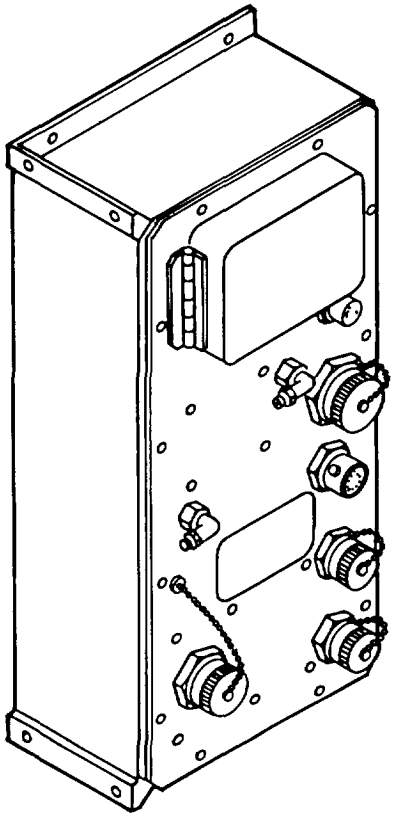
TECHNICAL MANUAL
DIRECT SUPPORT MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST)
FOR

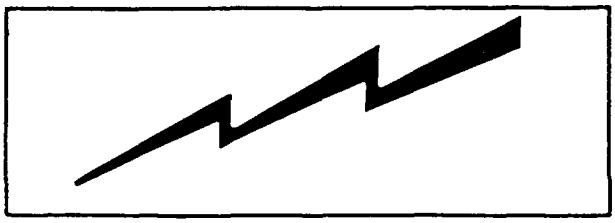


POWER DISTRIBUTION UNIT
(NSN 4240-01-068-8645)

HEADQUARTERS, DEPARTMENT OF THE ARMY

JULY 1986

WARNINGS



HIGH VOLTAGE

is used in the operation of this equipment.

DEATH ON CONTACT

may result if personnel fall to observe safety precautions when performing troubleshooting and maintenance procedures on the power distribution unit.

DISCONNECT POWER SUPPLIES BEFORE PERFORMING MAINTENANCE TO PREVENT DEATH OR POSSIBLE SERIOUS PERSONAL INJURY.

TOXIC HAZARD

Do not remove covers to service components after toxic exposure without observing proper handling procedures.

For electrical shock or toxic environment first aid, refer to FM 21-11 (TEST).

TECHNICAL MANUAL

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC

No. 3-4240-302-30&P-5

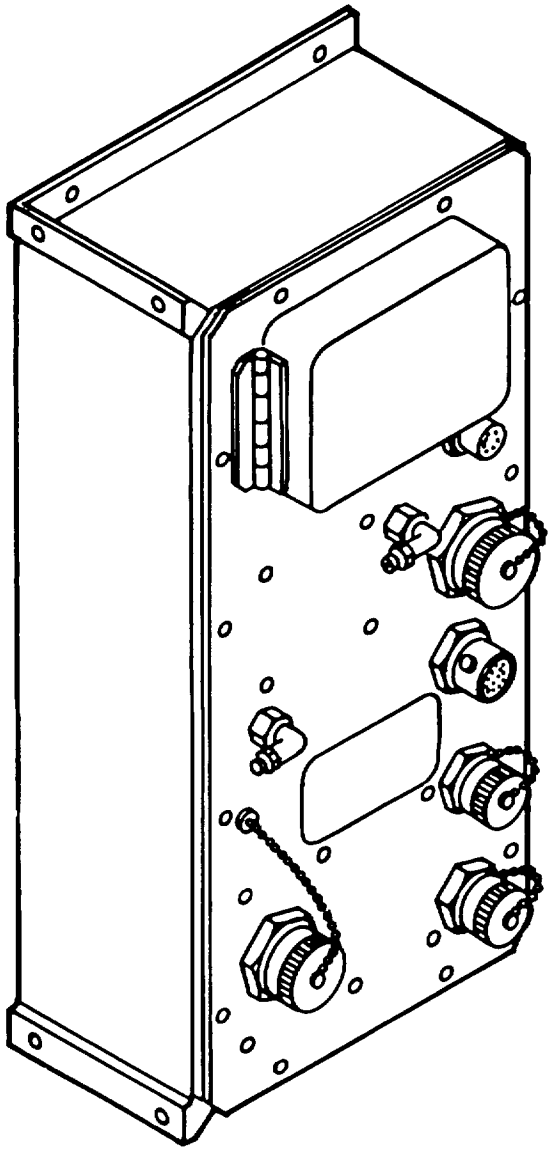
2 July 1986

DIRECT SUPPORT MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST) FOR POWER DISTRIBUTION UNIT (NSN 4240-01-068-8645)

Current as of *15 April 1986*

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual direct to: Commander, US Army Armament, Munitions and Chemical Command, ATTN: AMSMC-MAR-T(A), Aberdeen Proving Ground, MD 21010-5423. A reply will be furnished to you.



POWER DISTRIBUTION UNIT

CHAPTER 1
INTRODUCTION

Section I GENERAL INFORMATION

1-1. SCOPE.

a. Type of Manual. This manual provides direct support maintenance instructions for the power distribution unit, including repair parts and special tools list.

b. Equipment Name and Number.
Power Distribution Unit (PDU)
NSN 4240-01-068-8645

c. Purpose of Equipment. The PDU accepts and distributes 208 V ac, 3 phase, 400 Hz power to appropriate collective protection equipment (CPE) components. It converts high voltage ac power to 28 V dc for appropriate CPE components.

1-2. MAINTENANCE FORMS, RECORDS, AND REPORTS. Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pam 738-750, The Army Maintenance Management System (TAMMS) as contained in Maintenance Management Update.

1-3. DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE. Refer to TM 43-0002-31, Destruction of Chemical Weapons and Defense Equipment to Prevent Enemy Use.

1-4. NOMENCLATURE CROSS-REFERENCE LIST. Nomenclature cross-references used in this manual include the following:

Common Name	*Official Nomenclature*
Tubing	Nonmetallic tubing
Panel	Power distribution unit panel
Transformer/rectifier T1	Power transformer
Diode	Semiconductor device, diode
RFI filter	Radio frequency interference filter
Waterproof boot	Dust and moisture seal boot
PE LIGHT circuit breaker CB3	Circuit breaker
DC POWER circuit breaker CB2	Circuit breaker
Relay K1	Electromagnetic relay

1-5. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR). If the collective protection equipment needs improvement, let us know. Send an EIR. You, the user, are the only one who can tell us what you do not like about your equipment. Let us know why you do not like the design. Put it on an SF 368 (Quality Deficiency Report). Mail it to the Commander, US Army Armament, Munitions and Chemical Command, ATTN: AMSMC-QAD(R), Rock Island, IL 61299-6000. We will send you a reply.

Section II EQUIPMENT DESCRIPTION AND DATA

1-6. DESCRIPTION AND DATA

a. *Organizational Support Manual.* Refer to appendix A for the applicable organizational maintenance manual.

b. *Characteristics.*

(1) Distributes 208 V ac, 3 phase, 400 Hz power to MCPE components.

(2) Converts high voltage ac power to 28 V dc.

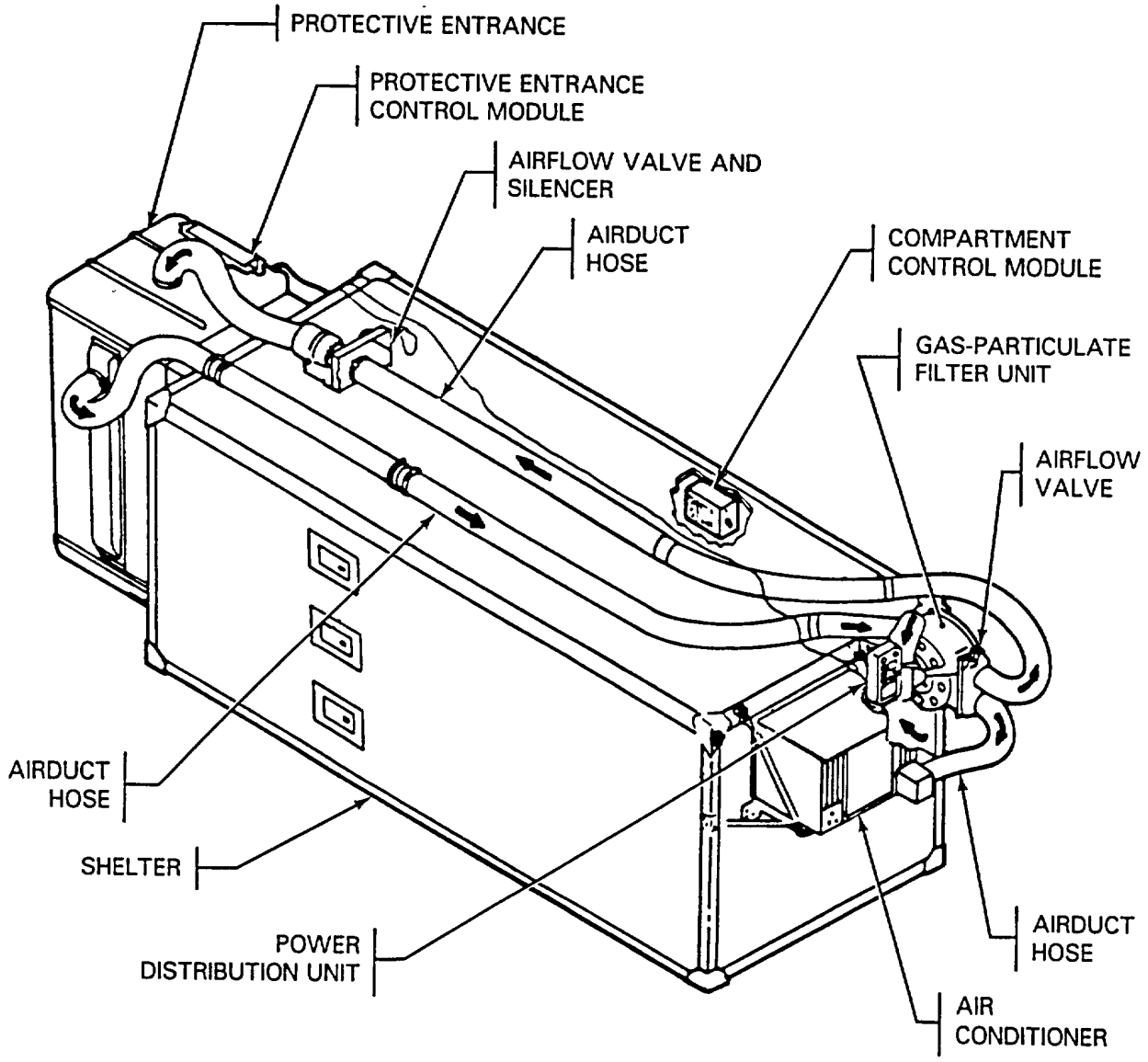
c. *Typical CPE System Description*.

(1) The gas-particulate filter unit (GPFU) removes toxic gases and dust from the air supplied to the protective entrance and shelter. Outside and return air is drawn by the main fan through the air inlet of the filter unit. From the main fan, the air is pushed through the

particulate and gas filters to the airflow valve.The filtered air passes through the airflow valve and is carried by airduct hoses to the protective entrance (PE) through the airflow valve and silencer and to the shelter through the air conditioner. Pressure sensing components in the compartment control module (CCM) automatically adjust the airflow valve to maintain a positive pressure in the shelter.

(2) The PE provides a pressurized transition area between the shelter and the outside contaminated zone. Personnel entering from the outside must wait 5 minutes within the PE before entering the shelter. Contamination is purged by the flow of filtered air. The protective entrance control module (PECM) automatically adjusts the airflow valve and silencer assembly to maintain the proper air pressure inside the protective entrance.

d. CPE System Configurations. Collective protection equipment is configured to fit the needs of a specific application and may differ from the typical system discussed above.



TYPICAL CPE CONFIGURATION

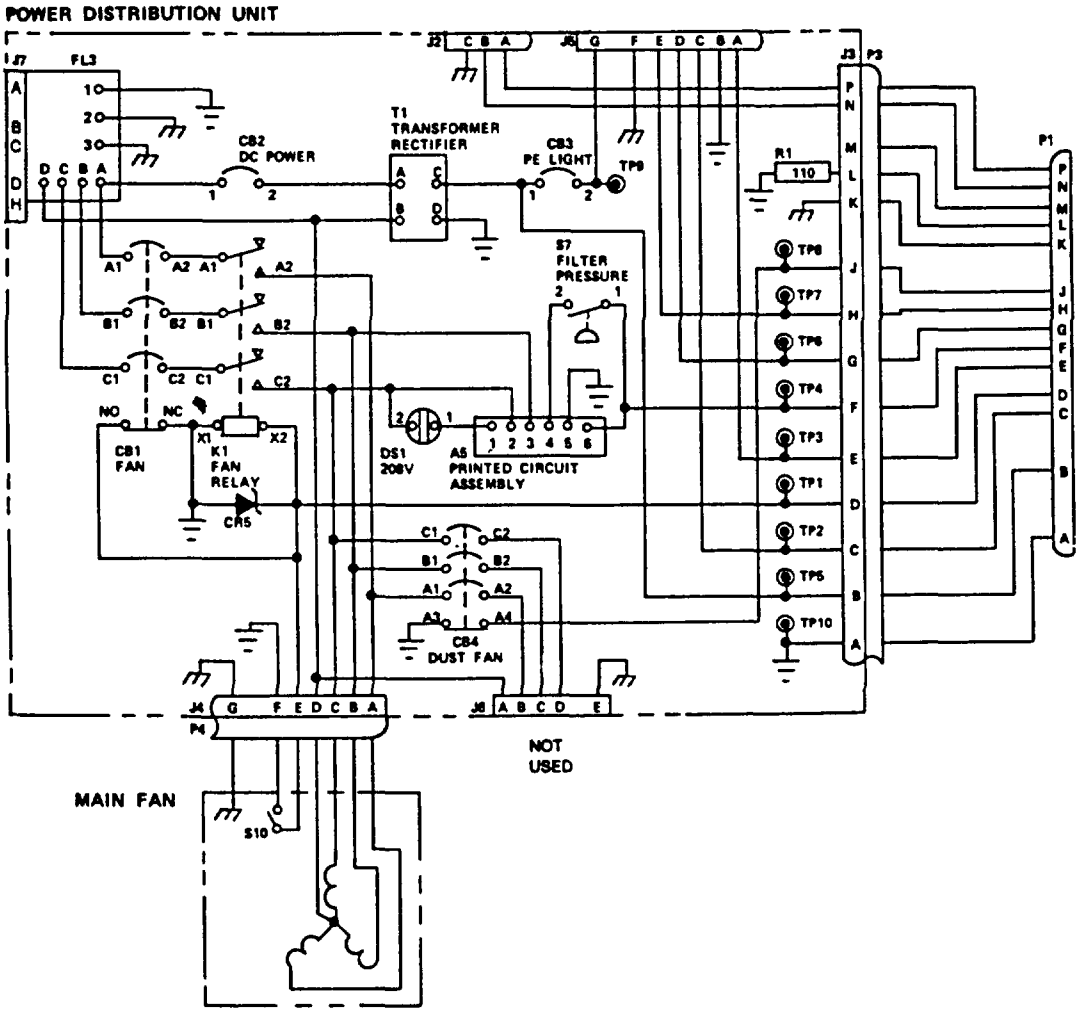
CHAPTER 2
MAINTENANCE INSTRUCTIONS

Section I REPAIR PARTS, SPECIAL TOOLS, TEST, MEASUREMENT, AND DIAGNOSTIC EQUIPMENT (TMDE), AND SUPPORT EQUIPMENT

2-1. COMMON TOOLS AND EQUIPMENT. For authorized common tools and equipment, refer to the modified table of organization and equipment (MTOE) applicable to your unit.

2-2. SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT. No special tools, TMDE, or support equipment are required.

2-3. REPAIR PARTS. Repair parts are listed and illustrated in appendix B of this manual.

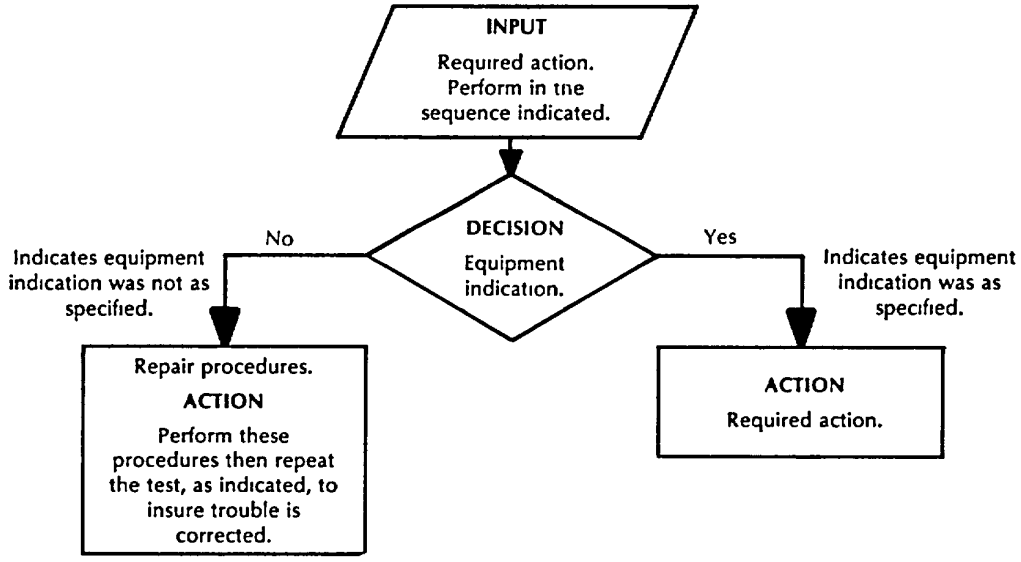


POWER DISTRIBUTION UNIT SCHEMATIC

Section II TROUBLESHOOTING

2-4. SCOPE. This section provides information for locating and correcting problems in the collective protection equipment. Use the following flow charts to isolate component problems and to locate repair instructions.

2-5. FLOW CHART PROCEDURES. This troubleshooting procedure is set up so that you actually are performing a module functional checkout. For example, if you have a good power distribution unit, you perform only the functional checkout (yes path). If the power distribution unit is defective (no path), the procedure direct you step-by-step to locate a defective component or a wiring problem. After module repair, you repeat the functional checkout at the point in the troubleshooting procedure where you originally dropped out. The following describes the troubleshooting chart symbols.

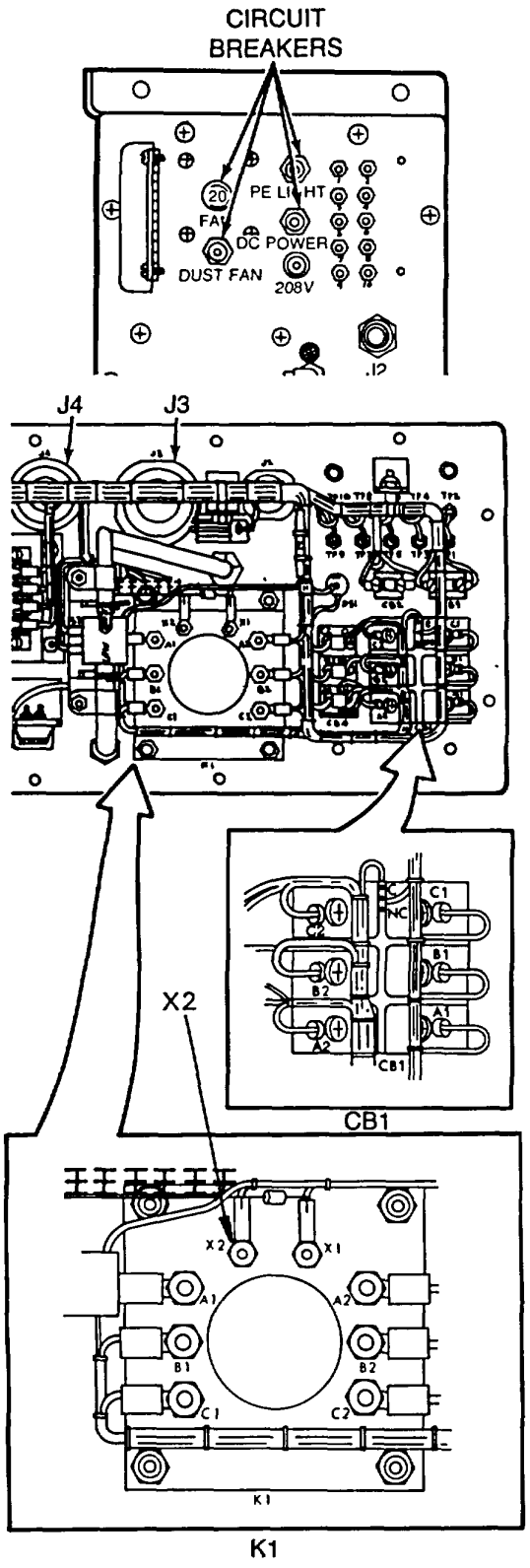


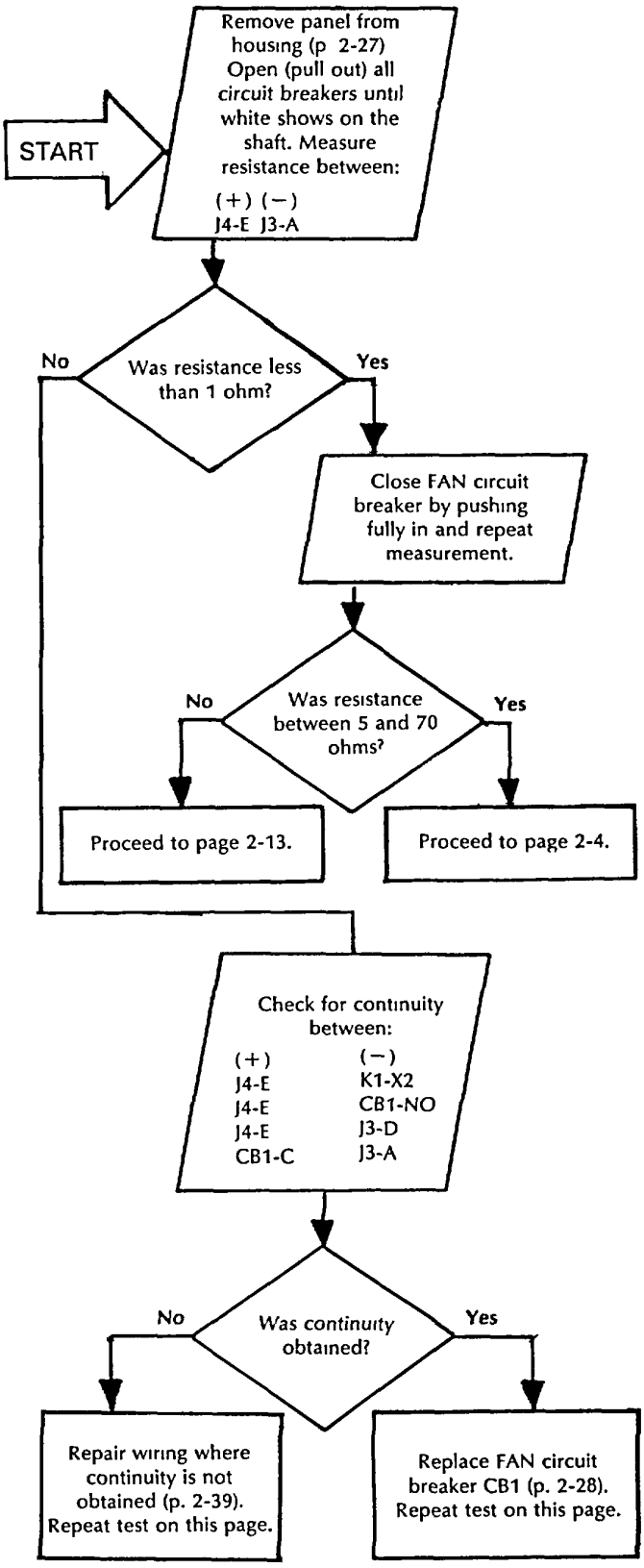
WARNING

High voltage is used to power this equipment. Before removing or installing power cable, be sure that POWER switch on control module is set to OFF and power source is shutdown to avoid personal injury or loss of life.

