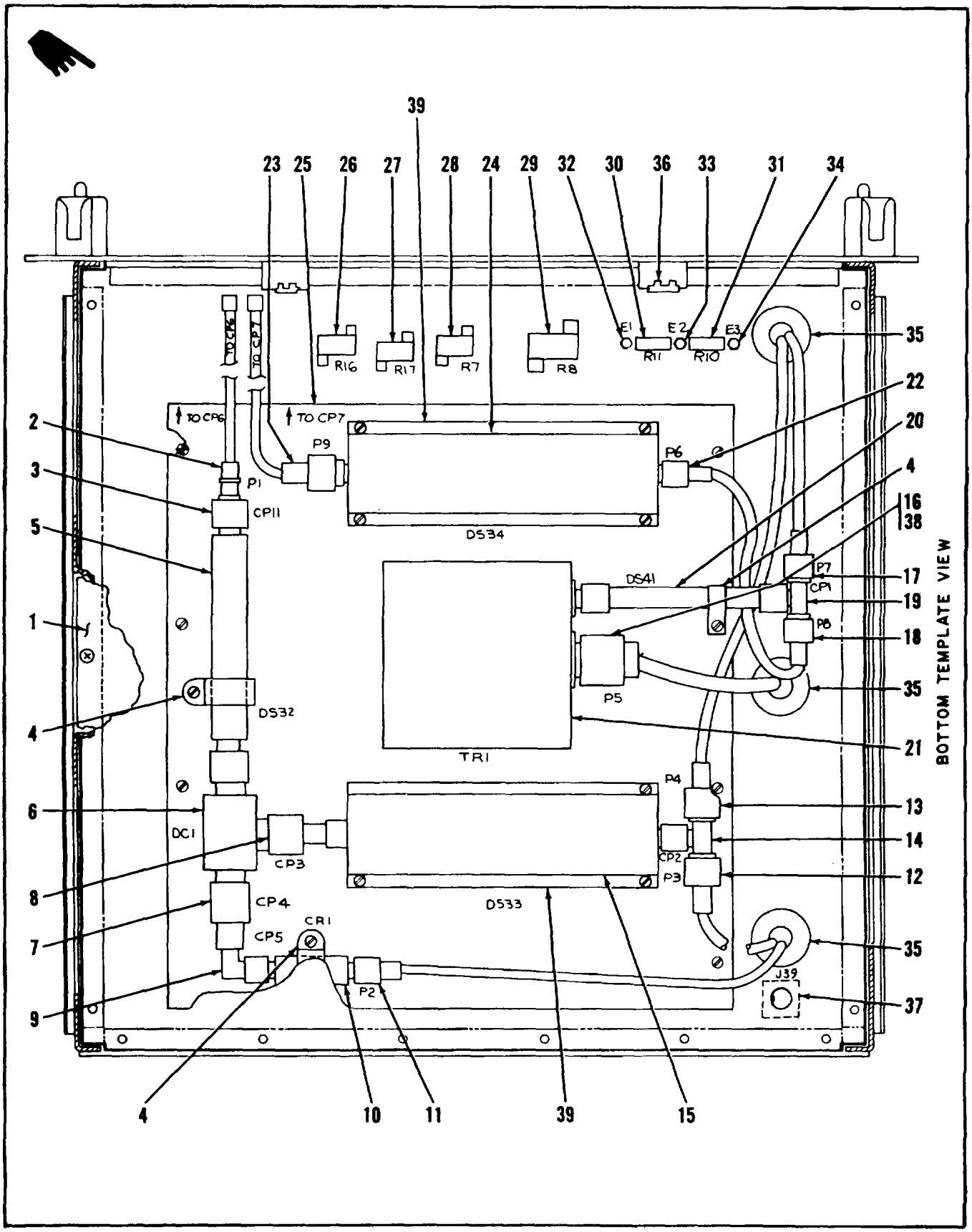

Figure 10. PT1585 Phase 3 CL Stack Tester

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
10-	337024	STACK TESTER, CL Phase 3, PT1585 (see fig.1 for NHA)			REF	
1	No Number	COVER, Bottom	X2	B	1	
2	819-B-1800W (819B1800W)	CONNECTOR, Plug, elec. (94375)	P1	S	1	
3	UG-201A/U (UG201AU)	ADAPTER (MIL-A-27434/37)	P	S	1	
4	MS21919DG	CLAMP, Loop	P1	S	1	
	2121	SPACER, Sleeve (83330)			9	
		(ATTACHING PARTS)				
		---*---				
5	FXRAD-30N (FXRAD30N)	ATTENUATOR, Fixed (00929)	P1	B	1	
6	3060-20	COUPLER, Directional (99899)	P1	B	1	
7	UG-201A/U (UG201AU)	ADAPTER (MIL-A-27434/37)	P1	S	1	
8	UG-1034/U (UG1034U)	ADAPTER (MIL-A-27434/27)	P1	S	1	
9	MS35368-3068	ADAPTER, UG-306B/U	P	S	1	
10	8471A	DETECTOR, R.F. (28480)	P1	S	1	
11	819-B-1800W (819B1800W)	CONNECTOR, Plug, elec. (94375)	P	S	1	
12	819-B-1800W (819B1800W)	CONNECTOR, Plug, elec. (94375)	P1	S	1	
13	M39012/16-0001	CONNECTOR, Plug, elec. (MIL-C-39012/16)	P	S	1	
14	MIS35173	ADAPTER, UG-274B/U	P1	S	1	
15	SA-50 (SA50)	ATTENUATOR, Variable (23042)	P1	B	1	
16	PT06-10-98S	CONNECTOR, Plug, elec. (77820)	P1	S	1	
17	M39012/16-0001	CONNECTOR, Plug, elec. (MIL-C-39012/16)	P1	S	1	
18	M39012/16-0001	CONNECTOR, Plug, elec. (MIL-C-39012/16)	P	S	1	
19	DA-4TB (DA4TB)	POW'ER DIVIDER (00929)	P1	S	1	
20	AB-40B (AB40B)	ATTENUATOR, Fixed (00929)	P1	B	1	
21	93A444	TRANSMITTER, FM, Telemetry, TR-320F (07618)	P1	B	1	

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
10- 22	M39012/16-0001	CONNECTOR, Plug, ... elec. (MIL-C-39012/16)	P1	S	1	
23						
24	SA-50 (SA50)	ATTENUATOR, Variable (23042).....	P1	B	1	
25	337024-05	MOUNT, Phenolic sht..... (MIL-P-15035) Type FBE laminated, 0.125 in. ±0.010 in. thk.	M	S	1	
26	RER65G10R0	RESISTOR, Fixed, W.W., ... 10 ohm, 10W ±1%, (MIL-R-39009/1)	P1	S	1	
27	RER65G1R00	RESISTOR, Fixed, W.W ..... 1 ohm, 10W ±1%, (MIL-R-39009/1)	P1	S	1	
28	RER65GR100	RESISTOR, Fixed, W.W., ... 0.100 ohm, 10W, ±1% (MIL-R-39009/1)	P1	S	1	
29	RER70G49R9	RESISTOR, Fixed, W.W., ... 49.9 ohm, 20W, ±1% (MIL-R-39009/1)	P1	S	1	
30	RC42GF151J	RESISTOR, Fixed, comp. ..... 150 ohm, 2W, ±5% (MIL-R-11/7)	P1	S	1	
31	RC20GF755J	RESISTOR, Fixed, comp. ..... 7.5M, 1/2W, ±5% (MIL-R-11/3)	P1	S	1	
32	750	TERMINAL, Stand-off (81312)	M	S	1	
33	750	TERMINAL, Stand-off (81312)	M	S	1	
34	750	TERMINAL, Stand-off (81312)	M	S	1	
35	No.72 (No. 72)	GROMMET, Rubber (77969).....	P1	S	3	
36	G51HB	GROMMET, Plastic (03296).....	P1	S	ARS	
37	PT00-8-3S	CONNECTOR, Recp. elec. (77820).....	P1	S	1	
38	MS3420-4A	BUSHING			1	
39	337024-31	STRIP, Alum. plate, 2024-T4, ... QQ-A-250/5 0.250 ± 0.005 thk.			4	

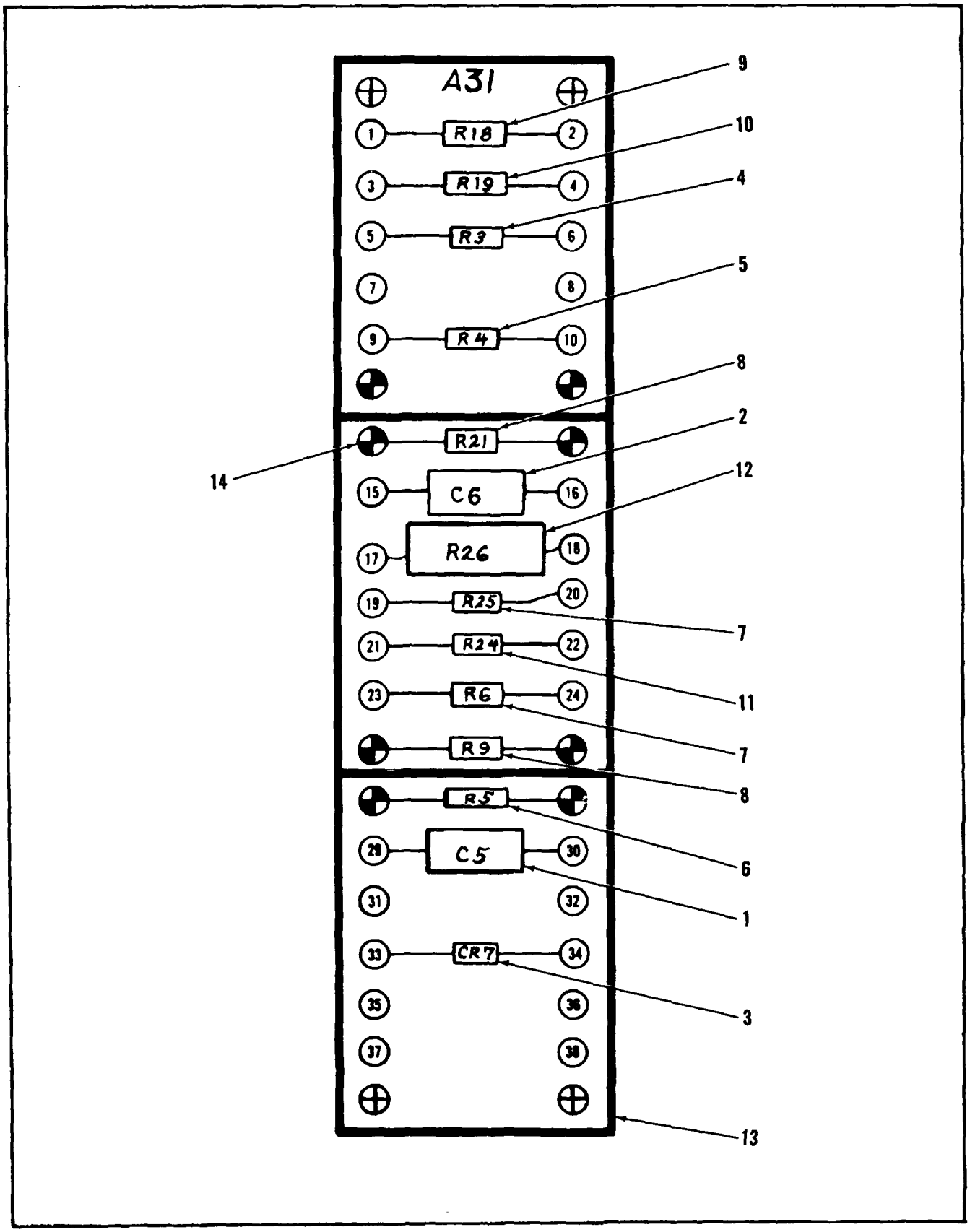

Figure 11. Component Board Assembly

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
11-	337024-30	COMPONENT BOARD ASSEMBLY ..... (see fig. 8 for NHA)	P1	F	REF	
1	350D105X9035A2	.CAPACITOR, Fixed tantalum, ... 1 mfd, 35V	P1	S	1	
2	K22J35KS	.CAPACITOR, Fixed, electrolytic, ... 22 mfd, 35V (05397)	P1	S	1	
3	1N270	SEMICONDUCTOR DEVICE, Diode ..... (MIL-S-19500/200) (81349)	P1	S	1	
4	RBR52CE1003F	.RESISTOR, Fixed, W.W., ... 1 meg, 1W ±1% (MIL-C-39012/21-0002) (81349)	P1	S	1	
5	RC20GF104J	.RESISTOR, Fixed, comp. ..... 100K, 1/2 W, ±5% (MIL-R-11/3) (81349)	P1	S	1	
6	RC20GF103J	.RESISTOR, Fixed, comp., ... 10K, 1/2 W, ±5% (MIL-R-11/3) (81349)	P1	S	1	
7	RC20GF102J	.RESISTOR, Fixed, comp. ..... 1K, 1/2 W, ±5% (MIL-R-11/3) (81349)	P1	S	2	
8	RC20GF510J	.RESISTOR, Fixed, comp., ... 510 ohms, 1/2 W, ±5% (MIL-R-11/3) (81349)	P1	S	2	
9	RBR52CE5ROOF	.RESISTOR, Fixed, W.W., ... 5 ohm, 1W, ±1% (MIL, -R-39005/1) (81349)	P1	S	1	
10	RBR52CE1OOROF	.RESISTOR, Fixed, W.W., ... 100 ohm, 1W, ±1% (MIL-R-39005/1) (81349)	P1	S	1	
11	RC20GF561J	.RESISTOR, Fixed, comp. ..... 560 ohm, 1/2W, ±5% (MIL-R-11/3) (81349)	P1	S	1	
12	RBR52CE20000F	.RESISTOR, Fixed, W.W., ... 2K, 1W, ±1% (MIL-R-39005/1) (81349)	P1	S	1	
13	1402-45	TERMINAL BOARD.....			1	
14	1300D	TERMINAL, Stud.....			12	

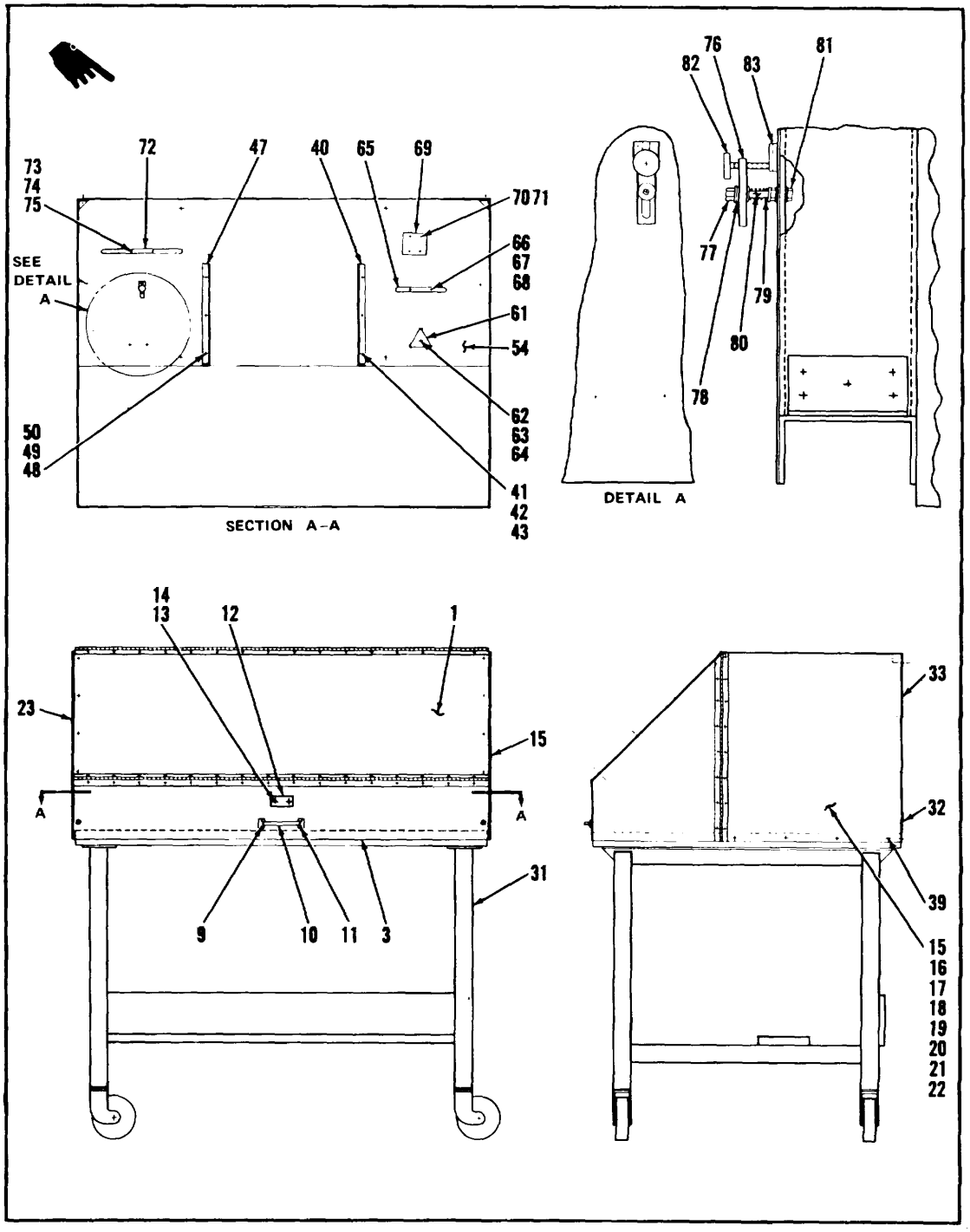

Figure 12. U7722 Chassis Assembly (1 of 5)

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
12-	337663	CHASSIS ASSEMBLY, U7722..... (see fig. 1 for NHA)			REF	
1	337663-10	COVER SUBASSEMBLY.....	X2	B	1	
2	337663-01	PANEL, Alum. sht., 6061-T6, ... 0.064 in. ±0.005 in. thk. (QQ-A-250/11)	M	B	1	
3	337663-03	PANEL, Alum. sht., 6061-T6, ... 0.064 in. ± 0.005 in. thk. (QQ-A-250/11)	M	B	1	
4	337663-05	PANEL, Alum. sht., 6061-T6, ... 0.064 in. ±0.005 in. thk. (QQ-A-250/11)	M	B	1	
5	MS202574-4813	HINGE	P1	S	2	
6	337663-27	ANGLE, Alum., 6061-T6,..... 1.00 x 1.00 x 0.125, (QQ-A-200/8) (ATTACHING PARTS)	M	B	2	
7	2600-6	STUD ASSEMBLY (71286).....	M	S	25	
8	MS20426D3-4	RIVET	P1	S	32	
9	MS20426D3-6	RIVET	P1	S	38	
10	30-3229	PULL, Drawer, aluminum ..... (90697) (ATTACHING PARTS)	M	B	3	
11	MS20426D3-6	RIVET	P1	S	6	
12	198550-001	PLATE, Identification (80063)- . ..... (ATTACHING PARTS)	X2	S	1	
13	MS35206-212	SCREW	P1	S	2	
14	MS21044N04	NUT	P1	S	2	
15	337663-60	SIDE SUBASSEMBLY, Right hand.....	X2	B	1	
16	337663-11	PANEL, Alum. sht., 6061-T6, ... 0.064 in ±0.005 in. thk. (QQ-A-250/11)	M	B	1	
17	337663-13	PANEL, Alum. sht., 6061-T6, ... 0.064 in. ± 0.005 in. thk. (QQ-A-250/11)	M	B	1	
18	MS20257-4-2075	HINGE P1 S			1	
19	337663-25	ANGLE, Alum., 6061-T6,..... 1.00 x 1.00 x 0.125, (QQ-A-200/8)- (ATTACHING PARTS)	M	B	ARS	
20	212-12	RECEPTACLE (71286)	P1	S	13	
21	MS20426D3-4	RIVET	P1	S	8	
22	MS20426D3-7	RIVET	P1	S	8	

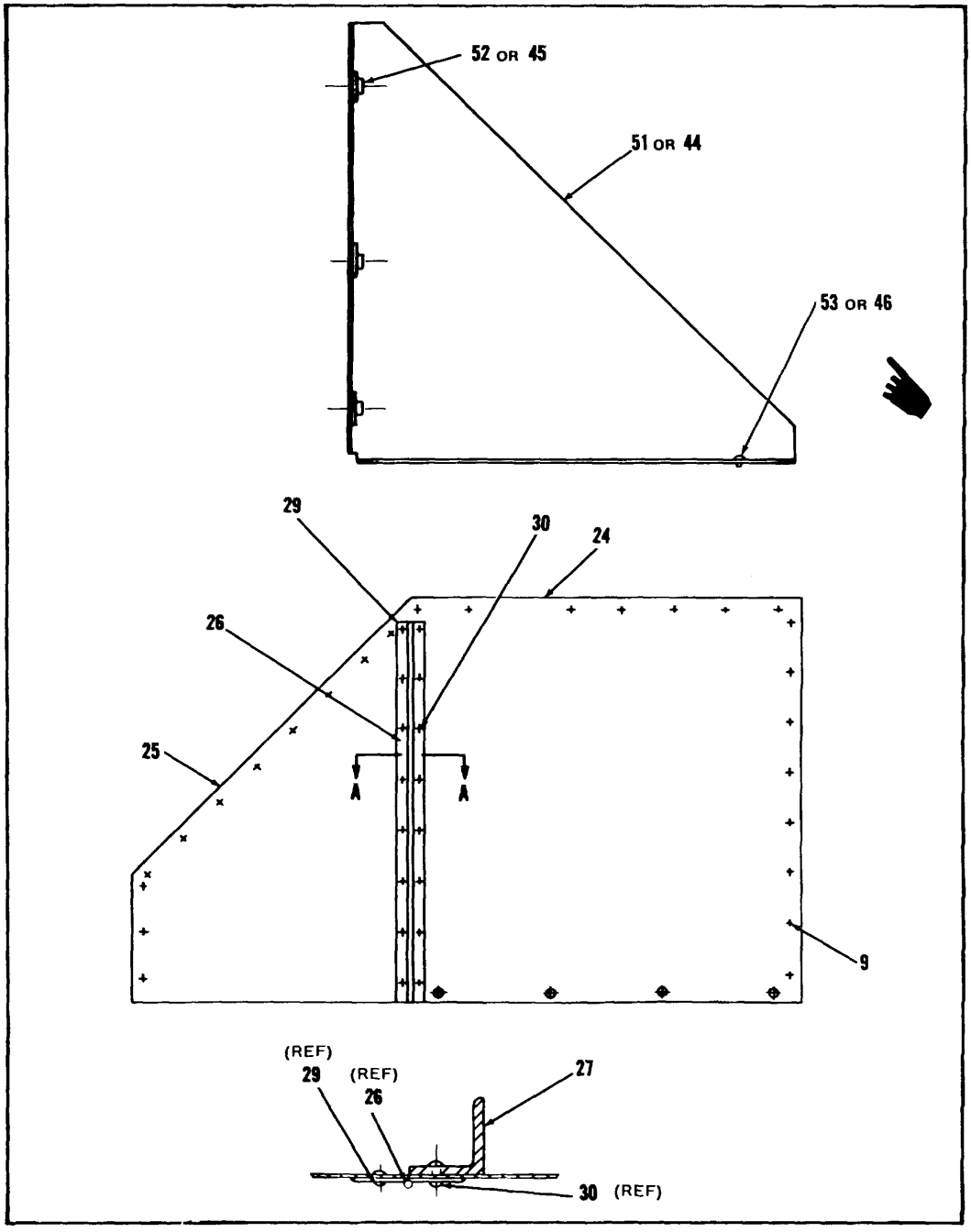

Figure 12. U7722 Chassis Assembly (2 of 5)

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
12 - 23	337663-50	.SIDE SUBASSEMBLY, Left hand	X2	B	1	
24	337663-11	.. PANEL, Alum sht., 6061-T6, ... 0.064 in. ± 0.005 in. thk. (QQ-A-250/1 1)	M	B	1	
25	337663-13	.. PANEL, Alum sht., 6061-T6, ... 0.064 in. ± 0.005 in. thk. (QQ-A-250/l 1)	M	B	1	
26	MS202574-2075	.. HINGE	P1	S	1	
27	337663-25	ANGLE, Alum., 6061-T6,.....	M	B	ARS	
		.. 1.00 x 1.00 x 0.125, (QQ-A-200/8) (ATTACHING PARTS)				
28	212-12	.. RECEPTACLE (71286)	P1	S	13	
29	MS20426D3-4	.. RIVET	P1	S	8	
30	MS20426D3-7	.. RIVET ..... -- * --	P1	S	8	
31	4362PB36	. BENCH, PORTABLE (10199)	X2	B	1	
32	198571-004	. LABEL, Identification (80063).....	X2	S	1	
33	337663-110	. BACK SUBASSEMBLY.....	X2	B	1	
34	337663-15	.. PANEL, Alum ., sht., 6061-T6, ... 0.064 in. ±0.005 in. thk. (QQ-A-250/1 1)	M	B	1	
35	337663-31	.. ANGLE, Alum 6061-T6,.....	M	B	1	
		1.00 x 1.00 x 0.125 in., ... (QQ-A-200/8) (ATTACHING PARTS)	M	B	1	
36	MS20426D3-6	.. RIVET	P1	S	16	
37	212-12	.. RECEPTACLE (71286)	P1	S	7	
38	MS20426D3-5	.. RIVET ..... -- * --	P1	S	14	
39	MS35495-94	. SCREW	P1	S	15	
40	337663-80	. ANGLE BRACKET SUBASSEMBLY,.... Right hand (ATTACHING PARTS)	M	B	1	
41	MS35207-262	.SCREW	P1	S	3	
42	AN315-3R	.NUT	P1	S	3	
43	MS35338-21	WASHER ..... - - * --	P1	S	3	
44	337663-17	BRACKET, Alum. sht., 6061-T6 .M 0.0831 in, ±0.005 in. thk. (QQ-A-25)0/11)	B	1		
45	22NA21-22-02	NUT, Self-locking..... P1 plate (22599) (ATTACHING PARTS)	S	3		
46	MS20426D3-5	RIVET ..... P1 -- * --	S	6		

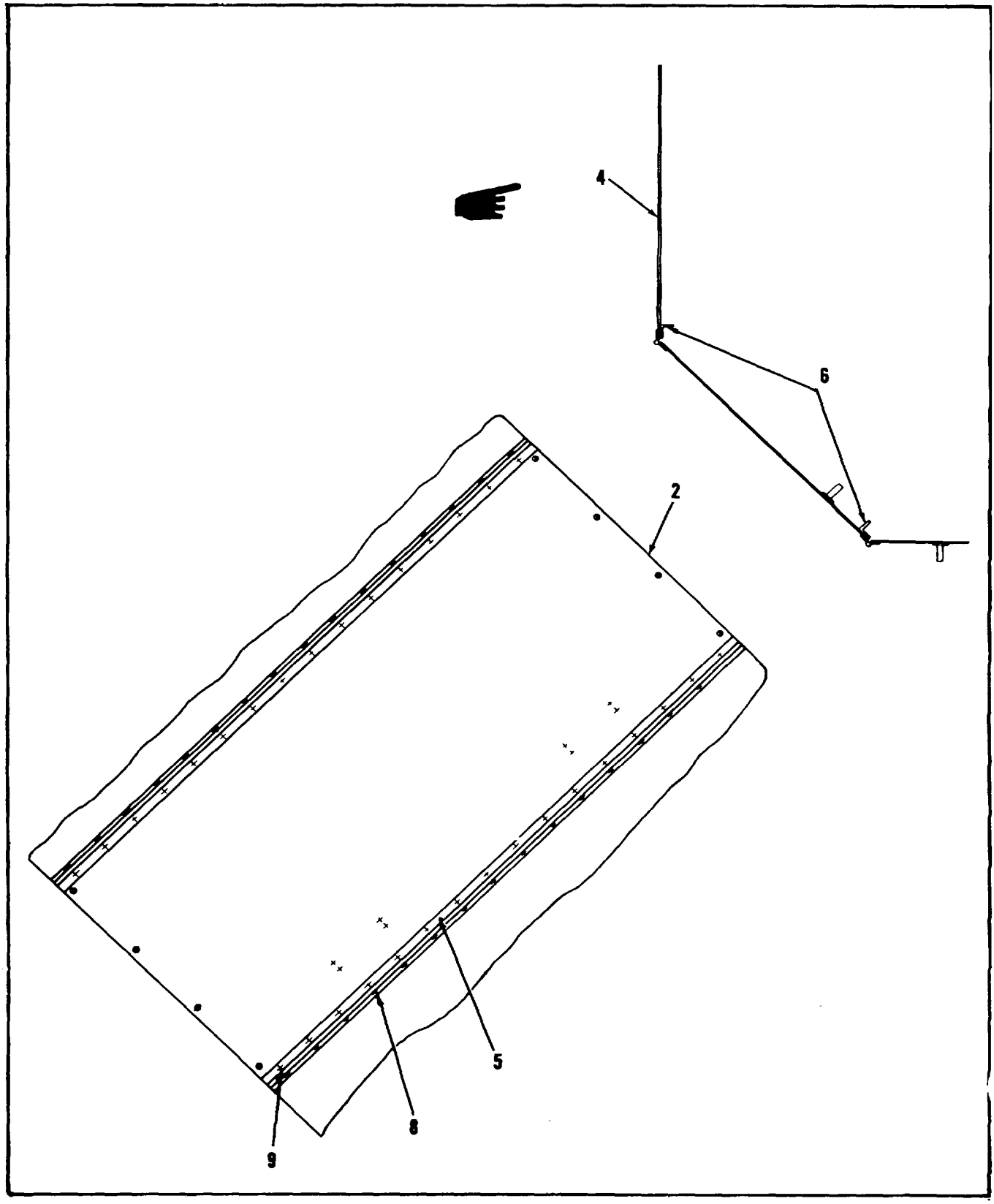

Figure 12. U7722 Chassis Assembly (3 of 5)

FIGURE & INDEX NUMBER	PART NUMBER	FSCM	DESCRIPTION 1 2 3 4 5 6 7	UNITS PER ASSY	USABLE ON CODE	SMR CODE
12 -47	337663-70		. ANGLE BRACKET SUBASSEMBLY, ... Left hand (ATTACHING PARTS)	X2		B 1
48	MS35207-262		. SCREW P1 ..... S	3		
49	AN315-3R		. NUT P1 ..... S	3		
50	MS35338-24		. WASHER P1 ..... S	3		
			-- * --			
51	337663-17		. . BRACKET, Alum sht., 6061-T6, ... 0.081 in. ±0.005 in. thk. (QQ-A-250/11)	M		B 1
52	22NA21-22-02		. . NUT, Self-locking, ... plate (22599) (ATTACHING PARTS)	P1		S 3
53	MS20426D3-5		. . RIVET	P1		S 6
			-- * --			
54	337663-30		. RISER SUBASSEMBLY	X2		B 1
55	337663-07		. . PANEL, Alum sht., 6061-T6 ..... 0.064 in. ± 0.005 in. thk. (QQ-A-250/11)	M		B 1
56	337663-37		. . CHANNEL, Alum., 6061-T6 ..... 4.00 x 2.00 x 0.150 in., (QQ-A-200/8)	M		B 5
57	337663-35		. . CHANNEL, Alum., 6061-T6, ... 4.00 x 2.00 x 0.150 in., (QQ-A-200/8)	M		B 1
58	337663-33		. . CHANNEL, Alum., 6061-T6, ... 4.00 x 2.00,x 0.150 in., (QQ-A-200/8)	M		B 1
59	337663-23		. . ANGLE, Alum., 6061-T6, ... 1.75 x 1.75 x 0.125 in., (QQ-A-200/8) (ATTACHING PARTS)	M		B 10
60	MS20470D3-7		. . RIVET	P1		S 100
			-- * --			
61	337663-45		. SPRING, Steel annealed, ... 0.032 in. ± 0.005 in. thk., (MIL-S-17919) (ATTACHING PARTS)	P1		S 1
62	MS35206-243		. SCREW P1 ..... S	1		
63	MS35649-282		. NUT P1 ..... S	1		
64	MS35338-23		. WASHER P1 ..... S	1		
65	337663-43		. SPRING, Steel annealed, ... 0.032 in. ± 0.005 in. thk., (MIL-S-17919)	P1		S 1

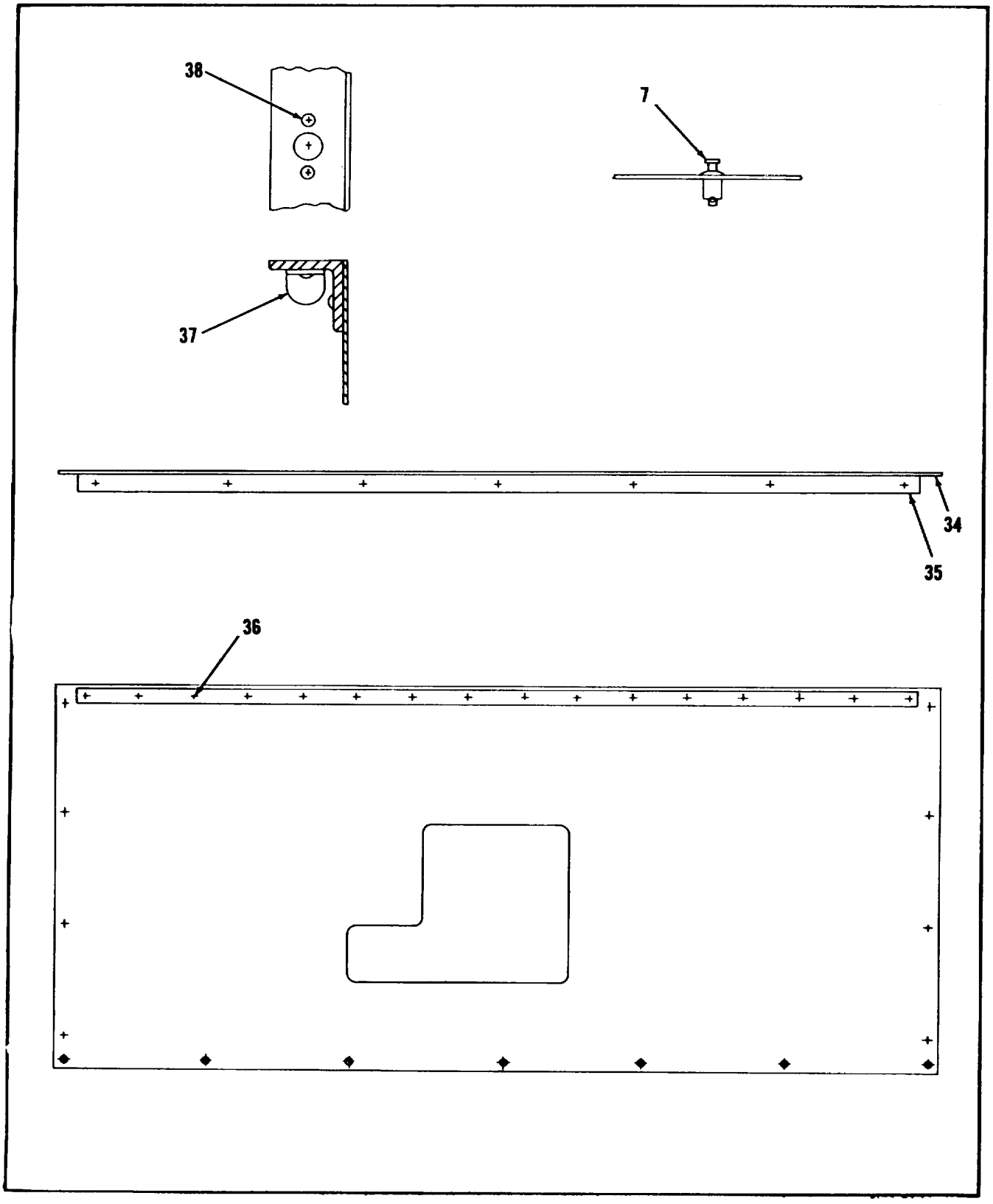

Figure 12. U7722 Chassis Assembly (4 of 5)

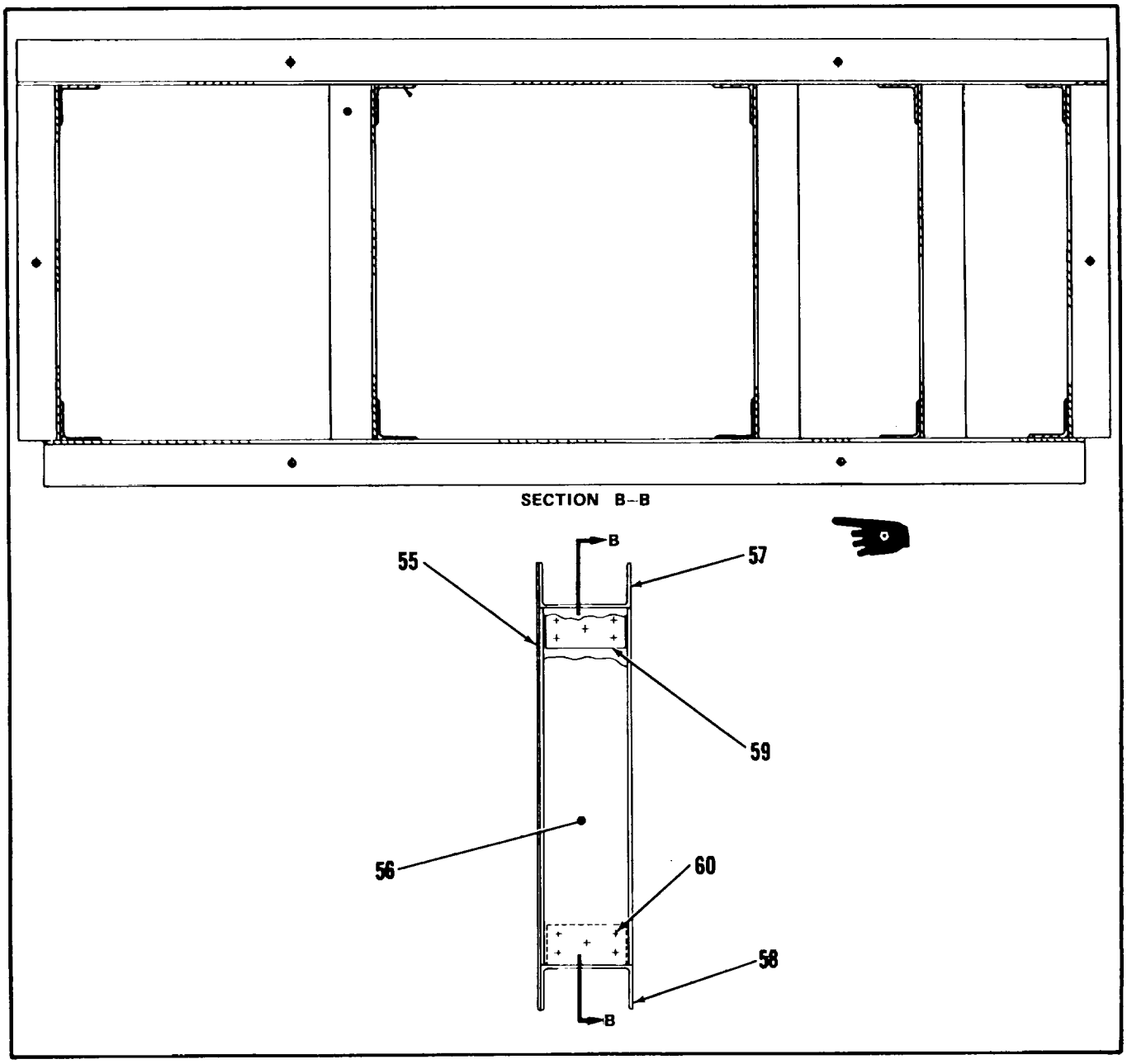

Figure 12. U7722 Chassis Assembly (5 of 5)

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6 7 DESCRIPTION	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
		(ATTACHING PARTS)				
12 - 66	MS35206-243	. SCREW	P1	S	2	
67	MS35649-282	. NUT.....	P1	S	2	
68	MS35338-23	. CASHIER.....	P1	S	2	
		-- * --				
69	337663-21	. BLOCK ,Alum., round, 6061-T6, ... (WW-T-700/6) (ATTACHING PARTS)	X2	B	1	
70	MS35207-260	. SCREW	P1	S	4	
71	MS35338-24	. WASHER	P1	S	4	
		-- * --				
72	337663-41	. SPRING, Steel, annealed, ... 0.032 in. ± 0.005 in. thk. (MIL-S- 17919) (ATTACHING PARTS)	P1	S	1	
73	MS35206-243	. SCREW	P1	S	2	
74	MS35649-282	. NUT.....	P1	S	2	
75	MIS35338-23	. WASHER	P1	S	2	
		-- * --				
76	CL-18220 (CL18220)	. CLAMP, Strap, ... tapped heel (99862) (ATTACHING PARTS)	P1	S	1	
77	CL-123 (CL123)	. NUT, Flanged (99862)	P1	S	1	
78	CL-254 (C L254)	. WASHER, Flat (99862).....	P1	S	5	
		-- * --				
79	CL-24306 (CL24306)	. SPRING (99862).....	P1	S	1	
80	CL-11320 (CL11320)	. STUD, Stainless steel (99862)..... (ATTACHING PARTS)	X2	B	1	
81	MS35649-202	. NUT.....	P1	S	2	
		-- * --				
82	CL-23312 (CL23312)	. SCREW, Knurled head (99862)	P1	S	1	
83	CL-1-GB (CL1GB)	. GUIDE BLOCK (99862)	X2	B	1	

