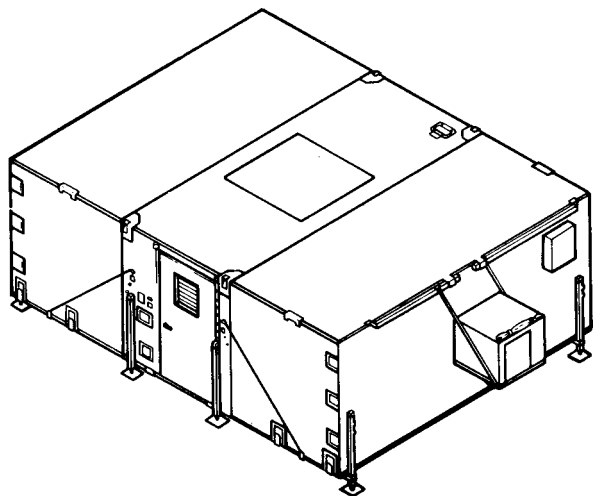


TECHNICAL MANUAL
OPERATOR'S AND AVIATION INTERMEDIATE
(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST)

FOR

SHELTER, SHOP SET, AVIATION
INTERMEDIATE MAINTENANCE,
(DIV) FIRE CONTROL REPAIR,
AIRMOBILE, SHELTER-MOUNTED
4931-01-093-2767



HEADQUARTERS, DEPARTMENT OF THE ARMY

OCTOBER 1982

ILLUSTRATED LIST OF MANUFACTURED ITEMS	REPAIR PARTS AND SPECIAL TOOLS LIST	MAINTENANCE ALLOCATION CHART	MAINTENANCE INSTRUCTIONS	TROUBLESHOOTING	SERVICE UPON RECEIPT	PREPARATION FOR MOVEMENT	ASSEMBLY AND PREPARATION FOR USE	PREVENTIVE MAINTENANCE CHECKS AND SERVICES
PAGE E-1	PAGE C-1	PAGE B-1	PAGE 3-10	PAGE 3-5	PAGE 3-2	PAGE 2-16	PAGE 2-7	PAGE 2-1

WARNING

The electrical system contains voltages that are dangerous if contacted. Before connecting or disconnecting power cables, or beginning maintenance on the grounding stud, ensure circuit breaker on power distribution panel connected to power source is in OFF position and then disconnect 120/208V cable assembly from shelter.

Ensure grounding rod is installed and connected before energizing shop set.

Dry cleaning solvent is flammable and should not be used near an open flame or in a smoking area. Use only in well-ventilated areas. The solvent evaporates quickly and has a drying, possibly damaging, effect on skin.

Switch S2 in circuit breaker panel box must be turned to OFF position before removing fluorescent lamp.

Turn power supply off before removing electrical cable assembly.

Open circuit breaker CB15 before removing/installing wiring on the power supply.

A minimum of four personnel is required when moving or lifting the environmental control unit (ECU), as each weighs approximately 270 lb (122 kg).

Ventilation fan and mounting panel should be removed from shelter wall prior to removal of fan blackout cover.

Injury to personnel may result if pressure is not relieved before beginning any maintenance on airhose.

Use only type 1.1.1 trichloroethane solvent. Never use solvent unless ventilation is provided. Breathing solvent vapors will cause unconsciousness, prolonged skin contact with solvent internally will cause vomiting.

FIRST AID

For first aid information, refer to FM 21-11.

Operator's and Aviation
Intermediate Maintenance Manual
(Including Repair Parts and Special Tools List)
for
SHELTER, SHOP SET, AVIATION INTERMEDIATE MAINTENANCE,
(DIV) FIRE CONTROL REPAIR, AIRMOBILE, SHELTER-MOUNTED
4931-01-093-2767

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 Materiel Readiness Command, ATTN: DRSAR-MAS, Rock Island, IL 61299. A reply will be furnished directly to you.

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HOW TO USE THIS MANUAL

MANUAL OVERVIEW

This manual contains maintenance procedures for the fire control repair shop set, including instructions for authorized fabrication of components. Illustrations are provided for the maintenance procedures.

GENERAL

- a. All references in this manual are to pages or to another publication.
- b. The designation of left and right is determined by looking inside from the cargo door.
- c. Whenever the male gender is mentioned (i.e., crewman, repairman) in the manual, it also pertains to females.

INDEXES

This manual is organized to quickly find the information needed. There are several useful indexes.

- a. Front Cover Index. Is a tabbed index of major functions and appendixes. Keyed to tabbed pages in the manual.
- b. Table of Contents. Lists in order all chapters, sections, and appendixes. Gives page references.
- c. Nomenclature Cross-Reference and List of Abbreviations.
 - (1) Nomenclature Cross-Reference. Gives an alphabetical list of common names and official nomenclature used in the manual.

- (2) List of Abbreviations. Is an alphabetical list of uncommon abbreviations used in the manual.

- d. Chapter Indexes. At the beginning of each chapter. List paragraphs in alphabetical order. Reference pages.

- e. Symptom Index. Located just before the troubleshooting table in maintenance chapter 3. Lists in alphabetical order parts of the shop set with possible malfunctions. References pages of the troubleshooting table.

- f. Alphabetical Index. Located at the end of the manual. An extensive subject index for everything in the manual. Gives page references.

MAINTENANCE PROCEDURES

- a. General. The maintenance instructions begin with a summary procedure, followed by detailed procedures for each maintenance task.

- b. Summary Procedure. Made up of two parts--initial setup and list of tasks. Used only when doing maintenance on the entire shop set. (For maintenance of an individual assembly, use the detailed procedures for each maintenance task.)

- (1) Initial Setup. Is a list of everything needed in order to do the maintenance task:

- Test Equipment--Lists all test equipment required to perform the procedures.

MAINTENANCE PROCEDURES (cont)

Special Tools--Lists tools needed to perform the maintenance tasks.

Materials/Parts--Lists expendable materials and 100% replaceable parts. Each material or part is followed by a part number. If more than one part is needed, the quantity needed precedes the part number.

Personnel Required--Lists the number of personnel needed and what they will be doing.

References--Lists other publications, appendixes, and maintenance procedures containing necessary information.

Troubleshooting References--Lists malfunctions which can be corrected by following the maintenance procedure.

Equipment, Conditions--Lists conditions to be met before starting the procedure. The reference on the left of the condition is a page reference to instructions for setting up the condition. At the end of each condition is a reference to the maintenance procedure to which the condition applies.

(2) List of Tasks. Summarizes in outline form the major tasks involved in the procedure. Gives page references to troubleshooting table and detailed procedures.

c. Detailed Procedures. Contain an initial setup plus step-by-step procedures.

(1) Initial Setup. Gives a list of everything needed in order to perform maintenance on each part of the shop set. See explanation of initial setup above. The only difference in an initial setup for a detailed procedure is that there is no reference under equipment conditions to a maintenance paragraph.

(2) Step-By-Step Procedures. Are illustrated procedures for maintenance authorized in the MAC, appendix B. For replacement of parts, refer to appendix C.

Also included in chapter 3 are procedures for:

- (a) Service upon receipt of the equipment--page 3-2.
- (b) Troubleshooting--page 3-5.

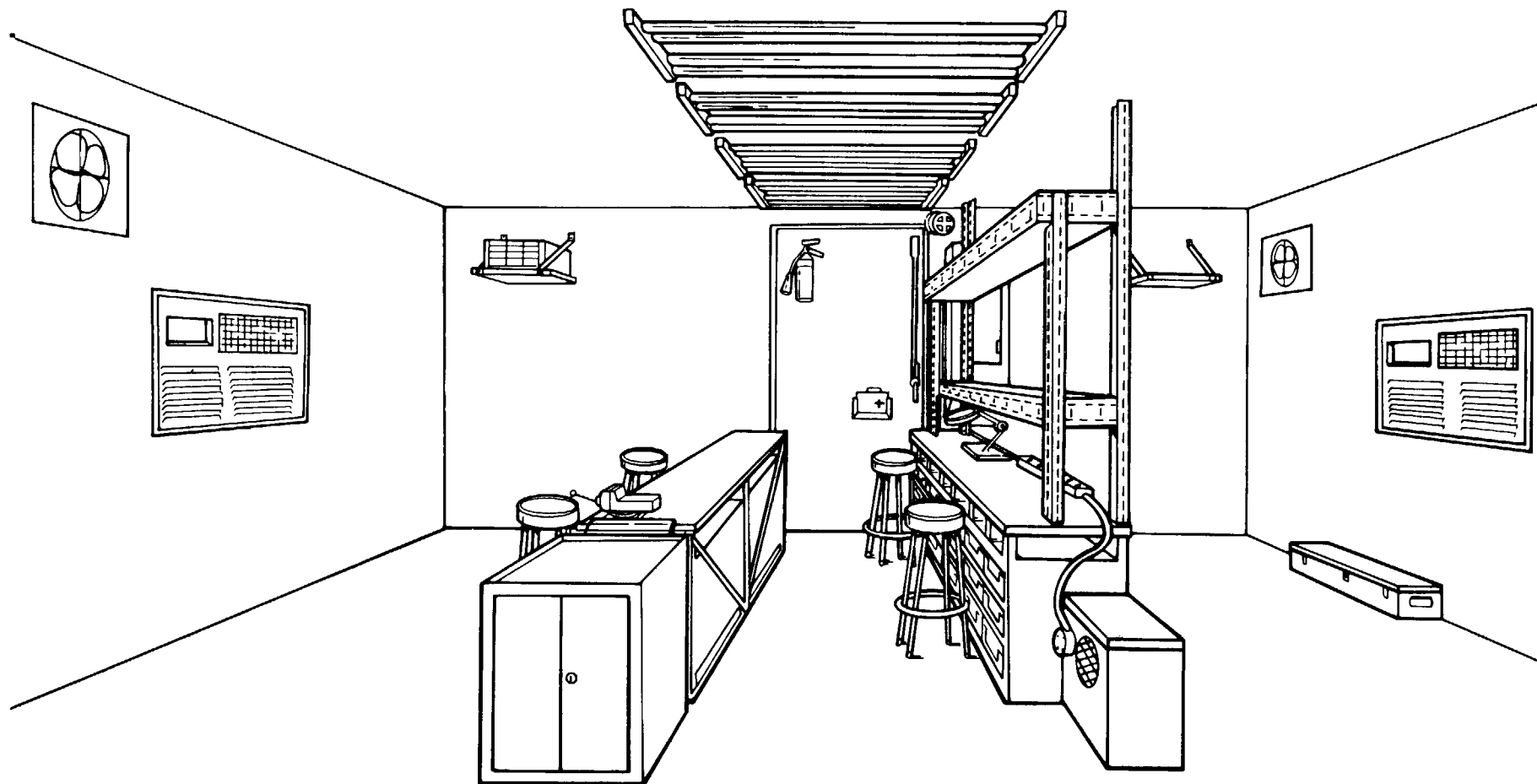
REPAIR PARTS AND SPECIAL TOOLS LIST

a. Repair Parts and Special Tools. Designed for operator's and aviation intermediate maintenance and are listed in appendix C.

b. Parts List. Is composed of functional groups, and follows MAC order. Parts in each group are listed in figure and item number sequence.

c. Illustrations. Illustrations and item numbers with repair parts authorized for operator's and aviation intermediate maintenance are in this manual.

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SHELTER, SHOP SET, AVIM, (DIV) FIRE CONTROL REPAIR, AIRMOBILE, SHELTER-MOUNTED

**CHAPTER 1
INTRODUCTION**

CHAPTER INDEX

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Section I. GENERAL INFORMATION

1-1. SCOPE

- a. Type of Manual: Operator's and aviation intermediate maintenance.
- b. Equipment Name and Part Number: Shelter, shop set, aviation intermediate maintenance, (DIV) fire control repair, airmobile, shelter-mounted, part number 11729123.
- c. Purpose of Equipment: Portable facility (shelter with tools and shop equipment) for maintenance of fire control equipment in aviation intermediate maintenance units.

1-2. MAINTENANCE FORMS, RECORDS, AND REPORTS

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by TM 38-750, The Army Maintenance Management System (TAMMS).

1-3. DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE

Refer to TM 750-244-3 and TM 750-244-1-4 for procedures concerning destruction of this materiel.

1-4. PREPARATION FOR STORAGE OR SHIPMENT

The shop set should be placed in the stowed condition (p 2-16) prior to storage or shipment.

1-5. NOMENCLATURE CROSS-REFERENCE

Common Name	Official Nomenclature
Airhose	Airhose assembly, nonmetallic
Angle	Bracket, angle
AVIM sheet metal shop set	Airmobile sheet metal aviation intermediate maintenance shop set

1-5. NOMENCLATURE CROSS-REFERENCE (cont)

Common Name	Official Nomenclature
AVIM tool crib shop set.....	Airmobile tool crib aviation intermediate maintenance shop set
AVIM welding shop set.....	Airmobile welding aviation intermediate maintenance shop set
Basic aircraft armament repairman tool set	Basic MOS45J aircraft armament repairman tool set
Black semigloss lacquer	Lacquer, black, flat
Blackout switch.....	Switch, toggle
Blind insert.....	Sert, screw thread
Brace	Bracket, angle
Brace	Brace, tool, cabinet
Bracket	Bracket, shelf, wall
Bulkhead adapter	Coupling pipe
Cable	Cable, power, electrical
Cable adapter assembly.....	Cable assembly, special purpose, electrical
Cable assembly	Cable and conduit assembly, electrical
Clamp	Clamp, loop
Cloth	Cloth, polishing
Cloth	Rag, wiping
Conduit	Conduit, metal, rigid
Conduit body	Box connector, electrical
Conduit box	Conduit outlet
Connector	Box connector, electrical
Connector	Box connector, electrical metal, flexible
Connector	Connector, plug, electrical
Connector	Connector, receptacle, electrical
Connector	Elbow, electrical, conduit
Contact pin (A, B, and C).....	Pin, contact
Contact pin (G)	Pin, contact

Common Name	Official Nomenclature
Contact pin (N)	Pin, contact
Cover	Cover, conduit outlet
Dust cover	Cover and guard, electrical
Dust cover	Cover and guard, electrical connector
Elbow	Elbow, pipe
Electrical cable assembly	Cable assembly, special purpose, electrical
End clip.....	Clip, end, strap
Female connector.....	Connector, plug, electrical
Female coupling assembly	Coupling half, quick disconnect (female)
File.....	Cabinet, mail, work organizer
Fire control repair shop set	Shelter-mounted airmobile (DIV) fire control repair aviation intermediate maintenance shop set shelter
First aid kit holder assembly	Holder, first aid kit
Fitting.....	Box connector, electrical
Fitting.....	Bracket, electrical connector
Flexible conduit.....	Conduit, metal, flexible
Fluorescent bulb	Lamp, fluorescent
Fluorescent lamp	Lampholder
Forward connector housing	Connector, plug, forward
Frame	Frame, table, base
Frame assembly	Frame assembly, ECU stowing
Gland	Packing nut, stuffing tube
Gland nut.....	Gland, cable sealing, class L
Gloves	Glove, cloth
Grip.....	Grip, cable, woven
Ground socket	Socket, contact, ground

Common Name	Official Nomenclature
Harness assembly	Wiring harness, branched
Hose	Hose, nonmetallic
Inner cover.....	Cover, blackout fan, inner
Insulation	Insulation sleeving, electrical
Insulation	Insulation, slug, thrm
Lamp bracket.....	Double angle bracket
Lamp bracket assembly	Bracket assembly, double angle
Left-hand angle.....	Brace, corner, LH
Lens tissue	Paper, lens
Light cover	Globe, electric light
Long brace.....	Brace, table, long, RH
Loop.....	Loop, strap fastener
Lubricating oil	Lubricating oil, semifluid
Male connector.....	Connector, plug, electrical
Male coupling assembly	Coupling half, quick disconnect (male)
Miscellaneous spare accessories	Accessories, package
Mounting bracket.....	Bracket, angle
120/208V cable assembly.....	Cable assembly, power, electrical
Outer cover.....	Cover, blackout fan, outer
Pad	Pad, cushioning
Pin socket.....	Socket, pin, insert
Plastic plug	Plug, protective, dust and moisture
Plug connector.....	Plug, connector
Pulling elbow	Elbow, electrical conduit
Quick disconnect female coupling assembly	Coupling half, quick disconnect (female)
Quick disconnect male coupling assembly	Coupling half, quick disconnect (male)
Raceway.....	Conduit, raceway, metal
Rear connector housing	Connector, plug, rear

Common Name	Official Nomenclature
Receptacle.....	Receptacle, grounding, duplex
Reducer	Adapter, electrical conduit
Reinforcing strip.....	Reinforcement plate
Removal tool no. 4.....	Connector electrical contact removal tool
Removal tool no. 6.....	Connector electrical contact removal tool
Right-hand angle	Brace, corner, RH
Shelves.....	Shelf, file, work organizer
Shelving.....	Shelf section
Shelving assembly.....	Shelf assembly
Shield.....	Shield, light
Short brace	Brace, table, short
Slide.....	Buckle
Socket (A, B, C, and N)	Socket, contact
Socket insert.....	Socket, insert
Solder	Solder, tin alloy
Sorting file.....	File, work organizer
Spacer	Gland, cable sealing class L
Space	Spacer, gland
Spacer	Spacer, plate
Spacer	Spacer, sleeve
Strap.....	Strap, tiedown, electrical components
Strap.....	Webbing, textile
Supplemental aircraft armament repairman tool set	Supplemental MOS45J aircraft armament repairman tool set
Support	Brace, table, support
Switchbox	Conduit outlet
Switchbox and mounting bracket	Switchbox assembly
Tape	Tape, insulation, electrical
Tiedown strap.....	Strap, webbing
White paint	Lacquer, white, semigloss
Wire	Lead, electrical
Wire	Lead, electrical, black
Wire	Lead, electrical, red
Wire rope	Lead, electrical

1-6. LIST OF ABBREVIATIONS I

AVIM.....	Aviation Intermediate Maintenance
DIV.....	Division
ECU.....	Environmental Control Unit
Hertz.....	Hertz
RPSTL.....	Repair Parts and Special Tools List
SPAM.....	Shop, Portable, Aircraft Maintenance
TMDE.....	Test, Measurement, and Diagnostic Equipment

1-7. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your shop set needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design or performance. Put it on an SF 368 (Quality Deficiency Report). Mail it to us at Commander, US Army Armament Materiel Readiness Command, ATTN: DRSAR-MAO, Rock Island, IL 61299. A reply will be furnished to you.

Section II. EQUIPMENT DESCRIPTION AND DATA

1-8. EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES

a. Characteristics. The fire control repair shop set provides a portable, air-transportable facility for repair of aviation fire control components.

b. Capabilities and Features.

(1) The shop set is transported with equipment in stowed positions and shelter in folded condition.

(2) A set of hand tools is furnished with the shop set. Refer to SC 4931-95-CL-A21 for a complete listing of items in the set.

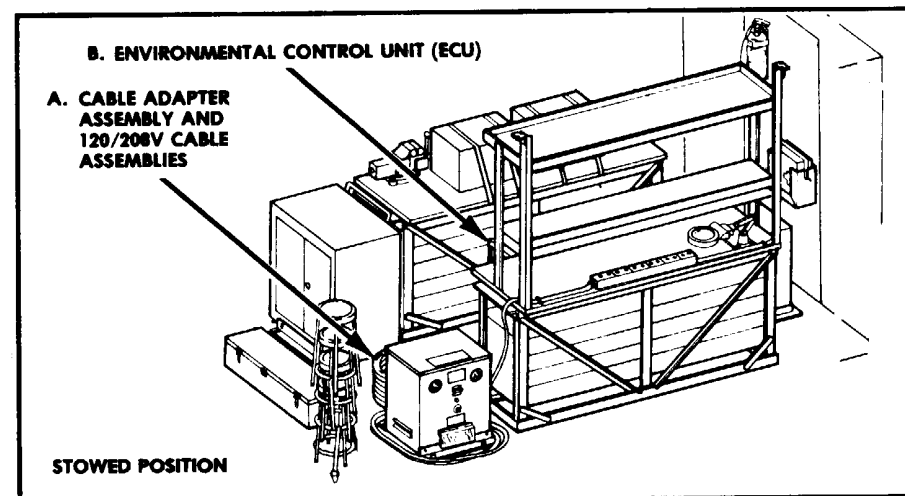
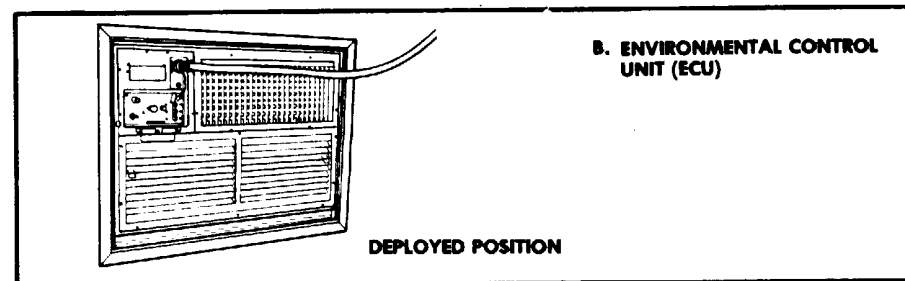
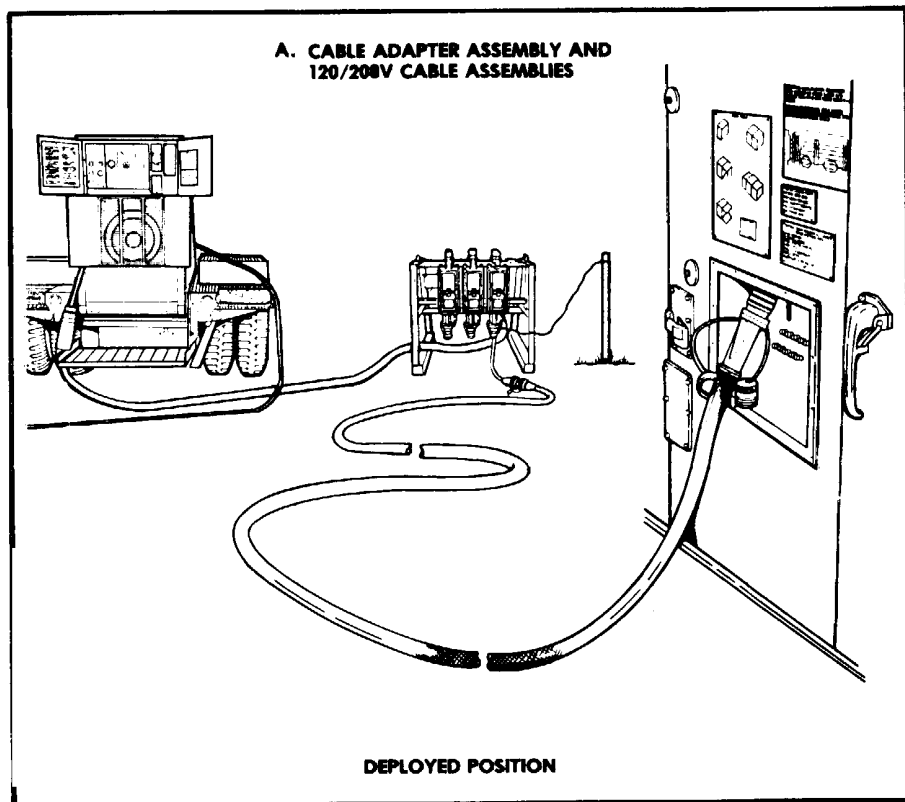
(3) The shelter is modified to provide additional electrical outlets.

(4) The shop set is equipped with door switches which automatically turn off interior lights when the doors are opened during blackout conditions. Blackout covers are also provided for the ventilation fans.

(5) An external power source (not furnished with shop set) supplies 120/208-volt, 3-phase, 60-Hz electrical power to the shop set.

(6) A set of miscellaneous spare parts is furnished with the shop set; refer to appendix C, section II.

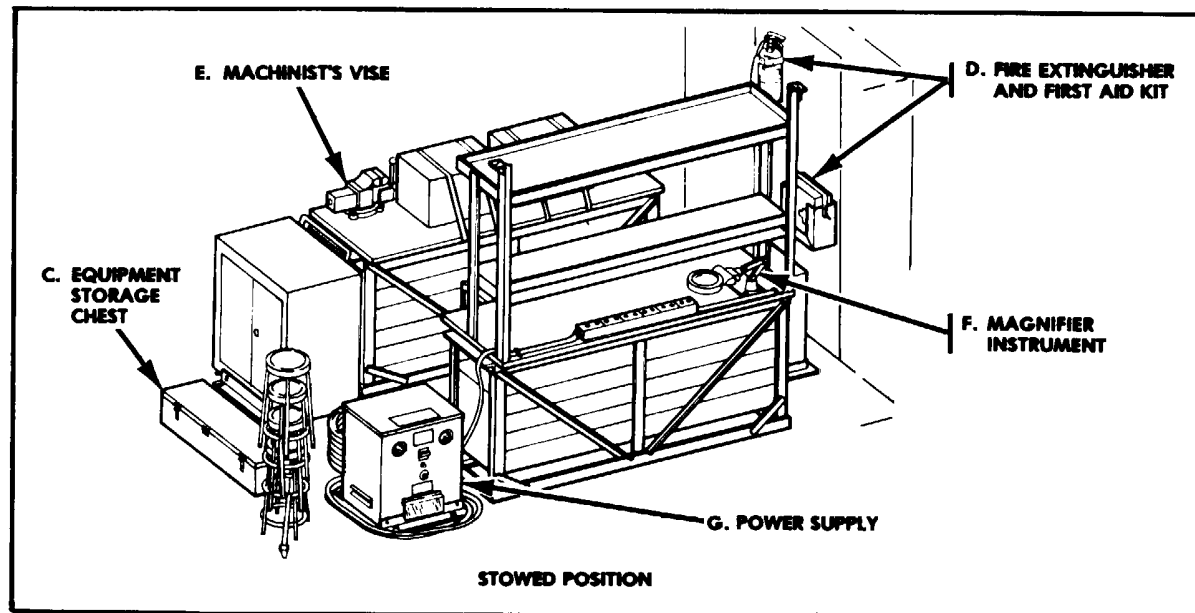
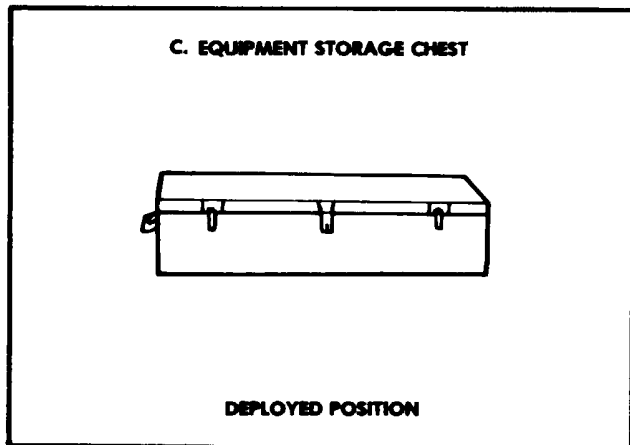
1-9. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS



a. Cable Adapter Assembly and 120/208V Cable Assemblies. A cable adapter assembly and two 120/208V cable assemblies are furnished to connect the shop set to the power source. The cable adapter assembly is connected to the power distribution panel. Then the 120/208V cable assemblies are connected between the cable adapter assembly and the power input panel on the exterior of the shelter. During stowed conditions, the cable adapter assembly and the 120/208V cable assemblies are coiled and strapped to the floor between the ECU and the cargo door.

b. Environmental Control Unit (ECU). There are two ECU's which, when stowed, are held in two frame assemblies with straps. The two frame assemblies are bolted to the floor between the two tables. When in operation, the two ECU's are mounted in the walls of the shelter and the frame assemblies are removed from the floor and stowed. When in operation, the ECU's maintain the temperature and humidity inside the shelter at desired levels.

1-9. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS (cont)



c. Equipment Storage Chest. The equipment storage chest (furnished with shelter) is used to store miscellaneous equipment. The equipment storage chest sits on the shelter floor. During stowed conditions it is secured to the floor, just inside the cargo door, with straps and tiedown rings.

d. Fire Extinguisher and First Aid Kit. The fire extinguisher and first aid kit are mounted on the inside of the personnel door.

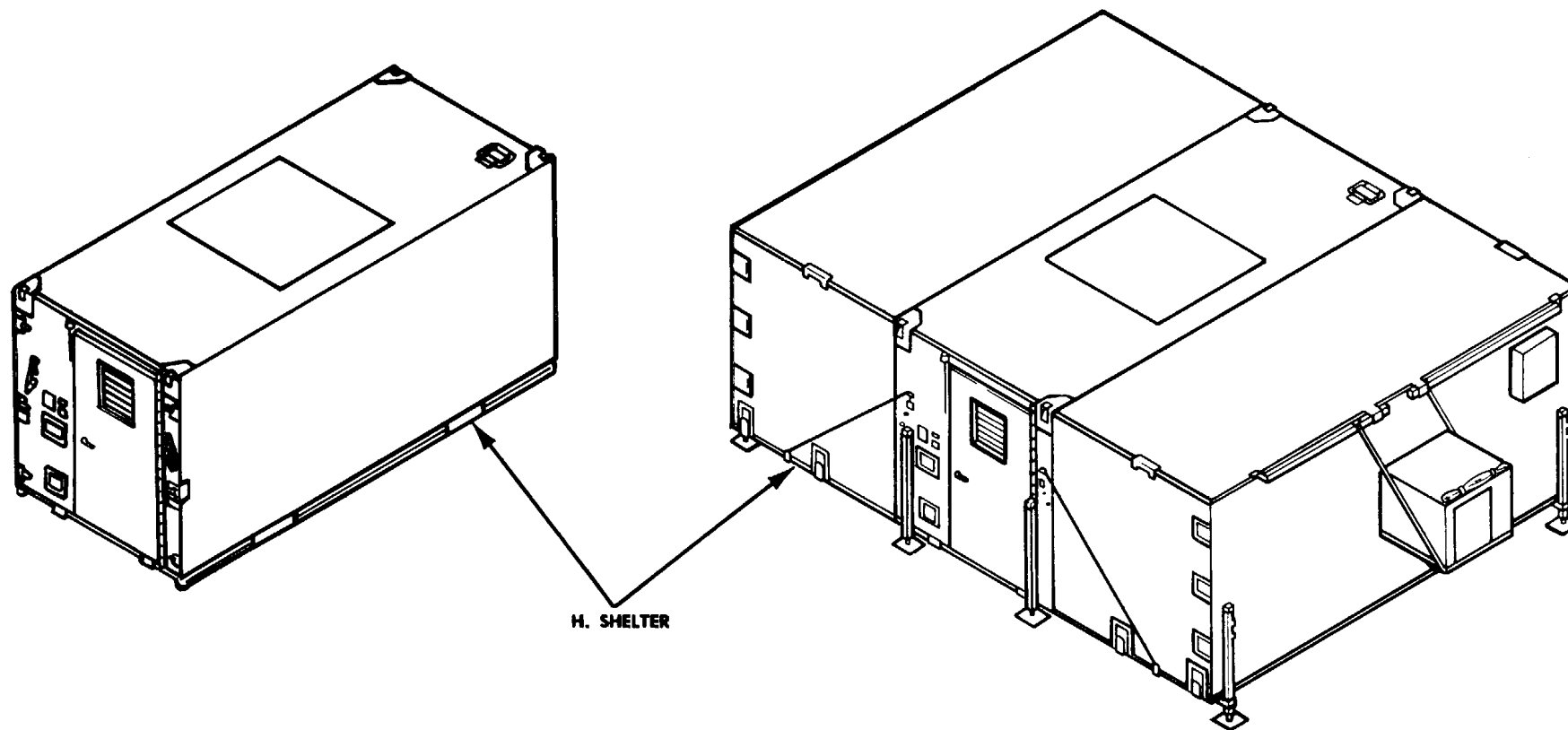
NOTE

The left table and right table references mean the two tables seen while standing in the cargo doorway and looking into the shop set at that entrance. This applies throughout chapter 1.

e. Machinist's Vise. The machinist's vise is mounted on the left table; it has two jaws which can be adjusted to grip objects.

f. Magnifier Instrument. The magnifier instrument is permanently mounted on the right table.

g. Power Supply. The power supply is permanently mounted to the shelter floor at the cargo door end of the right table by two braces. A cable assembly is furnished to connect the power supply to the power distribution panel which is used for test procedures.

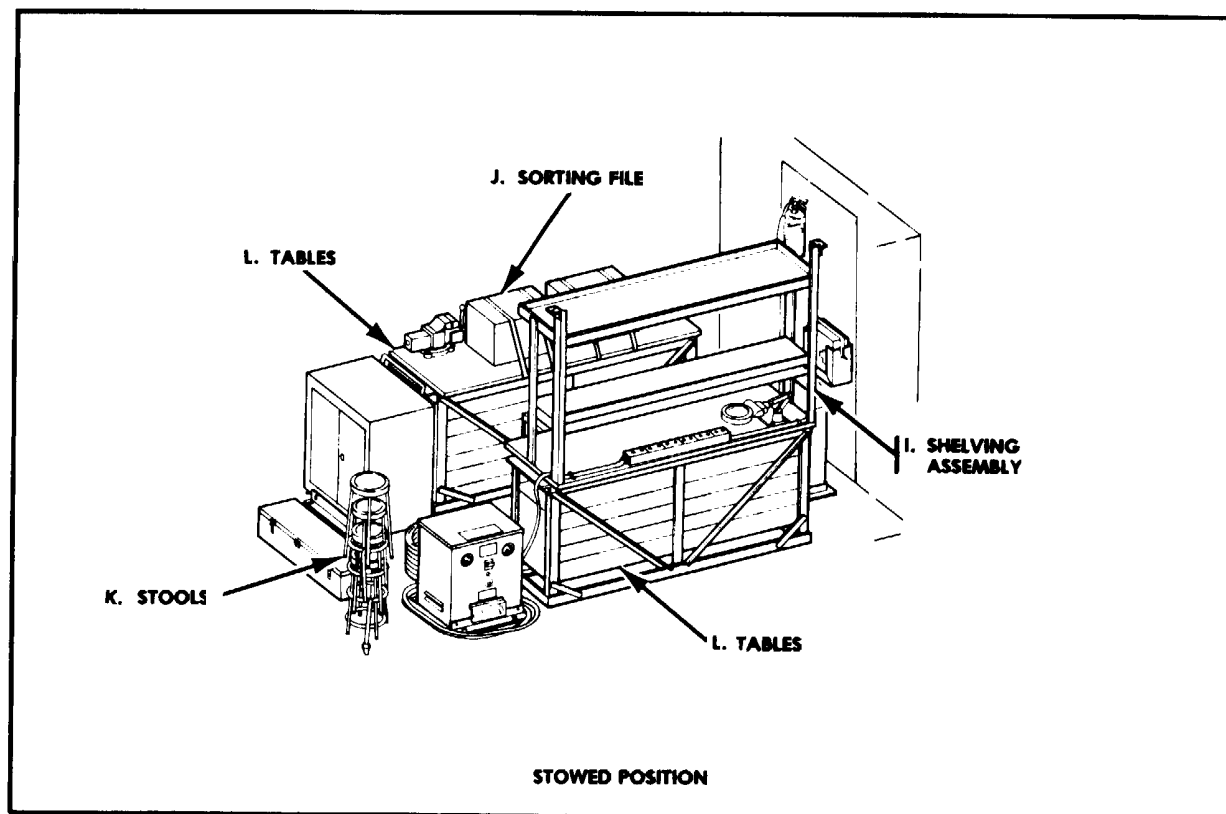
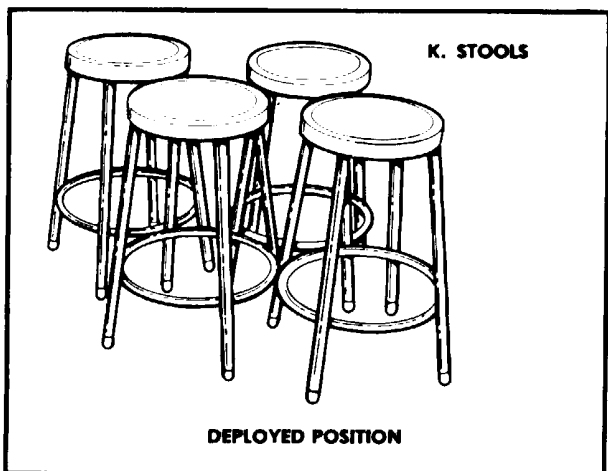
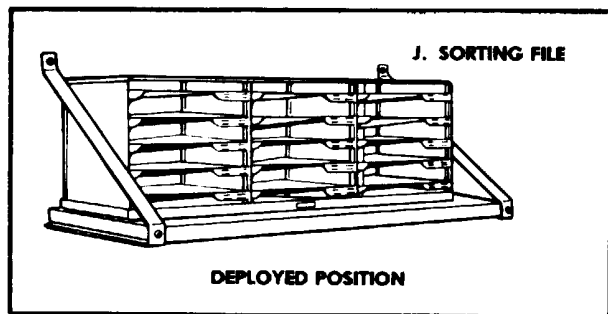


H. SHELTER

h. Shelter. The shelter is a SPAM unit modified for the shop set. The shelter end sections are foldable to make the shelter smaller for transporting. The shelter is deployed to full size prior to operation of the shop set. The shelter walls are designed to allow mounting of two ventilation fans and two

ECU's. The shelter has two doors: the cargo door on one side and the personnel door on the opposite side. For further information see TM 10-5410-224-14.

1-9. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS (cont)

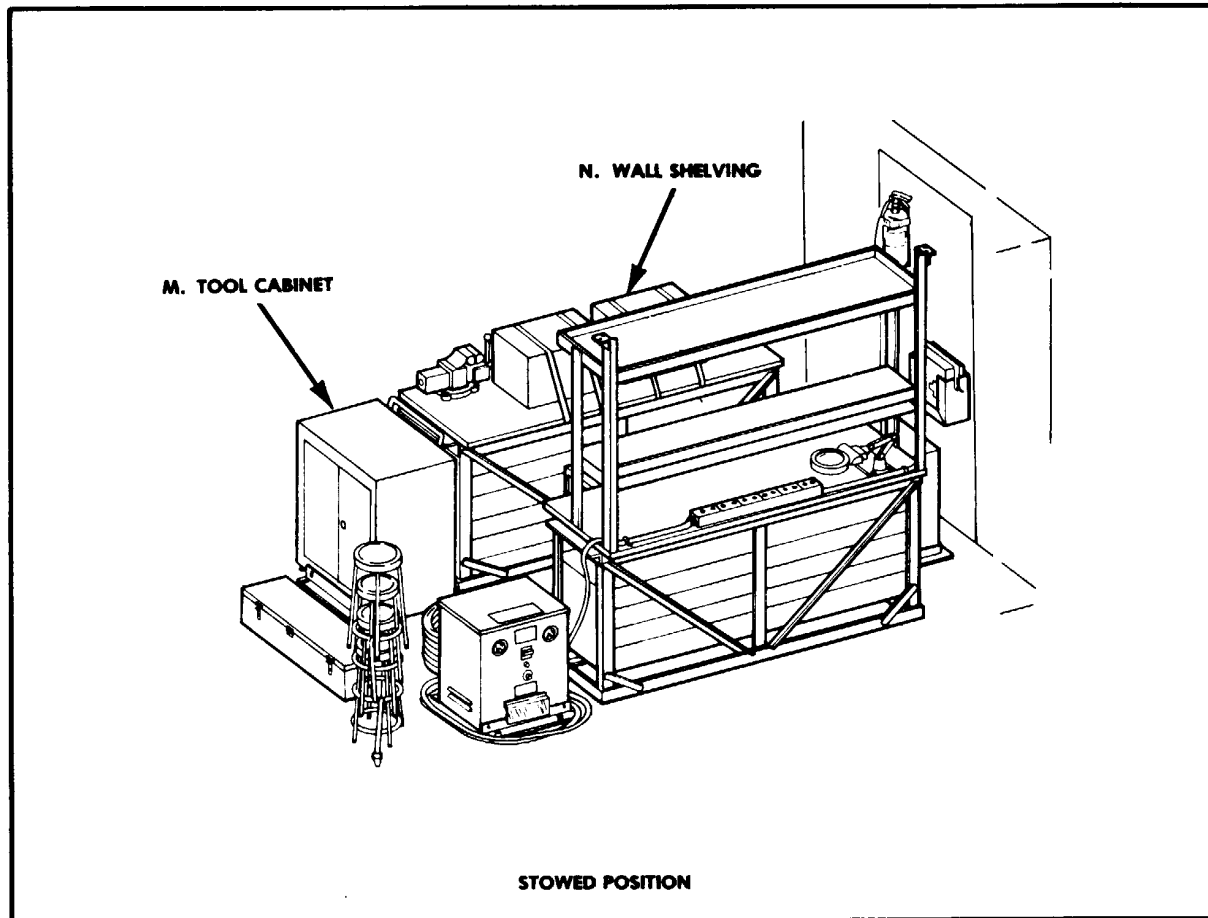
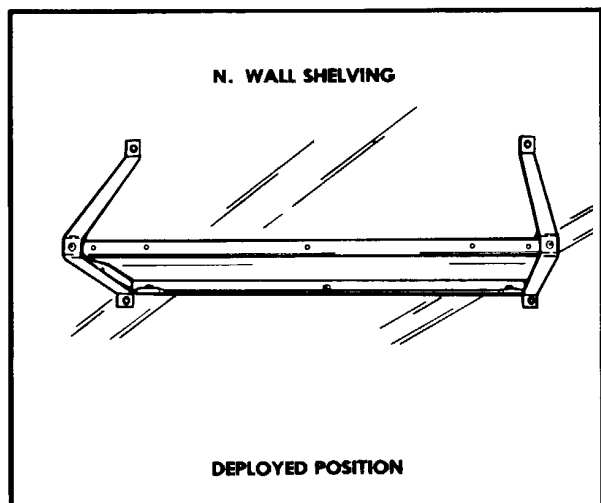


i. Shelving Assembly. The shelving assembly is fastened to the top of the right table and the ceiling of the shelter. The shelving assembly consists of two metal shelves supported by steel angles.

j. Sorting File. The sorting file is a horizontal-type file used to hold manuals and other publications. During stowed conditions, it is strapped to the top of the left table; during operation, it is placed on a wall shelf.

k. Stools. Four stools are provided for personnel use. When stowed, the four stools are stacked and strapped to the floor between the power supply and the cargo door.

l. Tables. Two tables (right and left) are strengthened by the addition of braces. They are then mounted in frames and the table-frame combination secured to the floor. Each table has drawer space for tools and a top surface for working and mounting of other equipment.



m. Tool Cabinet. The tool cabinet is used to store small hand tools. It is fastened to the shelter floor and to the cargo door end of the left table.

n. Wall Shelving. There are four wall shelves, each supported by two brackets. During operation of the shop set, the brackets and wall shelves are secured to the foldout wall panels of the shelter. When the shop set is in the

stowed condition, the brackets and wall shelves are strapped to the top of the left table.