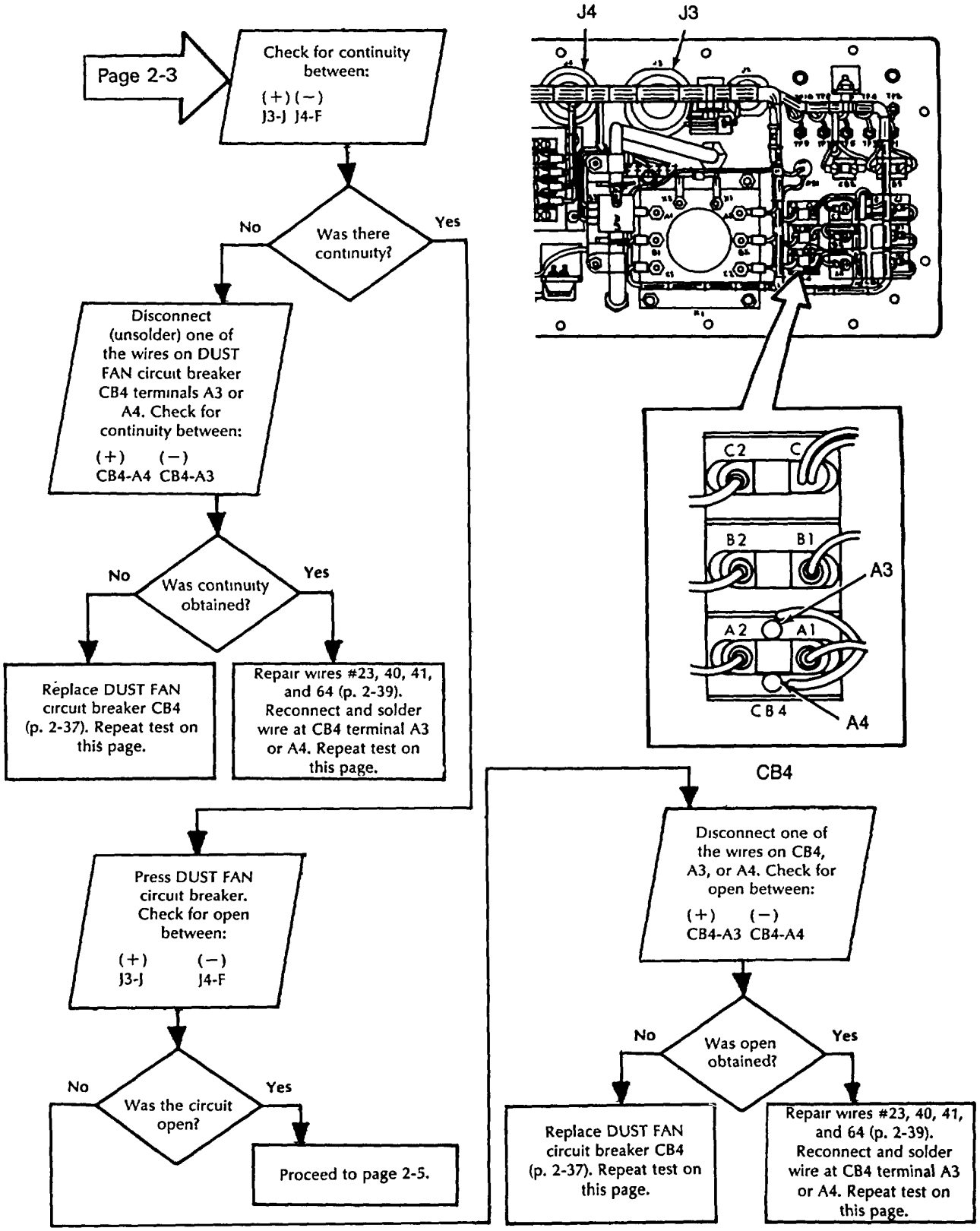
INDEX **PAGE**

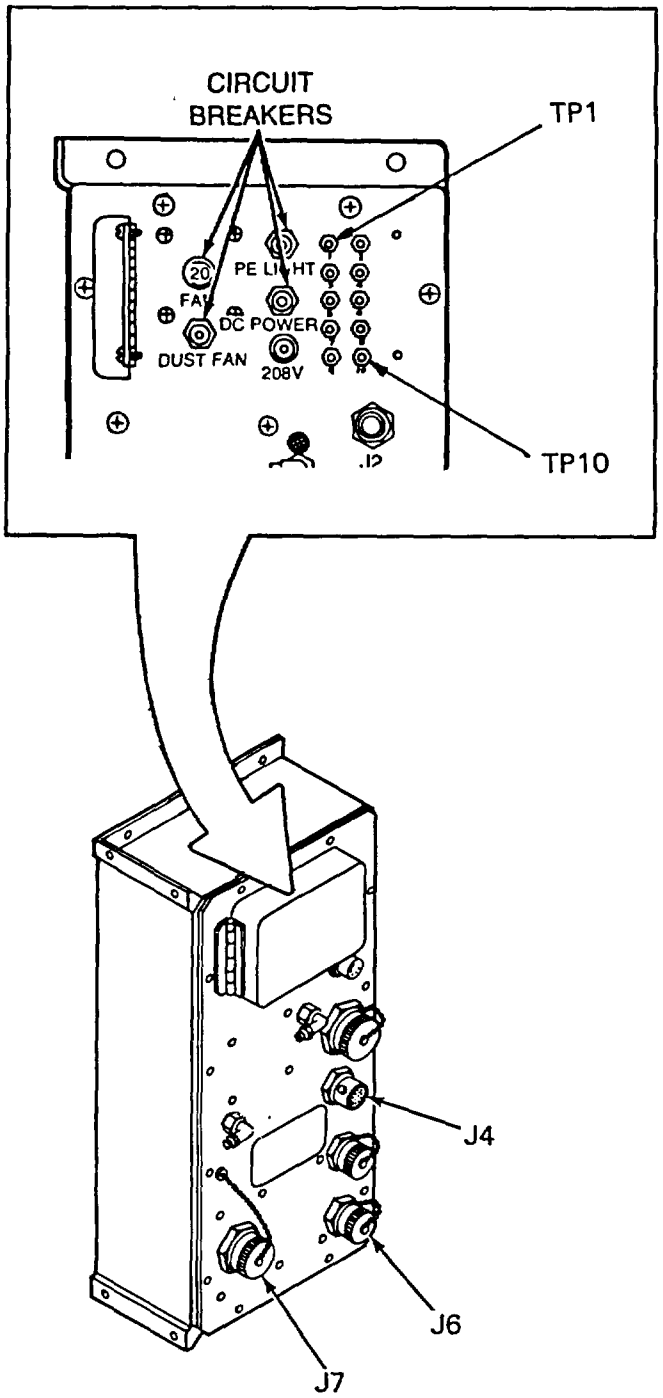
2-6. TROUBLESHOOTING PROCEDURES.





2-6. TROUBLESHOOTING PROCEDURES (CONT).





Page 2-4

Connect 28 V dc to:

TP 1 – Pos
TP 10 – Neg

This should cause relay K1 to pull in. A muffled "klunk" should be heard. Check for continuity between:

(+)	(–)
J7-A	J4-A
J7-B	J4-B
J7-C	J4-C

Was continuity obtained?

No

Proceed to page 2-15.

Yes

Check for continuity between:

(+)	(–)
J7-A	J6-B
J7-B	J6-C
J7-C	J6-D

Was continuity obtained?

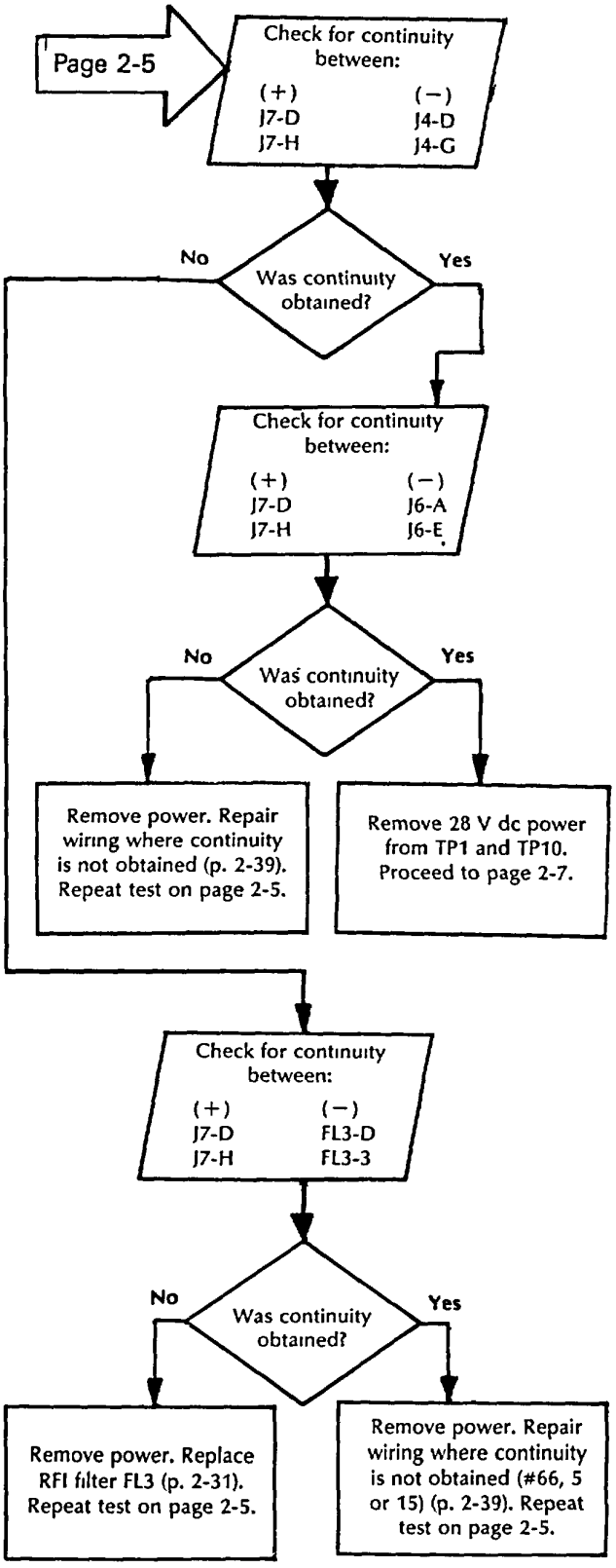
No

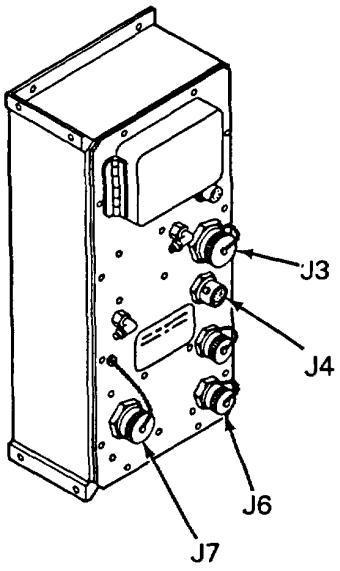
Proceed to page 2-16.

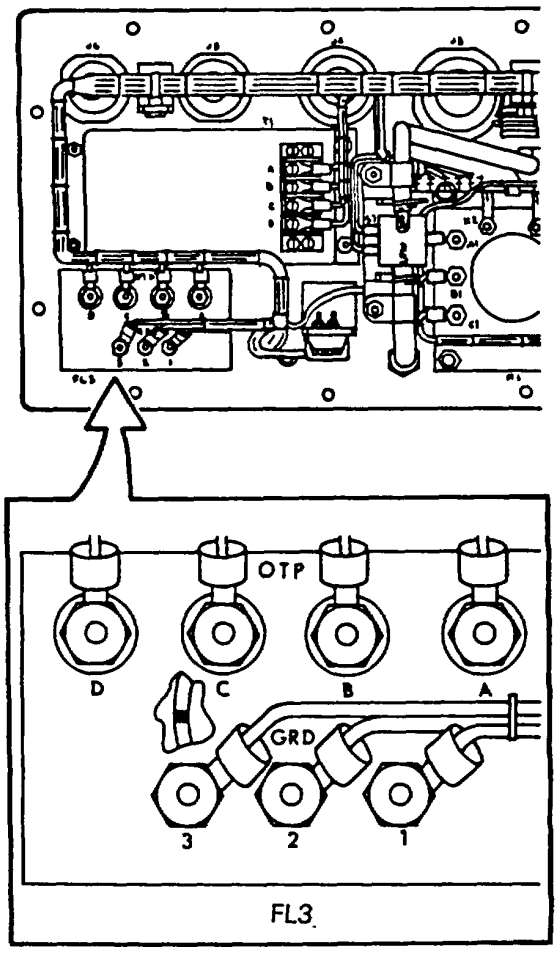
Yes

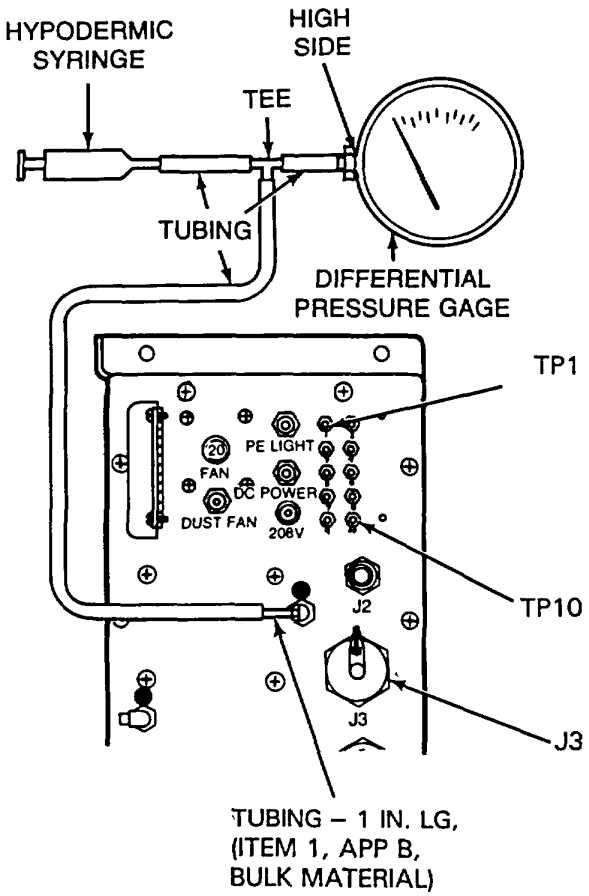
Proceed to page 2-6.

2-6. TROUBLESHOOTING PROCEDURES (CONT).









Page 2-6

Connect the high pressure side of a differential pressure gage (6 in. wg) to a pressure source (as shown) and to the hose fitting marked with *a red dot on the PDU panel*

Connect one end of a 680 ohm, 2 watt resistor to J3-F. Connect 28 V dc to:

(+) 680 resistor — (–) TP 10

Slowly increase pressure to 6 in. wg and measure voltage across resistor connected to power source (+) and J3-F (–). Multimeter should indicate 28± 2 V dc when pressure is greater than 5 5 in. wg; 0 V dc when less than 4.5 in wg

Was voltage 0 V dc at pressure less than 4.5 in wg?

No → Was voltage 0 V dc at pressure less than 4.5 in wg?

Yes → Was *voltage* 28 ± 0 V dc at pressure greater than 5.5 in. wg?

No → Proceed to page 2-18.

Yes → Proceed to page 2-8.

Was *voltage* 28 ± 0 V dc at pressure greater than 5.5 in. wg?

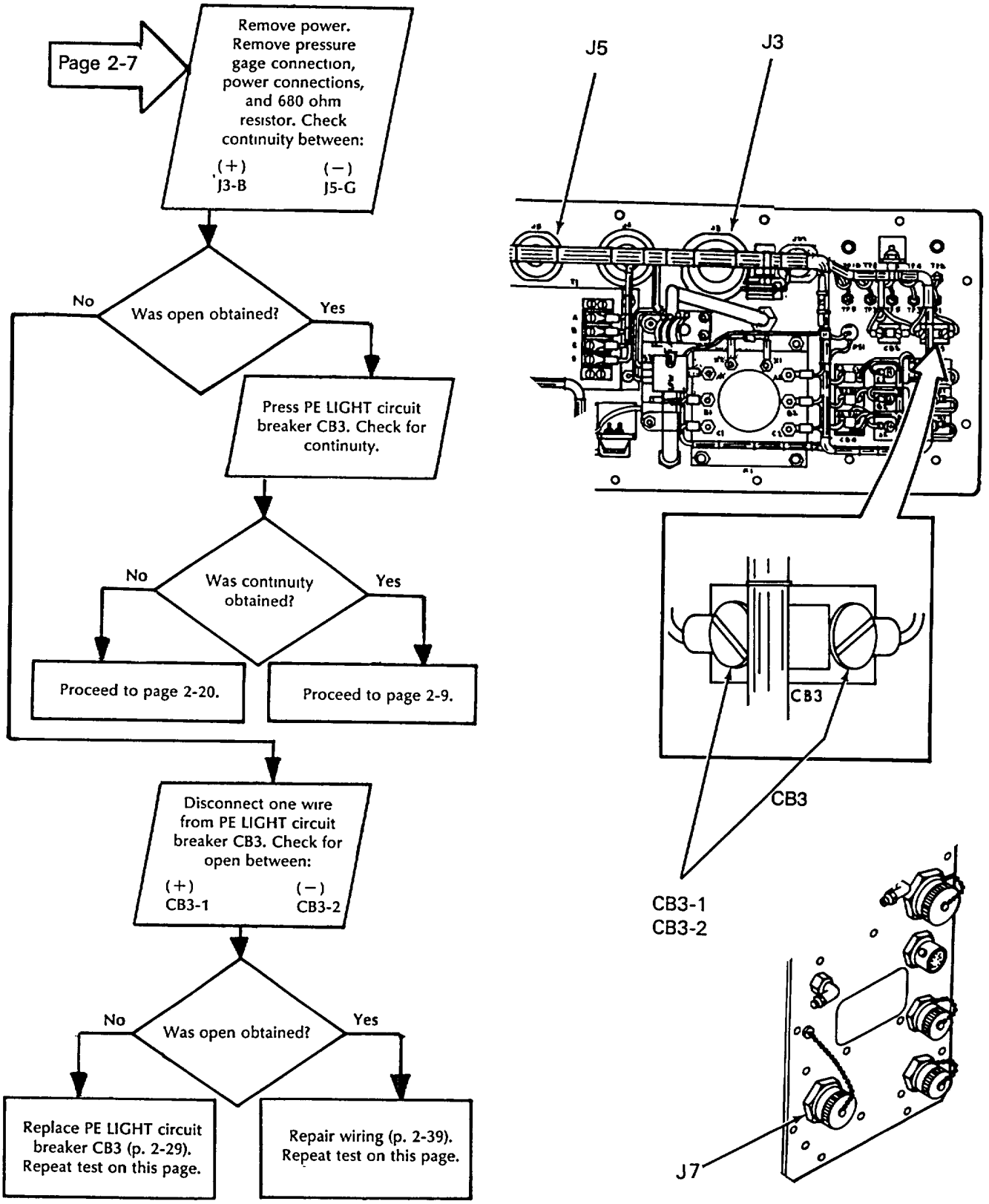
No → Did voltage switch to 28 ± 2 V dc at a pressure less than 4.5 in. wg?

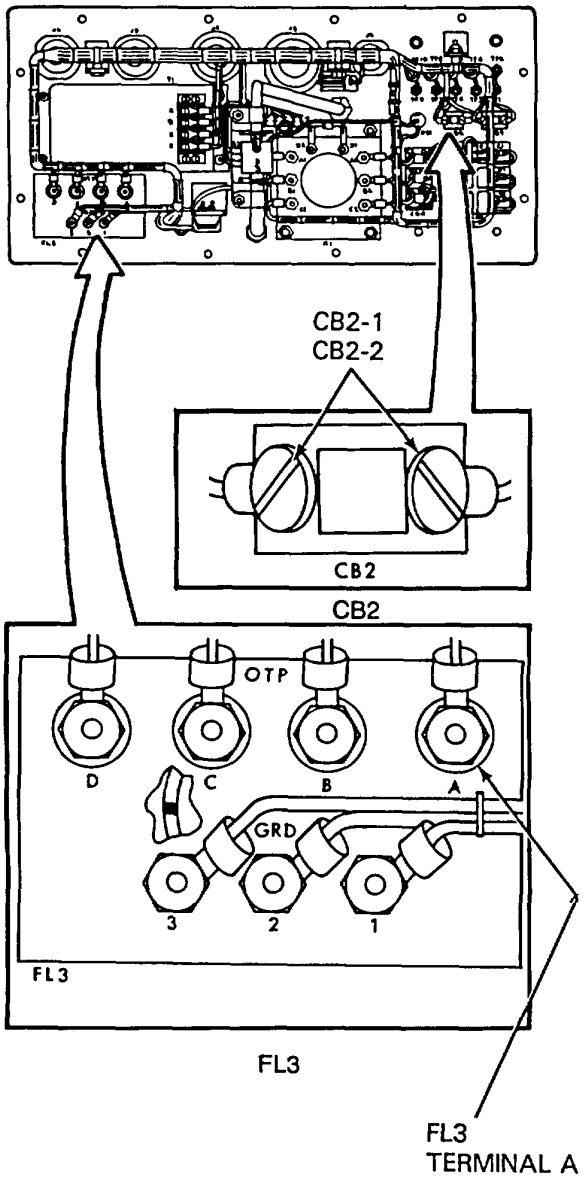
Yes → Did voltage switch to 28 ± 2 V dc at a pressure less than 4.5 in. wg?

No → Proceed to page 2-17.

Yes → Remove power. Replace pressure switch S7 (p. 2-32). Repeat test on this page.

2-6. TROUBLESHOOTING PROCEDURES (CONT).





Page 2-8

Check for open between:
(+) J7-A
(−) J7-D

Was open obtained?
No
Yes

Press DC POWER circuit breaker CB2. Check for continuity.

Was continuity obtained?
No
Yes

Proceed to page 2-21.

Proceed to page 2-10.

Disconnect wires from RFI filter FL3 *terminal A*. Check for open between:
(+) J7-A
(−) J7-D

Was open obtained?
No
Yes

Replace RFI filter FL3 (p. 2-31). Repeat test on this page.

Disconnect one wire from DC POWER circuit breaker CB2. Check for open between:
(+) CB2-1
(−) CB2-2

Was open obtained?
No
Yes

Replace DC POWER circuit breaker CB2 (p. 2-29). Reconnect wires to FL3. Repeat test on this page.

Repair wiring (p. 2-39). Reconnect wires to FL3 and CB2. Repeat test on this page.

2-6. TROUBLESHOOTING PROCEDURES (CONT).

Page 2-9

Check for continuity between:

(+)	(−)
J2-A	J3-P
J2-B	J3-N
J2-C	J3-A, J3-K, J5-B, J5-F
J5-A	J3-E
J5-C	J3-C
J5-D	J3-G
J5-E	J3-H
TP1	J3-D
TP2	J3-C
TP3	J3-E
TP4	J3-F
TP5	J3-B
TP6	J3-G
TP7	J3-H
TP8	J3-J
TP9	J5-G
TP10	J5-B

Was continuity obtained?

No

Repair wiring where continuity is not obtained (p. 2-39). Repeat test on this page.

Yes

Apply 28 V dc to:

TP1 – Pos
TP10 – Neg

Check for open between:

(+)	(−)
J7-A	J7-B
J7-A	J7-C
J7-A	J7-H
J7-B	J7-C
J7-B	J7-D
J7-B	J7-H
J7-C	J7-D
J7-C	J7-H
J7-D	J7-H

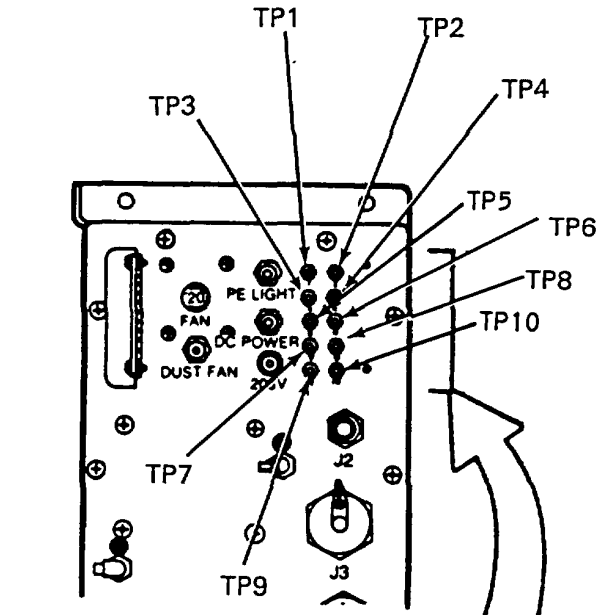
Was open obtained in all cases?