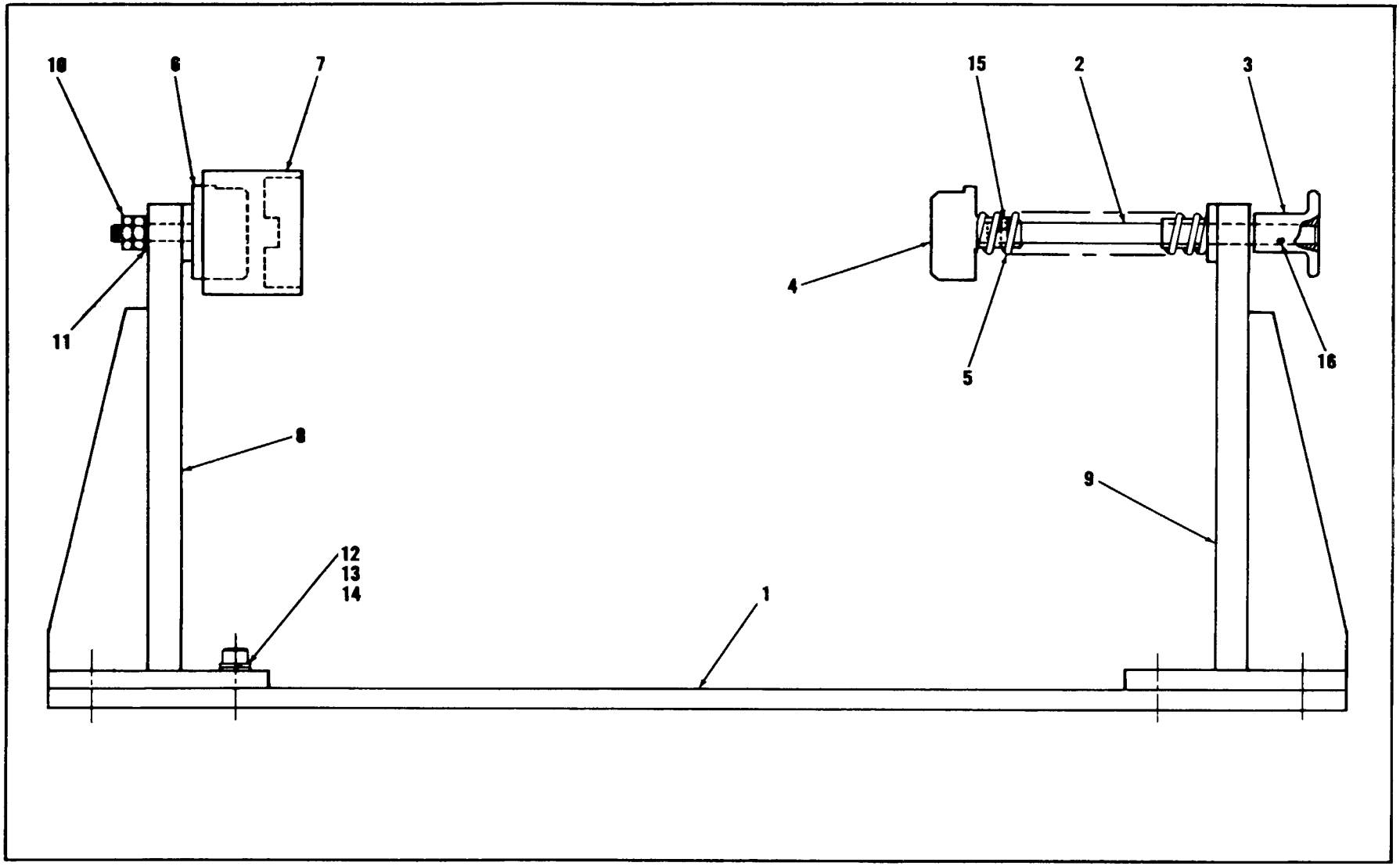

Figure 12A. Holding Fixture, TC613

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6 7 DESCRIPTION	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
12A-	P96371-000	HOLDING FIXTURE, TC613.....			REF	
1	P98626-000	. BASE, Fixture			1	
2	P98628-000	. ROD, Plunger.....			1	
3	P98629-000	. HANDLE, Plunger			1	
4	P98630-000	. ADAPTER, Plunger.....			1	
5	P98631-000	. SPRING, Compression			1	
6	P98632-000	. ADAPTER No. 1			1	
7	P98633-000	. ADAPTER No. 2			1	
8	P98634-000	. SUPPORT, L.H			1	
9	P98635-000	. SUPPORT, R.H.....			1	
10	AN316-8R	. NUT, Shear, 1/2-2onf-3 (88044)			2	
11	MS20002-8	. WASHER, Flat, 1/2 (96906)			1	
12	MS20002-6	. WASHER, Flat, 3/8 (96906)			8	
13	MS35338-46	. WASHER, Lock, 3/8 (96906)			8	
14	MS16998-74	. SCREW, Cap, socket head, 3/8-24UNF- ..... 3A x 1 lg. (96906)			8	
15	MS16562-224	. PIN, Spring, 1/8 dia. x 0.750 lg. (96906)			1	
16	NAS1081C08D4N	. SETSCREW, Self-locking, 8-32 UNC-..... 3A x 1/4 lg. (10060)			2	
	P98656-000	. ADAPTER No. 3			1	

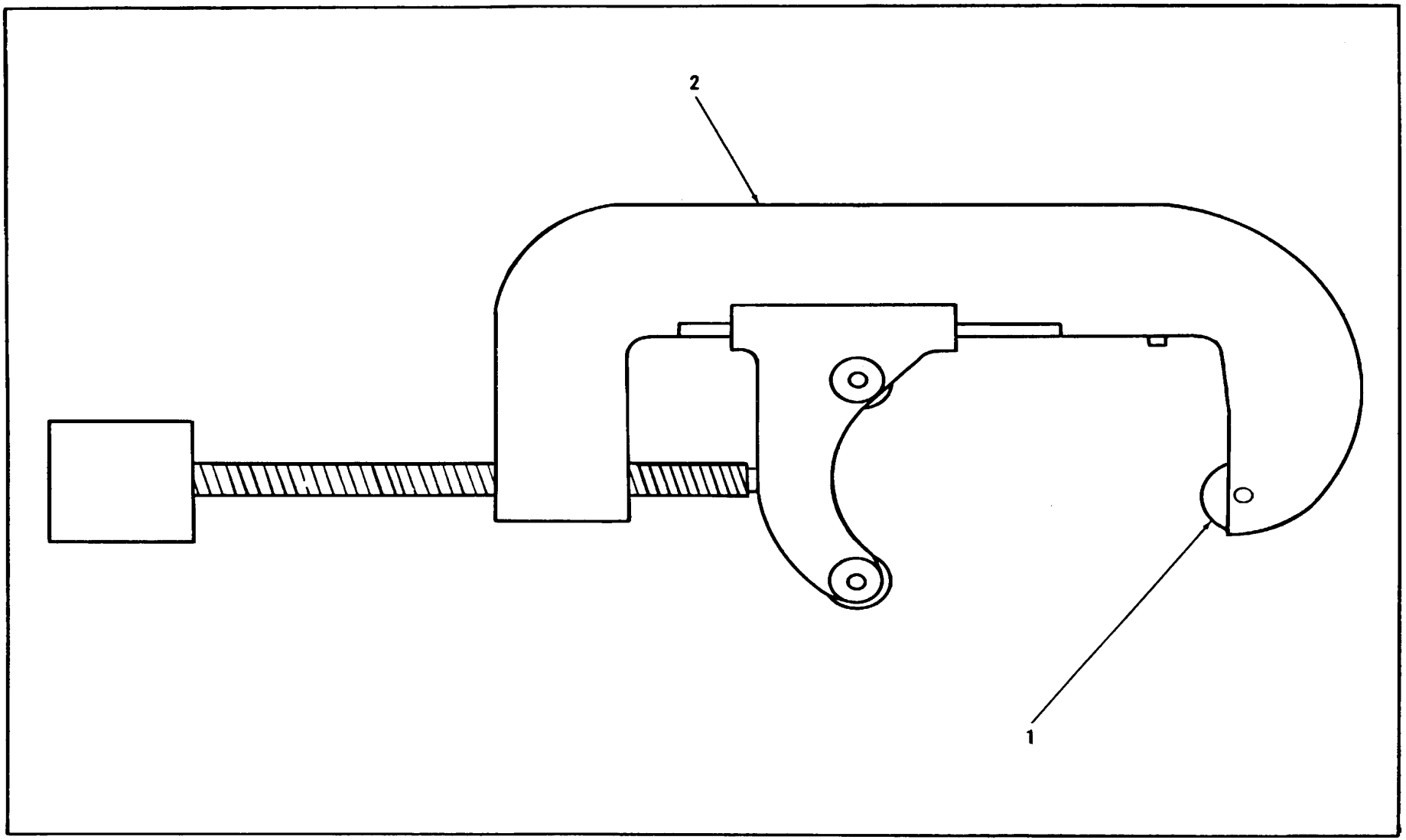

Figure 12B. Crimping Tool, TC614

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6 7 DESCRIPTION	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
12B-	P96372-000	CRIMPING TOOL, TC614.....			REF	
1	P98636-000	. WHEEL, Forming			1	
2	40	. CUTTER, Tubing, rigid (50893)			1	

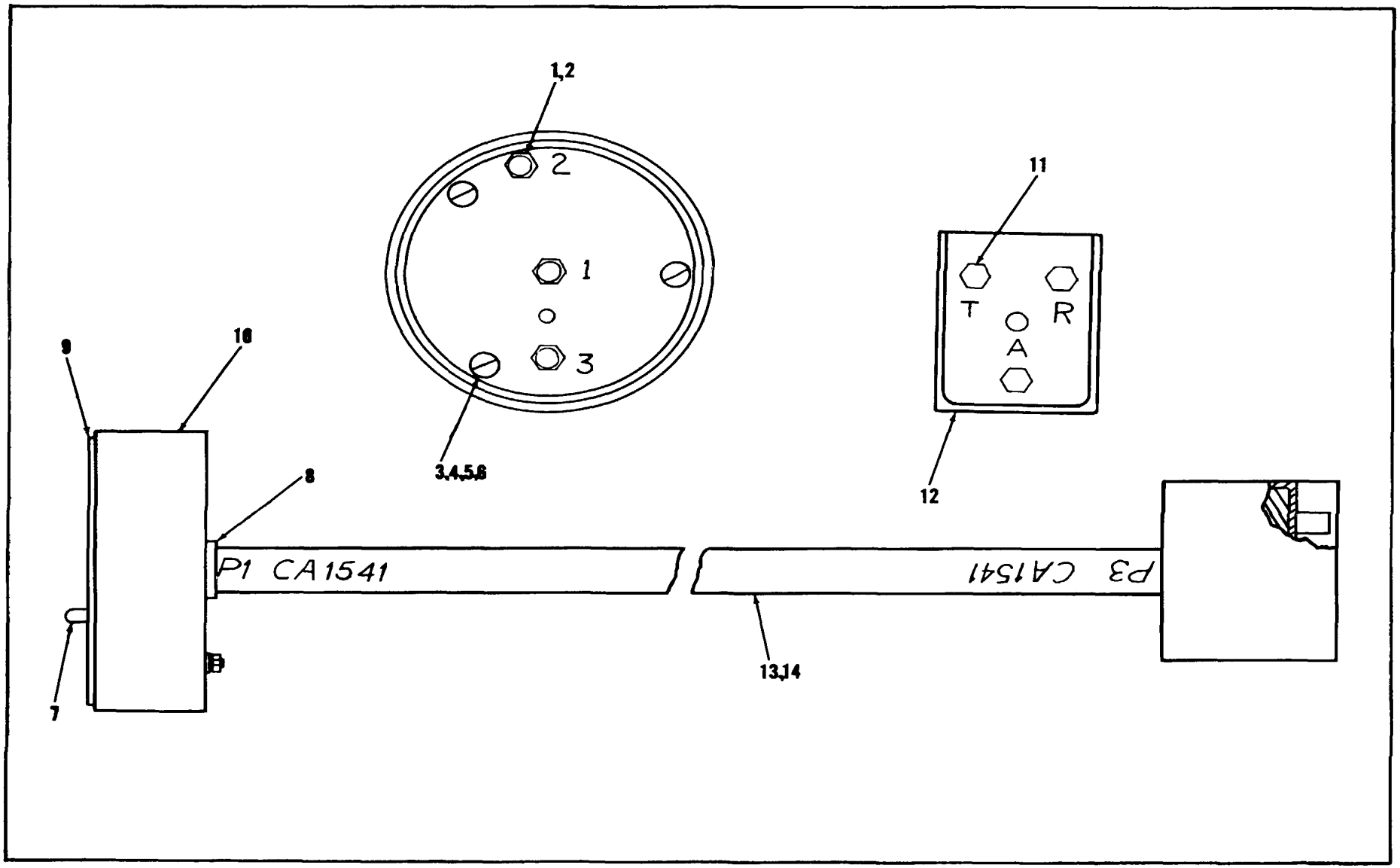

Figure 13. CA 1541 Cable Assembly

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6 7 DESCRIPTION	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
13-	337629	CABLE ASSEMBLY, CA1541 ..... (see fig. 1 for NIIA)			REF	
	No Number	. CONNECTOR ASSEMBLY, P1	X2	B		
1	51-077-0000	. . ADAPTER, Plug to jack (98291)	P1	S	3	
2	51-012-0000	. . ADAPTER, Right angle (98291) ..... (ATTACHING PARTS)	P1	B	3	
3	MS35206-221	. . SCREW, Mach., pan hd., 4-40 x 1 in.	P1	S	3	
4	AN960-4L	. . WASHER, Flat, No. 4	P1	S	3	
5	MS35340-40	. . WASHER, Lock, No. 4	P1	S	3	
6	MS35649-42	. . NUT, Plain, hex, 4-40 ..... -- * --	P1	S	3	
7	337629-07	. . PIN, Cor. Res. steel rod Type 302 (MIL-S-7720)	M	S	1	
8	MNIS3420-6	. . BUSHING, Rubber	P1	S	1	
9	337629-03	. . HOUSING, Rnd., Nylatron (L-P-410)	X2	B	1	
10	337629-05	. . HOUSING, Rnd., Nylatron (L-P-410)	X2	B	1	
	No Number	. CONNECTOR ASSEMBLY, P3	X2	B		
11	51-010-0000	. . ADAPTER, Straight (98291)	P1	S	3	
12	337629-01	. . HOUSING, Plastic, sh., Nylatron (L-P-410)	P	S	1	
13	MIL-I-7444 (MILI7444)	. INSULATION SLEEVING, Electrical, vinyl	P1	S	ARS	
14	RG-188A/U (RG188AU)	. CABLE, Radio frequency (MIL-C-17/69) (81349)	P1	S	ARS	

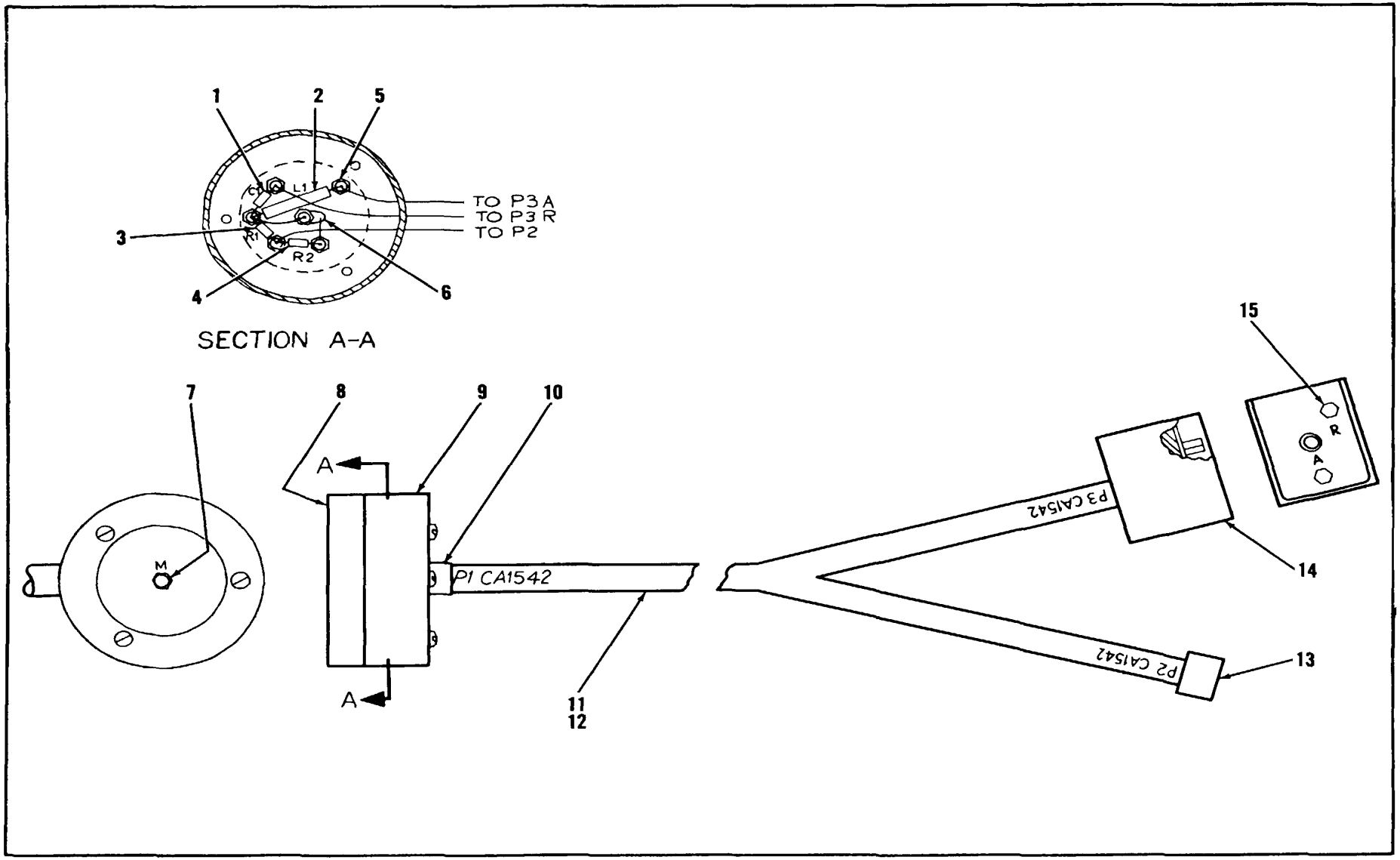

Figure 14. CA 1542 Cable Assembly

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6 7 DESCRIPTION	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
14-	337630	CABLE ASSEMBLY, CA1542 ..... (see fig. 1 for NHA).			REF	
	No Number	. CONNECTOR ASSEMBLY, P1	X2	B		
1	CK06CW103K	. . CAP., Fixed, ceramic, ... 0.01 mfd, ±20'% 200 WVDC (per MIL-C-11015/19) (81349)	P1	S	1	
2	4604	. . COIL, Radio, freq., ... 1.5uf, ± 10% (76487)	P1	S	1	
3	RCR07GFS13J	. . RESISTOR, Fixed, comp., ... 51K, ±5,, 1/4 W, (per MIL-R-39008/1) (81349)	P1	S	1	
4	RCR07GF10J	. . RESISTOR, Fixed, comp., ... 51 ohm, ±5%, 1/4 W, (per MIL-R-39008/1)	P1	S	1	
5	756	. . TERMINAL, Stand off (81312)	M	S	5	
6	MS35436-32	. . TERMINAL, LUG	P1	S	1	
7	52-043-000	. . ADAPTER, Straight (98291)	P1	S	1	
8	337630-03	. . HOUSING, Alum bar, ... 2024-T4 (QQ-A-200/3)	X2	S	1	
9	337630-05	. . HOUSING, Alum bar, ... 2024-T4 (QQ-A-200/3)	X2	S	1	
10	MS3420-6	. . BUSHING, Telescoping, rubber ..... (ATTACHING PARTS) -- * --	P1	S	1	
11	MIL-I-7444 (MILI7444)	. INSULATION SLEEVING, ... Electrical, vinyl	P1	S	ARS	
12	RG-188A/U (RG 188A/U)	. CABLE, Radio frequency ..... (per MIL-C-17/69) (81349)	P1	S	ARS	
13	819-B1800W (819B1800W)	. CONNECTOR, Plug, elect	P1	S	1	
	No Number	. CONNECTOR ASSEMBLY, P3	X2	B		
14	337630-01	. . HOUSING, Plastic sheet, ... Nylatron, GS(L-P-410)	X2	B	1	
15	51-010-000	. . ADAPTER, Straight (98291)	X2	B	2	

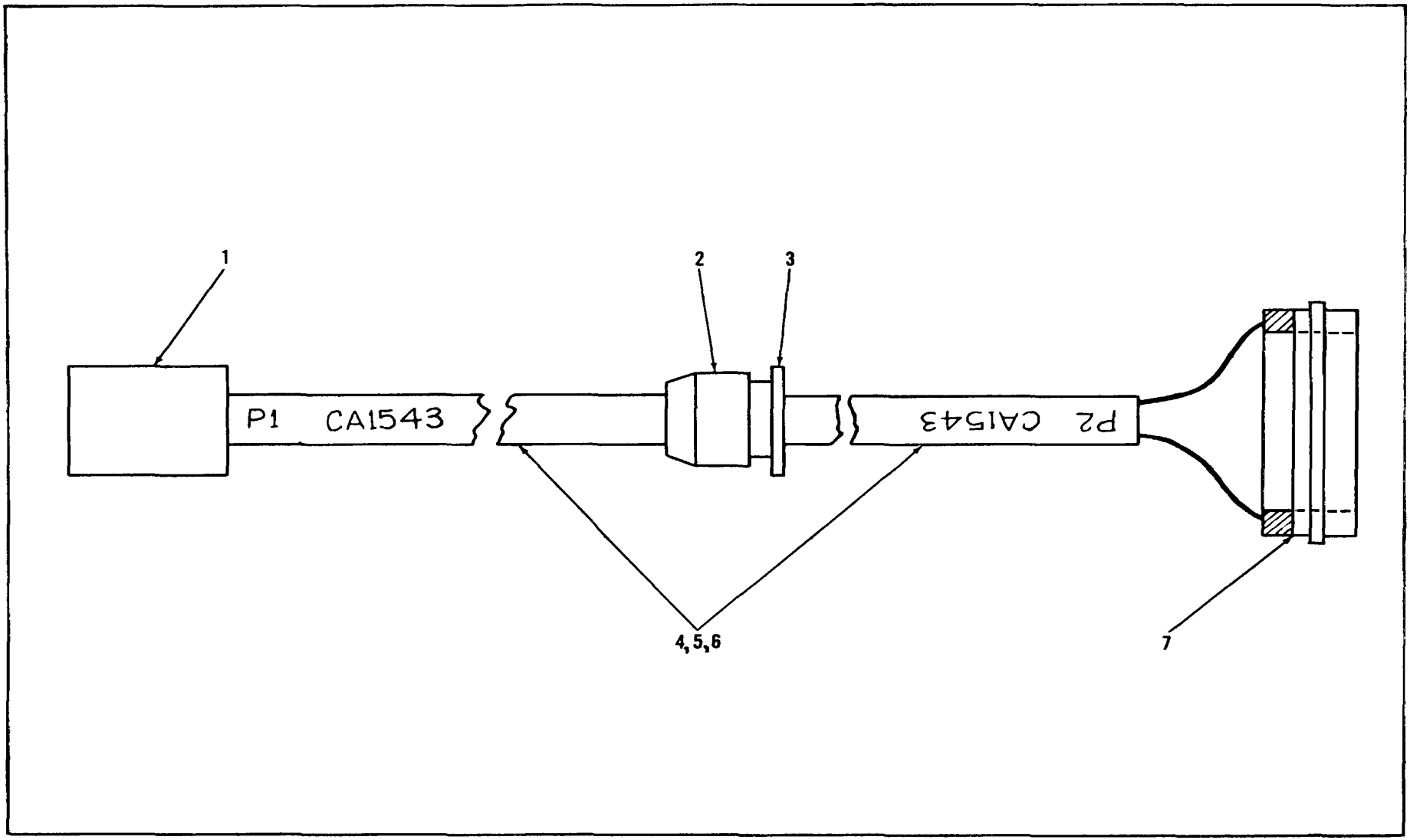

Figure 15. CA 1543 Cable Assembly

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6 7 DESCRIPTION	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
15-	337632	CABI,E ASSEMBLY, CA1543 ..... (see fig. 1 for NHA)			REF	
1	PT06P-20-24P (PT06P20-24P) (P1)	CONNECTOR, Plug; elec. (77820)	P1	S	1	
2	MS3057-6B	. ADAPTER, Cable to connector	P1	S	1	
3	2182-16	. RECEPTACLE, Dummy (71463)	X2	B	1	
4	MIL-I-7444 (MILI7444)	. INSULATION SI,EEVING, vinyl	P1	S	ARS	
5	MIL-W-16878 (MILW16878)	. WIRE, Insulated, shielded, ... size 26 (0.019) Type E	P1	S	ARS	
6	10-442481-12	. CABLE, Special purpose, ... coaxial (77820)	P1	S	1	
7	P69901	. CONNECTOR, Recp., elec.,..... TA386 (80063)	P1	S	1	

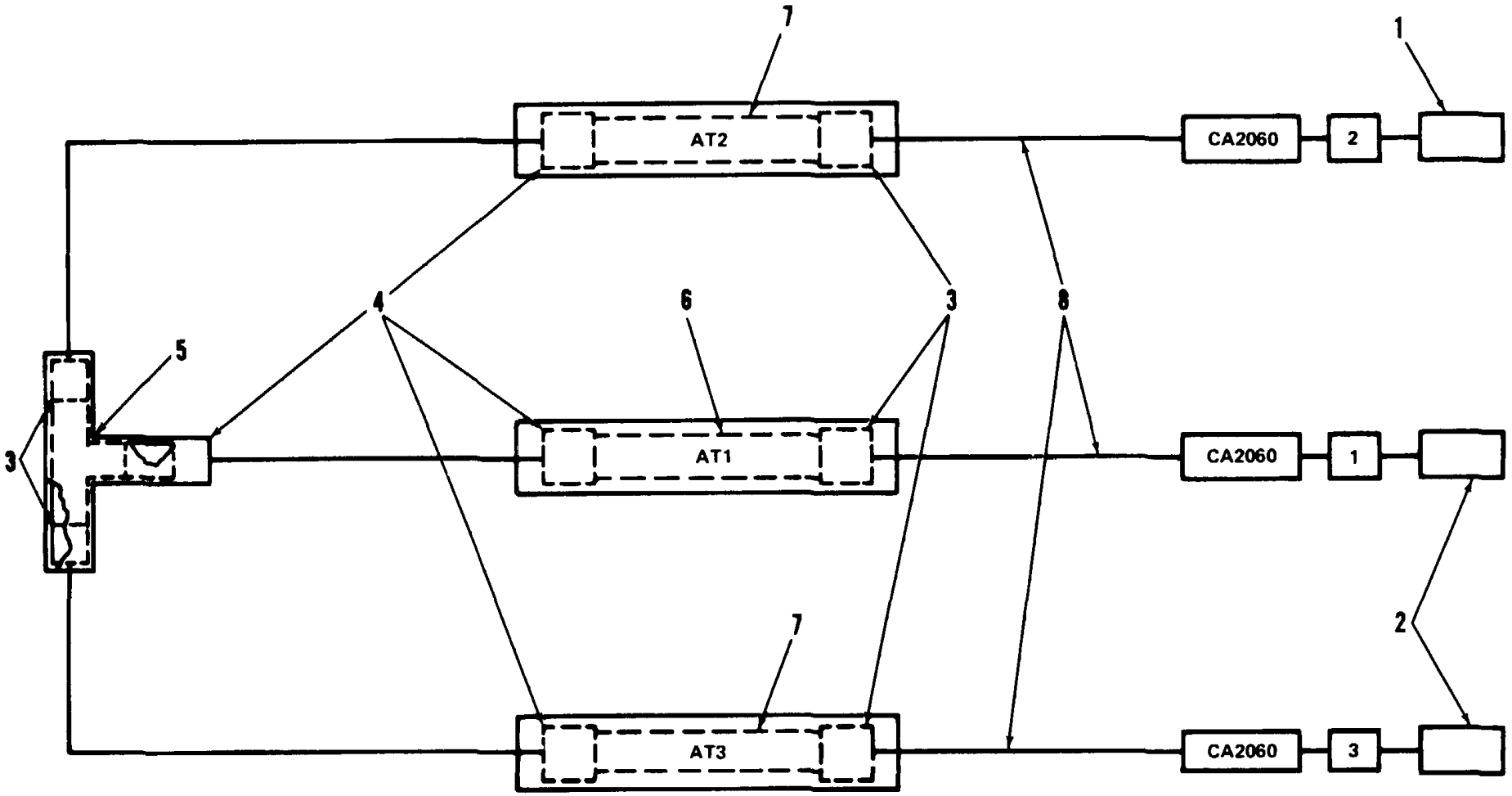

Figure 15A. CA2060 Cable Assembly

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6 7 DESCRIPTION	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
15A-	338289	CABLE ASSEMBLY, CA2060		REF		
1	UG-536B/U	. CONNECTOR, Plug, BNC		1		
2	51-000-3141	. CONNECTOR, Plug.....		2		
3	UG-88E/U	. CONNECTOR, Plug, BNC		5		
4	UG-89C/U	. CONNECTOR, Jack, BNC		4		
5	UG274B	. TEE, Adapter, connector, BNC		1		
6	AE-1OB	. ATTENUATOR, 10db.....		1		
7	AA-10OB	. ATTENUATOR, 10db.....		2		
8	RG-58/U	. CABLE, Radio frequency		ARS		

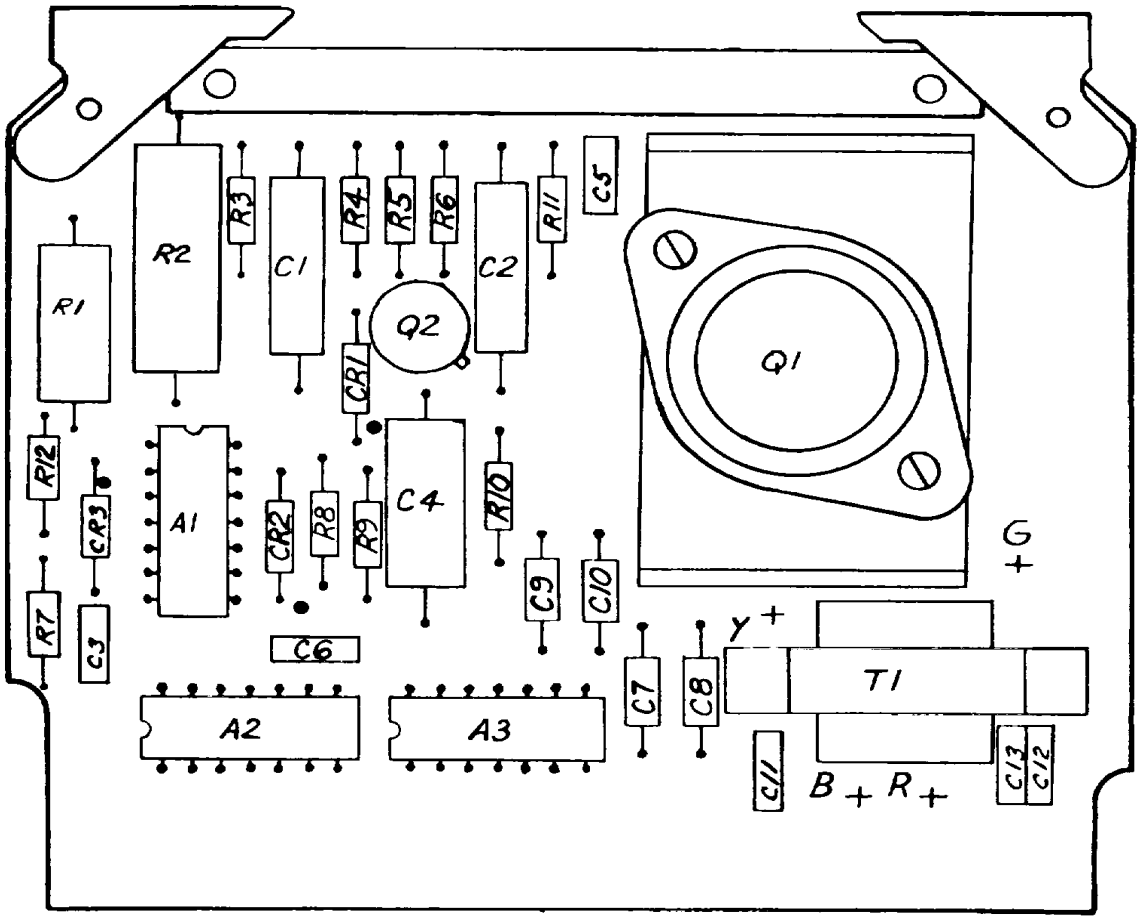

Figure 16. Signal Conditioner

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6 7 DESCRIPTION	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
16- (A5)	285222-000	CONDITIONER, Signal ..... (see fig. 8 for NHA)			REF	
1 (A1)	SP380A	. GATE, Input NOR (18324).....	P1	S	1	
2 (A2)	NE526A	. COMPARATOR, Analog,..... high speed (18324)	P1	S	1	
3 (A3)	MC832P	. CIRCUIT, Integrated,..... buffer dual (04713)	P1	S	I	
4 (C1)	29F631	. CAPACITOR, Fixed, electrolytic, ... 4.5 mfd, 30V, ± 75% - 15% (01002)	P1	S	1	
5 (C2)	TAN36BJ010MM	. CAPACITOR, Fixed, electrolytic, ... 1.0 mfd, 50V, ±20% (09023)	P1	S	1	
6 (C3, C6)	CK06BX104K	. CAPACITOR, Fixed, ceramic dielectric, ... 0.1 mfd, 100V, ±10% (per MIL-C-11015/19) (81349)	P1	S	2	
7 (C4) (81349)	CSR13BF226M	. CAPACITOR, Fixed, electrolytic ..... 22 mfd, 35V, ±20% (per MIL-C-39003/1)	P1	S	1	
8 (C5) 11015/19)	CK06BX683K	. CAPACITOR, Fixed, ceramic dielectric, ... 0.068 mfd, 100V, ±10% (per MIL-C-	P1	S	1	
9 (C7, C9) (81349)	CSR13BF474M	. CAPACTIOR, Fixed, electrolytic, ... 0.47 mfd, 35V, ±20% (per MIL-C-39003/1)	P1	S	2	
10 (C8, C10) (81349)	CSR13BF334M	. CAPACITOR, Fixed, electrolytic, ... 0.33 mfd, 35V, ±20% (per MIL-C-39003/1)	P1	S	2	
11 (C11, C12)	CK06BX103K	. CAPACITOR, Fixed, ceramic, ... 0.01 mfd, 200V, -±10% (per MIL-C-11015/19) (81349)	P1	S	2	
12 (C13)	CK06BX223K	. CAPACITOR, Fixed, ceramic, ... 0.022 mfd, 100V, ±10% (per MIL-C-11015/19) (81349)	P1	S	1	
13 (CR1)	1N270	. SEMICONDUCTOR DEVICE, Diode..... (per MIL-C-19500/200) (81349)	P1	S	1	
14 (CR2, CR3)	1N914	. SEMICONDUCTOR DEVICE, Diode..... (per MIL-C-19500/116) (81349)	P1	S	2	
15 (Q1)	2N3055	. TRANSISTOR (per MIL-S-19500/407-USAF) (81349)	P1	S	1	
16 (Q2)	2N1711	. TRANSISTOR (per MIL-S-19500/225) ..... (81349)	P1	S	1	
17 (R1)	RW79U1R00F	. RESISTOR, Fixed, W.W., ... 1 ohm, 3W, ±1%, (per MIL-R-26/5) (81349)	P1	S	1	

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6 7 DESCRIPTION	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
16- 18 (R2)	RW74U2R00F	. RESISTOR, Fixed, W.W., ... 2 ohm, 5W, ±1%, (per MIL-R-26/5) (81349)	P1	S	1	
19 (R3)	RCR07GF621J	. RESISTOR, Fixed, comp.,..... 620 ohm, 1/4W, ±5% (per MIL-R-39008/1) (81349)	P1	S	1	
20 (R4, R12)	RCR07GF201J	. RESISTOR, Fixed, comp.,..... 200 ohm, 1/4W, ±5% (per MIL-R-39008/1) (81349)	P1	S	2	
21 (R5)	RCR07GF273J	. RESISTOR, Fixed, comp.,..... 27K, 1/4W, ±5%, (per MIL-R-39008/1) (81349)	P1	S	1	
22 (R6, RI1)	RCR07GF272J	. RESISTOR, Fixed, comp.,..... 2.7K, 1/4W, ±5%, (per MIL-R-39008/1) (81349)	P1	S	2	
23 (R7)	RCR07GF120J	. RESISTOR, Fixed, comp.,..... 12K, 1/4W, ±5%, (per MIL-R-39008/1) (81349)	P1	S	1	
24 (R8)	RCR07GF511J	. RESISTOR, Fixed, comp.,..... 510 ohm, 1/4W, ±5%, (per MIL-R-39008/1) (81349)	PI	S	1	
25 (R9)	RCR07GF510J	. RESISTOR, Fixed, comp.,..... 51 ohm, 1/4W, ±5%, (per MIL-R-39008/1) (81349)	P1	S	1	
26 (R10)	RCR07GF103J	. RESISTOR, Fixed, comp.,..... 10K, 1/4W, ±5%, (per MIL-R-39008/1) (81349)	P1	S	1	
27 (T1)	AR109	. TRANSFORMER, Audio frequency ..... (07589)	P1	S	1	
	285222-01	. CIRCUIT BOARD			1	
	H-4711	. CARD KIT.....			1	

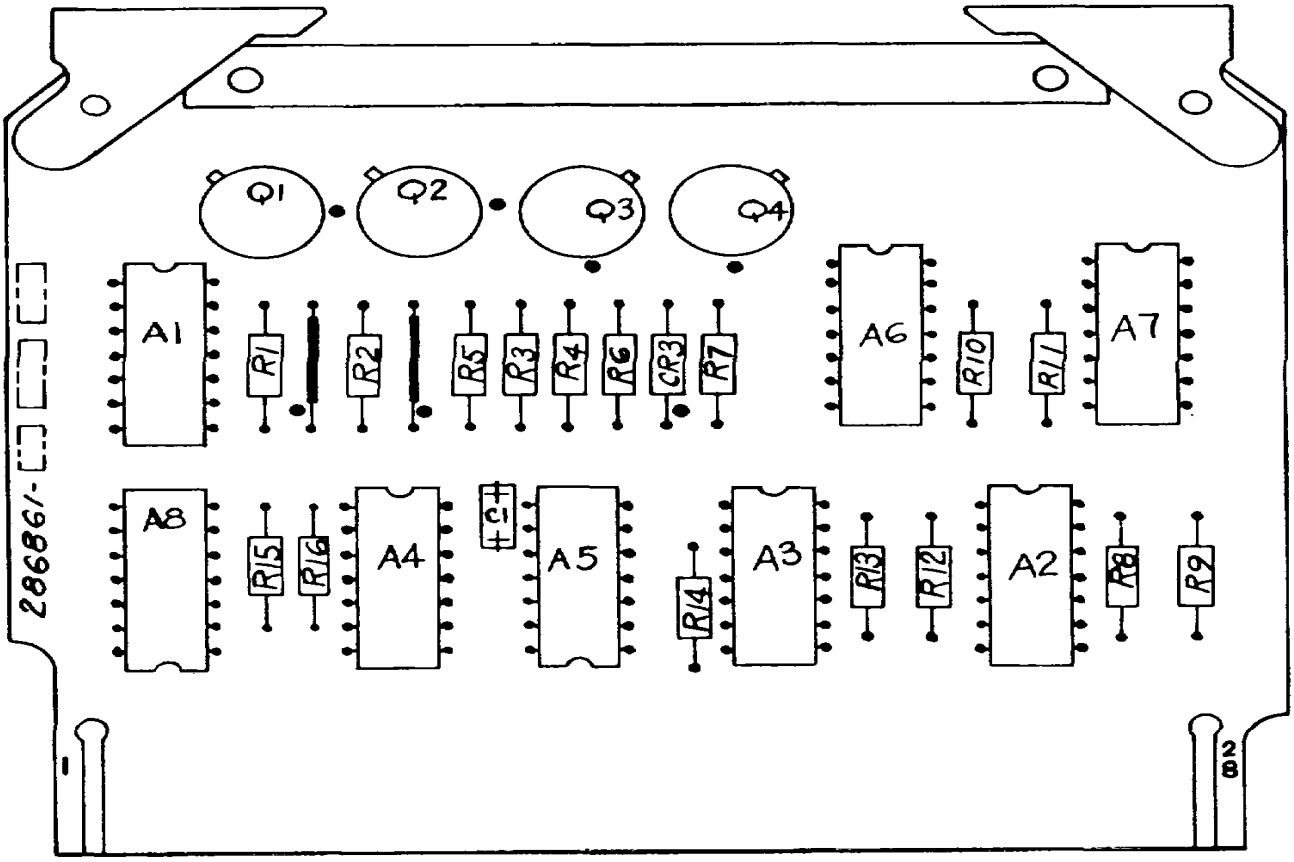

Figure 17. Diagnostic Signal Modulation Buffer

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6 7 DESCRIPTION	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
17-(A6)	286861-000	BUFFER, Modulation, ... diagostic signal sensing tri (see fig. 8 for NHA)			REF	
1 (A1,A2, A4)	MC846P	. CIRCUIT, Integrated (04713)	P1	B	3	
2 (A3)	SP380A	. GATE, Quad 2-input ..... NOR (18324)	P1	S	1	
3 (A5, A6, A7, A8)	MC832P	. CIRCUIT, Integrated (04713)	P1	S	4	
4 (C1)	CK06BX104K	. CAPACITOR, 0.1 mfd ±10%..... (per MIL-C-11015/19) (81349)	P1	S	1	
5 (CR3)	1N914	. DIODE ..... (per MIL-S-14500/116) (81349)	P1	S	1	
6 (Q1, Q2)	2N3502	. TRANSISTOR (01295)	P1	S	2	
7 (Q3, Q4)	2N1711	. TRANSISTOR..... (per MIL-S-19500/225) (81349)	P1	S	2	
8 (R1, R2, R5, R6, R7, R12 R13, R14)	RCR07GF103J	. RESISTOR, Fixed, comp.,..... .....10K, 1/4W, ±5% .....(per MIL-R-39008/1)(81349)	P1	S	8	
9 (R3, R4)	RCR07GF101J	. RESISTOR, Fixed, comp.,..... 100 ohm, 1/4W, ±5% (per MIL-R-39008/1) (81349)	P1	S	2	
10 (R8, R9, R10 R11, R15,	RCR07GF201J	. RESISTOR, Fixed, comp.,..... .....200 ohm, 1/4W, ±5% (per MIL-R-39008/1) (81349)	P1	S	6	
	286861-01	. CIRCUIT BOARD			1	
	H-4711	. CARD KIT.....			1	