1-10. DIFFERENCES BETWEEN MODELS

There is only one model of the fire control repair shop set. This shop set is similar to, but should not be confused with, the armament repair shop set described in TM 9-4933-223-13&P.

1-11. EQUIPMENT DATA

Identification Plate Located on personnel panel door. Contains equipment nomenclature; type and designation number; manufacturer's part number, name, and code; contract number; serial number; and National stock number.

Erection Sequence Instruction Plate Located on personnel panel door. Contains sequence and instructions for erection of the expandable shelter.

Exterior Dimensions (Stowed Shelter):	Dimension
Width.....	8 ft (2.44 m)
Height.....	7 ft, 11 in. (2.41 m)
Length.....	13 ft, 4 in. (4.06 m)

Exterior Dimensions (Deployed Shelter):	Dimension
Width.....	22 ft, 3 in. (6.78 m)
Height.....	7 ft, 11 in. (2.41 m)
Length.....	13 ft, 4 in. (4.06 m)

Interior Dimensions:	Dimension
Minimum clear height.....	6 ft, 9 in. (2.06 m)
Minimum clear width (stowed mode)	6 ft, 6 in. (1.98 m)

Total Weights:	Weight
Less payload.....	4200 lb (1905 kg)
With payload (maximum)	7000 lb (3175 kg)

Primary Power Requirements 120/208 Vac, 60 Hz, 3 phase, 5 wire

Environmental Limits:

Limit

Operating temperature..... -25° F to +125° F (-31.7° C to 51.7° C)
 Maximum outer skin temperature+200° F (93.3° C)

Transportability (Stowed Shelter):

Method

Air.....By aircraft, using 463L or MH5.1-1970 cargo handling system, or suspended from a helicopter.
 Water By any suitable water vessel.
 Rail.....On a standard railway car as used in the continental United States, in accordance with methods and standards in the loading rules of the Association of American Railroads.
 Land.....By truck, flat bed trailer, forklift or dolly set.

1-12. SAFETY, CARE, AND HANDLING

a. Specific cautions and warnings are included in this manual for safety purposes. Before performing any maintenance task, be sure all cautions and warnings are understood.

b. Do not move the shop set without putting it in the stowed condition per page 2-16.

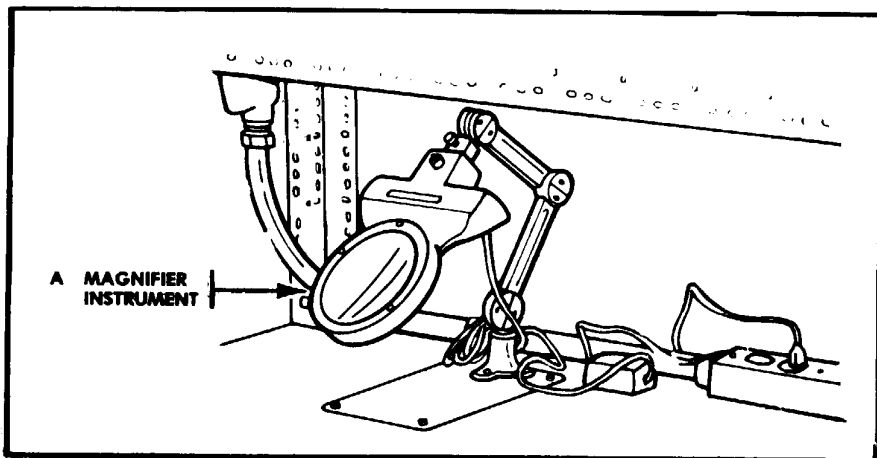
c. Refer to TM 10-5410-224-14 for proper procedures for air-lifting the shop set or transporting it by other means.

d. Specific warnings and cautions are contained in the manuals issued with the operable equipment. Before performing any maintenance task or operating the equipment, be sure all warnings and cautions are understood.

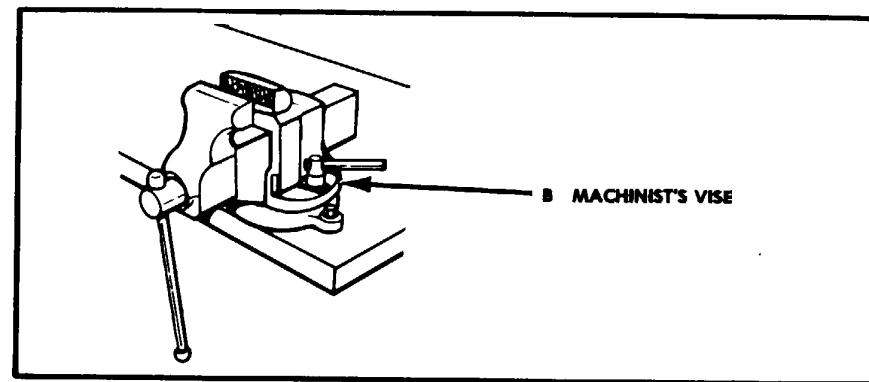
Section III. PRINCIPLES OF OPERATION

1-13. OPERABLE EQUIPMENT

The operable equipment is mounted either on the two tables or shelter floor. This equipment is mainly shop-type equipment used for maintenance or repair of other components.



A MAGNIFIER INSTRUMENT is mounted on the right table. Objects placed under the lens of the magnifier instrument appear enlarged to the operator due to the magnification effect of the lens.



B MACHINIST'S VISE is mounted on the left table; it has two jaws which can be adjusted to grip objects which are being worked on.

C ENVIRONMENTAL CONTROL UNIT (ECU) is stowed on the shelter floor but placed in shelter wall when in use. The two ECU's maintain the temperature and humidity inside the shop set at desired levels.

**CHAPTER 2
OPERATING INSTRUCTIONS**

CHAPTER INDEX

	Page		Page
Assembly and Preparation for Use.....	2-7	PMCS Procedures.....	2-1
General.....	2-1	Preparation for Movement.....	2-16
Introduction.....	2-7		
Operating Instructions on Decals and Instruction Plates	2-23		

Section I. PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

2-1. GENERAL

a. Before you operate, always keep in mind the cautions and warnings of this manual and the manuals for the shelter and other items of equipment of this shop set which have separate manuals. Perform your before (B) PMCS.

b. While you operate, always keep in mind the cautions and warnings listed in this manual and the manuals for the shelter and other items of equipment of this shop set which have separate maintenance instructions. Perform your during (D) PMCS.

c. After you operate, be sure to perform your after (A) PMCS listed in this manual and the manuals for the shelter and other items of equipment of the shop set which have separate maintenance instructions.

d. Every week, be sure to perform your weekly (W) PMCS listed in this manual and the manuals for the shelter and other items of equipment of the shop set which have separate maintenance instructions.

2-2. PMCS PROCEDURES I

The PMCS table lists the required checks to be performed by personnel who operate the shop set. The first column contains the item number which shall be used as a source of item numbers for the TM number column on DA Form 2404; the second column contains the PMCS interval; the third column lists the item to be inspected; the fourth column contains the inspection procedures; and the fifth column contains conditions under which the shop set is to be reported not ready.


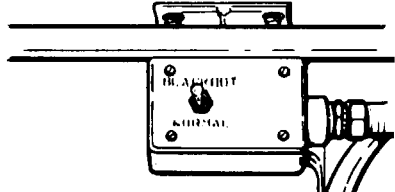


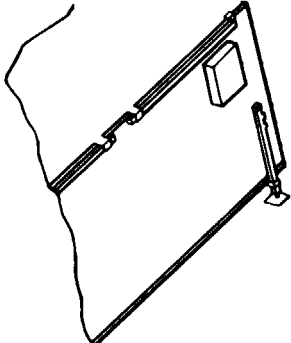
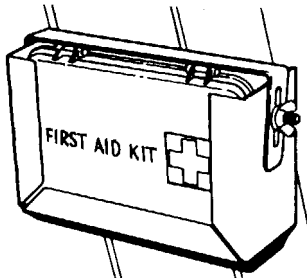

2-2. PMCS PROCEDURES (cont)

Preventive Maintenance Checks And Services

NOTE

Within designated interval, these checks are to be performed in the order listed.

Item No.	Interval				Item To Be Inspected	Procedures Check for and have Repaired or Adjusted as Necessary	For Readiness Reporting Equipment Will Be Reported Not Ready/Available If:
	B	D	A	W			
1		•			Fire Extinguisher	 <p>Check for missing seal, secure mounting, and visual damage.</p>	
2			•	•	Blackout Switch	 <p>Check that the lights go out when either door is opened while switch is in BLACKOUT position.</p>	Light stays on in blackout mode.

<p>3</p>	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • 	<p>Blackout Fan Cover</p>	 <p>During darkness, check that no light is seen around fan while interior lights are on.</p>	<p>Light can be seen through the fan housing.</p>
<p>4</p>		<ul style="list-style-type: none"> • 	<p>First Aid Kit</p>	 <p>Check that kit is in place and complete.</p>	
<p>5</p>	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • 	<p>Cable Adapter Assembly</p>	 <p>Check that the 6-in. (15.24-cm) cable with "do not disconnect" tag is in place and that cable adapter assembly is being used according to instructions on warning plate (p 2-23).</p>	<p>Cable adapter assembly is being used incorrectly or is inoperable.</p>

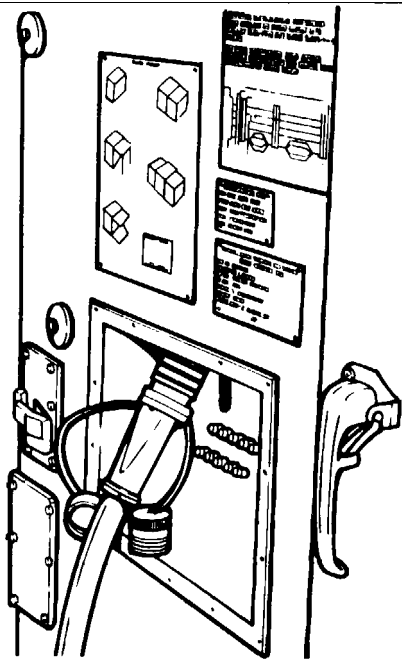


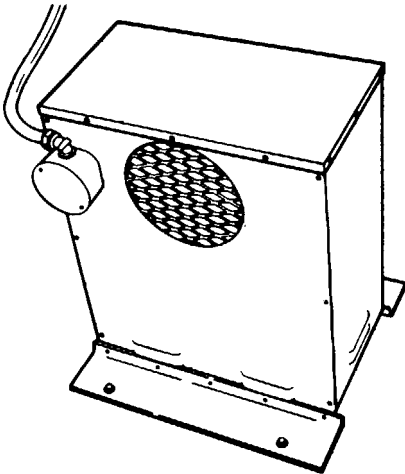
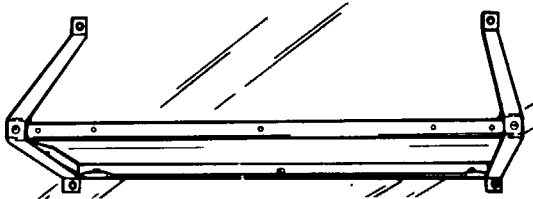
2-2. PMCS PROCEDURES (cont)

Preventive Maintenance Checks And Services (cont)

NOTE

Within designated interval, these checks are to be performed in the order listed.

B-Before		D-During			A-After		W-Weekly	
Item No.	Interval				Item To Be Inspected	Procedures Check for and have Repaired or Adjusted as Necessary	For Readiness Reporting Equipment Will Be Reported Not Ready/Available If:	
	B	D	A	W				
6	•	•	a		120/208V Cable Assembly	 <p>Check that 120/208V cable assembly is being used according to instructions on the warning plate (p 2-23).</p>	The 120/208V cable assembly is being used incorrectly or is inoperable.	

7	•	•	•	Power Supply	 <p>Check for no obstruction of cooling fan. Verify that the power leads are on the correct terminals and equipment is kept away from the terminals.</p> 	
8	•	•	•	Wall Shelving	<p>Check that items on wall shelving are in a safe position.</p>	
9	•	•	•	Test Equipment	<p>Check for the electrical safety of all test equipment brought into the shop set. Check for proper grounding and that electrical leads are not frayed.</p>	



2-2. PMCS PROCEDURES (cont)

Preventive Maintenance Checks And Services (cont)

NOTE

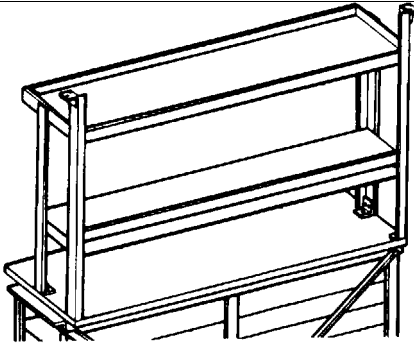

Within designated interval, these checks are to be performed in the order listed.

B-Before

D-During

A-After

W-Weekly

Item No.	Interval				Item To Be Inspected	Procedures Check for and have Repaired or Adjusted as Necessary	For Readiness Reporting Equipment Will Be Reported Not Ready/Available If:
	B	D	A	W			
10	•	•	•		Shelving Assembly	 <p>Check that items on shelving assembly are safely placed.</p>	
11	•	•	•		Grounding Rods	 <p>Check for proper installation and connection to both shelter and cable adapter assembly.</p>	

Section II. OPERATION UNDER USUAL CONDITIONS

2-3. INTRODUCTION

CAUTION

Never attempt to move or lift the shop set without first putting it in the stowed condition.

NOTE

The left and right table refer to the two tables as viewed looking inside from the cargo door. This applies throughout chapter 2.

a. This chapter gives information and procedures for preparing the fire control repair shop set for operation (assembly and preparation for use) and putting the shop set in the stowed condition (p 2-16, preparation for movement).

b. Procedures for lifting the shelter, leveling the shelter, installing/removing ventilation fans and ECU's, deployment of foldout panels, and other operations are contained in TM 10-5410-224-14. Become familiar with these procedures before operating.

c. Detailed operating instructions for hand tools, shop equipment, electrical power source, and other components furnished with the shop set, or used with it, are contained in manufacturer's instructions or other TM's.

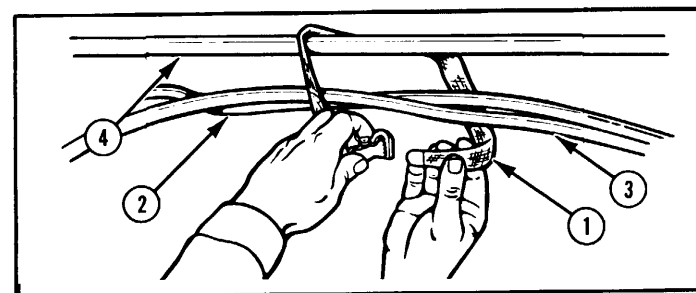
d. For removal/installation instructions and operating instructions for ventilation fans, refer to TM 10-5410-224-14.

e. For removal/installation instructions for ECU's, refer to TM 10-5410-224-14; for operating procedures, refer to TM 5-4120-243-14.

2-4. ASSEMBLY AND PREPARATION FOR USE

NOTE

When removing tiedown and mounting hardware, ensure all items are stored in the storage chest as they will be used again.

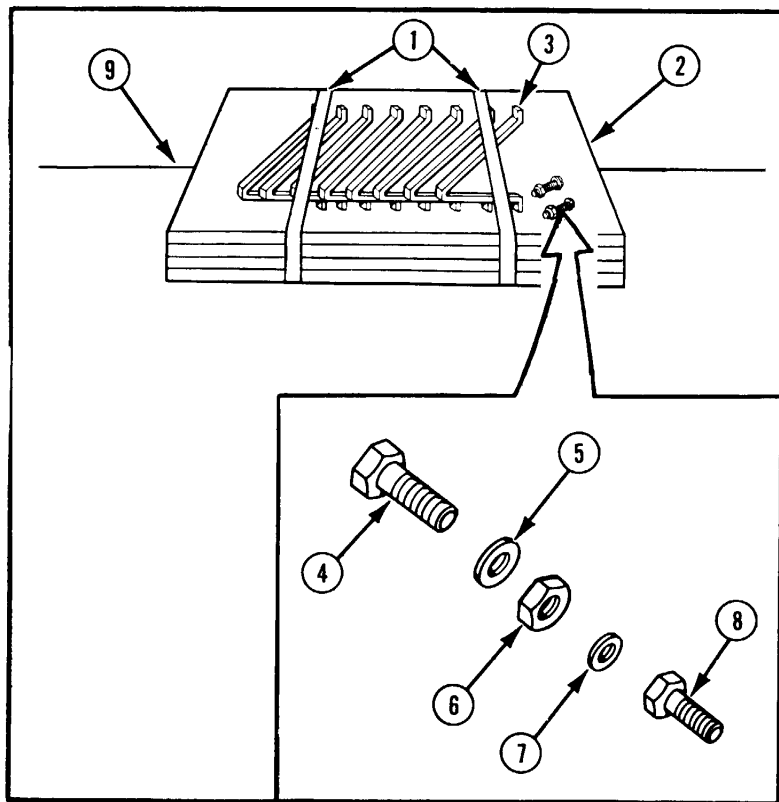


a. Deployment of Shelter.

- (1) Remove strap (1) holding coiled electrical cable (2) and air conditioning cable (3) to conduit (4) on wall above personnel door.
- (2) Level shelter and deploy foldout panels per TM 10-5410-224-14.
- (3) Remove ventilation fans from ceiling and install in shelter walls per TM 10-5410-224-14.
- (4) Refer to TM 10-5410-224-14 and perform any other operations necessary for complete deployment of the shelter.
- (5) Store all mounting hardware in storage chest.

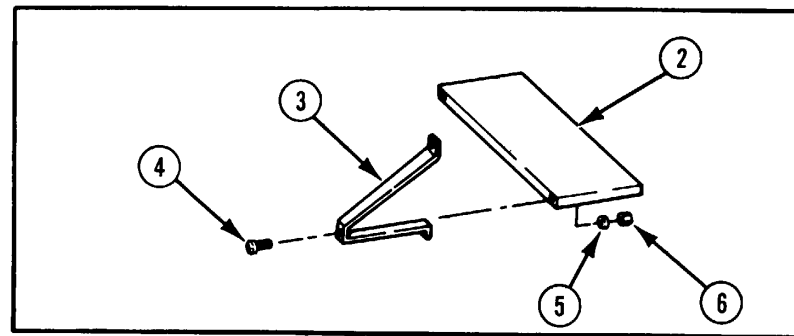


2-4. ASSEMBLY AND PREPARATION FOR USE (cont)



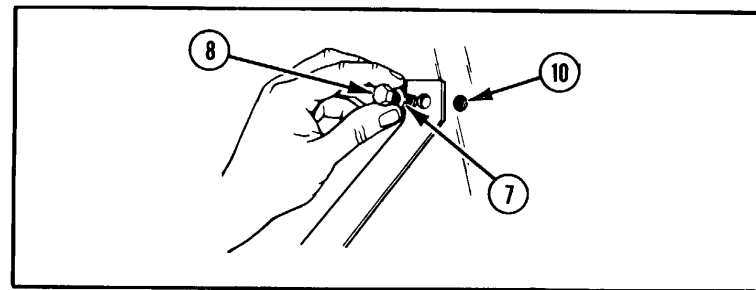
b. Installation of Wall Shelving.

- (1) Remove 2 straps (1) that are holding 4 wall shelves (2), 8 brackets (3), 8 screws (4), 8 flat washers (5), 8 nuts (6), 16 flat washers (7), and 16 screws (8) to left table (9).



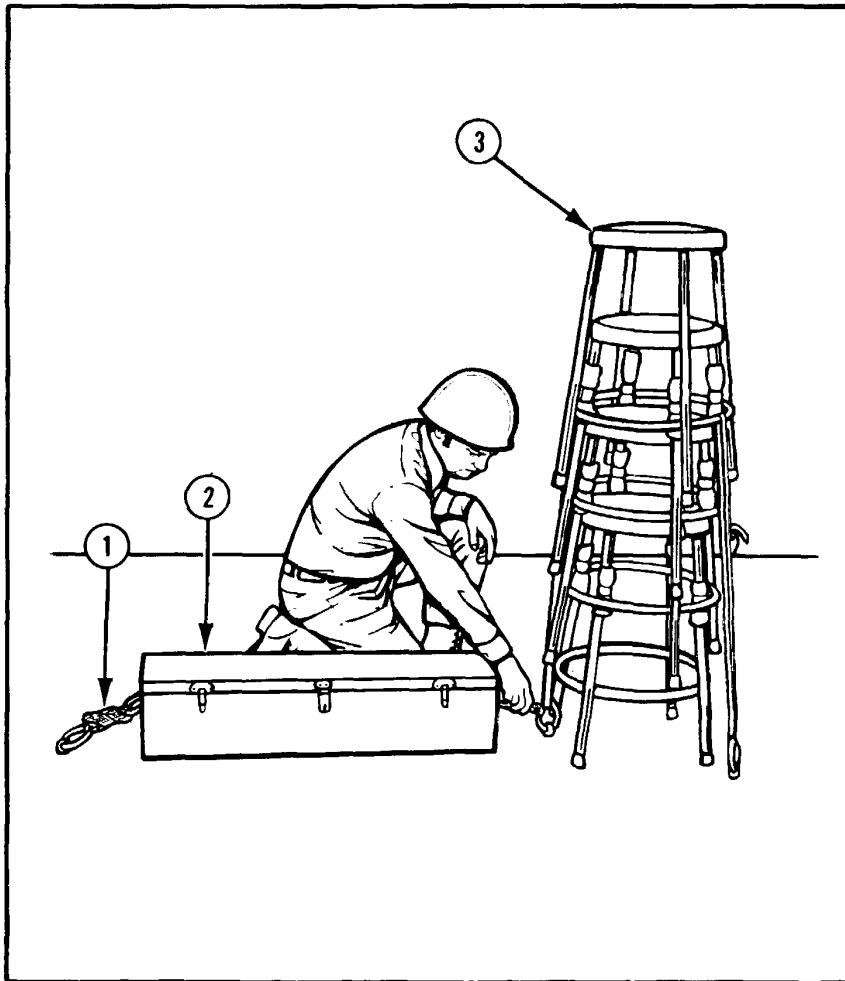
- (2) Install each of the four wall shelvings as follows:

- (a) Attach wall shelves (2) to two brackets (3) using two screws (4), two flat washers (5), and two nuts (6).



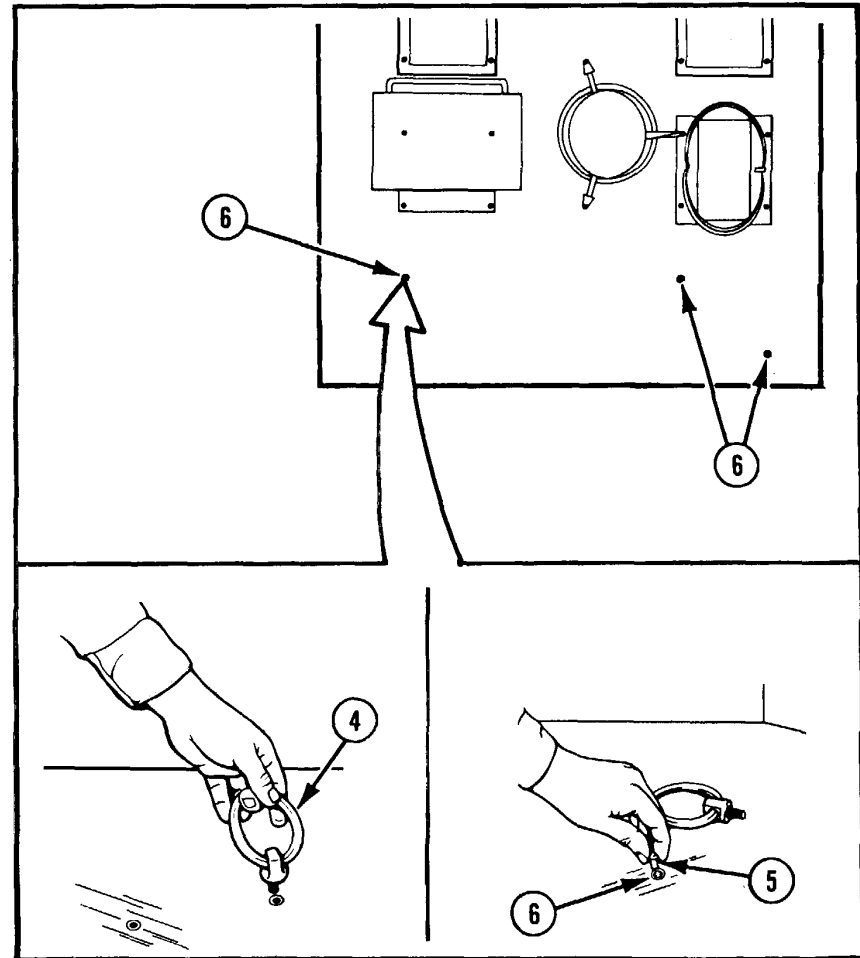
- (b) Attach brackets to foldout wall panel by installing four flat washers (7) with four screws (8) into blind inserts (10) in panel.

- (3) Store all mounting hardware in storage chest.



c. Readyng of Equipment Strapped to Floor.

(1) Remove four straps (1) holding equipment storage chest (2) and four stools (3) in place.

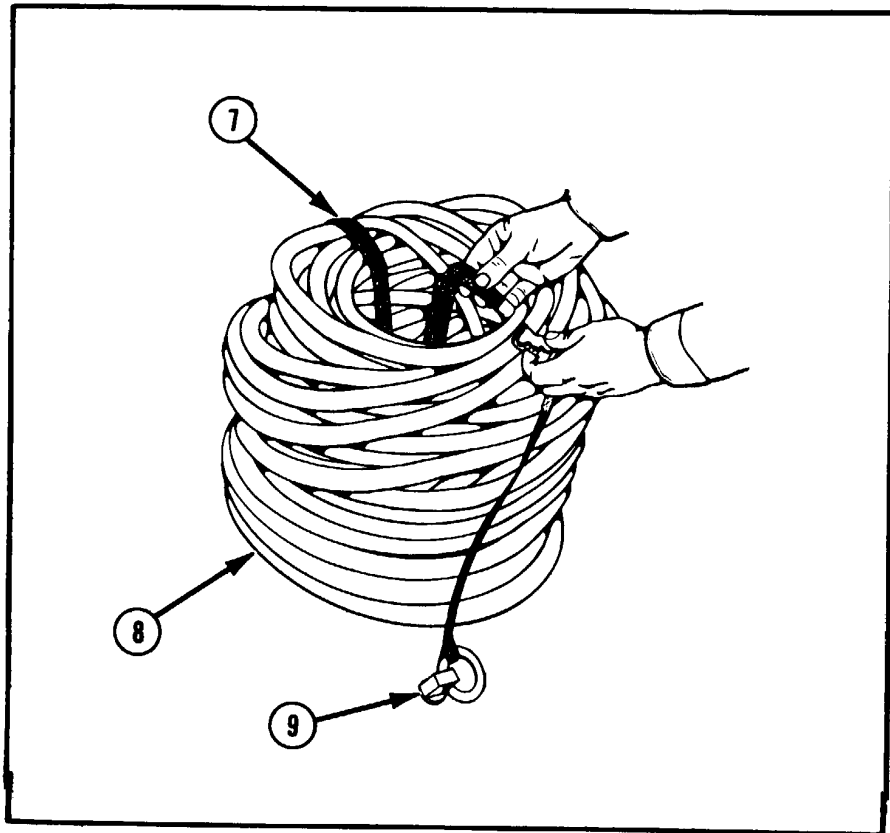


(2) Remove three tiedown rings (4) from shelter floor.

(3) Install three plastic plugs (5) into blind inserts (6) in floor (from which tiedown rings were just removed).



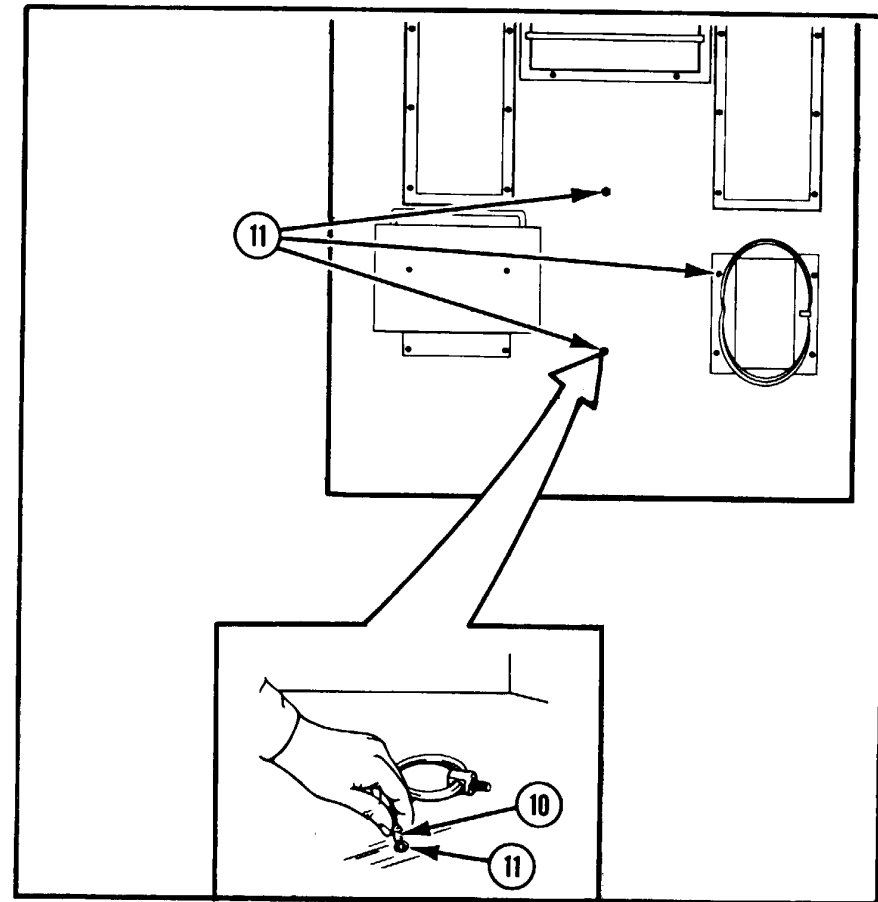
2-4. ASSEMBLY AND PREPARATION FOR USE (cont)



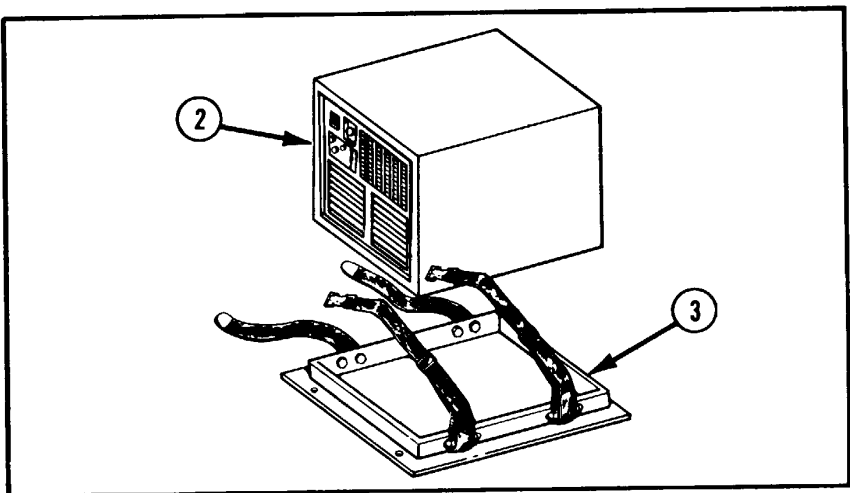
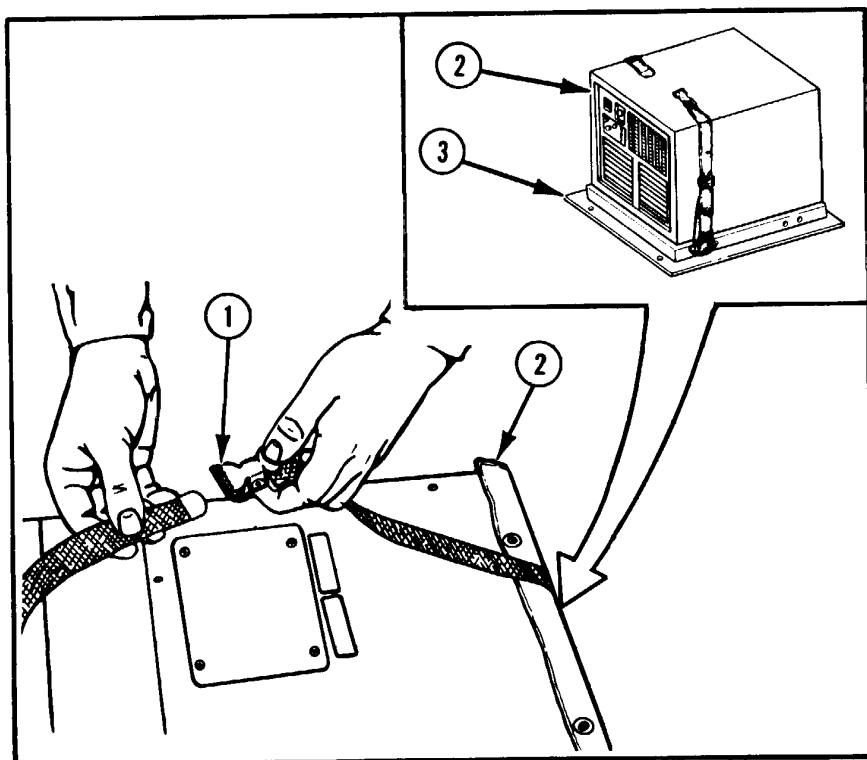
NOTE

Coil contains airhose, cable adapter assembly, and two 120/208V cable assemblies.

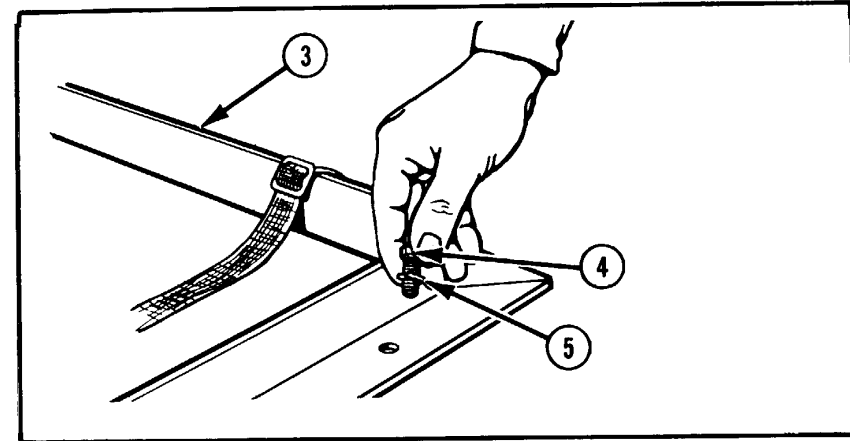
- (4) Remove three straps (7) holding coil (8) in place. Place coil outside shelter.
- (5) Remove three tiedown rings (9) from floor.



- (6) Install three plastic plugs (10) into blind inserts (11) in floor (from which tiedown rings were just removed).
- (7) Store all mounting hardware in storage chest.



(2) Lift the ECU (2) out of frame assembly (3) and place temporarily to one side.



(3) Remove four screws (4) and four lockwashers (5) holding frame assembly (3) to shelter floor.

d. Preparation of ECU's for Operation.

WARNING

A minimum of four personnel is required when moving or lifting the ECU's. (Each weighs approximately 270 lb (122 kg).)

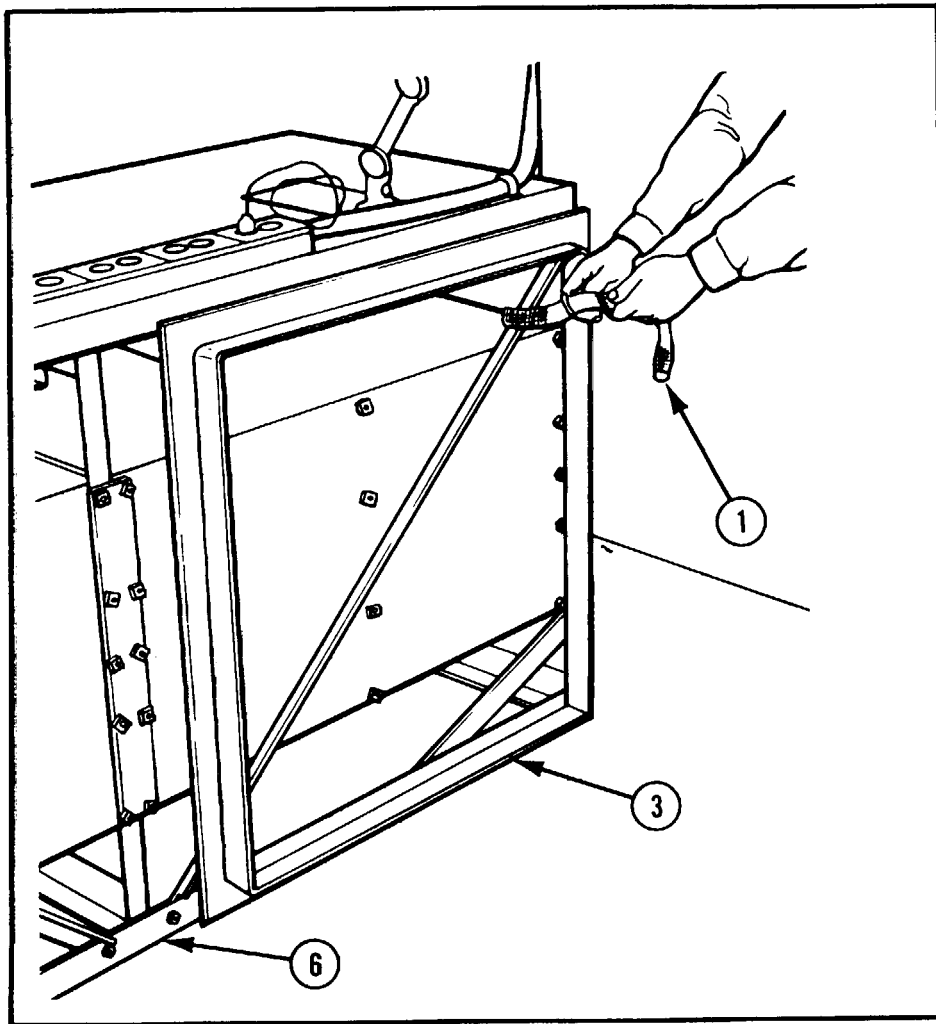
NOTE

There are two ECU's furnished with the shop set. The following instructions pertain to only one ECU.