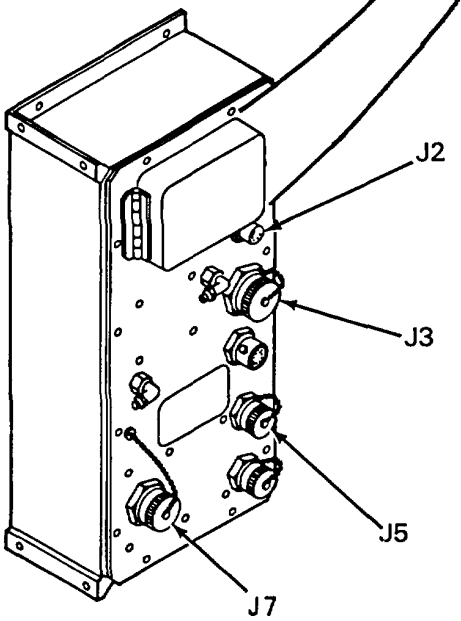
No

Proceed to page 2-26.

Yes

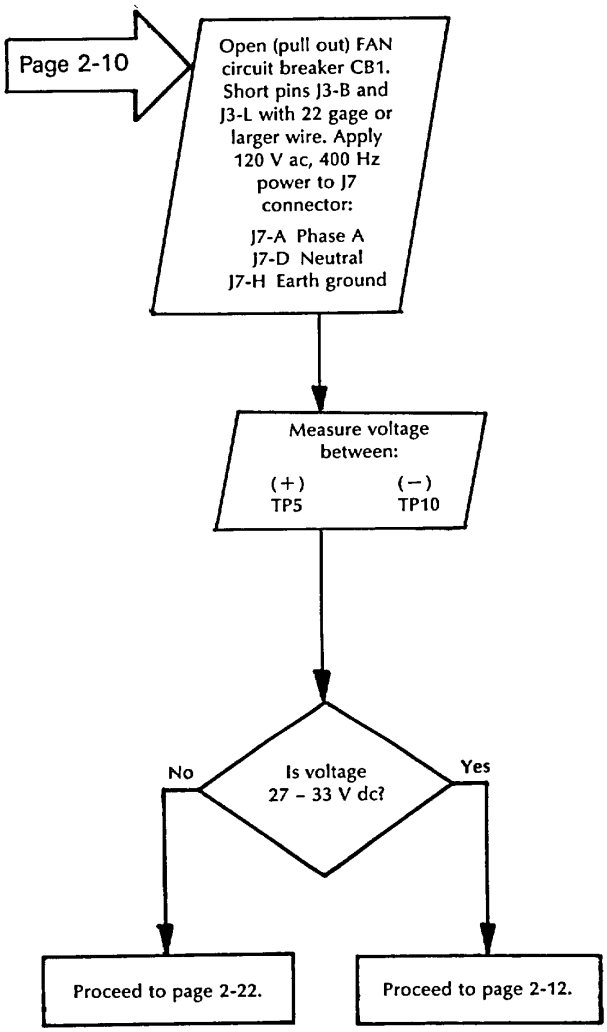
Remove 28 V dc power. Proceed to page 2-11.



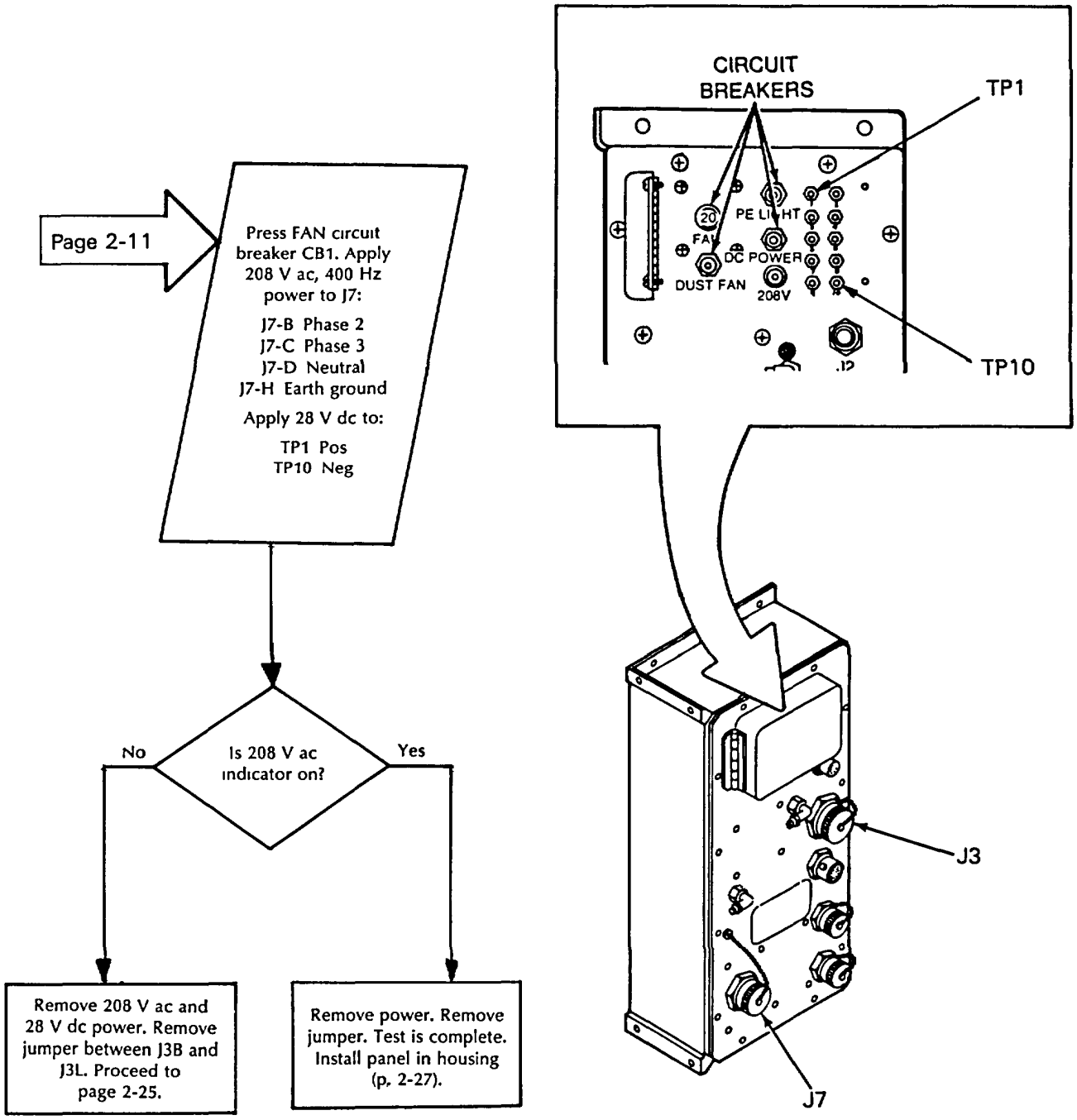


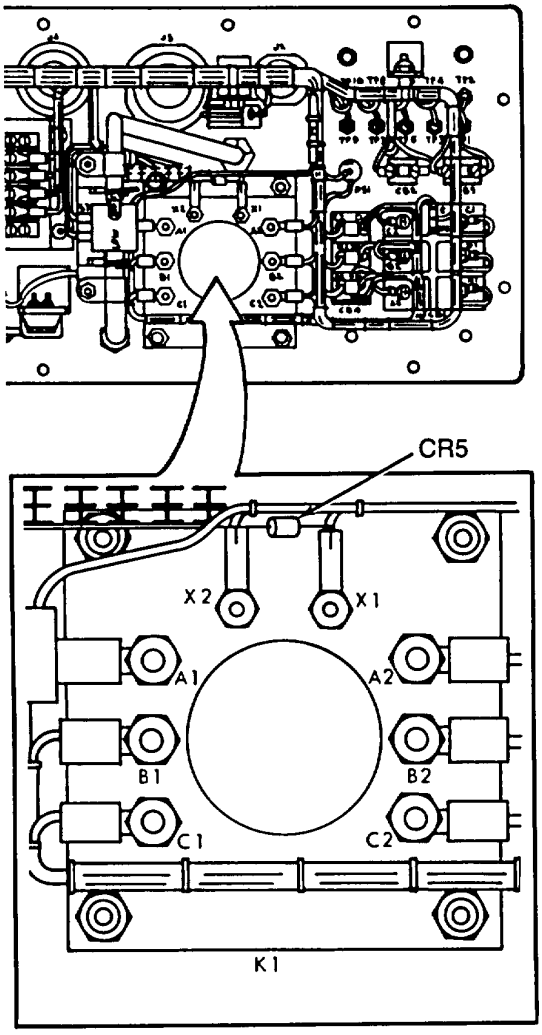
WARNING

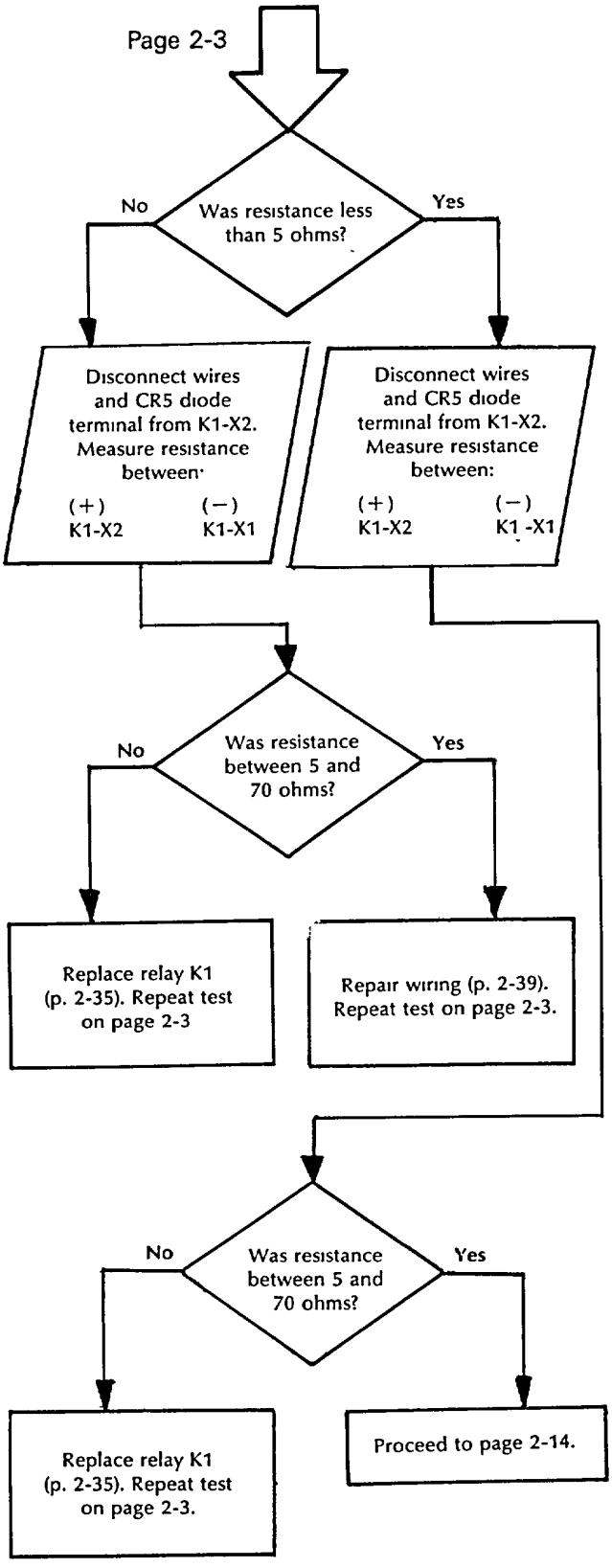
High voltage is used in the following procedures. Exercise caution when working on panel with voltage applied. Death or injury may result if contact is made with exposed terminals or wiring.



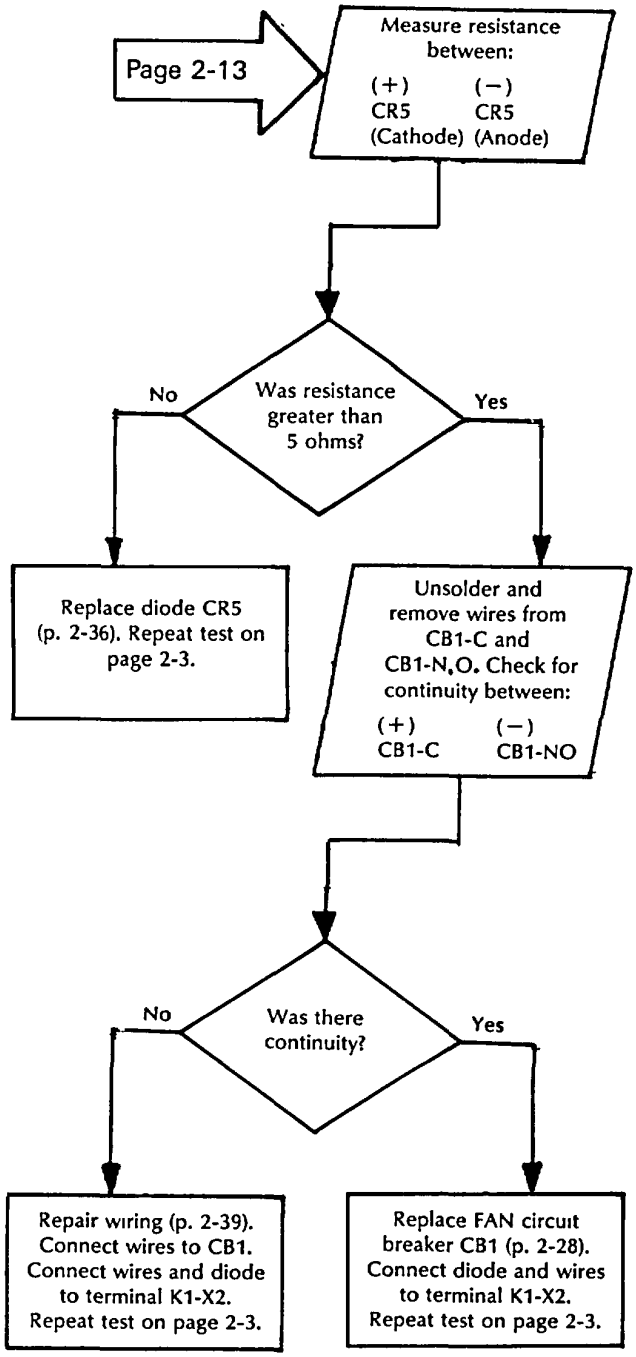
2-6. TROUBLESHOOTING PROCEDURES (CONT).

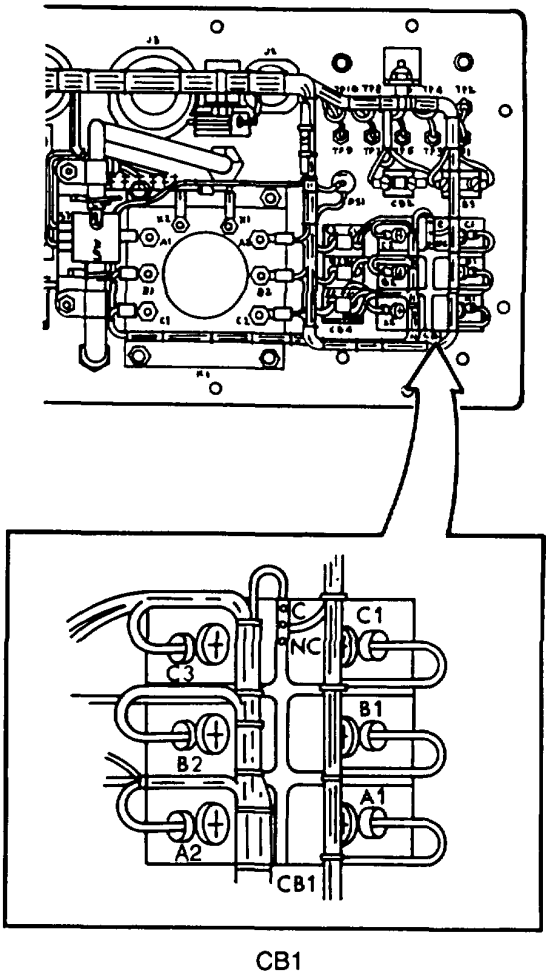



CR5
X2
X1
A1
A2
B1
B2
C1
C2
K1

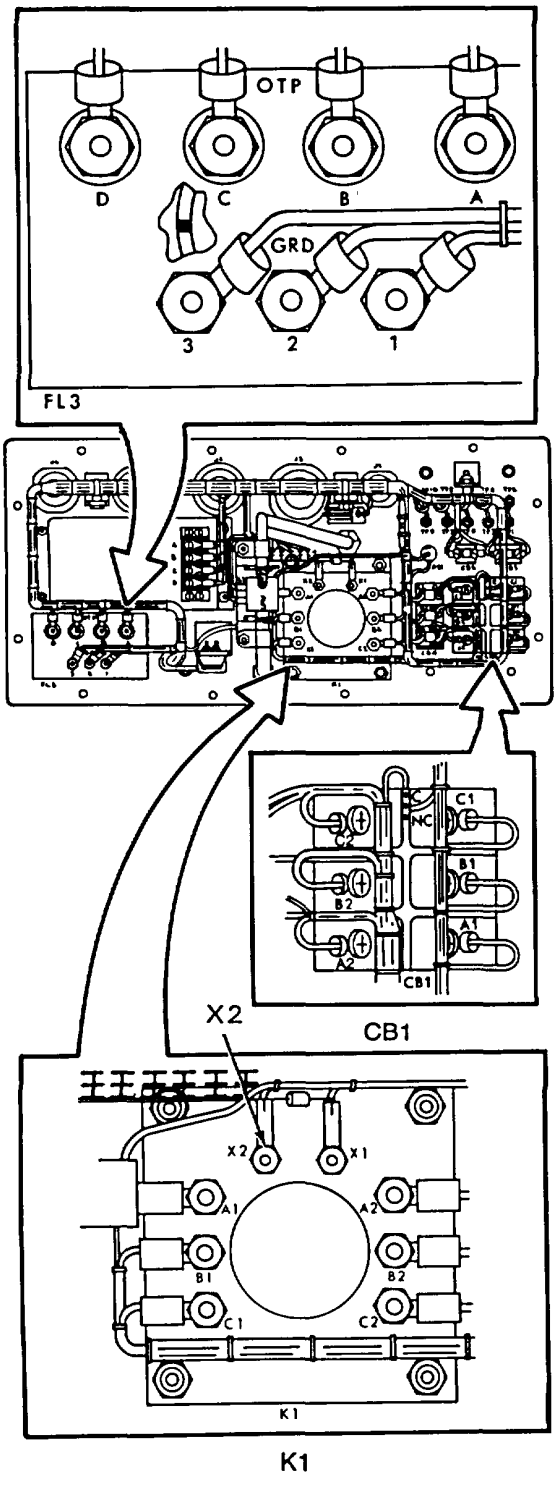

Page 2-3
Was resistance less than 5 ohms?
No
Yes
Disconnect wires and CR5 diode terminal from K1-X2. Measure resistance between:
(+) K1-X2
(−) K1-X1
Disconnect wires and CR5 diode terminal from K1-X2. Measure resistance between:
(+) K1-X2
(−) K1 -X1
Was resistance between 5 and 70 ohms?
No
Yes
Replace relay K1 (p. 2-35). Repeat test on page 2-3
Repair wiring (p. 2-39). Repeat test on page 2-3.
Was resistance between 5 and 70 ohms?
No
Yes
Replace relay K1 (p. 2-35). Repeat test on page 2-3.
Proceed to page 2-14.

2-6. TROUBLESHOOTING PROCEDURES (CONT).





CB1



Page 2-5

Check for continuity between:

(+)	(−)
J7-A	FL3-A
J7-B	FL3-B
J7-C	FL3-C

Was continuity obtained?

No → Remove power. Replace RFI filter FL3 (p 2-31). Repeat test on page 2-5.

Yes → Check for continuity between

(+)	(−)
CB1-A1	CB1-A2
CB1-B1	CB1-B2
CB1-C1	CB1-C2

Was continuity obtained?

No → Remove power. Replace FAN circuit breaker CB1 (p. 2-28) Set circuit breaker. Repeat test on page 2-5.

Yes → Check for continuity between:

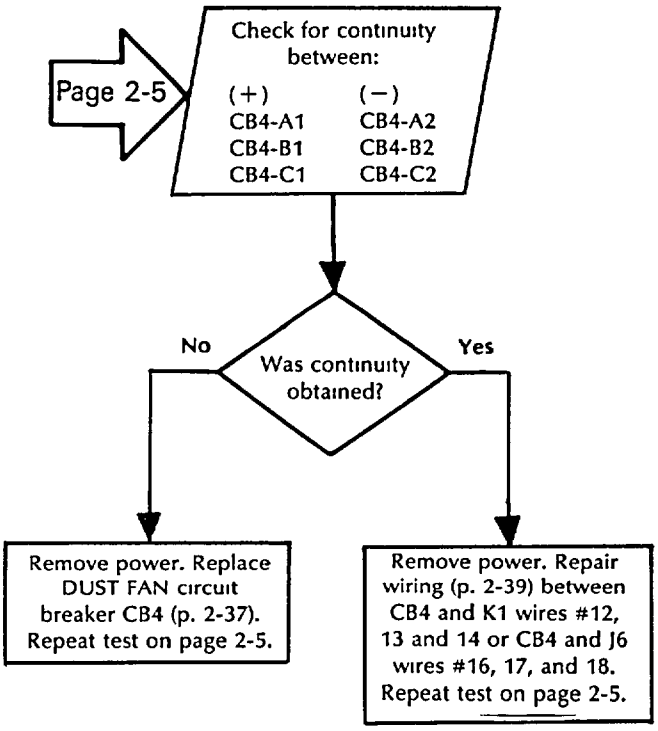
(+)	(−)
K1-A1	K1-A2
K1-B1	K1-B2
K1-C1	K1-C2

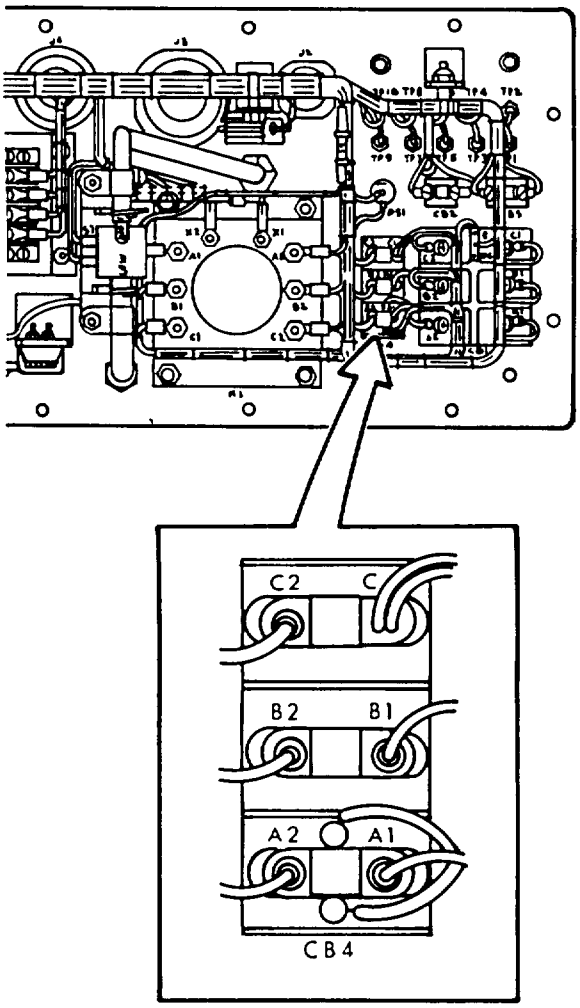
Was continuity obtained?