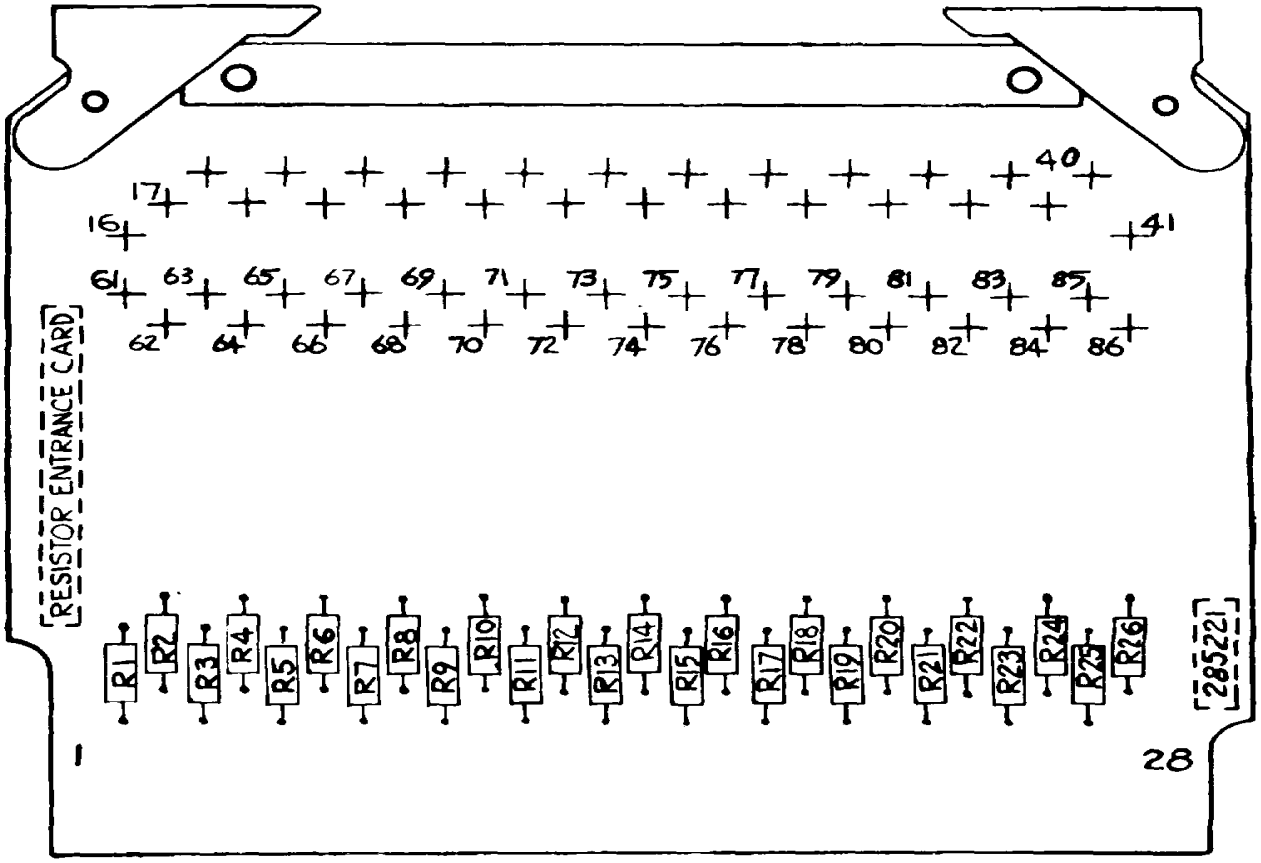

Figure 18. Resistor Entrance PC Card

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6 7 DESCRIPTION	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
18- (A15)	285221-000	. PC CARD, RESISTOR ENTRANCE, ... A15 (see Fig. 8 for NHA)			REF	
1 (R1, R3 - R26)	RC05GF392J	. . RESISTOR, Fixed, comp., ... 3.9K, 1/8W, ±5% (per MIL-R-11/11) (81349)	P1	S	25	
2 (R2)	RC-5GF393J	. . RESISTOR, Fixed, comp., ... 39K, 1/8W, ±5% (per MIL-R-11/11) (81349)	P1	S	1	
	285221-01	. CIRCUIT BOARD.....			1	
	H-4711	. CARD KIT			1	

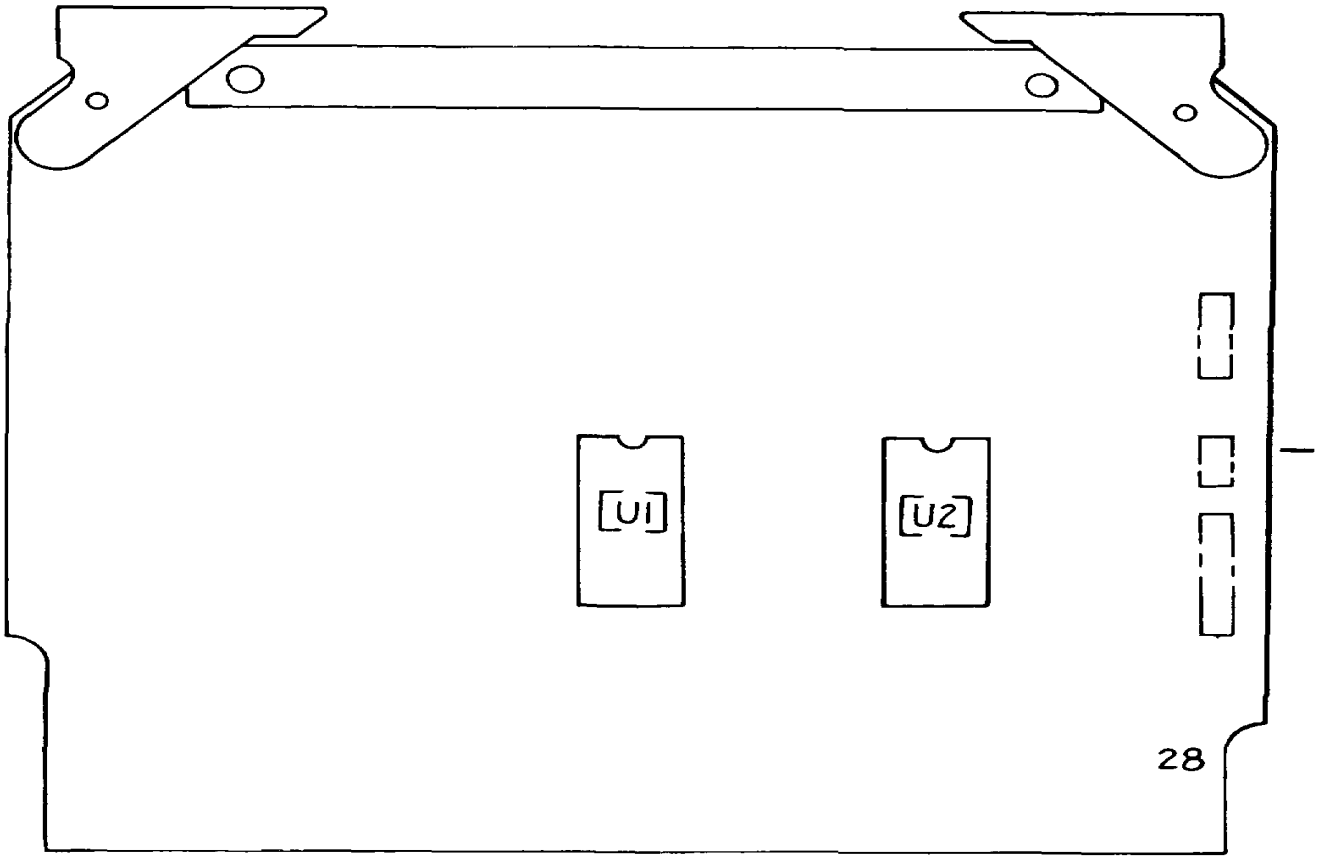

Figure 19. Full Adder

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6 7 DESCRIPTION	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
19- (A22)	285247-000	ADDER, Full (see Fig.....8 for NHA)			REF	
1 (U1, U2)	SN7483N	. CIRCUIT, Integrated (01295)	P1	B	2	
	285247-01	. CIRCUIT BOARD			1	
	H-4711	. CARD KIT.....			1	

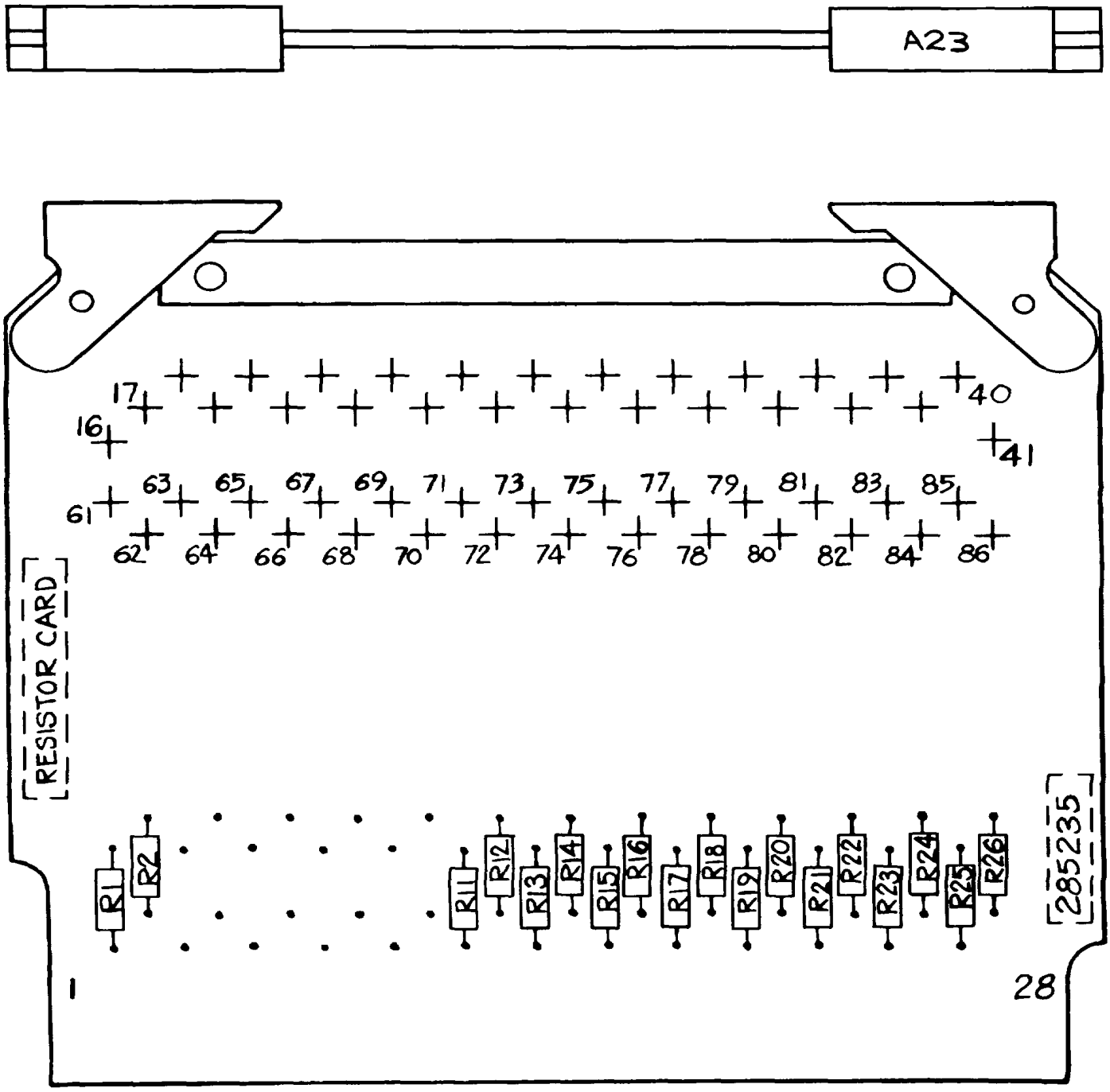

Figure 20. Resistor Card

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6 7 DESCRIPTION	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
20- (A23)	285235-000	CARD, Resistor..... (see Fig.;8 for NHA)		REF		
1 (R1)	RC05GF302J	. RESISTOR, Fixed, comp.,..... 3K, ±5%, 1/8W (per MIL-R-11/11) (81349)	P1	S	1	
2 (R2)	RC05GF912J	. RESISTOR, Fixed, comp., ... 9.1K, ±5%, 1/8W (per MIL-R-11/11) (81349)	P1	S	1	
3 (R11 R26)	RC05GF392J	. RESISTOR, Fixed, comp., ... 3.9K, ±5%, 1/8W (per MIL-R-11/11) (81349)	P1	S	16	
	285235-01	. CIRCUIT BOARD.....			1	
	H-4711	. CARD KIT			1	

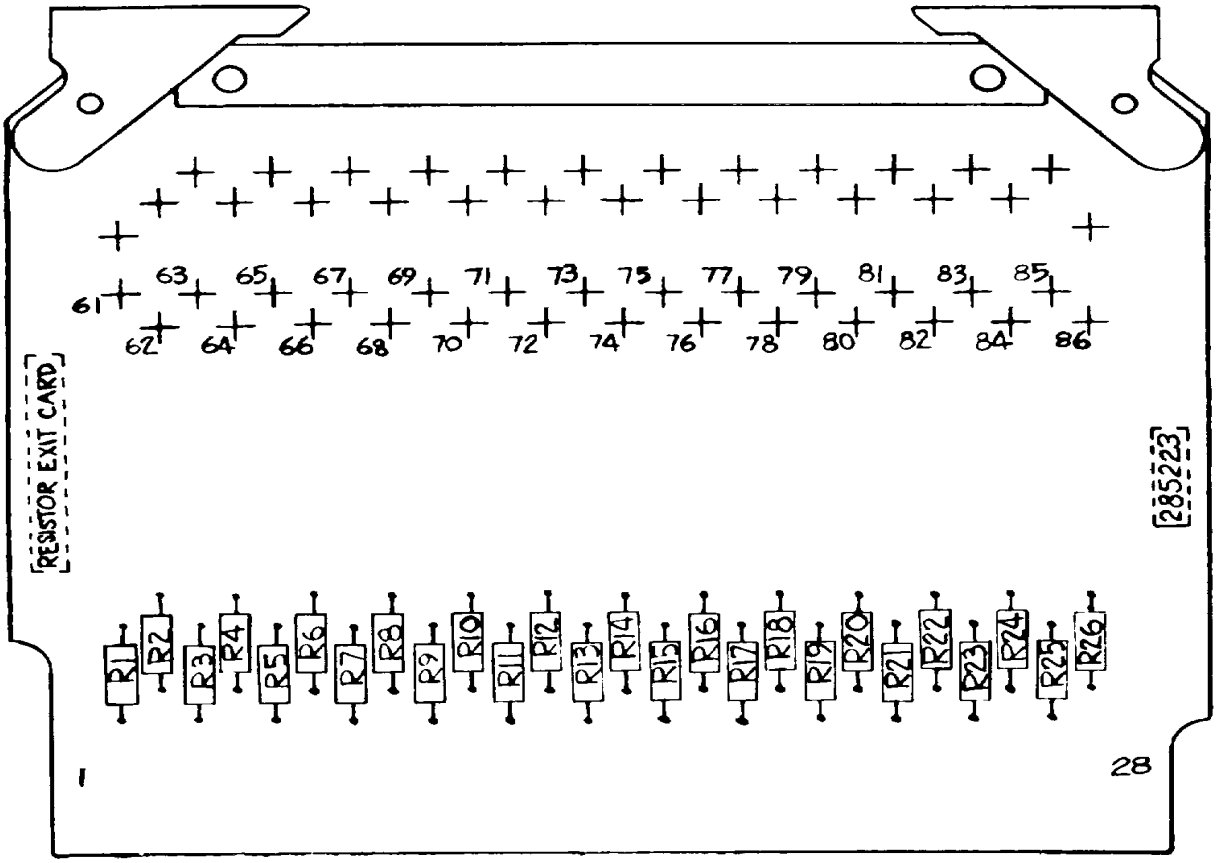

Figure 21. Resistor Exit Card

FIGURE & INDEX NUMBER	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
21-(A30)	285223-000	CARD, Exit, resistor ..... (see Fig. 8 for NHA)			REF	
1 (R1 R26)	RC05GF471J	.RESISTOR, Fixed, comp., 220 ohm ..... ± 5%, 1/4 W (per MIL-R-11/11) (81349)	P1	S	26	
	285223-01	.CIRCUIT BOARD.....			1	
	H-4711	.CARD KIT			1	

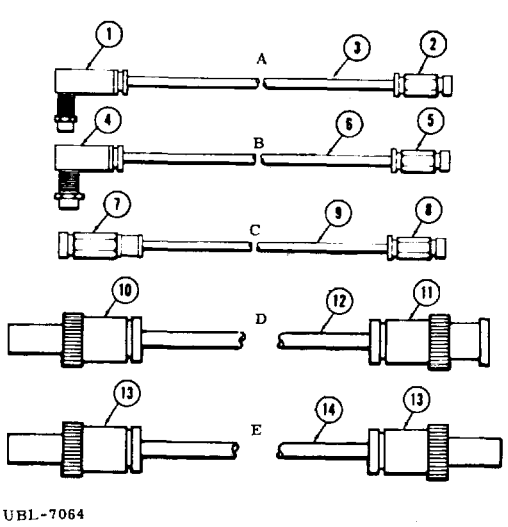

Figure 22. CS 717, CS1718, CS1719, CS1720, and CS1721 Cable Assemblies.

FIGURE & INDEX NUMBER	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
22-A	7242768	CABLE ASSEMBLY, CS1717 (98750) (See fig. 1 for NHA)			REF	
1	51-012-0000	CONNECTOR, Right angle (98291)	X2	B	1	
2	51-008-0000	CONNECTOR (98291)	X2	B	1	
3	RG-188/U	CABLE, Radio frequency (per MIL-C-17/69) (81349)	P1	S	ARS	
22-B	7242769	CABLE ASSEMBLY, CS1718 (98750) (see fig. I for NHA)			REP	
4	51-011-0000	CONNECTOR, Right angle (98291)	X2	B	1	
5	51-008-0000	CONNECTOR (98291) .	X2	B	1	
6	RG-188/U	CABLE, Radio frequency (per MIL-C-17/69) (81349)	P1	S	ARS	
12-C	7242770	CABLE ASSEMBLY, CS1719 (98750) (see fig. 1 for NHA)	X		REF	
7	51-007-0000	CONNECTOR (98291)	X2	B	1	
8	51-008-0000	CONNECTOR (98291).	X2	B	1	
9	RG-188/U	CABLE, Radio frequency (per HIL-C-17/69) (81349)	P1	S	ARS	
22-D	7242771	CABLE ASSEMBLY, CS1720 (98750) (See fig. 1 for NHA)			REF	
10	UG-89C/U	CONNECTOR, Jack, BNC	X2	B	1	
11	UG-88E/U	CONNECTOR, Plug, BNC	X2	B	1	
12	RG-58/U	CABLE, Radio frequency	P1	S	ARS	
22-E	7242772	CABLE ASSEMBLY, CS1721 (98750) (see fig. 1 for NHA)			REF	
13	UG-88E/U	CONNECTOR, Plug, BNC	X2	B	2	
14	RG-58/U	CABLE, Radio frequency	P1	S	ARS	

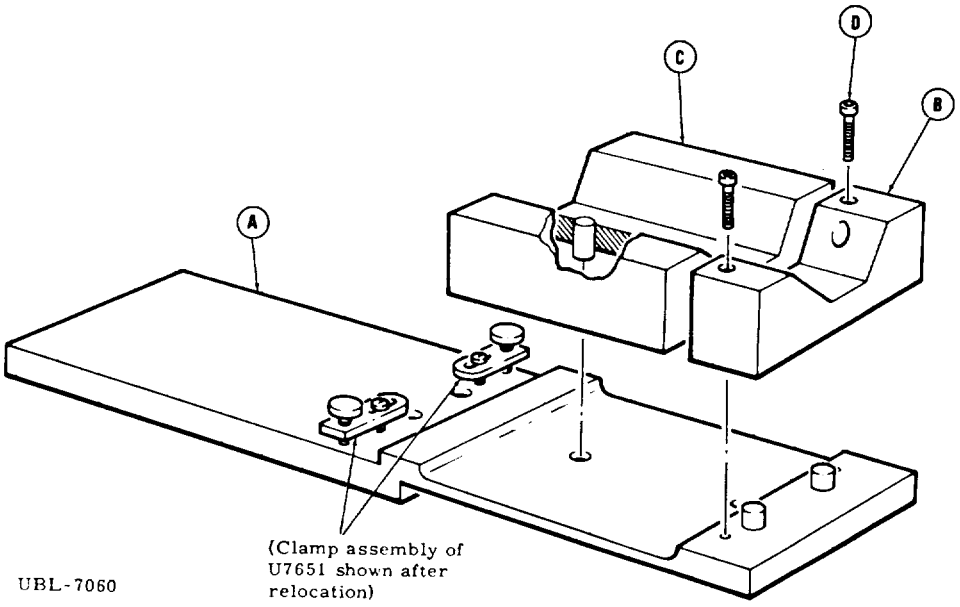

Figure 23. Extension Fixture and V-Blocks.

FIGURE & INDEX NUMBER	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
23-A	7242774	FIXTURE, Extension (98750) (see Fig. 1 for NHA)			REF	
23-B	7242773	V-BLOCK (98750) (see fig. 1 for NHA)			REF	
23-C	7242779	V-BLOCK (98750) (see fig. 1 for NHA)			REF	
23-15	MS35460-17	SCREW, Cap, socket head, 10-32 x 1½ in. (see fig. 1 for NHA)			REF	

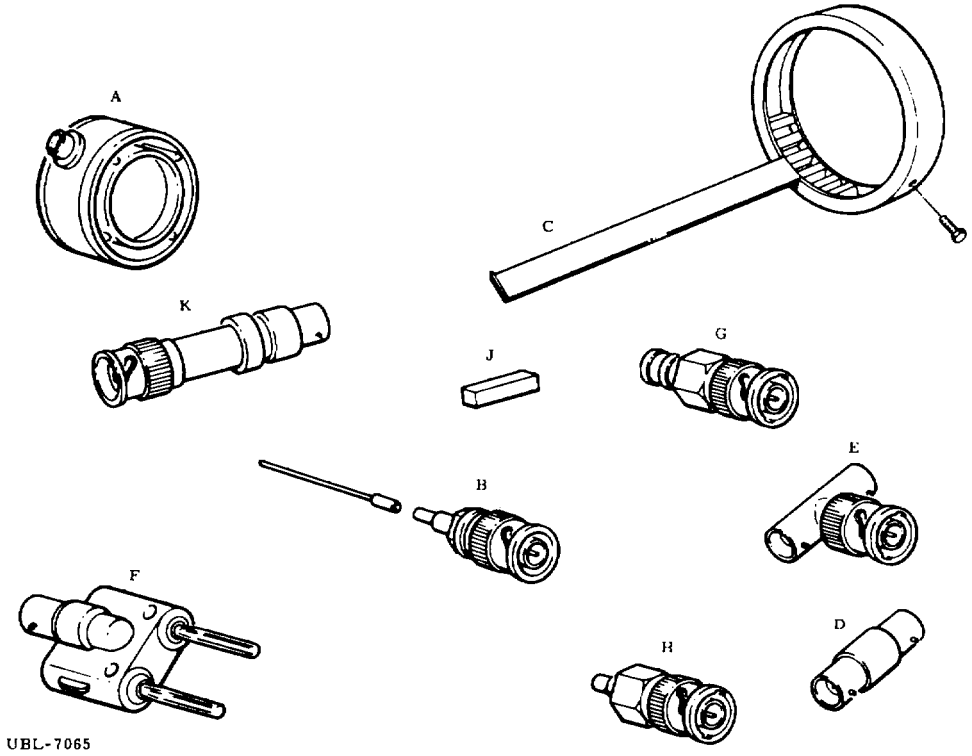

Figure 24. Loose Parts Used in Test Setup for CAEDET Family of Sensors.

FIGURE & INDEX NUMBER	PART NUMBER	DESCRIPTION 1 2 3 4 5 6 7	SOURCE CODE	REPAIR CODE	UNITS PER ASSY	USABLE ON CODE
24-A	7242778	ADAPTER, Connector, module (98750) ..... (see fig. 1 for NHA)			REF	
24-B	7242781	ANTENNA, UHF (98750) ..... (see fig. 1 for NHA)			REF	
24-C	7242766	FIXTURE, Turn-on (98750)..... (see fig. 1 for NHA)			REF	
24-D	UG-914/U	ADAPTER, Connector ..... (see fig. 1 for NHA)			REF	
24-E	UG-274S/U	TEE, Adapter, connector, BNC ..... (see fig. 1 for NHA)			REF	
24-F	1269	ADAPTER, Connector (05276) ..... (see fig. 1 for NHA)			REF	
24-G	51-073-6800	ADAPTER, Connector, plug to plug, BNC (98291) (see fig. 1 for NHA)			REF	
24-H	51-074-6800	ADAPTER, Connector, plug to jack, BNC (98291) (see fig. 1 for NHA)				
24-J	H-34	MAGNET (12617) ..... (see fig. 1 for NHA)			REF	
24-K	AE-10B	ATTENUATOR, 10 db (00929) ..... (see fig. 1 for NHA)			REF	

SECTION VIII

DIFFERENCE DATA SHEETS

Not Applicable

ALPHABETICAL INDEX

ALPHABETICAL INDEX(cont)

ALPHABETICAL INDEX(cont)

ALPHABETICAL INDEX(cont)

GLOSSARY

A

AUTDET–Audio detector, MA133 is a hangup version; MA135 is a ground vision; MA138 is a ground version also capable of detecting seismic disturbance. Limited commandability.

AUDIO–1. Part of a message received from CL stack/sensor upon receipt of proper command.

2. Indicator lamp on PT1585 panel for monitoring audio duration.

3. Control on PT1585 panel for turn-on of T module in a partial stack. A 2 kHz modulating signal is provided by the tester for audio.

4. Source-switch on PT1585 panel for selection of internal 2 kHz or externally provided audio.

B

BIT–1 or 0 depending on whether the related indicator lamp numbered 2 thru 16 on tester panel is respectively ON or OFF.

C

CADET–Commandable audio engine de sector. MA124 is a hangup version; MA137 is a ground version, MA137is a ground version also capable of detecting seismic disturbance.

CL–1. Command Link

2. A stack or sensor with remote control capability provided by J and R modules.

COMM1AND–1. Command transmission from PT1585 to CL stack/sensor consisting of RF signal modulated by a fixed period of 10 kHz and data including ID, RF Channel and Command.

2. A two digit number transmitted to a CL, stack/sensor for remote control.

D

DIAGNOSTIC INDICATOR–A row of six red indicators near bottom of PT1585 panel used to help locate a module which prevents a stack response.

COMMAND Indicator–Indicator lights whenever RT or TRANSMIT push buttons are actuated on PT1585 panel. Failure to light indicates tester malfunction.

RECEIVER VIDEO–Indicator E module must be removed from stack for monitoring this signal. Indicator lights when an R module video output is sensed in response to a command transmission from the PT1585. Failure to light may indicate R module malfunction.

ENCODER CALLUP Indicator–E module must be removed from stack for monitoring this signal. Indicator lights whenever the command transmission received from the PT1585 agrees with L module coding as determined by the J module. Failure to light may indicate 1, or J module malfunction or operator error in setting of switches on PT1585 panel.

SPLIT PHASE Indicator–E module must be removed from stack for monitoring this signal. Indicator lights whenever Z module output is sensed. Failure to light may indicate a Z module malfunction.

AUDIO TIME Indicator–E module must be removed from stack for monitoring this signal. Indicator lights whenever an' audio response message is sensed. Failure to light may indicate a L or J module malfunction.

RECEIVED MESSAGE Indicator–Indicator lights whenever the PT1585 receives a stack transmission. Failure to light may indicate a T module or tester malfunction.

E

EDET–Engine detector. MA134 is a hangup version; MA 136 is a ground version; MA139 is a ground version also capable of detecting seismic disturbance. All are "CL sensors.

EXPECTED MESSAGE–Preset by ID and FUNCTION switches on PT1585 panel and displayed on lower row of indicator lamps numbered 2 thru 10.

EXRAY – Expendable relay stack.

F

FUNCTION–1.Tester control for expected message type and data rate.

2. L module coding used in CL stack/sensor to determine initial operating mode.

3. L module coding used in NCL stack/sensor to determine fixed operating mode.

I

ID–Identification code of a CL or NCL stack/sensor transmitted with each message regardless of type.

L

LONG STACK A CL stack including module types E, Z, L, J, S, R, T and V.

N

NCL–1. Non Command Link

2. A stack/sensor without remote control capability.

NRT–1. Non Real Time

2. Mode of operation in which stack/sensor transmits a stored count of environmental simulations upon receipt of appropriate command.

R

RECEIVED MESSAGE–Response received from stack/sensor under test and displayed on lip row of indicator lamps numbered 2 thru 10.

RF CHANNEL–Partial address of a CL stack/sensor. which uniquely identifies it in conjunction with an ID code.

RT–1. Real Time

2. Mode of operation in which stack/sensor transmits with each environmental stimulation.

3. Control of PT1585 panel for simulating an environmental stimulation (E module output) in testing NCL partial stacks.

S

SENSOR A deployable assembly of the CL or NCL type.

SHORT STACK–An NCL stack including mod types E, Z, L and T.

STACK – An assembly of modules.

STATUS/COUNT–That portion of the Received Message displayed on indicator lamps 11 thru 16 on PT1585 panel. When used to indicate status, indicators 11 and 12 define operating mode whether RT' or NRT while indicators 13 thru 16 define E module sensitivity or gain. When used to indicate count, indicators 11 thru 16 represent the total number of stored events sensed by the E module after being zeroed in NRT.

T

T XTAL CHANNEL–A four digit number relate' to the transmitting frequency of a given module and marked on its crystal.

TRANSMIT–Control on PT1585 panel for sending a command transmission stack/sensor.

APPENDIX A

ORGANIZATIONAL, DIRECT SUPPORT, GENERAL SUPPORT AND DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST

Section I. INTRODUCTION

A-1. Scope

This appendix lists repair parts required for the performance of organizational, direct support, general support, and depot maintenance of System/Stock Tester PT–1585. This appendix is current as of 18 December 1972.

A–2. Indexes of Publications

a. DA Pam 310–4. Refer to the latest issue of DA Pam 310–4 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.

b. DA Pam 310–7. Refer to DA Pam 310–7 to determine whether there are Modification Work Orders (MWO's) pertaining to the equipment.

A–3. Forms and Records

a. Reports of Maintenance and Unsatisfactory Equipment. Use equipment forms and records in accordance with instructions in TM 38–750.

b. Report of Packing and Handling Deficiencies. Fill out and forward DD Form 6 (Report of Packaging and Handling Deficiencies) as prescribed in AR 700–58 (Army)NAVSUP Pub 378 (Navy)/AFR 71–4 (Air Force)/and MCO P4030.29 (Marine Corps).

c. Discrepancy in Shipment Report (DISREP) (SF 361). Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55–38 (Army)/NAVSUP Pub 459 (Navy)/AFM 75–34 (Air Force)/and MCO P4610.19 (Marine Corps).

d. Reporting of Equipment Publication Improvements. The reporting of errors, omissions, and recommendations for improving this appendix by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications) and forwarded direct to Commanding General, US Army Electronics Command, ATTN: AMSELMA–S, Fort Monmouth, NJ 07703.

A–4. General

This repair parts list is divided into the following sections:

a. Repair Parts List–Section II. A list of repair parts authorized at the organizational level for the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts.

b. Special Tools List. Not applicable.

c. Repair Parts List–Section III. A list of repair parts authorized at the direct support, general support, and depot levels for the performance of maintenance. The list also includes parts which must be removed for the replacement of the authorized parts.

d. Special Tools List. Not applicable.

e. Index–Federal Stock Number and Reference Number–Section IV. A list, in ascending numerical sequence, of all Federal stock numbers appearing in the listings, followed by a list, in alphabetic sequence, of all reference numbers appearing in the listings. Federal stock numbers and reference numbers are cross–referenced to each illustration figure and item number appearance.

A–5. Explanation of Columns

The following provides an explanation of columns found in the tabular listings.

a. Source, Maintenance, and Recoverability Codes (SMR).

(1) *Source code*. Indicates the manner of acquiring support items for maintenance, repair, or overhaul of end items. Source codes are:

Code *Explanation*

PA–Item procured and stocked for anticipated or known usage.

Code *Explanation*

PB–Item procured and stocked for insurance purposes because essentially dictates that a minimum quantity be available in the supply system.

PC–Items 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–Items 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 shutdown of production facilities, would prove uneconomical to reproduce at a later time.

KD–Item of depot overhaul/repair kit and not purchase 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, direct support, or general support 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 direct support maintenance level.

MH–Item to be manufactured or fabricated at general support maintenance level.

MD–Item to be manufactured or fabricated at 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 manufacturers' part number.

BLANK–Support items listed in this RPSTL TM assigned maintenance and recoverability codes and no source codes can be requisitioned with justification.

Note. Cannibalization or salvage may be used as a source of supply for any items source coded above except those coded XB and aircraft support items as restricted by AR 700–42.

(2) *Maintenance code, first digit*. The first digit of the maintenance code 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*

O–Support item is removed, replaced, used at the organizational level of maintenance. Note: A code "C" may be used in this position to denote crew or operator maintenance performed within organizational maintenance.

F–Support item is removed, replaced, used at the direct support maintenance level.

H–Support item is removed, replaced, used at the general support maintenance.

D–Support items that are removed, replaced, used at depot only.

(3) *Maintenance code, second digit*. The second digit of the maintenance code indicates whether 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).

Code *Application/Explanation*

O–The lowest maintenance level capable of complete repair of the support item is the organizational level.

F–The lowest maintenance level capable of complete repair of the support item is direct support.

H–The lowest maintenance level capable of complete repair of the support item is general support.

Code Application/Explanation

D–The lowest maintenance level capable of complete repair of the support item is the depot level.

L–Repair restricted to designated Specialized Repair Activity.

Z–Nonreparable. No repair is authorized.

B–No repair is authorized. The item may be reconditioned by adjusting, lubricating, etc, at the user level. No parts or special tools are procured by the maintenance of this item.

(4) *Recoverability code*. Indicates the disposition action on unserviceable items.

Code Definition

Z–Nonrepairable item. When unserviceable, condemn and dispose at the level indicated in the first digit of the maintenance code.

O–Reparable item. When uneconomically reparable, condemn and dispose at organizational level.

F–Reparable item. When uneconomically reparable, condemn and dispose at the direct support level.

H–Reparable item. When uneconomically reparable, condemn and dispose at the general support level.

D–Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal not authorized below depot level.

L–Reparable item. Repair condemnation and disposal not authorized below/specialized repair activity level.

A–Item requires special handling or condemnation procedures because of specific reasons (i.e., precious metal content, high dollar value, critical material or hazardous material).

b. Federal Stock Number. Indicates the Federal stock number assigned to the item and will be used for requisitioning purposes.

c. Description. Indicates the Federal item name and a minimum description required to identify the item. The last line indicates the reference number followed by the applicable Federal Supply Code for Manufacturer (FSCM) in parentheses. The FSCM is used as an element in item identification to designate manufacturer or distributor or Government agency, etc, and is identified in SB 708–42.

d. Unit of Measure (U/M). Indicates the standard or basic quantity by which the listed item is used in performing the actual maintenance function. This measure is expressed by a two character alphabetical abbreviation, e.g., ea, in, pr, etc, and is the basis used to indicate quantities and allowances in subsequent columns. 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.

e. 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.

f. 15–Day Organizational Maintenance Allowances.

(1) The repair parts indicated by an asterisk in the allowance columns represent those authorized for use at the organizational category and will be requisitioned on an "as required" basis until stockage is based on demand in accordance with AR 710–2.

(2) Major Army commanders are authorized to approve reduction in range of support items authorized for use in units within their commands. Recommendation for increase in range of items authorized for use will be forwarded to the Commanding General, US Army Electronics Command, ATTN: AMSELMA–S, Fort Monmouth, NJ 07703. Any changes approved will be reflected in a revision to the RPSTL.

(3) Allowance quantities are indicated in the Special Tools List section for special tools, TMDE, and other support equipment.

i. 30–Day DS/GS Maintenance Allowances.

Note: Allowances in GS Column are for GS Maintenance only.

(1) The repair parts indicated by asterisk entries in separate allowance columns for DS and GS represent those authorized for use at that category of maintenance to be requisitioned on an "as required" basis until stockage is based on demand in accordance with AR 710–2.

(2) Allowance quantities are indicated in the Special Tools List section for special tools, TMDE, and other support equipment.

j. 1–Year Allowances Per 100 Equipment/Contingency Planning Purposes. Items to be requisitioned as required until demand data is requested.

k. Depot Maintenance Allowance Per 100 Equip-

ments. This column indicates that the item identified with an asterisk are authorized to be requisitioned as required.

l. 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. Indicates the callout number used to reference the item on the illustration.

A-6. Special Information

Not applicable.

A-7. Location of Repair Parts

a. This manual contains one cross reference index (Sec IV) to be used to locate a repair part when either the Federal stock number or reference number (manufacturer's part number) is known. The first column in the index is prepared in numerical or alphanumeric sequence in ascending order. The reference numbers (manufacturer's part numbers) are listed immediately following the last listed Federal stock number in the index of Federal stock numbers.

b. When the Federal stock number or reference number is known, follow the procedures given in (1) and (2) below.

(1) Refer to the index of Federal stock numbers (sect. IV) and locate the Federal stock number or reference number. The Federal stock number and reference number are cross-referenced to the applicable figure and item number.

(2) Refer to the repair parts list (sec II or III) and locate the figure number (col. 7a Repair Parts for Organizational Maintenance or col. 10a Repair Parts for Direct Support, General Support and Depot Maintenance) and item number (col. 7b or 10b) as noted in the Federal stock number index.

c. When the figure and item number are known, scrutinize columns 7a or 10a and 7b or 10b of the repair parts list (sec II or III) until the item is located.

d. When the Federal stock number, reference number, figure number, and item number are not known, scrutinize column 3 of the repair parts list (sec II or III), which is arranged in alphabetical order.

A-8. Abbreviations

Not applicable.