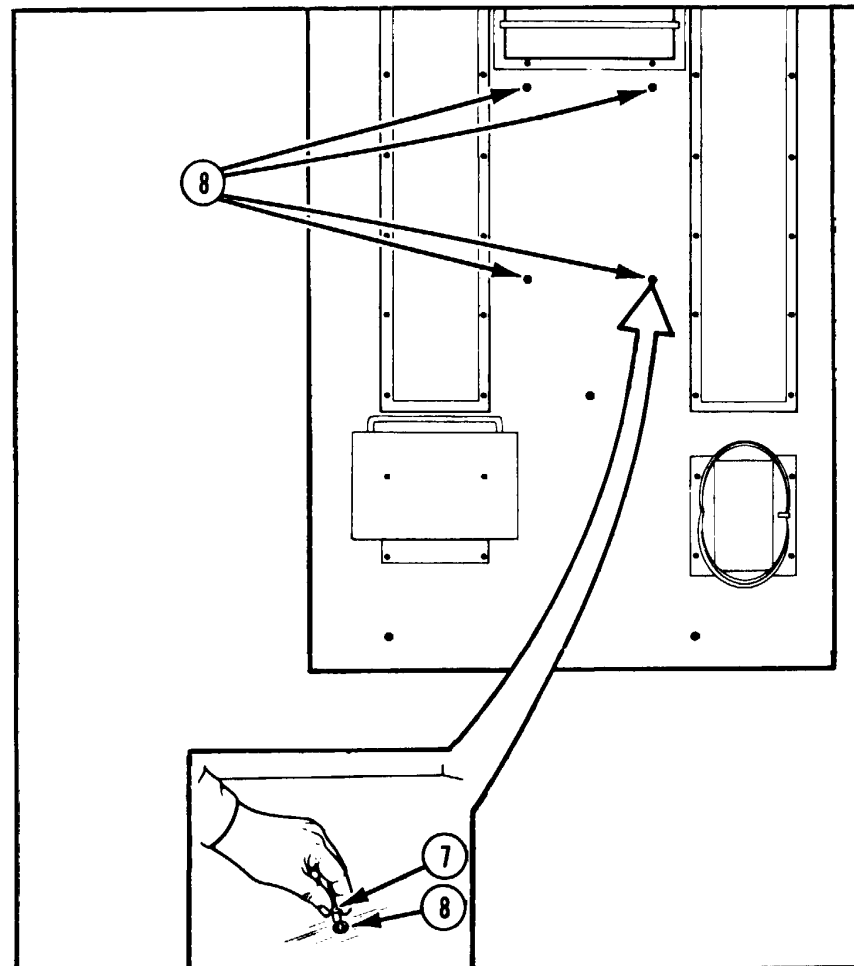
- (1) Remove two straps (1) holding ECU (2) in frame assembly (3).



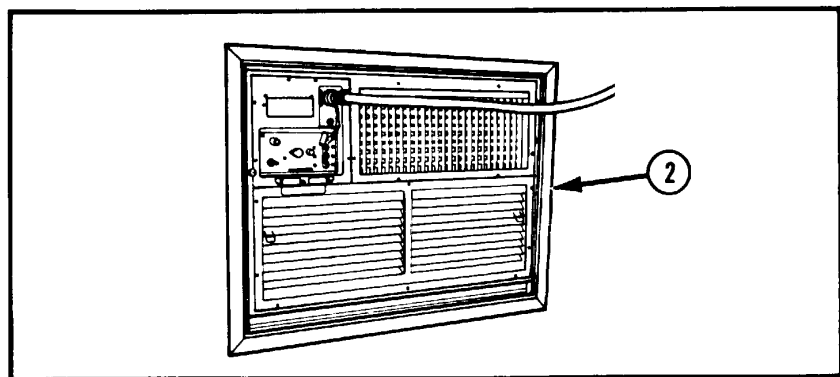
2-4. ASSEMBLY AND PREPARATION FOR USE (cont)



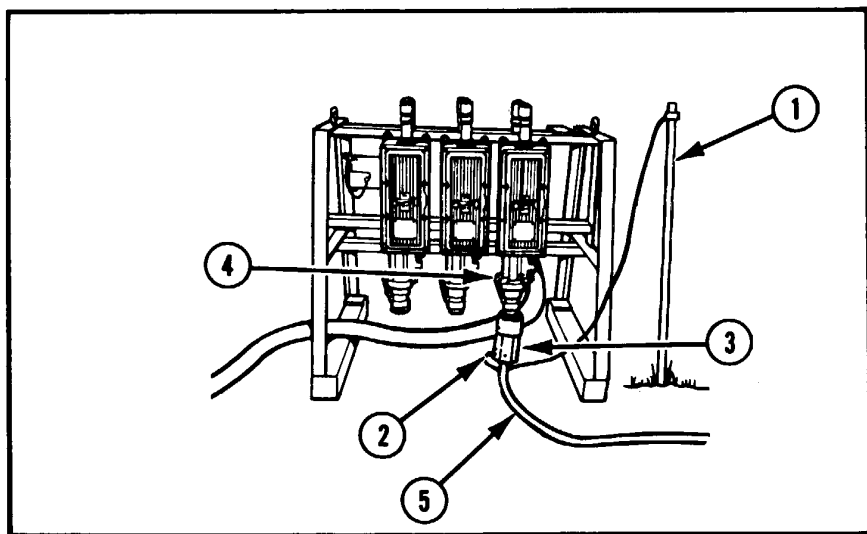
(4) Place frame assembly (3) and mounting hardware on back of the right table (6) and secure in place with two straps (1).



(5) Install four plastic plugs (7) into four blind inserts (8) in shelter floor (from which the four mounting screws were removed).



- (6) Install ECU (2) in shelter wall per TM 10-5410-224-14.
- (7) Store all mounting hardware in storage chest.



e. Connection of Shop Set to Power Source.

WARNING

The electrical system contains voltages that are dangerous if contacted. Before connecting or disconnecting power cables, ensure circuit breaker on power distribution panel connected to power source is in OFF position.

CAUTION

Be sure power source is a 120/208-volt, 3-phase, 60-Hz power source.

- (1) Clamp wire of grounding rod (1) to terminal lug (2) of plug connector (3).
- (2) Push grounding rod (1) into the ground near mating connector (4) on power distribution panel.

NOTE

Cable adapter assembly (5) is not needed if power distribution panel is equipped with an MS90555 connector per MIL-C22992.

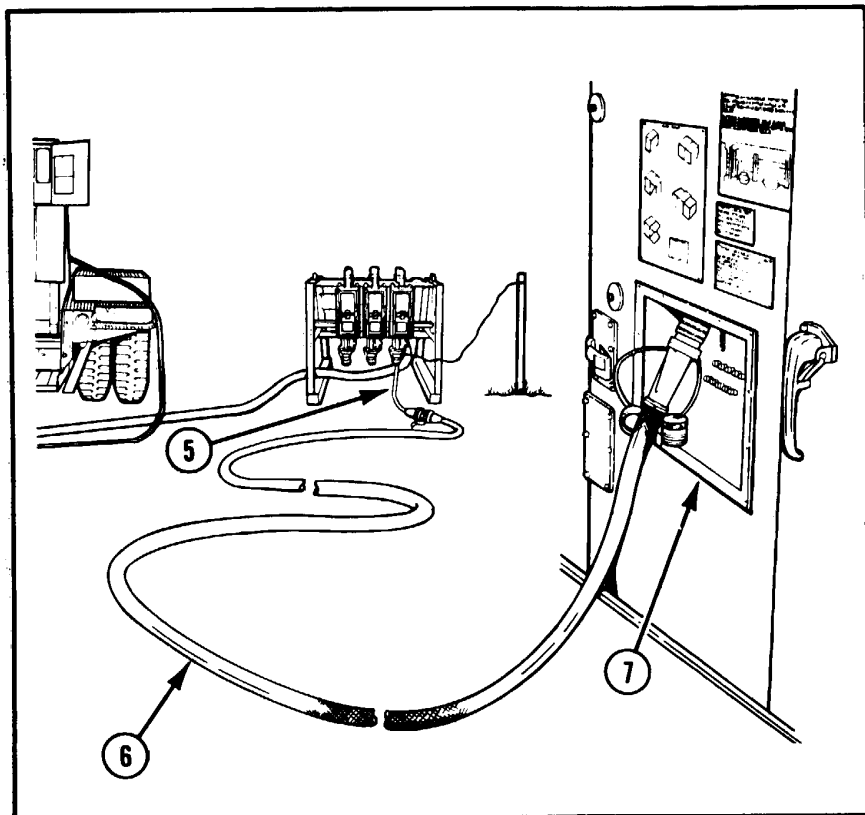
- (3) Connect plug connector (3) of cable adapter assembly (5) to mating connector (4) on power distribution panel.

CAUTION

Do not remove dust covers from connectors until just prior to assembly with mating connector (4).



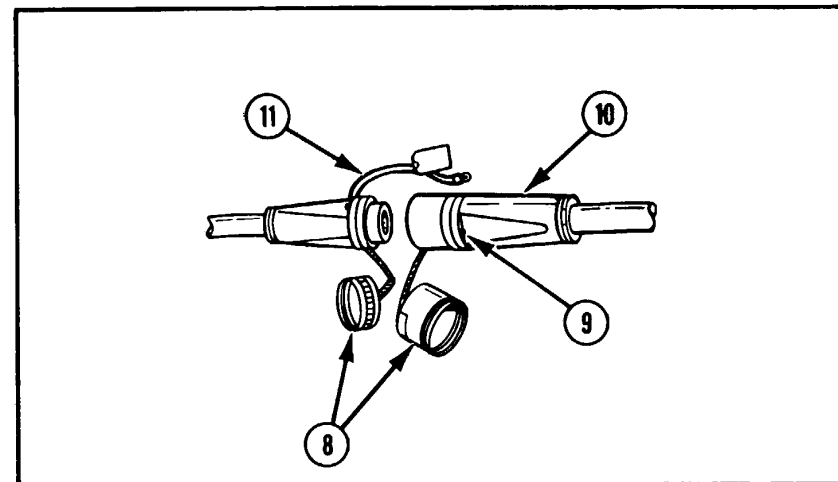
2-4. ASSEMBLY AND PREPARATION FOR USE (cont)



NOTE

One or two 120/208V cable assemblies may be used as required.

- (4) Lay out two 120/208V cable assemblies (6) between cable adapter assembly (5) and connector J1 of power input panel (7) on the exterior of the shelter (personnel door end).

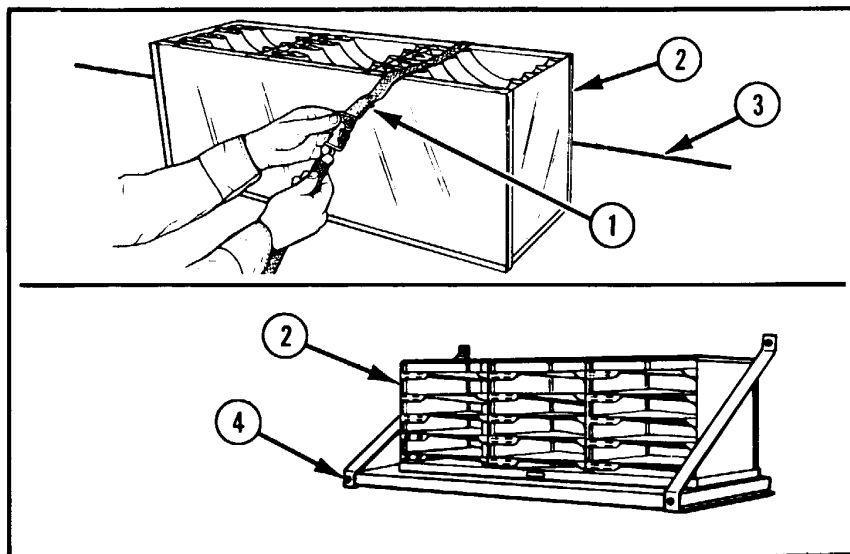


- (5) Remove dust covers (8) from all connectors and join all connectors.
- (6) Remove existing screw (9) from male connector (10) of 120/208V cable assembly.
- (7) Replace screw (9) using it to attach cable assembly (11) to male connector (10).
- (8) Check that all circuit breakers in circuit breaker panel box, to the right of personnel door, are in the ON position.

WARNING

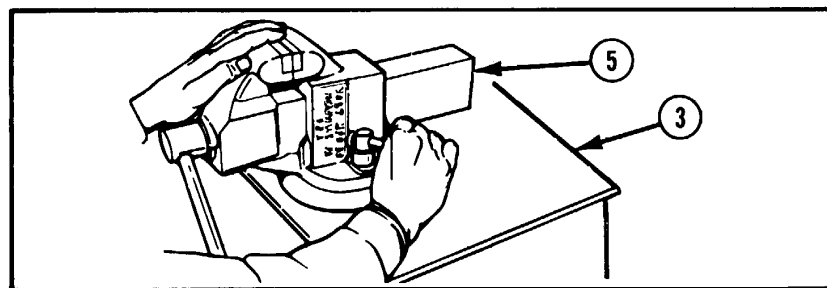
Ensure grounding rod is installed and connected before energizing shop set.

- (9) Energize shop set by placing circuit breaker on power distribution panel connected to power source in ON position.

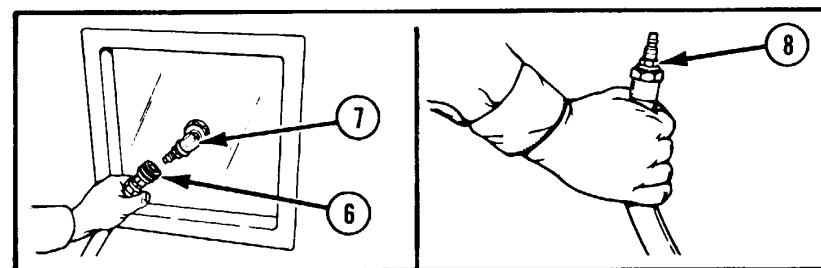


f. Readyng Miscellaneous Equipment.

- (1) Remove two straps (1) holding sorting file (2) to left table (3). Place sorting file on wall shelving (4).



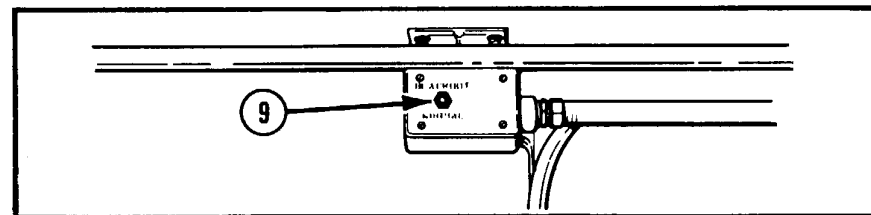
- (2) Rotate machinist's vise (5), located on left table (3), 90 degrees counterclockwise to operating position (jaws parallel to table) and tighten.



WARNING

Injury to personnel may result if pressure is not relieved before beginning any maintenance on airhose.

- (3) Connect quick-disconnect female coupling assembly (6) of airhose to quick-disconnect male coupling assembly (7) on outside shelter wall to the left of the personnel door. Then connect compressed air source to quick disconnect male coupling assembly (8) on end of airhose. The compressed air source will be 150 psi (10.55 kg/cm) maximum.



- (4) If blackout conditions exist, turn blackout switch (9) located above personnel door to BLACKOUT position.
- (5) Remove hand tools from storage as required.
- (6) Store all mounting hardware in storage chest.



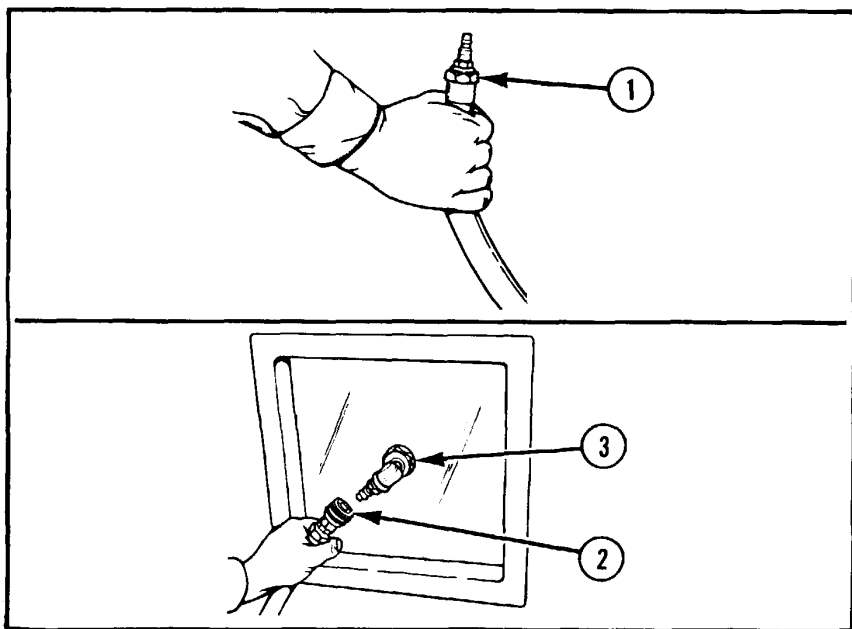
2-5. PREPARATION FOR MOVEMENT

a. Stowing of Miscellaneous Equipment.

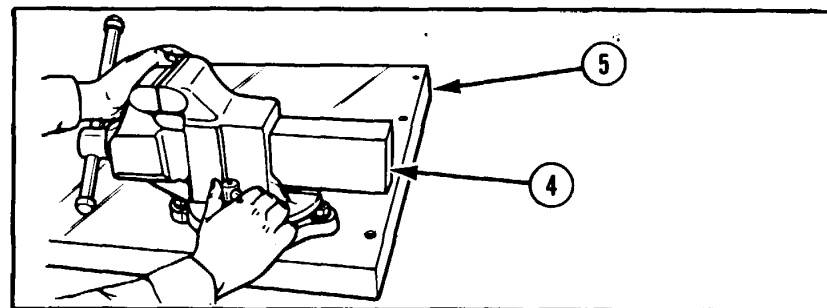
- (1) Store all hand tools in equipment storage chest, tool cabinet, or table drawers.

WARNING

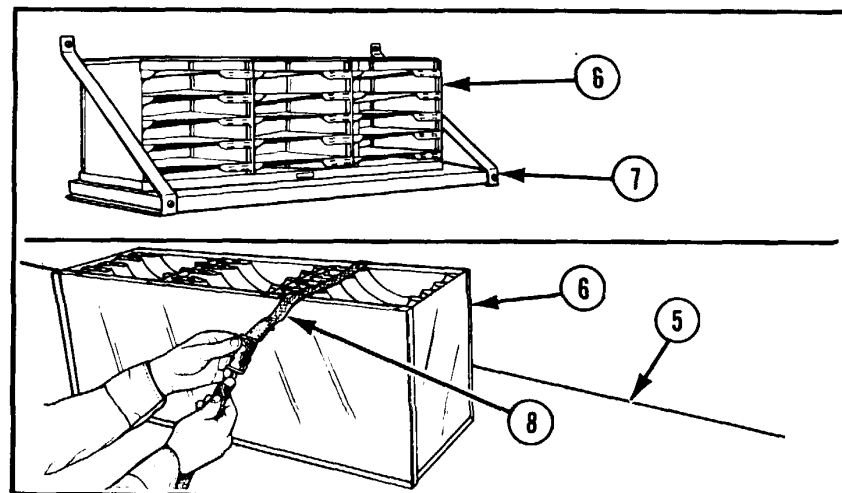
Injury to personnel may result if airhose is not bled.



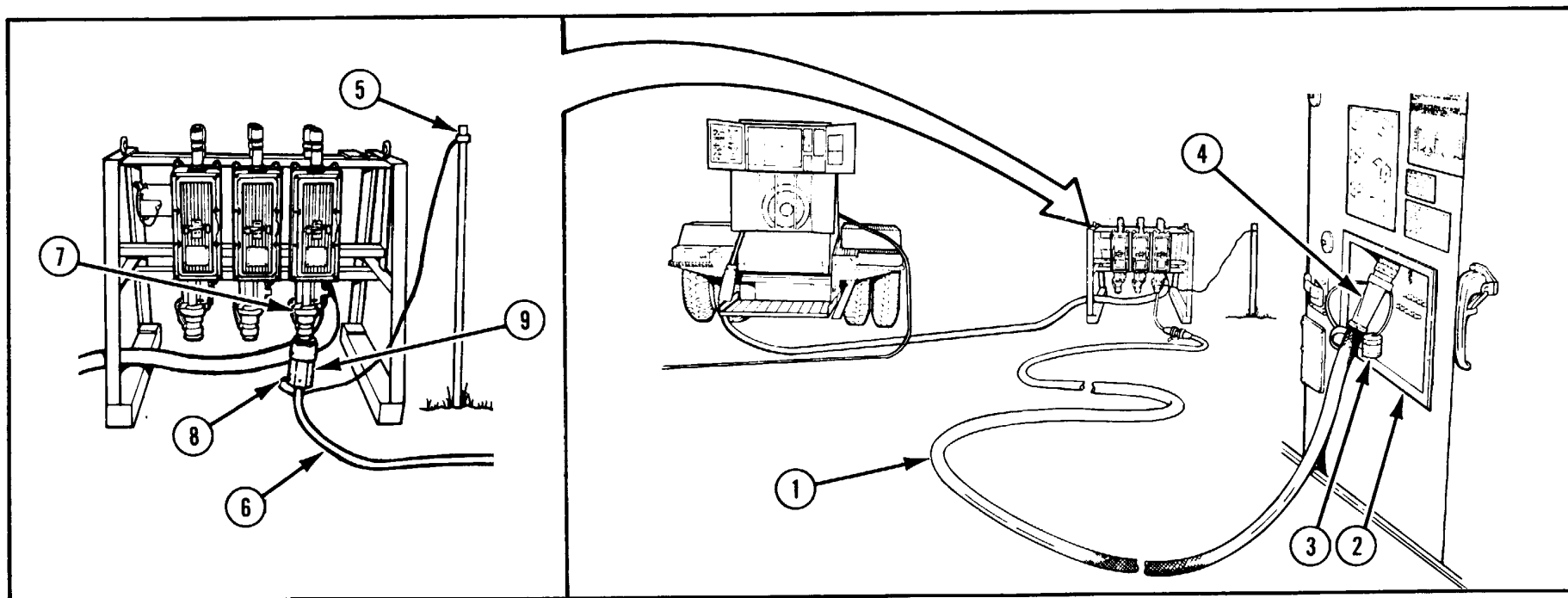
- (2) Disconnect compressed air source from quick-disconnect male coupling assembly (1) on end of airhose. Then disconnect quick-disconnect female coupling assembly (2) of airhose from quick-disconnect male coupling assembly (3) on exterior shelter wall.



- (3) Rotate machinist's vise (4) located on left table (5) 90 degrees clockwise to stowed position (jaws perpendicular to table) and tighten.



- (4) Remove sorting file (6) from wall shelving (7) and place on left table (5) with two straps (8).



b. Disconnection of Shop Set from Power Source.

WARNING

Do not connect or disconnect power cables when shop set is energized.

- (1) De-energize shop set by placing circuit breaker on power distribution panel connected to power source in OFF position.
- (2) Disconnect connector of 120/208V cable assembly (1) from receptacle J1 on power input panel (2) of shelter. Put dust covers (3) on connectors (4).
- (3) Pull grounding rod (5) out of ground.

- (4) Disconnect cable adapter assembly (6) from mating connector (7) on power distribution panel.

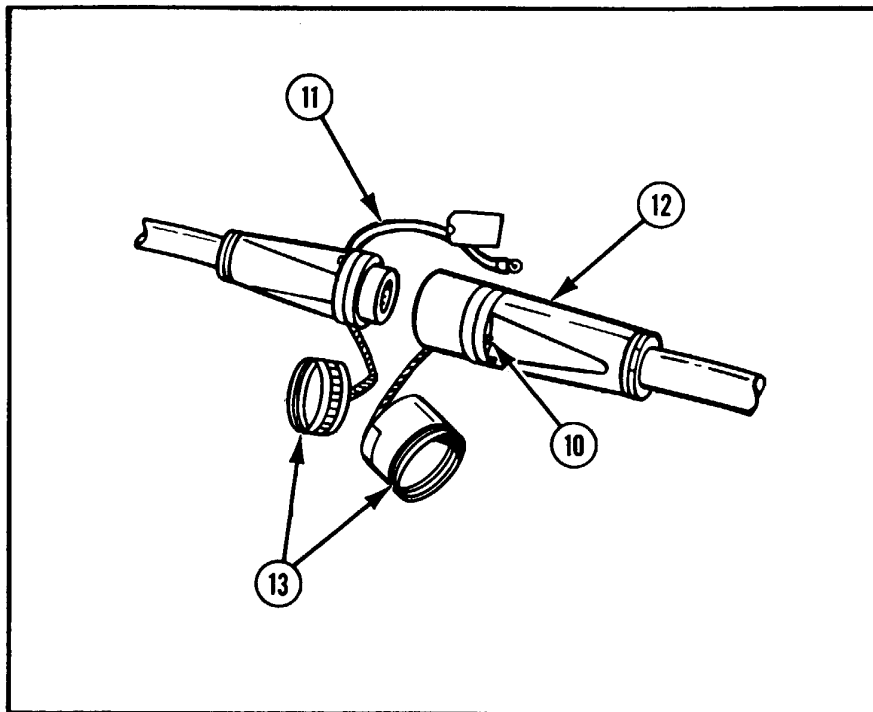
NOTE

It is not normally required that grounding rod (5), cable adapter assembly (6), and two 120/208V cable assemblies (1) be disconnected from each other. If disconnection is required, proceed to step (5). If disconnection is not required, omit steps (5), (6), (7), and (8), and proceed to step (9).

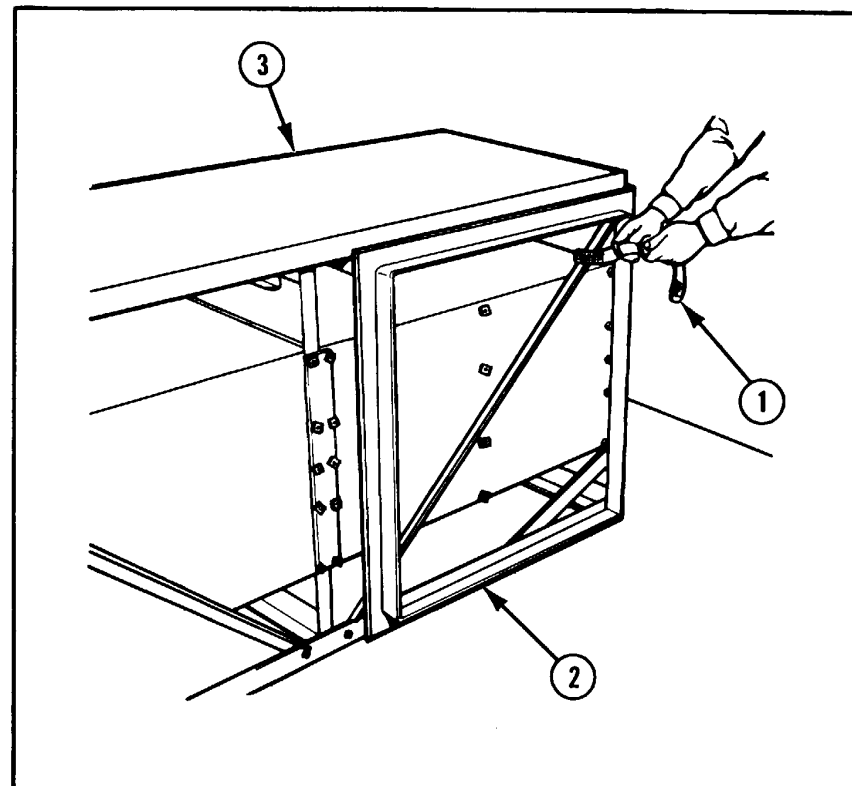
- (5) Unclamp wire of grounding rod (5) from terminal lug (8) of plug connector (9).



2-5. PREPARATION FOR MOVEMENT (cont)



- (6) Remove screw (10) and disconnect cable assembly (11) from male connector (12) on 120/208V cable assembly.
- (7) Replace screw (10).
- (8) Disconnect all connectors.
- (9) Install dust covers (13).
- (10) Coil 120/208V cable assemblies and cable in adapter assembly. Lay on shelter floor in front of tool cabinet.

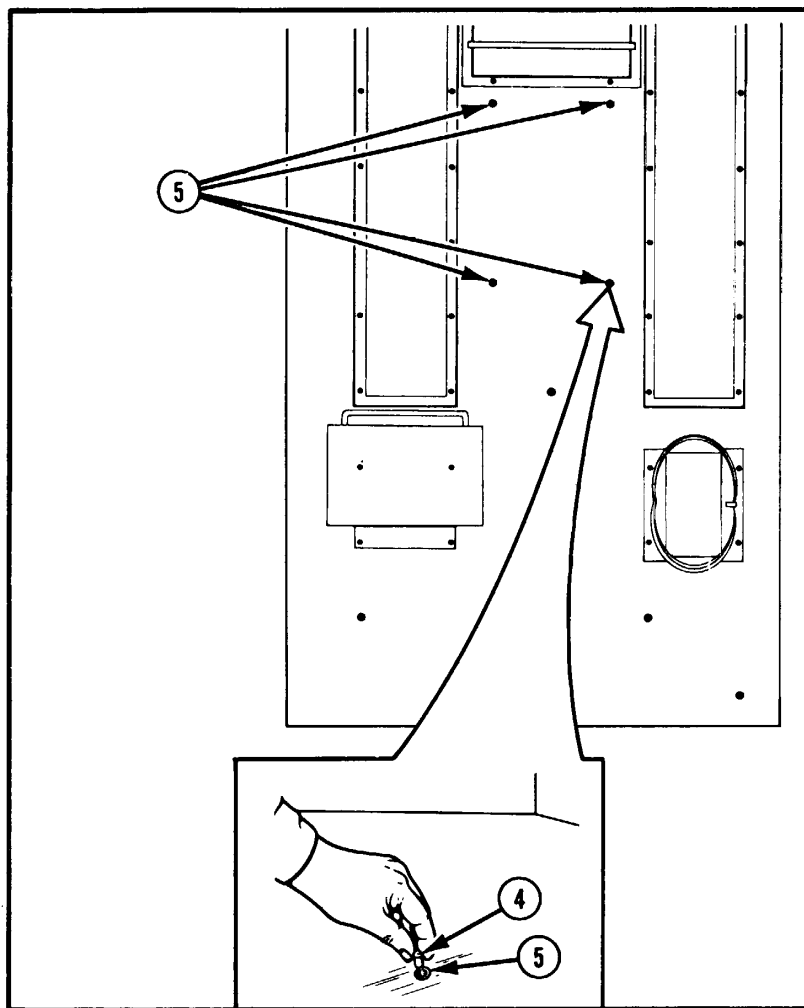


c. Stowing of ECU's.

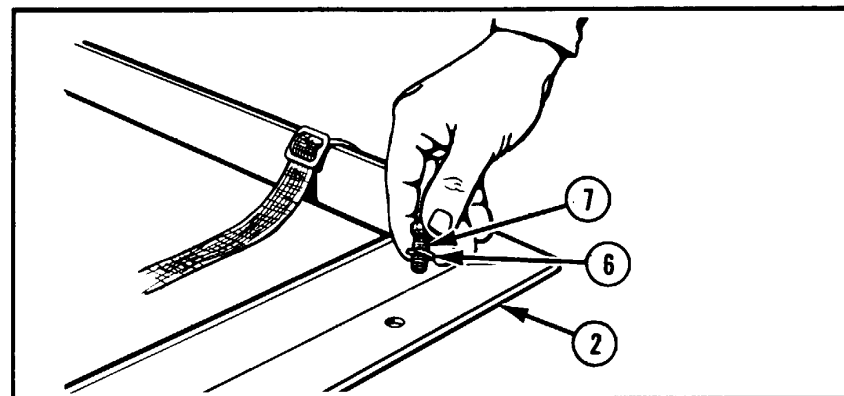
NOTE

There are two ECU's furnished with the shop set. The following instructions pertain to only one ECU.

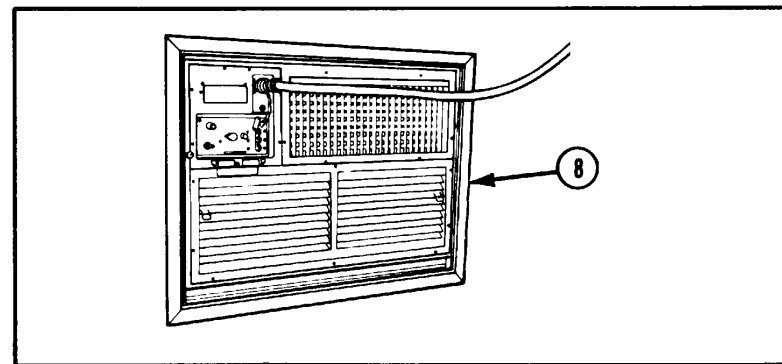
- (1) Remove two straps (1) holding frame assembly (2) and mounting hardware to back of right table (3).



(2) Remove four plastic plugs (4) from blind inserts (5) in shelter floor (frame assembly mounting holes).



(3) Place frame assembly (2) over mounting holes in shelter floor. Secure with four lockwashers (6) and four screws (7).



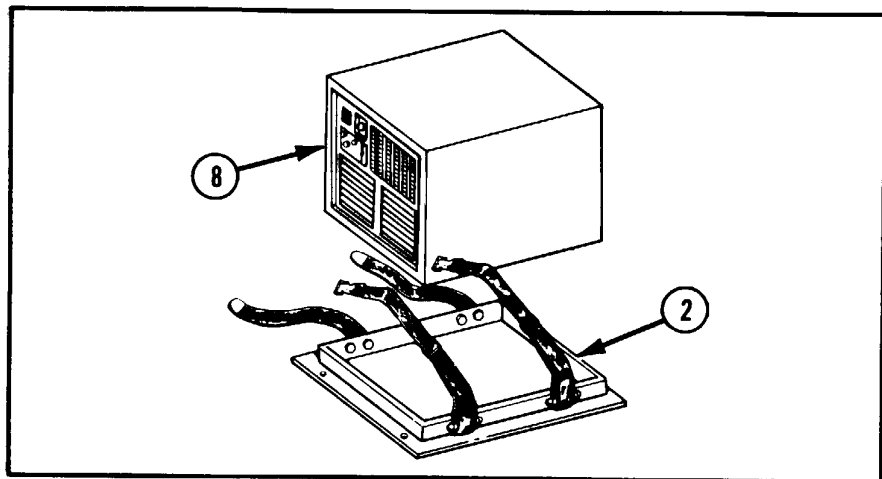
WARNING

A minimum of four personnel is required when moving or lifting the ECU's. (Each weighs approximately 270 lb (122 kg).)

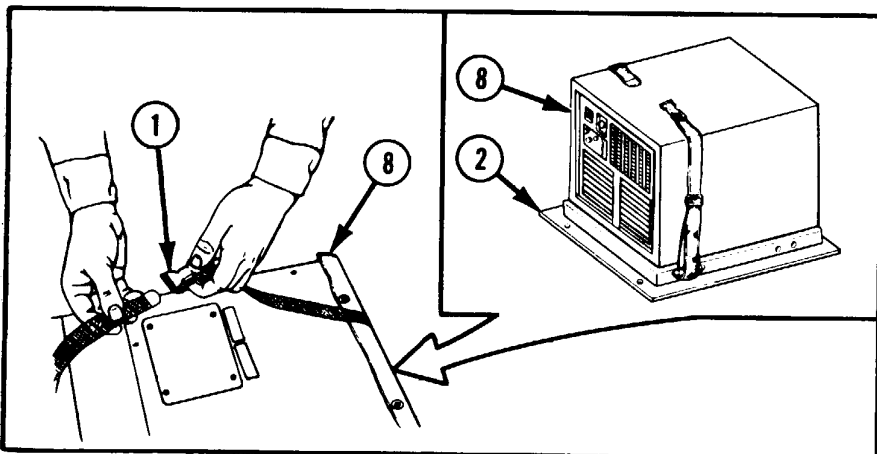
(4) Remove the ECU (8) from the shelter wall per TM 10-5410-224-14.



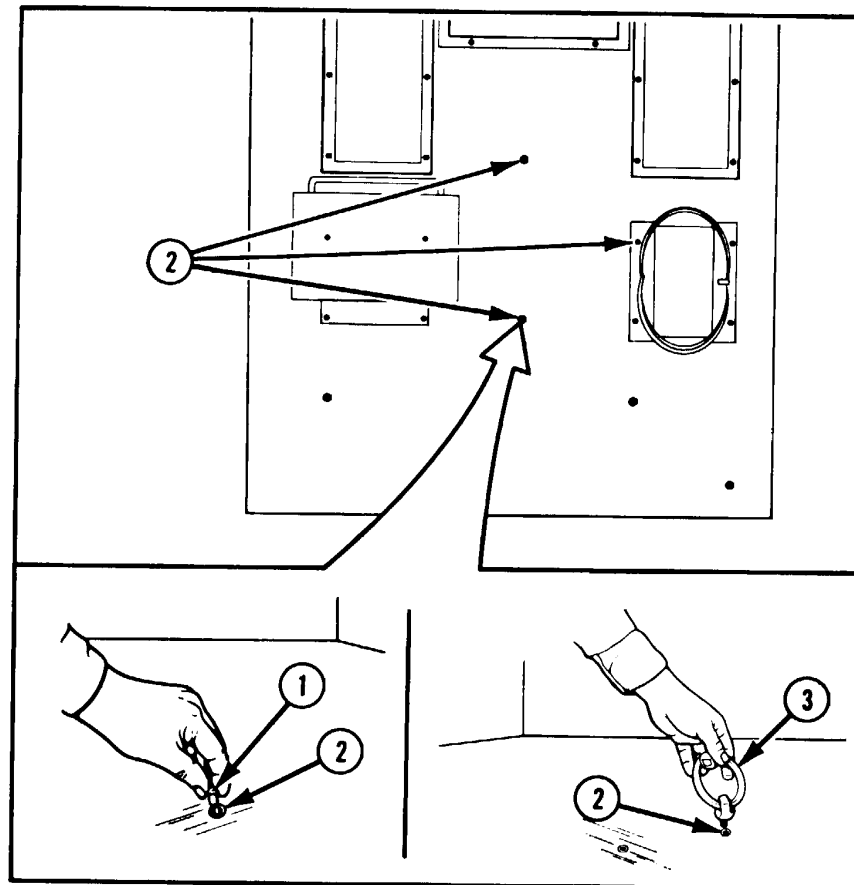
2-5. PREPARATION FOR MOVEMENT (cont)



(5) Lift the ECU (8) into the frame assembly (2).