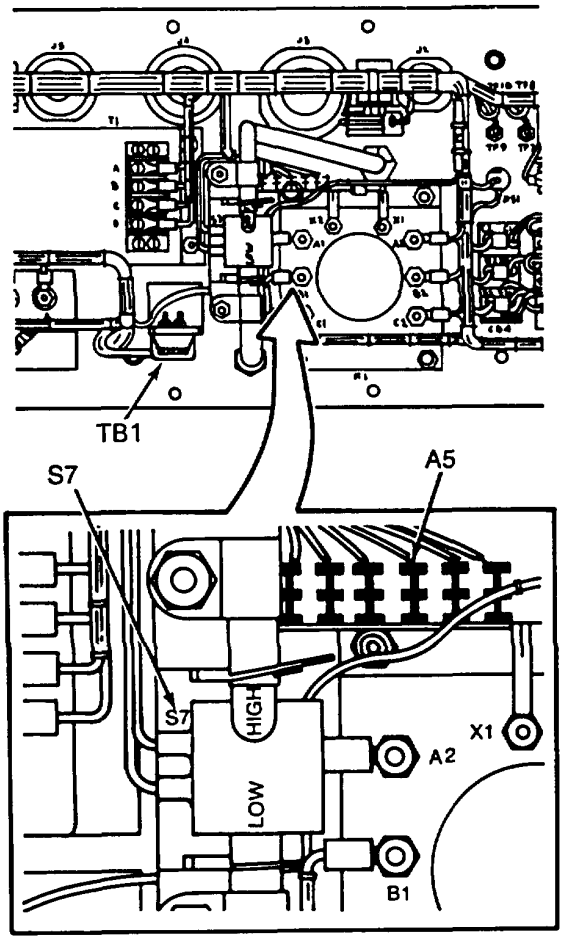
No → Remove power. Replace relay K1 (p. 2-35) Repeat test on page 2-5.

Yes → Remove power. Repair wires #2, 7, 9, 11, 1, 6, 3, 8, and 10 (p 2-39). Repeat test on page 2-5.

2-6. TROUBLESHOOTING PROCEDURES (CONT).







Page 2-7

Remove 28 V dc power. Disconnect wire at terminal 4 of A5. Reapply 28 V dc.

Did voltage switch to 0 V dc at a pressure less than 4.5 in. wg?

No

Yes

Remove 28 V dc power. Disconnect wires at terminal 6 of A5. Check for open between:

(+)	(−)
A5-6	TB1-1

Remove 28 V dc power. Disconnect one wire at pressure switch S7. Check for open between:

(+)	(−)
S7-1	S7-2
(A)	(B)

Was open obtained?

No

Yes

Replace printed circuit board A5 (p. 2-36). Repeat test on page 2-7.

Repair wiring (p. 2-39). Repeat test on page 2-7.

Was open obtained?

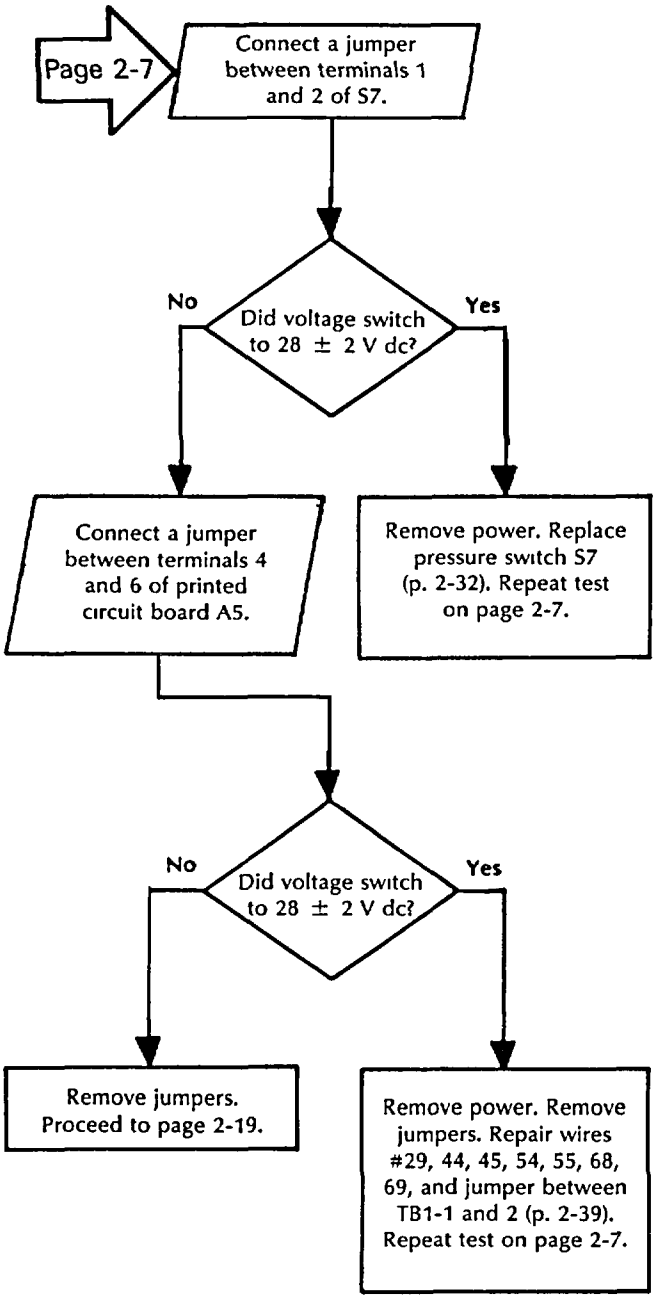
No

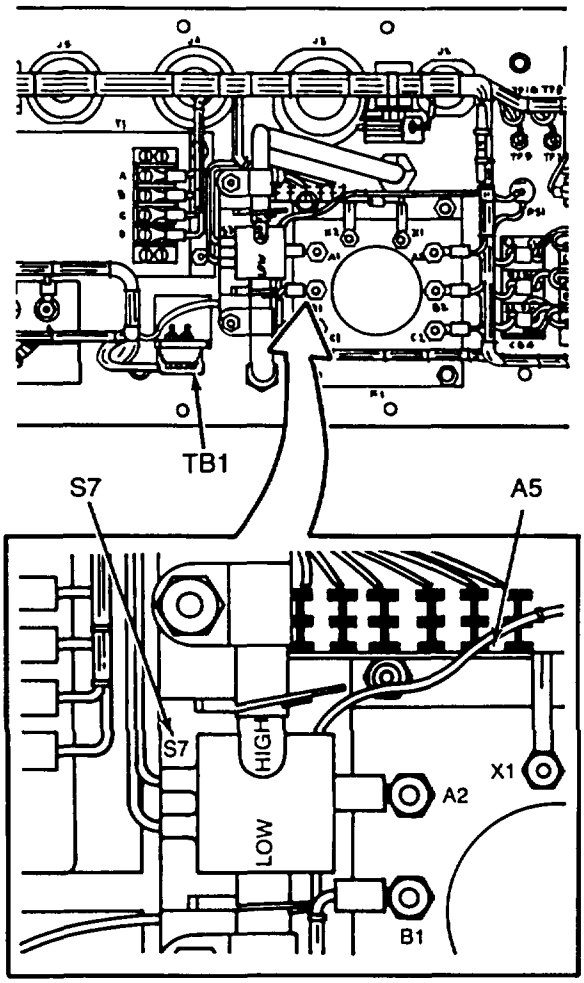
Yes

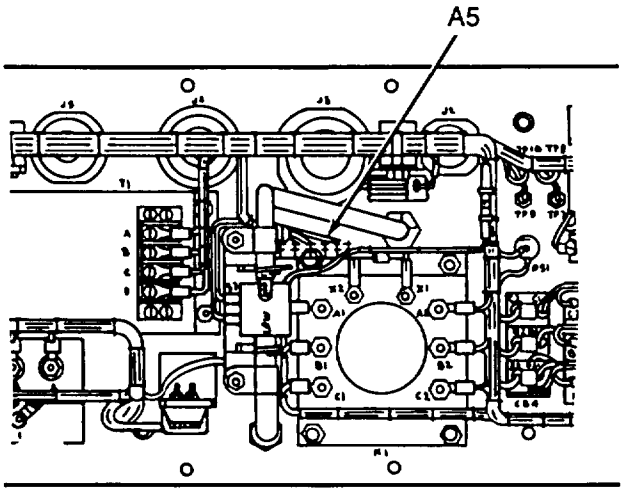
Reconnect wire to terminal 4 of A5. Replace pressure switch S7 (p. 2-32). Repeat test on page 2-7.

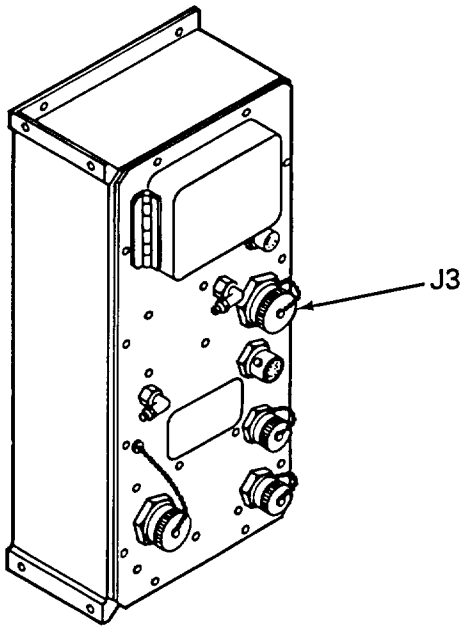
Repair wiring (p. 2-39). Reconnect wire at pressure switch S7. Repeat test on page 2-7.

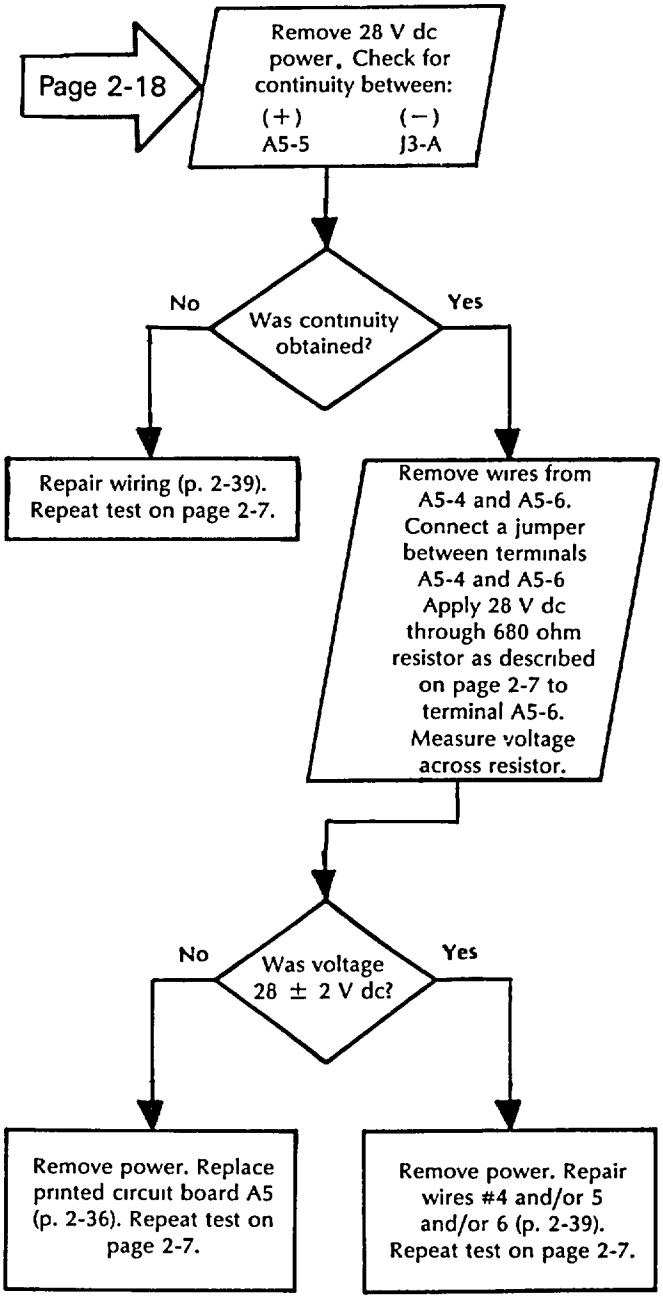
2-6. TROUBLESHOOTING PROCEDURES (CONT).



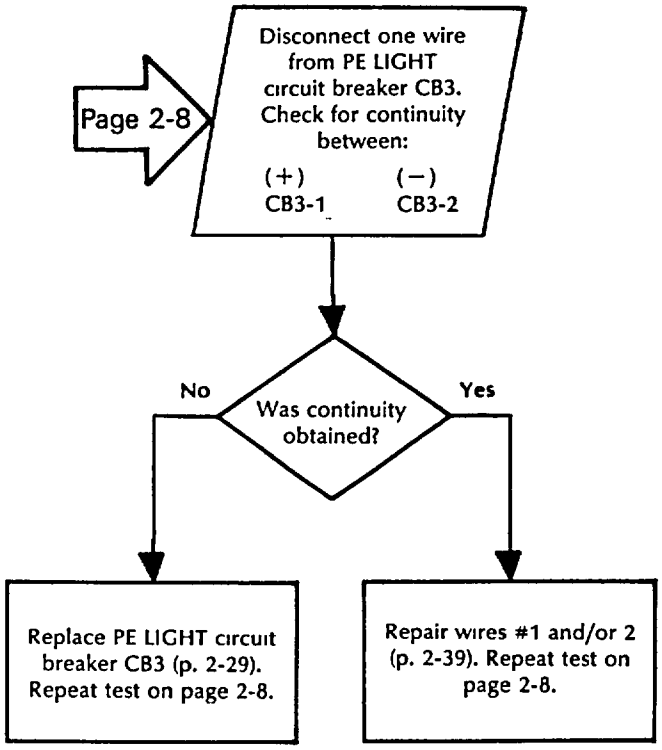


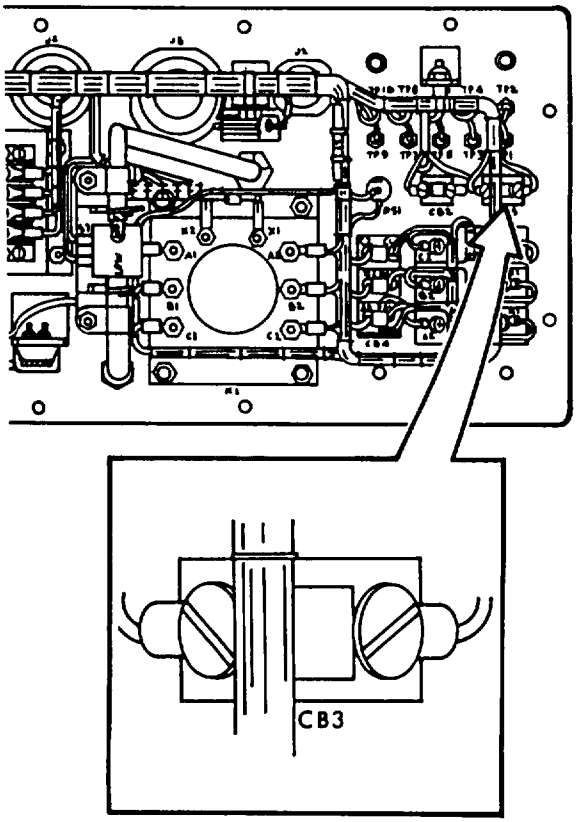

A5


J3

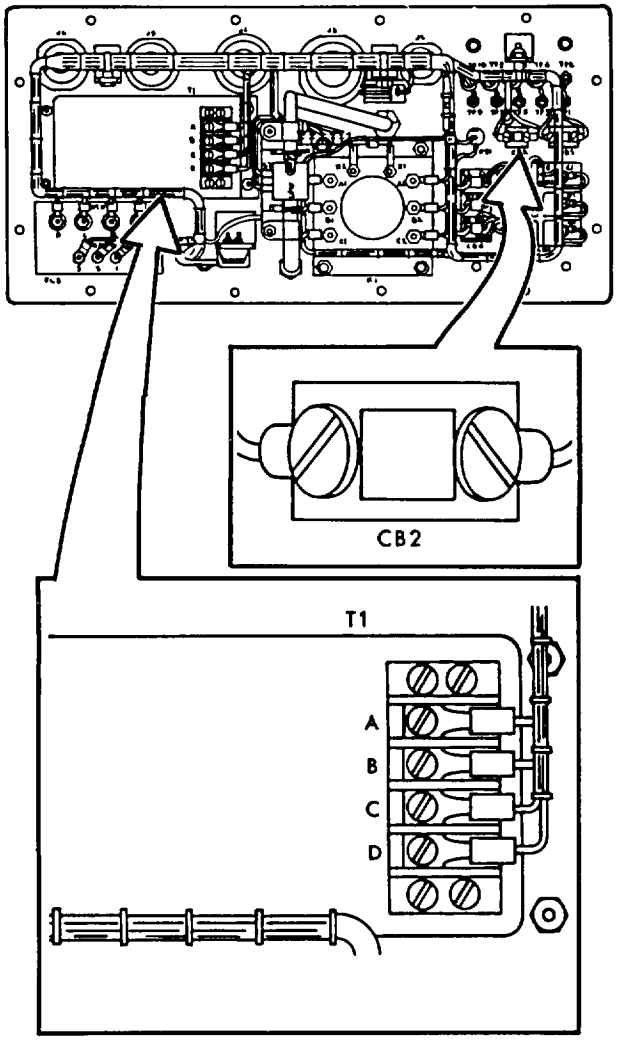

Page 2-18
Remove 28 V dc power. Check for continuity between:
(+) A5-5
(−) J3-A
No
Was continuity obtained?
Yes
Repair wiring (p. 2-39). Repeat test on page 2-7.
Remove wires from A5-4 and A5-6. Connect a jumper between terminals A5-4 and A5-6 Apply 28 V dc through 680 ohm resistor as described on page 2-7 to terminal A5-6. Measure voltage across resistor.
No
Was voltage 28 ± 2 V dc?
Yes
Remove power. Replace printed circuit board A5 (p. 2-36). Repeat test on page 2-7.
Remove power. Repair wires #4 and/or 5 and/or 6 (p. 2-39). Repeat test on page 2-7.

2-6. TROUBLESHOOTING PROCEDURES (CONT).

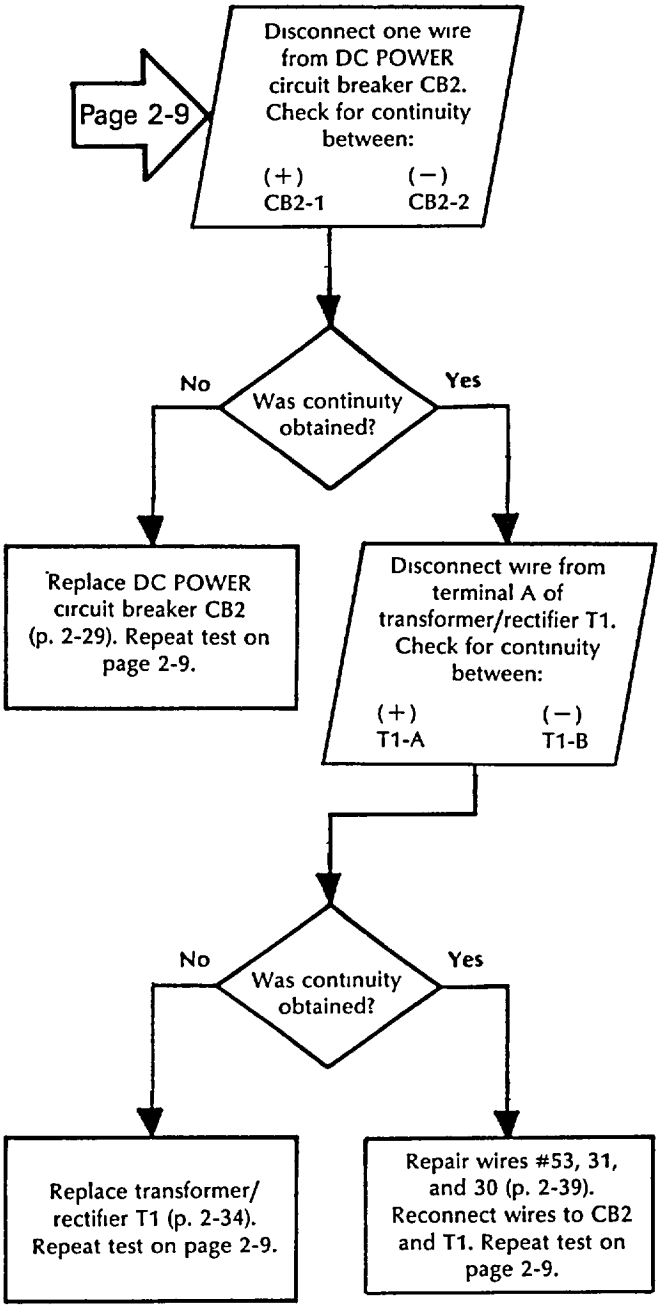




CB3


CB2
T1
A
B
C
D

T1


Page 2-9
Disconnect one wire from DC POWER circuit breaker CB2. Check for continuity between:
(+) CB2-1
(−) CB2-2
Was continuity obtained?
No
Yes
Replace DC POWER circuit breaker CB2 (p. 2-29). Repeat test on page 2-9.
Disconnect wire from terminal A of transformer/rectifier T1. Check for continuity between:
(+) T1-A
(−) T1-B
Was continuity obtained?
No
Yes
Replace transformer/ rectifier T1 (p. 2-34). Repeat test on page 2-9.
Repair wires #53, 31, and 30 (p. 2-39). Reconnect wires to CB2 and T1. Repeat test on page 2-9.

2-6. TROUBLESHOOTING PROCEDURES (CONT).

Page 2-11

Check DC POWER circuit breaker CB2 to see if it has remained set.

Has DC POWER circuit breaker CB2 remained set?

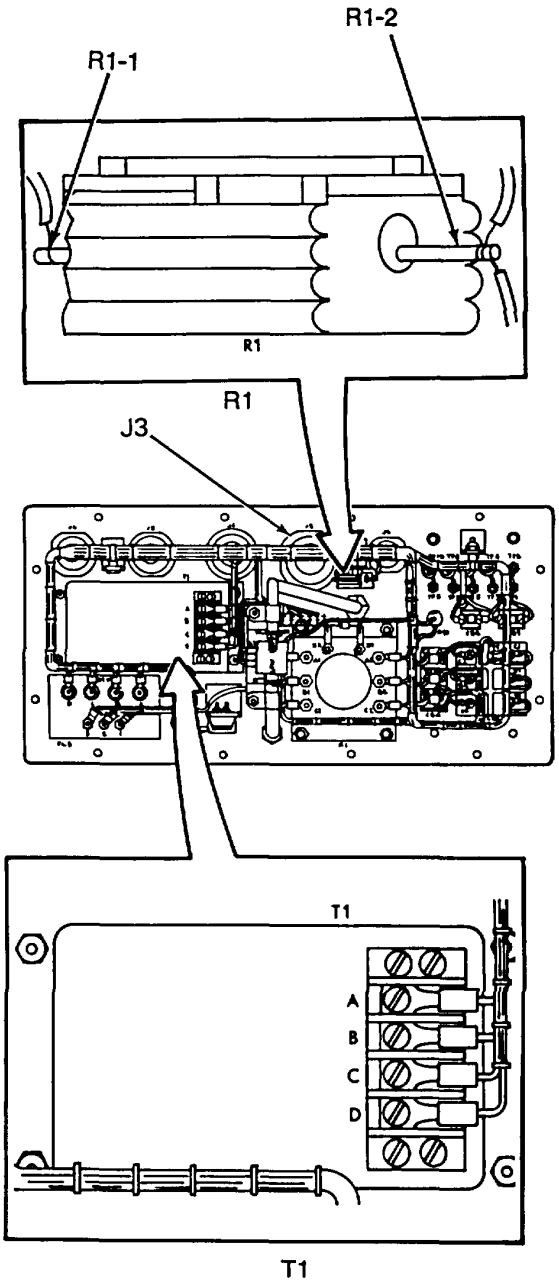
- No → Remove 120 V ac power. Disconnect wire from transformer/rectifier T1-A. Press DC POWER circuit breaker CB2. Check for open between: (+) FL3-A (−) FL3-D
- Yes → Proceed to page 2-23.

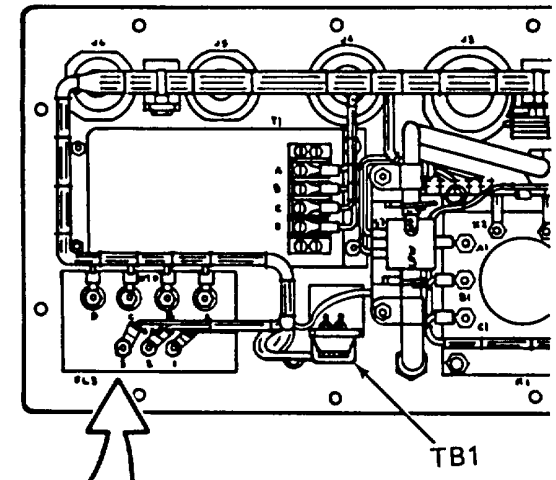
Was open obtained?