SECTION II-REPAIR PARTS FOR ORGANIZATIONAL MAINTENANCE

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REF NUMBER & MFR CODE USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 15-DAY ORGANIZATIONAL MAINTENANCE ALW (a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(7) ILLUSTRATION (a) FIG. NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
PAODD	6350-495-8124	CONNECTOR HEAD, CABLE, U7650 337461-00 (80063)	EA	1	*	*	*	*	1	1
PAODD		SIMULATOR, CODE PLUG, U7674 337493-000 (80063)	EA	1	*	*	*	*	1	2
PAODD		FIXTURE, ASSEMBLIN, U7651 337462-000 (80063)	EA	1	*	*	*	*	1	3
AOODD		TESTER, CL STACK, PHASE 3 PT1585 33724-000 (80063)	EA	1	*	*	*	*	1	4
PAOZZ	6625-041-3386	CABLE ASSYEMBLY, CA1541 337629 (80063)	EA	1	*	*	*	*	10	
PAODD	6350-495-8567	CABLE ASSEMBLY, CA1542 337630 (80063)	EA	1	*	*	*	*	11	
PAODD	6350-495-8124	CONNECTOR HEAD, CABLE, U7650 337461-000 (60063)	EA	*	*	*	*		*2	
PAOZZ		CABLE ASSYMBLY, CA543 337632-000 (80063)	EA	*	*	*	*	*	2	17
PAOZZ	635O-495-8125	SIMILATOR, CODE PLUG U7674 337493 (80063)	EA	1	*	*	*	*	3	
PAOZZ		HINGE, BUTT MS20257-2-700 (96906)	EA	1	*	*	*	*	3(2)	6
PAODD		COMPONENT ASSEMBLY 337493-10 (80063)	EA	*	*	*		*	3(2)	11
PAOZZ		CONNETOR, RECEPTACLE, ELECTRTCAL 10-442480(TA386) (77820)	EA	1	*	*	*	*	3(2)	29
PAOZZ	5935-222-7325	RECEPTACLE, CONNECTOR, DUMMY 2182-16 (71468)	EA	1	*	*	*	*	3(1)	35
PAOZZ		CABLE ASSEMBLY (CA1543) (80063)	EA	1	*	*	*	*	3(1)	48
PAOZZ		SWITCH, TOGGLE 8867K1 (17465)	EA	7	*	*	*	*	4	1
PAOZZ		SWITCH, TOGGLE 8866K1 (17465)	EA	15	*	*	*	*	4	2
PAODD		COMPONENT ASSEMBLY 337493-10 (80063)	EA	1	*	*	*	*	5	
PAOZZ		RESISTOR, FIXED, COMPOSITION RC5GF201J (81349)	EA	29	*	*	*	*	5	1
PAOZZ		SEMICONDUCTOR DEVICE, DIODE 1N914 (81349)	EA	43	*	*	*	*	5	12
PAOOD		FIXTURE, ASSEMBLING 337462 (80063)	EA	*	*	*	*	*	6	
PAOZZ		KNOB 337462-30 (96906)	EA	1	*	*	*	*	6(2)	6
PAOZZ	5315-823-6747	PIN, SPRING MS16562-218 (96906)	EA	1	*	*	*	*	6(2)	7
PAOZZ	9510-030-6992	ROD 337462-41 (80063)	EA	*	*	*	*	*	6(2)	10
PAOZZ		KNOB 337462 (80063)	EA	1	*	*	*	*	6(2)	15
PADZZ	5215-841-5416	PIN, DOWEL MS1616555-606 (96906)	EA	1	*	*	*	*	6(2)	16
PAOZZ	5910-030-6988	ROD 337462-37 (8063)	EA	1	*	*	*	*	6(2)	17

SECTION II-REPAIR PARTS FOR ORGANIZATIONAL MAINTENANCE

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REF NUMBER & MFR CODE USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 15-DAY ORGANIZATIONAL MAINTENANCE ALW (a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(7) ILLUS-TRATION (a) FIG. NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
PAOZZ		KNOB 337462-35 (80063)	EA	1	*	*	*	*	6(1)	33
PAOZZ		CLAMP ASSEMBLY 6008 (12139)	EA	2	*	*	*	*	6(1)	35
AOODD		STACK TESTER 337024 (80063)	EA	1	*	*	*	*		
PAOZZ	5355-558-1116	KNOB 70-2-2G (94144)	EA	2	*	*	*	*		
PAOZZ		HANDLE SET HP-10 (98376)	EA	1	*	*		*		
PAOZZ	5905-111-1682	RESISTOR, FIXED, COMPOSTITION R3R076163JS (81349)	EA	2	*	*	*	*	7(1)	8
PAOZZ		SWITCH, PUSH 933 (82389)	EA	1	*	*	*	*	7(1)	9
PAODD	5821-402-6637	LO, RECEIVER, NARROW BAND 81558-1 (80063)	EA	1	*	*	*	*	7(1)	10
PAOZZ		CONNECTOR, RECEPTACLE, ELECTRICAL PT00A-20-24S (77820)	EA	1	*	*	*	*	7(1)	11
PAOZZ		ADAPTER, UG-492D/U MS35177-49 (98921)	EA	1	*	*	*	*	7(1)	13
PAOZZ	6350-482-9664	EMITTER, VISIBLE 5082-440 (28480)	EA	6	*	*	*	*	7(1)	14
PAOZZ	5935-835-0510	CONNECTOR, R. F. 51-007-0000 (98291)	EA	3	*	*	*	*	7(1)	15
PAOZZ	5935-835-0510	CONNECTOR, RECEPTACLE, ELECTRICAL MIL-C-39012/21-0002 (77820)	EA	7	*	*	*	*	7(1)	16
PAOZZ		SWITCH, TOGGLE 8868K4 (17465)	EA	1	*	*	*	*	7(1)	17
PAOZZ	5905-309-5518	RESISTOR, FIXED, COMPOSTION RC20GF300J (81349)	EA	1	*	*	*	*	7(1)	18
PAOZZ	5935-192-4869	JACK, TELEPHONE A2A (37942)	EA	1	*	*	*	*	7(1)	19
PAOZZ		RESISTOR,VARIABLE 252-10K (11237)	EA	1	*	*	*	*	7(1)	20
PAOZZ		SPEAKER SP25A (80331)	EA	1	*	*	*	*	7(1)	21
PAOZZ		SWITCH, PUSH 2PB299-T2 (91929)	EA	3	*	*	*	*	7(1)	22
PAOZZ		SWITCH, PUSH 4PB11-T2 (91929)	EA	1	*	*	*	*	7(1)	23
PAOZZ		SWITCH, ROTARY, THUMBWHEEL 6202MW (97525)	EA	5	*	*	*	*	7(1)	24
PAOZZ		SWITCH, ROTARY, THUMBWHEEL 6257 MW (97525)	EA	2	*	*	*	*	7(1)	25
PAOZZ		SWITCH, ROTARY, THUMBWHEEL 6218MW (97525)	EA	2	*	*	*	*	7(1)	26
PAOZZ		LIGHT, INDICATOR 102SKI-FB2-R (08717)	EA	1	*	*	*	*	7(1)	27
PAOZZ	6240-752-2581	LAMP, INCANDECENT MS24515-685 (08717)	EA	1	*	*	*	*		

SECTION II-REPAIR PARTS FOR ORGANIZATIONAL MAINTENANCE

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REF NUMBER & MFR CODE	USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 15-DAY ORGANIZATIONAL MAINTENANCE ALW (a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(7) ILLUS-TRATION (a) FIG. NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
PAOZZ		LIGHT, INDICATOR 102SK1-FBG (08717)		EA	1	*	*	*	*	7(1)	29
PAOZZ		LAMP, INCANDECENT MS24575-685 (08717)		EA	1	*	*	*	*		
PAOZZ		METER, 0-50 MA, 1K 255 (80145)		EA	1	*	*	*	*	7(1)	30
PAOZZ		ADAPTER, UG-49492D/U MS35177-49 (98921)		EA	1	*	*	*	*	7(1)	31
PAOZZ		LIGHT, INDICATOR 102SK1-FB2-A (08717)		EA	24	*	*	*	*	7(1)	32
PAOZZ		LAMP, INCANDECENT MS24515-685 (08717)		EA	1	*	*	*	*		
PAOZZ		SWITCH, PUSH 2PB299-T2 (97929)		EA	2	*	*	*	*	7(1)	33
PAOZZ		SWITCH, PUSH 28-GB-3 (17870)		EA	2	*	*	*	*	7(1)	34
PAOZZ	6210-299-5120	LIGHT,INDICATOR 52410-995 (72619)		EA	1	*	*	*	*	7(1)	35
PAOZZ		LAMP, INCANDECENT 757 (08806)		EA	1	*	*	*	*		
PAOZZ	5930-984-9883	SWITCH, TOGGLE MS25307-222 (96906)		EA	2	*	*	*	*	7(1)	36
PAOZZ	6210-299-5120	LIGHT INDICATOR 52410-995 (72619)		EA	1	*	*	*	*	7(1)	37
PAOZZ		LAMP, GLOW NE-51H (08806)		EA	1	*	*	*	*		
PAOZZ		CONNECTOR, RECPTICALE, ELECTRICAL PT100-18-28P (77820)		EA	1	*	*	*	*		
PAO Z		CONNECTOR, PLUG, ELECTRICAL PT106-P-18-28S (77820)		EA	1	*	*	*	*		
PAODD	6350-181-1787	POWERSUPPLY PL-5.1-3.OA (13850)		EA	1	*	*	*	*	7(2)	42
PAODD		POWER SUPPLY PL-5.1-.75A (13850)		EA	1	*	*	*	*	7(2)	43
PAODD	6130-498-3702	POWER SUPPLY PL-5.-1-0-375A (13850)		EA	1	*	*	*	*	7(2)	44
PAODD		POWER SUPPLY PL-9.8-.2A (13850)		EA	1	*	*	*	*	7(2)	45
PAODD	6130-022-5132	POWER SUPPLY LM219 (80103)		EA	1	*	*		*	7(2)	46
PAODD		POWER SUPPLY PL-6.1-1.5A (13850)		EA	1	*	*	*	*	7(2)	47
PAOZZ	5935-803-1445	JACK, BANANA 108-902 (74970)		EA	5	*	*	*	*	7(2)	48
PAOZZ	5935-729-5559	JACK, BANANA 108-903 (74970)		EA	6	*	*	*	*	7(2)	49
PAOZZ	5935-810-2519	JACK, BANANA 108-904 (74970)		EA	1	*	*	*	*	7(2)	50
PAOZZ	5935-842-2166	JACK, BANANA 108-906 (74970)		EA	1	*	*	*	*	7(2)	51
PAOZZ	5920-857-6256	PROTECTOR, OVERVOLTAGE LMOV-1 (80103)		EA	1	*	*	*	*	7(2)	52
PAOZZ	5920-080-0704	PROTECTOR, OVERVOLTAGE LMOV-2 (80103)		EA	1	*	*	*	*	7(2)	53

SECTION II-REPAIR PARTS FOR ORGANIZATIONAL MAINTENANCE

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REF NUMBER & MFR CODE USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 15-DAY ORGANIZATIONAL MAINTENANCE ALW (a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(7) ILLUS-TRATION (a) FIG. NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
PAODD	5920-857-6256	PROTECTOR, OVERVOLTAGE LMOV-1 (80103)	EA	1	*	*	*	*	7(2)	54
PAODD	5920-857-6256	PROTECTOR, OVERVOLTAGE LMOV-1 (80103)	EA	1	*	*	*	*	7(2)	55
PAODD	5920-080-0707	PROTECTOR, OVERVOLTAGE LMOV-3 (80103)	EA	1	*	*	*	*	7(2)	56
PAOZZ	5915-188-4438	FILTER, SUPRESSION 9012-101-0000 (72982)	EA	2	*	*	*	*	7(2)	57
PAOZZ	5905-826-2289	RESISTOR, VARIABLE 224S-1-103M (80294)	EA	1	*	*	*	*	7(2)	58
PAOZZ	5905-965-8142	RESISTOR, VARIABLE 224S-1-102M (80294)	EA	1	*	*	*	*	7(2)	59
PAOZZ	5905-965-8142	RESISTOR, VARIABLE 224S-102M (80294)	EA	1	*	*	*	*	7(2)	60
PAOZZ	5905-842-0684	RESISTOR, VARIABLE 224S-101M (80294)	EA	1	*	*	*	*	7(2)	61
PAOZZ		GROMMET, RUBBER NO.5 (77969)	EA	6	*	*	*	*	7(2)	62
PAODD		COMPONENT BOARD ASSEMBLY, A31 337024-30 (80063)	EA	1	*	*	*	*	7(2)	66
PAOZZ	4140-010-5365	FAN, VENTILATING BC2206F-2 (92702)	EA	1	*	*	*	*		
PAOZZ		CAPACITOR, MYLAR DIELECTRIC 663F-105-94W (84411)	EA	1	*	*	*	*	7(3)	73
PAOZZ	5935-806-5539	CONNECTOR, PLUG PT06P-8-3P (77820)	EA	1	*	*	*	*		
PAOZZ	5940-194-2835	TERMINAL BOARD 3-140 (718785)	EA	1	*	*	*	*	7(3)	74
PAOZZ	5910-482-0442	CAPACITOR, FIXED, TANTALUM 350D106 (81349)	EA	3	*	*	*	*	7(3)	75
PAOZZ	5935-783-6524	CONNECTOR, RECEPTACLE DBMF-9W4S (71468)	EA	1	*	*	*	*	7(3)	77
PAOZZ	5935-089-1165	CONNECTOR, RECEPTALCE DBMF-13W3S (71468)	EA	2	*	*	*	*	7(3)	78
PAOZZ		CONNECTOR, RECEPTACLE MIL-C-39012-21-0002 (81349)	EA	2	*	*	*	*	7(3)	79
PAOZZ	5935-660-5207	CONNECTOR, RECEPTACLE, ELECTRICAL 5278 (74545)	EA	1	*	*	*	*	7(3)	81
PAOZZ	2920-217-9118	HOLDER, FUSE 342001 (75915)	EA	2	*	*	*	*	7(3)	82
PAOZZ		FUSE, CARTRIDGE AGC-1 (71400)	EA	2	*	*	*	*		
PAOZZ	5935-053-4793	CONNECTOR, PLUG, ELECTRICAL 819-B018DOW (94375)	EA	1	*	*	*	*	7(4)	86
PAOZZ	5935-259-0205	ADAPTER UG-201A/U (80058)	EA	1	*	*	*	*	7(4)	87
PAOZZ		CLAMP, LOOP MS21919DG (96906)	EA	1	*	*	*	*	7(4)	88
PAODD	6625-445-6954	ATTENUATOR, FIXED FXRAD-30N (00929)	EA	1	*	*	*	*	7(4)	89
PAOZZ	5985-492-7921	COUPLER, DIRECTIONAL 3060-20 (99899)	EA	1	*	*	*	*	7(4)	90
PAOZZ	5935-259-0205	ADAPTER UG-201A/U (80058)	EA	1	*	*	*	*	7(4)	91

SECTION II-REPAIR PARTS FOR ORGANIZATIONAL MAINTENANCE

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REF NUMBER & MFR CODE	USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 15-DAY ORGANIZATIONAL MAINTENANCE ALW (a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(7) ILLUS-TRATION (a) FIG. NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
PAOZZ	5935-204-5098	ADAPTER UG-1304/U (80058)		EA	1	*	*	*	*	7(4)	92
PAOZZ		ADAPTER, UG-306B/U MS3568-3068 (96906)		EA	1	*	*	*	*	7(4)	93
PAOZZ	5925-125-1313	DETECTOR, R.F. 8471A (28480)		EA	1	*	*	*	*	7(4)	94
PAOZZ	5935-053-4793	CONNECTOR, PLUG, ELECTRICAL 819B1800W (94375)		EA	1	*	*	*	*	7(4)	95
PAOZZ	5935-053-4793	CONNECTOR, PLUG, ELECTRICAL 819-B1800W (94375)		EA	1	*	*	*	*	7(4)	96
PAOZZ	5935-835-0508	CONNECTOR, PLUG, ELECTRICAL M39012/16-0001 (81349)		EA	1	*	*	*	*	7(4)	97
PAOZZ	5935-201-2411	ADAPTER, UG-274B/U MS35183 (96906)		EA	1	*	*	*	*	7(4)	98
PAODD	5985-147-8953	ATTENUATOR, VARIABLE SA-50 (23042)		EA	1	*	*	*	*	7(4)	99
PAOZZ		CONNECTOR, PLUG, ELECTRICAL PT06-10-98S (77820)		EA	1	*	*	*	*		
PAOZZ	5935-835-0508	CONNECTOR, PLUG,ELECTRICAL M39012/16-0001 (81349)		EA	1	*	*	*	*	7(4)	100
PAOZZ	5935-835-0508	CONNECTOR, PLUG, ELECTRICAL M39012/16-0001 (81349)		EA	1	*	*	*	*	7(4)	102
PAOZZ		POWER DIVIDER DA-4TB (00929)		EA	1	*	*	*	*	7(4)	103
PAODD	5985-728-8348	ATTENUATOR, FIXED AB-40B (00929)		EA	1	*	*	*	*	7(4)	104
PAOZZ	6350-483-2958	TRANSMITTER, FM, TEIEMETRY 93A444 (07618)		EA	1	*	*	*	*	7(4)	105
PAOZZ	5935-835-0508	CONNECTOR, PLUG ELECTRICAL M39012/16-0001 (81349)		EA	1	*	*	*	*	7(4)	106
PAOZZ	5935-835-0508	CONNECTOR, PLUG ELECTRICAL M39012/16-001 (81349)		EA		*	*	*	*	7(4)	107
PAOZZ	5985-147-8953	ATTENUATOR, VARIABLE SA-50 (23042)		EA	1	*	*	*	*	7(4)	108
PAOZZ		RESISTOR, FIXED, W.W. RER65F10ROM		EA	1	*	*	*	*	7(4)	110
PAOZZ		RESITOR, FIXED, W.W. RER65F1ROOM (81349)		EA	1	*	*	*	*	7(4)	111
PAOZZ		RESISTOR, FIXED, W.W. RER65FR100M (81349)		EA	1	*	*	*	*	7(4)	112
PAOZZ		RESISTOR, FIXED, W.W. RER70F49R9M (81349)		EA	1	*	*	*	*	7(4)	113
PAOZZ	5905-171-1975	RESISTOR, FIXED, COMPOSITION RC42GF151J (81349)		EA	1	*	*	*	*	7(4)	114
PAOZZ	5905-279-2508	RESISTOR, FIXED, COMPOSITION RC20GF755J (81349)		EA	1	*	*	*	*	7(4)	115
PAOZZ		CONNECTOR, RECEPTACLE, ELECTRICAL PT00-8-3S (77820)		EA	1	*	*	*	*	7(4)	121
PAOZZ		COMPONENT BOARD ASSMBLY 337024-30 (80063)		EA	1	*	*	*	*	8	
PAOZZ	6625-041-3386	CABLE ASSEMBLY, CA1541 337629 (80063)		EA	1	*	*	*	*	10	
PAODD	6350-495-8567	CABLE ASSEMBLY, CA1542 337630 (80063)		EA	1	*	*	*	*	11	

SECTION II-REPAIR PARTS FOR ORGANIZATIONAL MAINTENANCE

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REF NUMBER & MFR CODE USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 15-DAY ORGANIZATIONAL MAINTENANCE ALW (a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(7) ILLUS-TRATION (a) FIG. NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
PAOZZ	5910-847-7288	CAPACITOR, FIXED, CERAMIC CK06CW103K (81349)	EA	1	*	*	*	*	11	1
PAOZZ		COIL, RADIO, FREQUENCY 4604 (76487)	EA	1	*	*	*	*	11	2
PAOZZ	5905-136-3890	RESISTOR, FIXED, COMPOSITION RCR07G513JS (81349)	EA	1	*	*	*	*	11	3
PAOZZ	5905-106-1249	RESISTOR, FIXED, COMPOSITION RCR07G510JB (81349)	EA	1	*	*	*	*	11	4

SECTION III REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (CONT)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) QTY INC IN UNIT	(7) 30-DAY DS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(8) 30-DAY GS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(9) 1 YR ALW PER EQUIP CNTGCY	(10) DEPOT MAINT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (a) FIG NO.	(b) ITEM NO. OR REF. DESIGN.
PAODD	6625-169-1649	SENSOR/STACK TESTER, PT1585 286823 (80063)												1	
PAODD	6350-495-8124	CONNECTOR HEAD, CABLE, U7650 337461-000 (80063)	EA	1	*	*	*	*	*	*	*	*	*	1	1
PAODD		SIMULATOR, CODE PLUG, U7674 337493-000 (80063)	EA	1	*	*	*	*	*	*	*	*	*	1	2
PAODD		FIXTURE, ASSEMBLING, U7651 337462-000 (80063)	EA	1	*	*	*	*	*	*	*	*	*	1	3
AODDD		TESTER, CL STACK, PHASE 3, PT1585 D337024-000 (80063)	EA	1										1	4
DZO		CHASIS ASSEMBLY, U7622 337663-000 (80063)	EA	1										1	5
PAOZZ	6625-041-3386	CABLE ASSEMBLY, CA1541 337629 (80063)	EA	1	*	*	*	*	*	*	*	*	*	10	
PAOZD	6350-495-8567	CABLE ASSEMBLY, CA1542 337630 (80063)	EA	1	*	*	*	*	*	*	*	*	*	11	
ADDDD		CABLE ASSEMBLY, CA1543 337632 (80063)	EA	1						*				12	
PAODD	6350-495-8124	CONNECTOR HEAD, CABLE, U7650 337461-000 (80063)	EA	1	*	*	*	*	*	*	*	*	*	2	
XADZZ		RING 337461-05 (80063)	EA	1										2	1
DZZ		SCREW, CAP, SOCKET HEAD MS16997-36 (80063)	EA	4										2	2
XADZZ		DISC 337461-07 (80063)	EA	1										2	3
DZZ		SETSCREW, SELF LOCKING NAS1081-08B6 (80205)	EA	1										2	4
DZZ		LEVER 337461-13 (80063)	EA	1										2	5
DZZ		PIN, HEADLINES, STRAIGHT AN122717 (88044)	EA	1										2	6
DZZ		SPACER 337461-15 (80063)	EA	1										2	7
DZZ		PIN,HEADLESS, STRAIGHT AN122721 (80063)	EA	1										2	8
DZZ		SPACER 337461-11 (80063)	EA	1										2	9
XADZZ		CLEVIS 337461-17 (80063)	EA	1										2	10
XADZZ		BASE SUBASSEMBLY 337461-10 (80063)	EA	1										2	11
XADZZ		JIG BUTTTON 2025 (12139)	EA	1										2	12
DZZ		PLATE, IDENTIFICATION 198550-001 (80063)	EA	1										2	13
DZZ		SCREW, MACHINE MS51029-38 (96906)	EA	2										2	14
DZZ		SETSCREW, SELF LOCKING MS51029-38 (96906)	EA	4										2	15
DZZ		SCREW, MACHINE MS35206-203 (96906)	EA	4										2	16
ADDDD		CABLE ASSEMBLY, CA1543 337632-00 (80063)	EA	1										2	17

SECTION III REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (CONT)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) QTY INC IN UNIT	(7) 30-DAY DS MAINT ALLOWANCE			(8) 30-DAY GS MAINT ALLOWANCE			(9) 1 YR ALW PER EQUIP CNTGCY	(10) DEPOT MAINT ALW PER 100 EQUIP	(11) ILLUSTRATIONS	
						(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50	(c) 51-100			(a) FIG NO.	(b) ITEM NO. OR REF. DESIGN.
PAODD	6350-495-8125	SIMULATOR, CODE PLUG U7674 337493 (80063)	EA	1	*	*	*	*	*	*	*	*	*	3	
XADZZ		COVER 337493-17 (80063)	EA	1										3	1
DZZ		NUT,SELF-LOCKING MS21044N06 (96906)	EA	5										3(1)	2
DZZ		SCREW, MACHINE MS35190-238 (96906)	EA	5										3(1)	3
DZZ		SPACER 337493-11 (80063)	EA	2										3(2)	4
DZZ		SCREW, MACHINE MS3519-254 (96906)	EA	2										3(1)	5
PAOZZ		HINGE, BUTT MS20257-2-700 (96906)	EA	1	*	*	*	*	*	*	*	*	*	3(2)	6
DZZ		NUT, SELF-LOCKING MS21044N06 (96906)	EA	4										3(1)	7
DZZ		SCREW, MACHINE MS35206-277 (96906)	EA	4										3(1)	8
XADZZ		COVER 337-493-15 (80063)	EA	1										3(2)	9
DZZ		SCREW, SELF-TAPPING MS24621-29 (96906)	EA	7										3(2)	10
PAODD		COMPONENT ASSEMBLY 337493-10 (80063)	EA	1	*	*	*	*	*	*	*	*	*	3(2)	11
DZZ		SCREW, MACHINE MS35206-245 (96906)	EA	8										3(2)	12
DZZ		WASHER, FLAT AN960-8 (88044)	EA	4										3(2)	13
DZZ		WASHER, LOCK MS3540-12 (96906)	EA	8										3(2)	14
DZZ		SPACER 8368 (83330)	EA	4										3(2)	15
DZZ		DISC 337493-27 (80063)	EA	1										3(2)	16
DZZ		SETSCREW, SELF-LOCKING NAS1061-08A4N (80205)	EA	1										3(2)	17
XADZZ		LEVER 337493-01 (80063)	EA	1										3(2)	18
DZZ		PIN, STRAIGHT, HEADLESS MS51838-198 (96906)	EA	1										3(2)	19
XADZZ		ROD 337493-03 (88044)	EA	1										3(2)	20
DZZ		PIN, STRAIGHT, HEADLESS AN122717 (88044)	EA	1										3(2)	21
XADZZ		BUSHING 337493-07 (80063)	EA	1										3(2)	22
DZZ		ADAPTER, CONNECTOR 10-442475 (77820)	EA	1										3(2)	23
DZZ		SETSCREW, SELF-LOCKING NAS1081-08A4N (80205)	EA	4										3(1)	24
DZZ		RING 337493-25 (80063)	EA	1										3(2)	25
DZZ		SCREW, CAP MS16997-36 (96906)	EA	4										3(1)	26

SECTION III REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (CONT)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) QTY INC IN UNIT	(7) 30-DAY DS MAINT ALLOWANCE			(8) 30-DAY GS MAINT ALLOWANCE			(9) 1 YR ALW PER EQUIP CNTGCY	(10) DEPOT MAINT ALW PER 100 EQUIP	(11) ILLUSTRATIONS	
						(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50	(c) 51-100			(a) FIG NO.	(b) ITEM NO. OR REF. DESIGN.
DZZ		NUT, HEXAGON, SELF-LOCKING MS21044N08 (96906)	EA	4										3(1)	27
XADZZ		BUSHING 3374930-31 (80063)	EA	1										3(2)	28
PAOZZ		CONNECTOR, RECEPTACLE, ELECTRICAL 10-442480(TA386) (77820)	EA	1	*	*	*	*	*	*	*	*	*	3(2)	29
XADZZ		BUSHING 337493-05 (80063)	EA	1										3(2)	30
XADZZ		FITTING PLATE 337493-23 (80063)	EA	1										3(1)	31
DZZ		SCREW, CAP MS16977-32 (96906)	EA	4										3(1)	32
DZZ		SCREW, CAP MS16997-33 (96906)	EA	4										3(1)	33
DZZ		NUT, HEXAGON, SELF-LOCKING MS21044N08 (96906)	EA	4										3(1)	34
PAOZZ	5935-222-7325	RECEPTACLE, CONNECTOR, DUMMY 2182-16 (71468)	EA	1	*	*	*	*	*	*	*	*	*	3(1)	35
DZZ		SCREW, MACHINE MS35206-204 (96906)	EA	4										3(1)	36
DZZ		NUT, SELF-LOCKING, HEXAGON 22NM-26 (22599)	EA	4										3(1)	37
DZZ		FLATE, IDENTIFICATION 198550-001 (80063)	EA	1										3(1)	38
XADZZ		HOUSING 337493-13 (80063)	EA	1										3(1)	39
DZZ		SCREW, MACHINE MS35206-243 (96906)	EA	10										3(2)	40
DZZ		WASHER, LOCKING MS35340-42 (96906)	EA	10										3(2)	41
DZZ		TERMINAL, STAND-OFF 750 (81312)	EA	1										3(1)	42
DZZ		SCREW, MACHINE MS35206-213 (96906)	EA	1										3(1)	43
DZZ		TERMINAL, STAND-OFF 750 (81312)	EA	1										3(1)	44
DZZ		SCREW, MACHINE MS35206-213 (96906)	EA	1										3(1)	45
DZZ		JIG BUTTON, PRECISION 2025 (12139)	EA	2										3(1)	46
XADZZ		BASE 337493-21 (96906)	EA	1										3(2)	47
ADDDD		CABLE ASSEMBLY (CA1543) (80063)	EA	1										3(1)	48
DZZ		ADAPTER, CABLE TO CONNECTOR MS3057-6B (96906)	EA	1										3(1)	49
DZZ		ADAPTER, CABLE TO CONNECTOR MS3057-12B (96906)	EA	1										3(1)	50
DZZ		COVER 337193-15 (80063)	EA	1										4	
PAOZZ		SWITCH, TOGGLE 8867K1 (17465)	EA	7	*	*	*	*	*	*	*	*	*	4	1
PAOZZ		SWITCH, TOGGLE 8866K1 (17465)	EA	15	*	*	*	*	*	*	*	*	*	4	2

SECTION III REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (CONT)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) QTY INC IN UNIT	(7) 30-DAY DS MAINT ALLOWANCE			(8) 30-DAY GS MAINT ALLOWANCE			(9) 1 YR ALW PER EQUIP CNTGCY	(10) DEPOT MAINT ALW PER 100 EQUIP	(11) ILLUSTRATIONS	
						(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50	(c) 51-100			(a) FIG NO.	(b) ITEM NO. OR REF. DESIGN.
PAODD		COMPONENT ASSEMBLY 337493-10 (80063)	EA	1	*	*	*	*	*	*	*	*	*	5	
PAOZZ		RESISTOR, FIXED, COMPOSITION RCO5GF201J (81439)	EA	29	*	*	*	*	*	*	*	*	*	5	1
PAOZZ		SEMICONDUCTOR DEVICE, DIODE 1N914 (81439)	EA	43	*	*	*	*	*	*	*	*	*	5	2
XBOZZ		WIRE QQ-W-343 (81348)	EA	V										5	3
DZZ		SLEEVING, INSULATION, VINYL MIL-1-7444 (81349)	EA	V										5	4
DZZ		TERMINAL, STUD 2005D (15849)	EA	115										5	5
XADZZ		CIRCUIT BOARD 337493-33 (80063)	EA	1										5	6
XADZZ		FIXTURE, ASSEMBLING 337462 (80063)	EA	1	*	*	*	*	*	*	*	*	*	6	
DZZ		SETSCREW NAS1081C3A8N (80205)	EA	1										6(1)	1
XADZZ		SHAFT 337462-23 (80063)	EA	1										6(1)	2
XADZZ		BRACKET 337462-23 (80063)	EA	1										6(1)	3
D Z		RING, RETAINING N5000-87 (79136)	EA	2										6(1)	4
DZZ		BUSHING, BALL A-81420-SS (96881)	EA	2										6(1)	5
PAOZZ		KNOB 337462-30 (96906)	EA	1	*	*	*	*	*	*	*	*	*	6(1)	6
PAOZZ	5315-823-8747	PIN, SPRING MS16562-218 (96906)	EA	1	*	*	*	*	*	*	*	*	*	6(2)	7
PADZZ	9530-030-6989	ADAPTER 337462-27 (80063)	EA	1								*	*	6(2)	8
DZZ		SCREW, CAP MS16997-58 (96906)	EA	3										6(2)	9
PAOZZ	9510-030-6992	ROD 337462-41 (80063)	EA	1	*	*	*	*	*	*	*	*	*	6(2)	10
XADZZ		GEAR 337462-50 (80063)	EA	1										6(2)	11
DZZ		PIN, DOWEL AN122696 (88044)	EA	1										6(2)	12
XADZZ		RAIL 337462-15 (80063)	EA	1										6(2)	13
DZZ		SCREW, CAP MS16977-60 (96906)	EA	2										6(2)	14
PAOZZ		KNOB 337462 (80063)	EA	1	*	*	*	*	*	*	*	*	*	6(2)	15
PAOZZ	5315-841-5416	PIN, DOWEL MS16555-606 (96906)	EA	1	*	*	*	*	*	*	*	*	*	6(2)	16
PAOZZ	5910-030-6988	ROD 337462-37 (80063)	EA	1	*	*	*	*	*	*	*	*	*	6(2)	17
XADZZ		GEAR 337462-70 (80063)	EA	1										6(2)	18
DZZ		BUSHING 337162-43 (80063)	EA	1										6(2)	19

SECTION III REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (CONT)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) QTY INC IN UNIT	(7) 30-DAY DS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(8) 30-DAY GS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(9) 1 YR ALW PER EQUIP CNTGCY	(10) DEPOT MAINT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (a) FIG NO.	(b) ITEM NO. OR REF. DESIGN.
DZZ		SETSCREW AN565C8113 (88044)	EA	2										6(2)	20
DZZ		BRACKET 337462-17 (80063)	EA	1										6(1)	21
DZZ		SCREW, CAP MS16997-78 (96906)	EA	4										6(1)	22
DZZ		GUIDE, PLASTIC 337462-51 (80063)	EA	1										6(1)	23
DZZ		SCREW, CAP MS16991-84 (96906)	EA	2										6(1)	24
DZZ		GUIDE, PLASTIC 337462-45 (80063)	EA	1										6(1)	25
DZZ		SCREW, CAP MS16997-78 (96906)	EA	4										6(1)	26
DZZ		GUIDE, PLASTIC 3377462-51 (80063)	EA	1										6(1)	27
DZZ		SCREW, CAP MS16997-77 (96906)	EA	2										6(2)	28
XADZZ		TRACK 337462-13 (80063)	EA	1										6(1)	29
DZZ		SCREW, CAP MS16977-80 (96906)	EA	3										6(1)	30
XADZZ		COVER 337462-03 (80063)	EA	1										6(1)	31
DZZ		SCREW, MACHINE MS35206-215 (98921)	EA	6										6(1)	32
PAOZZ		KNOB 337462-35 (80063)	EA	1	*	*	*	*	*	*	*	*	*	6(1)	33
DZZ		BRACKET 337462-11 (80063)	EA	1										6(1)	34
PAOZZ		CLAMP ASSEMBLY 6008 (12139)	EA	2	*	*	*	*	*	*	*	*	*	6(1)	35
DZZ		PLATE, INDENTIFICATION 198550-001 (80063)	EA	1										6(1)	36
DZZ		SCREW, MACHINE MS35206-215 (98921)	EA	6										6(1)	37
DZZ		LABEL, IDENTIFICATION 198571-004 (80063)	EA	1										6(1)	38
XADZZ		BASE ASSEMBLY 337462-10 (80063)	EA	1										6(1)	39
AOODD		STACK TESTER 337024 (80063)	EA	1	*	*	*	*	*	*	*	*	*		
DZZ		PLATE, IDENTIFICATION 170927-003 (80063)	EA	1											
PAOZZ		KNOB 70-5-1G (94144)	EA	2	*	*	*	*	*	*	*	*	*		
PAOZZ	5355-558-1118	KNOB 70-2-2G (94144)	EA	1	*	*	*	*	*	*	*	*	*		
PAOZZ		HANDLE SET HP-10 (98376)	EA	1	*	*	*	*	*	*	*	*	*		
DZZ		CHASSIS, ELECTRICAL P867J-15-2-0 (98376)	EA	1											
DZZ		COVER 337024-53 (80063)	EA	1										7(1)	6

SECTION III REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (CONT)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) QTY INC IN UNIT	(7) 30-DAY DS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(8) 30-DAY GS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(9) 1 YR ALW PER EQUIP CNTGCY	(10) DEPOT MAINT ALW PER 100 EQUIP	(11) ILLUSTRATIONS (a) FIG NO.	(b) ITEM NO. OR REF. DESIGN.
DZZ		TERMINAL, STAND-OFF 750 (81312)	EA	2										7(1)	7
PAOZZ	5905-11-1682	RESISTOR, FIXED, COMPOSITION RCR07G163JS (81349)	EA	2	*	*	*	*	*	*	*	*	*	7(1)	8
PAOZZ		SWITCH, PUSH 933 (82389)	EA	1	*	*	*	*	*	*	*	*	*	7(1)	9
PAODD	5821-402-6637	RECEIVER, NARROW BAND 80558-1 (80063)	EA	1	*	*	*	*	*	*	*	*	*	7(1)	10
PAODD		LO, REFERENCE, ASSEMBLY 81558-1 (80063)	EA	1	*	*	*	*	*	*	*	*	*	7(1)	11
DZZ		STRIP 337024-11 (80063)	EA	1										7(1)	12
PAOZZ		CONNECTOR, RECETACLE, ELECTRICAL PT00A-20-24S (77820)	EA	1	*	*	*	*	*	*	*	*	*	7(1)	13
PAOZZ		ADAPTER, UG-492D/U MS35177-49 (98921)	EA	1	*	*	*	*	*	*	*	*	*	7(1)	14
PAOZZ	6350-482-9664	EMITTER, VISIBLE 5082-4400 (28480)	EA	6	*	*	*	*	*	*	*	*	*	7(1)	15
PAOZZ	5935-432-6271	CONNECTOR, R.F. 51-007-0000 (98291)	EA	3	*	*	*	*	*	*	*	*	*	7(1)	16
PAOZZ	5935-835-0510	CONNECTOR, RECEPTACLE, ELECTRICAL MIL-C-39012/21-0002 (77820)	EA	7	*	*	*	*	*	*	*	*	*	7(1)	17
PAOZZ		SWITCH, TOGGLE 8868K4 (17465)	EA	1	*	*	*	*	*	*	*	*	*	7(1)	18
PAOZZ	5905-309-5518	RESISTOR, FIXED, COMPOSTITION RG20GF300J (81349)	EA	1	*	*	*	*	*	*	*	*	*	7(1)	19
PAOZZ	5935-192-4869	JACK, TELEPHONE A2A (37942)	EA	1	*	*	*	*	*	*	*	*	*	7(1)	20
PAOZZ		RESISTOR, VARIABLE 282-10K (11237)	EA	1	*	*	*	*	*	*	*	*	*	7(1)	21
PAOZZ		SPEAKER SP25A (80331)	EA	1	*	*	*	*	*	*	*	*	*	7(1)	22
PAOZZ		SWITCH, PUSH 2PB299-T2 (91929)	EA	3	*	*	*	*	*	*	*	*	*	7(1)	23
PAOZZ		SWITCH, PUSH 4PB11-T2 (91929)	EA	1	*	*	*	*	*	*	*	*	*	7(1)	24
PAOZZ		SWITCH, ROTARY, THUMBWHEEL 620MW (97525)	EA	5	*	*	*	*	*	*	*	*	*	7(1)	25
PAOZZ		SWITCH, ROTARY,THUMBWHEEL 6257MW (97525)	EA	2	*	*	*	*	*	*	*	*	*	7(1)	26
PAOZZ		SWITCH, ROTARY, THUMBWHEEL 6218MW (97525)	EA	2	*	*	*	*	*	*	*	*	*	7(1)	27
PAOZZ		LIGHT, INDICATOR 102SKI-FB2-R (08717)	EA	1	*	*	*	*	*	*	*	*	*	7(1)	28
PAOZZ	6240-752-2581	LAMP, INCANDECENT MS24515-685 (08717)	EA	1	*	*	*	*	*	*	*	*	*		
PAOZZ		LIGHT, INDICATOR 102SKI-FB2-G (08717)	EA	1	*	*	*	*	*	*	*	*	*	7(1)	29
PAOZZ		LAMP, INCANDECENT MS24575-685 (08717)	EA	1	*	*	*	*	*	*	*	*	*		
PAOZZ		METER, 0-50 MA, 1K 255 (80145)	EA	1	*	*	*	*	*	*	*	*	*	7(1)	30
PAOZZ		ADAPTER, UG-49D/U MS35177-49 (98921)	EA	1	*	*	*	*	*	*	*	*	*	7(1)	31

SECTION III REPAIR PARTS DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (Continued)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION / REFERENCE NUMBER & MFR CODE / USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(7) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(8) 1-YR ALW PER EQUIP CNTGY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATION (A) FIG. NO.	(B) ITEM NO. OR REFERENCE DESIGNATION
PAOZZ		LIGHT, INDICATOR 102SK1-FB2-A (08717)	EA	24	*	*	*	*	*	*	*	*	7(1)	32
PAOZZ		LAMP, INCANDECENTEA MS24515-685 (08717)	1	*	*	*	*	*	*	*	*			
PAOZZ		SWITCH, PUSH 2PB299-T2 (97929)	EA	2	*	*	*	*	*	*	*	*	7(1)	33
PAOZZ		SWITCH, ROTARY 28-GB-3 (17870)	EA	2	*	*	*	*	*	*	*	*	7(1)	34
PAOZZ	6210-299-5120	LIGHT, INDICATOR 52410-995 (72619)	EA	1	*	*	*	*	*	*	*	*	7(1)	35
PAOZZ		LAMP INCANDECENT 757 (08806)	EA	1	*	*	*	*	*	*	*	*		
PAOZZ	5930-984-9883	SWITCH, TOGGLE MS25307-222 (96906)	EA	2	*	*	*	*	*	*	*	*	7(1)	36
PAOZZ	6210-299-5120	LIGHT INDICATOR 52410-995 (72619)	EA	1	*	*	*	*	*	*	*	*	7(1)	37
PAOZZ		LAMP, GLOW NE-51H (08806)	EA	1	*	*	*	*	*	*	*	*		
DZZ		COVER, TOP	EA	1									7(2)	38
DZZ		PLATE 337024-03 (80063)	EA	1									7(2)	39
AOODD		CONNECTOR ASSEMBLY	EA	1									7(2)	40
PAOZZ		CONNECTOR, RECEPTALCE, ELECTRICAL PT100-18-28P (77820)	EA	1	*	*	*	*	*	*	*	*		
PAOZD		CONNECTOR, PLUG, ELECTRICAL PT106-P-18-28S	EA	1	*	*	*	*	*	*	*	*	7(2)	41
XADZZ		CHASSIS 337024-01 (80063)	EA	1									7(2)	42
PAODD	6350-181-1787	POWER SUPPLY PL-5.1-3.0A (13850)	EA	1	*	*	*	*	*	*	*	*	7(2)	43
PAOZZ		POWER SUPPLY PL-5.1-.75A (13850)	EA	1	*	*	*	*	*	*	*	*	7(2)	44
PAODD	6130-498-3702	POWER SUPPLY PL-5.1-0-375A (13850)	EA	1	*	*	*	*	*	*	*	*	7(2)	45
PAODD		POWER SUPPLY PL-9.8-.2A (13850)	EA	1	*	*	*	*	*	*	*	*	7(2)	46
PAODD	6130-022-5132	POWER SUPPLY LM219 (80103)	EA	1	*	*	*	*	*	*	*	*	7(2)	47
PAODD		POWER SUPPLY PL-6.1-1.5A (13850)	EA	1	*	*	*	*	*	*	*	*		
PAOZZ	5935-803-1445	JACK, BANANA 108-902 (74970)	EA	5	*	*	*	*	*	*	*	*	7(2)	48
PAOZZ	5935-729-5559	JACK, BANANA 108-903 (74970)	EA	6	*	*	*	*	*	*	*	*	7(2)	49
PAOZZ	5935-810-2519	JACK, BANANA 108-904 (74970)	EA	1	*	*	*	*	*	*	*	*	7(2)	50
PAOZZ	5935-842-2166	JACK, BANANA 108-906 (74970)	EA	1	*	*	*	*	*	*	*	*	7(2)	51
PAODD	5920-857-6256	PROTECTOR, OVERVOLTAGE LMOV-1 (80103)	EA	1	*	*	*	*	*	*	*	*	7(2)	52
PAODD	5920-080-0704	PROTECTOR, OVERVOLTAGE LMOV-1 (80103)	EA	1	*	*	*	*	*	*	*	*	7(2)	53