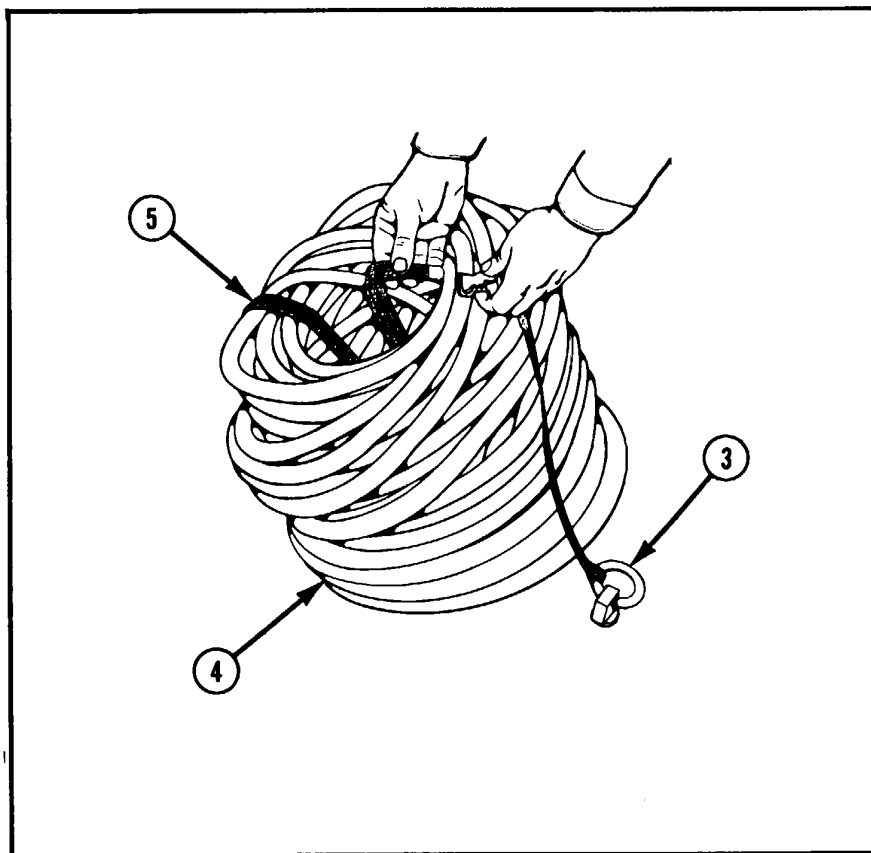


(6) Secure ECU (8) to frame assembly (2) with two straps (1).



d. Stowing of Equipment to Floor.

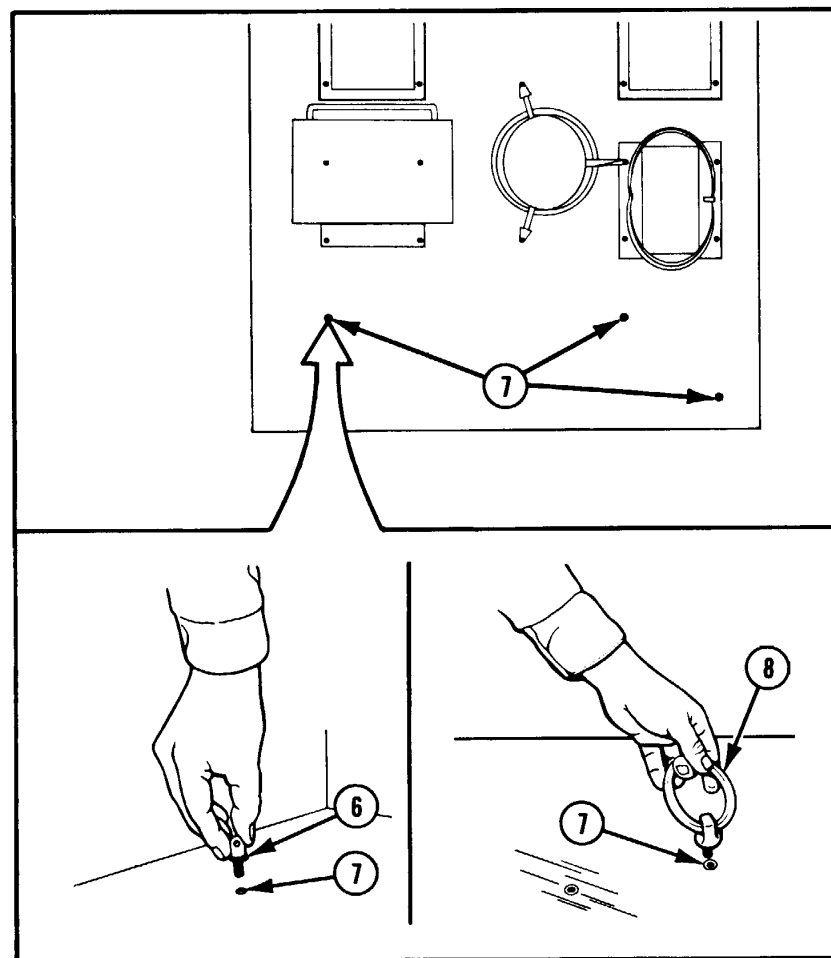
- (1) Remove three plastic plugs (1) from blind inserts (2) in floor.
- (2) Install three tiedown rings (3) into blind inserts (2).



NOTE

Coil (4) contains airhose, cable adapter assembly, and two 120/208V cable assemblies coiled together.

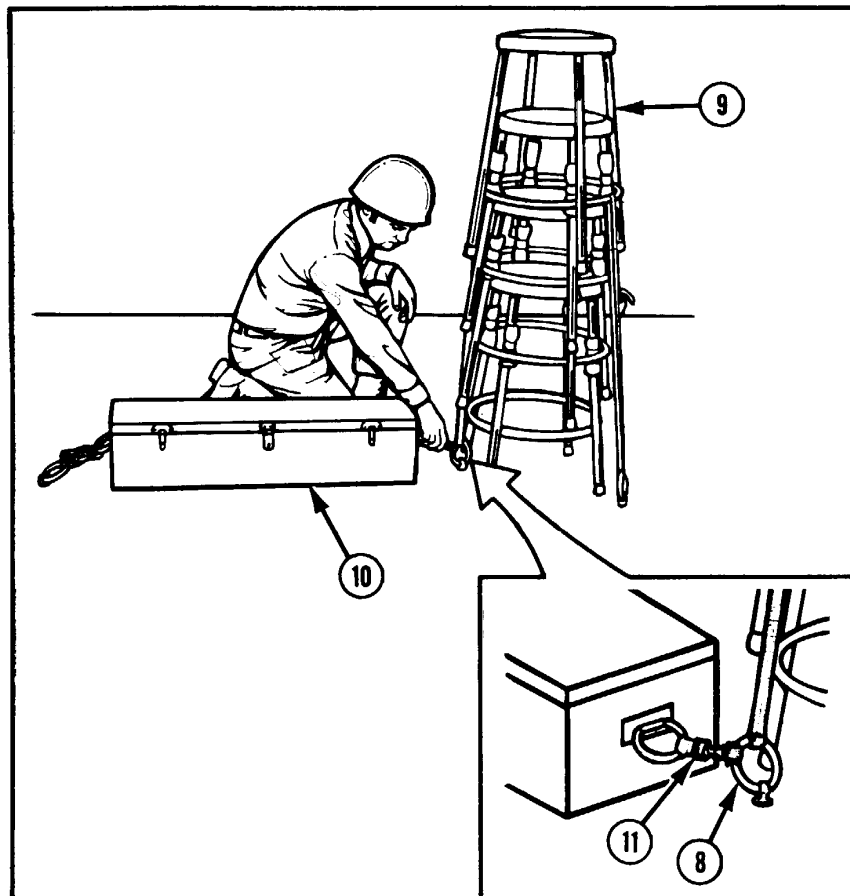
- (3) Place coil (4) in between three tiedown rings (3). Coil is between ECU and cargo door.
- (4) Tie coil (4) to tiedown rings (3) with three straps (5).



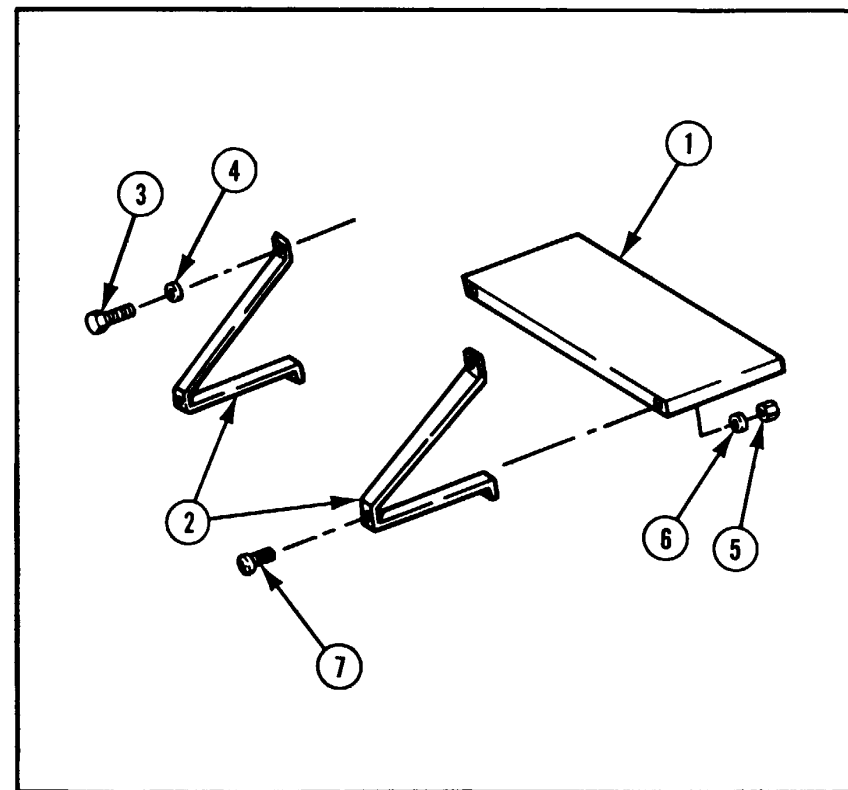
- (5) Remove three plastic plugs (6) from blind inserts (7) in floor between coil and cargo door.
- (6) Install three tiedown rings (8) into blind inserts (7).



2-5. PREPARATION FOR MOVEMENT (cont)



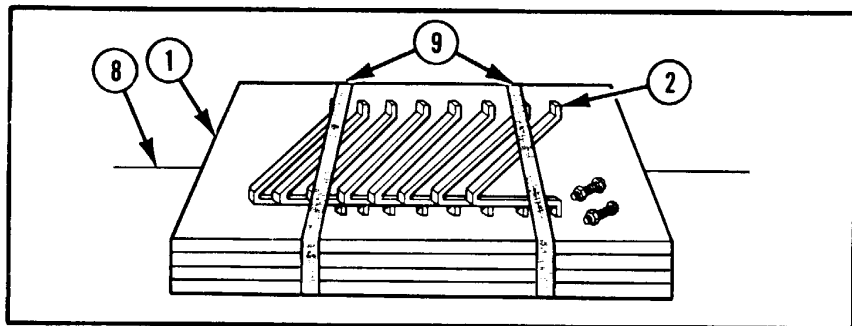
- (7) Place four stools (9) and equipment storage chest (10) in between tiedown rings (8).
- (8) Secure four stools (9) and equipment storage chest (10) in place by tying to tiedown rings (8) with four straps (11).



e. Stowing of Wall Shelving.

- (1) Remove each wall shelf (1) with two attached brackets (2) from shelter wall panel by removing four screws (3) and four flat washers (4).
- (2) Remove two brackets (2) from each wall shelf (1) by removing two nuts (5), two flat washers (6), and two screws (7).

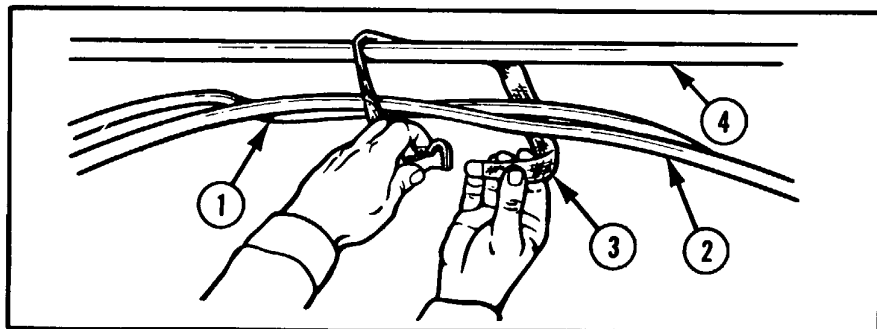
2-6. OPERATING INSTRUCTIONS ON DECALS AND INSTRUCTION PLATES



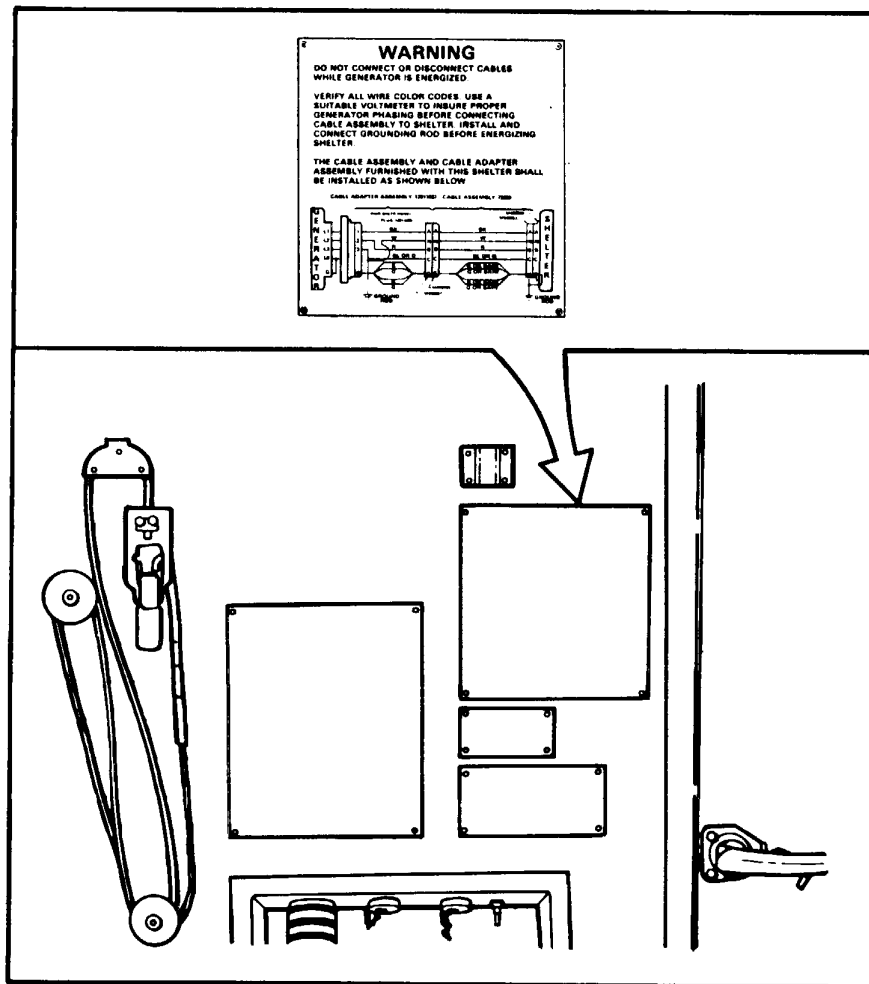
(3) Place wall shelves (1), brackets (2), and mounting hardware on left table (8). Secure in place with two straps (9).

f. Placing Shelter in Stowed Condition.

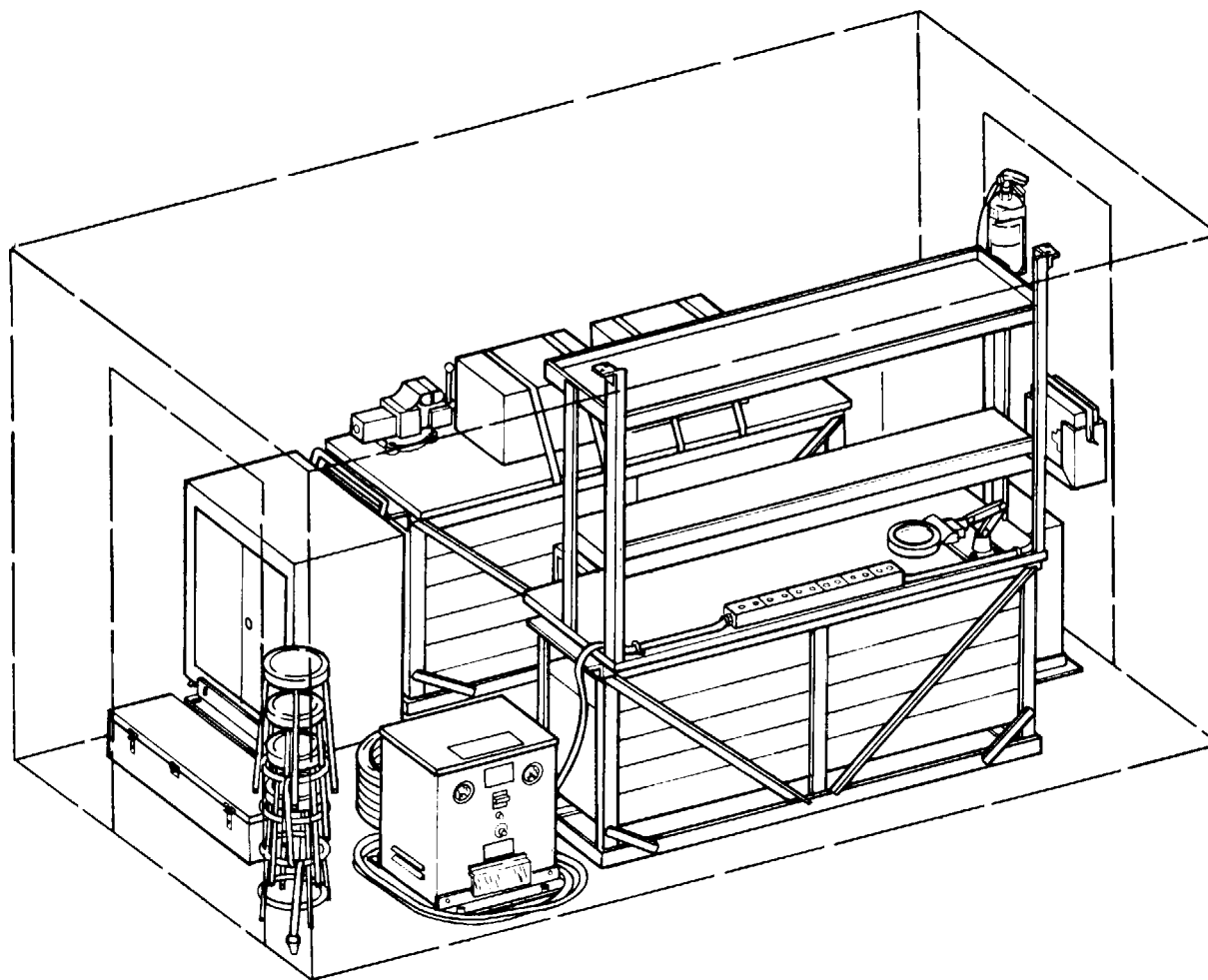
- (1) Stow components of shelter such as ventilation fans, grounding rod, etc, per TM 10-5410-224-14.
- (2) Stow foldout panels of shelter per TM 10-5410-224-14.



(3) Coil electrical cable (1) and air conditioning cable (2) and hang with strap (3) to conduit (4) above personnel door.



Warning Plate. This plate, located on the outside wall to the left of the personnel door, gives instructions and warnings for the electrical cables.



SHELTER. SHOP SET AVVIM (DIV) FIRE CONTROL REPAIR, AIRMOBILE, SHELTER-MOUNTED (STOWED POSITION)

**CHAPTER 3
INTERMEDIATE MAINTENANCE INSTRUCTIONS**

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Section I. REPAIR PARTS, SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT

3-1. COMMON TOOLS AND EQUIPMENT

For authorized common tools and equipment refer to SC 4931-95-CL-A21.

3-2. SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT

No support equipment or TMDE is required for the shop set. Special tools are listed in appendix C of this manual.

3-3. REPAIR PARTS

Repair parts are listed and illustrated in appendix C of this manual.

Section II. SERVICE UPON RECEIPT

3-4. SITE AND SHELTER REQUIREMENTS

a. The ground shall be level and firm enough so that leveling jacks on the shelter can properly level the shop set.

b. A compressed air source must be supplied with a hose capable of connection to the male quick-disconnect coupling assembly located on the exterior shelter wall to the left of the personnel door.

c. An electrical power source must be furnished to provide 120/208-volt, 3-phase, 60-Hz electrical power to the shelter.

3-5. SERVICE UPON RECEIPT--FIRE CONTROL REPAIR SHOP SET

LOCATION	ITEM	ACTION	REMARKS
1. Shop Set	Shelter	Inspect for damage due to shipping.	Refer to TM 10-5410-224-14.
2. Shelter	a. Tables and mounting frames	Inspect for bent or broken parts.	
	b. Power supply	Inspect for damage due to shipping.	Refer to TM 11-6130-246-12.
	c. Environmental control units and frame assemblies.	(1) Check ECU's for shipping damage. (2) Inspect frame assemblies for bent or cracked members.	Refer to TM 5-4120-243-14.
	d. Tool cabinet	(1) Check that doors open, close, and latch properly. (2) Check to see that tool cabinet is securely fastened in place.	
	e. Stools	Remove any packing and preservative material.	
	f. Hand tools (unmounted components on installed equipment list)	(1) Remove all packing and preservative material.	



3-5. SERVICE UPON RECEIPT--FIRE CONTROL REPAIR SHOP SET (cont)

LOCATION	ITEM	ACTION	REMARKS
2. Shelter (cont)	f. Hand tools (unmounted components on installed equipment list) (cont)	(2) Check that hand tools are present and serviceable. (3) Clean if required.	
3. Left Table	a. Sorting file	(1) Remove any packing material and inspect for proper assembly or damage. (2) Clean if required.	
	b. Wall shelving	Inspect for damaged or missing parts.	
	c. Machinist's vise	(1) Remove any packing material and inspect for proper assembly or damage. (2) Clean if required.	
4. Right Table	a. Magnifier instrument	(1) Remove packing material and check for damaged lens. (2) Clean if required.	
	b. Shelving assembly	Inspect for damaged parts.	

3-6. CHECKING UNPACKED EQUIPMENT

- a. Inspect the equipment for damage incurred during shipment. If the equipment has been damaged, report the damage on SF Form 364, Report of Discrepancy (ROD).
- b. Check the equipment against the packing slip to see if the shipment is complete. Report all discrepancies in accordance with the instructions of TM 38-750.
- c. Check to see whether the equipment has been modified.

3-7. INSTALLATION INSTRUCTIONS

- a. Stowed Components of Shop Set. Refer to chapter 2 for installation instructions for placing stowed components of shop set into operating mode.
- b. Components on Installed Equipment List. Place all items (which are small hand tools or components of hand tools) listed on installed equipment list (SC 4931-95-CL-A21) in storage areas. These areas include table drawers, equipment storage chest, and tool cabinet.

Section III. TROUBLESHOOTING

3-8. TROUBLESHOOTING INFORMATION

- a. The symptom index can be used as a quick guide to troubleshooting. Common malfunctions are listed in alphabetical order with a page number

reference to the troubleshooting table where a test or inspection and corrective action are provided.

SYMPTOM INDEX

	Troubleshooting Procedure (Page)
CABLE ADAPTER ASSEMBLY	
Environmental control units or exhaust fans do not operate correctly	3-8
CABLE ASSEMBLY, 120/208V	
Environmental control units or exhaust fans do not operate correctly	3-8



3-8. TROUBLESHOOTING INFORMATION (cont)

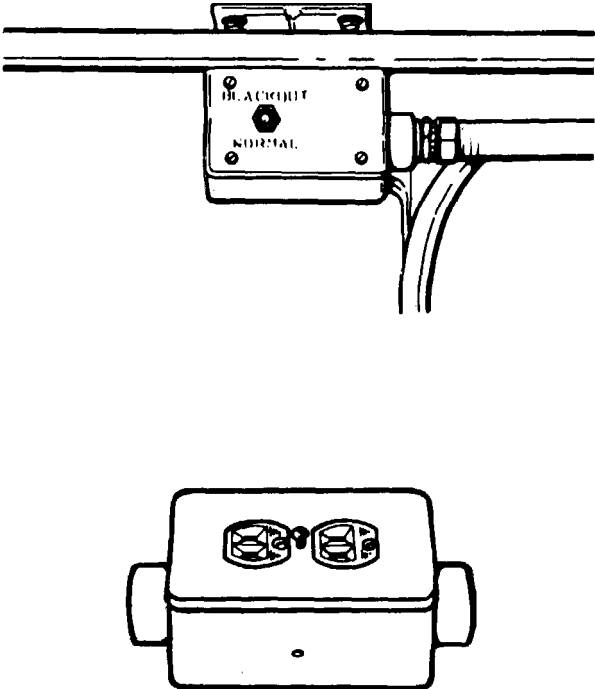
SYMPTOM INDEX (cont)

	Troubleshooting Procedure (Page)
CEILING ELECTRICAL OUTLETS	
There is no electrical power at outlets	3-7
POWER SUPPLY	
The power supply does not operate.....	3-9
SHELTER LIGHTS	
Lights fail to come on	3-7
WORK TABLE ELECTRICAL OUTLETS	
There is no electrical power at work tables.....	3-9

b. The troubleshooting table (p 3-7) lists the common malfunctions which you may find during operation or maintenance of the shop set. You should perform the tests/inspections and corrective actions in the order listed.

c. This manual cannot list all malfunctions that may occur, nor all tests or inspections and corrective actions. If a malfunction is not listed or is not corrected by a listed corrective action, notify your supervisor.

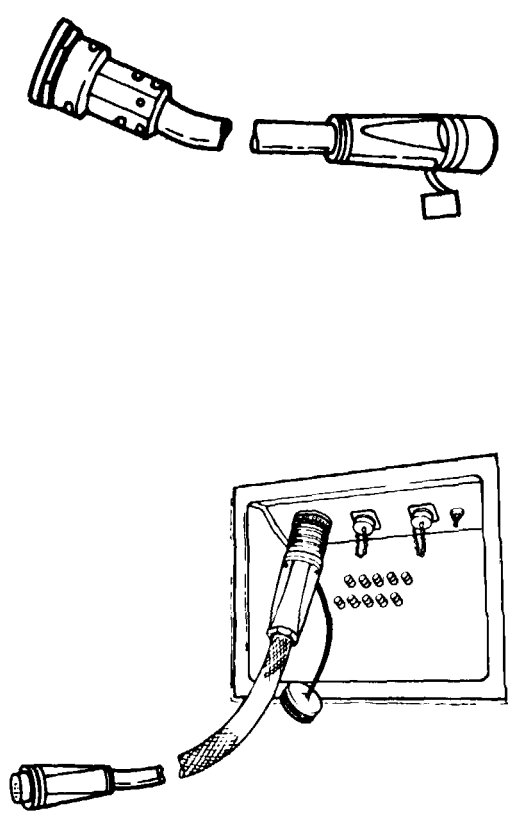
Table 3-1. Troubleshooting.

<p>MALFUNCTION TEST OR INSPECTION CORRECTIVE ACTION</p>	<p>LOCATION</p>
<p style="text-align: center;">SHELTER LIGHTS</p> <p>1. LIGHTS FAIL TO COME ON.</p> <p>Step 1. Check for open doors or blackout switch in BLACKOUT position.</p> <p style="padding-left: 40px;">Close doors or place blackout switch in NORMAL position.</p> <p>Step 2. Check for proper operation of door microswitches.</p> <p style="padding-left: 40px;">Aline or replace microswitches as required (p 3-186).</p> <p style="text-align: center;">CEILING ELECTRICAL OUTLETS</p> <p>2. THERE IS NO ELECTRICAL POWER AT OUTLETS.</p> <p>Step 1. Check circuit breaker CB9.</p> <p style="padding-left: 40px;">Reset circuit breaker.</p> <p>Step 2. Check for defective outlets or wiring.</p> <p style="padding-left: 40px;">With power off, repair or replace defective parts (p 3-227).</p>	 <p>The diagram shows two electrical components. The top component is a rectangular switch mounted on a horizontal bar, with 'BLACKOUT' and 'NORMAL' labels and a central knob. The bottom component is a rectangular ceiling electrical outlet with two circular ports on top and a small indicator light on the front.</p>



3-8. TROUBLESHOOTING INFORMATION (cont)

Table 3-1. Troubleshooting (cont).

<p>MALFUNCTION TEST OR INSPECTION CORRECTIVE ACTION</p>	<p>LOCATION</p>
<p style="text-align: center;">CABLE ADAPTER ASSEMBLY</p> <p>3. ENVIRONMENTAL CONTROL UNITS OR EXHAUST FANS DO NOT OPERATE CORRECTLY.</p> <p>Step 1. Check that power source is connected according to instructions on the warning plate (p 2-23).</p> <p style="padding-left: 40px;">With power source off, make connections specified on warning plate.</p> <p>Step 2. Check cable adapter assembly for open circuits.</p> <p style="padding-left: 40px;">With power source off, disconnect cable adapter assembly and make an ohmmeter check of each phase through the cable from pin end to socket end. Repair as required (p 3-287).</p> <p style="text-align: center;">120/208V CABLE ASSEMBLY</p> <p>4. ENVIRONMENTAL CONTROL UNITS OR EXHAUST FANS DO NOT OPERATE CORRECTLY.</p> <p>Step 1. Check that electrical power to the shelter is connected according to instructions on the warning plate (p 2-23).</p> <p style="padding-left: 40px;">With power source off, make connections specified on warning plate.</p>	 <p>The diagram shows two electrical components. The top component is a cable adapter assembly, consisting of a cylindrical metal housing with a flange on one end and a smaller cylindrical section on the other. The bottom component is a 120/208V cable assembly, which includes a rectangular metal enclosure with two toggle switches and a terminal block with several screw terminals. A thick, flexible cable is connected to the enclosure, and a separate cable with a connector is shown below it.</p>

Step 2. Check the 120/208V cable assembly for open circuits.

With power source off, disconnect 120/208V cable assembly and make an ohmmeter check of each phase through the cable from the socket connector end to the pin connector end. Repair as required (p 3-324).

POWER SUPPLY

5. THE POWER SUPPLY DOES NOT OPERATE.

Step 1. Check circuit breaker CB15.

Reset the circuit breaker.

Step 2. Check the circuit breaker on the power supply.

Repair as required; see TM 11-6130-246-12 for the power supply technical information.

Step 3. With electrical power off, check wire and terminal connections from CB15 to the power supply.

Repair as required (p 3-46).

WORK TABLE ELECTRICAL OUTLETS

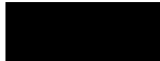
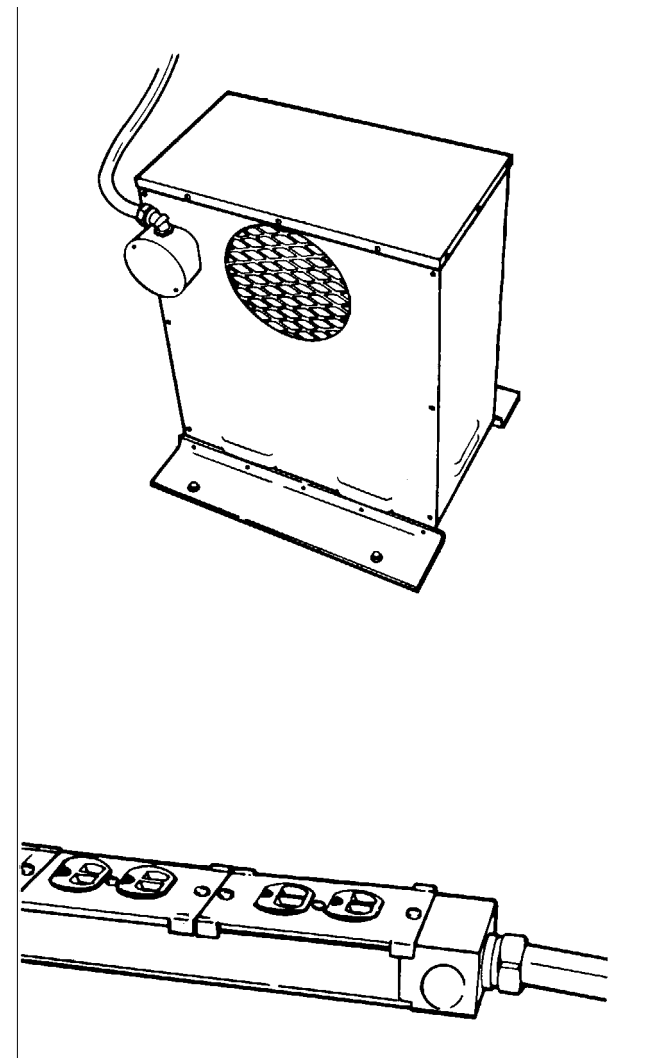
6. THERE IS NO ELECTRICAL POWER AT WORK TABLE OUTLETS.

Step 1. Check circuit breakers CB6 and CB8.

Reset circuit breakers.

Step 2. With power off, check electrical connections and wiring to the outlets (p 3-46).

Repair as required (p 3-224).



Section IV. MAINTENANCE PROCEDURES

NOTE

The left and right table references mean the two tables seen while standing in the cargo doorway and looking into the shop set at that entrance.

Paragraph 3-9 contains instructions for parts called out on the shop set top assembly drawing which are not assemblies. Paragraphs 3-10 thru 3-18 contain

maintenance instructions for parts called out on installation or modification drawings. Paragraphs 3-19 thru 3-46 contain maintenance instructions for all the assemblies.

The maintenance instructions are written as if the shop set were in the operating mode.

3-9. SHOP SET--MAINTENANCE INSTRUCTIONS

INITIAL SETUP

Test Equipment
Ohmmeter
Voltmeter

Special Tools
AVIM sheet metal shop set (SC 4920-99-CL-A91, part VI.)
AVIM tool crib shop set (SC 4920-99-CL-A91, part VII)

AVIM welding shop set (SC 4920-99-CL-A91, part IX)
Basic aircraft armament repairman tool set (SC 4933-95-CL-A13)
Fire control repair shop set (SC 49;31-95-CL-A21)
Removal tool no. 4 (MS90562-5)
Removal tool no. 6 (MS90562-6)
Supplemental aircraft armament repairman tool set (SC 4933-95-CL-A14)

Materials/Parts*

- | | |
|--|--|
| Abrasive cloth (item 4, app D) | Contact pins (A, B, and C) (3) (MS90559-8) |
| Adhesive (item 1, app D) | Ground socket (MS90560-7) |
| Adhesive (item 2, app D) | Lug terminal (MS25036-111) |
| Adhesive (item 3, app D) | Lug terminal (MS25036-156) |
| Black semigloss lacquer (item 10, app D) | Preformed packing (MS29513-132) |
| Cloth (item 5, app D) | Sockets (A, B, C, and N) (4) (MS90560-5) |
| Cloth (item 17, app D) | Terminal (MS25036-110) |
| Dry cleaning solvent (item 6, app D) | Terminals (2) (MS25036-112) |
| Forest green paint (item 7, app D) | Warning plate (12011686) |
| Gloves (item 9, app D) | Wire (12011690-1) |
| Lens tissue (item 14, app D) | Wire (12011690-5) |
| Lubricating oil (item 12, app D) | Wire (12011690-6) |
| Marking ink (item 13, app D) | Wire (12011690-7) |
| Solder (item 18, app D) | Wire (12011690-8) |
| Tape (item 19, app D) | Wire (12011690-10) |
| White paint (item 11, app D) | Wire (12011690-11) |
| Band (MIL-P-15024/8) | Wire (12011690-12) |
| Blind inserts (2) (12011684) | Wire (12011690-13) |
| Blind inserts (13) (12011685) | Wire (12011690-14) |
| Blind nuts (8) (12011679-1) | Wire (12011690-16) |
| Blind nuts (6) (12011679-2) | Wire (12011690-18) |
| Bushings (12) (MS3348-4-6L) | Wire (12011690-20) |
| Compression connector (12011667) | Wire (12011690-21) |
| Connector (MS3106R-20-8S(C)) | Wire (12011690-22) |
| Contact pin (G) (MS90559-12) | Wire (12011690-23) |
| Contact pin (N) (MS90559-9) | |

* Use parts, as required, according to appendix C.



3-9. SHOP SET--MAINTENANCE INSTRUCTIONS (cont)

INITIAL SETUP (cont)

Personnel required: 10
 Aircraft fire control
 repairmen: 4 Lift the ECU.
 Aircraft fire control
 repairmen: 2

Disassemble/reassemble
 conduit.
 Lift table during removal/
 installation.
 To remove/install the
 shelving assembly.

References

- SC 4931-95-CL-A21
- TM 10-5410-224-14
- TM 11-6130-246-12
- TM 43-0139
- TM 5-4120-243-14

TM 9-237

- Appendix C
- Appendix D
- Appendix E
- 3-74 Wire table.
- 3-48 Wiring diagram.

- 3-49 Schematic diagram.
- 3-128 Installed equipment list--maintenance instructions.
- 3-46 Disassembly and reassembly procedures for shop set--electrical installation--maintenance instructions.
- 3-239 Reassembly procedure for wire assembly.
- 3-237 Disassembly procedure for wiring harness assembly (switchbox to distribution panel).
- 3-237 Reassembly procedure for wiring harness assembly (switchbox to distribution panel).
- 3-273 Repair procedure for ECU stowing frame assembly--webbing strap--maintenance instructions.
- 3-284 Repair procedure for first aid kit holder assembly--bracket assembly--maintenance instructions.
- 3-279 Repair procedure for first aid kit holder assembly--holder assembly--maintenance instructions.

- 3-287 Reassembly, test procedures, and installation procedures for cable adapter assembly.
- 3-287 Removal and disassembly procedures for cable adapter assembly.
- 3-324 Reassembly, test procedures, and installation procedures for 120/208V cable assembly.
- 3-324 Removal and disassembly procedures for 120/208V cable assembly.
- 3-344 Repair procedures for 120/208V cable assembly--electrical plug connector (female).
- 3-346 Repair procedures for 120/208V cable assembly--electrical plug connector (male).

Troubleshooting References

- 3-9 The power supply does not operate.
- 3-7 There is no electrical power at outlets.
- 3-9 There is no electrical power at work table outlets.
- 3-7 Lights fail to come on.
- 3-8 Environmental control units or exhaust fans do not operate correctly.

Equipment Conditions

- 2-17 Circuit breaker on power distribution panel must be in OFF position (task no. 2 and 3).
- 2-17 120/208V cable assembly disconnected at shop set (task no. 2) 3-46 Electrical installation removed (task no. 4, 6, and 24).
- 3-115 Conduit installation removed (task no. 6 and 24).
- 3-246 Shelving assembly removed (task no. 6)
- 2-7 Ventilation fan and mounting panel removed from shelter (task no. 14).
- 2-11 ECU removed from stowing frame assembly (task no. 24 and 25).



3-9. SHOP SET--MAINTENANCE INSTRUCTIONS (cont)

LIST OF TASKS			
Task No.	Task	Task Ref (Page)	Troubleshooting Ref No. (Page)
1	Maintain shop set: a. Inspect. b. Disassemble. c. Repair. d. Repair/apply stencils. e. Install blind nuts. f. Reassemble.	3-26 3-31 3-35 3-38 3-40 3-42	
2	Maintain shop set--electrical installation: a. Inspect. b. Disassemble. c. Inspect after disassembly. d. Repair. e. Modify. f. Reassemble. g. Test.	3-47 3-50 3-73 3-73 3-77 3-79 3-111	3-7, 3-9
3	Maintain shop set--grounding stud: a. Disassemble. b. Inspect. c. Service. d. Repair. e. Reassemble.	3-112 3-113 3-113 3-113 3-114	

4	Maintain shop set--conduit installation:	3-115 3-115 3-119 3-121 3-122
	<ul style="list-style-type: none"> a. Inspect. b. Disassemble. c. Repair. d. Modify. e. Reassemble. 	
5	Maintain shop set--installed equipment list:	3-129 3-132 3-134 3-136 3-139 3-141
	<ul style="list-style-type: none"> a. Inspect. b. Service. c. Remove. d. Repair. e. Modify tables. f. Install. 	
6	Maintain shop set--ceiling modification:	3-145 3-146 3-147 3-148 3-150
	<ul style="list-style-type: none"> a. Inspect. b. Disassemble. c. Repair. d. Modify ceiling. e. Reassemble. 	
7	Maintain shop set--door modification:	3-154 3-157 3-157 3-158 3-159
	<ul style="list-style-type: none"> a. Disassemble. b. Inspect. c. Repair. d. Modify door. e. Reassemble. 	