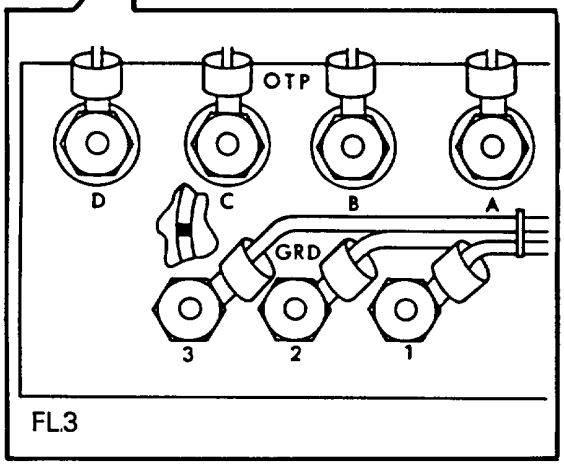
- No → Repair wires #30, 67, and 62 (p. 2-39). Reconnect wire at T1-A. Repeat test on page 2-11.
- Yes → Reconnect wire at T1-A. Disconnect wires at T1-C. Reapply 120 V ac power.

Has DC POWER circuit breaker CB2 remained set?

- No → Remove power. Replace transformer/rectifier T1 (p. 2-34). Repeat test on page 2-11.
- Yes → Remove power. Repair wiring at output of T1 wires #51 and 52 (p. 2-39). Repeat test on page 2-11.







Page 2-22

Turn off 120 V ac power. Measure transformer/rectifier load resistance:
(+) T1-C (−) T1-D

Was resistance 110 ± 10 ohms?
No
Yes

Reapply 120 V ac power. Measure voltage at input of transformer/rectifier:
(+) T1-A (−) T1-B

Was voltage 120 ± 10 V ac?
No
Yes

Proceed to page 2-24.

Remove power. Replace transformer/rectifier T1 (p. 2-34) Repeat test on page 2-11.

Remove jumper across pins J3-B and J3-L. Measure resistance across 110 ohm resistor R1:
(+) R1-1 (−) R1-2

Was resistance 110 ± 10 ohms?
No
Yes

Replace resistor R1 (p. 2-38). Repeat test on page 2-11.

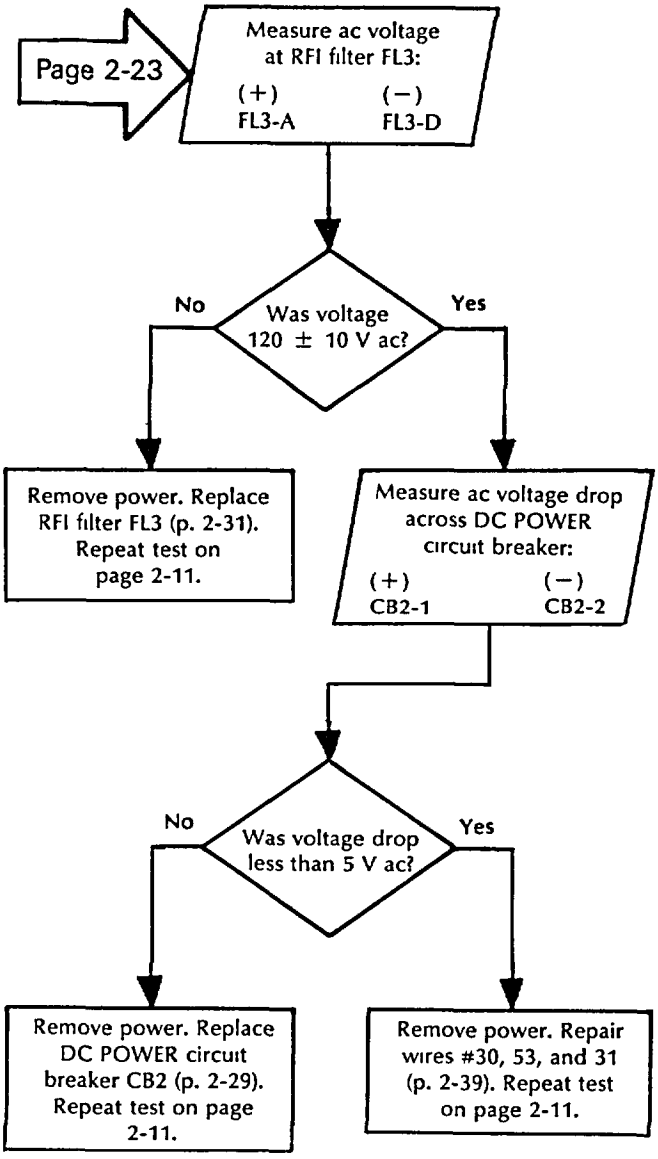
Remove wires from transformer/rectifier T1-C and T1-D. Measure resistance across:
(+) T1-C (−) T1-D

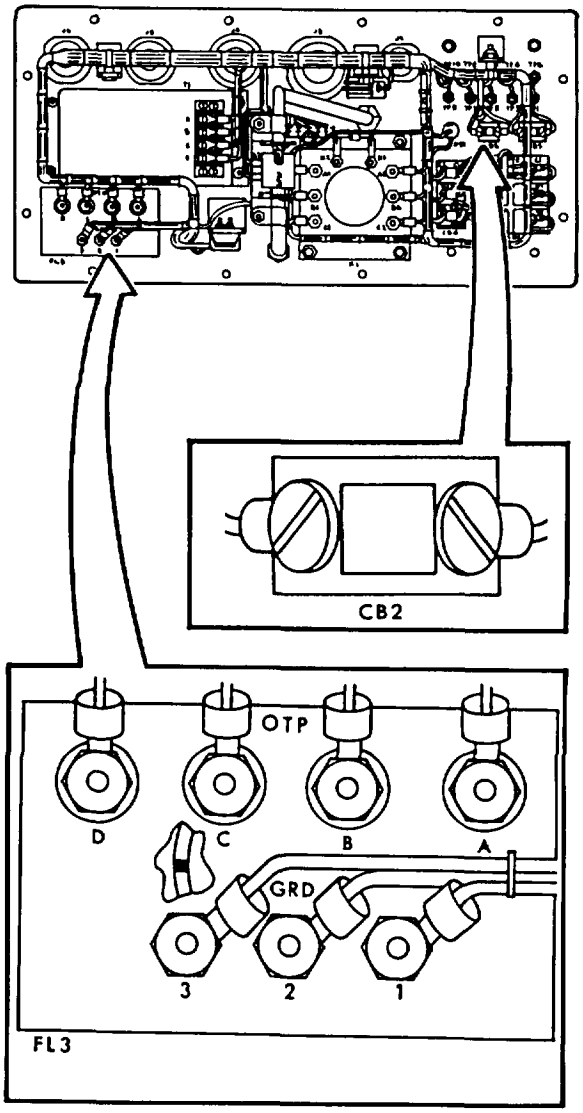
Was open obtained?
No
Yes

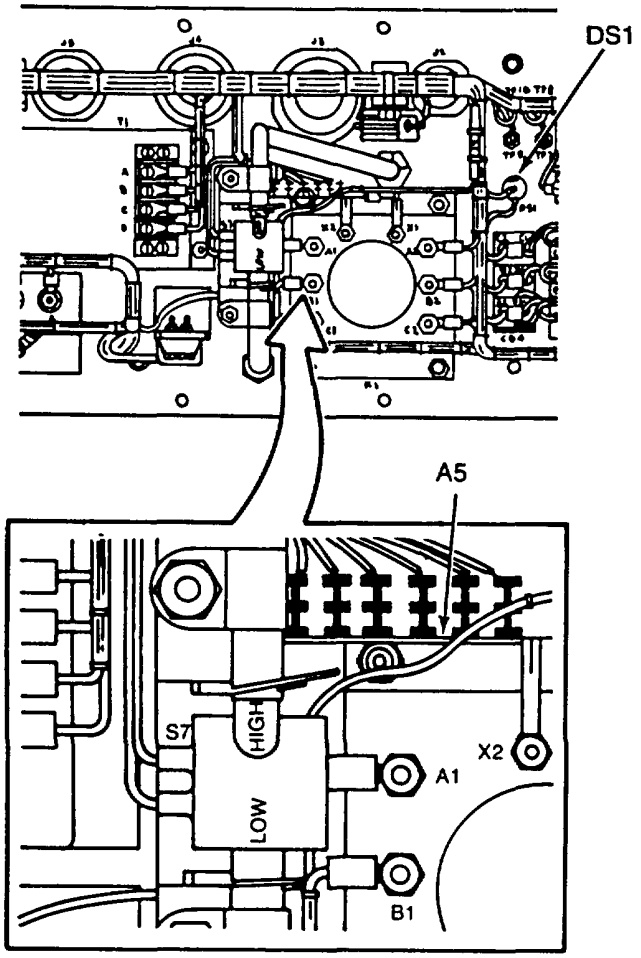
Replace transformer/rectifier T1 (p. 2-34). Repeat test on page 2-11.

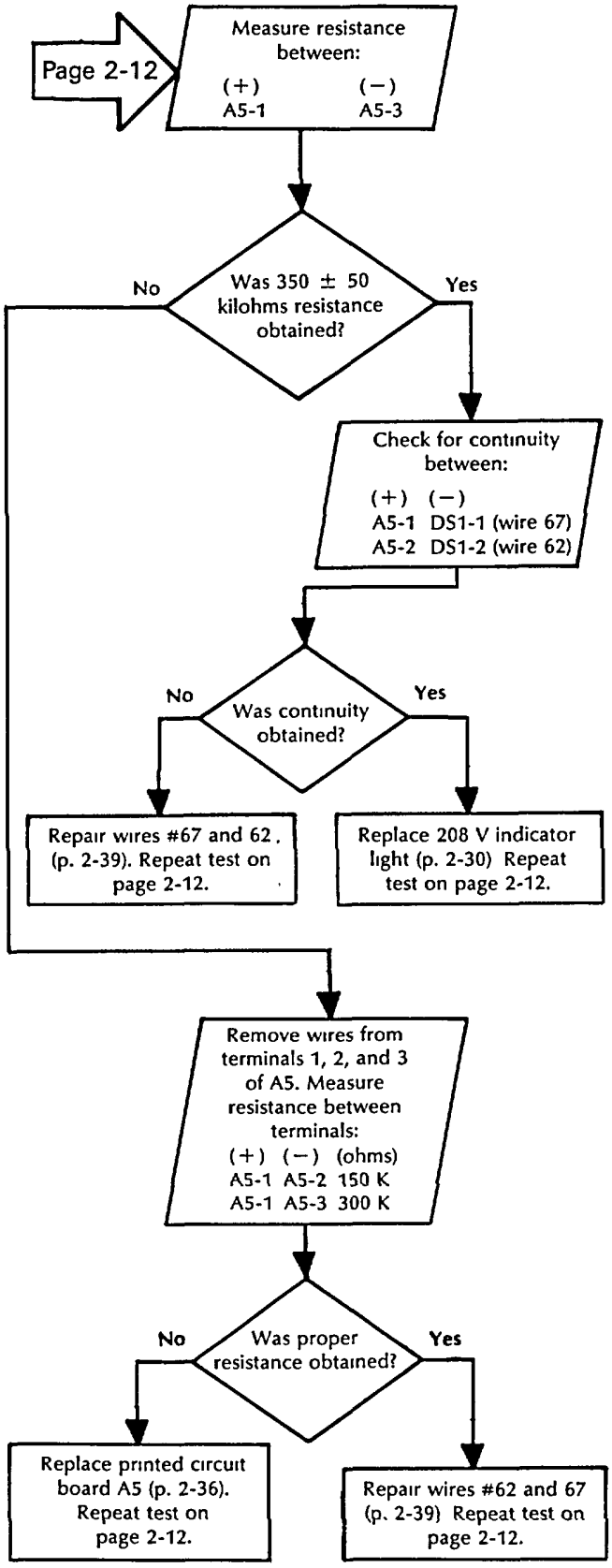
Repair wires #24, 29, 52, 50, 51 and jumper wires from TB1-3 to TB1-2 and TB1-2 to TB1-1 (p. 2-39). Reconnect wires to T1. Repeat test on page 2-11.

2-6. TROUBLESHOOTING PROCEDURES (CONT).

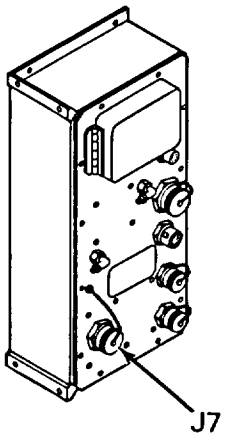


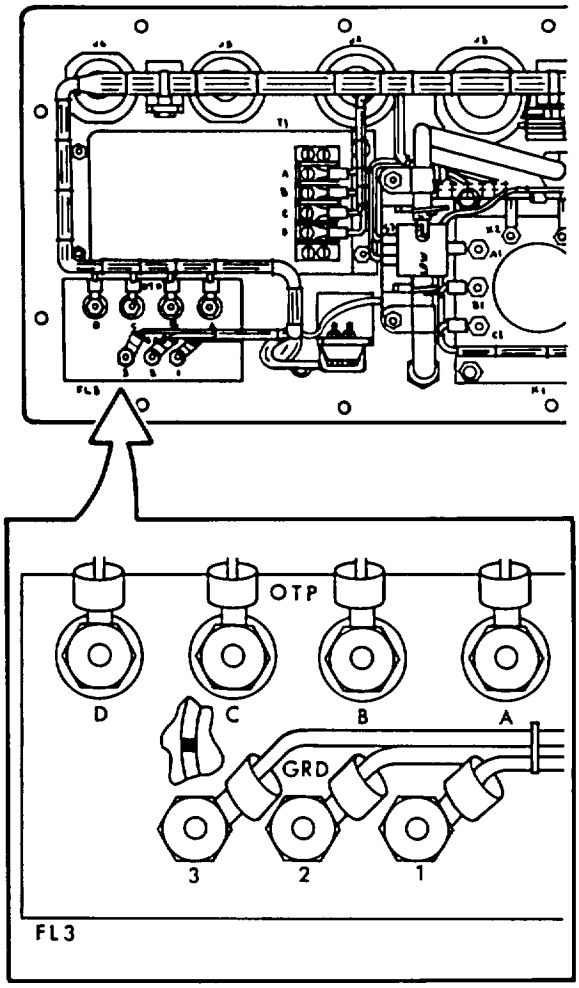



DS1
A5
S7
HIGH
LOW
X2
A1
B1


Page 2-12
Measure resistance between:
(+) A5-1
(−) A5-3
Was 350 ± 50 kilohms resistance obtained?
No
Yes
Check for continuity between:
(+) (−)
A5-1 DS1-1 (wire 67)
A5-2 DS1-2 (wire 62)
Was continuity obtained?
No
Yes
Repair wires #67 and 62. (p. 2-39). Repeat test on page 2-12.
Replace 208 V indicator light (p. 2-30) Repeat test on page 2-12.
Remove wires from terminals 1, 2, and 3 of A5. Measure resistance between terminals:
(+) (−) (ohms)
A5-1 A5-2 150 K
A5-1 A5-3 300 K
Was proper resistance obtained?
No
Yes
Replace printed circuit board A5 (p. 2-36). Repeat test on page 2-12.
Repair wires #62 and 67 (p. 2-39) Repeat test on page 2-12.

2-6. TROUBLESHOOTING PROCEDURES (CONT).





Page 2-10

Open (pull out) DC POWER circuit breaker. Check for open between:

(+)	(−)
J7-A	J7-B
J7-A	J7-C
J7-A	J7-D
J7-A	J7-H
J7-B	J7-C
J7-B	J7-D
J7-B	J7-H
J7-C	J7-D
J7-C	J7-H
J7-D	J7-H

Was open obtained in all cases?

No → Remove 28 V dc power. Remove all wires connected to RFI filter at FL3 A, B, C, and D. Repeat measurements for open.

Yes → Remove power. Repair wiring (shorted) between CB1 and connectors J4 and/or J6 (p. 2-39). Repeat test on page 2-10.

Was open obtained in all cases?

No → Replace RFI filter FL3 (p. 2-31). Repeat test on page 2-10.

Yes → Repair wiring connected to terminals of RFI filter FL3 wires #1, 2, 3, 30, 31, and 66 (p. 2-31). Repeat test on page 2-10.

2-7. POWER DISTRIBUTION UNIT.

This task covers the removal, repair, and installation of the following:

a. Panel (p. 2-27)
b. FAN circuit breaker CB1 (p. 2-28)
c. PE LIGHT circuit breaker CB3 or DC POWER circuit breaker CB2 (p. 2-29)
d. 208 V indicator light (p. 2-30)
e. RFI filter FL3 (p. 2-31)
f. Pressure switch S7 (p. 2-32)
g. Loop clamp (p. 2-33)
h. Transformer/rectifier T1 (p. 2-34)
i. Relay K1 (p. 2-35)
j. Printed circuit board A5 (p. 2-36)
k. Diode CR5 (p. 2-36)
l. DUST FAN circuit breaker CB4 (p. 2-37)
m. Fixed resistor R1 (p. 2-38)
n. Wiring (p. 2-39)

INITIAL SETUP

Tools
Electronic Equipment Tool Kit TK-105/G
General Mechanics Tool Kit (SC 5180-90-CL-N26)

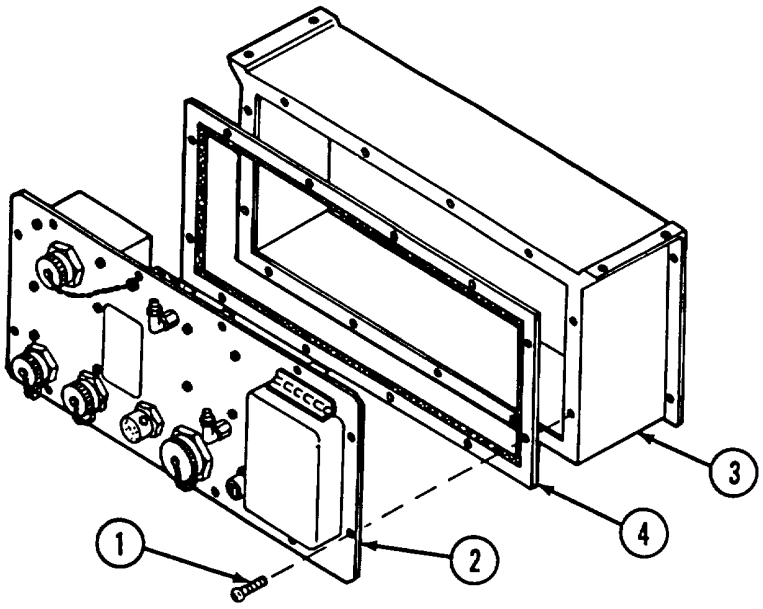
References
TB SIG 222

Materials/Parts
Insulation sleeving (item 1, app C)

Equipment Condition
PDU removed from the filter unit

Troubleshooting References
Refer to page 2-3

LOCATION	*ITEM*	*ACTION*
REMOVAL		
Power Distribution Unit	Panel	Remove 12 screws (1), and separate panel (2) from housing (3).
REPAIR	Shielding gasket	Replace shielding gasket (4) if torn or broken.
INSTALLATION	Panel	Install panel (2) on housing using 12 screws (1).



2-7. POWER DISTRIBUTION UNIT (CONT).

LOCATION	*ITEM*	*ACTION*

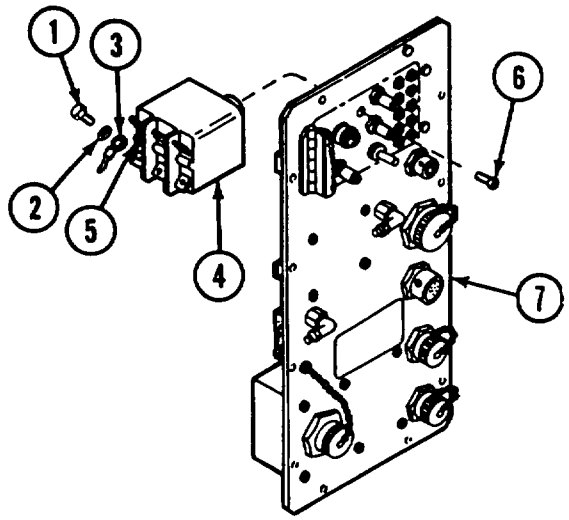
REMOVAL

Panel — FAN circuit breaker CB1

1. Remove six screws (1), washers (2), and wires (3) from FAN circuit breaker CB1 (4). Tag wires.
2. Unsolder and tag wires from C and NO contacts (5) on FAN circuit breaker CB1 (4).
3. Remove four screws (6), and remove FAN circuit breaker CB1 (4) from panel (7).

NOTE

Observe orientation of numbers on push button.



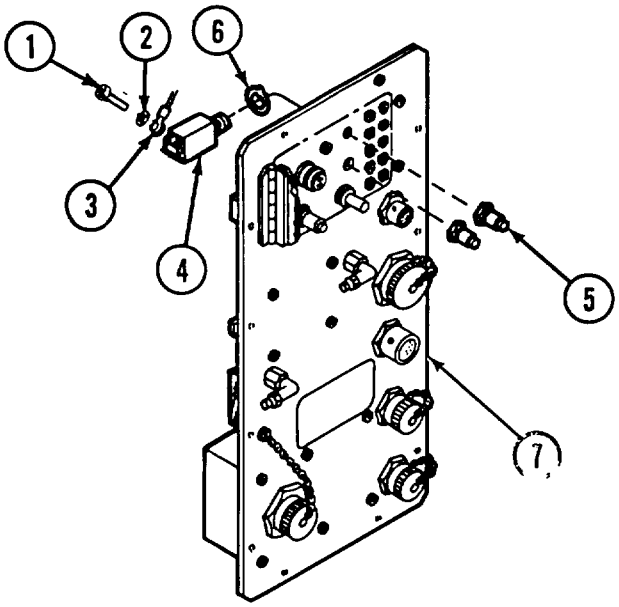
INSTALLATION

1. Insert FAN circuit breaker CB1 (4) in panel (7), and secure with four screws (6).
2. Solder wires to C and NO contacts of circuit breaker. Refer to wiring diagram (p. 2-39).
3. Install wires (3) on six electrical terminals using six screws (1) and washers (2). Refer to wiring diagram (p. 2-39).

LOCATION	*ITEM*	*ACTION*

REMOVAL

Panel	PE LIGHT circuit breaker CB3 or DC POWER circuit breaker CB2	1. Remove two screws (1), washers (2), and wires (3) from circuit breaker (4). Tag wires. 2. Unscrew waterproof boot (5). 3. Remove circuit breaker (4) and keying washer (6) from panel (7).



INSTALLATION

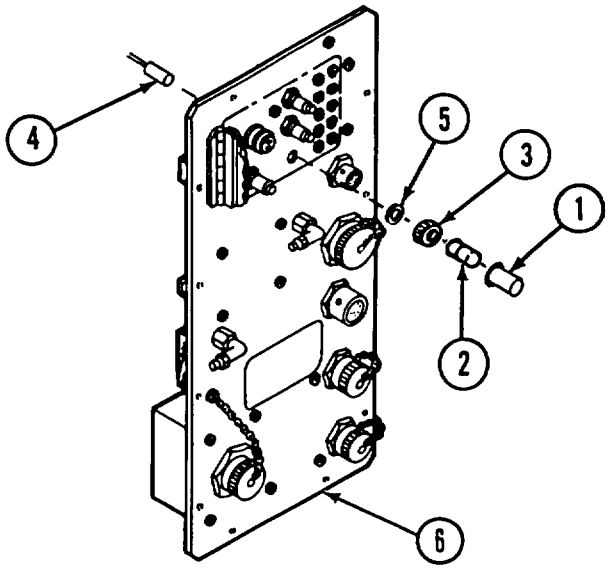
1. Place keying washer (6) on circuit breaker (4).
2. Insert circuit breaker in panel (7), and secure with waterproof boot (5).
3. Connect wires using screws (1) and washers (2). Refer to wiring diagram (p. 2-39).

2-7. POWER DISTRIBUTION UNIT (CONT).