SECTION III REPAIR PARTS DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (Continued)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION / REFERENCE NUMBER & MFR CODE / USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(7) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(8) 1-YR ALW PER EQUIP CNTGY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATION (A) FIG. NO.	(B) ITEM NO. OR REFERENCE DESIGNATION
PAODD	5920-857-6256	PROTECTOR, OVERVOLTAGE LMOV-1 (80103)	EA	1	*	*	*	*	*	*	*	*	7(2)	54
PAODD	5920-857-6256	PROTECTOR, OVERVOLTAGE LMOV-1 (80103)	EA	1	*	*	*	*	*	*	*	*	7(2)	55
PAODD	5920-080-0707	PROTECTOR, OVERVOLTAGE LMOV-3 (80103)	EA	1	*	*	*	*	*	*	*	*	7(2)	56
PAOZZ	5915-188-4438	FILTER, SUPPRESSION 9012-101-0000 (72982)	EA	2	*	*	*	*	*	*	*	*	7(2)	57
PAOZZ	5905-826-2289	RESISTOR, VARIABLE 224S-1-103M (80294)	EA	1	*	*	*	*	*	*	*	*	7(2)	58
PAOZZ	5905-965-8142	RESISTOR, VARIABLE 224S-1-102M (80294)	EA	1	*	*	*	*	*	*	*	*	7(2)	59
PAOZZ	5905-965-8142	RESISTOR, VARIABLE 224S-1-102M (80294)	EA	1	*	*	*	*	*	*	*	*	7(2)	60
PAOZZ	5905-842-0684	RESISTOR, VARIABLE 224S-1-101M (80294)	EA	1	*	*	*	*	*	*	*	*	7(2)	61
PAOZZ		GROMMET, RUBBER NO. 5 (77969)	EA	6	*	*	*	*	*	*	*	*	7(2)	62
DZZ		BRACKET 337024-45 (80063)	EA	1	*	*	*	*	*	*	*	*	7(2)	63
DZZ		CARD RACK H4812 (97525)	EA	1									7(2)	64
PAFDD	6350-482-9665	SIGNAL CONDITIONER	EA	1	*	*	*	*	*	*	*	*		
	-	285222-000 (80063)	EA	1	*	*	*	*	*	*	*	*		
PAFDD	6350-483-2936	DIAGNOSTIC 286861-000 (80063)	EA	1	*	*	*	*	*	*	*	*		
PAFDD	5999-451-4271	FLIP FLOPS D4003 (97525)	EA	4	*	*	*	*	*	*	*	*		
PAFDD	4920-435-5244	CIRCUIT CARD ASSY D4008 (97525)	EA	2	*	*	*	*	*	*	*	*		
PAFDD	4920-435-5444	CRYSTAL OSCILLATOR D4022 (97525)	EA	1	*	*	*	*	*	*	*	*		
PAFDD	4920-435-5184	CIRCUIT CARD ASSY D44004 (97525)	EA	5	*	*	*	*	*	*	*	*		
PAFDD	4920-435-5444	CRYSTAL OSCILLATOR D4022 (97525)	EA	1	*	*	*	*	*	*	*	*		
PAFDD	4920-435-5184	CIRCUIT CARD ASSY D4004 (97525)	EA	5	*	*	*	*	*	*	*	*		
PAFDD		SHIFT REGISTER D4208 (975250)	EA	2	*	*	*	*	*	*	*	*		
PAFDD		RESISTOR ENTRANCE CARD 285221-00 (80063)	EA	1	*	*	*	*	*	*	*	*		
PAFDD	599-451-4272	EXCLUSIVE OR CIRCUITS, SIXTEEN D4025 (97525)	EA	1	*	*	*	*	*	*	*	*		
PAFDD	4920-435-5241	CIRCUIT CARD ASSY D4007 (97525)	EA	1	*	*	*	*	*	*	*	*		
PAFDD	4920-435-5287	CIRCUIT CARD ASSY D4031 (97525)	EA	1	*	*	*	*	*	*	*	*		
PAFDD	6350-483-2953	FULL ADDER 285247-000 (80063)	EA	1	*	*	*	*	*	*	*	*		
PAFDD		RESISTOR CARD 285235-00 (80063)	EA	1	*	*	*	*	*	*	*	*		
PAFDD		LAMP DRIVERS D4036 (97525)	EA	3	*	*	*	*	*	*	*	*		
PAFDD		RESISTOR EXIT CARD 285223-000 (80063)	EA	1	*	*	*	*	*	*	*	*		
PADZZ		BRACKET, LEFT 337024-13 (80063)	EA	1									7-65	

SECTION III REPAIR PARTS DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (Continued)

SMR CODE	(1) FEDERAL STOCK NUMBER	(2) DESCRIPTION / REFERENCE NUMBER & MFR CODE	(3) USABLE ON CODE	UNIT OF MEAS	QTY INC IN UNIT	(4) (5) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(6) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(7) 1-YR ALW PER EQUIP CNTGY	DEPOT MAINT ALW PER 100 EQUIP	(8) (9) (10) ILLUSTRATION (A) FIG. NO.	(B) ITEM NO. OR REFERENCE DESIGNATION
DZZ		BRACKET 337024-14 (80063)		EA	1									7(2)	66
PAODD		COMPONENT BOARD ASSEMBLY, A31 337024-30 (80063)		EA	1	*	*	*	*	*	*	*	*	7(2)	66
DZZ	5310-576-2785	SPACER 2122 (83330)		EA	4									7(2)	67
DZZ		SPACER 337024-21 (80063)		EA	9									7(2)	68
DZZ		SPACER 2106 (83330)		EA	4									7(2)	69
DZZ		SPACER 337024-23 (80063)		EA	6									7(2)	70
DZZ		COVER, REAR		EA	1									7(2)	71
DZZ		VENT 337024-33 (80063)		EA	1									7(3)	72
PAOZZ	4140-010-5365	FAN VENTILATING BC2206F-2 (92702)		EA	1	*	*	*	*	*	*	*	*		
PAOZZ		CAPACITOR, MYLAR DIELECTRIC 663F-105-94W (84411)		EA	1	*	*	*	*	*	*	*	*	7(3)	73
PAOZZ	5935-806-5539	CONNECTOR, PLUG PT06P-8-3P (77820)		EA	1	*	*	*	*	*	*	*	*		
PAOZZ	5940-194-2833	TERMINAL BOARD 3-140 (71785)		EA	1	*	*	*	*	*	*	*	*	7(3)	74
PAOZZ	5910-482-0442	CAPACITOR, FIXED TATALUM 35D106 (81349)		EA	3	*	*	*	*	*	*	*	*	7(3)	75
DZZ		TERMINAL STANDOFF 750 (81312)		EA	6									7(3)	76
PAOZD	5935-738-6524	CONNECTOR, RECEPTACLE DBMF-9W4S (71468)		EA	1	*	*	*	*	*	*	*	*	7(3)	77
PAOZZ	5935-089-1165	CONNECTOR, RECEPTACLE DBMF-13W3S (71468)		EA	2	*	*	*	*	*	*	*	*	7(3)	78
PAOZZ		CONNECTOR, RECEPTACLE MIL-C-39012/21-002 (81349)		EA	2	*	*	*	*	*	*	*	*	7(3)	79
DZZ		BRACKET 337024-17 (80063)		EA	1									7(30	80
PAOZZ	5935-660-5207	CONNECTOR, RECEPTACLE, ELECTRICAL 5278 (74545)		EA	1	*	*	*	*	*	*	*	*	7(3)	81
PAOZZ	2920-217-9118	HOLDER, FUSE 342001 (75915)		EA	2	*	*	*	*	*	*	*	*	7(3)	82
PAOZZ		FUSE, CARTRIDGE AGC-1 (71400)		EA	2	*	*	*	*	*	*	*	*		
DZZ		TERMINAL STUD 7201 (05791)		EA	1									7(3)	83
DZZ		LABEL 198571-004 (80063)		EA	1									7(3)	84
XADZZ		COVER BOTTOM		EA	1									7(4)	85
PAOZZ	5935-053-4793	CONNECTOR, PLUG, ELECTRICAL		EA	1	*	*	*	*	*	*	*		7(4)	86
PAOZZ	5935-259-0205	ADAPTER UG-201A/U (80058)		EA	1	*	*	*	*	*	*	*	*	7(4)	87
PAOZZ		CLAMP, LOOP MS21919DG (96906)		EA	1	*	*	*	*	*	*	*	*	7(4)	88

SECTION III REPAIR PARTS DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (Continued)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION / REFERENCE NUMBER & MFR CODE / USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(7) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(8) 1-YR ALW PER EQUIP CNTGY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATION (A) FIG. NO.	(B) ITEM NO. OR REFERENCE DESIGNATION
PAODD	6625-445-6954	ATTENUATOR, FIXED FXRAD-30N (000929)	EA	1	*	*	*	*	*	*	*	*	7(4)	89
PAOZZ	5985-492-7921	COUPLER DIRECTIONAL 3060-20 (99899)	EA	1	*	*	*	*	*	*	*	*	7(4)	90
PAOZZ	5935-204-5098	ADAPTER UG-201A/U (80058)	EA	1	*	*	*	*	*	*	*	*	7(4)	91
PAOZZ	5935-204-5098	ADAPTER UG-1034/U (80058)	EA	1	*	*	*	*	*	*	*	*	7(4)	92
PAOZZ		ADAPTER UG-306B/U MS3536-3068 (96906)	EA	1	*	*	*	*	*	*	*	*	7(4)	93
PAOZZ	5985-125-1313	DETECTOR, R. F. 8471A (284800	EA	1	*	*	*	*	*	*	*	*	7(4)	94
PAOZZ	5935-053-4793	CONNECTOR, PLUG, ELECTRICAL 819-B1800W (94375)	EA	1	*	*	*	*	*	*	*	*	7(4)	95
PAOZZ	5935-053-4793	CONNECTOR, PLUG, ELECTRICAL 819-B1800W (94375)	EA	1	*	*	*	*	*	*	*	*	7(4)	96
PAOZZ	5935-835-0508	CONNECTOR, PLUG, ELECTRICAL M39012/16-001 (81349)	EA	1	*	*	*	*	*	*	*	*	7(4)	97
PAOZZ	5935-201-2411	ADAPTER, UG-274B/U MS35183 (96906)	EA	1	*	*	*	*	*	*	*	*	7(4)	98
PAODD	5985-147-8953	ATTENUATOR, VARIABLE SA-50 (23042)	EA	1	*	*	*	*	*	*	*	*	7(4)	99
PAOZZ		CONNECTOR, PLUG ELECTRICAL PT06-10-98S (77820)	EA	1	*	*	*	*	*	*	*	*		
PAOZZ	5935-835-0508	CONNECTOR, PLUG ELECTRICAL M39012/16-001 (81349)	EA	1	*	*	*	*	*	*	*	*	7(4)	100
PAOZZ	5935-835-0508	CONNECTOR, PLUG ELECTRICAL M39012/16-001 (81349)	EA	1	*	*	*	*	*	*	*	*	7(4)	102
PAOZZ		POWER DIVIDER DA-4TB (00929)	EA	1	*	*	*	*	*	*	*	*	7(4)	103
PAODD	5985-728-8348	ATTENUATOR, FIXED AB-40B (00929)	EA	1	*	*	*	*	*	*	*	*	7(4)	104
PAODD	6350-483-2958	TRANSMITTER, FM, TEIEMETRY 93A444 (07618)	EA	1	*	*	*	*	*	*	*	*	7(4)	105
PAOZZ	5935-835-0508	CONNECTOR, PLUG, ELECTRICAL M39012/16-001 (81349)	EA	12	*	*	*	*	*	*	*	*	7(4)	106
PAOZZ	5935-835-0508	CONNECTOR, PLUG, ELECTRICAL M39012/16-001 (81349)	EA	1	*	*	*	*	*	*	*	*	7(4)	107
PAOZZ	5985-147-8953	ATTENUATOR, VARIABLE SA-50 (23042)	EA	1	*	*	*	*	*	*	*	*	7(4)	108
DZZ		MOUNT 337024-05 (80063)	EA	1									7(4)	109
PAOZZ		RESISTOR, FIXED, W. W. RER65F1ORO, (81349)	EA	1	*	*	*	*	*	*	*	*	7(4)	110
PAOZZ		RESISTOR, FIXED, W. W. RER65F1ROOM (81349)	EA	1	*	*	*	*	*	*	*	*	7(4)	111
PAOZZ		RESISTOR, FIXED W. W. RER65F1ROOM (81349)	EA	1	*	*	*	*	*	*	*	*	7(4)	112
PAOZZ		RESISTOR, FIXED W. W. RER70F49R9M (81349)	EA	1	*	*	*	*	*	*	*	*	7(4)	113
PAOZZ	5905-171-1975	RESISTOR, FIXED, COMPOSITION RC42GF151J (81349)	EA	1	*	*	*	*	*	*	*	*	7(4)	114
PAOZZ	5905-279-2508	RESISTOR, FIXED, COMPOSITION RC20GF755J (81349)	EA	1	*	*	*	*	*	*	*	*	7(4)	115

SECTION III REPAIR PARTS DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (Continued)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION / REFERENCE NUMBER & MFR CODE / USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT 1-20	(6) 30 DAY DS MAINT ALLOWANCE (A) 21-50	(B) 51-100	(C) 1-20	(7) 30 DAY DS MAINT ALLOWANCE (A) 21-50	(B) 51-100	(C)	(8) 1-YR ALW PER EQUIP CNTGY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATION (A) FIG. NO.	(B) ITEM NO. OR REFERENCE DESIGNATION
DZZ		TERMINAL, STAND-OFF 750 (81312	EA	1									7(4)	116
DZZ		TERMINAL, STAND-OFF 750 (81312)	EA	1									7(4)	117
DZZ		GROMMET, RUBBER NO. 72 (77969)	EA	3									7(4)	119
DZZ		GROMMET, PLASTIC G51HB 903296)	EA	V									7(4)	120
PAOZZ		CONNECTOR, RECEPTACLE, ELECTRICAL PT00-8-3S (77820)	EA	1	*	*	*	*	*	*	*	*	7(4)	121
PAODD		COMPONENT BOARD ASSEMBLY 337024-30 (80063)	EA	1	*	*	*	*	*	*	*	*	8	
PADZZ		CAPACITOR, FIXED, TANTALUM 350D105X9035A2 (81349)	EA	1							*	*	8	1
PCDZZ		CAPACITOR, FIXED, ELECTROLYTIC R22J35KSC6 (05397)	EA	1							*	*	8	2
PADZZ		SEMICONDUCTOR DEVICE, DIODE 1N270 (81349)	EA	1							*	*	8	3
PADZZ	5909-484-7392	RESISTOR, FIXED, W. W. RER52L1OOO3FR (81349)	EA	1							*	*	8	4
PADZZ	5909-889-0011	RESISTOR, FIXED, COMPOSITION RC20F104JR4 (81349)	EA	1							*	*	8	5
PADZZ	5905-185-8510	RESISTOR, FIXED, COMPOSITION RC20GF103J (81349)	EA	1							*	*	8	6
PADZZ	5905-195-6806	RESISTOR. FIXED, COMPOSITION RC20GF102 R6 & R25 (81349)	EA	1							*	*	8	7
PADZZ	5905-279-3517	RESISTOR. FIXED, COMPOSITION RC20GF510J R9 & R21 (81349)	EA	1							*	*	8	8
PADZZ		RESISTOR. FIXED, W. W. RER52L5R000FR (81349)	EA	1							*	*	8	9
PADZZ		RESISTOR. FIXED, W. W. RER52L1000R0FR (81349)	EA	1							*	*	8	10
PADZZ	5905-195-6805	RESISTOR. FIXED, COMPOSITION RC20GF561J R26 (81349)	EA	1							*	*	8	11
PADZZ		RESISTOR. FIXED, W. W. RER52L20000FR (81349)	EA	1							*	*	8	12
DZD		CHASSIS ASSEMBLY, U7622 (80063) 337663 (80063)	EA	1									9	
XADZZ		COVER SUBASSEMBLY 337663-10 (80063)	EA	1									9(1)	1
XADZZ		PANEL 337663-01 (80063)	EA	1									9(3)	2
XADZZ		PANEL 337663-03 (80063)	EA	1									9(1)	3
XADZZ		PANEL 337663-05 (80063)	EA	1									9	4
DZZ		HINGE MS20257-4-4813 (96906)	EA	2									9(3)	5
DZZ		ANGLE 337663-27 (80063)	EA	2									9(3)	6
DZZ		STUD ASSEMBLY 2600-6 (71286)	EA	25									9(4)	7

SECTION III REPAIR PARTS DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (Continued)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION / REFERENCE NUMBER & MFR CODE / USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(7) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(8) 1-YR ALW PER EQUIP CNTGY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATION (A) FIG. NO.	(B) ITEM NO. OR REFERENCE DESIGNATION
DZZ		RIVET MS20426D3-4 (96906)	EA	32									9(3)	8
DZZ		RIVET MS20426D3-6 (96906)	EA	38									9(3)	9
DZZ		PULL, DRAWER 30-3229 (90697)	EA	3									9(1)	10
DZZ		RIVET MS20426D3-6 (96906)	EA	6									9	11
DZZ		PLATE IDENTIFICATION 198550-001 (80063)	EA	1									9(1)	12
DZZ		SCREW MS35206-212 (96906)	EA	2									9(1)	13
DZZ		NUT MS21044NO4 (96906)	EA	2									9(1)	14
KADZZ		SIDE SUBASSEMBLY, RIGHT HAND 337663-60 (80063)	EA	1									9(1)	15
KADZZ		PANEL 337663-11 (80063)	EA	1									9	16
KADZZ		PANEL 337663-13 (80063)	EA	1									9	17
DZZ		HINGE MS20257-4-2075 (96906)	EA	1									9	18
DZZ		ANGLE 337663-25 (80063)	EA	V									9	19
DZZ		RECEPTACLE 212-12 (71286)	EA	13									9	20
DZZ		RIVET MS20426D3-4 (96906)	EA	8									9	21
DZZ		RIVET MS20426D3-4 (96906)	EA	8									9	22
KADZZ		SIDE SUBASSEMBLY, LEFT HAND 337663-50 (80063)	EA	1									9(1)	23
KADZZ		PANEL 337663-11 (80063)	EA	1									9(2)	24
KADZZ		PANEL 337663-11 (80063)	EA	1									9(2)	25
DZZ		HINGE MS20257-4-2075 (96906)	EA	1									9(2)	26
DZZ		ANGLE 337663-25 (80063)	EA	V									9(2)	27
DZZ		RECEPTACLE 212-12 (71286)	EA	13									9	28
DZZ		RIVET MS20426D3-4 (96906)	EA	8									9(2)	29
DZZ		RIVET MS20426D3-4 (96906)	EA	8									9(2)	30
KADZZ		BENCH, PORTABLE 4362PB36 (10199)	EA	1									9(1)	31
DZZ		LABEL, IDENTIFICATION 198571-004 (80063)	EA	1									9(1)	32
KADZZ		BACK SUBASSEMBLY 337663-110 (88063)	EA	1									9(1)	33
KADZZ		PANEL 337663-15 (80063)	EA	1									9(4)	34

SECTION III REPAIR PARTS DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (Continued)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION / REFERENCE NUMBER & MFR CODE / USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(7) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(8) 1-YR ALW PER EQUIP CNTGY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATION (A) FIG. NO.	(B) ITEM NO. OR REFERENCE DESIGNATION
DZZ		ANGLE 337663-31 (80063)	EA	1									9(4)	35
DZZ		RIVET MS20426D3-6 (96906)	EA	16									9(4)	36
DZZ		RECEPTACLE 212-12 (71286)	EA	7									9(4)	37
DZZ		RIVET MS20426D3-5	EA	14									9(4)	38
DZZ		SCREW MS35495-94 (96906)	EA	15									9	39
DZZ		ANGLE BRACKET SUBASSEMBLY, RIGHT HAND 337663-80 (80063)	EA	1									9(1)	40
DZZ		SCREW MS35207-262 (96906)	EA	3									9	41
DZZ		NUT AN315-3R (88044)	EA	3									9	42
DZZ		WASHER MS35338-24 (96906)	EA	3									9	43
DZZ		BRACKET 337663-17 (80063)	EA	1									9	44
DZZ		NUT, SELF-LOCKING 22NA21-22-02 (22599)	EA	3									9	45
DZZ		RIVET MS20426D3-5 (96906)	EA	6									9	46
DZZ		ANGLE BRACKET SUBASSEMBLY, LEFT HAND 337663-80 (88063)	EA	1									9(1)	47
DZZ		SCREW MS35207-262 (96906)	EA	3									9(1)	48
DZZ		NUT AN315-3R (88044)	EA	3									9(1)	49
DZZ		WASHER MS35338-24 (96906)	EA	3									9(1)	50
DZZ		BRACKET 337663-17 (80063)	EA	1									9	51
DZZ		NUT, SELF-LOCKING 22NA21-22-02 (22599)	EA	3									9	52
DZZ		RIVET MS20426D3-5 (96906)	EA	6									9	53
DZZ		RISER SUBASSEMBLY 337663-30 (80063)	EA	1									9(1)	54
DZZ		PANEL 337663-07 (80063)	EA	1									9(5)	55
DZZ		CHANNEL 337663-37 (80063)	EA	5									9(5)	56
DZZ		CHANNEL 337663-35 (80063)	EA	1									9(5)	57
DZZ		CHANNEL 337663-33 (80063)	EA	1									9(5)	58
DZZ		ANGLE 337663-23 (80063)	EA	10									9(5)	59
DZZ		RIVET MS20470D3-7 (96906)	EA	100									9(5)	60
DZZ		SPRING 337663-45 (80063)	EA	1									9(1)	61

SECTION III REPAIR PARTS DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (Continued)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION / REFERENCE NUMBER & MFR CODE / USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(7) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(8) 1-YR ALW PER EQUIP CNTGY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATION (A) FIG. NO.	(B) ITEM NO. OR REFERENCE DESIGNATION
DZZ		SCREW MS35206-243 (96906)	EA	1									9(1)	62
DZZ		NUT MS35649-282 (96906)	EA	1									9(1)	63
DZZ		WASHER MS35338-23 (96906)	EA	1									9(1)	64
DZZ		SPRING 337663-43 (80063)	EA	1									9(1)	65
DZZ		SCREW MS35206-243 (96906)	EA	2									9(1)	66
DZZ		NUT MS35649-282 (96906)	EA	2									9(1)	67
DZZ		WASHER MS35338-23 (96906)	EA	2									9(1)	68
DZZ		BLOCK 337663-21 (80063)	EA	1									9(1)	69
DZZ		SCREW MS35207-260 (96906)	EA	4									9(1)	70
DZZ		WASHER MS35338-24 (96906)	EA	4									9(1)	71
DZZ		SPRING 337663-41 (80063)	EA	1									9(1)	72
DZZ		SCREW MS35206-243 (96906)	EA	2									9(1)	73
DZZ		NUT MS35649-282 (96906)	EA	2									9(1)	74
DZZ		WASHER MS35338-23 (96906)	EA	2									9(1)	75
DZZ		CLAMP, STRAP CL-18220 (99862)	EA	1									9(1)	76
DZZ		NUT, FLANGED CL-123 (99862)	EA	1									9(1)	77
DZZ		WASHER, FLAT CL-254 (99862)	EA	5									9(1)	78
DZZ		SPRING CL-24306 (99862	EA	1									9(1)	79
DZZ		STUD, STAINLESS STEEL CL-11320 (99862)	EA	1									9(1)	80
DZZ		NUT MS35649-202 (96906)	EA	2									9(1)	81
DZZ		SCREW, KNURLED CL-23312 (99862)	EA	1									9(1)	82
DZZ		GUIDE BLOCK CL-1-GB (99862)	EA	1									9(1)	83
DZZ	6625-041-3386	CABLE ASSEMBLY, CA1541 337629 (80063)	EA	1	*	*	*	*	*	*	*	*	10	
XADZZ		CONNECTOR ASSEMBLY. P1	EA											
XADZZ		ADAPTER, PLUG TO JACK 51-077-0000 (98291)	EA	3									10	1
XADZZ		ADAPTER, RIGHT ANGLE 51-012-0000 (98291)	EA	3									10	2
XADZZ		SCREW, MACHINE MS35206-211 (96906)	EA	3									10	3

SECTION III REPAIR PARTS DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (Continued)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION / REFERENCE NUMBER & MFR CODE / USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(7) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(8) 1-YR ALW PER EQUIP CNTGY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATION (A) FIG. NO.	(B) ITEM NO. OR REFERENCE DESIGNATION
XADZZ		WASHER, FLAT AN960-4L (88044)	EA	3									10	4
XADZZ		WASHER, LOCK MS 35340-40 (96906)	EA	3									10	5
XADZZ		NUT, PLAIN MS35649-42	EA	3									10	6
XADZZ		PIN 337629-07 (80063)	EA	1									10	7
XADZZ		BUSHING RUBBER MS3420-6 (96906)	EA	1									10	8
XADZZ		HOUSING 337629-03 (80063)	EA	1									10	9
XADZZ		CONNECTOR ASSEMBLY, P3	EA											
XADZZ		ADAPTER, STRAIGHT 51-010-0000 (98291)	EA	3									10	11
XAD Z		HOUSING 337629-01 (80063)	EA	1									10	12
XADZZ		INSULATION SLEEVING MIL-1-7444 (81349)	EA	V									10	13
XADZZ		CABLE, RADIO FREQUENCY RG-188/U (81349)	EA	V									10	14
PAOZZ	6350-495-8567	CABLE, ASSEMBLY, CA1542 337630 (80063)	EA	1	*	*	*	*	*	*	*	*	11	
XADZZ		CONNECTOR ASSEMBLY, P1	EA											
PAOZZ	5910-847-7288	CAPACITOR, FIXED, CERAMIC CK06CW103K (81349)	EA	1	*	*	*	*	*	*	*	*	11	1
PAOZZ		COIL, RADIO, FREQUENCY 46004 (76487)	EA	1	*	*	*	*	*	*	*	*	11	2
PAOZZ	5905-136-3890	RESISTOR, FIXED, COMPOSITION RCR07G513JS (81349)	EA	1	*	*	*	*	*	*	*	*	11	3
PAOZZ	5905-106-1249	RESISTOR, FIXED, COMPOSITION RCR07G510JS (81349)	EA	1	*	*	*	*	*	*	*	*	11	4
XADZZ		TERMINAL, STAND OFF 756 (81312)	EA	5									11	5
XADZZ		TERMINAL, LUG MS35436-32 (96906)	EA	1									11	6
XADZZ		ADAPTER, STRAIGHT 52-043-000 (98291)	EA	1									11	7
XADZZ		HOUSING 337630-03 (80063)	EA	1									11	8
XADZZ		HOUSING 337630-05 (80063)	EA	1									11	9
DZZ		BUSHING, TELESCOPING MS3420-6 (96906)	EA	1									11	10
XADZZ		INSULATION SLEEVING MIL-1-7444 (81349)	EA	V									11	11
XADZZ		CABLE, RADIO FREQUENCY RG-188/A (81349)	EA	V									11	12
XADZZ		CONNECTOR, PLUG, ELECTRICAL 819-B1800W (94375)	EA	1									11	13

SECTION III REPAIR PARTS DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (Continued)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION / REFERENCE NUMBER & MFR CODE / USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(7) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(8) 1-YR ALW PER EQUIP CNTGY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATION (A) FIG. NO.	(B) ITEM NO. OR REFERENCE DESIGNATION
XADZZ		CONNECTOR ASSEMBLY P3	EA	1										
XADZZ		HOUSING 337630-01 (80063)	EA	1									11	14
XADZZ		ADAPTER, STRAIGHT 51-010-000 (98291)	EA	2									11	15
ADDDD		CABLE, ASSEMBLY CA1543 (80063)	EA	1									12	
PADZD		CONNECTOR, PLUG, ELECTRICAL PT06P-20-24P (77820)	EA	1									12	1
PADZZ		ADAPTER, CABLE TO CONNECTOR MS3057-6B (96906)	EA	1									12	2
PADZZ		RECEPTACLE, DUMMY 2182-16 (71468)	EA	1									12	3
PADZZ		INSULATION SLEEVING MIL-1-7444 (81349)	EA	V									12	4
PADZZ		WIRE, INSULATED MIL-W-16878 (81349)	EA	V									12	5
PADZZ		CABLE, SPECIAL PURPOSE, COAXIAL 10-442481-12 (77820)	EA	1									12	6
PADZZ		CONNECTOR, RECEPTACLE, ELECTRICAL P69901 (80063)	EA	1							*	*	12	7
		ADAPTER MS3057-12B (96906)	EA	1	*	*	*	*	*	*	*	*	12	8
PAFDD	6350-482-9665	SIGNAL CONDITIONER 285222 (80063)	EA	1									13	
PADZZ	5962-252-4535	GATE, INPUT NOR SP380A (18324)	EA	1							*	*	13	1
PADZZ	5962-481-8703	COMPARATOR, ANALOG NE526A (18324)	EA	1							*	*	13	2
PADZZ	5962-011-3008	CIRCUIT, INTEGRATED MC832P (04713)	EA	1							*	*	13	3
PADZZ	5910-083-3974	CAPACITOR, FIXED, ELECTROLYTIC 29F631 (01002)	EA	1							*	*	13	4
PADZZ		CAPACITOR, FIXED, ELECTROLYTIC TAN36BJ010MM (09023)	EA	1							*	*	13	5
PADZZ	5910-022-2760	CAPACITOR, FIXED, CERAMIC DIELECTRIC CK06BX104K (81349)	EA	2							*	*	13	6
PCDZZ		CAPACITOR, FIXED, ELECTROLYTIC CSR13BF226M (81349)	EA	1							*	*	13	7
PADZZ	5910-105-2095	CAPACITOR, FIXED, CERAMIC DIELECTRIC CK06BX683K (81349)	EA	1							*	*	13	8
PADZZ		CAPACITOR, FIXED, ELECTROLYTIC CSR13BF474M (81349)	EA	2							*	*	13	9
PCDZZ		CAPACITOR, FIXED, ELECTROLYTIC CSR13BF334M (81349)	EA	2							*	*	13	10
PADZZ	5910-883-5712	CAPACITOR, FIXED, CERAMIC CK06BX103K (81349)	EA	2							*	*	13	11
PADZZ	5910-105-1924	CAPACITOR, FIXED, CERAMIC CK06BX223K (81349)	EA	1							*	*	13	12
PADZZ		SEMICONDUCTOR DEVICE, DIODE IN270 (81349)	EA	1							*	*	13	13
PADZZ		SEMICONDUCTOR DEVICE, DIODE IN914 (81349)	EA	2							*	*	13	14
PADZZ	5961-199-6008	TRANSISTOR 2N3055 (81349)	EA	1							*	*	13	15

SECTION III REPAIR PARTS DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (Continued)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION / REFERENCE NUMBER & MFR CODE / USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(7) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(8) 1-YR ALW PER EQUIP CNTGY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATION (A) FIG. NO.	(B) ITEM NO. OR REFERENCE DESIGNATION
PADZZ	5961-054-0046	TRANSISTOR 2N1711 (81349)	EA	1							*	*	13	16
PADZZ	5905-997-9352	RESISTOR, FIXED, W. W. RW79U1ROOF (81349)	EA	1							*	*	13	17
PADZZ	5905-928-0968	RESISTOR, FIXED, W. W. RW74U2ROOF (81349)	EA	1							*	*	13	18
PADZZ	5905-136-3891	RESISTOR, FIXED, COMPOSITION RCR07G621JS (81349)	EA	1							*	*	13	19
PADZZ	5905-111-4845	RESISTOR, FIXED, COMPOSITION RCR07G201JS (81349)	EA	2							*	*	13	20
PADZZ	5905-119-3504	RESISTOR, FIXED, COMPOSITION RCR07G273JS (81349)	EA	1							*	*	13	21
PADZZ	5905-111-4727	RESISTOR, FIXED, COMPOSITION RCR07G272JS (81349)	EA	2							*	*	13	22
PADZZ	5905-106-3667	RESISTOR, FIXED, COMPOSITION RCR07G120JS (81349)	EA	1							*	*	13	23
PADZZ	5905-116-3504	RESISTOR, FIXED, COMPOSITION RCR07G511JS (81349)	EA	1							*	*	13	24
PADZZ	5905-106-1249	RESISTOR, FIXED, COMPOSITION RCR07G510JS (81349)	EA	1							*	*	13	25
PADZZ	5905-106-3666	RESISTOR, FIXED, COMPOSITION RCR07G103JS (81349)	EA	1							*	*	13	26
PADZZ	5950-768-5219	TRANSFORMER, AUDIO FREQUENCY AR109 (07589)	EA	1							*	*	13	27
PAFDD	6350-482-2936	DIAGNOSTIC, SIGNAL SENSING 286861 (80063)	EA	1	*	*	*	*	*	*	*	*	14	
PADZZ	5962-066-0171	CIRCUIT, INTEGRATED MC846P (04713)	EA	3							*	*	14	1
PADZZ	5962-252-4535	GATE, QUAD 2-INPUT SP380A (18324)	EA	1							*	*	14	2
PADZZ	2962-066-0173	CIRCUIT, INTEGRATED MC832P (04713)	EA	4							*	*	14	3
PADZZ	5910-022-2760	CAPACITOR CK06BX104K (81349)	EA	1							*	*	14	4
PADZZ		DIODE IN914 (81349)	EA	1							*	*	14	5
PADZZ	5961-954-0626	TRANSISTOR 2N3502 (01295)	EA	2							*	*	14	6
PADZZ	5961-054-0046	TRANSISTOR 2N1711 (81349)	EA	2							*	*	14	7
PADZZ	5905-106-3666	RESISTOR, FIXED, COMPOSITION RCR07G103JS (81349)	EA	8							*	*	14	8
PADZZ	5995-141-1183	RESISTOR, FIXED, COMPOSITION RCR07G101JS (81349)	EA	2							*	*	14	9
PADZZ	5905-111-4845	RESISTOR, FIXED, COMPOSITION RCR07G201JS (81349)	EA	6							*	*	14	10
PAFDZ		RESISTOR ENTRANCE CARD 285221 (80063)	EA	1	*	*	*	*	*	*	*	*	15	
PADZZ	5905-922-7218	RESISTOR, FIXED, COMPOSITION RC05GF392J (81349)	EA	25							*	*	15	1
PADZZ	5905-915-0981	RESISTOR, FIXED, COMPOSITION RC05GF393J (81349)	EA	1							*	*	15	2
PAFDD	6350-482-2935	FULL ADDER 285247 (80063)	EA	1	*	*	*	*	*	*	*	*	16	

SECTION III REPAIR PARTS DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (Continued)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION / REFERENCE NUMBER & MFR CODE / USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(7) 30 DAY DS MAINT ALLOWANCE (A) 1-20	(B) 21-50	(C) 51-100	(8) 1-YR ALW PER EQUIP CNTGY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATION (A) FIG. NO.	(B) ITEM NO. OR REFERENCE DESIGNATION
PADZZ	5962-011-2762	CIRCUIT, INTEGRATED SM748 (01295)	EA	2							*	*	16	1
PAFZZ		RESISTOR CARD 285235 (80063)	EA	1	*	*	*	*	*	*	*	*	17	
PADZZ	5905-948-2391	RESISTOR, FIXED, COMPOSITION RCO5GF302J (81349)	EA	1							*	*	17	1
PADZZ	5905-917-5526	RESISTOR, FIXED, COMPOSITION RCO5GF302J (81349)	EA	1							*	*	17	2
PADZZ	5905-922-7218	RESISTOR, FIXED, COMPOSITION RCO5GF392J (81349)	EA	16							*	*	17	3
PAFDD		RESISTOR EXIT CARD 285223 (80063)	EA	1	*	*	*	*	*	*	*	*	18	
PADZZ	5905-782-4107	RESISTOR, FIXED, COMPOSITION RCO5GF471J (81349)	EA	26							*	*	18	1

SECTION IV. INDEX FEDERAL STOCK NUMBER AND REFERENCE NUMBER

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF DESIGNATION
2920-217-9118	7(3)	82
2962-066-0173	14	3
5310-576-2785	7(2)	67
5315-823-8747	6(2)	7
5315-841-5416	6(2)	16
5821-402-6637	7(1)	10
5905-106-1249	11	4
5905-106-1249	13	25
5905-106-3666	13	26
5905-106-3666	14	8
5905-106-3667	13	23
5905-111-1682	7(1)	8
5905-111-4727	13	22
5905-111-4845	13	20
5905-111-4845	14	10
5905-116-2394	13	24
5905-119-3504	13	21
5905-136-3890	11	3
5905-136-3891	13	19
5905-171-1975	7(4)	114
5905-185-8510	8	6
5905-195-6800	8	11
5905-195-6806	8	7
5905-279-2508	7(4)	115
5905-279-3517	8	8
5905-309-5518	7(1)	19
5905-484-7392	8	4
5905-782-4107	18	1
5905-826-2289	7(2)	58
5905-842-0684	7(2)	61
5905-489-0011	8	5
5905-915-0981	15	2
5905-917-5526	17	2
5905-922-7218	15	1
5905-922-7218	17	3
5905-928-0968	13	18
5905-948-2391	17	1
5905-965-8142	7(2)	59
5905-965-8142	7(2)	60
5905-997-9352	13	17
5910-022-2760	13	6
5910-022-2760	14	4
5910-030-6988	6(2)	17
5910-083-3984	13	4
5910-105-1924	13	12
5910-105-2095	13	8
5910-482-0442	7(3)	75
5910-847-7288	11	1
5910-882-5712	13	11
5915-188-1438	7(2)	57
5920-080-0704	7(2)	53
5920-080-0707	7(2)	56
5920-857-6256	7(2)	52
5920-857-6256	7(2)	54
5920-857-6256	7(2)	55
5930-984-9883	7(2)	36
5935-053-4793	7(1)	86
5935-053-4793	7(4)	95
5935-053-4793	7(4)	96
5935-089-1167	7(3)	78
5935-192-4869	7(1)	20
5935-201-2411	7(4)	98
5935-204-5098	7(4)	92
5935-222-7325	3(1)	35
5935-259-0205	7(4)	87
5935-259-0205	70()	91
5935-432-6271	7(1)	16
5935-660-5207	7(3)	81
5935-729-5559	7(2)	49
5935-738-6524	7(3)	77

SECTION IV. INDEX FEDERAL STOCK NUMBER AND REFERENCE NUMBER (CONTINUED)

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF DESIGNATION
5935-803-1445	7(2)	48
5935-810-2519	7(2)	50
5935-835-0508	7(4)	97
5935-835-0508	7(4)	100
5935-835-0508	7(4)	102
5935-835-0508	7(4)	106
5935-835-0508	7(4)	107
5935-835-0510	7(1)	17
5935-842-2166	7(2)	51
5940-194-2835	7(3)	74
5950-768-5218	13	27
5961-054-0046	13	16
5961-054-0046	14	7
5961-199-6008	13	15
5961-954-0626	14	6
5962-011-3008	13	3
5962-011-2762	16	1
5962-066-0171	14	1
5962-252-4535	13	1
5962-252-4535	14	2
5962-481-8703	13	2
5985-125-1313	7(4)	94
5985-147-8953	7(4)	108
5985-147-8953	7(4)	99
5985-728-8348	7(4)	104
5995-141-1183	14	9
6130-022-5132	7(2)	46
6130-498-3702	7(1)	44
6210-299-5120	7(1)	35
6210-299-5120	7(1)	37
6350-181-1787	7(2)	42
6350-482-9664	7(1)	15
6350-483-2958	7(4)	105
6350-495-8124	1	1
6625-445-6954	7(4)	89
9510-030-6992	6(2)	10
9530-030-6989	6(2)	8

REFERENCE NO.	MFG. CODE	FIG NO.	ITEM NUMBER OR REF. DESIGNATION
AB-40B	00929	7(4)	104
AN122696	88044	6(2)	12
AN122717	88014	2	6
AN122717	88044	3(2)	21
AN122721	88044	2	8
AN315-3R	88044	9	42
AN315-3R	88044	9(1)	49
AN565C8113	88044	6(2)	20
AN960-4L	88044	10	4
AN960-8	88044	3(2)	13
AR109	07589	12	37
A2A	37942	7(1)	20
A-81420-SS	96881	6(1)	5
CA1543	80063	3(1)	48
CK06BK104K	81349	13	6
CK06BX103K	81349	13	11
CK06BX104K	81349	14	4
CK06BX223K	81349	13	12
CK06BX683K	81349	13	8
CK06CW103K	81349	11	1
CL-1-GB	99862	9(1)	83
CL-11320	99862	9(1)	80
CL123	99862	9(1)	77
CL-18220	99862	9(1)	76
CL-23312	99862	9(1)	82
CL-24306	99862	9(1)	79
CL-254	99862	9(1)	78
CSR13BF226M	81349	13	7
CSR13BF334M	81349	13	11
CSR13BF474M	81349	13	9
DA-4TB	00929	7(4)	103

SECTION IV. INDEX FEDERAL STOCK NUMBER AND REFERENCE NUMBER (CONTINUED)