3-9. SHOP SET--MAINTENANCE INSTRUCTIONS (cont)

LIST OF TASKS			
Task No.	Task	Task Ref (Page)	Troubleshooting Ref No. (Page)
8	Maintain shop set--table modification: <ul style="list-style-type: none"> a. Inspect. b. Remove. c. Disassemble. d. Repair. e. Modify. f. Reassemble. g. Install. 	<ul style="list-style-type: none"> 3-163 3-164 3-165 3-166 3-169 3-171 3-172 	
9	Maintain shop set--tool cabinet modification: <ul style="list-style-type: none"> a. Remove. b. Inspect. c. Disassemble. d. Repair. e. Modify tool cabinet. f. Reassemble. g. Install. 	<ul style="list-style-type: none"> 3-173 3-174 3-175 3-176 3-176 3-177 3-177 	

10	Maintain shop set--miscellaneous spare accessories:	3-179
	a. Inspect.	3-179
	b. Remove.	3-180
	c. Repair.	3-180
	d. Install.	
11	Maintain electrical cable assembly:	
	a. Remove.	3-181
	b. Inspect.	3-182
	c. Disassemble.	3-182
	d. Repair.	3-183
	e. Reassemble.	3-184
	f. Install.	3-185
12	Maintain switchbox and mounting bracket (with toggle 3-7 switch):	
	a. Inspect.	3-186
	b. Remove/disassemble.	3-187
	c. Repair.	3-189
	d. Modify.	3-189
	e. Reassemble/install.	3-190
	f. Adjust microswitch.	3-194
	g. Test.	3-194
13	Maintain switchbox and mounting bracket (without 3-7 toggle switch):	
	a. Inspect.	3-196
	b. Remove/disassemble.	3-197
	c. Repair.	3-198
	d. Modify.	3-199
	e. Reassemble/install.	3-199
	f. Adjust microswitch.	3-202
	g. Test.	3-202



3-9. SHOP SET--MAINTENANCE INSTRUCTIONS (cont)

LIST OF TASKS (cont)			
Task No.	Task	Task Ref (Page)	Troubleshooting Ref No. (Page)
14	Maintain fan blackout cover:		
	a. Remove.	3-204	
	b. Inspect.	3-205	
	c. Repair.	3-206	
15	Maintain power supply mounting:		
	d. Install.	3-207	
	a. Inspect.	3-208	
	b. Remove.	3-209	
	c. Disassemble.	3-209	
	d. Repair.	3-210	
	e. Modify power supply.	3-210	
f. Reassemble.	3-212		
16	Maintain fluorescent lamp:		
	g. Install.	3-212	
	a. Remove.	3-213	
	b. Disassemble.	3-214	
	c. Inspect.	3-215	
	d. Service.	3-215	
	e. Repair.	3-215	
	f. Reassemble.	3-215	
g. Modify fluorescent lamp.	3-216		
	h. Install.	3-217	

17	Maintain lamp bracket assembly:	3-219
	a. Inspect.	3-219
	b. Remove.	3-220
	c. Disassemble.	3-221
	d. Repair.	3-221
	e. Reassemble.	3-221
	f. Modify shelving assembly.	3-222
	g. Install.	
18	Maintain wiring harness assembly (bench): 3-9	
	a. Remove.	3-225
	b. Inspect.	3-225
	c. Disassemble.	3-226
	d. Repair.	3-226
	e. Reassemble.	3-227
	f. Install.	
19	Maintain wiring harness assembly (ceiling): 3-9	
	a. Remove.	3-228
	b. Inspect.	3-229
	c. Disassemble.	3-229
	d. Repair.	3-230
	e. Reassemble.	3-233
	f. Install.	
20	Maintain wire assembly (ceiling outlets):	
	a. Remove.	3-235
	b. Inspect.	3-235
	c. Disassemble.	3-235
	d. Repair.	3-236
	e. Reassemble.	3-236
	f. Install.	

3-9. SHOP SET--MAINTENANCE INSTRUCTIONS (cont)

LIST OF TASKS (cont)			
Task No.	Task	Task Ref (Page)	Troubleshooting Ref No. (Page)
21	Maintain wiring harness assembly (switchbox to distribution panel):		3-7
	a. Remove.	3-238	
	b. Inspect.	3-238	
	c. Disassemble.	3-238	
	d. Repair.	3-238	
	e. Reassemble.	3-239	
22	Maintain wire assembly:		
	a. Remove.	3-240	
	b. Inspect.	3-240	
	c. Disassemble.	3-241	
	d. Repair.	3-241	
	e. Reassemble.	3-242	
23	Maintain wire assembly (switchbox):		
	a. Remove.	3-244	
	b. Inspect.	3-244	
	c. Disassemble.	3-244	
	d. Repair.	3-245	
	e. Reassemble.	3-245	
	f. Install.	3-245	

24	Maintain shelving assembly:	<ul style="list-style-type: none"> a. Inspect. 3-246 b. Service. 3-248 c. Remove. 3-249 d. Disassemble. 3-250 e. Repair. 3-253 f. Reassemble. 3-257 g. Install. 3-264
25	Maintain ECU stowing frame assembly:	<ul style="list-style-type: none"> a. Inspect. 3-266 b. Remove. 3-267 c. Disassemble. 3-268 d. Repair. 3-269 e. Reassemble. 3-270 f. Install. 3-271
26	Maintain ECU stowing frame assembly--webbing strap:	<ul style="list-style-type: none"> a. Inspect. 3-272 b. Remove/disassemble. 3-272 c. Repair. 3-273 d. Reassemble/install. 3-273
27	Maintain first aid kit holder assembly:	<ul style="list-style-type: none"> a. Remove. 3-274 b. Inspect. 3-275 c. Disassemble. 3-276 d. Repair. 3-276 e. Reassemble. 3-277 f. Install. 3-278



3-9. SHOP SET--MAINTENANCE INSTRUCTIONS (cont)

LIST OF TASKS (cont)			
Task No.	Task	Task Ref (Page)	Troubleshooting Ref No. (Page)
28	Maintain first aid kit holder assembly--holder assembly: a. Remove. b. Inspect. c. Disassemble. d. Repair. e. Reassemble. f. Install.	3-279 3-280 3-280 3-281 3-281 3-282	
29	Maintain first aid kit holder assembly--bracket assembly: a. Remove. b. Inspect. c. Disassemble. d. Repair. e. Reassemble. f. Install.	3-284 3-285 3-285 3-285 3-286 3-286	
30	Maintain cable adapter assembly: a. Inspect. b. Service. c. Remove. d. Disassemble. e. Repair. f. Prepare cable for plug connector. g. Reassemble. h. Test procedures. i. Install.	3-288 3-289 3-289 3-291 3-295 3-300 3-308 3-309	3-8 3-298

31	Maintain cable adapter assembly--female connector:		3-8
	a. Remove.	3-311	
	b. Inspect.	3-311	
	c. Service.	3-311	
	d. Repair.	3-312	
	e. Install.	3-312	
32	Maintain cable adapter assembly--plug connector:		3-8
	a. Inspect.	3-313	
	b. Service.	3-313	
	c. Remove.	3-314	
	d. Install.	3-314	
33	Maintain cable adapter assembly--cable assembly:		
	a. Inspect.	3-315	
	b. Remove.	3-315	
	c. Disassemble.	3-316	
	d. Repair.	3-316	
	e. Reassemble.	3-317	
	f. Install.	3-318	
34	Maintain airhose:		
	a. Remove.	3-319	
	b. Inspect.	3-319	
	c. Disassemble.	3-320	
	d. Repair.	3-320	
	e. Reassemble.	3-321	
	f. Install.	3-321	
35	Maintain sorting file.:		
	a. Inspect.	3-322	
	b. Service.	3-322	
	c. Remove.	3-323	
	d. Disassemble.	3-323	
	e. Repair.	3-323	
	f. Reassemble.	3-323	
	g. Install.	3-323	



3-9. SHOP SET--MAINTENANCE INSTRUCTIONS (cont)

LIST OF TASKS (cont)			
Task No.	Task	Task Ref (Page)	Troubleshooting Ref No. (Page)
36	Maintain 120/208V cable assembly: a. Inspect. b. Remove. c. Disassemble. d. Repair. e. Reassemble. f. Test procedures. g. Install.	3-325 3-325 3-328 3-332 3-333 3-342 3-342	3-8
37	Maintain 120/208V cable assembly--electrical plug connector (female): a. Remove. b. Inspect. c. Service. d. Repair. e. Install.	3-344 3-344 3-345 3-345 3-345	3-8
38	Maintain 120/208V cable assembly--electrical plug connector (male): a. Remove. b. Inspect. c. Service. d. Repair. e. Install.	3-346 3-346 3-347 3-347 3-348	3-8

NOTE

The left and right table references mean the two tables seen while standing in the cargo doorway and looking into the shop set at that entrance.

Paragraph 3-9 contains instructions for parts called out on the shop set top assembly drawing which are not assemblies. Paragraphs 3-10 thru 3-18 contain

maintenance instructions for parts called out on installation or modification drawings. Paragraphs 3-19 thru 3-46 contain maintenance instructions for all the assemblies.

The maintenance instructions are written as if the shop set were in the operating mode.

THIS TASK COVERS:	d. Repair/application of stencils e. Installation of blind nuts f. Reassembly
a. Inspection b. Disassembly c. Repair	
INITIAL SETUP	
Special Tools	References
Basic aircraft armament repairman tool set (SC 4933-95-CL-A13) Fire control repair shop set (SC 4931-95-CL-A21)	Appendix D Appendix E TM 9-237
Material s/Parts	
Black semigloss lacquer (item 10, app D) Dry cleaning solvent (item 6, app D) Gloves (item 9, app D) Blind nut (2) (12011679-2) Warning plate (12011686)	



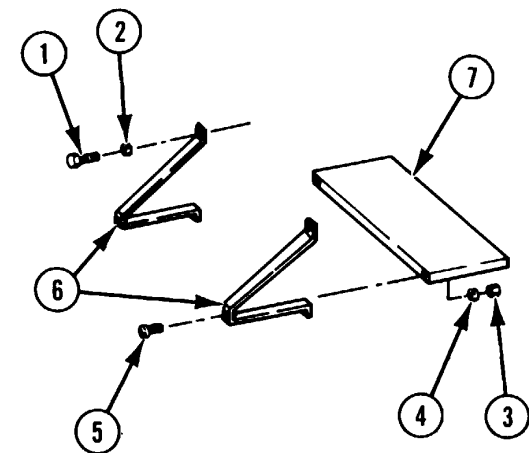
3-9. SHOP SET--MAINTENANCE INSTRUCTIONS (cont)

INSPECTION

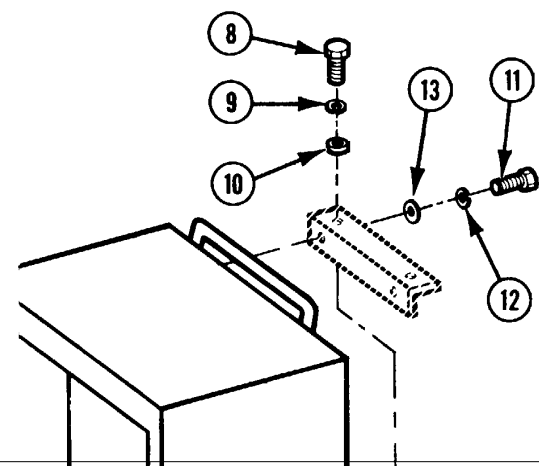
NOTE
 Steps 1 thru 3 pertain to one wall shelving. There are four wall shelvings mounted on the shelter walls.

NOTE
 Steps 4 thru 9 list parts used to secure the modified tool cabinet in place at cargo door end of left table.

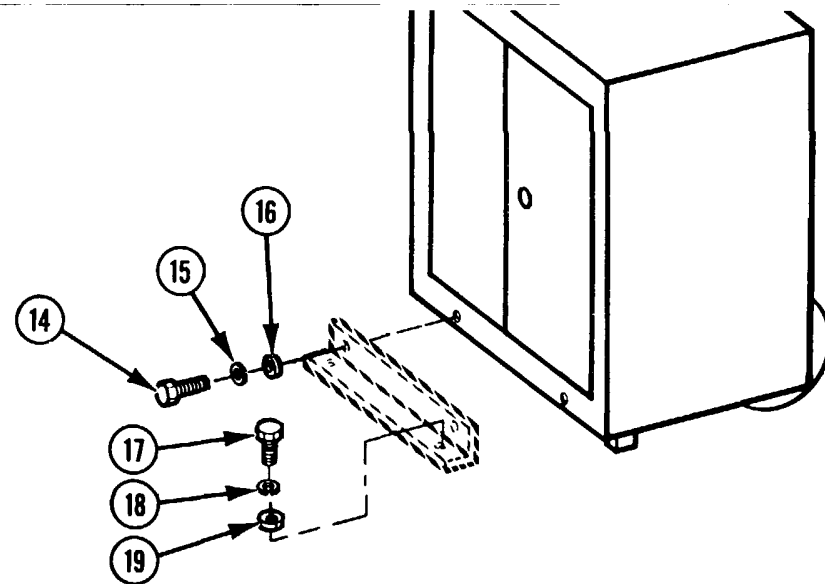
1. FOUR SCREWS (1) AND FOUR FLAT WASHERS (2). Check for missing, damaged, or corroded parts.
2. TWO NUTS (3), TWO FLAT WASHERS (4), AND TWO SCREWS (5). Check for missing, damaged, or corroded parts.
3. TWO BRACKETS (6) AND WALL SHELF (7). Check for bent or cracked condition.



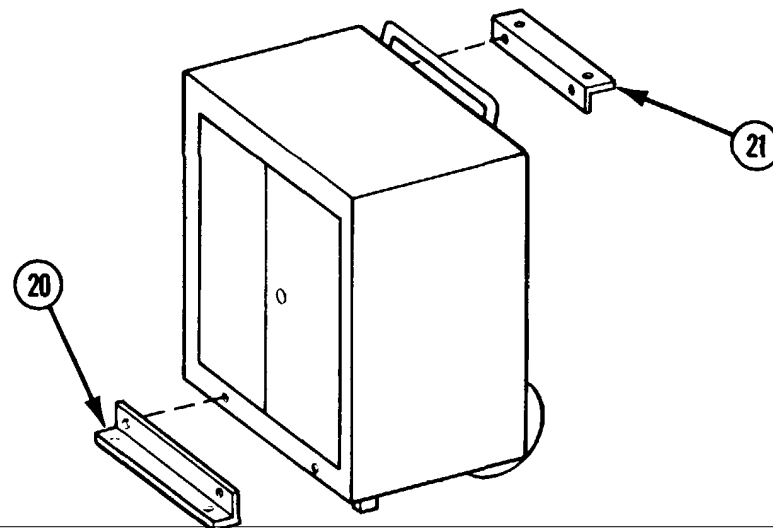
4. TWO SCREWS (8), TWO LOCKWASHERS (9), AND TWO FLAT WASHERS (10). Check for missing, damaged, or corroded parts.
5. TWO SCREWS (11), TWO LOCKWASHERS (12), AND TWO FLAT WASHERS (13). Check for missing, damaged, or corroded parts.



6. TWO SCREWS (14), TWO LOCKWASHERS (15), AND TWO FLAT WASHERS (16). Check for missing, damaged, or corroded parts.
7. TWO SCREWS (17), TWO LOCKWASHERS (18), AND TWO FLAT WASHERS (19). Check for missing, damaged or corroded parts.



8. BRACE (20) AND ANGLE (21). Check for bent or cracked parts.

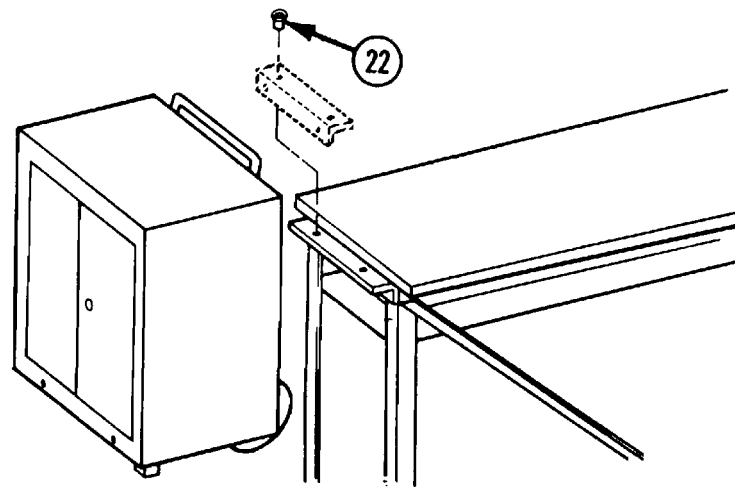


3-9. SHOP SET--MAINTENANCE INSTRUCTIONS,(cont)

INSPECTION (cont)

9 TWO BLIND NUTS (22).

- a. Check for loose mounting.
- b. Check for stripped internal threads.



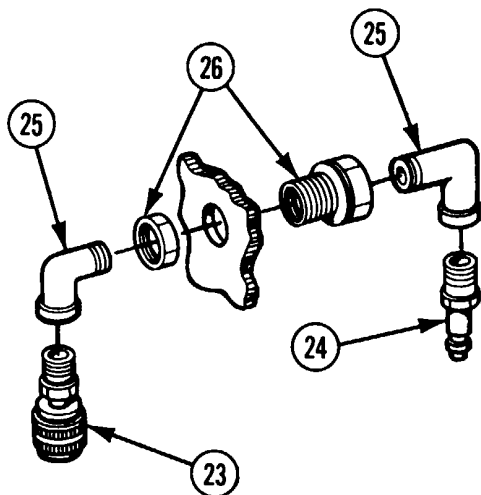
WARNING

Injury to personnel may result if pressure is not relieved before beginning any maintenance on airhose.

NOTE

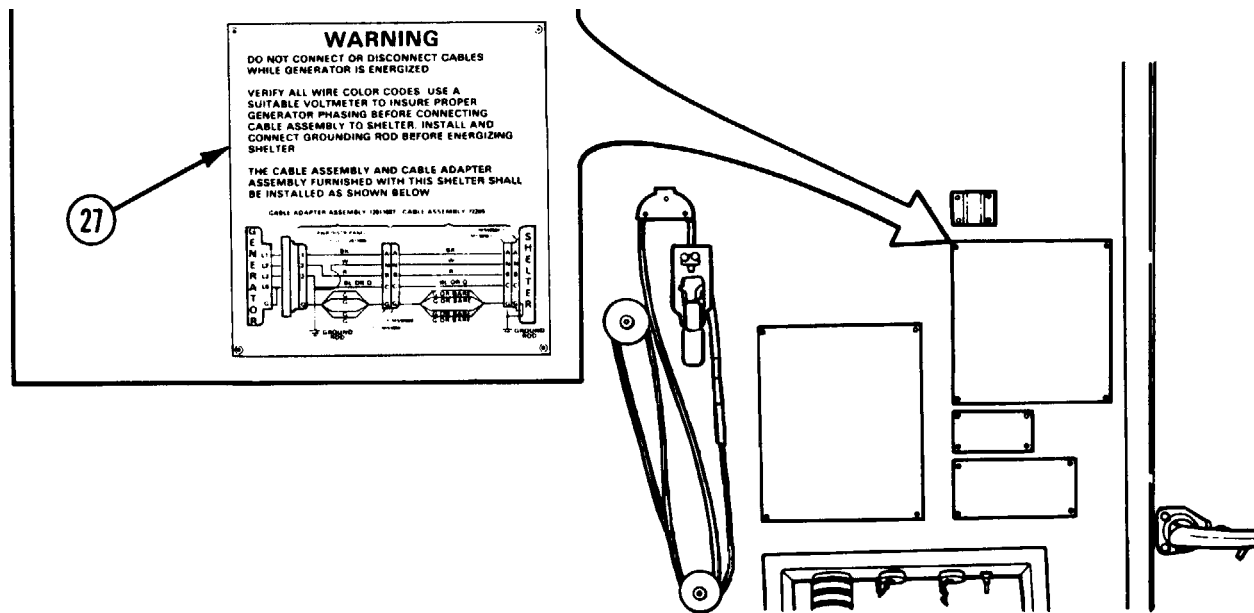
Steps 10 and 11 list parts which form airhose connections on the inside and outside of the shelter wall to left of personnel door (viewed from outside).

- 10 FEMALE COUPLING ASSEMBLY (23) AND MALE COUPLING ASSEMBLY (24). Check for proper quick-connect/disconnect action with mating coupling assemblies.
- 11 TWO ELBOWS (25) AND BULKHEAD ADAPTER (26). Check for cracked or corroded parts.



NOTE
All remaining detail parts of the shop set are listed in steps 12 thru 15.

- 12 WARNING PLATE (27). Check to ensure it is not missing and is readable (located on outside shelter wall to left of personnel door).



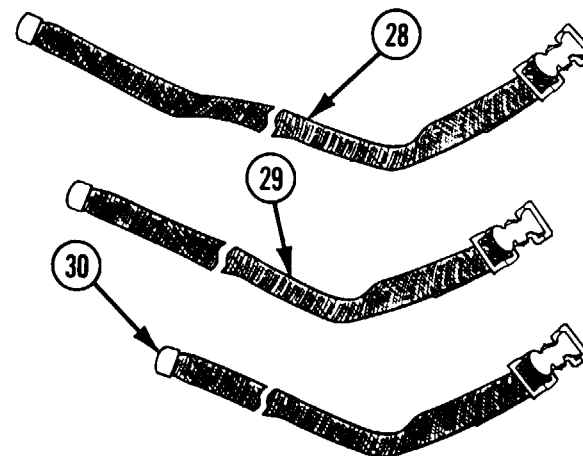
3-9 SHOP SET--MAINTENANCE INSTRUCTIONS (cont)

INSPECTION (cont)

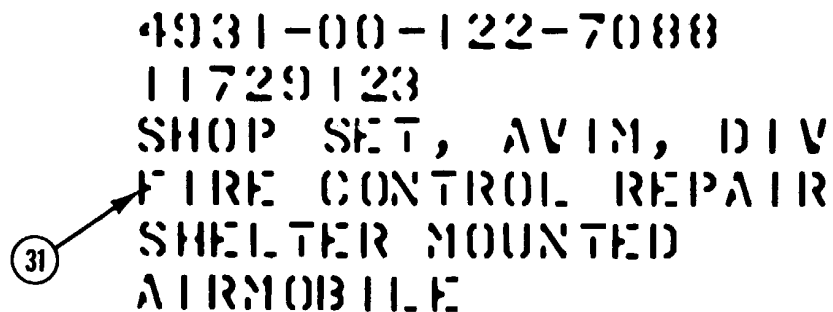
NOTE

Three tiedown straps (28) are used to tie the cable coil to the shelter floor, four tiedown straps (29) are used to tie the sorting file and wall shelvings to tables, and four tiedown straps (30) are used to tie stools and equipment storage chest to floor.

- 13 THREE TIEDOWN STRAPS (28), FOUR TIEDOWN STRAPS (29), AND FOUR TIEDOWN STRAPS (30).
- a. Remove from storage.
 - b. Check for missing, frayed, or broken parts.
 - c. Return to storage.



- 14 STENCIL (31) ON PERSONNEL DOOR END OF SHELTER. Check to ensure it is readable.



DISASSEMBLY

15 TWO STENCILS (32) ON THE TWO DOORS OF SHELTER. Check for readability.

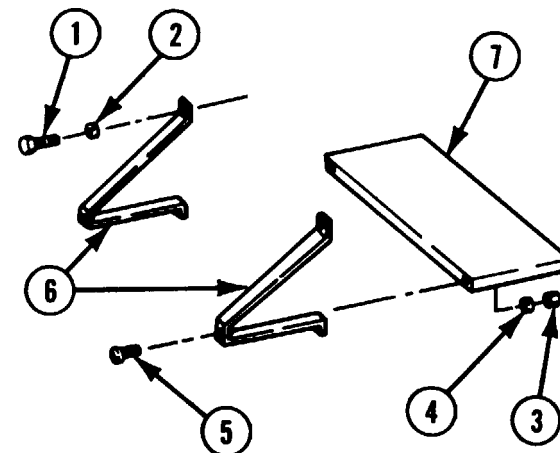
FIRE CONTROL SHOP

32

NOTE

Steps 1 thru 4 pertain to disassembly of one wall shelving. There are four wall shelveings mounted on the shelter walls; the other three are disassembled in the same manner.

- 1 FOUR SCREWS (1) AND FOUR FLAT WASHERS (2). Remove and separate.
- 2 TWO NUTS (3). Remove.
- 3 TWO FLAT WASHERS (4). Remove.
- 4 TWO SCREWS (5), TWO BRACKETS (6), AND WALL SHELF (7). Separate.



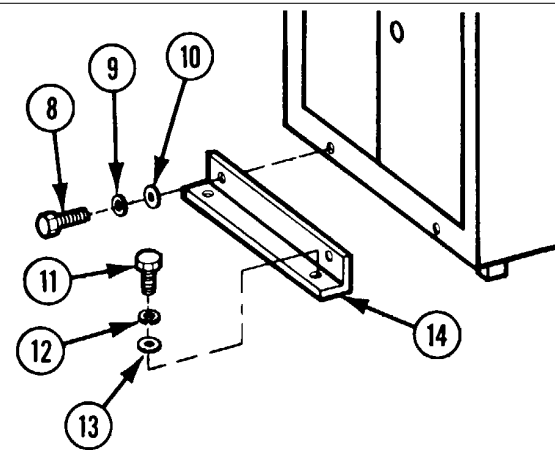
3-9. SHOP SET--MAINTENANCE INSTRUCTIONS (cont)

DISASSEMBLY (cont)

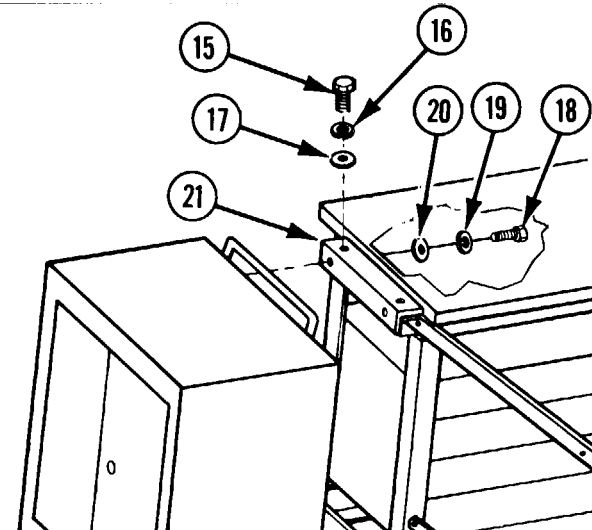
NOTE

Steps 5 thru 11 list parts used to secure the modified tool cabinet in place at cargo door end of left table.

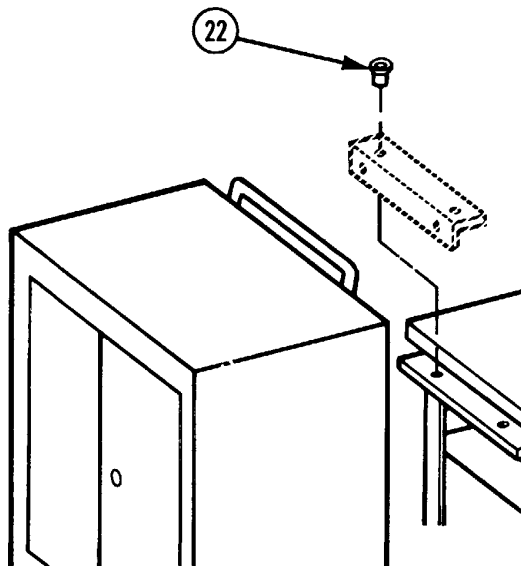
- 5 TWO SCREWS (8), TWO LOCKWASHERS T (9), AND TWO FLAT WASHERS (10). Remove and separate. 1
- 6 TWO SCREWS (11), TWO LOCKWASHERS (12), AND TWO FLAT WASHERS (13). 1 Remove and separate.
- 7 BRACE (14). Remove.



- 8 TWO SCREWS (15), TWO LOCKWASHERS (16), AND TWO FLAT WASHERS (17). Remove and separate.
- 9 TWO SCREWS (18), TWO LOCKWASHERS (19), AND TWO FLAT WASHERS (20). Remove and separate.
- 10 ANGLE (21). Remove.



- 11 TWO BLIND NUTS (22). If replacement is necessary, remove by drilling out with a 0.407-in. (1.034-cm) diameter drill.



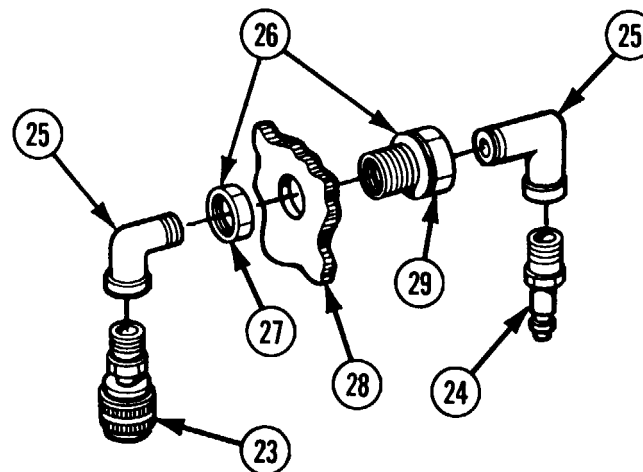
WARNING
Injury to personnel may result if pressure is not relieved before beginning any maintenance on airhose.

NOTE
Steps 12 thru 15 list parts which form airhose connections on the inside and outside of shelter wall to left of personnel door (as viewed from outside).

All airhoses must be disconnected before disassembling the following parts.

- 12 FEMALE COUPLING ASSEMBLY (23). Remove.
13 MALE COUPLING ASSEMBLY (24). Remove.
14 TWO ELBOWS (25). Remove.
15 BULKHEAD ADAPTER (26).

- a. Remove nut (27).
- b. Remove from shelter pan (28).
- c. Replace nut (27) on body (29).

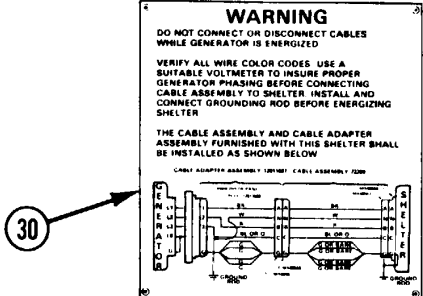


3-9. SHOP SET--MAINTENANCE INSTRUCTIONS (cont)

DISASSEMBLY (cont)

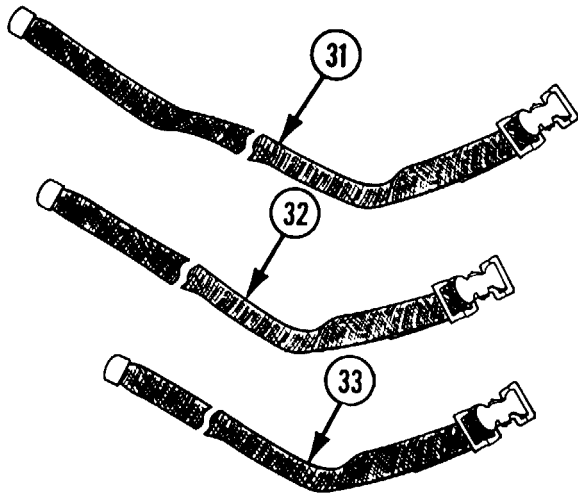
NOTE
Steps 16 and 17 pertain to remaining detail parts of the shop set.

16 **WARNING PLATE (30).** If replacement is necessary, peel warning plate off outside shelter wall.



NOTE
Three tiedown straps (31) are used to tie cable coil to shelter floor, four tiedown straps (32) are used to tie sorting file and wall shelvings to tables, and four tiedown straps (33) are used to tie the stools and equipment storage chest to floor.

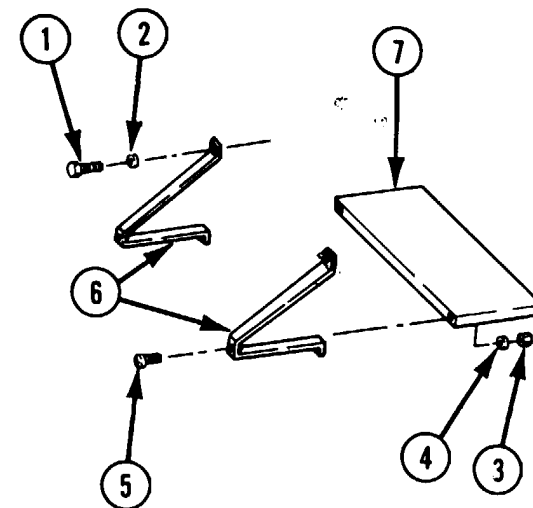
17 THREE TIEDOWN STRAPS (31), FOUR TIEDOWN STRAPS (32), AND FOUR TIEDOWN STRAPS (33). Remove from storage.



REPAIR

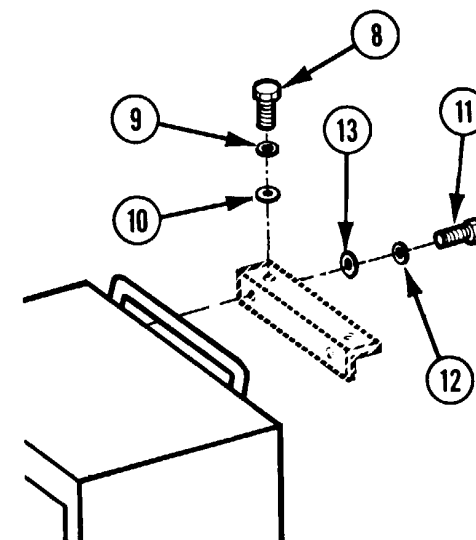
NOTE
 Steps 1 thru 4 pertain to repair of one wall shelving. There are four wall shelvings mounted on the shelter walls; the other three are repaired in the same manner.

- 1 FOUR SCREWS (1) AND FOUR FLAT WASHERS (2). Replace if missing, damaged, or corroded.
- 2 TWO NUTS (3), TWO FLAT WASHERS (4), AND TWO SCREWS (5). Replace if missing, damaged, or corroded.
- 3 TWO BRACKETS (6). Replace by fabrication (fig. 1, app E).
- 4 WALL SHELF (7). Replace if bent or cracked.



NOTE
 Steps 5 thru 11 list parts used to secure the modified tool cabinet in place at cargo door end of left table.

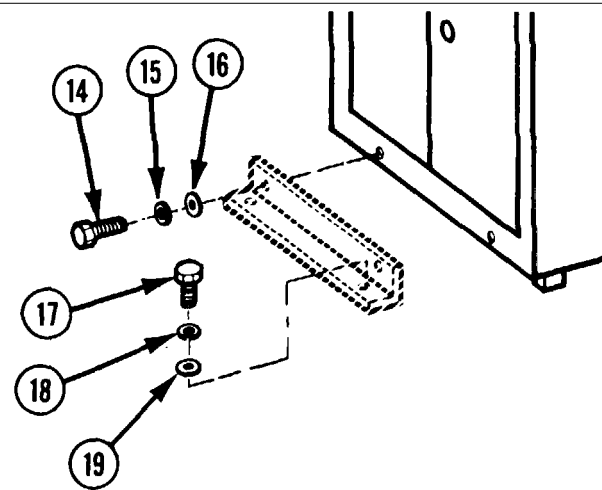
- 5 TWO SCREWS (8), TWO LOCKWASHERS (9), AND TWO FLAT WASHERS (10). Replace if missing, damaged, or corroded.
- 6 TWO SCREWS (11), TWO LOCKWASHERS (12), AND TWO FLAT WASHERS (13). Replace if missing, damaged, or corroded.



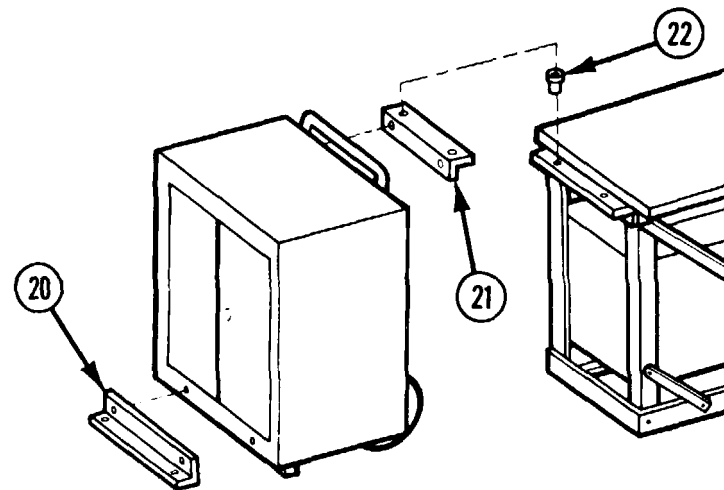
3-9. SHOP SET--MAINTENANCE INSTRUCTIONS (cont)

REPAIR (cont)

- 7 TWO SCREWS (14), TWO LOCKWASHERS (15), AND TWO FLAT WASHERS (16). Replace if missing, damaged, or corroded.
- 8 TWO SCREWS (17), TWO LOCKWASHERS (18), AND TWO FLAT WASHERS (19). Replace if missing, damaged, or corroded. O

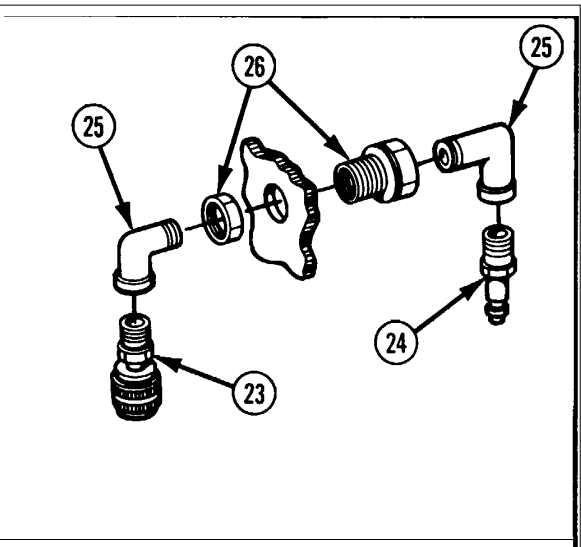


- 9 BRACE (20). Replace by fabrication (fig. 2, app E).
- 10 ANGLE (21). Replace by fabrication (fig. 24, app E).
- 11 TWO BLIND NUTS (22). Replace with new parts if removed. ;



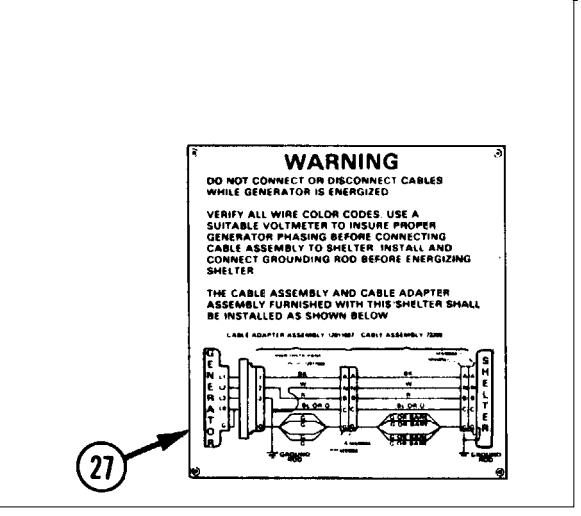
NOTE
 Steps 12 and 13 list parts which form airhose connections on the inside and outside of the shelter wall to left of personnel door (viewed from outside).

- 12 FEMALE COUPLING ASSEMBLY (23) AND MALE COUPLING ASSEMBLY (24). Replace if there is not proper quick-connect/disconnect action with mating coupling assemblies.
- 13 TWO ELBOWS (25) AND BULKHEAD ADAPTER (26). Replace if cracked or corroded.



NOTE
 Steps 14 and 15 pertain to remaining detail parts of the shop set.

- 14 WARNING PLATE (27). Replace with new part if removed or damaged.