LOCATION	*ITEM*	*ACTION*

REMOVAL

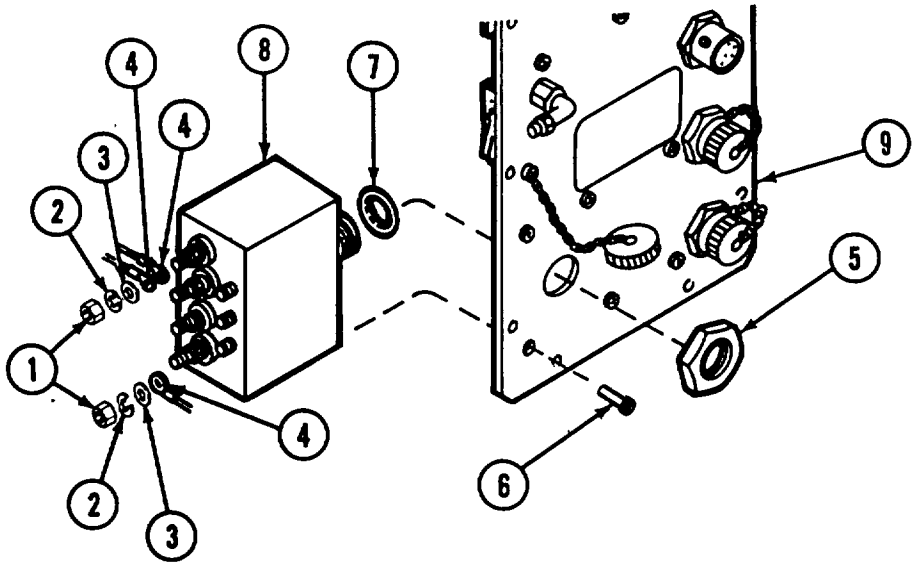
Panel	208 V indicator light	1. Unscrew lens (1), and pull out lamp (2). 2. Unscrew knurled ring (3), and remove indicator light (4) and washer (5). 3. Remove insulation, and unsolder and tag connections from indicator light (4).



INSTALLATION

1. Place insulation sleeving (item 1, app C) over wire leads.
2. Solder wire leads to 208 V indicator light. Refer to wiring diagram (p. 2-39).
3. Place insulation sleeving (item 1, app C) over connection and shrink.
4. Insert 208 V indicator light (4) in panel, and secure to panel (6) with knurled ring (3) and washer (5).
5. Install lamp (2) in lens (1).
6. Screw lens (1) in indicator light.

LOCATION	*ITEM*	*ACTION*
REMOVAL		
Panel	RFI filter FL3	1. Remove seven nuts (1), lockwashers (2), and washers (3) from filter terminals, and release wiring (4). Tag wires. 2. Unscrew nut (5). 3. Unscrew four screws (6), and remove RFI filter FL3 from panel (9). 4. Remove preformed packing (7) from RFI filter FL3 (8).



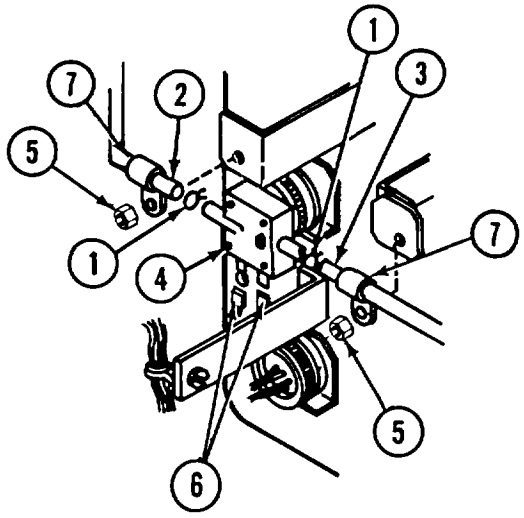
REPAIR		
	Preformed packing	Replace preformed packing (7) if torn or broken.
INSTALLATION		
Panel	RFI filter FL3	1. Place preformed packing (7) on RFI filter FL3 (8). 2. Install RFI filter FL3 in panel (9) using four screws (6). 3. Install nut (5). 4. Connect wires (4) to filter terminals using washers (3), lockwashers (2), and nuts (1). Refer to wiring diagram (p. 2-39).

2-7. POWER DISTRIBUTION UNIT (CONT).

LOCATION	*ITEM*	*ACTION*

REMOVAL

Panel — Pressure switch S7



1. Loosen nuts (5).
2. Remove loop clamps (7).
3. Pinch ears of hose clamps (1), and remove tubing (2 and 3) from pressure switch S7 (4).
4. Disconnect electrical connectors (6) from pressure S7 (4) switch, and remove switch.

NOTE

Observe orientation of pressure switch for installation.

REPAIR

Nonmetallic tubing — Replace tubing if torn or broken. Fabricate replacement tubing (2 or 3) from item 1, app B, bulk material. Cut to same length as tubing being replaced.

INSTALLATION

Pressure switch S7

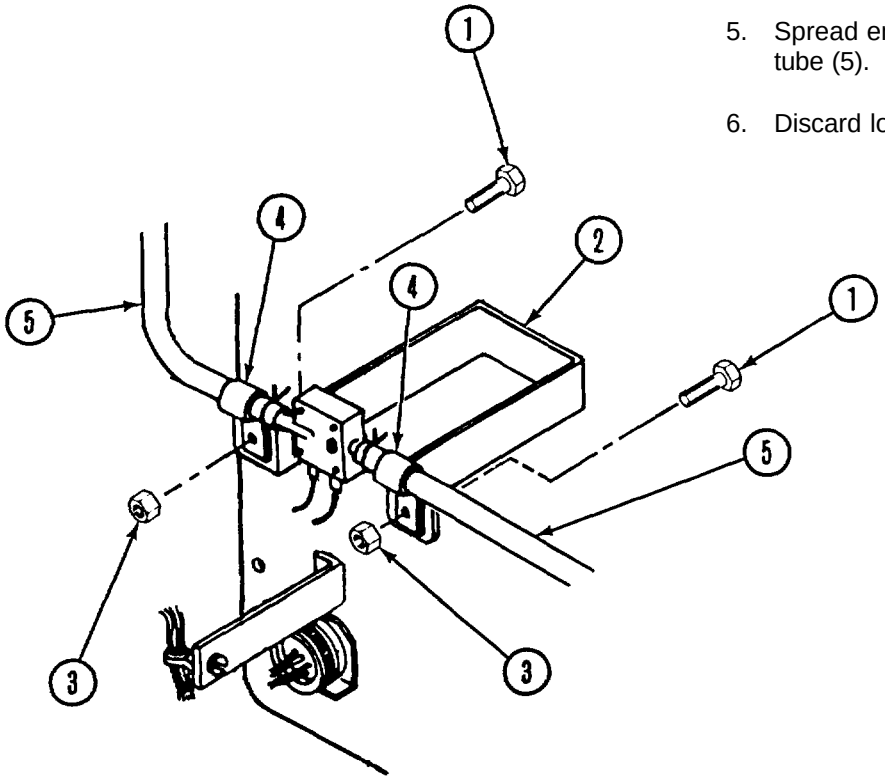
1. Connect wire connectors to pressure switch S7 (4). Refer to wiring diagram (p. 2-39).
2. Position pressure switch S7 (4) between tubing (2 and 3) with switch terminals pointing toward transformer/rectifier T1 and LOW and HIGH marking away from panel.
3. Install tube (3) on LOW side of switch and tube (2) on HIGH side.
4. Position clamps (1) within 1/4 inch of switch body.
4. Replace loop clamps (7).
6. Tighten nuts (5).

LOCATION	ITEM	ACTION

REMOVAL

Loop clamp

1. Remove power distribution unit panel (p. 2-27).
2. Secure screw (1) with wrench.
3. Using a second wrench, remove nut (3).
4. Remove screw (1).
5. Spread ends of loop clamp (4) and slip over tube (5).
6. Discard loop clamp (4).



INSTALLATION

Loop clamp

1. Spread ends of replacement loop clamp (4).
2. Slip loop clamp (4) over tube (5).
3. Insert screw (1) through bracket (2) and loop clamps (4).
4. Secure screw (1) with wrench.
5. Using a second wrench, tighten nut (3). Take care not to overtighten.
6. Replace power distribution unit panel (p. 2-27).

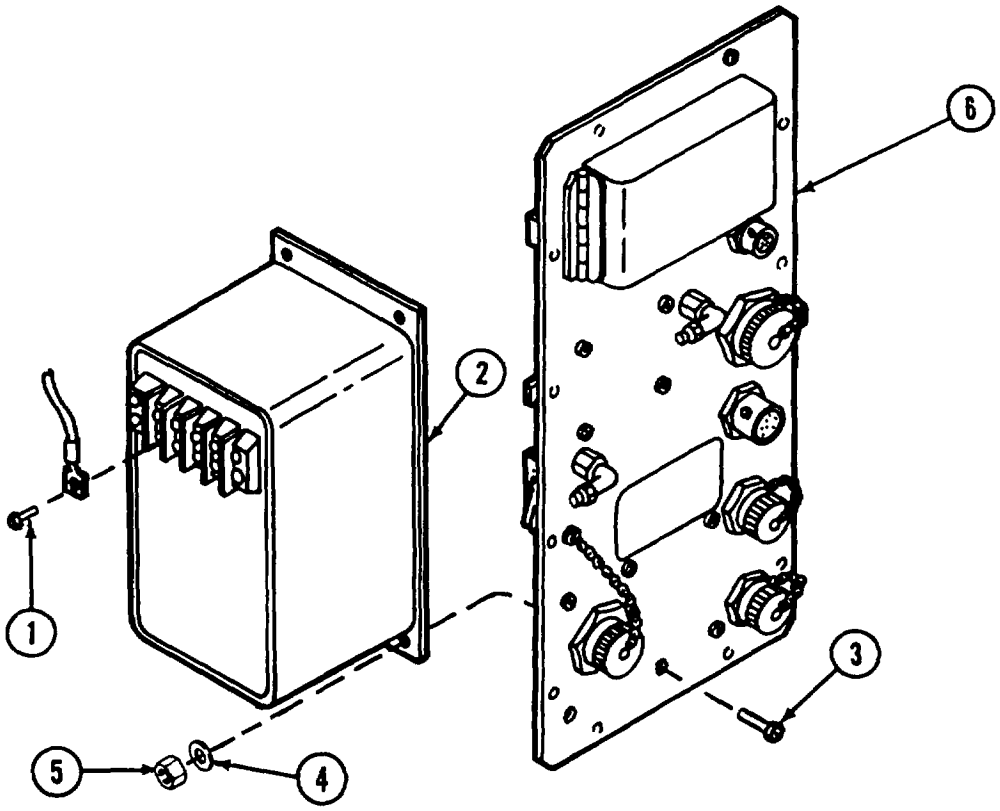
2-7. POWER DISTRIBUTION UNIT (CONT).

LOCATION	*ITEM*	*ACTION*

REMOVAL

Panel — Transformer/rectifier T1

1. Remove four screws (1) from transformer/ rectifier T1 (2), and remove and tag wires.
2. Remove four screws (3), washers (4), and nuts (5), and remove transformer/rectifier T1 (2) from panel (6).



INSTALLATION

1. Position transformer/rectifier T1 (2) on panel (6).
2. Secure to panel (6) using four screws (3), washers (4), and nuts (5).
3. Install wires using four screws (1). Refer to wiring diagram (p. 2-39).

LOCATION	ITEM	ACTION

REMOVAL

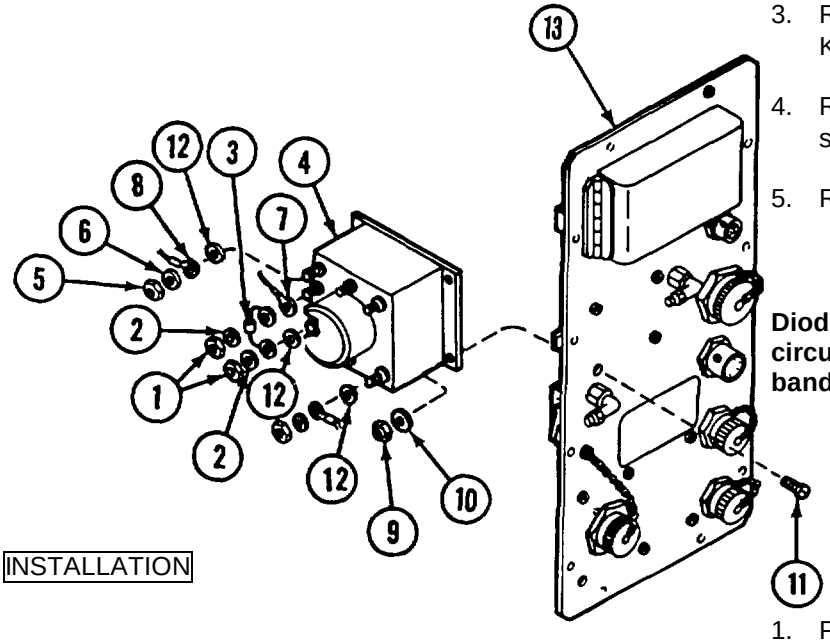
Panel — Electromagnetic relay K1

1. Remove nuts (1) and washers (2).

CAUTION

Apply heat sink pliers to leads of diode when unsoldering. Excessive heat will damage the diode.

2. Remove diode CR5 (3) from relay K1 (4) (p. 2-36). Retain diode.
3. Remove six nuts (5) and washers (6) from relay K1, and remove wires (7 and 8).
4. Remove four nuts (9), washers (10), and screws (11).
5. Remove relay K1 (4) from panel (13).



CAUTION

Diodes must be connected properly or circuitry damage will result. Observe the banded end of the diode.

INSTALLATION

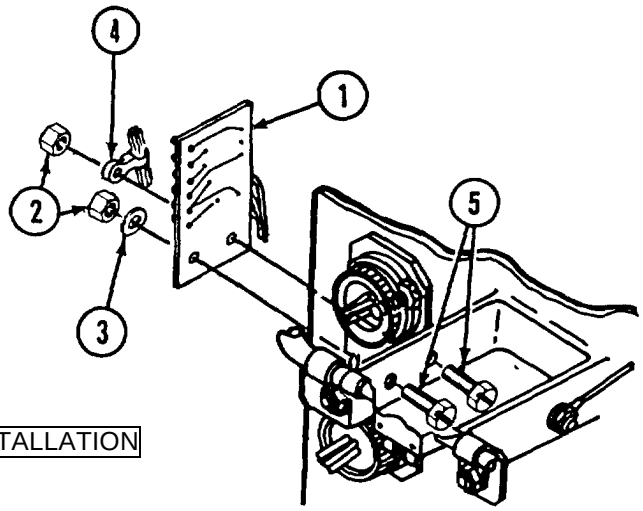
1. Position relay K1 (4) on panel.
2. Attach with four screws (11), washers (10), and nuts (9).
3. Install washers (12) if removed.
4. Install wires (7) on terminals X1 and X2 of relay K1 (4). Refer to wiring diagram (p. 2-39).
5. Install diode CR5 (3) between terminal X1 and X2 of relay K1 (p. 2-36). Ensure that the band end is installed on terminal X2. Secure with washers (2) and nuts (1).
6. Install wires (8), and secure with washers (6) and nuts (5). Refer to wiring diagram (p. 2-39).

2-7. POWER DISTRIBUTION UNIT (CONT).

LOCATION	*ITEM*	*ACTION*

REMOVAL

Panel — Printed circuit board A5



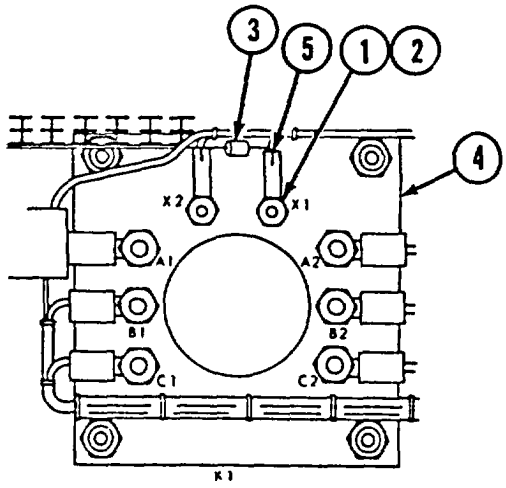
1. Remove two nuts (2), washer (3), tiedown strap (4), and two screws (5). Note orientation of tiedown strap (4).
2. Unsolder and tag wires from printed circuit board A5 (1).
3. Remove printed circuit board A5 (1).

INSTALLATION

1. Connect and solder wires to printed circuit board A5 (1). Refer to wiring diagram (p. 2-39).
2. Position printed circuit board A5 (1) on bracket, and install screws (5).
3. Install tiedown strap (4) and nut (2) on one screw (5). Install washer (3) and nut (2) on the other screw (5).

REMOVAL

Power Relay — Diode CR5



1. Remove nuts (1) and washers (2).

CAUTION

Apply heat sink pliers to leads of diode when unsoldering. Excessive heat will damage the diode.

2. Remove diode CR5 (3) from relay K1 (4).

CAUTION

Diodes must be connected properly or circuitry damage will result. Observe the banded end of the diode.

CAUTION

Apply heat sink pliers to leads of diode when soldering. Excessive heat will damage the diode.

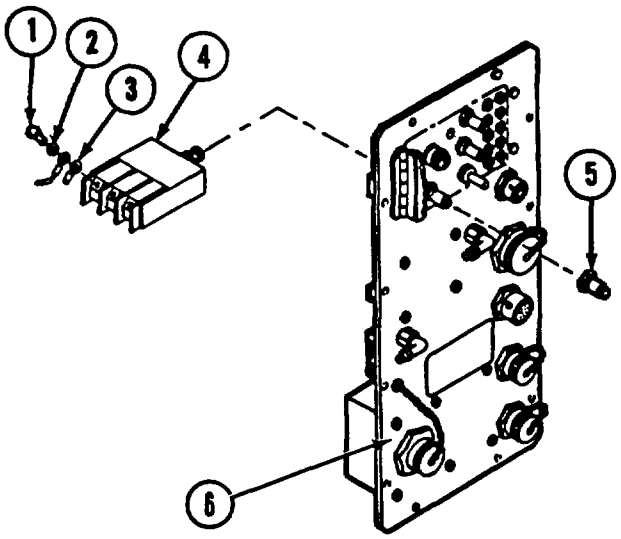
INSTALLATION

1. Solder terminal lugs (5) on diode CR5 (3).
2. Install diode (3) between terminal X1 and X2 of the relay K1 (4). Ensure that the band end is installed on terminal X2. Secure with washers (2) and nuts (1).

LOCATION	*ITEM*	*ACTION*

REMOVAL

Panel	DUST FAN circuit breaker CB4	1. Remove six screws (1), washers (2), and wires (3) from circuit breaker CB4 (4). Tag wires. 2. Unsolder and tag wires from A3 and A4 contacts on circuit breaker CB4 (4). 3. Unscrew boot (5), and remove circuit breaker CB4 (4) from panel (6).



INSTALLATION

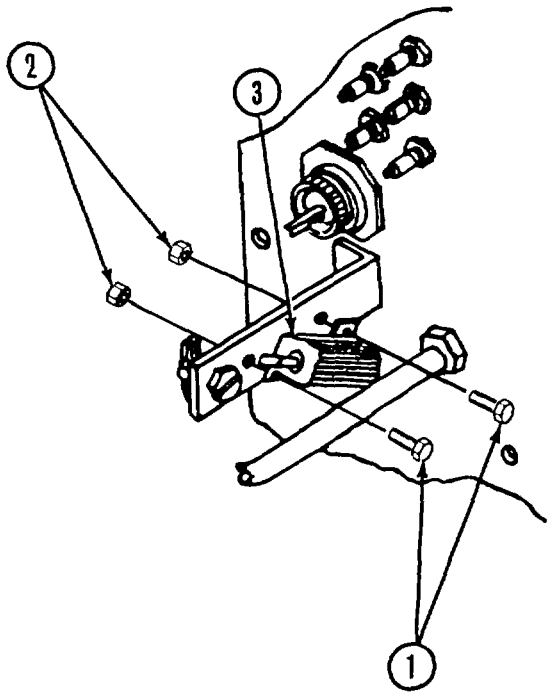
1. Insert circuit breaker (4) in panel (6), and secure with boot (5).
2. Solder wires to A3 and A4 contacts of circuit breaker. Refer to wiring diagram (p. 2-39).
3. Install wires (3) on six electrical terminals using six screws (1) and washers (2). Refer to wiring diagram (p. 2-39).

2-7. POWER DISTRIBUTION UNIT (CONT).

LOCATION	*ITEM*	*ACTION*

REMOVAL

Panel	Fixed resistor R1	1. Remove two screws (1) and nuts (2). 2. Unsolder and tag wires from resistor R1 (3).



INSTALLATION

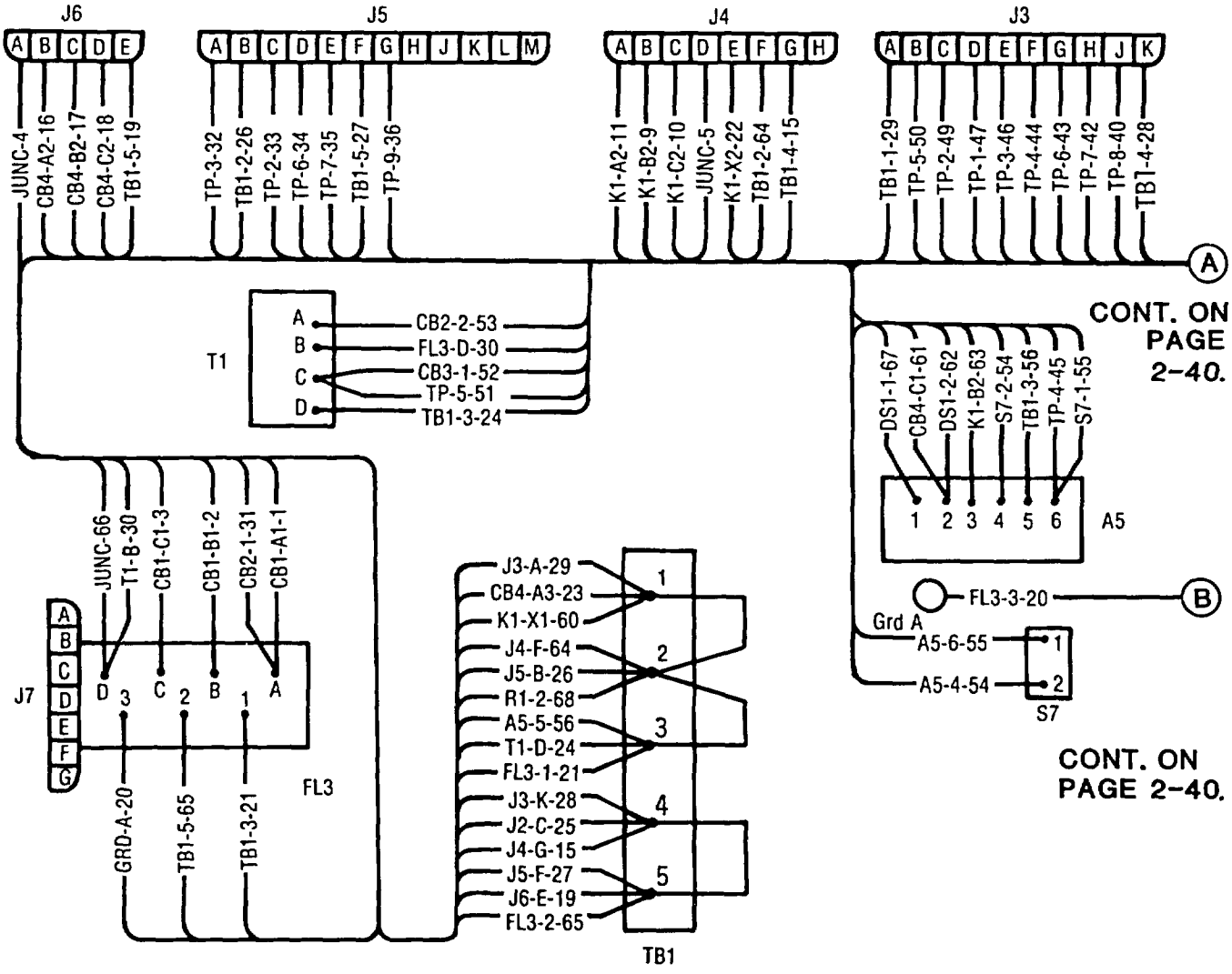
1. Solder wires to R1 (3) terminals. Refer to wiring diagram (p. 2-39).
2. Install resistor using screws (1) and nuts (2).