REFERENCE NO.	MFR CODE	FIG. NO.	ITEM NUMBER OR REF. DESIGNATION
DBMF-9W4S	71468	7(3)	77
DBMF-13W35	71468	7(3)	78
FXRAD-30N	00929	7(4)	89
G51HB	03296	7(4)	120
H4812	97525	7(2)	64
LMOV-1	80103	7(2)	52
LMOV-1	80103	7(2)	54
LMOV-1	80103	7(2)	55
LMOV-2	80103	7(2)	53
LMOV-3	80103	7(2)	56
LM219	80103	7(2)	46
MC832P	07143	13	3
MC846P	04713	14	1
MIL-C-39012/21-0002	77820	7(1)	17
MIL-C-39012/21-0002	81349	7(3)	79
MIL-W-16878	81349	12	5
MIL-1-7444	81349	5	4
MIL-1-7444	81349	10	13
MIL-1-7444	81349	11	11
MIL-1-7444	81349	12	4
MS16555-606	96906	6(2)	16
MS16562-218	96906	6(2)	7
MS16977-60	96906	6(1)	14
MS16977-80	96906	6(1)	
MS16997-32		3(1)	32
MS16997-33	96906	3(1)	33
MS16997-36	96906	2	2
MS16997-36	96906	3(1)	26
MS16997-58	96906	6(2)	9
MS16997-77	96906	6(2)	28
MS16997-78	96906	6(1)	22
MS16997-78	96906	6(1)	26
MS16997-84	96906	6(1)	24
MS20257-2-700	96906	3(2)	6
MS20257-4-2075	96906	9	18
MS20257-4-2075		9(2)	26
MS20257-4-4813	96906	9(3)	5
MS20426D3-4	96906	9	21
MS20426D3-4	96906	9(2)	29
MS20426D3-4	96906	9(3)	8
MS20426D3-5	96906	9	46
MS20426D3-5	96906	9	53
MS20426D3-5	96906	9(4)	38
MS20426D3-6	96906	9	11
MS20426D3-6	96906	9(3)	9
MS20426D3-6	96906	9(4)	36
MS20426D3-7	96906	9	22
MS20426D3-7	96906	9(2)	30
MS20426D5	96906	9(4)	38
MS20470D3-7	96906	9(5)	60
MS21044N04	96906	9(1)	14
MS21044N06	96906	3(1)	2
MS21044N06	96906	3(1)	7
MS21044N08	96906	3(1)	27
MS21044N08	96906	3(1)	34
MS21919DG	96906	7(4)	88
MS24621-29	96906	3(2)	10
MS25307-222	96906	7(1)	36
MS3057-6B	96906	3(1)	49
MS3057-6B	96906	12	2
M53057-12B	96906	3(1)	50
MS3057-12B	96906	12	8
MS3420-6	96906	10	8
MS3420-6	96906	11	10
MS35177-49	98921	7(1)	14
MS35177-49	98921	7(1)	31
MS35183	96906	7(4)	98
MS35190-238	96906	3(1)	3
MS35190-254	96906	3(1)	5
MS35206-203	96906	2	16

SECTION IV. INDEX FEDERAL STOCK NUMBER AND REFERENCE NUMBER (CONTINUED)

REFERENCE NO.	MFR CODE	FIG. NO.	ITEM NUMBER OF REF. DESIGNATION
MS35206-204	96906	3(1)	36
MS35206-212	96909	9(1)	13
MS35206-213	96906	2	14
MS35206-213	96906	3(1)	43
MS35206-213	96906	3(1)	45
MS35206-215	98921	6(1)	32
MS35206-215	98921	6(1)	37
MS35206-221	96906	10	3
MS35206-227	96906	3(1)	8
MS35206-243	96906	3(2)	40
MS35206-243	96906	9(1)	62
MS35206-243	96906	9(1)	66
MS35206-243	96906	9(1)	73
MS35206-245	96906	3(2)	12
MS35207-260	96906	9(1)	70
MS35207-262	96906	9	41
MS35207-262	96906	9(1)	48
MS35338-23	96906	9(1)	64
MS35338-23	96906	9(1)	68
MS35338-23	96906	9(1)	75
MS35338-24	96906	9	43
MS35338-24	96906	9(1)	50
MS35338-24	96906	9(1)	71
MS35340-12	96906	3	14
MS35340-40	96906	10	5
MS35340-42	96906	3(2)	41
MS35368-3068	96906	7(4)	93
MS35436-32	96906	11	6
MS35495-94	96906	9	39
MS35649-42	96906	10	6
MS35649-202	96906	9(1)	81
MS35649-282	96906	9(1)	63
MS35649-282	96906	9(1)	67
MS35649-282	96906	9(1)	74
MS51029-38	96906	2	15
MS51838-198	96906	3(2)	19
M39012/16-0001	81349	7(4)	97
M39012/16-0001	81349	7(4)	100
M39012/16-0001	81349	7(4)	102
M39012/16-0001	81349	7(4)	106
M39012/16-0001	81349	7(4)	107
NAS108C3A85	80205	6(1)	1
NAS1081-08A4G	80205	3(1)	17
NAS1081-08A4G	80205	3(1)	24
NAS1081-06B6	80205	2	4
MC832P	04713	14	3
MC526A	18324	13	2
NO. 5	77969	7(2)	62
NO.72	77969	7(4)	119
N5000-87	79136	6(1)	4
PL-5.1-0.375A	13850	7(2)	44
PL-5.1-3.0A	13850	7(2)	42
PL-5.1-.75A	13805	7(2)	43
PL-6.1-1.5A	13850	7(2)	47
PL-9.8-.2A	13850	7(2)	45
PT00A-20-24S	77820	7(1)	13
PT00-8-3S	77820	7(4)	121
PT06P-20-24P	77820	12	1
P69901	80063	12	7
QQ-W-343	81348	5	3
PBR51L20000WR	81349	8	12
PBR52L10000FR	81349	8	10
PBR52L1003FR	81349	8	4
PBR52L000FR	81349	8	9
RCB07G1JS	81349	14	9
RCB07G103JS	81349	13	26
RCB07G103JS	81349	14	8
RCB07G120JS	81349	13	23
RCB07G163JS	81349	7(1)	8
RCB07G201JS	81349	13	20

SECTION IV. INDEX FEDERAL STOCK NUMBER AND REFERENCE NUMBER (CONTINUED)

REFERENCE NO.	MFR CODE	FIG. NO.	ITEM NUMBER OR REF. DESIGNATION.
RCR07G201JS	81349	14	10
RCR07GF272JS	81349	13	22
RCR07GF273JS	81349	13	21
RCR07GF510JS	81349	11	4
RCR07GF510JS	81349	13	25
RCR07G511JB	81349	13	24
RCR07G513J3	81349	11	3
RCR07G621JS	81349	13	19
RC05CF201J	81349	5	1
RC05GF302J	81349	17	1
RC05GF392J	81349	15	1
RC05GF392J	81349	17	3
RC05GF393J	81349	15	2
RC05GF471J	81349	18	1
RC05GF912J	81349	17	2
RC20GF102J	81349	8	7
RC20GF103J	81349	8	6
RC20GF104JR4	81349	8	5
RC20GF300J	81349	7(1)	19
RC20GF510J	81349	8	8
RC20GF561J	81349	8	11
RC20GF755J	81349	7(4)	115
RC42GF151J	81349	7(4)	114
RER65FR100M	81349	7(4)	112
RER65F1R00M	81349	7(4)	111
RER65F10R0M	81349	7(4)	100
RER70F49R9M	81349	7(4)	113
RG-188A/U	81349	10	14
RG-188A/U	81349	11	12
RW74U2R00F	81349	13	18
RW79U1R00F	81349	13	17
R22J35KSC6	05397	8	2
SA50	23042	7(4)	99
SA50	23042	7(40	108
SN7483N	01295	16	1
SP25A	80331	7(1)	22
SP380A	18324	13	1
SP380A	18324	14	2
TAN36BJ010M	09023	13	5
UG-1034/U	80058	7(4)	
UG-201A/U	80058	7(4)	87
UG-201A/U	80058	7(4)	91
1N270	81349	8	3
1N270	81349	13	13
1N914	81349	5	2
1N914	81349	13	14
1N914	81349	14	5
102SK1-FB2-A	08717	7(1)	32
102SK1-FB2-G	08717	7(1)	29
102SK1-FB2-R	08717	7(1)	28
10-442475	77820	3(2)	23
10-442480(TA386)	77820	3(2)	29
10-442481-12	77820	12	6
108-902	74970	7(2)	48
108-903	74970	7(2)	49
108-904	74970	7(2)	50
108-906	74970	7(2)	51
198550-001	80063	2	13
198550-001	80063	3(1)	38
198550-001	80063	6(1)	36
198550-001	80063	9(1)	12
198571-004	80063	6(1)	38
198571-004	80063	7(3)	84
198571-004	80063	9(1)	32
2N1711	81349	13	16
2N1711	81349	14	7
2N3055	81349	13	15
2N3502	01295	14	6
2PB299-T2	91929	7(1)	23
2PB299-T2	97929	7(1)	33

SECTION IV. INDEX FEDERAL STOCK NUMBER AND REFERENCE NUMBER (CONTINUED)

REFERENCE NO.	MFR CODE	FIG. NO.	ITEM NUMBER OR REF. DESIGNATION
2005D	15849	5	5
2025	12139	2	12
2025	2139	3(1)	46
2106	83330	7(2)	69
212-12	71286	9	20
212-12	71286	9	28
212-12	71286	9(4)	37
2122	83330	7(2)	67
2182-16	71468	3(1)	35
2182-16	71468	12	3
22NA21-22-02	22599	9	45
22NA21-22-02	22599	9	52
22NM-26	22599	3(1)	37
224S-1-101M	80294	7(2)	61
224S-1-102M	80294	7(2)	59
224S-1-102M	80294	7(1)	60
224S-1-103M	80294	7(1)	58
252-10K	11237	7(1)	21
255	80145	7(1)	30
2600-6	71286	9(4)	7
28-GB-3	17870	7(1)	34
29F631	01002	13	4
30-3229	90697	9(1)	10
3060-20	99899		
3-140	71785	7(3)	74
337024-000	80063	1	4
337024-01	80063	7(2)	41
337024-03	80063	7(2)	39
337024-05	80063	7(4)	109
337024-11	80063	7(1)	12
337024-13	80063	7(2)	65
337024-17	80063	7(2)	80
337024-21	80063	7(2)	68
337024-23	80063	7(2)	70
337024-30	80063	7(2)	66
337024-33	80063	7(3)	72
337024-45	80063	7(2)	63
337024-53	80063	7(1)	6
337162-43	80063	6(2)	19
337461-000	80063	1	1
337461-05	80063	2	1
337461-07	80063	2	3
337461-10	80063	2	11
337461-11	80063	2	9
337461-13	80063	2	5
337461-15	80063	2	7
337461-17	80063	2	10
337462	80063	6(2)	15
337462-000	80063	1	3
337462-03	80063	6(1)	31
337462-10	80063	6(1)	39
337462-11	80063	6(1)	34
337462-13	80063	6(1)	29
337462-15	80063	6(2)	13
337462-17	80063	6(1)	21
337462-23	80063	6(1)	3
337462-27	80063	6(2)	8
337462-30	96906	6(1)	6
337462-35	80063	6(1)	33
337462-37	80063	6(2)	17
337462-41	80063	6(2)	10
337462-45	80063	6(1)	25
337462-50	80063	6(2)	11
337462-51	80063	6(1)	23
337462-51	80063	6(1)	27
337462-70	80063	6(2)	18
337462-100	80063	6(1)	2
337493-000	80063	1	2
337493-01	80063	3(2)	18
337493-03	88044	3(2)	20

SECTION IV. INDEX FEDERAL STOCK NUMBER AND REFERENCE NUMBER (CONTINUED)

REFERENCE NO.	MFR CODE	FIG. NO.	ITEM NUMBER OR REF. DESIGNATION
337493-07	80063	3(2)	22
337629-01	80063	10	12
337629-03	80063	10	9
337629-05	80063	10	10
337629-07	80063	10	7
337630-01	80063	11	14
337630-03	80063	11	8
337630-05	80063	11	9
337663-07	80063	9(5)	55
337663-17	80063	9	44
337663-17	80063	9	51
337663-21	80063	9(1)	69
337663-23	80063	9(5)	59
337663-33	80063	9(5)	58
337663-35	80063	9(5)	57
337663-37	80063	9(5)	56
337663-41	80063	9(1)	72
337663-43	80063	9(1)	65
337663-45	80063	9(1)	61
3374930-31	80063	3(2)	28
337493-05	80063	3(2)	30
337493-10	80063	3(2)	11
337493-11	80063	3(2)	4
337493-13	80063	3(1)	39
337-493-15	80063	3(2)	9
337493-17	80063	3	1
337493-21	96906	3(2)	47
337493-23	80063	3(1)	31
337493-25	80063	3(2)	25
337493-27	80063	3(2)	16
337493-33	80063	5	6
337632-000	80063	2	17
337663-000	80063	1	5
337663-01	80063	9(3)	2
337663-03	80063	9(1)	3
337663-05	80063	9	4
337663-10	80063	9(1)	1
337663-11	80063	9	16
337663-11	80063	9(2)	24
337663-13	80063	9	17
337663-13	80063	9(2)	25
337663-15	80063	9(4)	34
337663-17	80063	9	44
337663-17	80063	9	51
337663-25	80063	9	19
337663-25	80063	9(2)	27
337663-27	80063	9(3)	6
337663-30	88063	9(1)	54
337663-31	80063	9(4)	35
337663-50	80063	9(1)	23
337663-60	80063	9(1)	15
337663-80	80063	9(1)	40
337663-80	88063	9(1)	47
337663-110	88063	9(1)	33
342001	75915	7(3)	82
350D105X9035A2	81349	8	1
350D106	81349	7(3)	75
51-012-000	98291	10	2
51-077-0000	98291	10	1
4PB11-T2	91929	7(1)	24
436PB36	10199	9(1)	31
4604	76487	11	2
5082-4400	28480	7(1)	15
51-007-0000	98291	7(1)	16
51-010-0000	98291	10	11
51-10-000	98291	11	15
52-043-000	98291	11	7
52410-995	72619	7(1)	35
52410-995	72619	7(1)	37
5278	74545	7(3)	81

SECTION IV. INDEX FEDERAL STOCK NUMBER AND REFERENCE NUMBER (CONTINUED)

REFERENCE NO.	MFR CODE	FIG. NO.	ITEM NUMBER OR REF. DESIGNATION	REFERENCE NO.	MFR CODE	FIG. NO.	ITEM NUMBER OR REF. DESIGNATION
6008	12139	6(1)	35				
62002W	97525	7(1)	25				
6218MW	97525	7(1)	27				
6257MW	97525	7(1)	26				
663F-105-94W	84411	7(3)	73				
7201	05791	7(3)	83				
750	81312	3(1)	42				
750	81312	3(1)	44				
750	81312	7(1)	7				
750	81312	7(3)	76				
750	81312	7(4)	116				
750	81312	7(4)	117				
750	81312	7(4)	118				
756	81312	11	5				
80555-1	10412	7(1)	10				
81558-1	80063	7(1)	11				
819B01800W	94375	7(4)	86				
819-B1800W	94375	7(4)	95				
819-B1800W	94375	11	13				
8368	83330	3(2)	15				
8471A	28480	7(4)	94				
8866K1	17465	4	2				
8868K4	17465	4	1				
8868K4	17465	7(1)	18				
9012-101-0000	72982	7(2)	57				
93A444	07618	7(4)	105				
933	82389	7(1)	9				

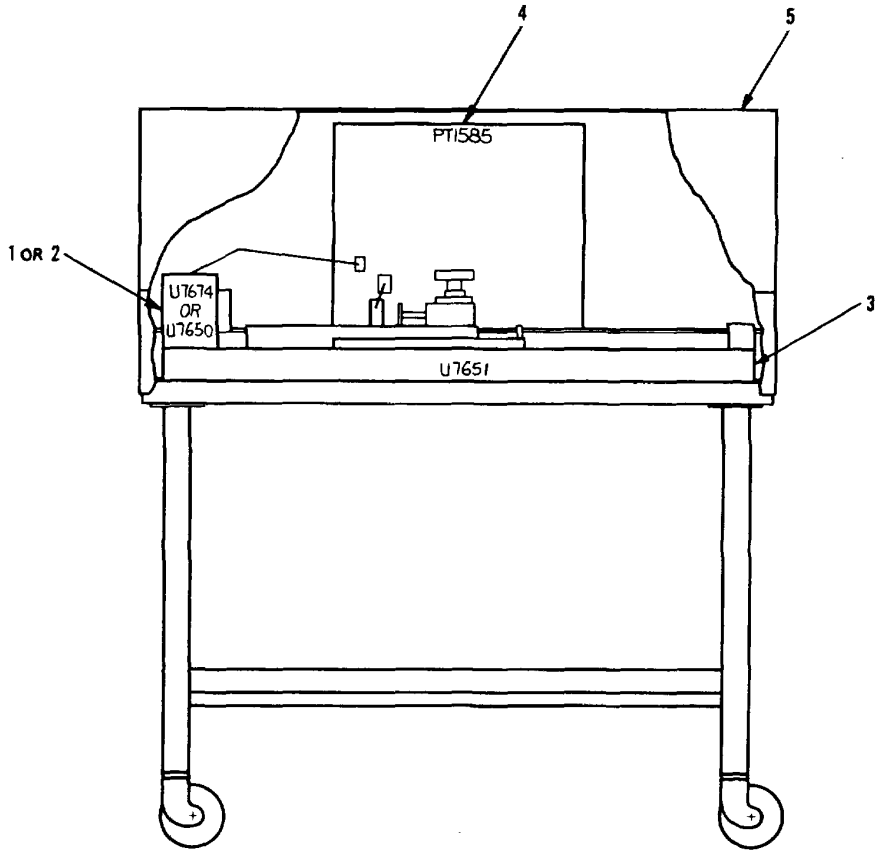

Figure 1. PT 1585 sensor/stack tester.

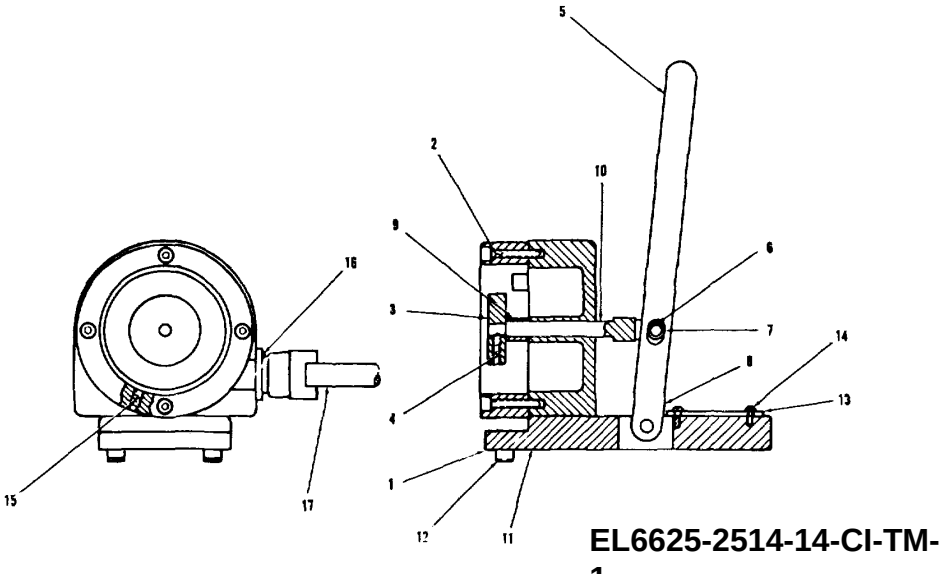

Figure 2. U7650 cable connector head.

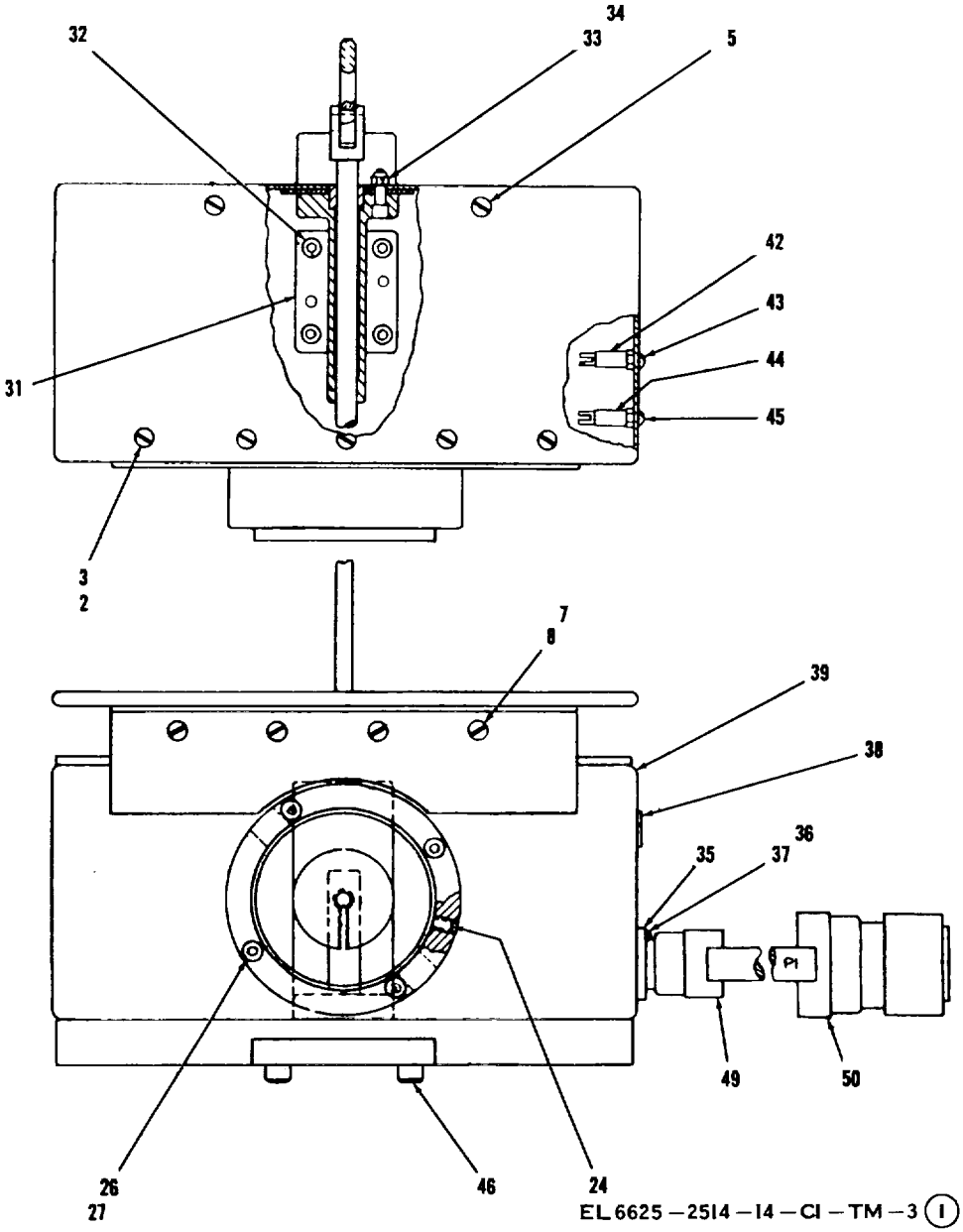

Figure 3(1). U7674 simulated code plug (sheet 1 of 2).

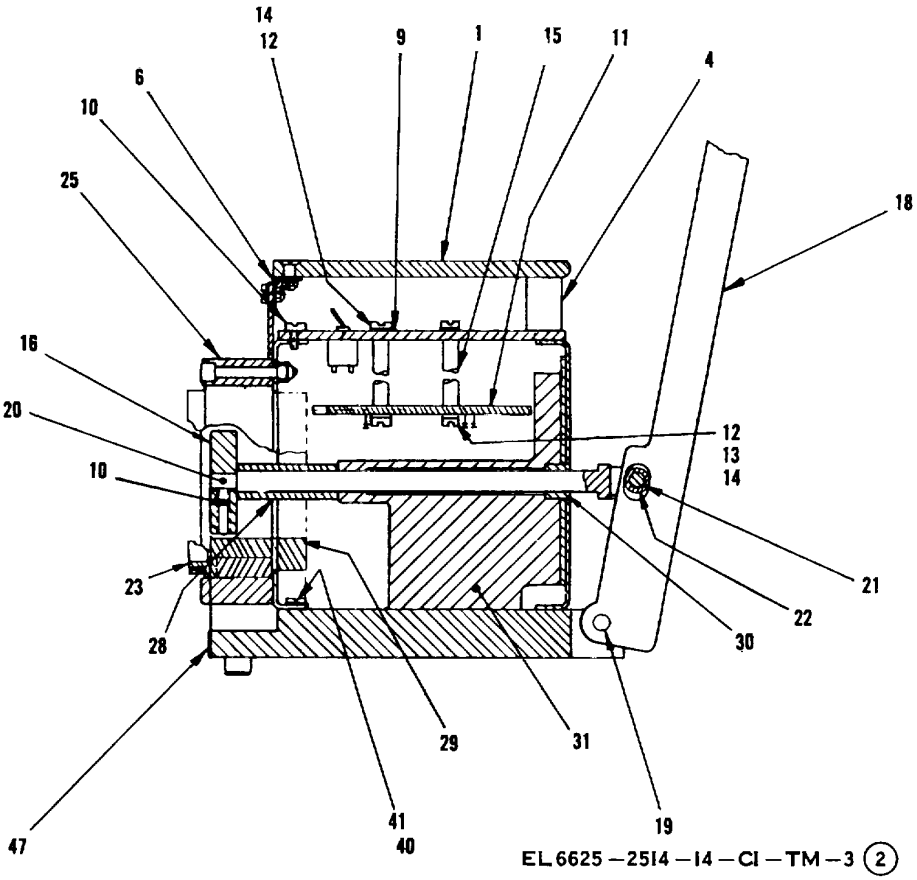

Figure 3(2). U7674 simulated code plug (sheet 2 of 2).

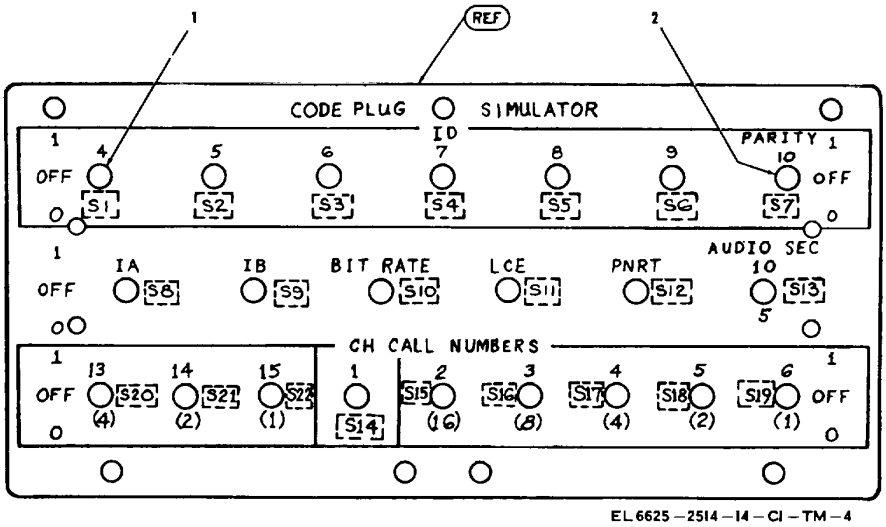

Figure 4. Cover.

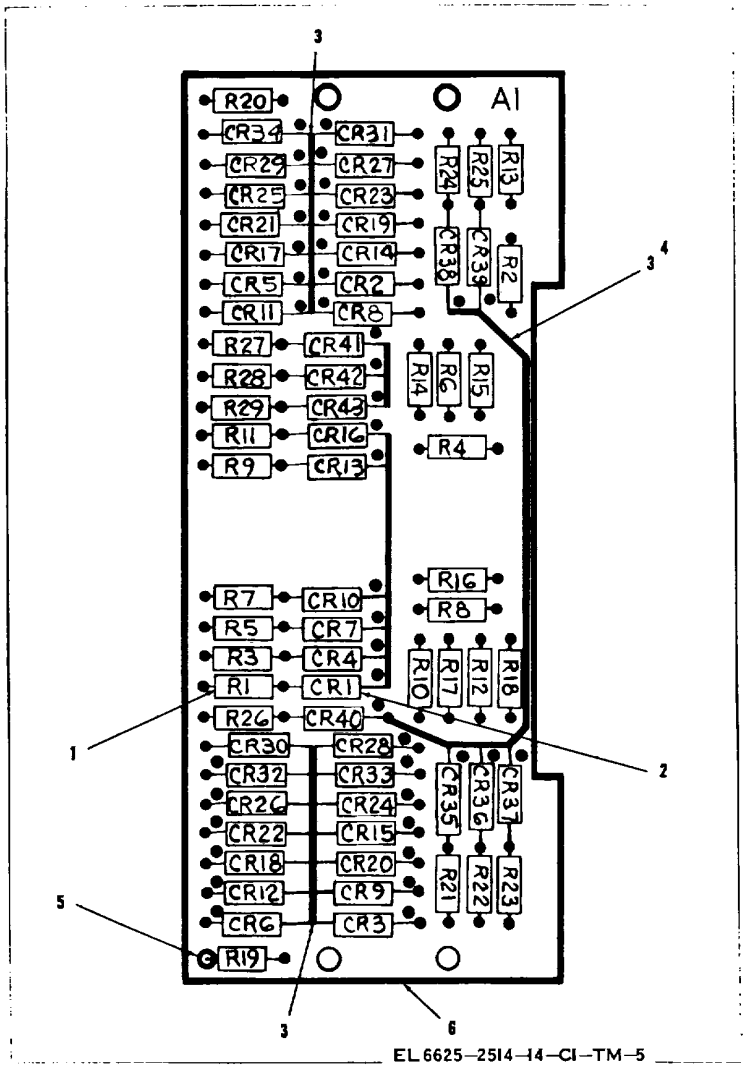

Figure 5. Component assembly

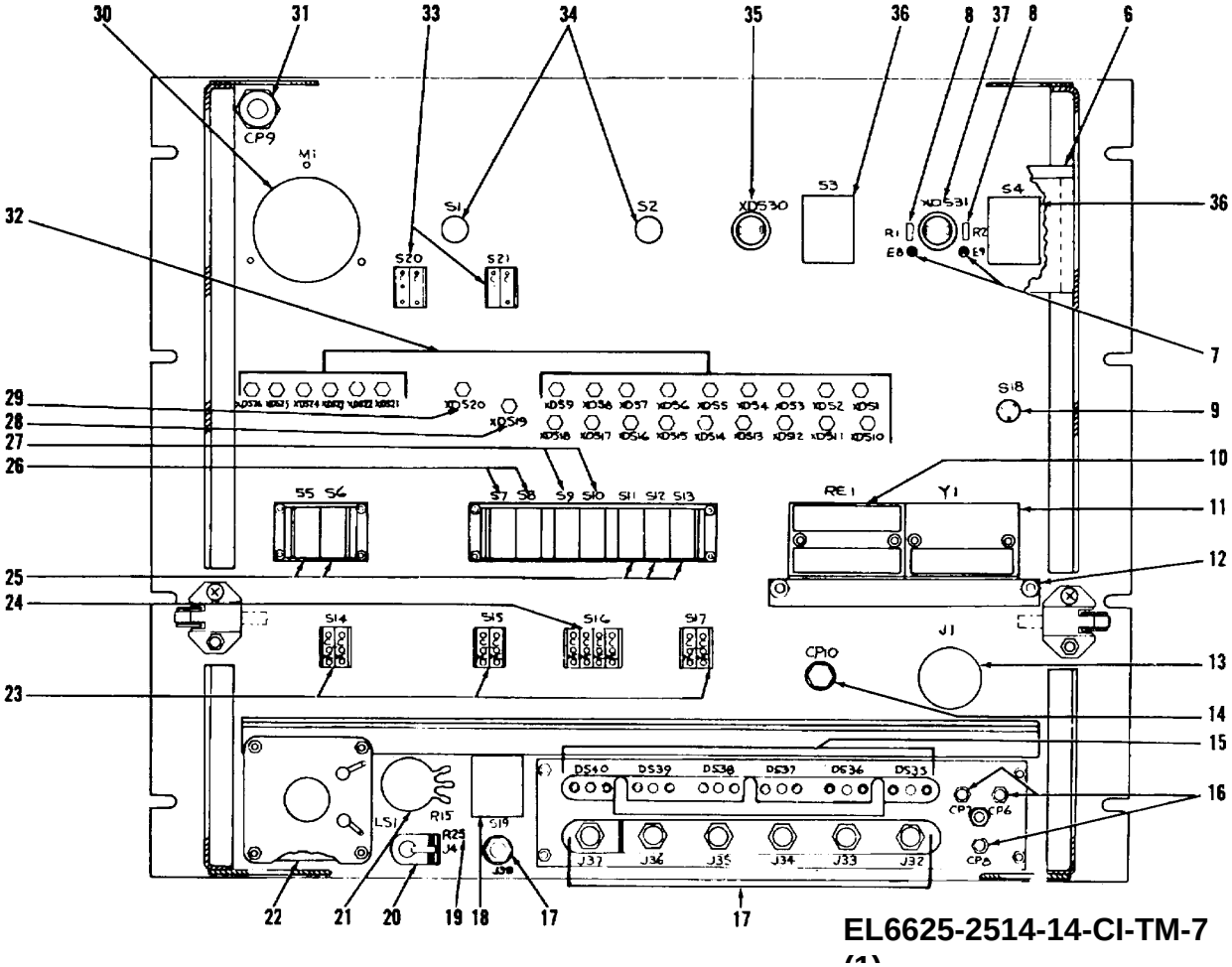

Figure 7(1). PT 1585 phase 3 cl stack tester (sheet 1 of 4),

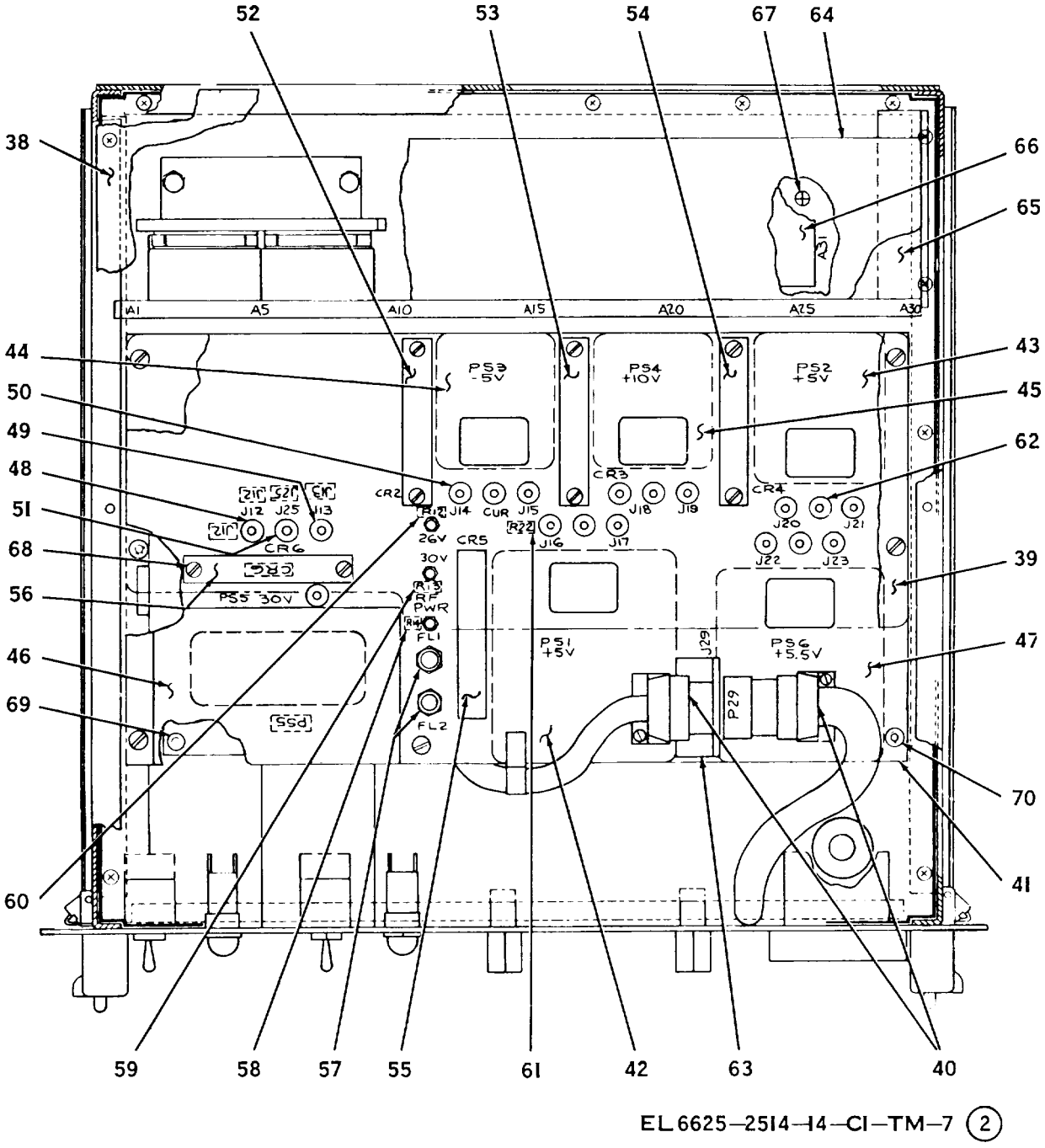

Figure 7(2). PT 1585 phase 3 cl stack tester (sheet 2 of 4).

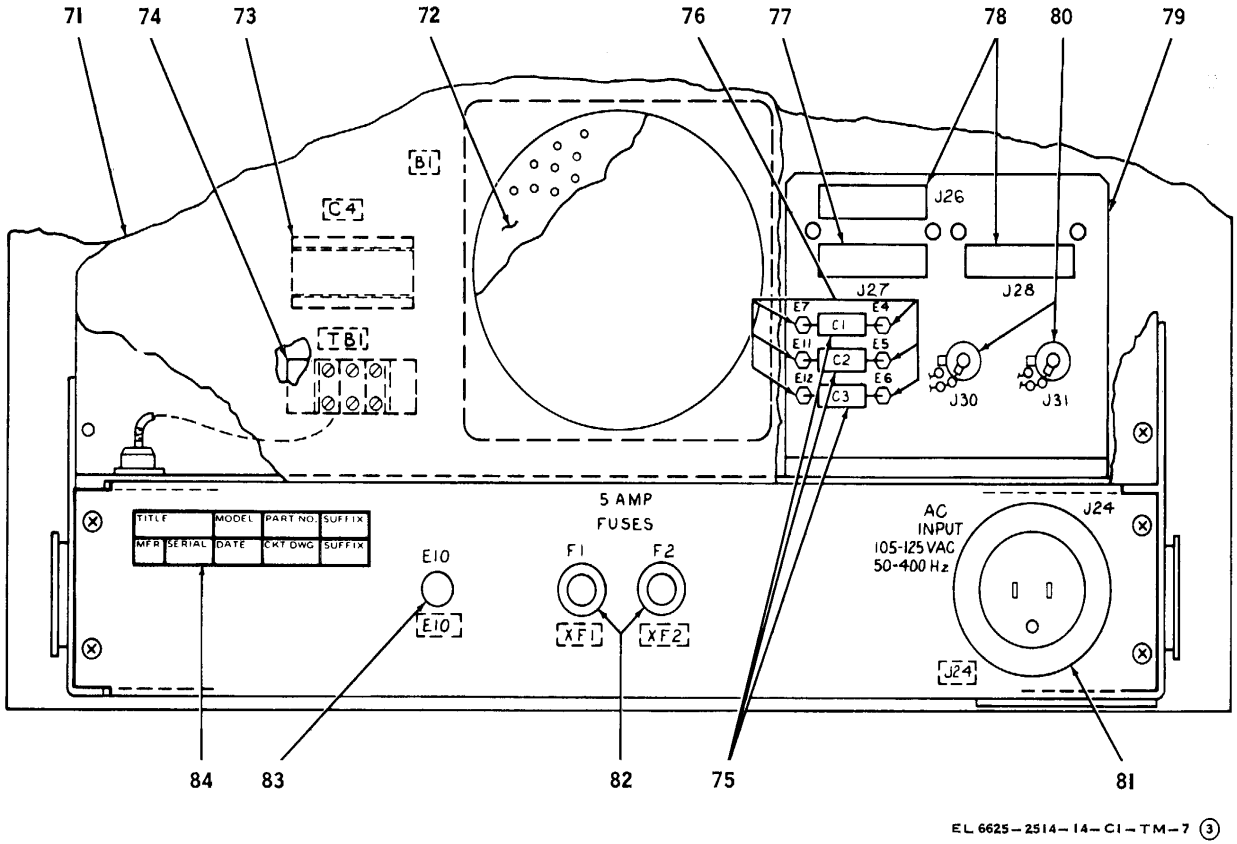

Figure 7(3) PT 1585 phase 3 cl stack tester (sheet 3 of 4).