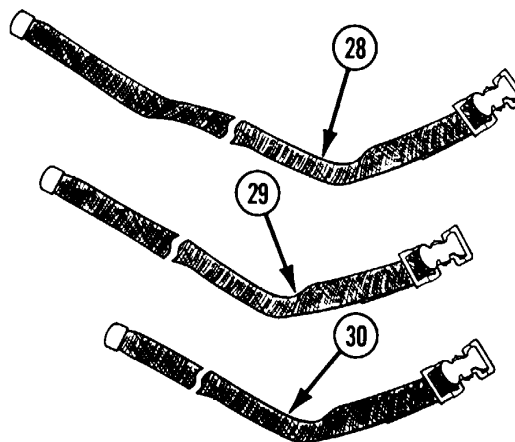
3-9. SHOP SET--MAINTENANCE INSTRUCTION (cont)

REPAIR (cont)

REPAIR/APPLICATION OF STENCILS

NOTE

Three tiedown straps (28) are used to tie cable coil to shelter floor, four tiedown straps (29) are used to tie sorting file and wall shelvings to tables, and four tiedown straps (30) are used to tie the stools and equipment storage chest to floor.



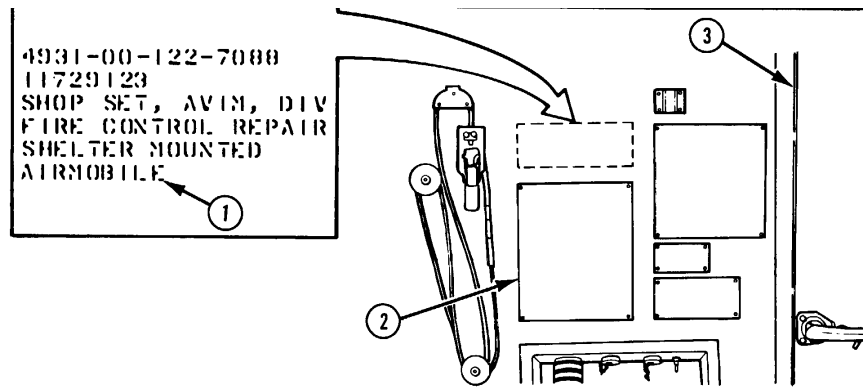
WARNING

Dry cleaning solvent is flammable and should not be used near an open flame or in a smoking area. Use only in well-ventilated areas. Avoid skin contact as the solvent evaporates quickly and has a drying, sometimes damaging, effect on the skin.

- 15 THREE TIEDOWN STRAPS (28), FOUR TIEDOWN STRAPS (29), AND FOUR TIEDOWN STRAPS (30). Replace if missing, frayed, or broken.

NOTE

Stencil letters are to be painted using black semigloss lacquer (item 10, app D). Stencil (1) is located on outside shelter wall above existing data plate (2), to the left of personnel door (3).



- 1 STENCIL (1).
- a. Wipe surface clean with dry cleaning solvent (item 6, app D) wearing gloves (item 9, app D).
 - b. Lettering should be 0.50 to 0.62 in. (1.27 to 1.57 cm) high as illustrated.

4931-00-122-7088
11729123
SHOP SET, AVIM, DIV
FIRE CONTROL REPAIR
SHELTER MOUNTED
AIRMOBILE



NOTE

The two stencils (4) are located 3.00 in. (7.62 cm) below vent (5) on personnel and cargo doors.



3-9. SHOP SET--MAINTENANCE INSTRUCTIONS (cont)

REPAIR/APPLICATION OF STENCILS (cont)

- 2 TWO STENCILS (4).
 - a. Wipe surface clean with dry cleaning solvent (item 6, app D) wearing gloves (item 9, app D).
 - b. Lettering should be 1.50 to 2.00 in. (3.81 to 5.08 cm) high as illustrated.

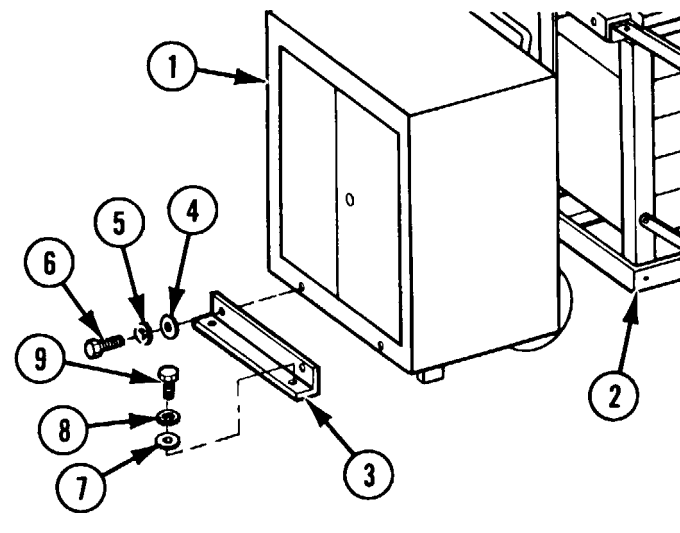


INSTALLATION OF BLIND NUTS

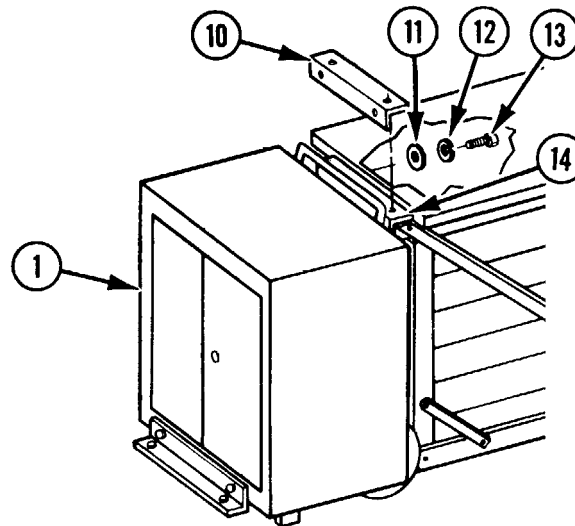
NOTE

The following procedure is to be used only for initial installation; when the table support has been replaced with a new part; or when the modified table has been replaced with a new assembly.

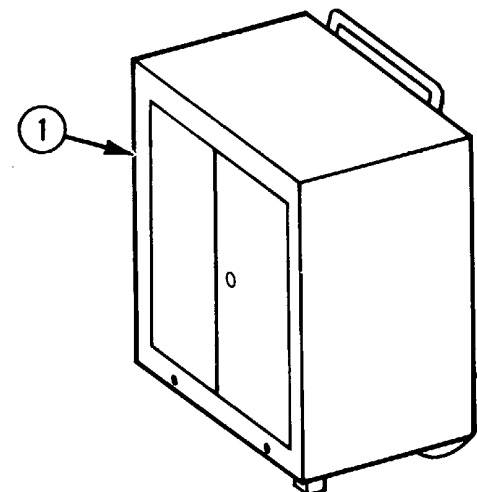
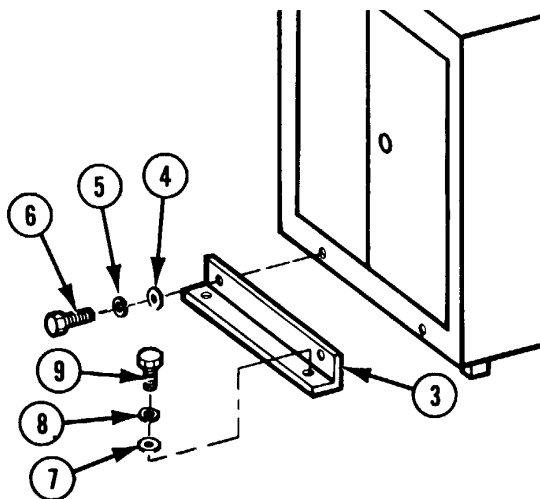
- 1 MODIFIED TOOL CABINET (1). Position at cargo door end of left table (2).
- 2 BRACE (3). Aline with holes in modified tool cabinet (1).
- 3 TWO FLAT WASHERS (4), TWO LOCKWASHERS (5), AND TWO SCREWS (6). Install through brace into front of modified tool cabinet.
- 4 TWO FLAT WASHERS (7), TWO LOCKWASHERS (8), AND TWO SCREWS (9). Install through brace into floor.



- 5 ANGLE (10), TWO FLAT WASHERS (11), TWO LOCKWASHERS (12), AND TWO SCREWS (13). Install on modified tool cabinet (1).
- 6 TABLE SUPPORT (14). Mark two hole locations 12 in. (30.48 cm) apart (centered on table support), using existing holes in angle (10) as a template.
- 7 TWO SCREWS (13), TWO LOCKWASHERS (12), TWO FLAT WASHERS (11), AND ANGLE (10). Remove and separate.



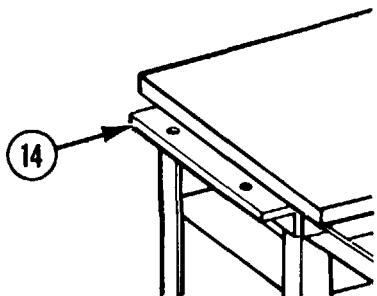
- 8 TWO SCREWS (9), TWO LOCKWASHERS (8), AND TWO FLAT WASHERS (7). Remove and separate.
- 9 TWO SCREWS (6), TWO LOCKWASHERS (5), AND TWO FLAT WASHERS (4). Remove and separate.
- 10 BRACE (3). Remove.



11 MODIFIED TOOL CABINET (1). Remove.

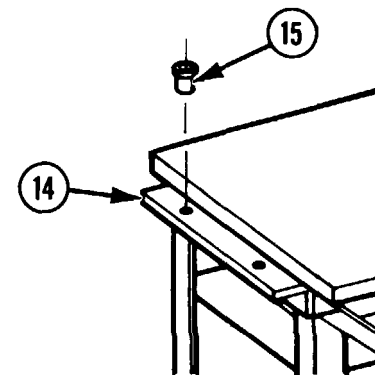
3-9. SHOP SET--MAINTENANCE INSTRUCTIONS (cont)

INSTALLATION OF BLIND NUTS (cont)



12 TABLE SUPPORT (14). Drill two 0.413-in. (1.049-cm) +0.005 in. (-0.0127 cm) diameter holes through at marked locations.

- 13 TWO BLIND NUTS (15).
- a. Install in table support (14) from above.
 - b. Pull up tight using hydraulic gun.



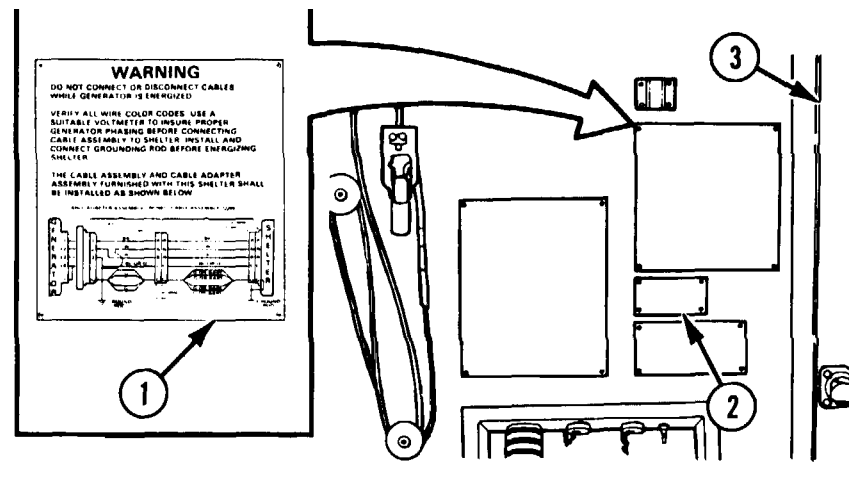
REASSEMBLY

- 1 WARNING PLATE (1).

WARNING

Dry cleaning solvent is flammable and should not be used near an open flame or in a smoking area. Use only in well-ventilated areas. Avoid skin contact as the solvent evaporates quickly and has a drying, sometimes damaging, effect on skin.

- a. Before installing new plate, clean area with dry cleaning solvent (item 6, app D) wearing gloves (item 9, app D).
- b. Remove protective backing.
- c. Apply to outside shelter wall just above existing data plate (2) to left of personnel door (3).

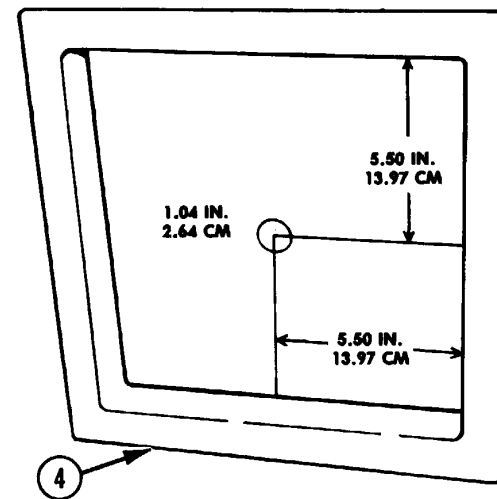


NOTE

Steps 2 thru 6 pertain to reassembly of airhose connections on the inside and outside of the shelter wall to left of personnel door (as viewed from outside).

Step 2 is performed only once at the time of initial installation.

- 2 SHELTER PAN (4). Drill a 1.04in. (2.64-an) +0.01-in. (+0.023cm) diameter hole through, 5.50 in. (13.97 cm) to left of right edge and 5.50 in. (13.97 cm) down from top edge (viewed from outside).



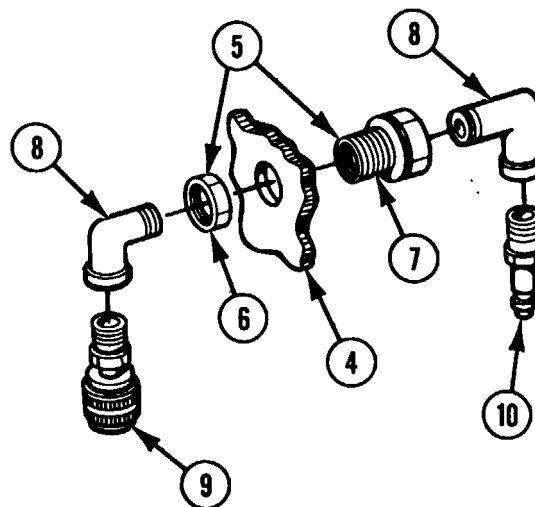
- 3 BULKHEAD ADAPTER (5).

- a. Remove nut (6) from body (7).
- b. Install body (7) through shelter pan (4) adjacent to personnel door.
- c. Tighten nut (6) on body (7).

- 4 TWO ELBOWS (8). Install.

- 5 FEMALE COUPLING ASSEMBLY (9). Install on inside of shelter.

- 6 MALE COUPLING ASSEMBLY (10). Install on outside of shelter.



3-9. SHOP SET--MAINTENANCE INSTRUCTIONS (cont)

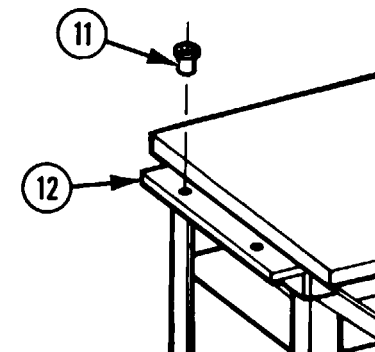
REASSEMBLY (cont)

NOTE

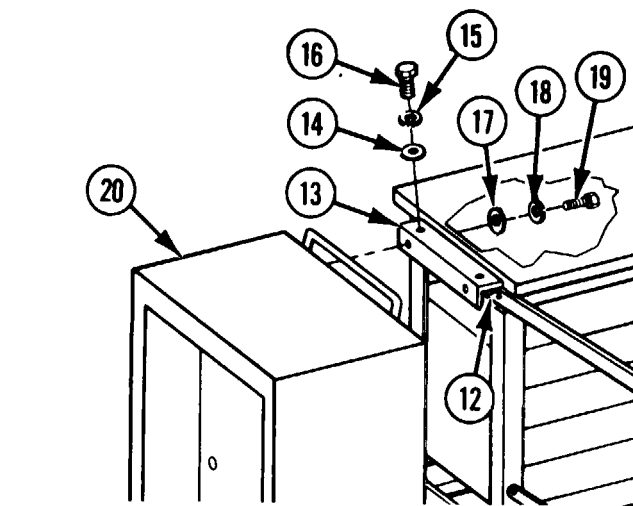
All airhoses may now be connected to the coupling assemblies.

Steps 7 thru 12 list parts used to secure the modified tool cabinet in place at cargo door end of left table.

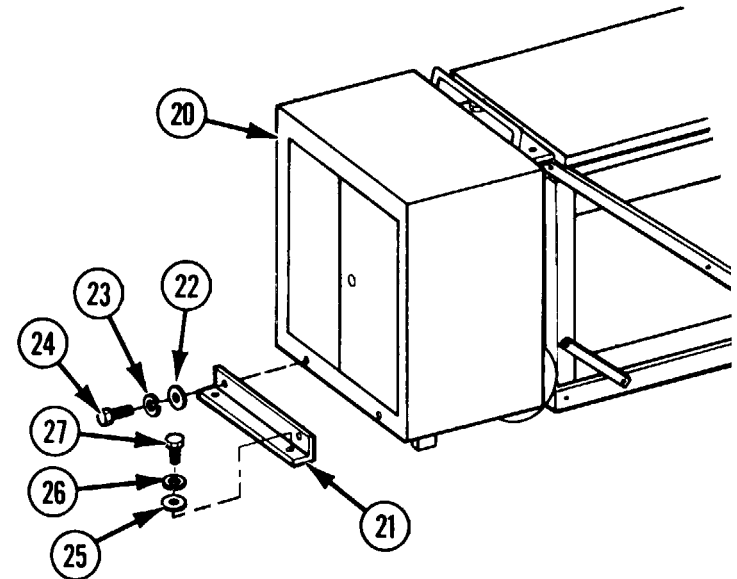
- 7 TWO BLIND NUTS (11).
- a. Install in table support (12) from above.
 - b. Pull up tight using hydraulic gun.



- 8 ANGLE (13), TWO FLAT WASHERS (14), TWO LOCKWASHERS (15), AND TWO SCREWS (16). Install on table support (12).
- 9 TWO FLAT WASHERS (17), TWO LOCKWASHERS (18), AND TWO SCREWS (19). Install to hold modified tool cabinet (20) to angle (13).



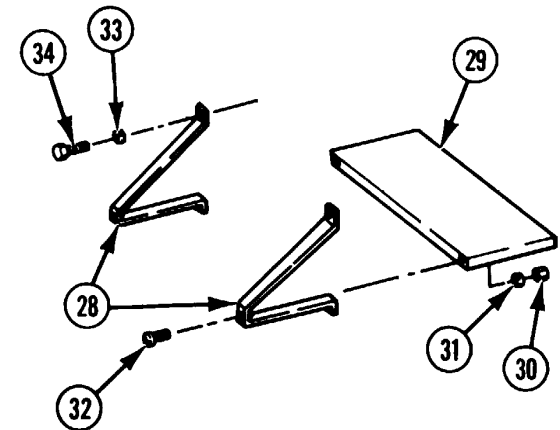
- 10 BRACE (21). Aline over holes in floor in front of modified tool cabinet (20).
- 11 TWO FLAT WASHERS (22), TWO LOCKWASHERS (23), AND TWO SCREWS (24). Install through brace (21) into modified tool cabinet (20).
- 12 TWO FLAT WASHERS (25), TWO LOCKWASHERS (26), AND TWO SCREWS (27). Install through brace (21) into floor.



NOTE

Steps 13 thru 16 pertain to reassembly of one wall shelving. There are four wall shelvings mounted on the shelter walls; the other three are reassembled in the same manner.

- 13 TWO BRACKETS (28) AND WALL SHELF (29). Position together.
- 14 TWO NUTS (30), TWO FLAT WASHERS (31), AND TWO SCREWS (32). Install.
- 15 TWO BRACKETS (28). Hold in position so that holes line up with blind inserts in shelter wall.
- 16 FOUR FLAT WASHERS (33) AND FOUR SCREWS (34). Install.



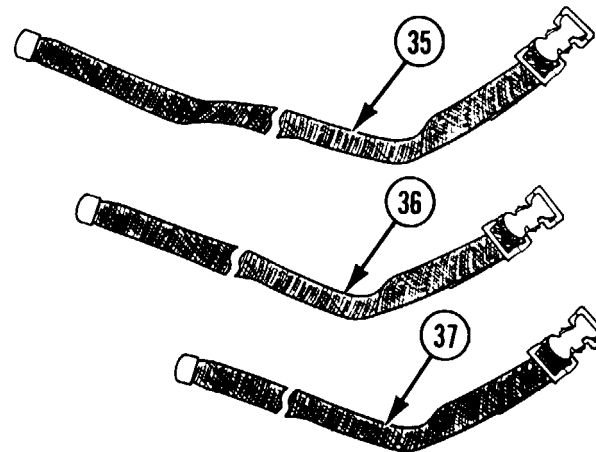
3-9. SHOP SET--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY (cont)

NOTE

Three tiedown straps (35) are used to tie the cable coil to the shelter floor, four tiedown straps (36) are used to tie the sorting file and wall shelvings to tables, and four tiedown straps (37) are used to tie stools and equipment storage chest to floor.

- 17 THREE TIEDOWN STRAPS (35), FOUR TIEDOWN STRAPS (36), AND FOUR TIEDOWN STRAPS (37). Place in storage.



13-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCT

THIS TASK COVERS:

- | | |
|---|---|
| <ul style="list-style-type: none"> a. Inspection b. Disassembly c. Inspection after disassembly d. Repair | <ul style="list-style-type: none"> e. Modification f. Reassembly g. Test |
|---|---|

INITIAL SETUP

- | | |
|---|---|
| <ul style="list-style-type: none"> Test Equipment <ul style="list-style-type: none"> Ohmmeter Voltmeter Special Tools <ul style="list-style-type: none"> AVIM tool crib shop set (SC 4920-99-CL-A91, part VII) | <ul style="list-style-type: none"> Basic aircraft armament repair man tool set (SC 4933-95-CL-A13) Fire control repair shop set (SC 4931-95-CL-A21) Materials/Parts <ul style="list-style-type: none"> Tape (item 19, app D) Lug terminal (MS25036-111) Lug terminal (MS25036-156) |
|---|---|

References

- Appendix C
- Appendix D
- Appendix E
- 3-48 Wiring diagram.
- 3-49 Schematic diagram.
- 3-74 Wire table.

Troubleshooting References

- 3-9 The power supply does not operate.
- 3-7 There is no electrical power at outlets.
- 3-9 There is no electrical power at work table outlets.

Equipment Conditions

- 2-17 Circuit breaker on power distribution panel must be in OFF position.
- 2-17 120/208V cable assembly disconnected at shop set.

WARNING

The shop set contains voltages which are dangerous if contacted. Before performing any maintenance on the electrical installation, be sure the circuit breaker on power distribution panel connected to power source is in OFF position and the 120/208V cable assembly is disconnected from the shop set.

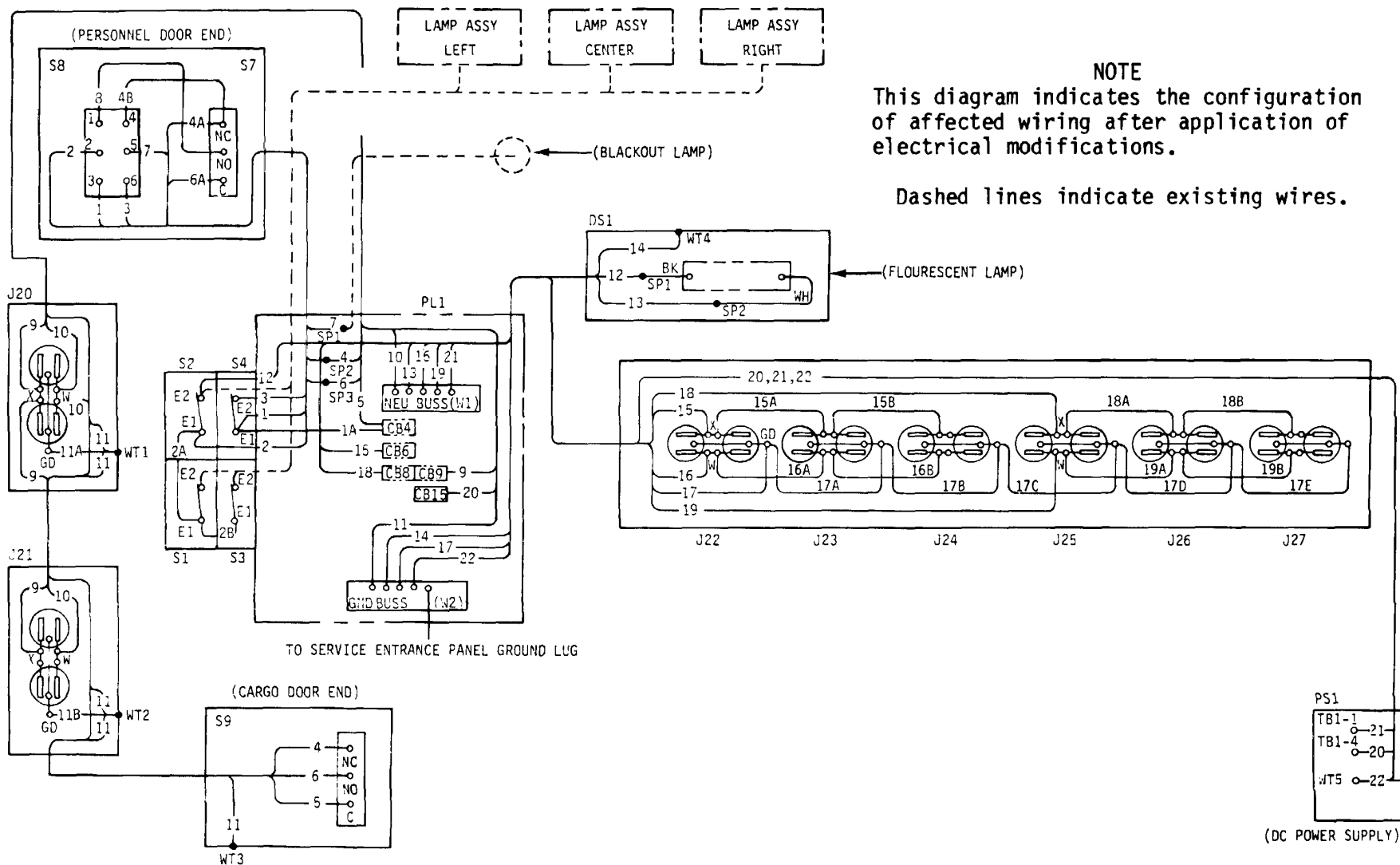
INSPECTION

1 FLEXIBLE CONDUIT AND ALL EXTERNAL ELECTRICAL COMPONENTS. Visually inspect to ensure proper condition and security of installation.

2 ALL WIRING. With all covers removed, check for loose or broken connections. Then check with suitable ohmmeter for continuity. For more detailed circuitry information, refer to wiring diagram (fig. 3-1) and schematic diagram (fig. 3-2).

3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

INSPECTION (cont)



NOTE
This diagram indicates the configuration of affected wiring after application of electrical modifications.

Dashed lines indicate existing wires.

Figure 3-1. Wiring diagram.

NOTE

Switches S7 and S9 are in NC position when doors are open.

Blackout override switch S7 and door switch S8 are mounted in the same enclosure above the personnel door.

Door switch S9 is mounted above the cargo door.

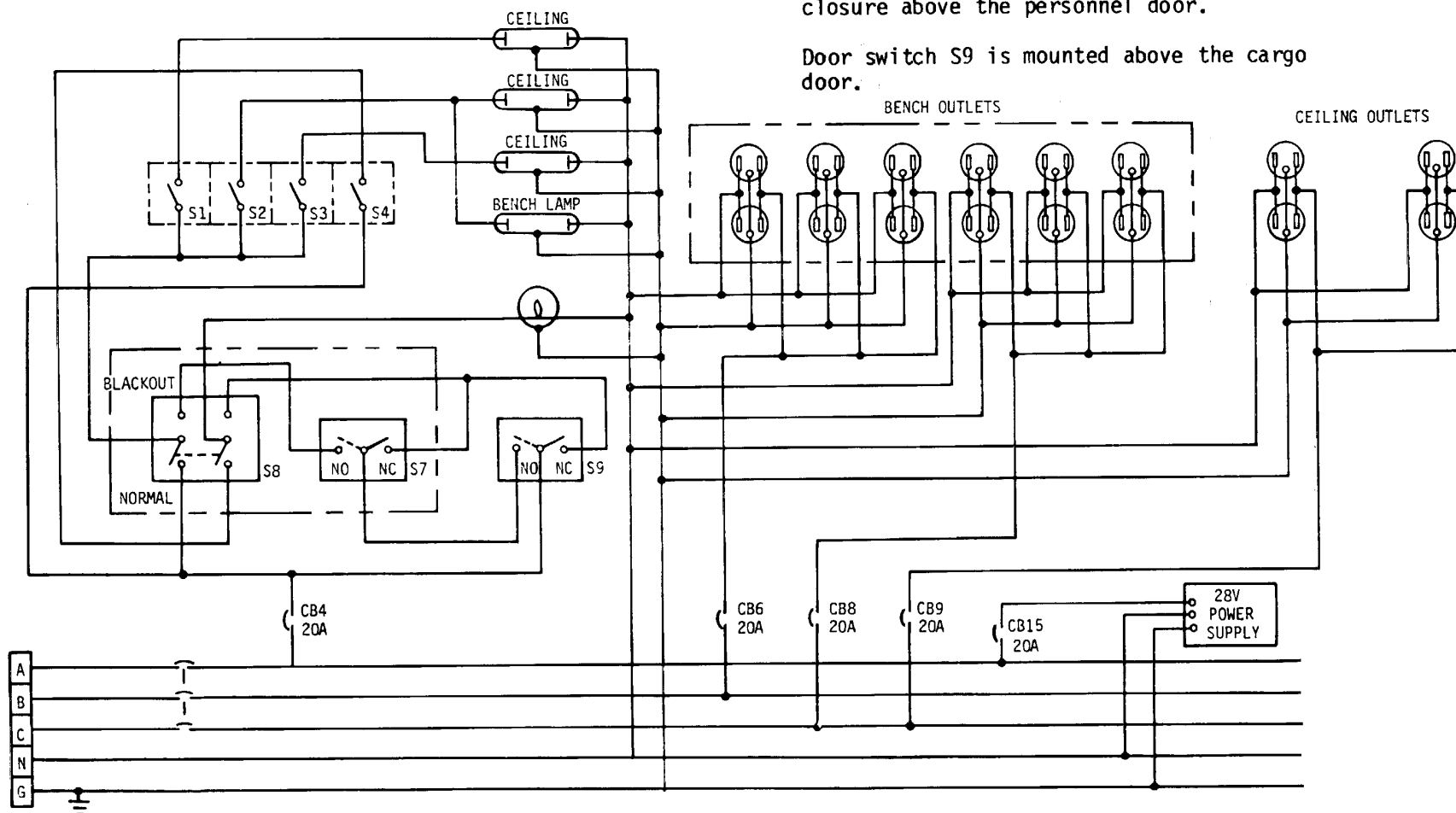


Figure 3-2. Schematic diagram.

3-10. SHOP SET--ELECTRICAL INSTALLATION-- MAINTENANCE INSTRUCTIONS (cont)

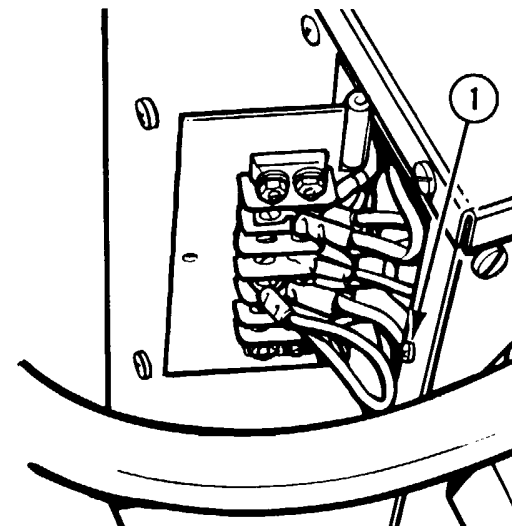
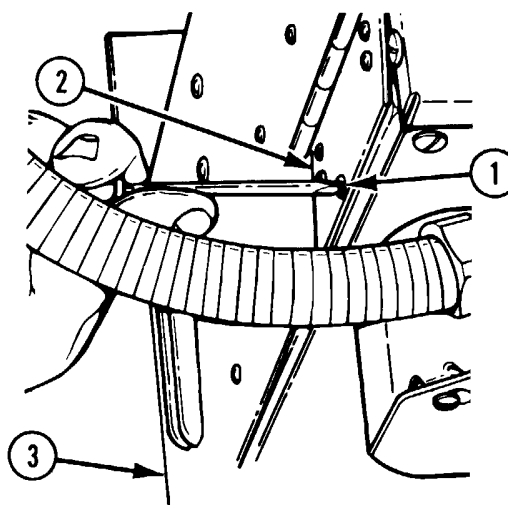
DISASSEMBLY I

NOTE

For identification purposes, at disassembly tag all wires with wire number and terminal connection locations. For clarity, wires not mentioned in text are not shown.

1 SCREW (1).

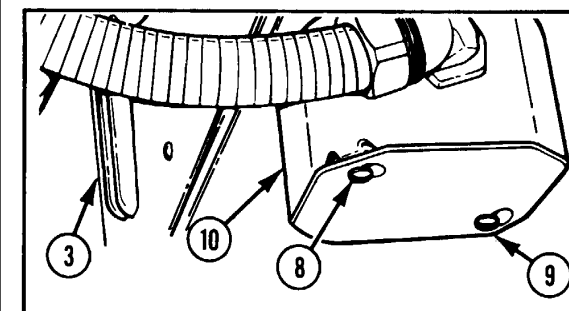
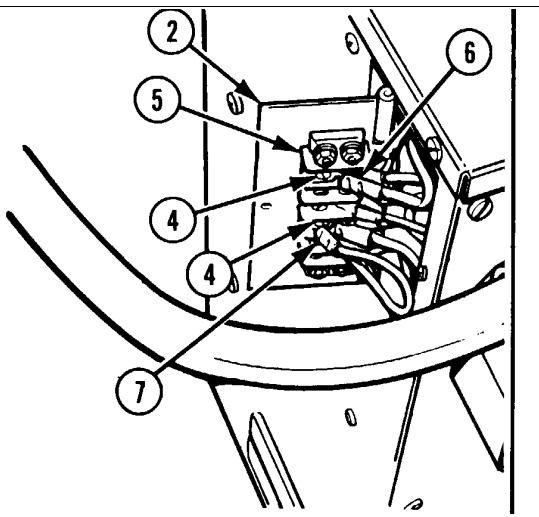
- a. Remove from door (2) on power supply (3).
- b. Open door (2).
- c. Reinstall.



2 TWO SCREWS (4). Remove from terminal board (5) on door (2).

3 BLUE WIRE (6) AND WHITE WIRE (7).

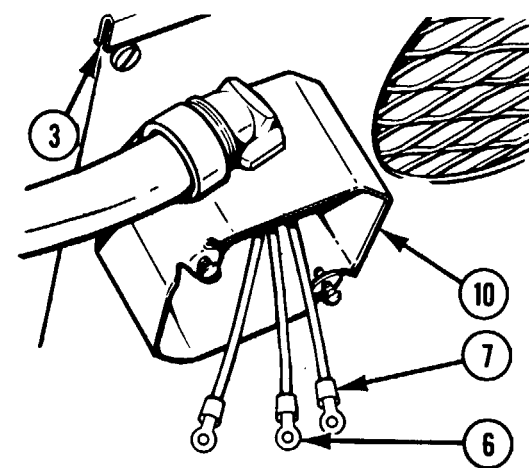
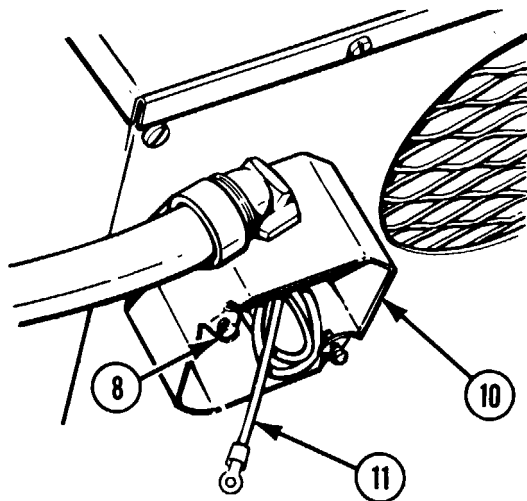
- a. Disconnect.
- b. Reinstall two screws (4).



4 TWO SCREWS (8). Loosen from cover (9) of conduit box (10) on power supply (3).

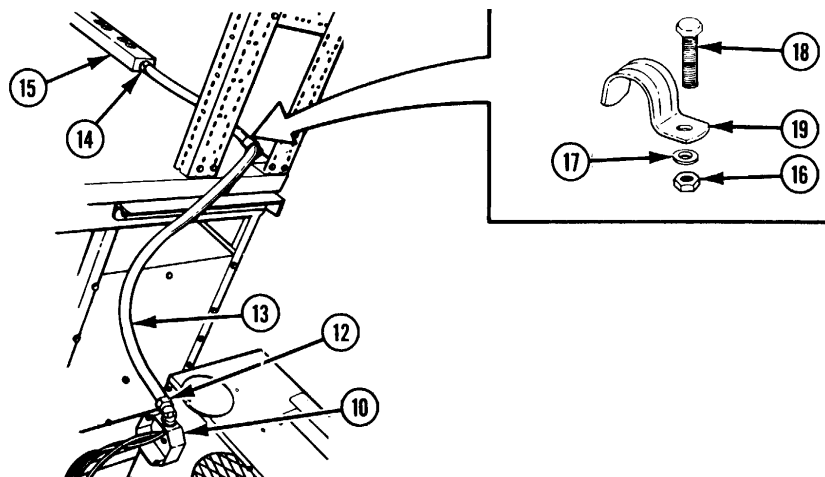
5 COVER (9). Turn slightly and remove.

- 6 SCREW (8).
- a. Remove from conduit box (10).
- b. Disconnect green wire (11).
- c. Reinstall screw (8).



- 7 BLUE WIRE (6) AND WHITE WIRE (7). Pull out of power supply (3) from conduit box (10).

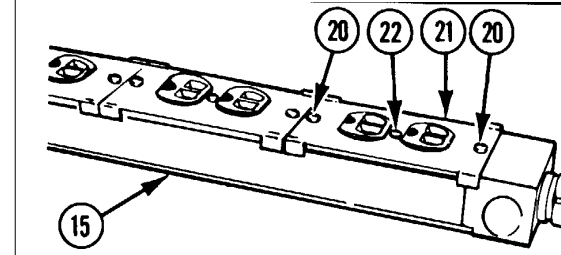
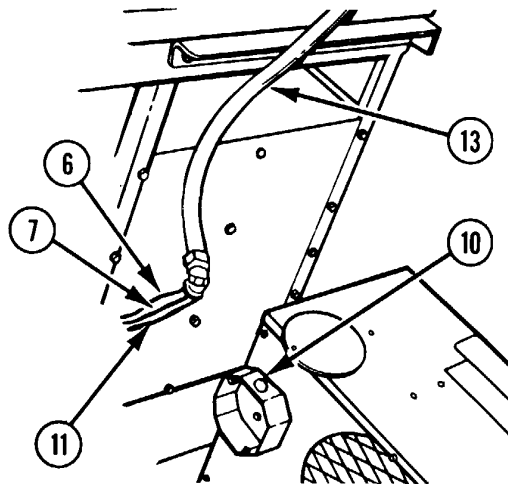
- 8 CONNECTOR (12) ON FLEXIBLE CONDUIT (13). Loosen at conduit box (10).
- 9 CONNECTOR (14) ON FLEXIBLE CONDUIT (13). Loosen at raceway (15).
- 10 NUT (16), WASHER (17), SCREW (18), AND CLAMP (19). Remove from flexible conduit (13).