LOCATION	ITEM	ACTION

REPAIR

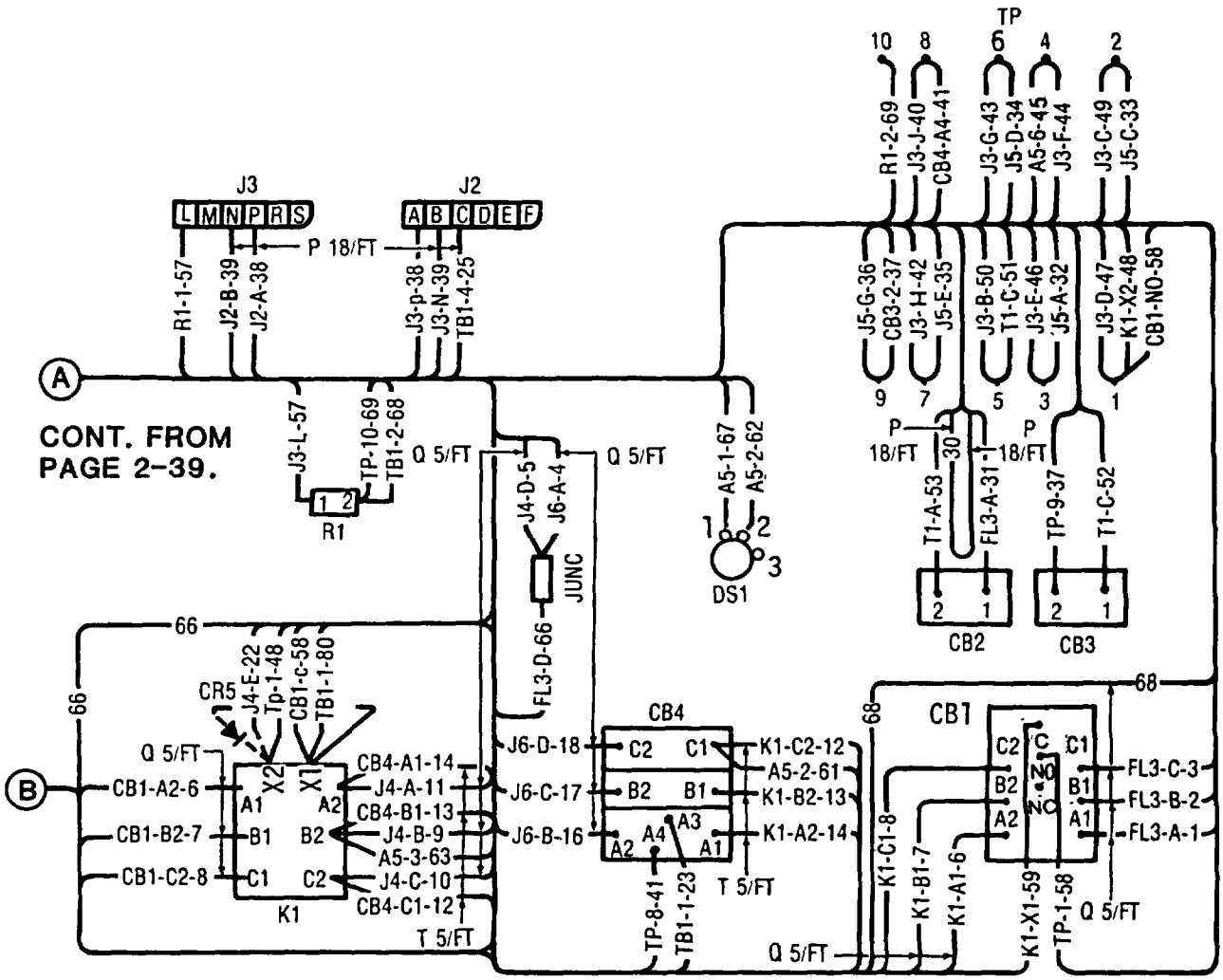
Panel Wiring **NOTE**

Wires 1 through 21, 65 and 66 are 16 AWG. Wires 22 through 29 are 20 AWG. All other wires are 22 AWG.



LEGEND

A5	- PRINTED CIRCUIT CARD	GRD	- GROUND	K1	- FAN RELAY
CB1	- CIRCUIT BREAKER	J2	- CONNECTOR	R1	- RESISTOR
CB2	- CIRCUIT BREAKER	J3	- CONNECTOR	S7	- PRESSURE SWITCH
CB3	- CIRCUIT BREAKER	J4	- CONNECTOR	T1	- TRANSFORMER
CB4	- CIRCUIT BREAKER	J5	- CONNECTOR	TB1	- TERMINAL BOARD
CR5	- DIODE	J6	- CONNECTOR	TP	- TEST POINT
DS1	- INDICATOR	J7	- CONNECTOR		
FL3	- FILTER	JUNC	- INSULATED JUNCTION		



CONT. FROM
PAGE 2-39.

LEGEND

A5	- PRINTED CIRCUIT CARD	J4	- CONNECTOR
CB1	- CIRCUIT BREAKER	J5	- CONNECTOR
CB2	- CIRCUIT BREAKER	J6	- CONNECTOR
CB3	- CIRCUIT BREAKER	J7	- CONNECTOR
CB4	- CIRCUIT BREAKER	JUNC	- INSULATED JUNCTION
CR5	- DIODE	K1	- FAN RELAY
DS1	- INDICATOR	R1	- RESISTOR
FL3	- FILTER	S7	- PRESSURE SWITCH
GRD	- GROUND	T1	- TRANSFORMER
J2	- CONNECTOR	TB1	- TERMINAL BOARD
J3	- CONNECTOR	TP	- TEST POINT

APPENDIX A
REFERENCES

The following publications are related to information contained in this manual.

A-1. TECHNICAL MANUALS.

TM 3-4240-285-20&P .....Organizational Maintenance Manual (Including Repair Parts and Special Tools List) for Collective Protection Equipment, Air Defense System, PATRIOT

TM 3-4240-284-20&P .....Organizational Maintenance Manual (Including Repair Parts and Special Tools List) for Collective Protection Equipment, Air Defense System, TACFIRE

TM 3-4240-286-20&P .....Organizational Maintenance Manual (Including Repair Parts and Special Tools List) for Collective Protection Equipment, Air Defense System, AN/TSQ-73

TM 3-4240-308-20&P .....Organizational Maintenance Manual (Including Repair Parts and Special Tools List) for Collective Protection Equipment, TACFIRE UCE

TM 3-4240-309-20&P .....Organizational Maintenance Manual (Including Repair Parts and Special Tools List) for Collective Protection Equipment, GUARDRAIL

TM 3-4240-311-20&P .....Organizational and Direct Support Maintenance Manual (Including Repair Parts and Special Tools List) for Collective Protection Equipment, Air Defense System, TRAILBLAZER

A-2. COMMON TABLE OF ALLOWANCES.

CTA 50-970 .....Expendable/Durable Items (Except: Medical, Class V, Repair Parts, and Heraldic Items)

CTA 8-100 .....Army Medical Department Expendable/Durable Items

A-3. SUPPLY BULLETIN.

SB 708-41/42 .....Federal Supply Code for Manufacturers; United States and Canada - Code to Name and Name to Code

A-4. SUPPLY CATALOG.

SC 5180-91-CL-R07 .....Tool Kit, Electronic Equipment TK-105/G

SC 5180-90-CL-N26 .....Tool Kit, General Mechanics; Automotive

A-5. TECHNICAL BULLETIN.

TB SIG 222 .....Solder and Soldering

A-6. FIELD MANUALS.

FM 21-11 (TEST) .....First Aid for Soldiers

A-7. DA PAMPHLET.

DA Pam 738-750 .....The Army Maintenance Management System (TAMMS) as Contained in Maintenance Management Update

APPENDIX B
REPAIR PARTS AND SPECIAL TOOLS LIST

Section I INTRODUCTION

B-1. SCOPE. This RPSTL lists and authorizes spares and repair parts, special tools, special test, measurement, and diagnostic equipment (TMDE), and other special support equipment required for performance of direct support maintenance of the power distribution unit. It authorizes the requisitioning, issue, and disposition of spares, repair parts, and special tools as indicated by the source, maintenance, and recoverability (SMR) codes.

B-2. GENERAL. In addition to Section I, Introduction, this Repair Parts and Special Tools List is divided into the following sections:

a. *Section II. Repair Parts List.* A list of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending alphanumeric sequence with the parts in each group listed in ascending figure and item number sequence. Bulk materials are listed by item name in FIG BULK at the end of the section.

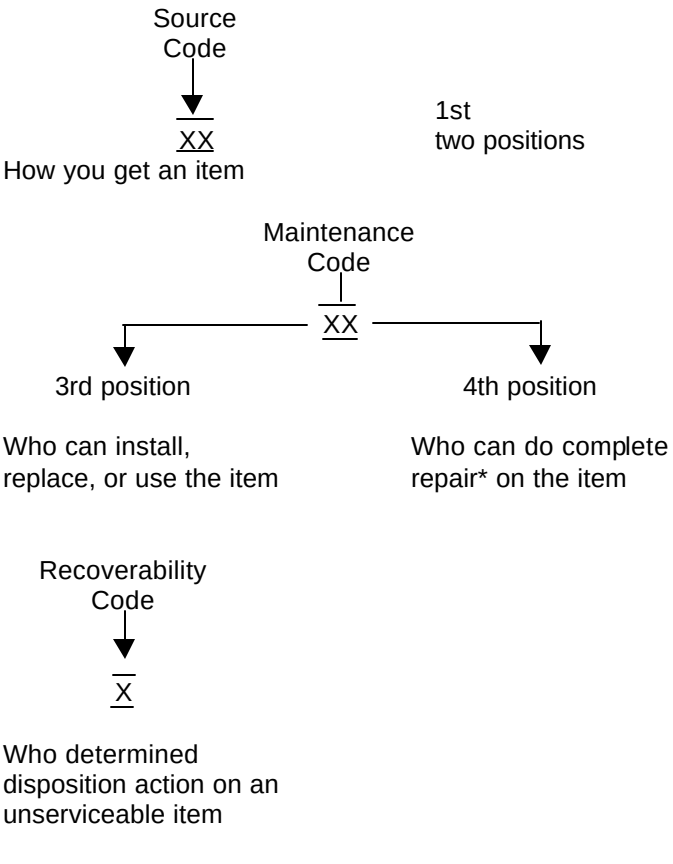
b. *Section III. Special Tools List*. Not applicable.

c. *Section IV. National Stock Number and Part Number Index*. A list, in National item identification number (NIIN) sequence, of all National stock numbered items appearing in the listing, followed by a list in alphanumeric sequence of all part numbers appearing in the listing. National stock numbers and part numbers are cross-referenced to each illustration figure and item number appearance.

B-3. EXPLANATION OF COLUMNS (SECTION II).

a. *ITEM NO. [Column (1)].* Indicates the number used to identify items called out in the illustration.

b. *SMR CODE [Column (2)].* The Source, Maintenance, and Recoverability (SMR) code is a 5-position code containing supply/requisitioning information, maintenance category authorization criteria, and disposition instruction, as shown in the following breakout:



*Complete Repair: Maintenance capacity, capability, and authority to perform all the corrective maintenance tasks of the "Repair" function in a use/user environment in order to restore serviceability to a failed item.

B-3. EXPLANATION OF COLUMNS (SECTION II) (CONT).

(1) *Source Code.* The source code tells you how to get an item needed for maintenance, repair, or overhaul of an end item/equipment. Explanations of source codes follow:

Code	*Explanation*
PA PB PC** PD PE PF PG	Stocked items; use the applicable NSN to request/requisition items with these source codes. They are authorized to the category indicated by the code entered in the 3d position of the SMR code.

****NOTE**

Items coded PC are subject to deterioration.

KD KF KB	Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance category indicated in the 3d position of the SMR code. The complete kit must be requisitioned and applied.
MO - (Made at Org/AVUM Level) MF - (Made at DS/AVUM Level) MH - (Made at GS Level) ML -(Made at Specialized Repair Act) (SRA) MD - (Made at Depot)	Items with these codes are not to be requested/requisitioned individually. They must be made from bulk material which is identified by the part number in the DESCRIPTION AND USABLE ON CODE (UOC) column and listed in the Bulk Material group of the repair parts list in this RPSTL. If the item is authorized to you by the 3d position code of the SMR code, but the source code indicates it is made at a higher level, order the item from the higher level of maintenance.

Code	*Explanation*
AO - (Assembled by Org/ AVUM) Level) AF - (Assembled by DS/AVIM Level) AH - (Assembled by GS Category) AL - (Assembled by SRA) AD - (Assembled by Depot)	Items with these codes are not to be requested/requisitioned individually. The parts that make up the assembled item must be requisitioned or fabricated and assembled at the level of maintenance indicated by the source code. If the 3d position code of the SMR code authorizes you to replace the item, but the source code indicates the item is assembled at a higher level, order the item from the higher level of maintenance.
XA	Do not requisition an "XA"-coded item. Order its next higher assembly. (Also, refer to the NOTE below.)
XB	If an "XB" item is not available from salvage, order it using the FSCM and part number given.
XC	Installation drawing, diagram, instruction sheet, field service drawings, that is identified by manufacturer's part number.
XD	Item is not stocked. Order an "XD"-coded item through normal supply channels using the FSCM and part number given, if no NSN is available.

NOTE

Cannibalization or controlled exchange, when authorized, may be used as a source of supply for items with the above source codes, except for those source coded XA.

B-3. EXPLANATION OF COLUMNS (SECTION II).

(2) *Maintenance code.* Maintenance codes tells you the level(s) of maintenance authorized to USE and REPAIR support items. The maintenance codes are entered in the third and fourth positions of the SMR code as follows:

(a) The maintenance code entered in the third position tells you the lowest maintenance level authorized to remove, replace, and use an item. The maintenance code entered in the third position will indicate authorization to one of the following levels of maintenance:

Code	*Application/Explanation*
C	Crew or operator maintenance done within organizational maintenance.
O	Organizational category can remove, replace, and use the item.
F	Direct support level can remove, replace, and use the item.
H	General support level can remove, replace, and use the item.
L	Specialized repair activity can remove, replace, and use the item.
D	Depot level can remove, replace, and use the item.

(b) The maintenance code entered in the fourth position tells whether or not the item is to be repaired and identifies the lowest maintenance level with the capability to do complete repair (i.e., perform all authorized repair functions). **[NOTE: Some limited repair may be done on the item at a lower level of maintenance, if authorized by the Maintenance Allocation Chart (MAC) and SMR codes.]** This position will contain one of the following maintenance codes.

Code	*Application/Explanation*
O	Organizational is the lowest level that can do complete repair of the item.
F	Direct support is the lowest level that can do complete repair of the item.
H	General support is the lowest level that can do complete repair of the item
L	Specialized repair activity (designate the specialized repair activity) is the lowest level that can do complete repair of the item.
D	Depot is the lowest level that can do complete repair of the item.
Z	Nonreparable, no repair is authorized.
B	No repair is authorized. (No parts or special tools are authorized for the maintenance of a "B" coded item.) However, the item may be reconditioned by adjusting, lubricating, etc., at the user level.

(3) *Recoverability Code*. Recoverability codes are assigned to items to indicate the disposition action on unserviceable items. The recoverability code is entered in the fifth position of the SMR code as follows:

Recoverability Codes	*Application/Explanation*
Z	Nonreparable item. When unserviceable, condemn and dispose of the item at the level of maintenance shown in 3d position of SMR code.
O	Reparable item. When uneconomically reparable, condemn and dispose of the item at organizational level.
F	Reparable item. When uneconomically reparable, condemn and dispose of the item at the direct support level.
H	Reparable item. When uneconomically reparable, condemn and dispose of the item at the general support level.
D	Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item not authorized below depot level.

B-3. EXPLANATION OF COLUMNS (SECTION II) (CONT).

Recoverability Codes	*Application/Explanation*
L	Reparable item. Condemnation and disposal not authorized below specialized repair activity (SRA).
A	Item requires special handling or condemnation procedures because of specific reasons (e.g., precious metal content, high dollar value, critical material, or hazardous material). Refer to appropriate manuals/directives for specific instructions.

c. *FSCM [Column (3)].* The Federal Supply Code for Manufacturer (FSCM) is a 5-digit numeric code which is used to identify the manufacturer, distributor, or Government agency, etc., that supplies the item.

d. P*ART NUMBER [Column (4)].* Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity) which controls the design and characteristics of the item by means of its engineering drawings, specifications standards, and inspection requirements to identify an item or range of items.

NOTE

When you use a NSN to requisition an item, the item you receive may have a different part number from the part ordered.

e. DESCRIPTION AND USABLE ON CODE (UOC) [Column (5)]. This column includes the following information:

(1) The Federal item name and, when required, a minimum description to identify the item.

(2) Part numbers for bulk materials are referenced in this column in the line item entry for the item to be manufactured/fabricated.

(3) The statement "END OF FIGURE" appear just below the last item description in column (5) for a given figure in section II.

f. *QTY [Column (6)].* The QTY (quantity per figure column) 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 the quantity is variable and the quantity may vary from application to application.

B-4. EXPLANATION OF COLUMNS (SECTION IV).

a. *NATIONAL STOCK NUMBER (NSN) INDEX.*

(1) *STOCK NUMBER Column.* This column lists the NSN by National item identification number (NIIN) sequence. The NIIN consists of the last nine digits of the NSN

$$\text{(i.e., } 5305\text{-}\underbrace{01\text{-}674\text{-}1467}_{\text{NIIN}}\text{)}.$$
NSN

When using this column to locate an item, ignore the first 4 digits of the NSN. However, the complete NSN should be used when ordering items by stock number.

(2) *FIG. Column.* This column lists the number of the figure where the item is identified/located. The figures are in numerical order in section II.

(3) *ITEM Column.* The item number identifies the item associated with the figure listed in the adjacent FIG. column. This item is also identified by the NSN listed on the same line.

b. *PART NUMBER INDEX.* Part numbers in this index are listed by part number in ascending alphanumeric sequence (i.e., vertical arrangement of letter and number combination which places the first letter or digit of each group in order A through Z, followed by the numbers 0 through 9 and each following letter or digit in like order).

(1) *FSCM Column.* The Federal Supply Code for Manufacturer (FSCM) is a 5-digit numeric code used to identify the manufacturer, distributor, or Government agency, etc, that supplies the item.

(2) *PART NUMBER Column.* Indicates the primary number used by the manufacturer (individual, firm, corporation, or Government activity) which controls the design and characteristics of the item by means of its engineering drawings, specifications standards, and inspection requirements to identify an item or range of items.

B-4. EXPLANATION OF COLUMNS (SECTION IV) (CONT).

(3) *STOCK NUMBER Column.* This column lists the NSN for the associated part number and manufacturer identified in the PART NUMBER and FSCM columns to the left.

(4) *FIG. Column.* This column lists the number of the figure where the item is identified/located in section II.

(5) *ITEM Column.* The item number is that number assigned to the item as it appears in the figure referenced in the adjacent figure number column.

B-5. SPECIAL INFORMATION.

a. *Fabrication Instructions.* Bulk materials required to manufacture items are listed in the Bulk Material Functional Group of this RPSTL. Part numbers for bulk materials are also referenced in the description column of the line item entry for the item to be manufactured/fabricated.

b. *Index Numbers.* Items which have the word BULK in the figure column will have an index number shown in the item number column. This index number is a cross-reference between the National Stock Number/Part Number Index and the bulk material list in section II.

B-6. HOW TO LOCATE REPAIR PARTS.

a. *When National Stock Number or Part Number is Not Known.*

(1) *First.* Using the table of contents, determine the assembly group or subassembly group to which the item belongs. This is necessary since figures are prepared for assembly groups and subassembly groups, and listings are divided into the same groups.

(2) *Second.* Find the figure covering the assembly group or subassembly group to which the item belongs.

(3) *Third.* Identify the item on the figure and note the item number.

(4) *Fourth.* Refer to the Repair Parts List for the figure to find the part number for the item number noted on the figure.

(5) *Fifth.* Refer to the Part Number Index to find the NSN, if assigned.

b. *When National Stock Number or Part Number is Known.*

(1) *First.* Using the Index of National Stock Numbers and Part Numbers, find the pertinent National Stock Number or Part Number. The NSN index is in National Item Identification Number (NIIN) sequence [see B-4.a.(1)]. The part numbers in the Part Number index are listed in ascending alphanumeric sequence (see B-4.b.). Both indexes cross-reference you to the illustration figure and item number of the item you are looking for.

(2) *Second.* After finding the figure and item number, verify that the item is the one you are looking for, then locate the item number in the repair parts list for the figure.

B-7. ABBREVIATIONS.

(Not Applicable)

Section II REPAIR PARTS LIST

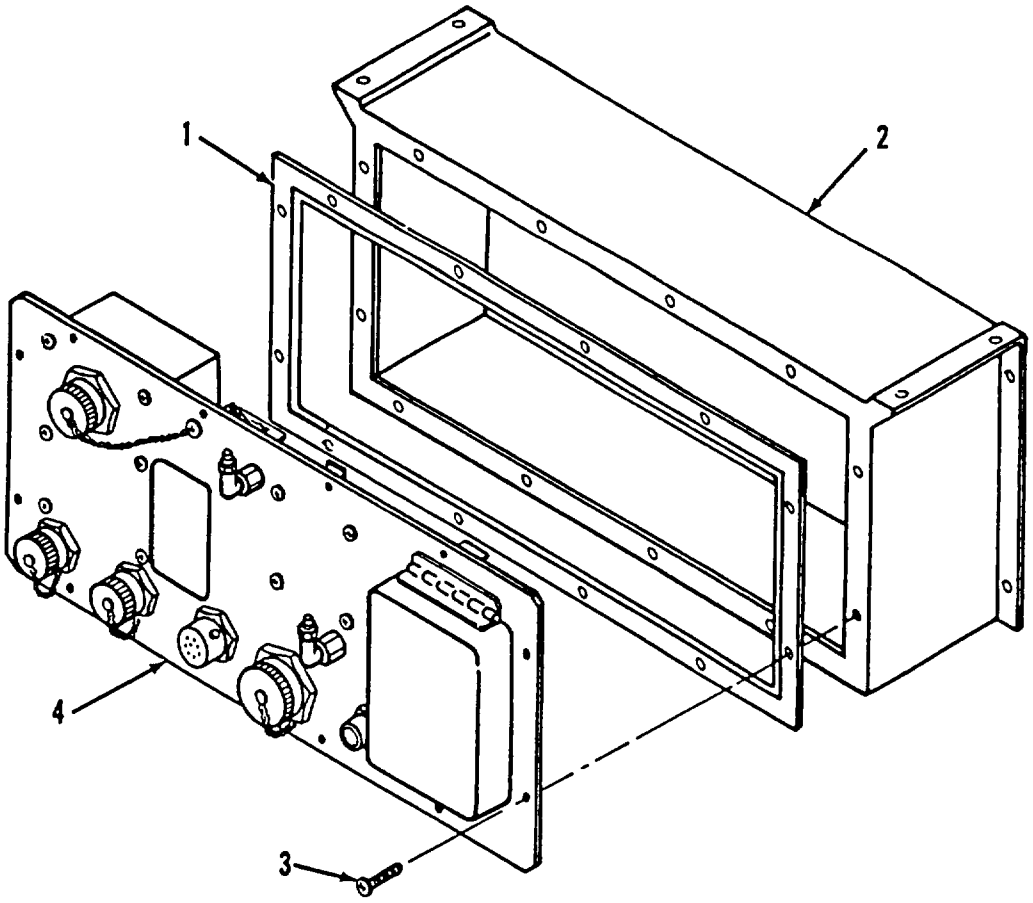
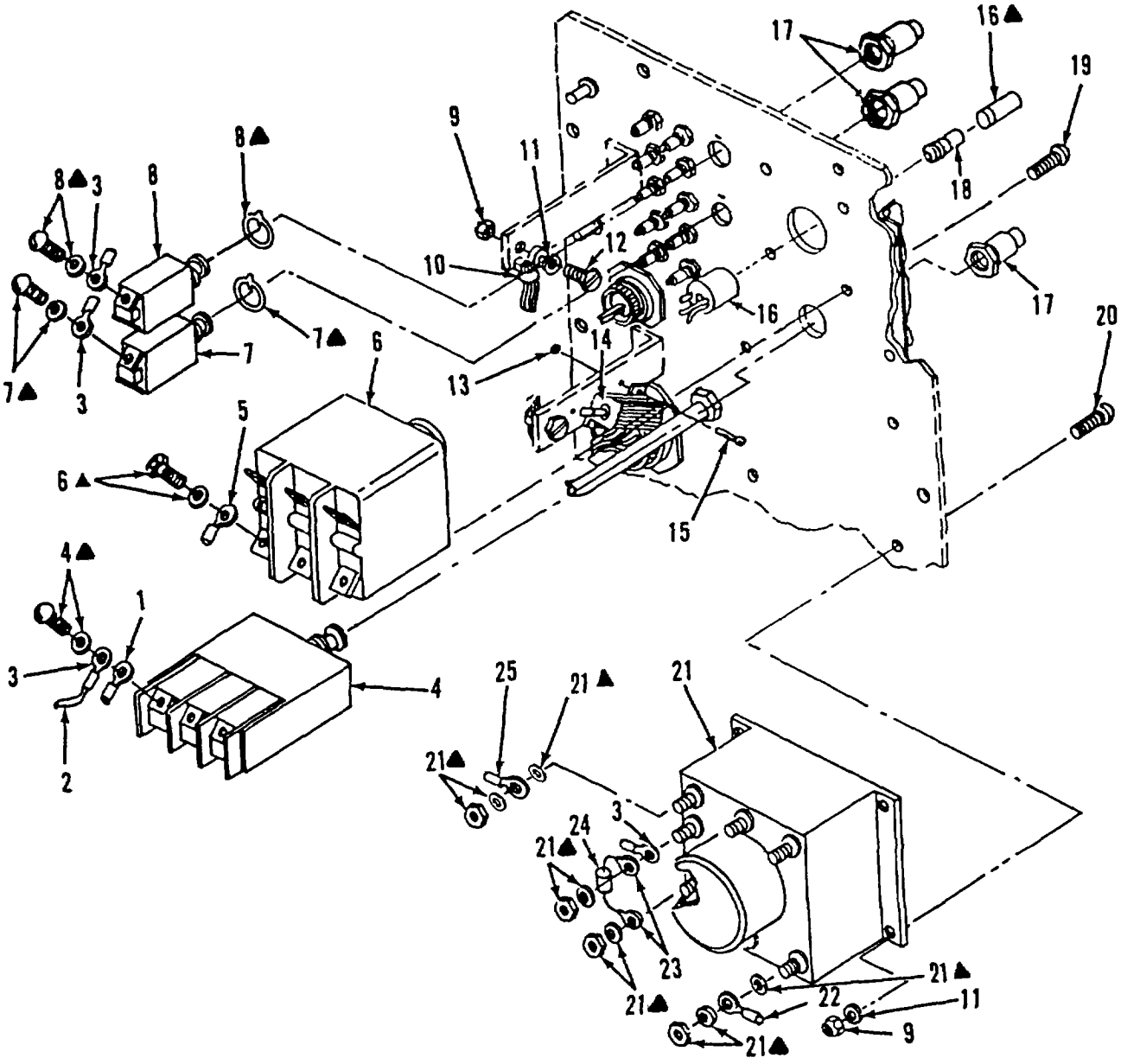