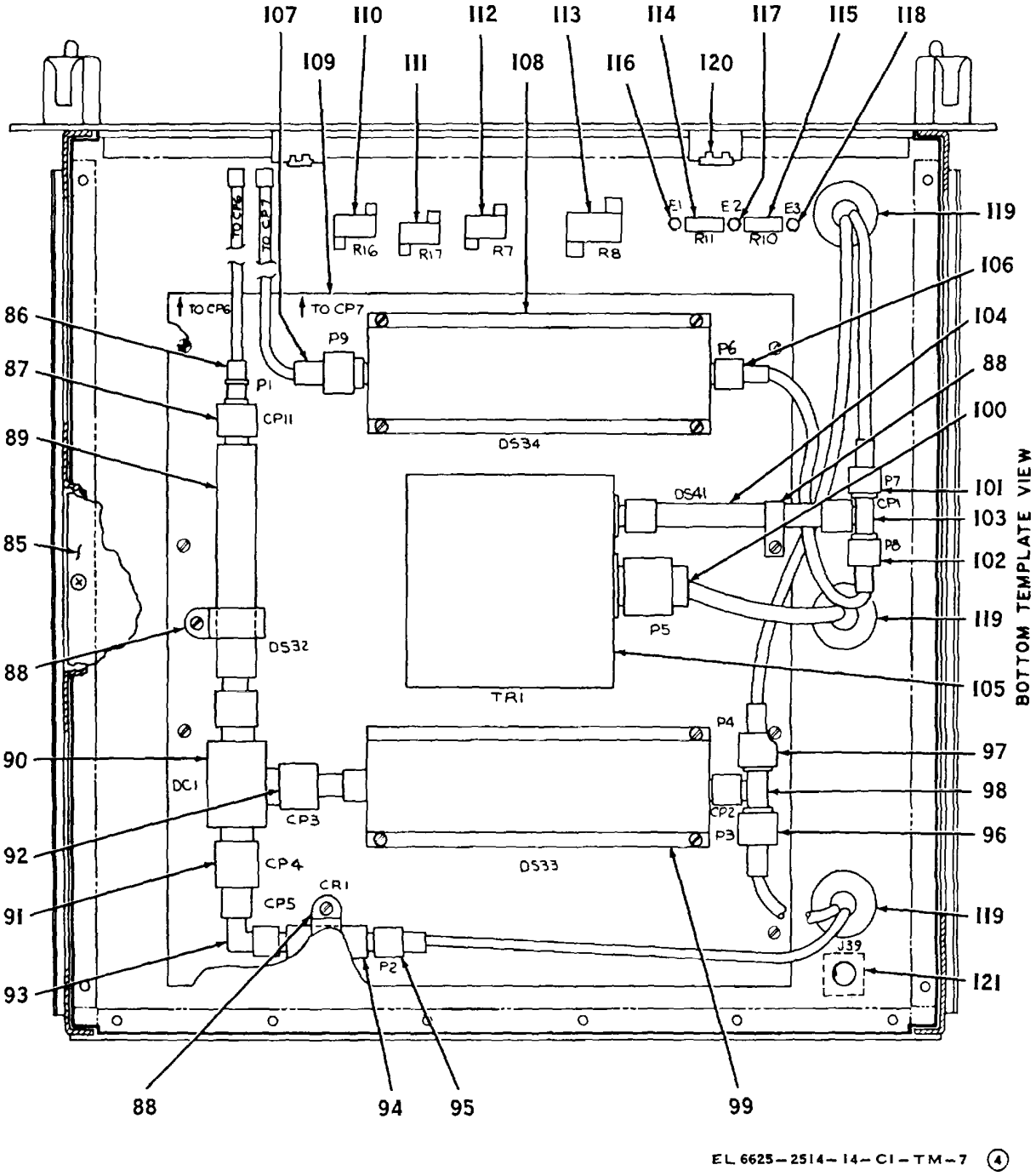

Figure 7(4) PT 1585 phase 3 cl stack tester (sheet 4 of 4).

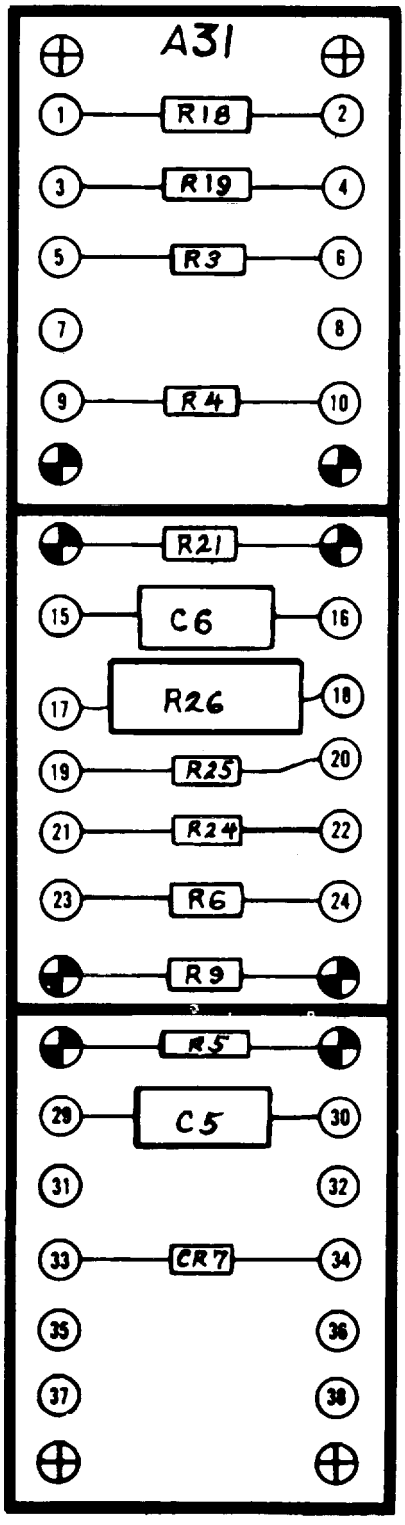

Figure 8. Component board assembly.

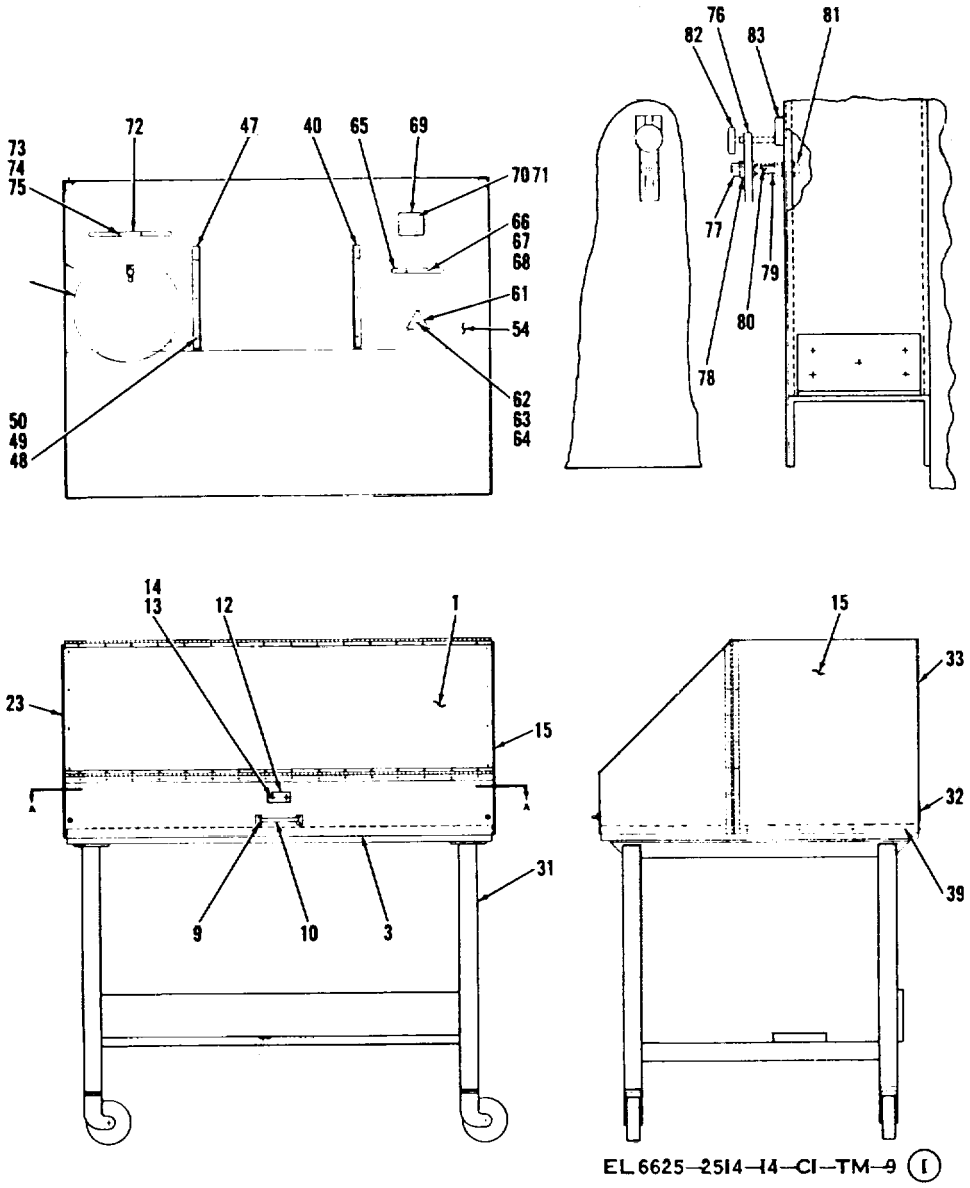

Figure 9(1). U7622 chassis assembly (sheet 1 of 5).

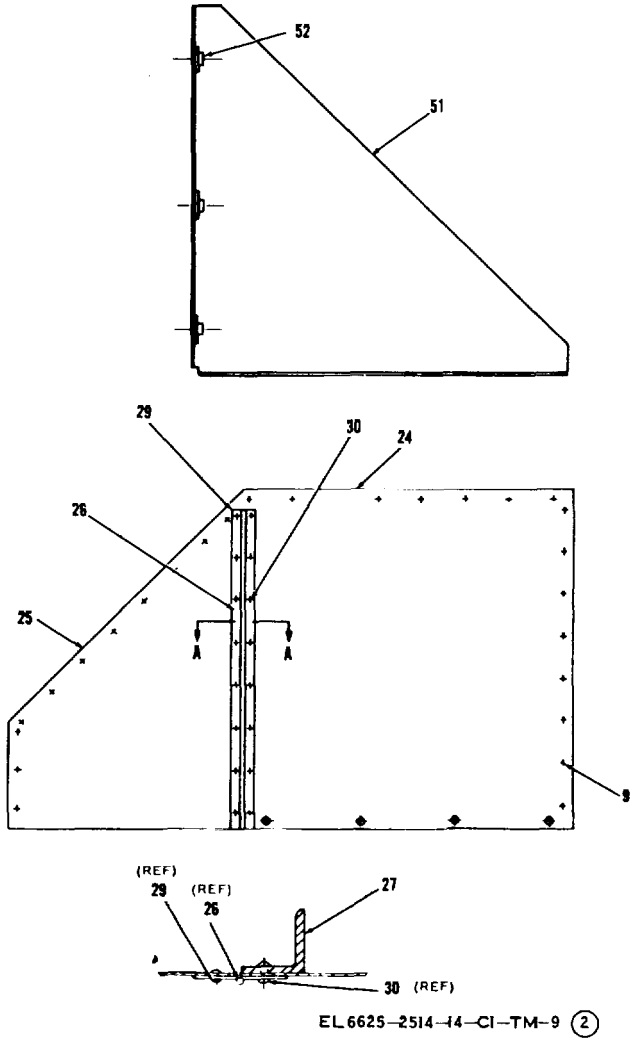

Figure 90 (2). U7622 chassis assembly (sheet 2 of 5).

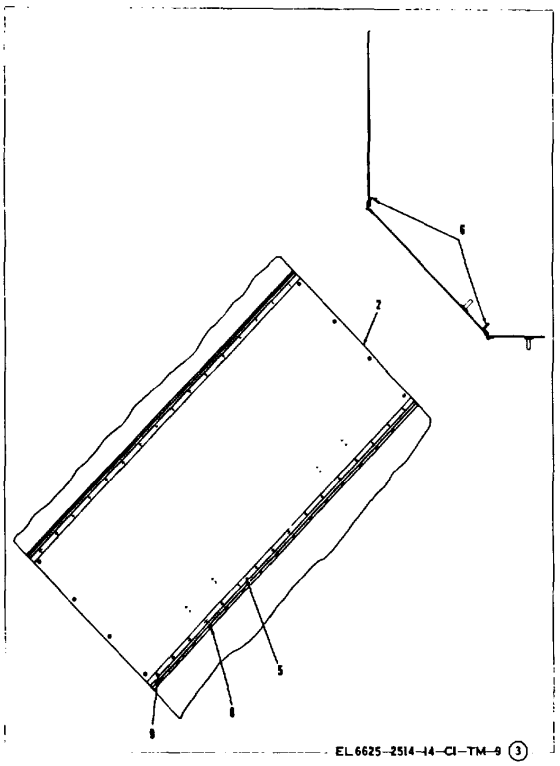

Figure 9(3). U762- chassis assembly (sheet 3 of 5).

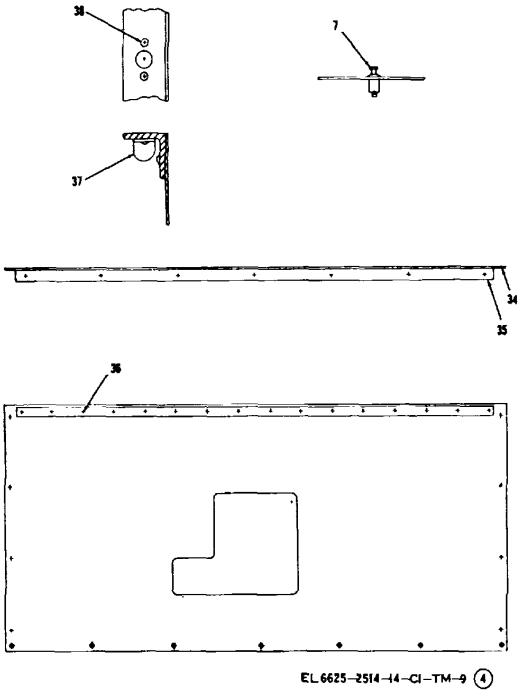

Figure 9(4). U7622 chassis assembly (sheet 4 of 5).

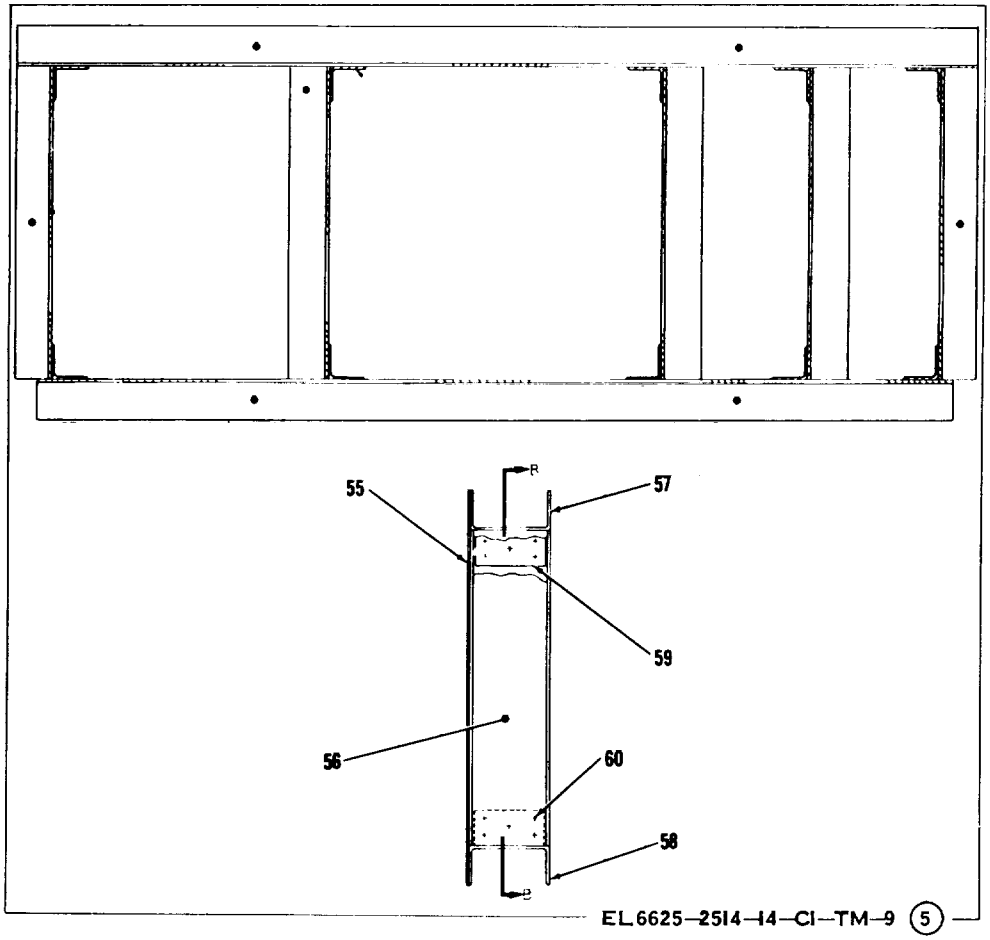

Figure 9(5). U70662 chassis assembly (sheet 5 of 5).

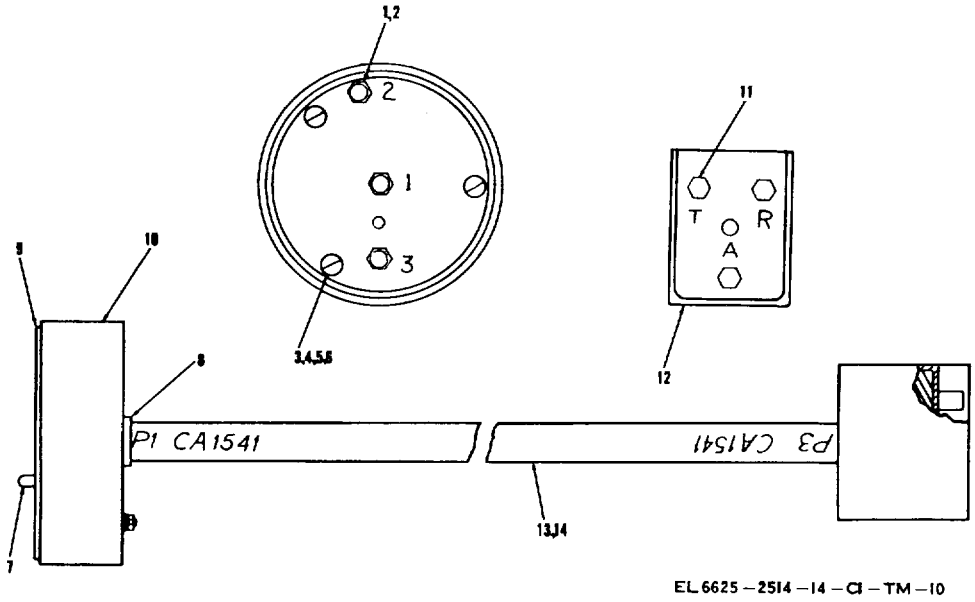

Figure 10. CA 1541 cable assembly.

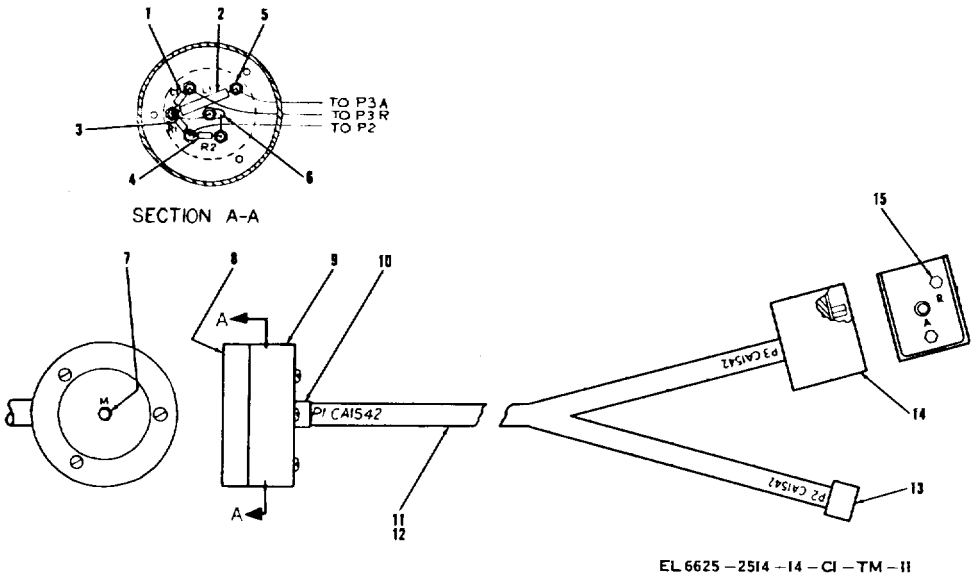

Figure 11. CA 1542 cable assembly.

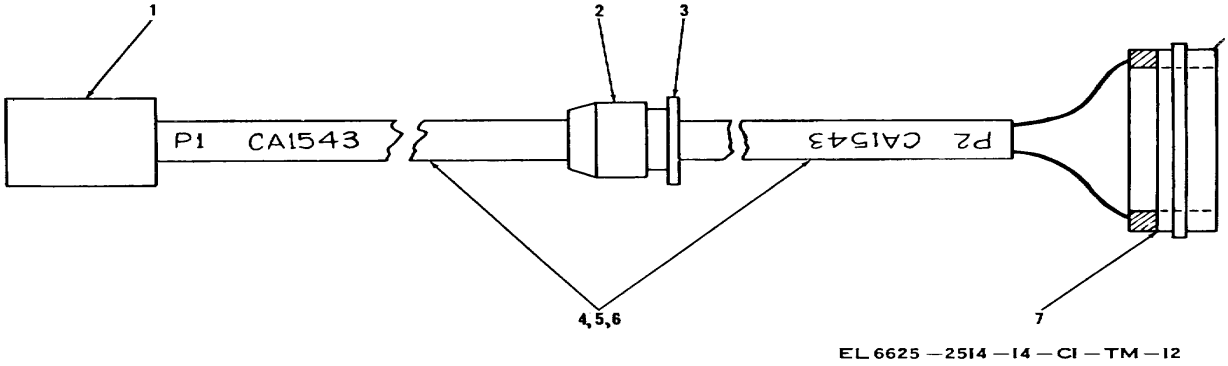

Figure 12. CA 1543 cable assembly.

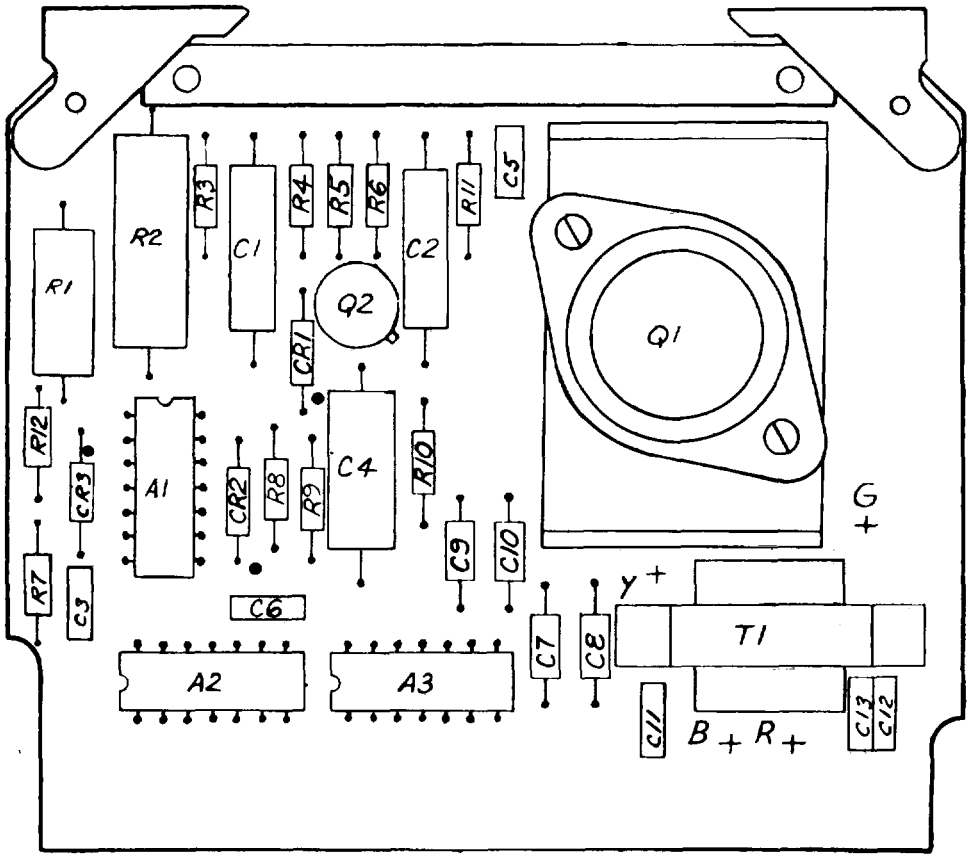

Figure 13. Signal conditioner.

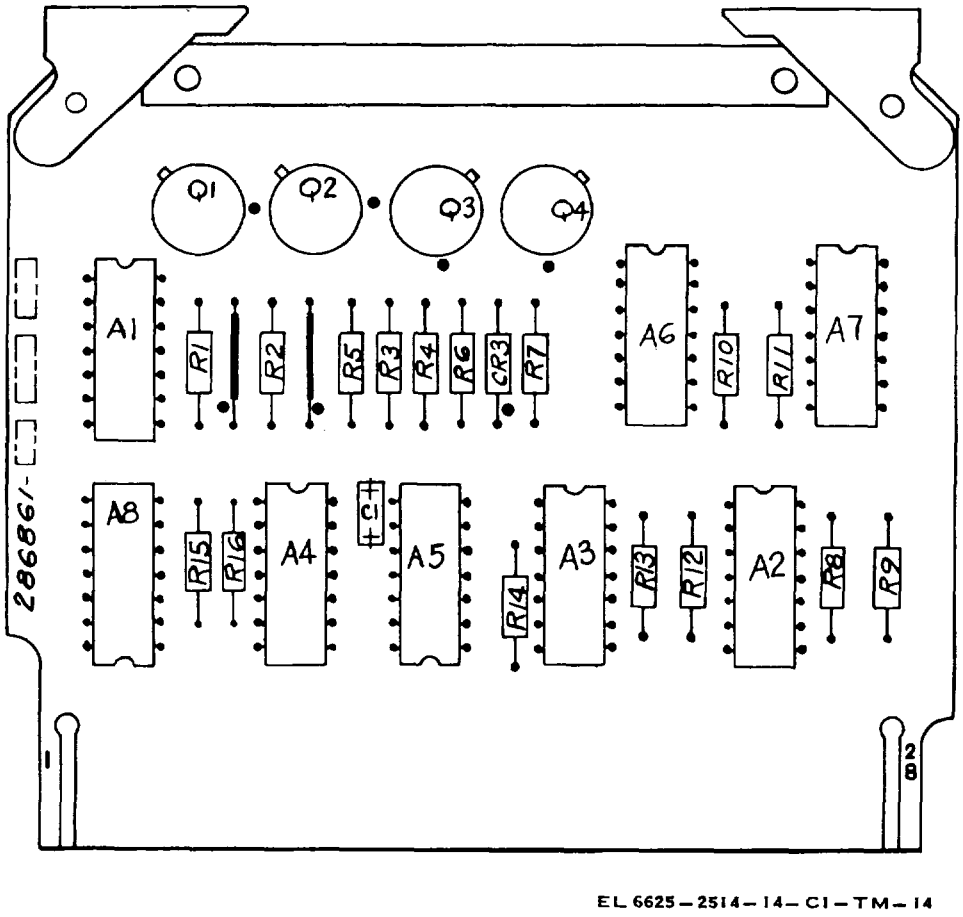

Figure 14. Diagnostic signal modulation buffer.

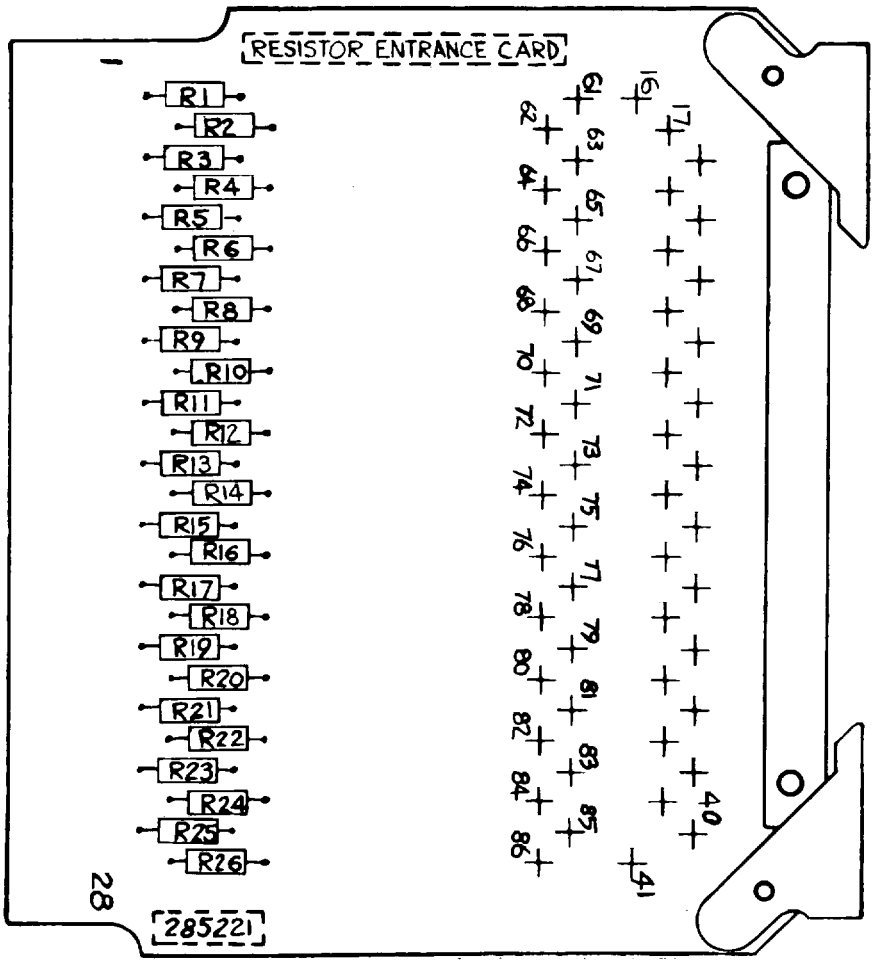

Figure 15. Resistor entrance card.

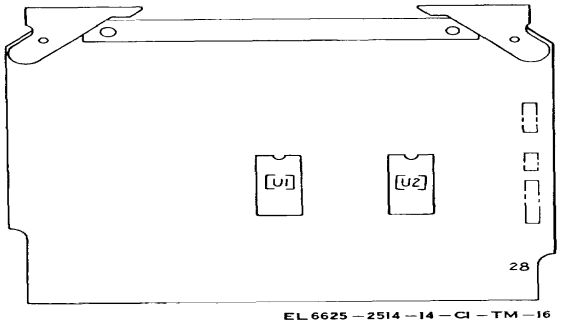

Figure 16. Full adder.

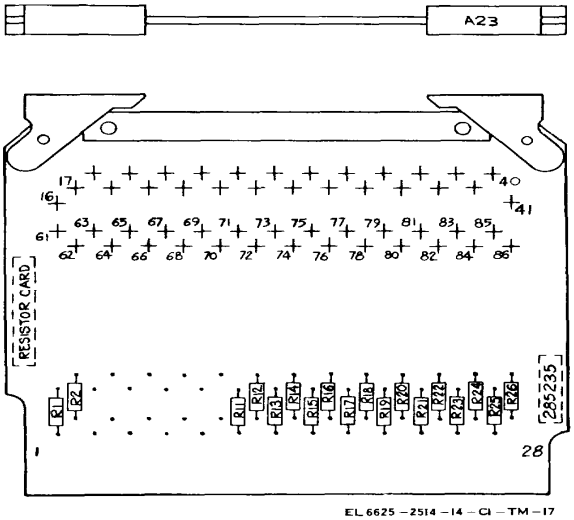

Figure 17. Resistor card.

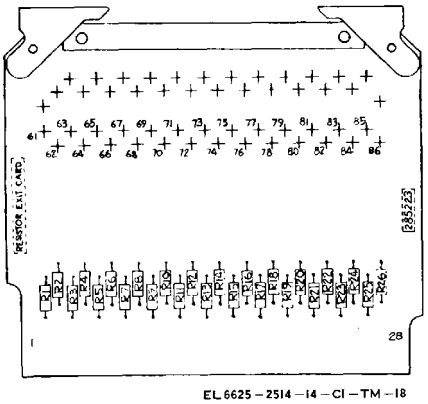

Figure 18. Resistor exist card.

APPENDIX B

MAINTENANCE ALLOCATION

Section I. INTRODUCTION

B-1. General

This appendix provides a summary of the maintenance operations covered in the equipment literature. It authorizes categories of maintenance for specific maintenance functions on repairable items and components and the tools and equipment required to perform each function. This appendix may be used as an aid in planning maintenance operations.

B-2. Maintenance Functions

Maintenance functions will be limited to and defined as follows:

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

b. Test. To verify serviceability and to detect incipient failure of 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, preserve, drain, paint, or to replenish fuel/lubricants/hydraulic fluids or compressed air supplies.

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

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

f. Calibrate. To determine and cause corrections to be made or to be adjusted on instruments or test measuring and diagnostic equipment used to precision measurement. Consists of the comparison 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, module (component or assembly) in a manner to allow the proper functioning of the equipment/system.

h. Replace. The act of substituting a serviceable like-type part, subassembly, module (component or assembly) in a manner to allow the proper functioning of an equipment/system.

i. Repair. The application of maintenance services (inspect, test, service, adjust, align, calibrate, 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/assembly, end item or system.

j. Overhaul. That maintenance effort (service/action) necessary to restore an item to a completely serviceable/operational condition as prescribed by maintenance standards (e.g., DMWR) in pertinent technical manuals. 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 materiel 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.

l. Symbols. The uppercase letter placed in the appropriate column indicates the lowest level at which that particular maintenance function is to be performed.

B-3. Explanation of Format

a. Group Number. Column 1 lists group numbers, the purpose of which is to match components, assemblies, subassemblies and modules with the next higher assembly.

b. Functional Group. Column 2 lists the next higher assembly group and the item names of components, assemblies, subassemblies and modules within the group for which maintenance is authorized.

c. Maintenance Functions. Column 3 lists the twelve maintenance functions defined in B-2 above. Each maintenance function required for an item is specified by the symbol among those listed in d below which indicates the level responsible for the required maintenance. Under this symbol is listed an appropriate work measurement time value determined as indicated in e below.

d. Use of Symbols. The following symbols are used to prescribe work function responsibility:

C-Operator/Crew
O-Organization
F-Direct Support
H-General Support
D—Depot

e. Work Measurement Time. The active repair time required to perform the maintenance function is included directly below the symbol identifying the category of maintenance. The skill levels used to obtain the measurement times approximate those found in typical TOE units. Active repair time is the average aggregate time required to restore an item (subassembly, assembly, component, module, end item or system) to a serviceable condition under typical field operating conditions. This time includes preparation time, fault isolation/diagnostic time, and QA/QC time in addition to the time required to perform specific maintenance functions identified for the tasks authorized in the maintenance allocation chart. This time is expressed in man-hours and carried to one decimal place (tenths of hours).

f. Tools and Test Equipment. This column is used to specify, by code, those tools and test equipment required to perform the designated function.

g. Remarks. Self-explanatory.

B-4. Explanation of Format of Table B2-1 Tool and Test Equipment Requirements

The columns in table B2-1 are as follows:

a. Tools and Equipment. The numbers in this column coincide with the numbers used in the tools and equipment column of the maintenance allocation chart. The numbers indicate the applicable tool for the maintenance function.

b. Maintenance Category. The codes in this column indicate the maintenance category normally allocated the facility.

c. Nomenclature. This column lists tools, test, and maintenance equipment required to perform the maintenance functions.

d. National Stock Number. This column lists the National stock number of the specific tool or test equipment.

e. Tool number. Not used.

(Next printed page is B-3)

SECTION II. MAINTENANCE ALLOCATION CHART

(1) GROUP NUMBER	(2) FUNCTIONAL GROUP COMPONENT ASSEMBLY NOMENCLATURE	(3) MAINTENANCE FUNCTIONS											(4) TOOLS AND EQUIPMENT	(5) REMARKS
		INSPECT	TEST	SERVICE	ADJUST	ALIGN	CALIBRATE	INSTALL	REPLACE	REPAIR	OVERHAUL	REBUILD		
	TEST SET, SENSORS- REPEATER SET, RADIO TS-3470/USM (PT-1585)	C 0.1		0 0.3				C 0.3					7	Visual
			F		F	D 1.0	D 1.0			F	D 3.5	D 4.0	1 thru 5,8 6	Depot facilities
01	SIMULATOR U7674	C 0.1	F 0.8						F 0.4	F 0.8	D		1 thru 5,8	Depot facilities
02	FIXTURE U7651	C 0.1	F						F 0.4	F 0.8	D 1.0		1 thru 5,8	Depot facilities
03	RECEIVER, NARROW BAND	C 0.1	D 0.8			D 0.6			F 0.4	D 0.8	D 1.0		8 6	Depot facilities
04	REFERENCE (Y1)	0 0.1	D 0.8			D 0.6			F 0.4	D 0.8	D 1.0		8 6	Depot facilities

SECTION II. MAINTENANCE ALLOCATION CHART - Continued

(1) GROUP NUMBER	(2) FUNCTIONAL GROUP COMPONENT ASSEMBLY NOMENCLATURE	(3) MAINTENANCE FUNCTIONS											(4) TOOLS AND EQUIPMENT	(5) REMARKS
		INSPECT	TEST	SERVICE	ADJUST	ALIGN	CALIBRATE	INSTALL	REPLACE	REPAIR	OVERHAUL	REBUILD		
05	TRANSMITTER, FM	0 0.1			F 0.5				F 0.4				1 thru 5, 8	
			D 0.8			D 0.6	D 0.6						6	
										D	D			Depot facilities
06	POWER SUPPLY	0 0.1												
			F 0.8		F 0.5				F 0.4				1 thru 5, 8	
							D 0.6						6	
										D 0.8	D 1.0			Depot facilities
07	PROTECTOR, OVERVOLTAGE	0 0.1											1,7	
			F 0.8		F 0.5				F 0.4				1 thru 5,8	
							D						6	
										D 0.8	D 1.0			Depot facilities
08	COMPONENT BOARDS	0 0.1												
			F 0.6						F 0.4	F 0.8			1 thru 5,8	
											D 0.5			Depot facilities
09	PRINTED CIRCUIT CARDS A5-A30	0 0.1											1,7	
									F 0.4				1,4,5,8	
			D 1.0							D 1.0				Depot facilities
10	MISCELLANEOUS COMPONENTS KNOBS, INDICATOR LAMPS, FUSES, BEZELS, ETC. (EXTERNAL)	C 0.1							C 0.2					

SECTION II. MAINTENANCE ALLOCATION CHART (Continued)

(1) GROUP NUMBER	(2) FUNCTIONAL GROUP COMPONENT ASSEMBLY NOMENCLATURE	(3) MAINTENANCE FUNCTIONS											(4) TOOLS AND EQUIPMENT	(5) REMARKS
		INSPECT	TEST	SERVICE	ADJUST	ALIGN	CALIBRATE	INSTALL	REPLACE	REPAIR	OVERHAUL	REBUILD		
11	CABLES	C 0.1	0 0.3	0 0.3					0 0.2	0 0.4			1,7	
12	MISCELLANEOUS COMPONENTS SWITCHES, METER, SPEAKER, SOLID-STATE EMITTERS, JACKS, TEST POINTS, TERMINAL BOARDS, ETC.	C 0.1	0 0.3	0 0.2					0 0.3				1,7	Visual

TABLE B2-1. TOOLS AND TEST EQUIPMENT REQUIREMENTS

TOOLS AND EQUIPMENT	MAINTENANCE CATEGORY	NOMENCLATURE	NATIONAL STOCK NUMBER	TOOL NUMBER
		TEST SET, SENSORS-REPEATER SET, RADIO TS-3470/USM (PT-1585) - CONTINUED		
1	O,F,H,D	MULTIMETER TS-352B/U	6625-00-242-5023	
2	F,H,D	RESISTOR, DECADE ZM-168/U	6625-00-669-0266	
3	F,H,D	WATTMETER AN/URM-98A	6625-00-566-4990	
4	F,H,D	COUNTER, ELECTRONIC, DIGITAL READOUT AN/USM-207	6625-00-911-6368	
5	F,H,D	OSCILLOSCOPE AN/USM-281	6625-00-228-2201	
6	D	GENERAL PURPOSE AUTOMATIC TEST EQUIPMENT (GATE) AN/GSM-220	6350-00-122-7595	
7	O	TOOL, KIT, ELECTRONIC EQUIPMENT TK-105/G	5180-00-510-8177	
8	F,H,D	TOOL KIT, ELECTRONIC EQUIPMENT TK-100/G	5180-00-605-0079	

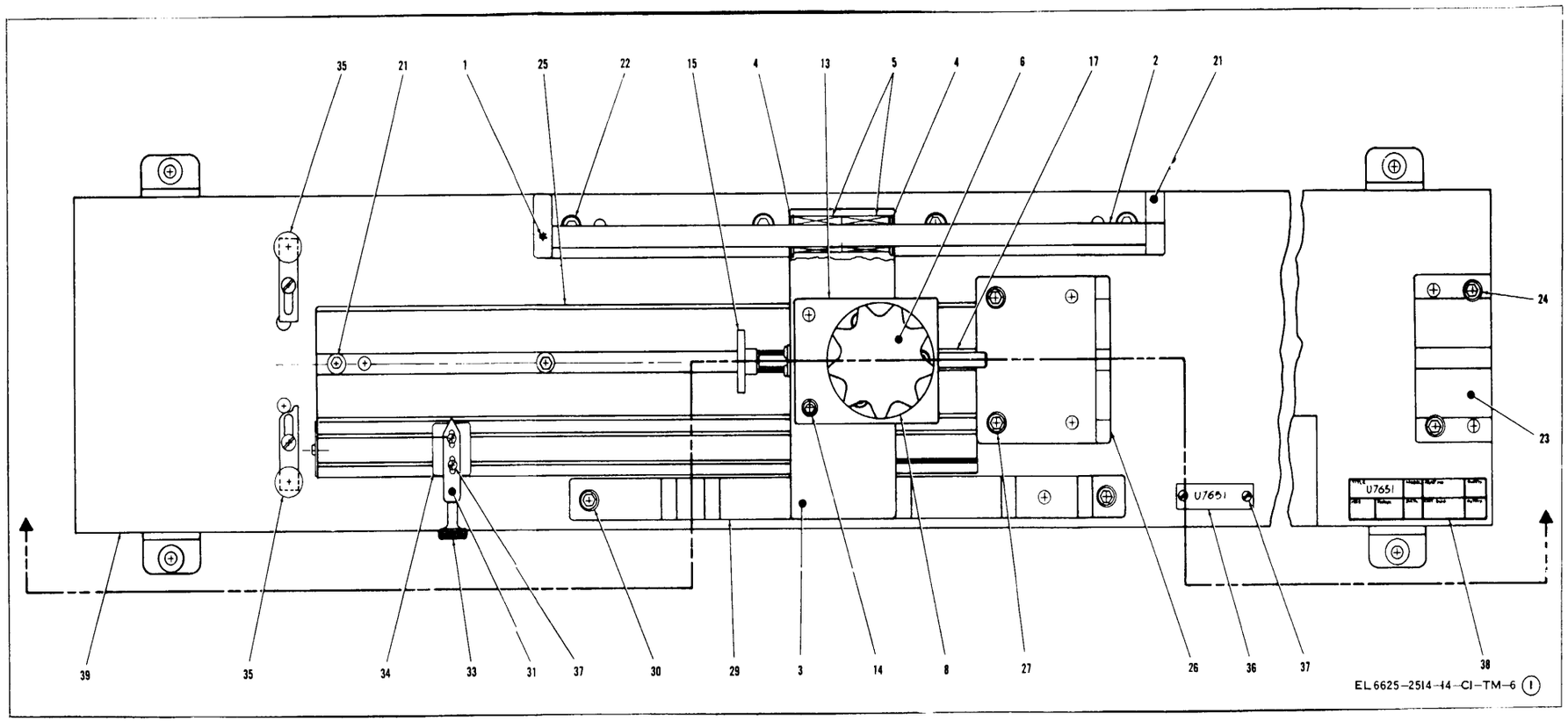

Figure 6. U7651 assembling fixture (sheet 1 of 2)

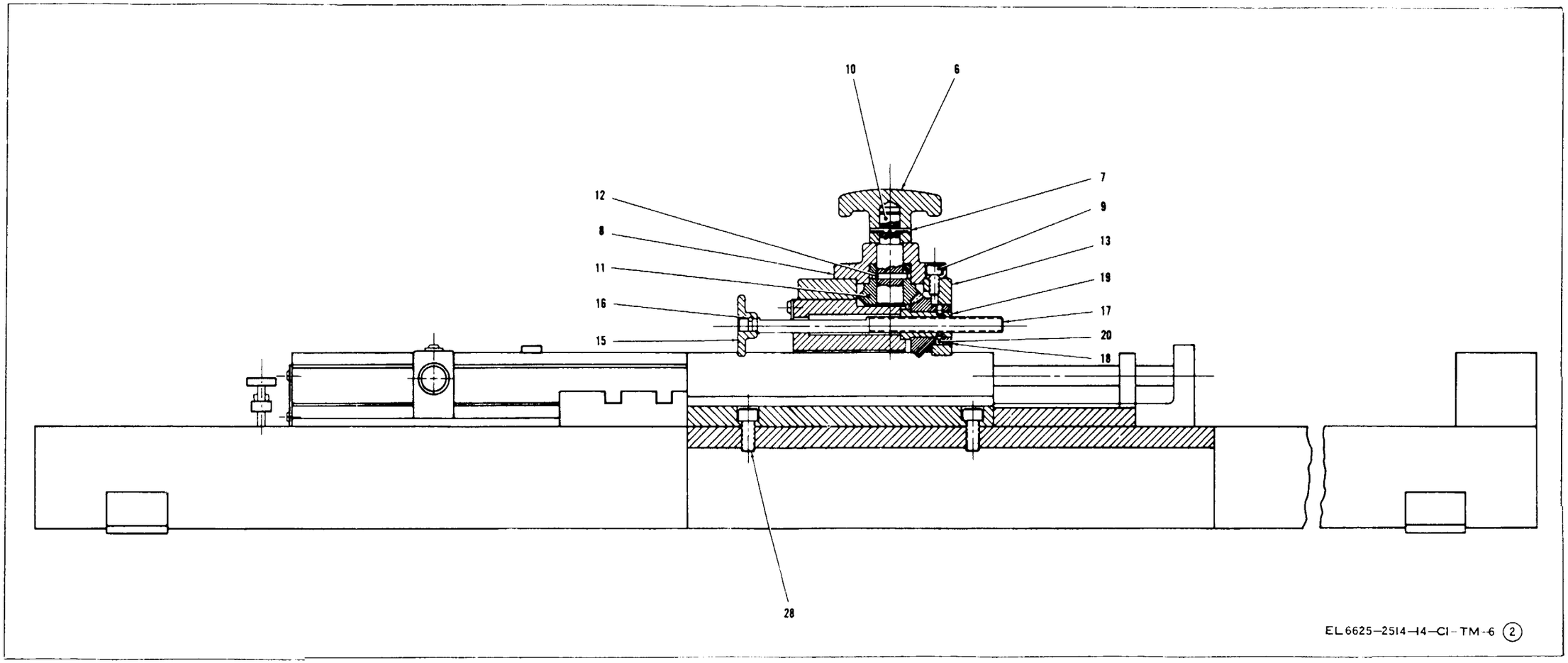

Figure 6. U7651 assembling fixture (sheet 2 of 2).