3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

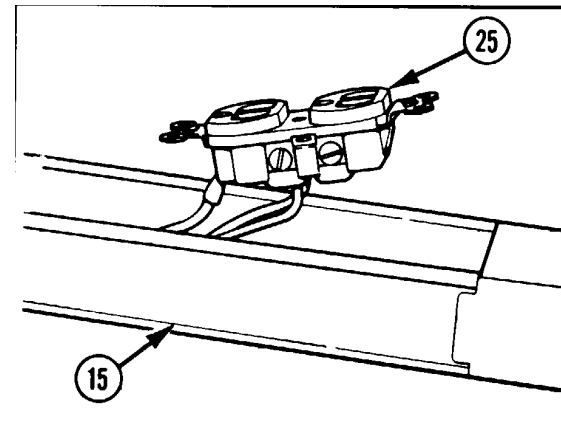
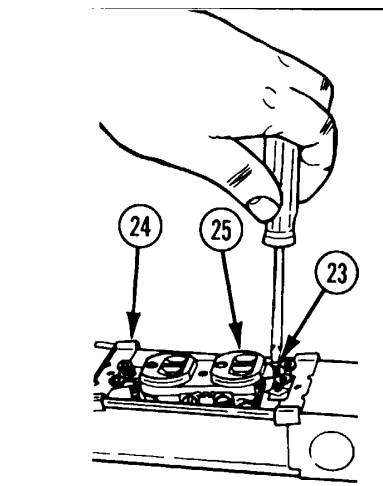
DISASSEMBLY (cont)

- 11 BLUE WIRE (6), WHITE WIRE (7), AND GREEN WIRE (11).
- a. Pull out of conduit box (10).
 - b. Remove flexible conduit (13).



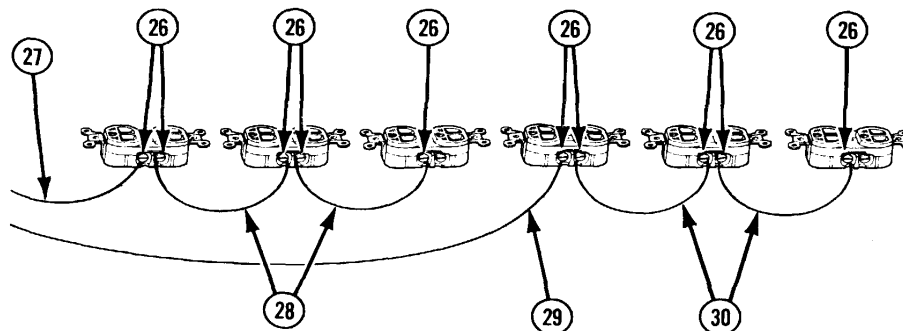
- 12 TWELVE SCREWS (20). Remove from six covers (21) of raceway (15).
- 13 SIX SCREWS (22). Remove from six covers (21) of raceway (15).
- 14 SIX COVERS (21). Remove.

- 15 TWELVE SCREWS (23). Remove from twelve clips (24) and six receptacles (25).
- 16 TWELVE CLIPS (24). Remove.

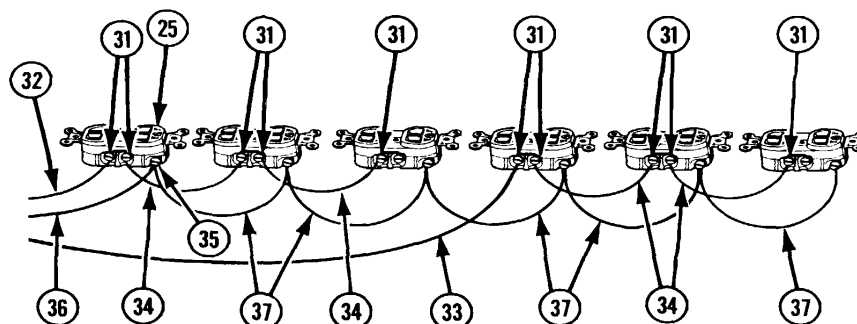


- 17 SIX RECEPTACLES (25). Lift out of raceway (15).

- 18 TEN BRASS SCREWS (26). Loosen.
- 19 BLACK WIRE (27), TWO BLACK WIRES (28), RED WIRE (29), AND TWO RED WIRES (30). Disconnect.
- 20 TWO BLACK WIRES (28) AND TWO RED WIRES (30). Remove.



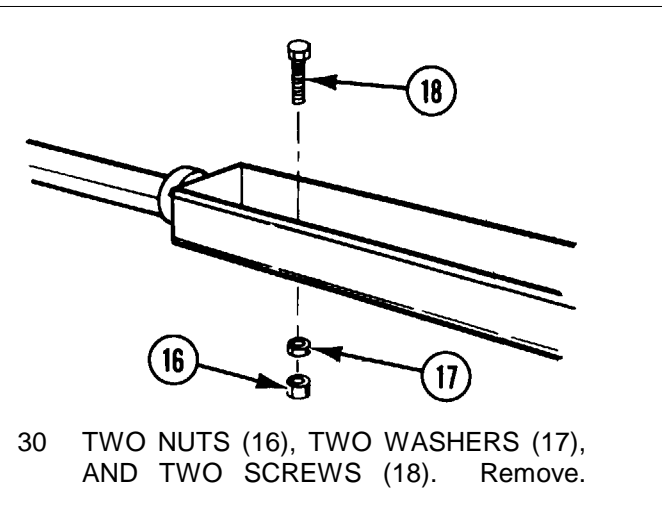
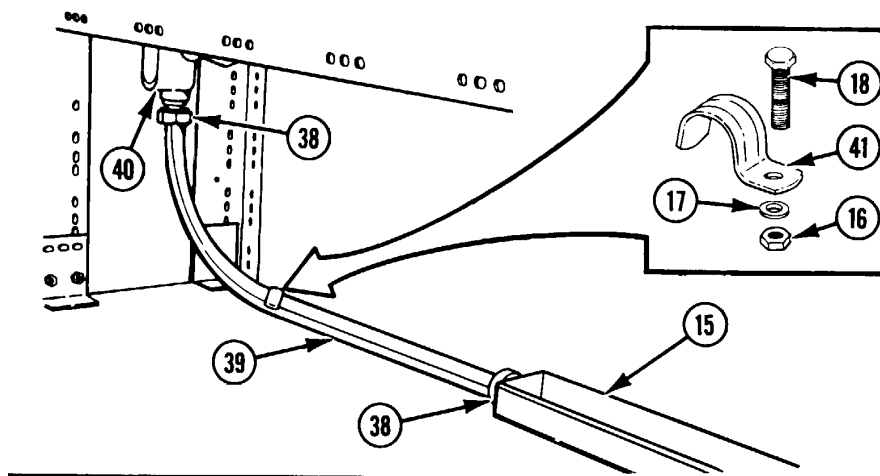
- 21 TEN SILVER SCREWS (31). Loosen.
- 22 WHITE WIRE (32), WHITE WIRE (33), AND FOUR WHITE WIRES (34). Disconnect.
- 23 FOUR WHITE WIRES (34). Remove.
- 24 SIX GROUND SCREWS (35). Loosen.
- 25 GREEN WIRE (36) AND FIVE GREEN WIRES (37). Disconnect.
- 26 FIVE GREEN WIRES (37). Remove.
- 27 SIX RECEPTACLES (25). Remove.



13-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

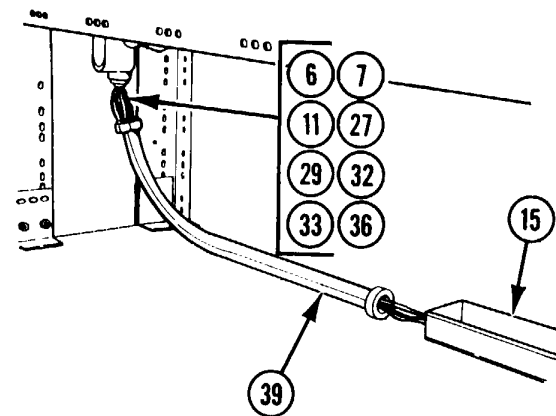
DISASSEMBLY (cont)

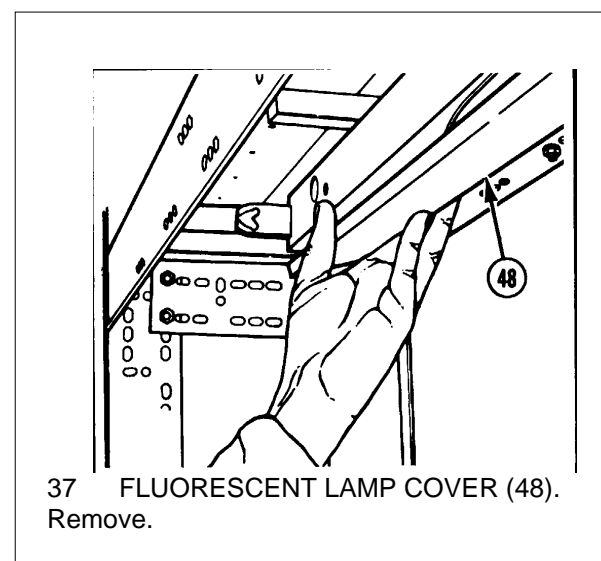
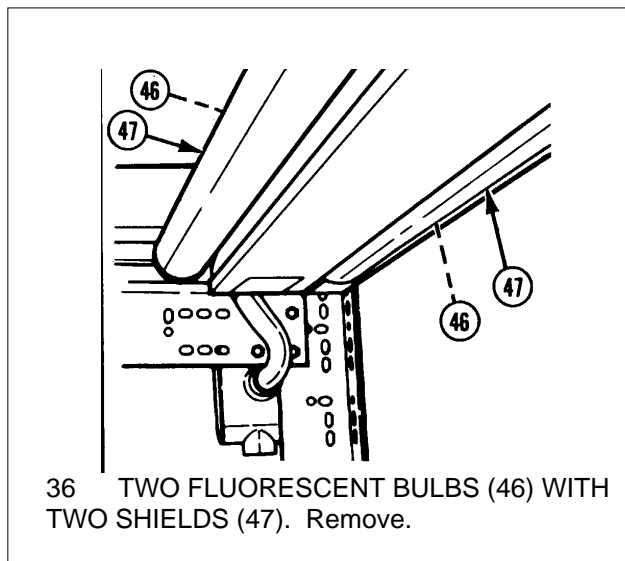
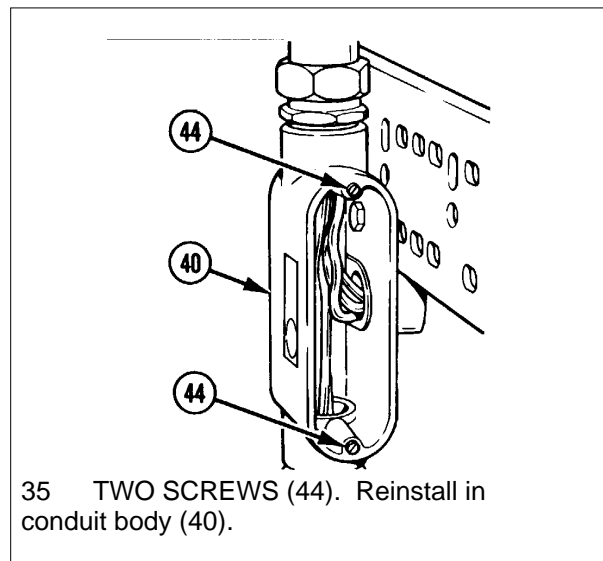
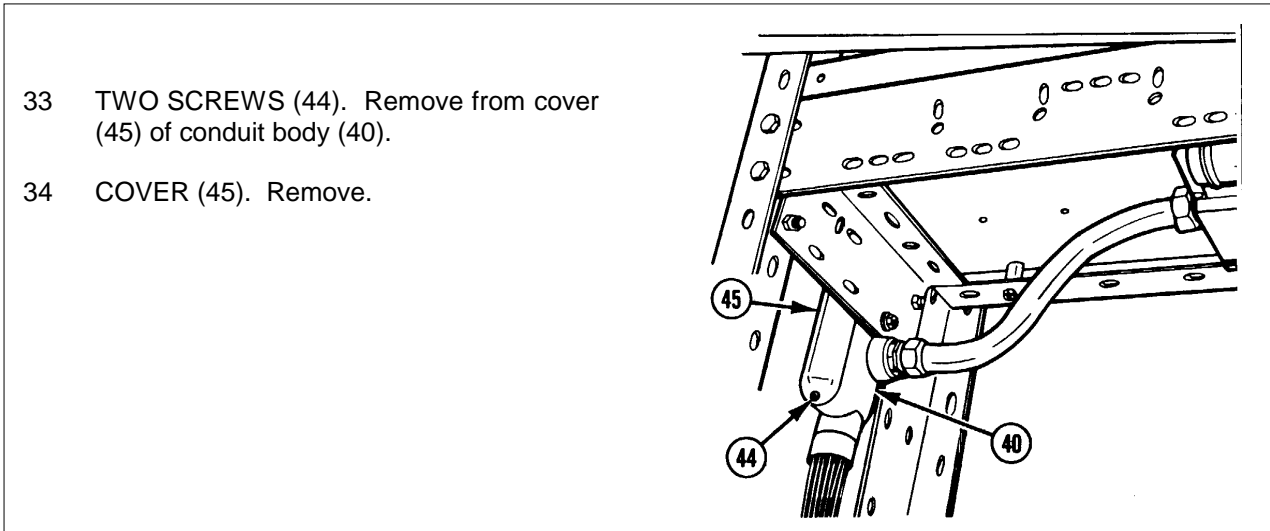
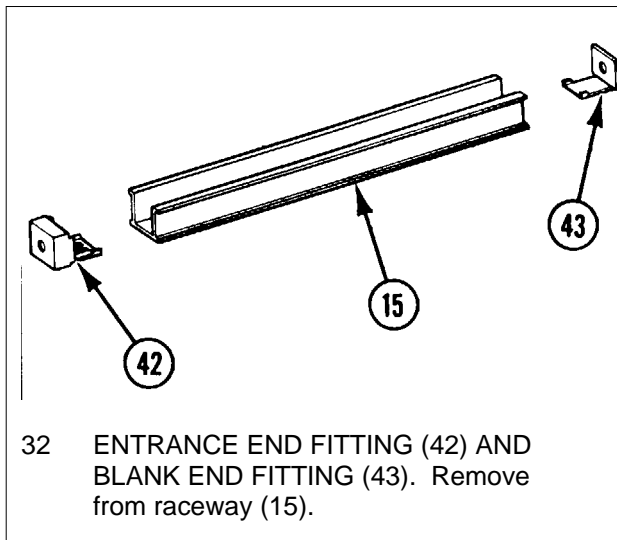
- 28 TWO CONNECTORS (38) ON FLEXIBLE CONDUIT (39) BETWEEN RACEWAY (15) AND CONDUIT BODY (40). Loosen.
- 29 NUT (16), WASHER (17), SCREW (18), AND CLAMP (41). Remove from flexible conduit (39).



- 30 TWO NUTS (16), TWO WASHERS (17), AND TWO SCREWS (18). Remove.

- 31 RACEWAY (15) AND FLEXIBLE CONDUIT (39). Pull from white wire (7), blue wire (6), green wire (11), black wire (27), red wire (29), white wire (32), green wire (36), and white wire (33).

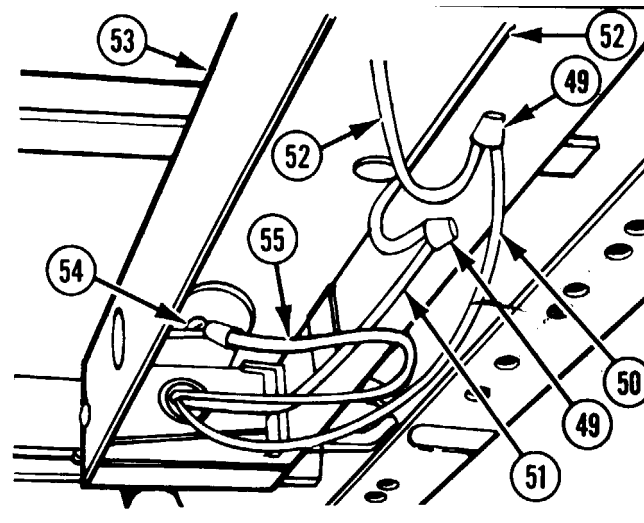




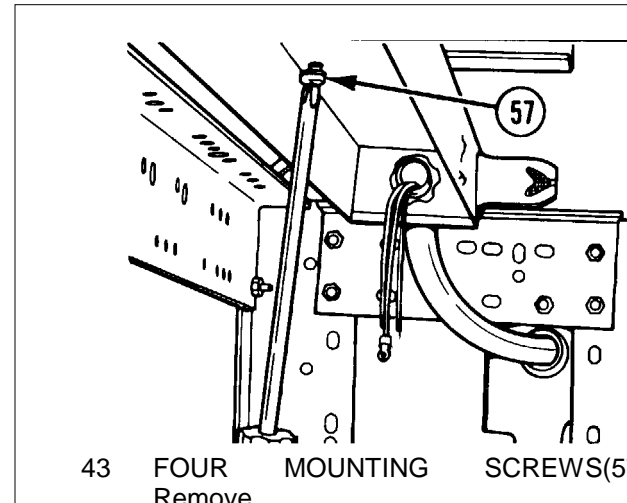
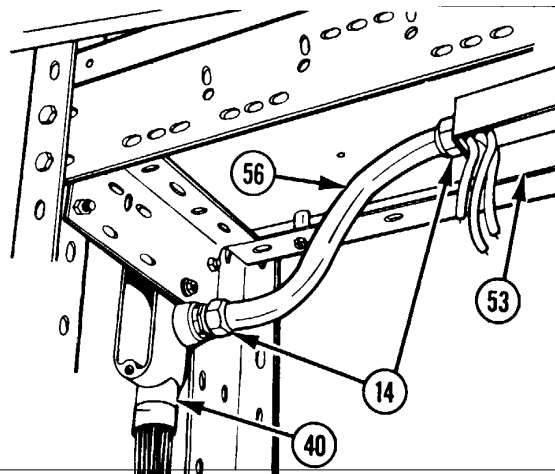
13-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

DISASSEMBLY (cont)

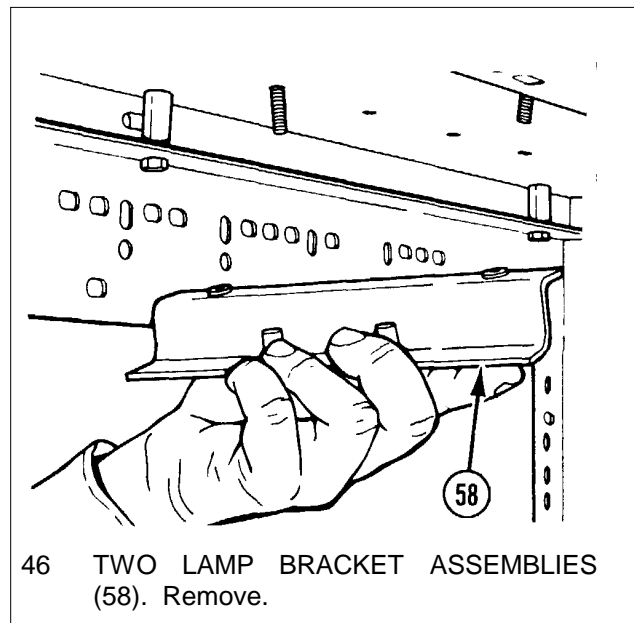
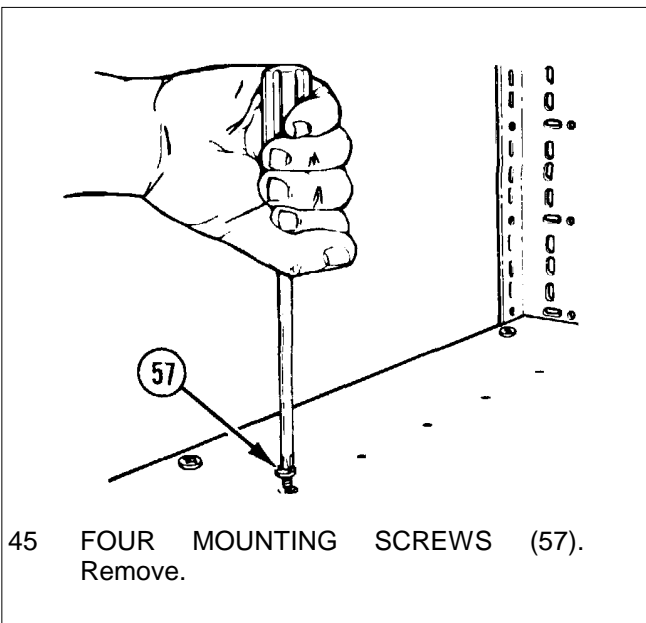
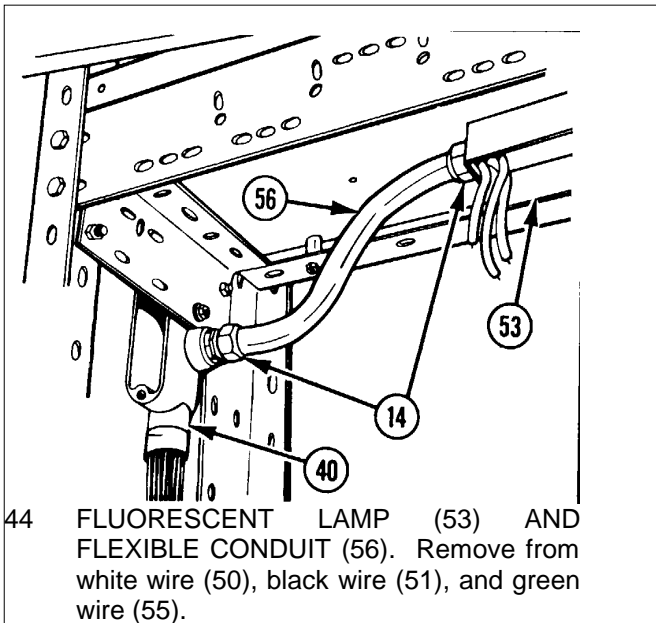
- 8 TWO CONDUCTOR SPLICES (49). Remove.
- 39 WHITE WIRE (50) AND BLACK WIRE (51). Disconnect from two wires (52) of fluorescent lamp (53).
- 40 SCREW (54). Loosen.
- 41 GREEN WIRE (55). Disconnect.



- 42 TWO CONNECTORS (14) ON FLEXIBLE CONDUIT (56) BETWEEN CONDUIT BODY (40) AND FLUORESCENT LAMP (53). Loosen.



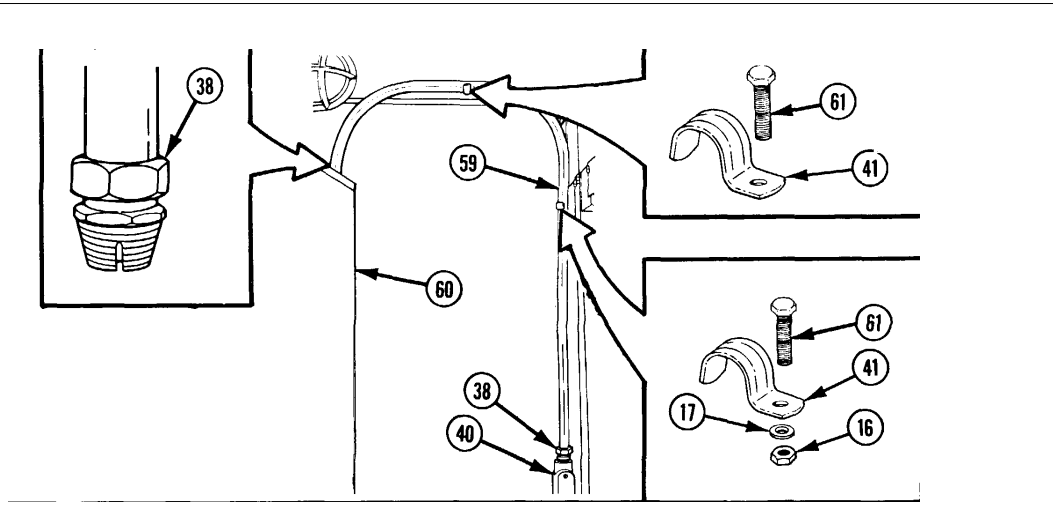
- 43 FOUR MOUNTING SCREWS(57). Remove



47 TWO CONNECTORS (38) ON FLEXIBLE CONDUIT (59) BETWEEN CONDUIT BODY (40) AND CIRCUIT BREAKER PANEL BOX PL1 (60). Loosen.

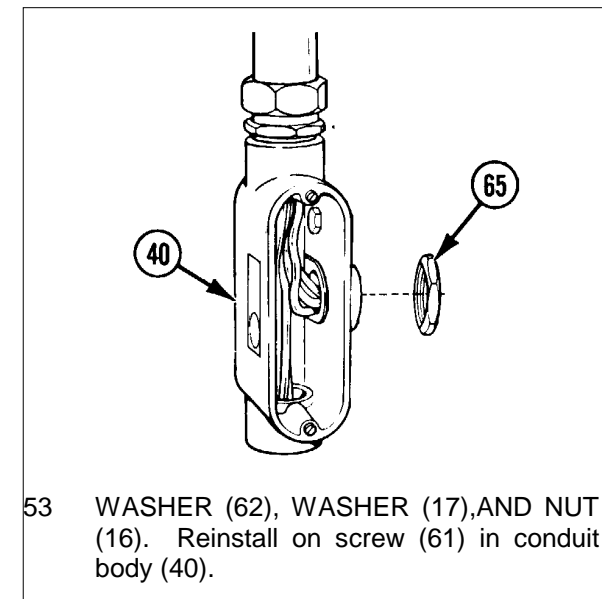
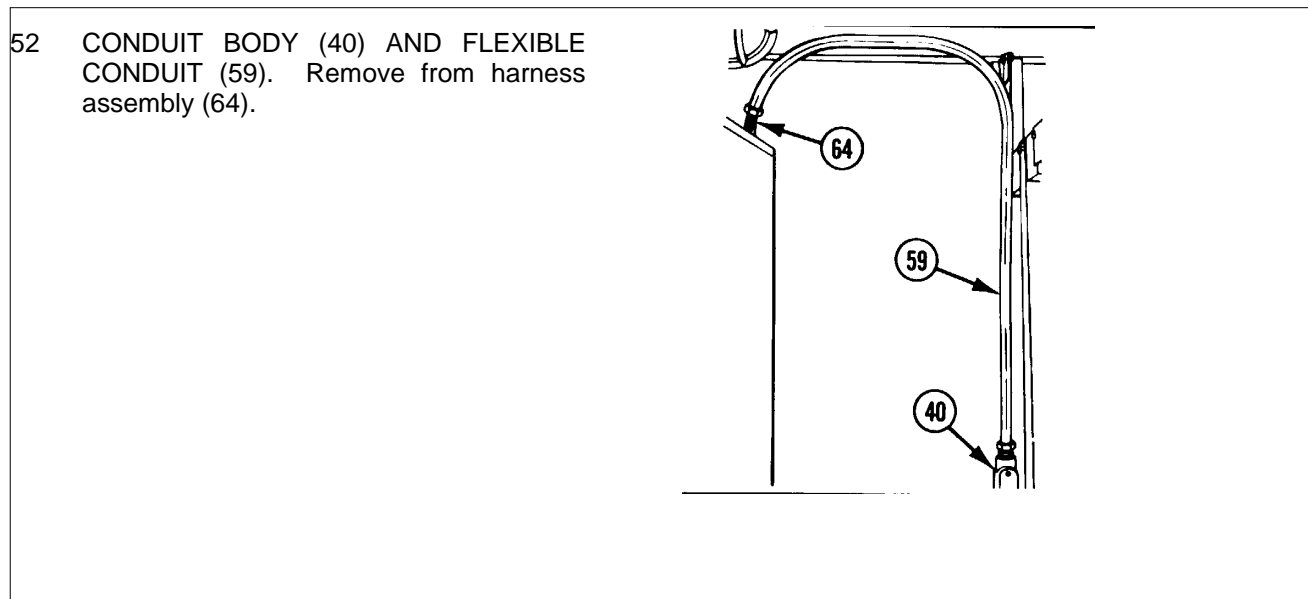
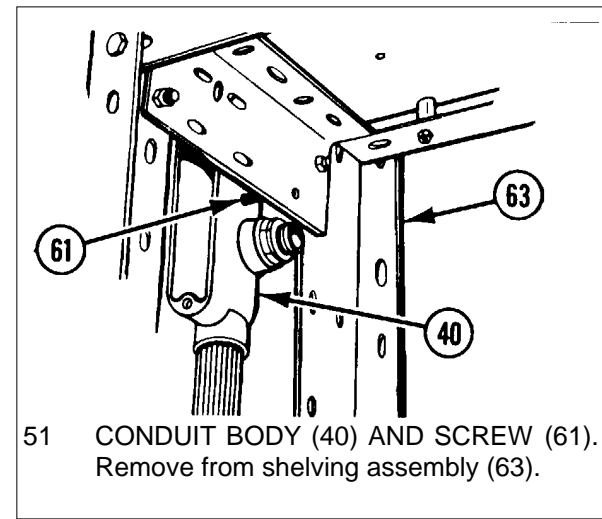
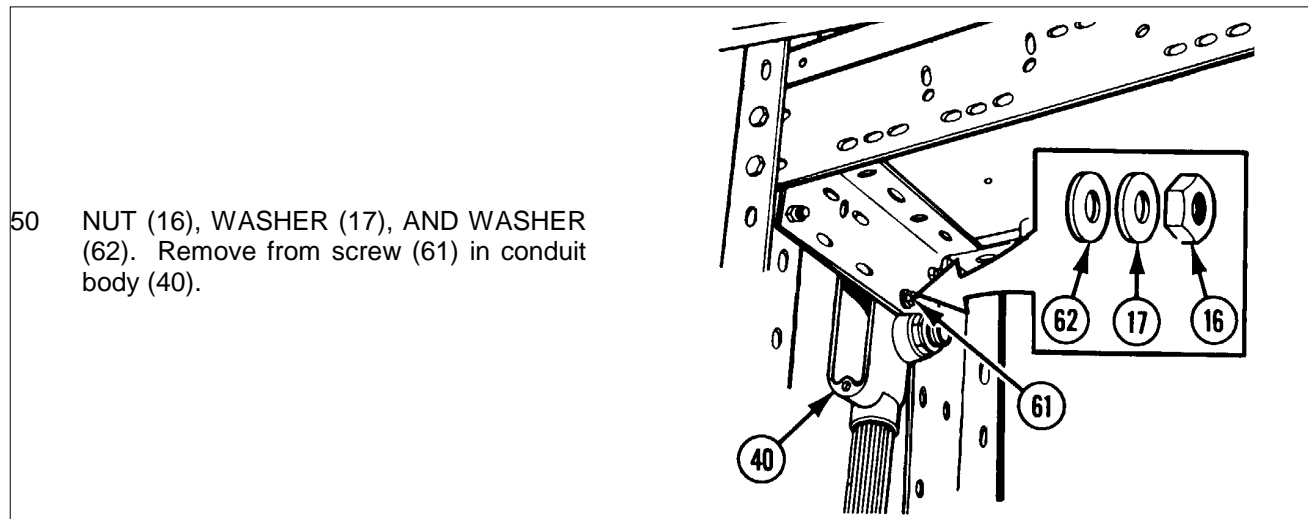
48 NUT (16), WASHER (17), SCREW (61), AND CLAMP (41). Remove from flexible conduit (59).

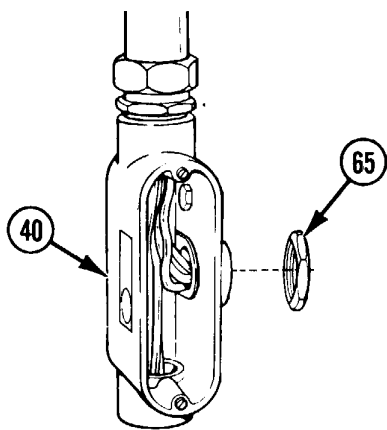
49 SCREW (61) AND CLAMP (41). Remove from flexible conduit (59).



13-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

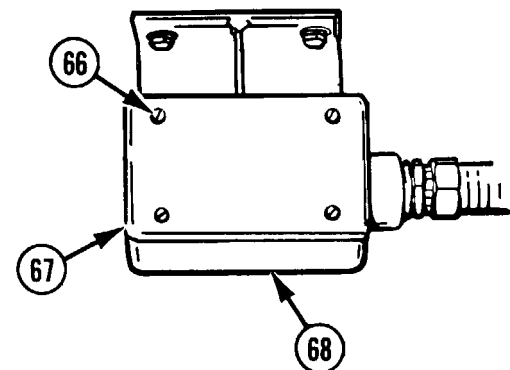
DISASSEMBLY (cont) I



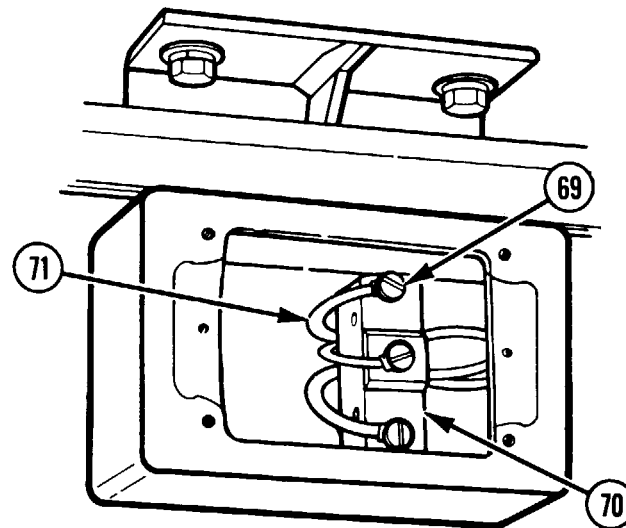


54 REDUCER (65). Remove from conduit body (40).

- 55 FOUR SCREWS (66). Remove from cover (67) of switchbox S9 (68).
- 56 COVER (67). Remove.



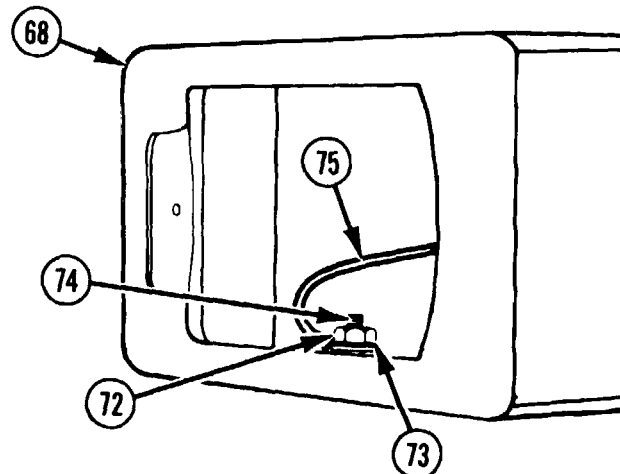
- 57 THREE SCREWS (69). Remove from microswitch S9 (70).
- 58 THREE BLUE WIRES (71). Disconnect.
- 59 THREE SCREWS (69). Reinstall in microswitch S9 (70).



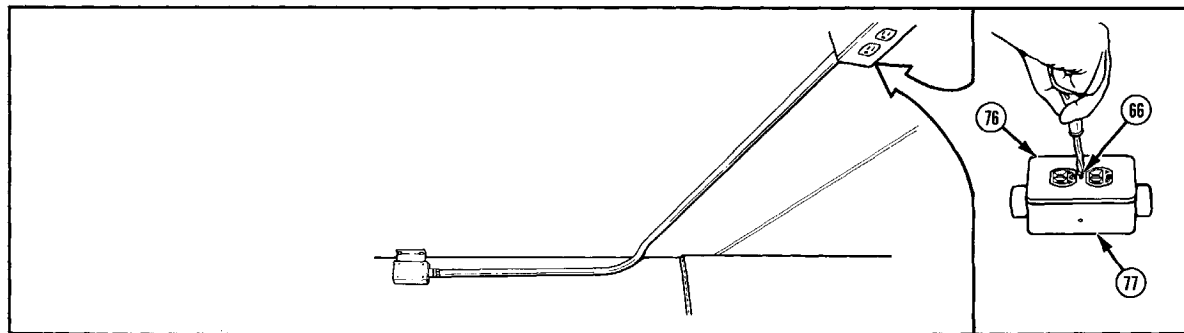
3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

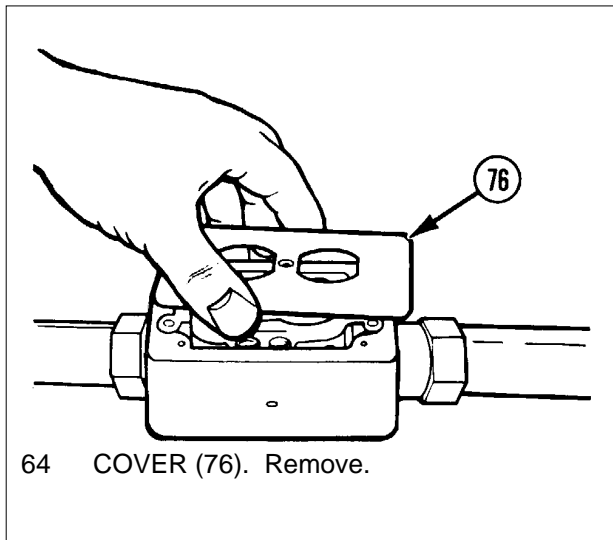
DISASSEMBLY (cont)

- 60 NUT (72) AND WASHER (73). Remove from screw (74) in switchbox S9 (68).
- 61 GREEN WIRE (75). Disconnect.
- 62 WASHER (73) AND NUT (72). Reinstall on screw (74).

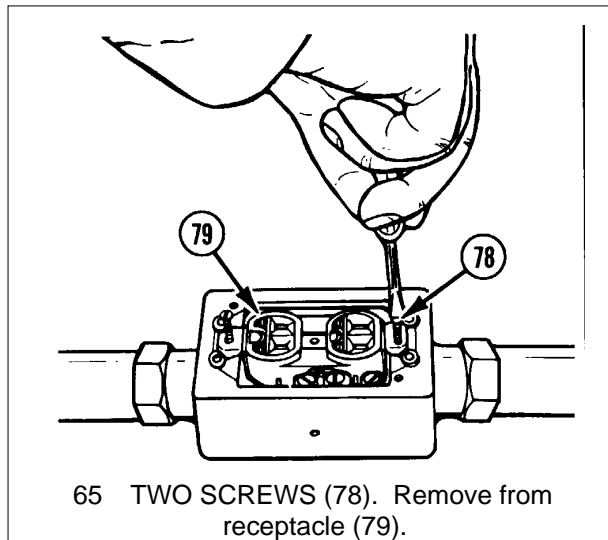


- 63 SCREW (66). Remove from cover (76) of conduit box J21 (77).

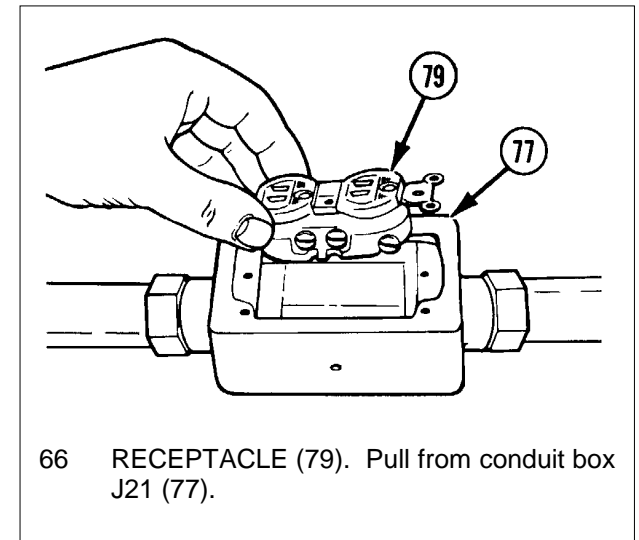




64 COVER (76). Remove.



65 TWO SCREWS (78). Remove from receptacle (79).

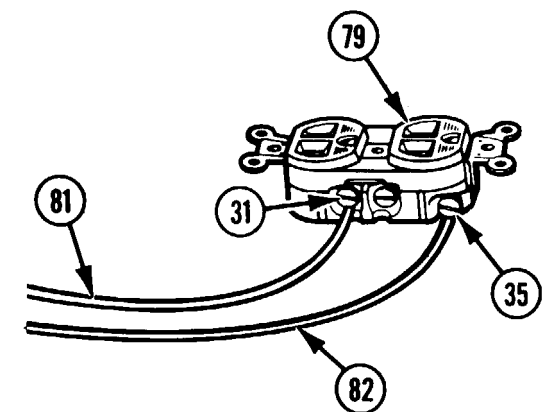
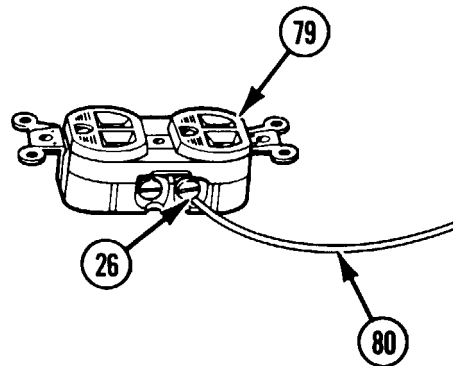


66 RECEPTACLE (79). Pull from conduit box J21 (77).

67 BRASS SCREW (26), SILVER SCREW (31), AND GROUND SCREW (35). Loosen.

68 BLACK WIRE (80), WHITE WIRE (81), AND GREEN WIRE (82). Disconnect.

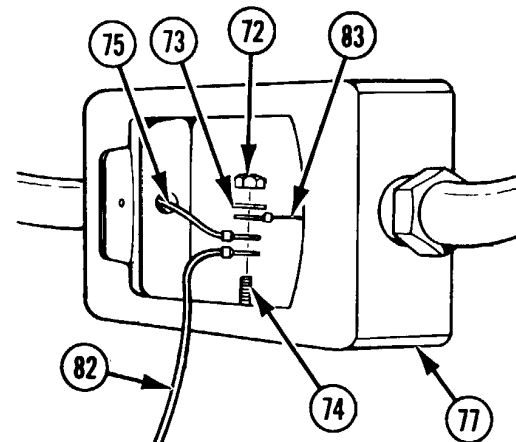
69 RECEPTACLE (79). Remove.