Figure B-1. Power Distribution Unit

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 01 POWER DISTRIBUTION UNIT E5-19-6387	
				FIG. B-1 POWER DISTRIBUTION UNIT	
0001	PAFZZ	81361	D5-19-6392	SHIELDING GASKET, ELECTRONIC	1
0002	XAFZZ	81361	E5-19-6390	HOUSING	1
0003	PAFZZ	96906	MS3213-33	SCREW, MACHINE	12
0004	XAFFF	81361	E5-19-6391	PANEL, POWER DISTRIBUTION UNIT	1

END OF FIGURE



▲ FURNISHED WITH BASIC ITEM

Figure B-2. Power Distribution Panel (Sheet 1 of 3)

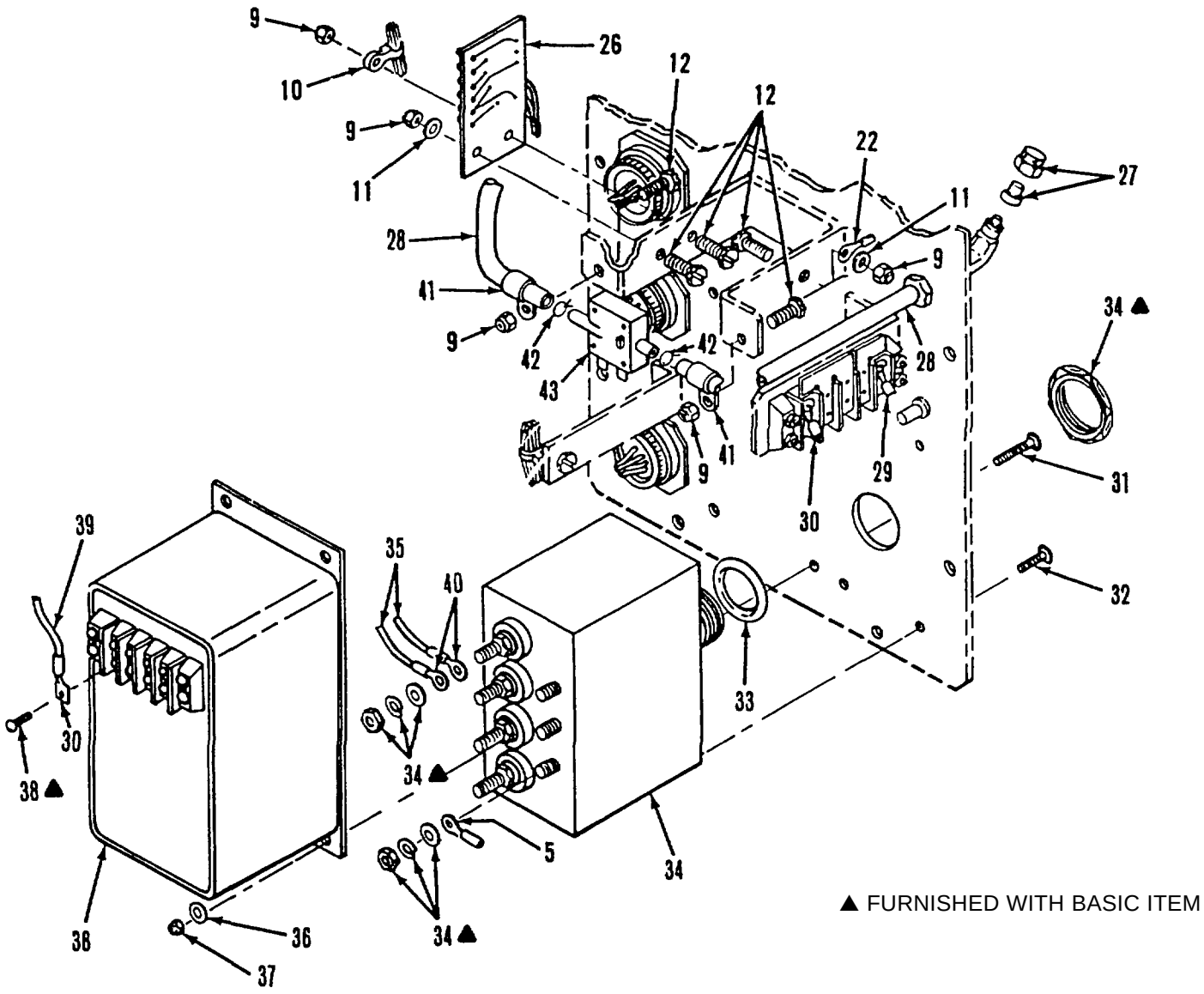
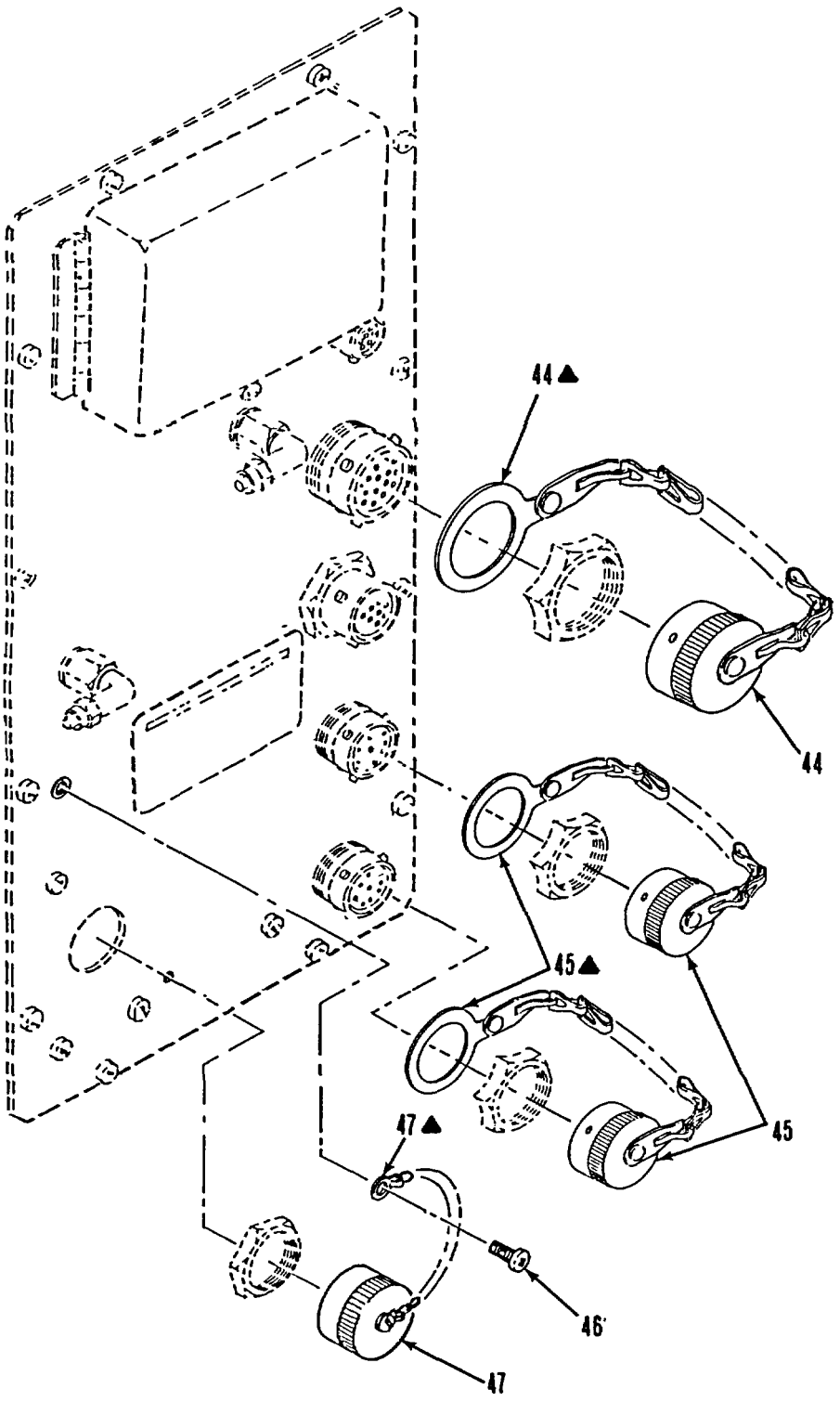


Figure B-2. Power Distribution Panel (Sheet 2 of 3)



▲ FURNISHED WITH BASIC ITEM

Figure B-2. Power Distribution Panel (Sheet 3 of 3)

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 0101 POWER DISTRIBUTION PANEL E5-19-6391	
				FIG. B-2 POWER DISTRIBUTION PANEL	
0001	PAFZZ	96906	MS25036-107	TERMINAL, LUG	6
0002	MFFZZ	81349	M5086/1-20-9	WIRE, ELECTRICAL MAKE FROM WIRE, P/N V M5086/1-20-9	
0003	PAFZZ	96906	MS25036-102	TERMINAL, LUG	9
0004	PAFZZ	18876	10231240	CIRCUIT BREAKER	1
0005	PAFZZ	96906	MS25036-153	TERMINAL, LUG	13
0006	PAFZZ	82647	6752-320-20	CIRCUIT BREAKER	1
0007	PAFZZ	82647	7274-12-1	CIRCUIT BREAKER	1
0008	PAFZZ	82647	7274-12-1-1-2	CIRCUIT BREAKER	1
0009	PAFZZ	96906	MS21044N3	NUT, SELF-LOCKING, HEXAGON	12
0010	PAFZZ	09922	TF-5H	STRAP, TIEDOWN, ELECTRICAL	4
0011	PAFZZ	96906	MS27183-8	WASHER, FLAT	9
0012	PAFZZ	96906	MS51849-66	SCREW, MACHINE	8
0013	PAFZZ	96906	MS21044N04	NUT, SELF-LOCKING, HEXAGON	2
0014	PAFZZ	81349	RER70F1100R	RESISTOR, FIXED, WIRE WOUND	1
0015	PAFZZ	96906	MS51849-14	SCREW, MACHINE	2
0016	XDFZZ	07137	PTL-A1(3-C7A)	LIGHT, INDICATOR	1
0017	PAFZZ	82647	14500-1	BOOT, DUST AND MOISTURE SEAL	3
0018	PAOZZ	81349	M15098/11-001	LAMP, GLOW	1
0019	PAFZZ	96906	MS3213-14	SCREW, MACHINE	4
0020	PAFZZ	96906	MS3213-36	SCREW, MACHINE	4
0021	PAFZZ	96906	MS24143D1	RELAY, ELECTROMAGNETIC	1
0022	PAFZZ	96906	MS25036-108	TERMINAL, LUG	10
0023	PAFZZ	96906	MS35430-4	TERMINAL, LUG	2
0024	PAFZZ	81349	JAN1N5557	SEMICONDUCTOR DEVICE, DIODE	1
0025	PAFZZ	96906	MS25036-103	TERMINAL, LUG	1
0026	PAFZZ	81361	C5-19-6415	PRINTED CIRCUIT BOARD	1
0027	PAOZZ	30327	261P1-4	NUT, TUBE COUPLING	2
0028	MFFZZ	81361	E5-19-6391-52	TUBING, NONMETALLIC MAKE FROM TUBING, P/N ZZ-R-765/NSN 9330-01-073-1011	14
0029	PAFZZ	96906	MS17143-11	TERMINAL, LUG	4
0030	PAFZZ	96906	MS17143-10	TERMINAL., LUG	16
0031	PAFZZ	96906	MS3213-27	SCREW, MACHINE	4
0032	PAFZZ	96906	MS3213-24	SCREW, MACHINE	4
0033	PAFZZ	96906	MS28775-120	PACKING, PREFORMED	1
0034	PAFZZ	81361	D5-19-6353	FILTER, RADIO FREQUENCY INTERFERENCE	1
0035	MFFZZ	81349	M5086/1-16-9	WIRE, ELECTRICAL MAKE FROM WIRE, P/N V M5086/1-16-9	
0036	PAFZZ	96906	MS27183-7	WASHER, FLAT	4
0037	PAFZZ	96906	MS21044N08	NUT, SELF-LOCKING, HEXAGON	4
0038	PAFZZ	81361	D5-19-10861	TRANSFORMER, POWER	1
0039	MFFZZ	81349	M5086/1-22-9	WIRE, ELECTRICAL MAKE FROM WIRE, P/N V M5086/1-22-9	
0040	PAFZZ	96906	MS25036-149	TERMINAL, LUG	2
0041	PAFZZ	96906	MS25281R6	CLAMP, LOOP	2
0042	PAFZZ	70494	A5S	CLAMP, HOSE	2
0043	PAFZZ	81361	B5-19-6261-1	SWITCH, PRESSURE	1

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
0044	PAOZZ	96906	MS3181-20N	COVER, ELECTRICAL CONNECTOR.....	1
0045	PAOZZ	96906	MS3181-14N	COVER, ELECTRICAL CONNECTOR.....	2
0046	PAOZZ	96906	MS35206-229	SCREW, MACHINE	1
0047	PAOZZ	96906	MS25043-18DA	COVER. ELECTRICAL CONNECTOR.....	1

END OF FIGURE

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 99 BULK MATERIALS	
				FIG. BULK	
1	PAFZZ	81348	ZZ-R-765	TUBING, NONMETALLIC	4
2	PAFZZ	81349	M5086/1-16-9	WIRE, ELECTRICAL	43
3	PAFZZ	81349	M5086/1-20-9	WIRE, ELECTRICAL	24
4	PAFZZ	81349	M5086/1-22-9	WIRE, ELECTRICAL.....	213

END OF FIGURE

Section III SPECIAL TOOLS LIST

(Not Applicable)

NATIONAL STOCK NUMBER AND PART NUMBER INDEX

NATIONAL STOCK NUMBER INDEX

STOCK NUMBER	FIG.	ITEM
5925-00-045-1704	B-2	7
5310-00-088-0551	B-2	13
5940-00-113-8179	B-2	1
4730-00-116-2969	B-2	42
5961-00-139-9812	B-2	24
5940-00-143-4771	B-2	25
5940-00-143-4774	B-2	5
5940-00-143-4780	B-2	22
5305-00-148-1286	B-2	20
5305-00-179-8946	B-2	12
5945-00-201-9456	B-2	21
5940-00-204-8966	B-2	3
5330-00-542-1329	B-2	33
5905-00-553-8100	B-2	14
5940-00-557-1629	B-2	40
6145-00-578-7517	BULK	2
6145-00-578-7519	BULK	3
6145-00-578-7520	BULK	4
5940-00-681-8185	B-2	23
5925-00-768-2035	B-2	8
5310-00-609-8544	B-2	36
5310-00-809-8546	B-2	11
5310-00-811-3494	B-2	37
5925-00-814-8428	B-2	4
4730-00-817-1891	B-2	27
5940-00-825-3697	B-2	29
5940-00-825-3699	B-2	30
5310-00-877-5797	B-2	9
6240-00-892-4420	B-2	18
5975-00-958-6451	B-2	17
5305-00-984-4989	B-2	46
5340-00-989-9224	B-2	41
5935-00-990-5565	B-2	44
5935-00-990-5580	B-2	45
5305-01-006-8953	B-2	31
5305-01-031-5092	B-1	3
5999-01-048-9865	B-2	26
5305-01-053-0958	B-2	15
5305-01-053-0959	B-2	19
5305-01-053-0960	B-2	32
5975-01-053-6294	B-2	10
5930-01-055-9249	B-2	43
5925-01-067-5437	B-2	6
9330-01-073-1011	BULK	1
5999-01-074-8880	B-1	1
5950-01-091-8626	B-2	38
5915-01-096-8853	B-2	34
5935-01-175-8419	B-2	47

NATIONAL STOCK NUMBER AND PART NUMBER INDEX

PART NUMBER INDEX

FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM
70494	A5S	4730-00-116-2969	B-2	42
81361	B5-19-6261-1	5930-01-055-9249	B-2	43
81361	C5-19-6415	5999-01-048-9865	B-2	26
81361	D5-19-10861	5950-01-091-8626	B-2	38
81361	D5-19-6353	5915-01-096-8853	B-2	34
81361	D5-19-6392	5999-01-074-8880	B-1	1
81361	E5-19-6390		B-1	2
81361	E5-19-6391		B-1	4
81361	E5-19-6391-52		B-2	28
81349	JAN1N5557	5961-00-139-9812	B-2	24
96906	MS17143-10	5940-00-825-3699	B-2	30
96906	MS17143-11	5940-00-825-3697	B-2	29
96906	MS21044N04	5310-00-088-0551	B-2	13
96906	MS21044N08	5310-00-811-3494	B-2	37
96906	MS21044N3	5310-00-877-5797	B-2	9
96906	MS24143D1	5945-00-201-9456	B-2	21
96906	MS25036-102	5940-00-204-8966	B-2	3
96906	MS25036-103	5940-00-143-4771	B-2	25
96906	MS25036-107	5940-00-113-8179	B-2	1
96906	MS25036-108	5940-00-143-4780	B-2	22
96906	MS25036-149	5940-00-557-1629	B-2	40
96906	MS25036-153	5940-00-143-4774	B-2	5
96906	MS25043-18DA	5935-01-175-8419	B-2	47
96906	MS25281R6	5340-00-939-9224	B-2	41
96906	MS27183-7	5310-00-809-8544	B-2	36
96906	MS27183-8	5310-00-809-8546	B-2	11
96906	MS28775-120	5330-00-542-1329	B-2	33
96906	MS3181-14N	5935-00-990-5580	B-2	45
96906	MS3181-20N	5935-00-990-5565	B-2	44
96906	MS3213-14	5305-01-053-0959	B-2	19
96906	MS3213-24	5305-01-053-0960	B-2	32
96906	MS3213-27	5305-01-006-8953	B-2	31
96906	MS3213-33	5305-01-031-5092	B-1	3
96906	MS3213-36	5305-00-148-1286	B-2	20
96906	MS35206-229	5305-00-984-4989	B-2	46
96906	MS35430-4	5940-00-681-8185	B-2	23
96906	MS51849-14	5305-01-053-0958	B-2	15
96906	MS51849-66	5305-00-179-8946	B-2	12
81349	M15098/11-001	6240-00-892-4420	B-2	18
81349	M5086/1-16-9		B-2	35
		6145-00-578-7517	BULK	2
81349	M5086/1-20-9		B-2	2
		6145-00-578-7519	BULK	3
81349	M5086/1-22-9		B-2	39
		6145-00-578-7520	BULK	4
07137	PTL-A1(3-C7A)		B-2	16
81349	RER70F1100R	5905-00-553-8100	B-2	14
09922	TF-5H	5975-01-053-6294	B-2	10
81348	ZZ-R-765	9330-01-073-1011	BULK	1
18876	10231240	5925-00-814-8428	B-2	4
82647	14500-1	5975-00-958-6451	B-2	17

NATIONAL STOCK NUMBER AND PART NUMBER INDEX

PART NUMBER INDEX

FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM
30327	261P1-4	4730-00-817-1891	B-2	27
82647	6752-320-20	5925-01-067-5437	B-2	6
82647	7274-12-1	5925-00-045-1704	B-2	7
82647	7274-12-1-1-2	5925-00-768-2035	B-2	8

APPENDIX C
EXPENDABLE/DURABLE SUPPLIES AND MATERIALS LIST

Section I INTRODUCTION

C-1. SCOPE. This appendix lists expendable/ durable supplies and materials you will need to maintain the Power Distribution Unit. This listing is for informational purposes only and is not authority to requisition the listed items. These items are authorized to you by CTA 50-970, expendable/ durable items (except medical, class V repair parts, and heraldic items) or CTA 8-100, Army Medical Department expendable/durable items.

C-2. EXPLANATION OF COLUMNS.

a. *Column (1) Item Number*. This number is assigned to the entry in the listing and is referenced in the narrative instructions to identify the material (e.g., Use insulation sleeving, item 1, app C).

b. *Column (2) Level*. This column identifies the lowest level of maintenance that requires the listed item.

F Direct Support Maintenance

c. *Column (3) National Stock Number.* This is the National stock number assigned to the item; use it to request or requisition the item.

d. *Column (4) Description* Indicates the Federal item name and, if required, a description to identify the item. The last line for each item indicates the Federal Supply Code for Manufacturer (FSCM) in parentheses followed by the part number.

e. *Column (5) Unit of Measure (U/M).* Indicates the measure used in performing the actual maintenance function. This measure is expressed by a two character alphabetical abbreviation (e.g., ea, in., pr). If the unit of measure differs from the unit of issue, requisition the lowest unit of issue that will satisfy your requirements.

Section II EXPENDABLE/DURABLE SUPPLIES AND MATERIALS LIST

(1) ITEM NUMBER	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) DESCRIPTION	(5) U/M
1	F	5970-00-812-2969	INSULATION SLEEVING: 1/8 x 1 ft lg (06090) RNF 100-1-8 BLACK	FT

ALPHABETICAL INDEX

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TM 3-4240-302-30&P-5		POWER DISTRIBUTION UNIT (NSN 4240-01-068-8645)

BE EXACT PIN-POINT WHERE IT IS

PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO
1-1	1-4		
2-28	2-12		
2-43	2-14		

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

ITEM 1. LINE 12. Change "Rock Island, IL 61201" to read, "Aberdeen Proving Ground, MD 21010."
REASON: Wrong address.

ITEM 2. Test equipment. Add, "28V dc power supply capable of delivery 2 amps"
REASON: Incomplete information.

ITEM 3. Add callout "20" to the shaft slinger in the illustration.
REASON: Callout missing from illustration.

SAMPLE

PRINTED NAME GRADE OR TITLE AND TELEPHONE NUMBER

JOHN SMITH, S.SGT. 793/XXXX

SIGN HERE John Smith

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Commander
US Army Armament, Munitions and Chemical Command
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Aberdeen Proving Ground, MD 21010-5423

By: Order of the Secretary of the Army

Official:

D. L. DILWORTH
Brigadier General, United States Army
The Adjutant General

JOHN A. WICKHAM, JR.
General, United States Army
Chief of Staff

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