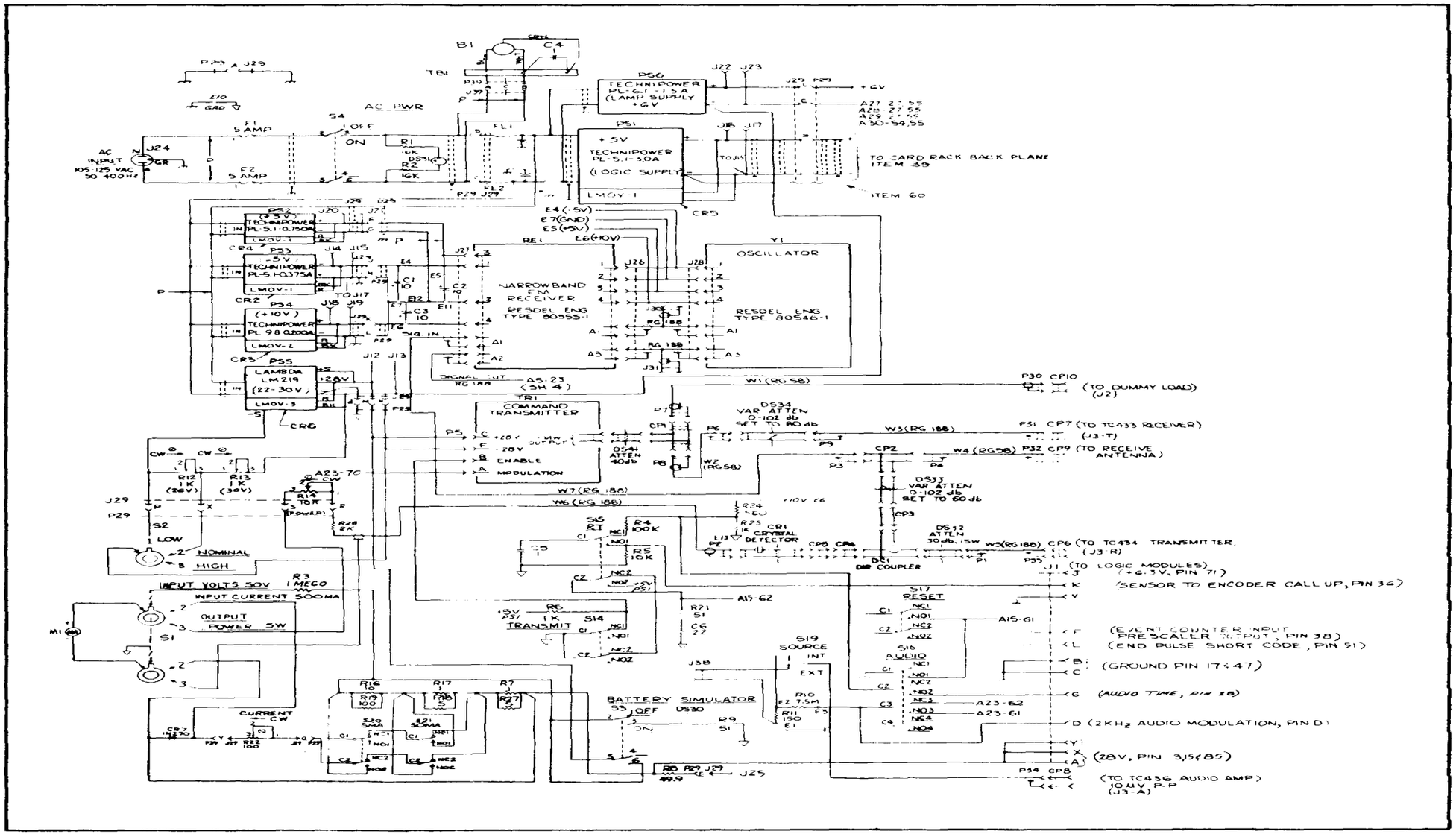

Figure 6-1. PT1585 Schematic Diagram (1 of 5). *6-3/(6-4 blank)*

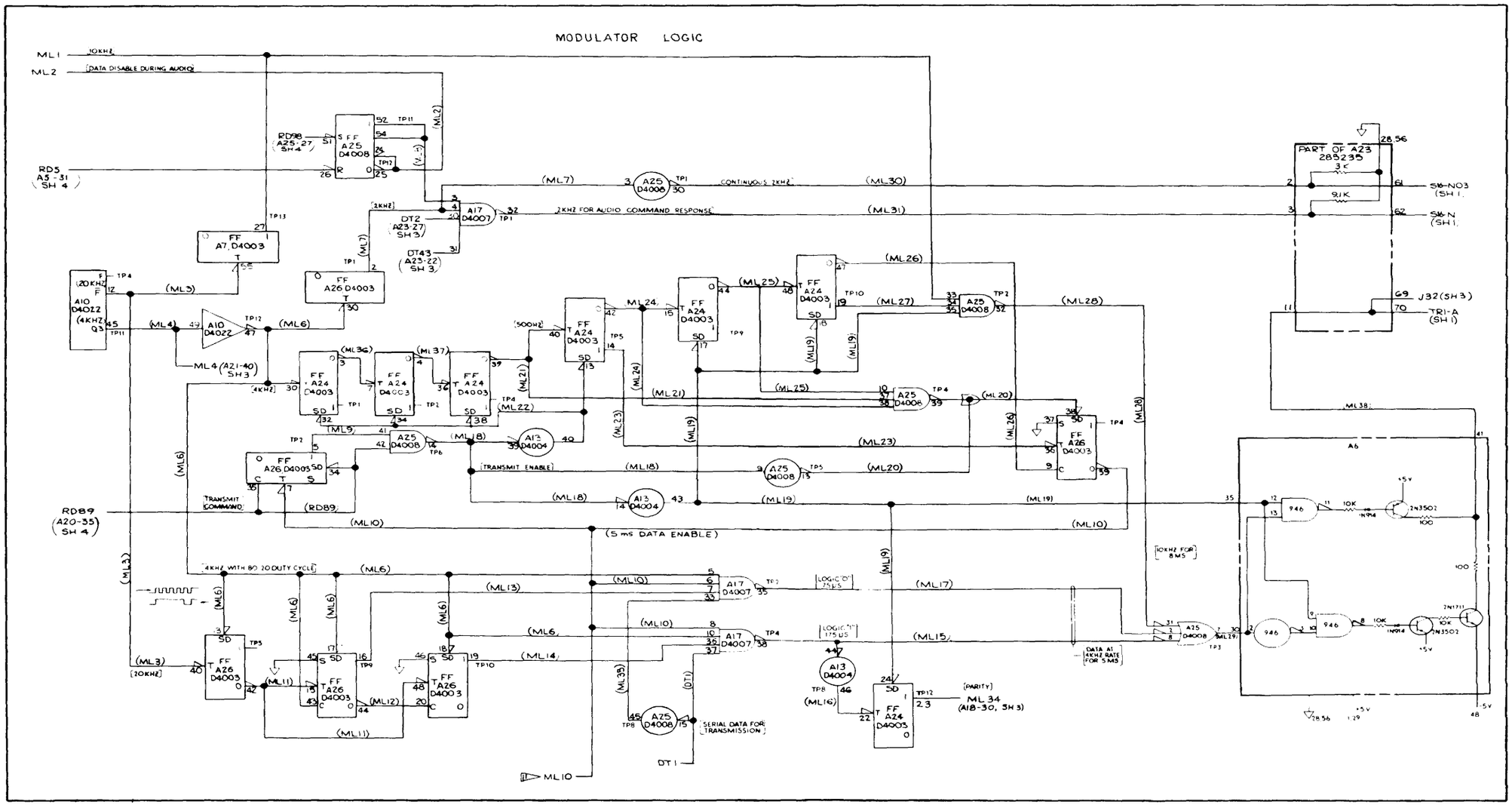

Figure 6-1. Modulator Logic Diagram (2 of 5). *6-5/(6-6 blank)*

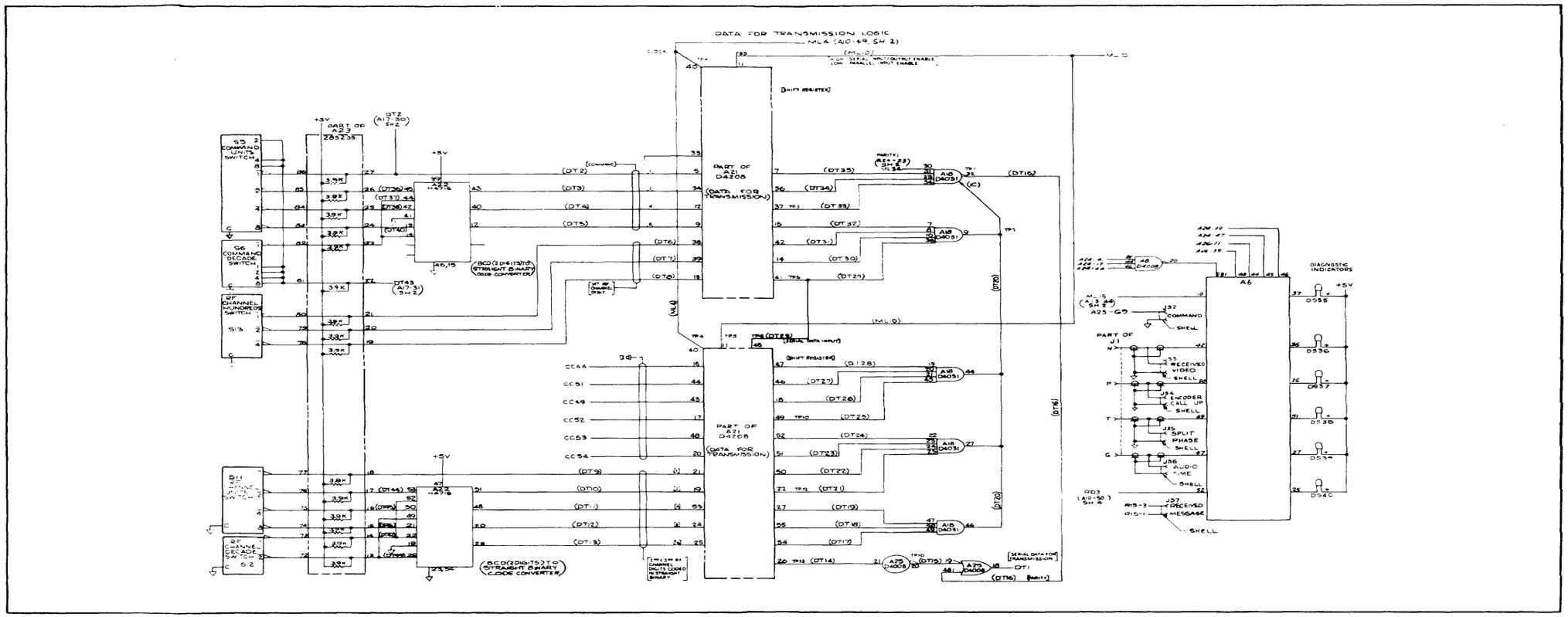

Figure 6-1. Data for Transmission Logic Diagram (3 of 5). *6-7/(6-8 blank)*

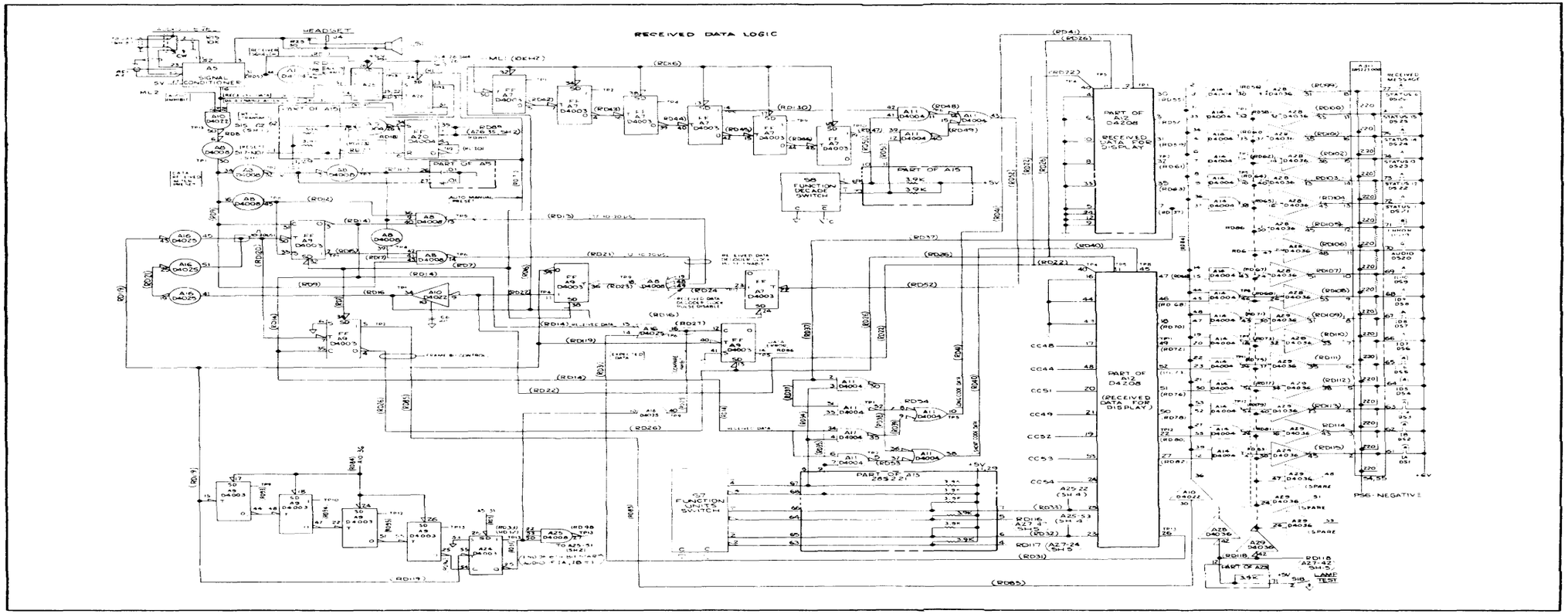

Figure 6-1. Received Data Logic Diagram (4 of 5) *6-9/(6-10 blank)*

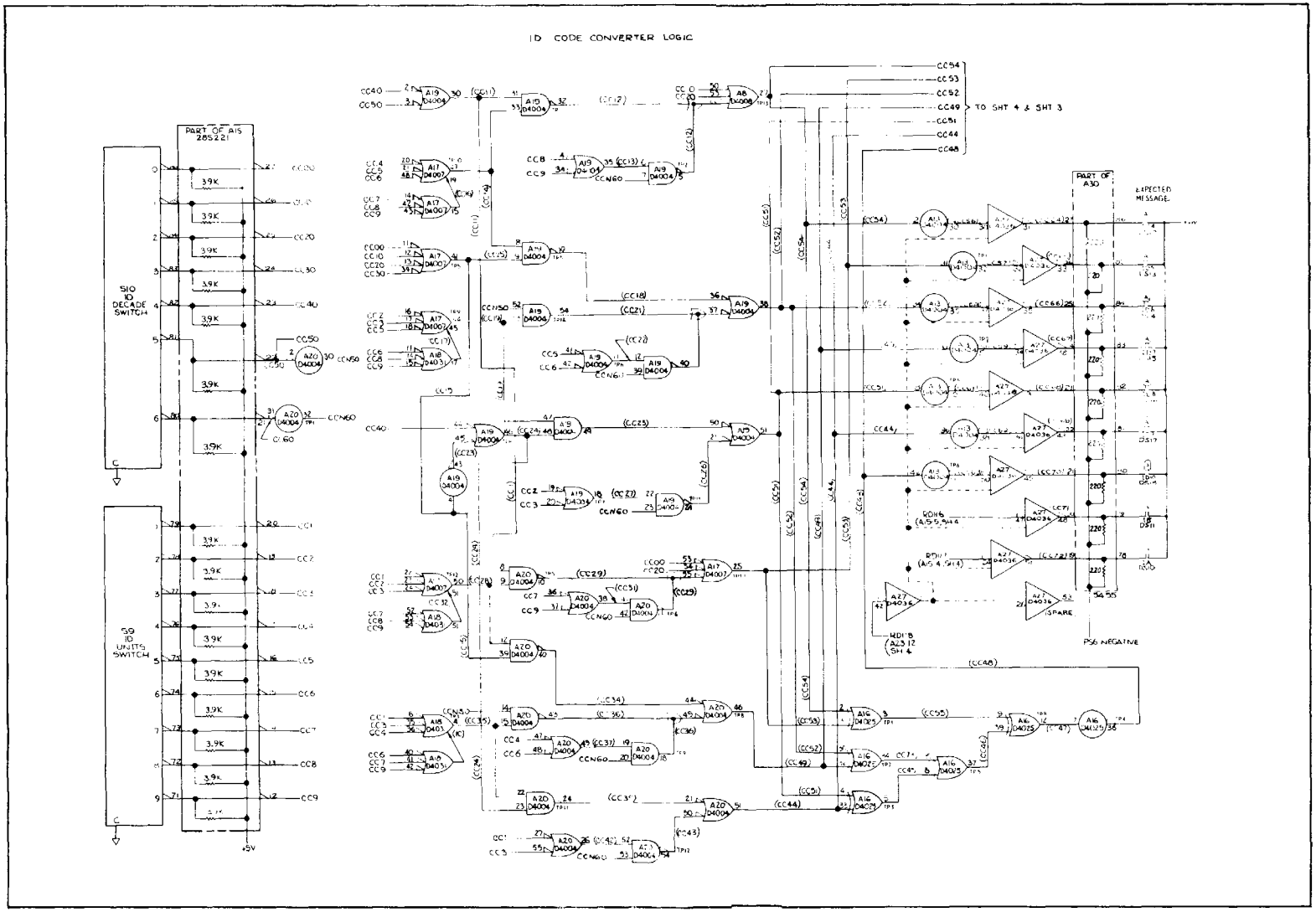

Figure 6-1. ID Code Converter Logic Diagram (5 of 5).

6-11/(6-12 blank)

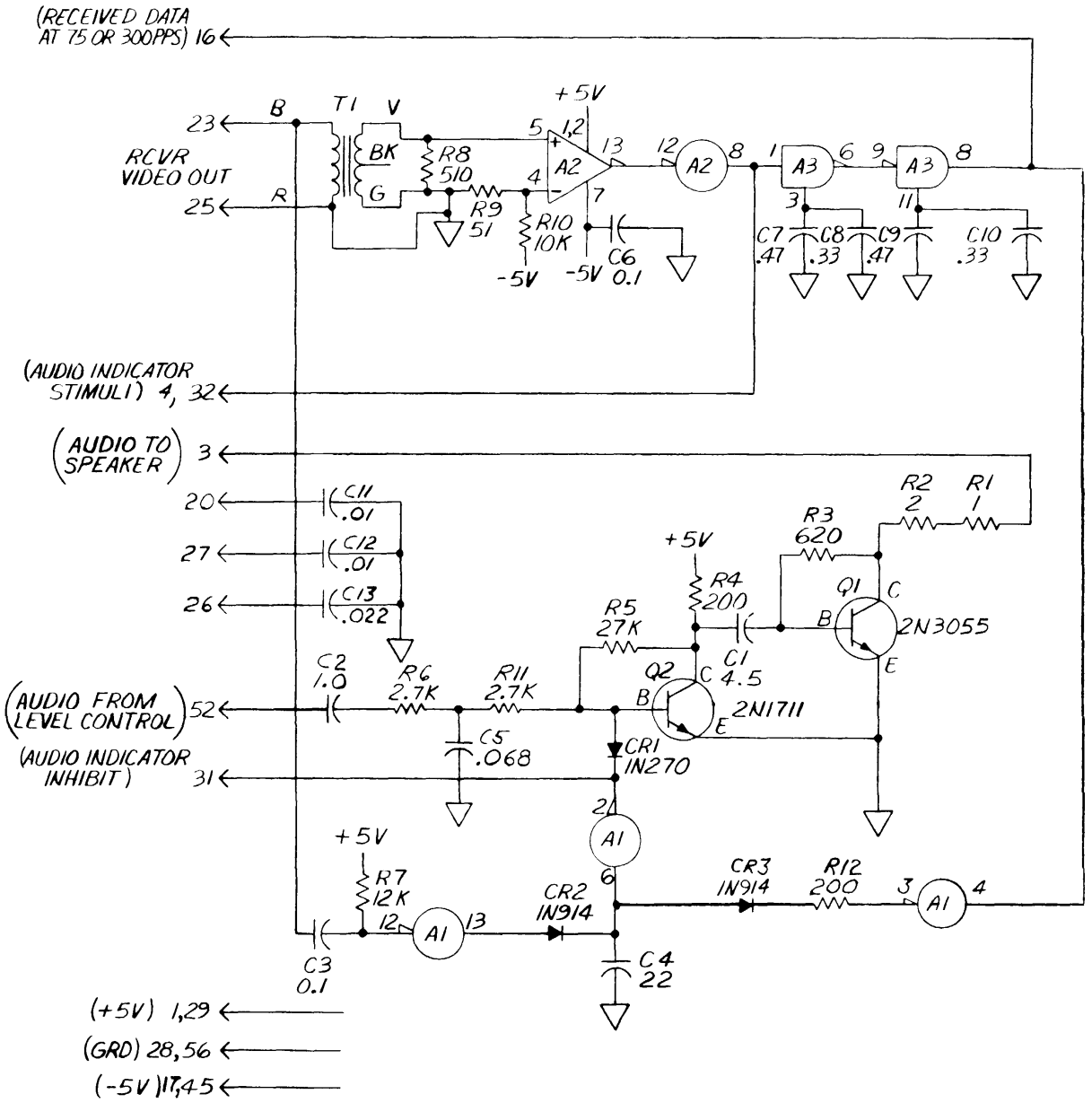

Figure 6-11. A5 Card Logic Diagram.

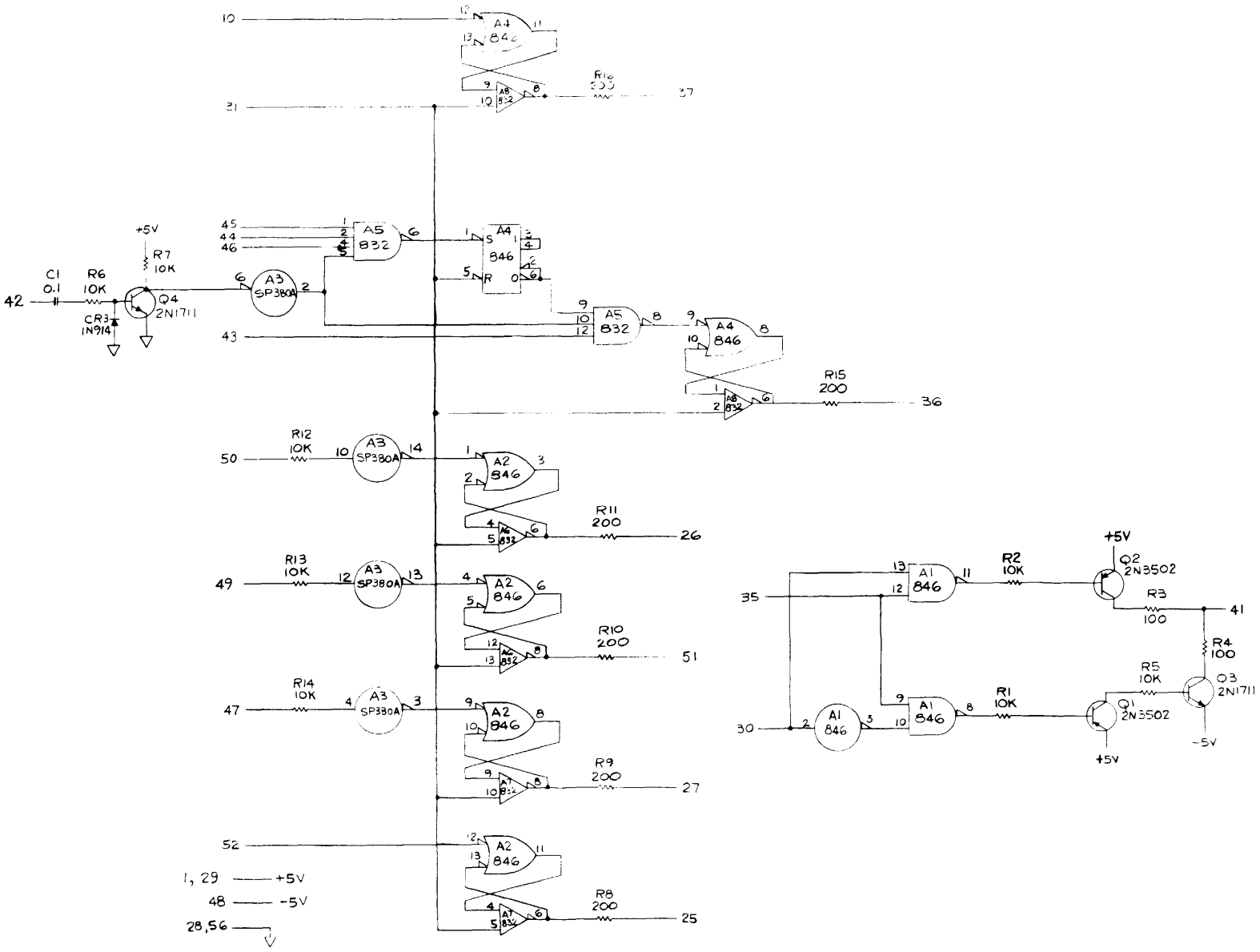

Figure 6-12. A6 Card Logic Diagram.

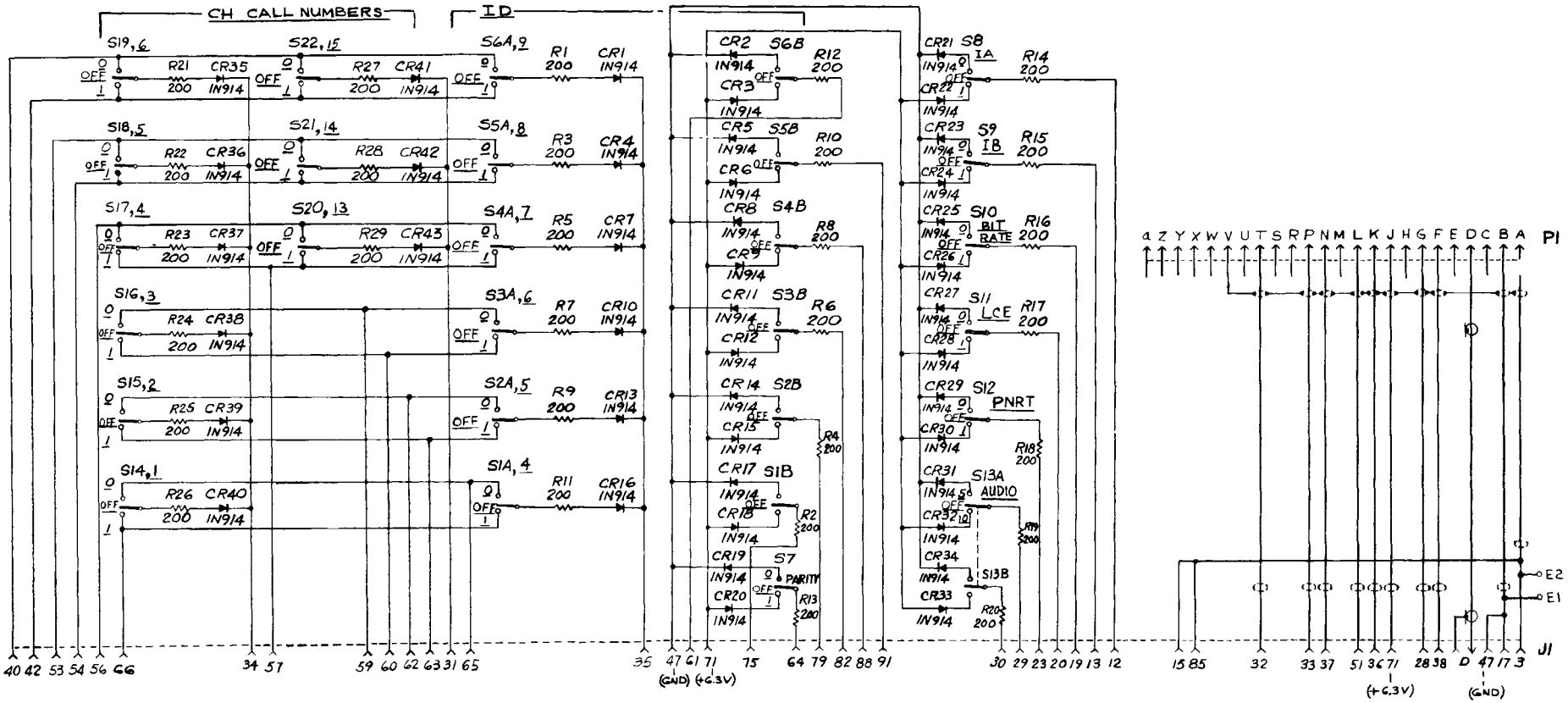

Figure 6-17. U7674 Simulated Code Plug Schematic Diagram.

6-45/(6-46 blank)

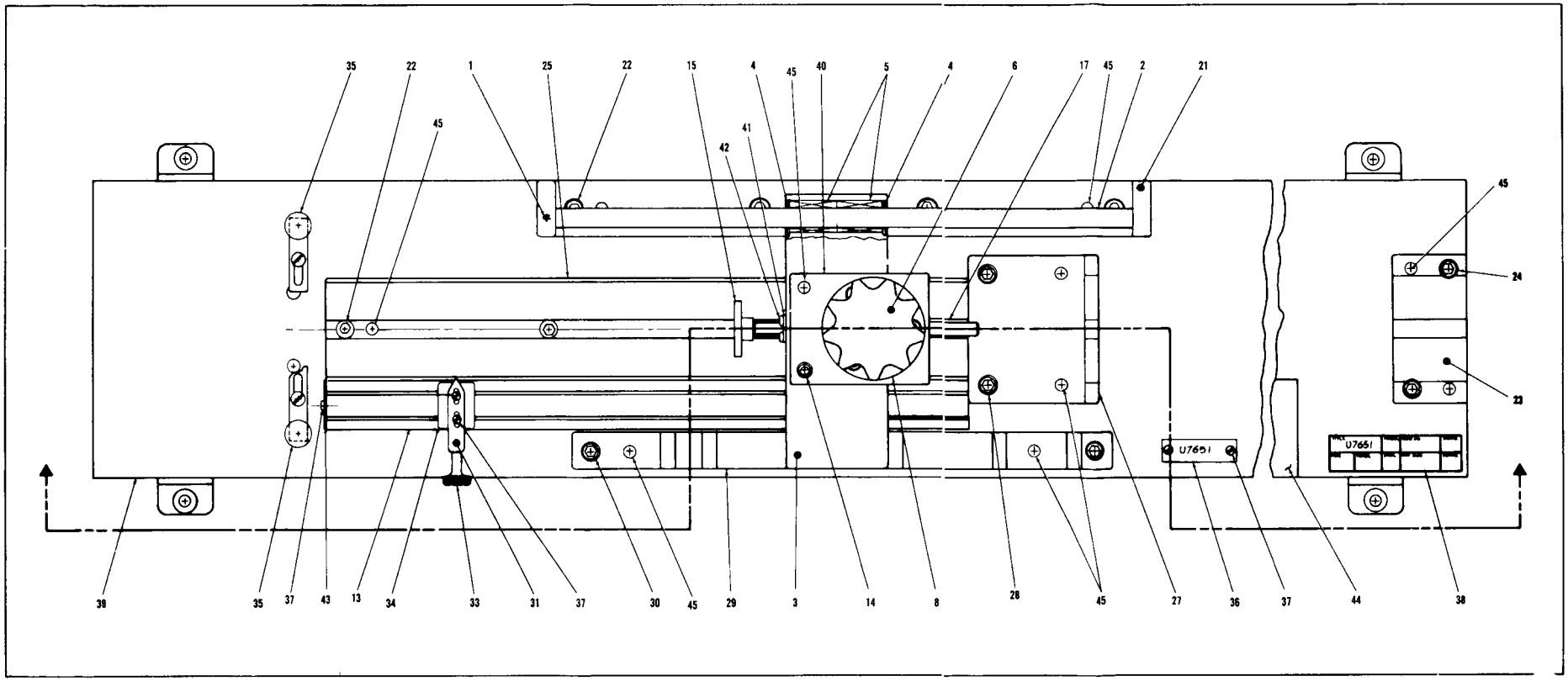

Figure 6. U7651 Assembly Fixture (1 of 2)

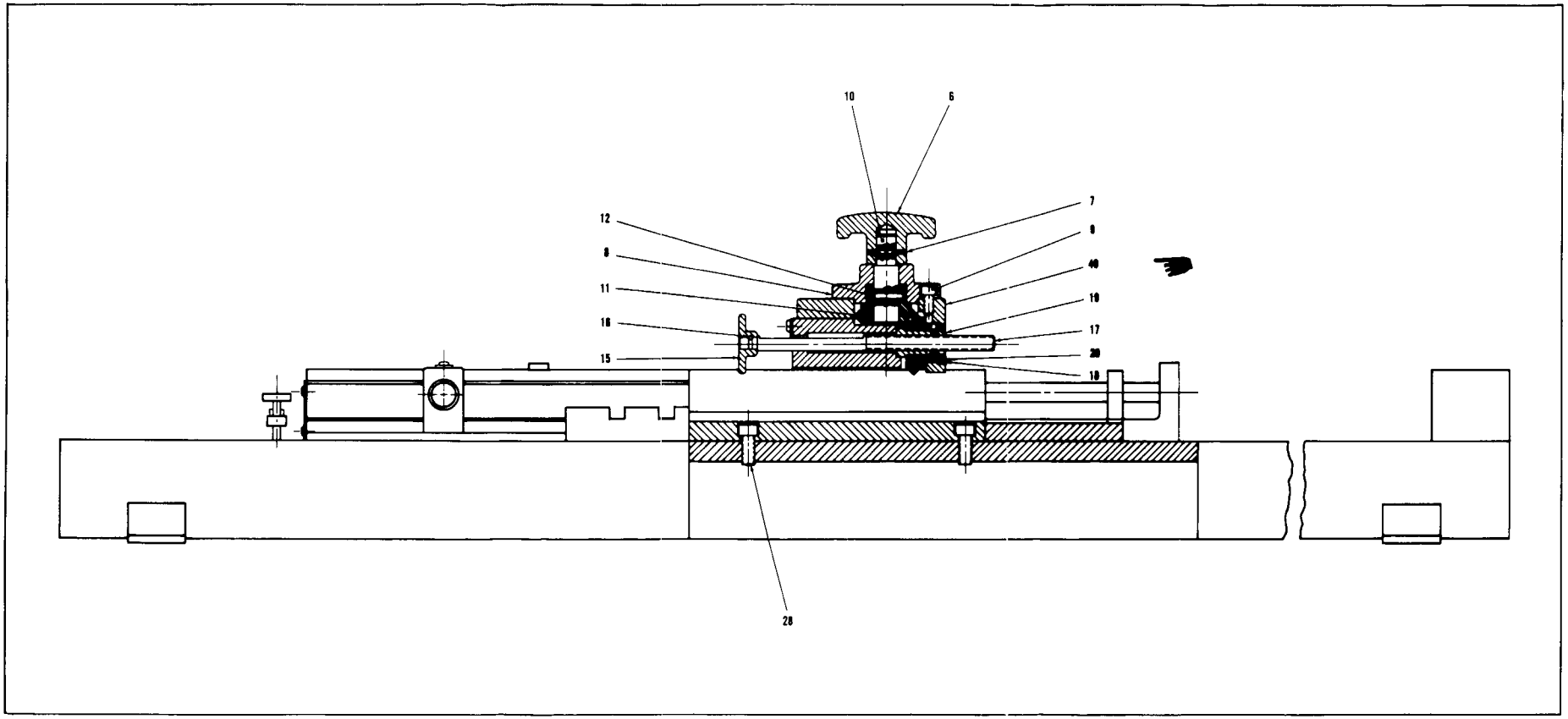

Figure 6. U7651 Assembly Fixture (2 of 2)

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