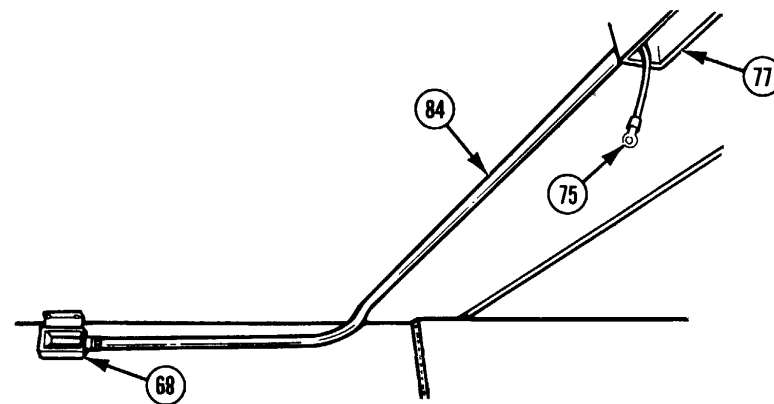
13-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

DISASSEMBLY (cont)

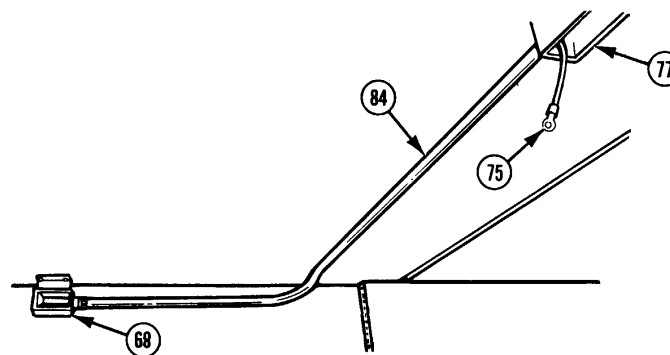
- 70 NUT (72) AND WASHER (73). Remove from screw (74) in conduit box J21 (77).
- 71 GREEN WIRE (75), GREEN WIRE (82), AND GREEN WIRE (83). Disconnect.
- 72 GREEN WIRE (82). Remove.
- 73 WASHER (73) AND NUT (72). Reinstall on screw (74).



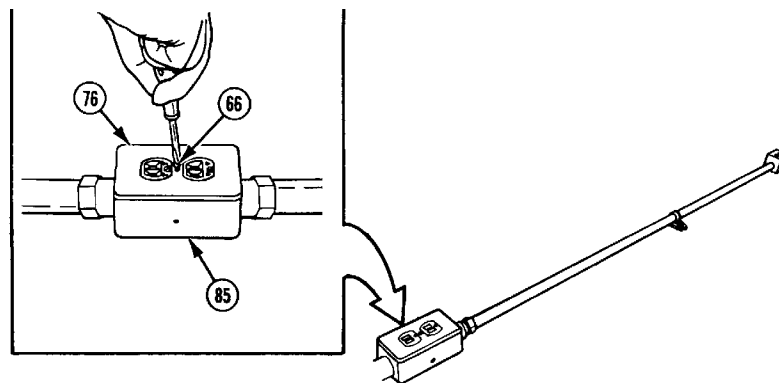
- 74 GREEN WIRE (75). Remove from conduit (84) between switchbox S9 C68) and conduit box J21 (77).



75 THREE BLUE WIRES (71). Pull through conduit (84) from switch box S9 (68) to conduit box J21 (77).

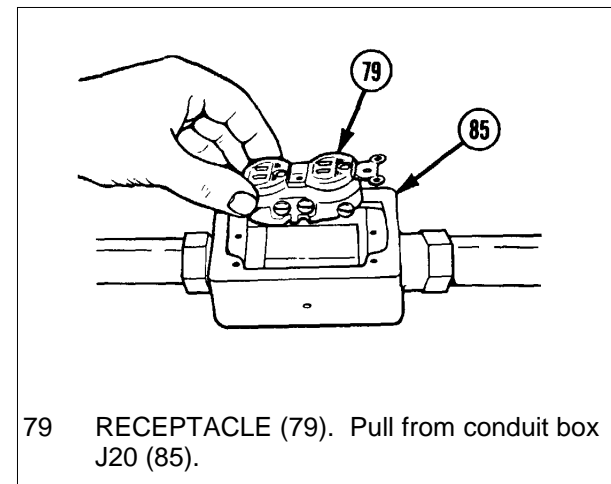
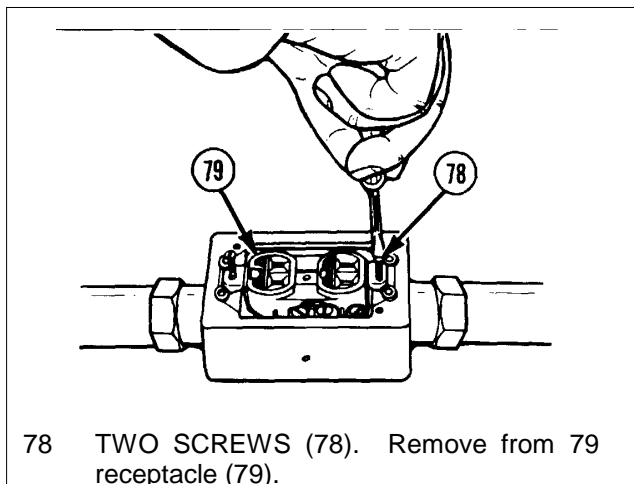
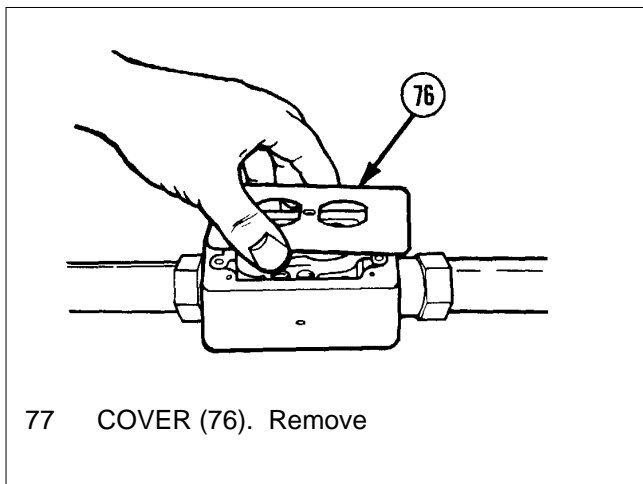


76 SCREW (66). Remove from cover (76) of conduit box J20 (85).



3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

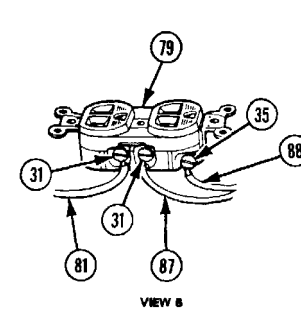
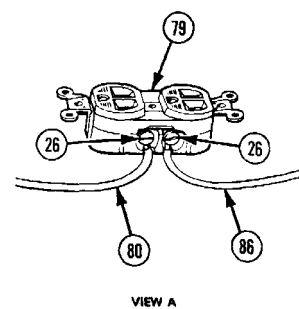
DISASSEMBLY (cont)



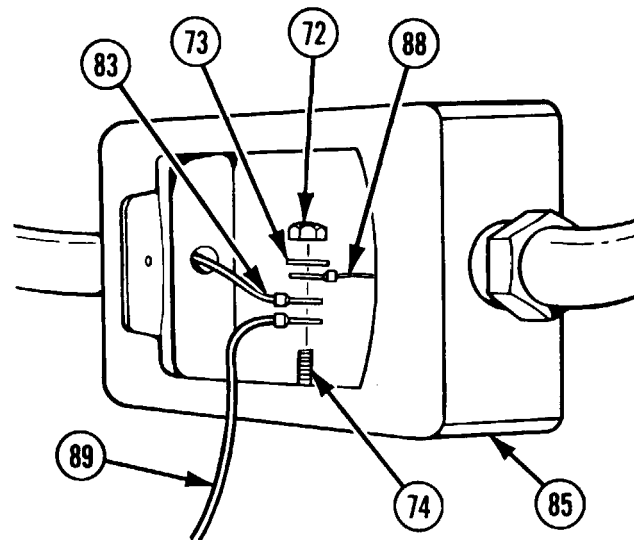
80 TWO BRASS SCREWS (26), TWO SILVER SCREWS (31), AND GROUND SCREW (35). Loosen.

81 BLACK WIRE (80), BLACK WIRE (86), WHITE WIRE (81), WHITE WIRE (87), AND GREEN WIRE (88). Disconnect.

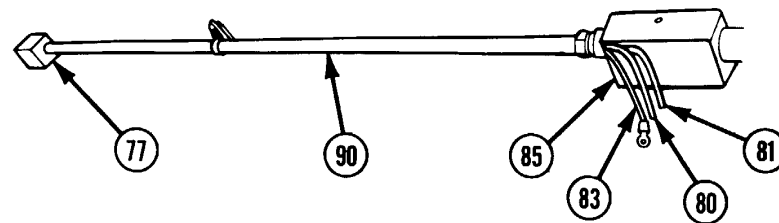
82 RECEPTACLE (79). Remove.



- 83 NUT (72) AND WASHER (73). Remove from screw (74) in conduit box J20 (85).
- 84 GREEN WIRE (88), GREEN WIRE (83), AND GREEN WIRE (89). Disconnect.
- 85 GREEN WIRE (88). Remove.
- 86 WASHER (73) AND NUT (72). Reinstall on screw (74).



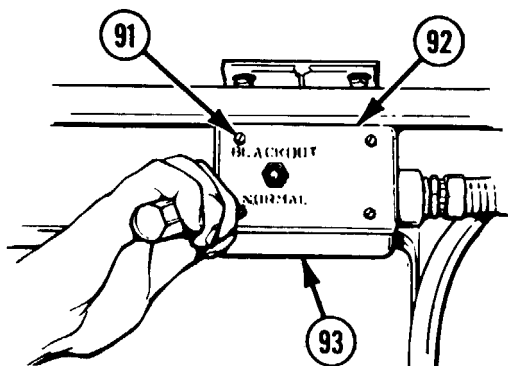
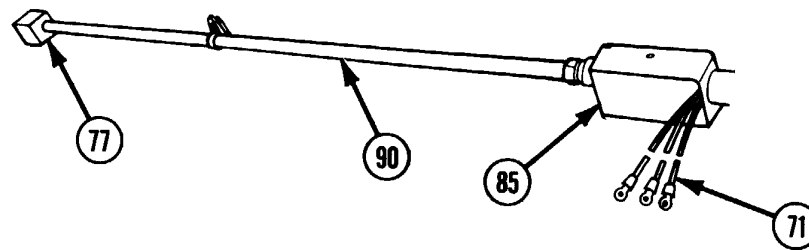
- 87 GREEN WIRE (83), BLACK WIRE (80), AND WHITE WIRE (81). Remove from conduit (90) between conduit box J21 (77) and conduit box J20 (85).



3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

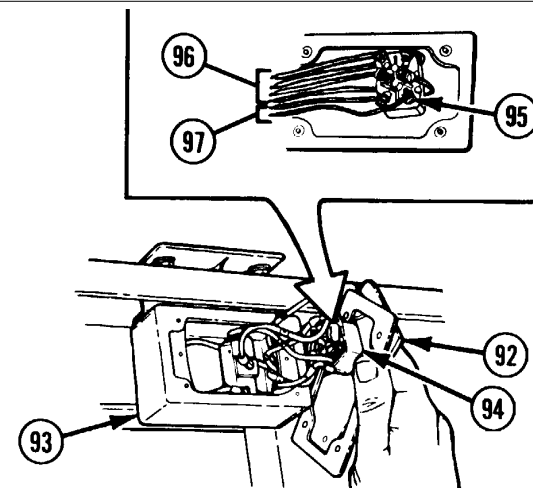
DISASSEMBLY (cont)

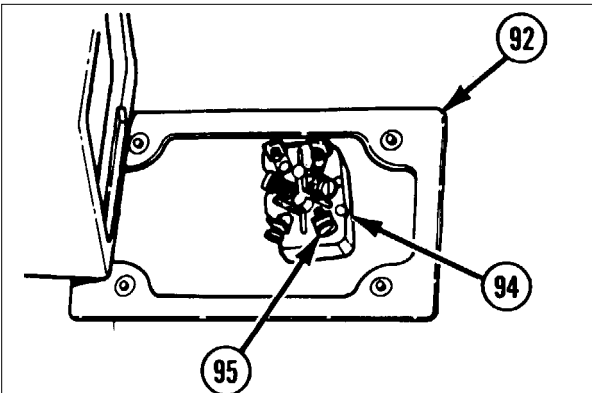
88 THREE BLUE WIRES (71). Pull through conduit (90) from conduit box J21 (77) to conduit box J20 (85).



89 FOUR SCREWS (91). Remove from cover (92) from switchbox S7/S8 (93).

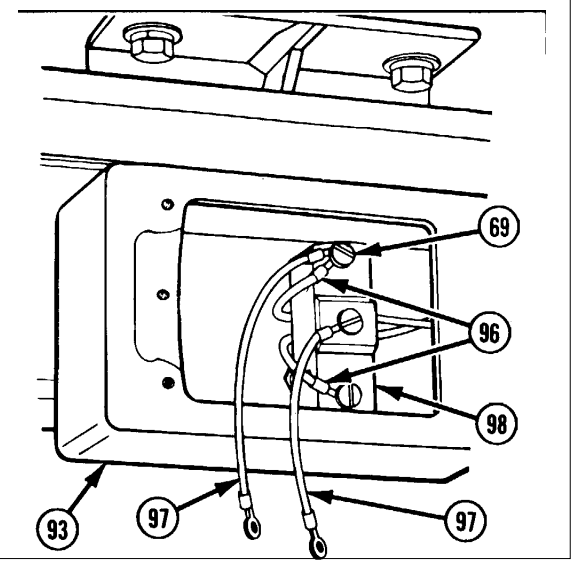
- 90 COVER (92) AND TOGGLE SWITCH S8 (94). Pull away from switchbox S7/S8 (93).
- 91 SIX SCREWS (95) IN TOGGLE SWITCH S8 (94). Remove.
- 92 FOUR BLACK WIRES (96) AND TWO BLACK WIRES (97). Disconnect.



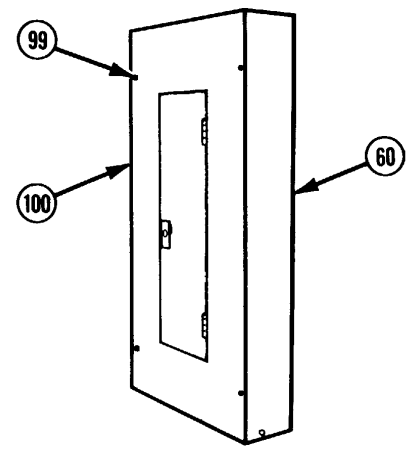


- 93 COVER (92) AND TOGGLE SWITCH S8 (94). Remove.
- 94 SIX SCREWS (95). Reinstall in toggle switch S8 (94).

- 95 THREE SCREWS (69) IN MICROSWITCH S7 (98). Remove.
- 96 TWO BLACK WIRES (96) AND TWO BLACK WIRES (97). Disconnect.
- 97 TWO BLACK WIRES (97). Remove from switchbox S7/S8 (93).
- 98 THREE SCREWS (69). Reinstall in microswitch S7 (98).



- 99 FOUR SCREWS (99). Remove from front panel (100) of circuit breaker panel box PL1 (60).
- 100 FRONT PANEL (100). Remove.

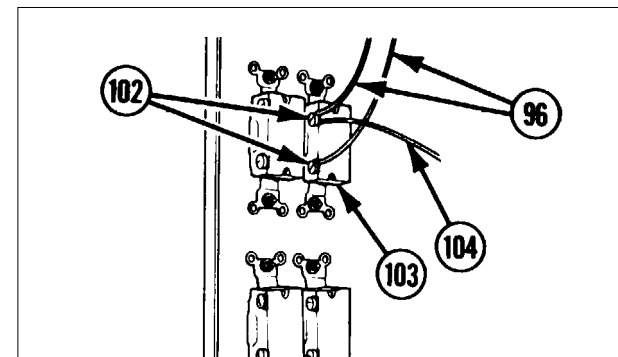
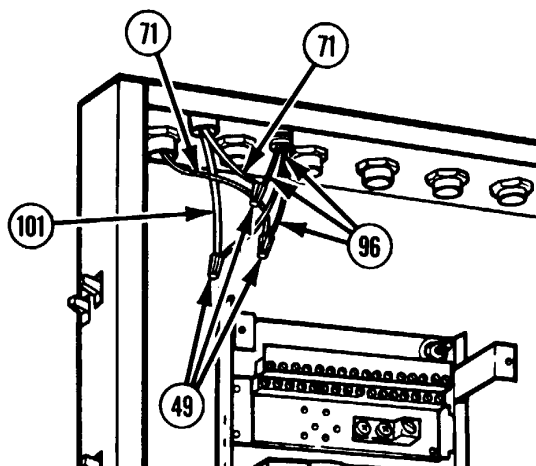


3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

DISASSEMBLY (cont)

101 THREE CONDUCTOR SPLICES (49).

- a. Remove.
- b. Disconnect black wire (96) from black wire (101) of blackout lamp.
- c. Disconnect black wire (96) from blue wire (71).
- d. Disconnect black wire (96) from blue wire (71).

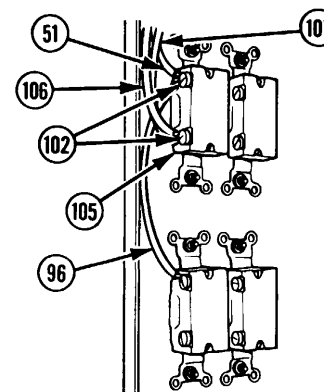


102 TWO TERMINAL SCREWS (102). Loosen in switch S4 (103).

103 TWO BLACK WIRES (96) AND BLACK WIRE (104). Disconnect.

104 TWO TERMINAL SCREWS (102). Loosen in switch S2 (105).

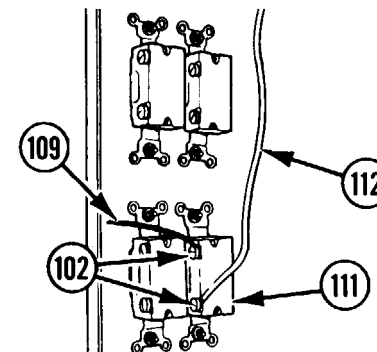
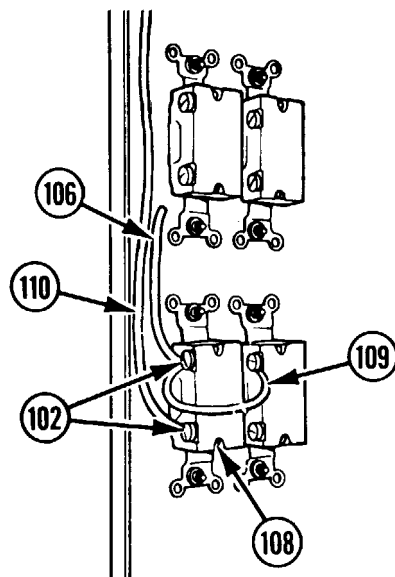
105 BLACK WIRE (51), BLACK WIRE (96), BLACK WIRE (106), AND RED WIRE (107) FROM CENTER LAMP ASSEMBLY. Disconnect.



106 TWO TERMINAL SCREWS (102). Loosen in switch S1 (108).

107 BLACK WIRE (106), BLACK WIRE (109), AND BLACK WIRE (110) FROM RIGHT LAMP ASSEMBLY. Disconnect.

108 BLACK WIRE (106). Remove.



109 TWO TERMINAL SCREWS (102). Loosen in switch S3 (111).

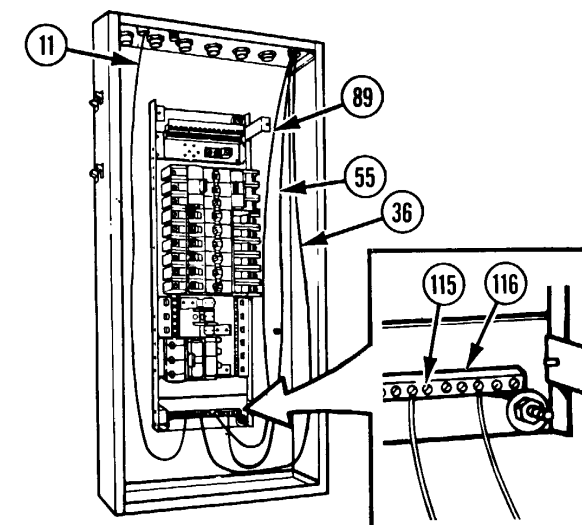
110 BLACK WIRE (109) AND BLUE WIRE (112) FROM LEFT LAMP ASSEMBLY. Disconnect.

111 BLACK WIRE (109). Remove.

112 HARNESS ASSEMBLY (113). Remove from flexible conduit (114) between switchbox S7/S8 (93) and circuit breaker panel box PL1 (60).

113 FOUR TERMINAL SCREWS (115) IN GROUND BUSS W2 (116). Loosen.

114 GREEN WIRE (89), GREEN WIRE (55), GREEN WIRE (36), AND GREEN WIRE (11). Disconnect.

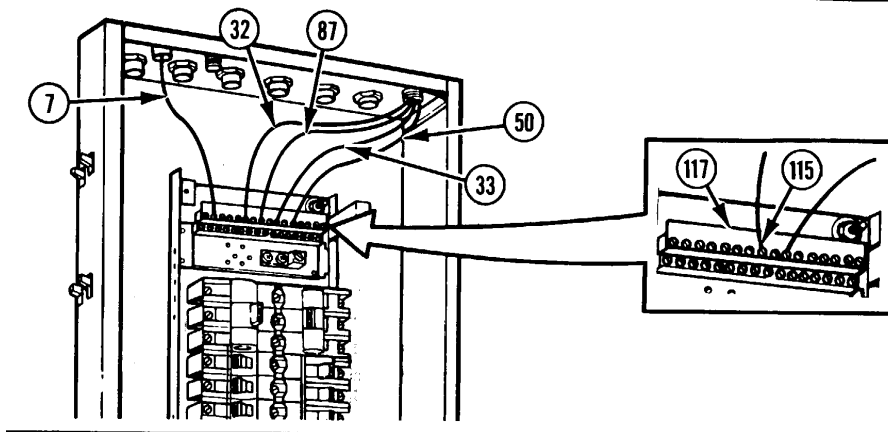


3-10 SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)j

DISASSEMBLY (cont)

115 FIVE TERMINAL SCREWS (115) IN NEUTRAL BUSS W1 (117).
Loosen.

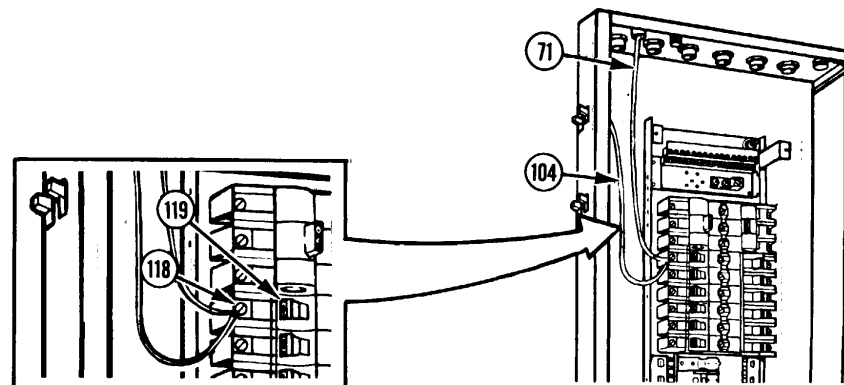
116 WHITE WIRE (87), WHITE WIRE (50), WHITE WIRE (32), WHITE
WIRE (33), AND WHITE WIRE (7). Disconnect.



117 TERMINALS SCREW (118) IN CIRCUIT BREAKER CB4 (119).
Loosen.

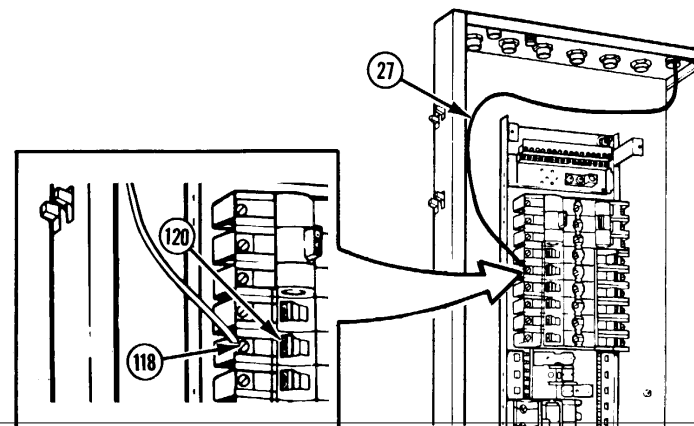
118 BLUE WIRE (71) AND BLACK WIRE (104). Disconnect.

119 BLACK WIRE (104). Remove.



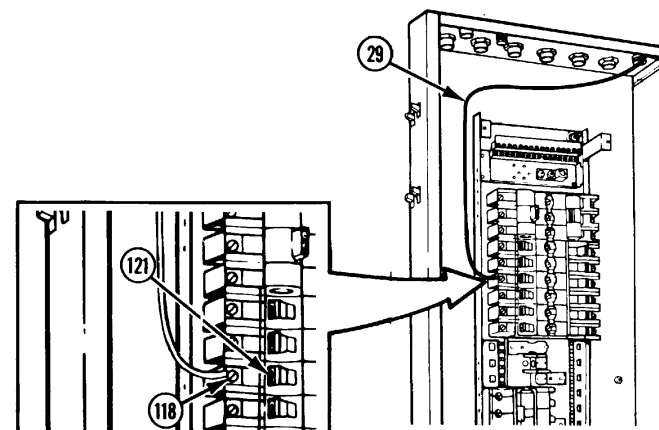
120 TERMINAL SCREW (118) IN CIRCUIT BREAKER CB6 (120). Loosen.

121 BLACK WIRE (27). Disconnect.



122 TERMINAL SCREW (118) IN CIRCUIT BREAKER CB8 (121). Loosen.

123 RED WIRE (29). Disconnect.

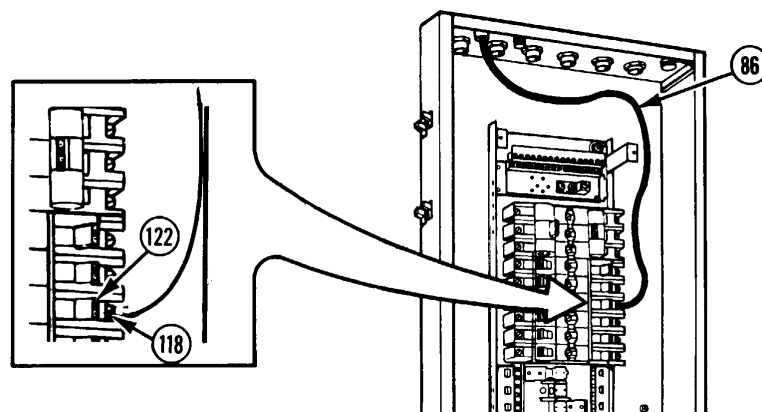


3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

DISASSEMBLY (cont)

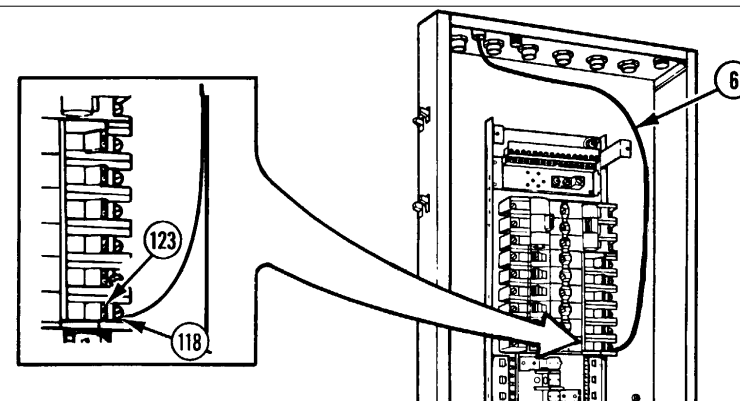
124 TERMINAL SCREW (118) IN CIRCUIT BREAKER CB9 (122). Loosen.

125 BLACK WIRE (86). Disconnect.

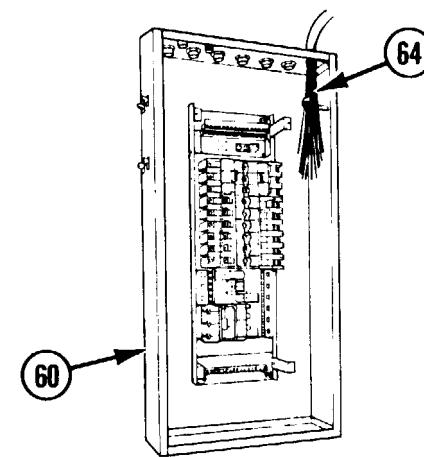
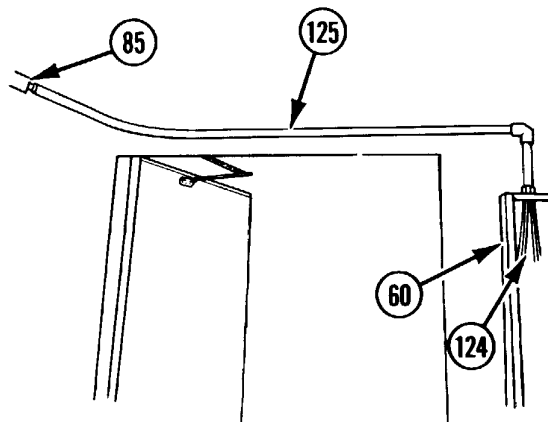


126 TERMINAL SCREW (118) IN CIRCUIT BREAKER CB15 (123). Loosen.

127 BLUE WIRE (6). Disconnect.



128 HARNESS ASSEMBLY (124). Remove from conduit (125) between conduit box J20 (85) and circuit breaker panel box PL1 (60).



129 HARNESS ASSEMBLY (64). Remove from circuit breaker panel box PL1 (60).

INSPECTION AFTER DISASSEMBLY:

ALL WIRING. Inspect for worn insulation, breaks, or indication of short circuit.

REPAIR

NOTE
Repair is by replacement of authorized parts (app C) as required.

- 1 WIRE. Replace by fabrication (fig. 3, app E) as applicable. Refer to wire table (p 3-74).
- 2 LUG TERMINALS. Replace.
- 3 FLEXIBLE CONDUIT. Replace by fabrication (fig. 4, app E) as applicable.

- 4 RACEWAY. Replace if needed.
- 5 CONNECTORS. Replace.
- 6 CONDUIT BODY. Replace.
- 7 CLAMPS, SCREWS, WASHERS, AND NUTS. Replace.
- 8 INSULATION. Repair by applying tape (item 19, app D) as needed.

3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

REPAIR (cont)

Table 3-2. Wire Table

*Wire No.	Color	Length	Termination		Part No.	Terminals	Qty	Notes
			From	To				
1	Black	30 in. (76.20 cm)	S8-3	S4-E1	12011690-1	MS25036-111	1	Stranded
1A	Black	10 in. (25.40 cm)	S4-E1	PL1-CB4	12011690-2			Stranded
2	Black	30 in. (76.20 cm)	S8-2	S2-E1	12011690-1	MS25036-111	1	Stranded
2A	Black	6 in. (15.24 cm)	S2-E1	S1-E1	12011690-3			Stranded
2B	Black	6 in. (15.24 cm)	SI-E1	S3-E1	12011690-3			Stranded
3	Black	30 in. (76.20 cm)	S8-6	S4-E2	12011690-1	MS25036-111		Stranded
4	Blue	264 in. (670.00 cm)	S9-NC	PL1-SP2	12011690-5			
4A	Black	30 in. (76.20 cm)	PL1-SP2	S7-NC	12011690-1	MS25036-111	1	Stranded
4B	Black	4 in. (10.16 cm)	S7-NC	S8-4	12011690-4	MS25036-111	2	Stranded
5	Blue	264 in. (670.100 cm)	S9-C	PL1-CB4	12011690-5			
6	Blue	264 in. (670.00 cm)	S9-NO	PL1-SP3	12011690-5			
6 A	Black	30 in. (76.20 cm)	PL1-SP3	S7-C	12011690-1	MS25036-111	1	Stranded
7	Black	30 in. (76.20 cm)	S8-5	PL1-SP1	12011690-1	MS25036-111	1	Stranded
8	Black	4 in. (10.16 cm)	S8-1	S7-NO	12011690-4	MS25036-111	2	Stranded

9	Black	192 in. (487.68 cm)	PL1-CB9	J20-X J21-X	12011690-6		
Section							
9	Black	130 in. (330.20 cm)	PL1-CB9	J20-X	12011690-6		
Section							
9	Black	62 in. (157.48 cm)	J20-X	J21-X	12011690-6		
10	White	192 in. (487.68 cm)	PL1-W1	J21-W J20-W	12011690-7		
Section							
10	White	130 in. (330.20 cm)	PL1-W1	J20-W	12011690-7		
Section							
10	White	62 in. (157.48 cm)	J20-W	J21-W	12011690-7		
11	Green	264 in. (670.00 cm)	PL1-W2	S9-WT3 J21-WT2 J20-WT1	12011690-8		
Section							
11	Green	112 in. (284.48 cm)	PL1-W2	J20-WT1	12011690-8		
Section							
11	Green	62 in. (157.48 cm)	J20-WT1	J21-WT2	12011690-8		
Section							
11	Green	90 in. (228.60 cm)	J21-WT2	S9-WT3	12011690-8		
11A	Green	4 in. (10.16 cm)	J20-GD	J20-WT1	12011690-9	MS25036-156	1
11B	Green	4 in. (10.16 cm)	J21-GD	J21-WT2	12011690-9	MS25036-156	1
12	Black	108 in. (274.32 cm)	S2-E2	DS1-SP1	12011690-10		

*All wire is no. 12 AWG, type THWN, solid copper, single conductor, except as noted. All insulation is stripped back 0.5 in. (1.27 cm) from each end.



13-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

REPAIR (cont)

Table 3-2. Wire Table (cont)

*Wire No.	Color	Length	Termination		Part No.	Terminals	Qty	Notes
			From	To				
13	White	108 in. (274.32 cm)	PL1-W1	DS1-SP2	12011690-11			
14	Green	108 in. (274.32 cm)	PL1-W2	DS1-WT4	12011690-12			
15	Black	144 in. (365.76 cm)	PL1-CB6	J22-X	12011690-13			
15A	Black	6 in. (15.24 cm)	J22-X	J23-X	12011690-3			Stranded
15B	Black	6 in. (15.24 cm)	J23-X	J24-X	12011690-3			Stranded
16	White	144 in. (365.76 cm)	PL1-W1	J22-W	12011690-14			
16A	White	6 in. (15.24 cm)	J22-W	J23-W	12011690-15			
16B	White	6 in. (15.24 cm)	J23-W	J24-W	12011690-15			
17	Green	144 in. (365.76 cm)	PL1-W2	J22-GD	12011690-16			
17A	Green	6 in. (15.24 cm)	J22-GD	J23-GD	12'011690-17			
17B	Green	6 in. (15.24 cm)	J23-GD	J24-GD	12011690-17			
17C	Green	6 in. (15.24 cm)	J24-GD	J25-GD	12011690-17			
17D	Green	6 in. (15.24 cm)	J25-GD	J26-GD	12011690-17			
17E	Green	6 in. (15.24 cm)	J26-GD	J27-GD	12011690-17			

18	Red	156 in. (396.24 cm)	PL1-CB8	J25-X	12011690-18
18A	Red	6 in. (15.24 cm)	J25-X	J26-X	12011690-19
18B	Red	6 in. (15.24 cm)	J26-X	J27-X	12011690-19
19	White	156 in. (396.24 cm)	PL1-W1	J25-W	12011690-20
19A	White	6 in. (15.24 cm)	J25-W	J26-W	12011690-15
19B	White	6 in. (15.24 cm)	J26-W	J27-W	12011690-15
20	Blue	216 in. (548.64 cm)	PL1-CB15	PS1-TB1-4	12011690-21
21	White	216 in. (548.64 cm)	PL1-W1	PS1-TB1-1	12011690-22
22	Green	216 in. (548.64 cm)	PL1-W2	PS1-WT5	12011690-23

*All wire is no. 12 AWG, type THWN, solid copper, single conductor, except as noted. All insulation is stripped back 0.5 in.(1.27 cm) from each end.

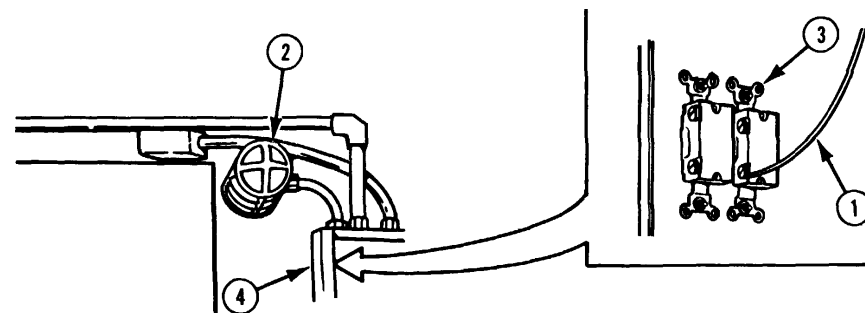
MODIFICATION

NOTE

Modification of the electrical installation is required when installing wiring in a new shelter which has not previously been modified.

For clarity, wires not mentioned in text are not shown.

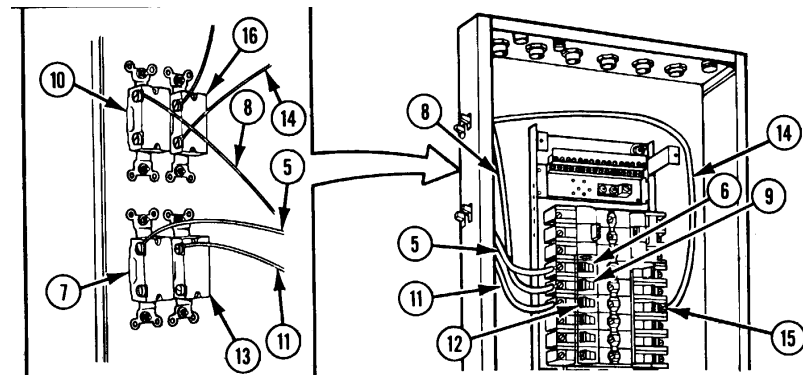
- 1 BLACK WIRE (1) FROM BLACKOUT LAMP (2). Disconnect from switch S4 (3) inside circuit breaker panel box PL1 (4).



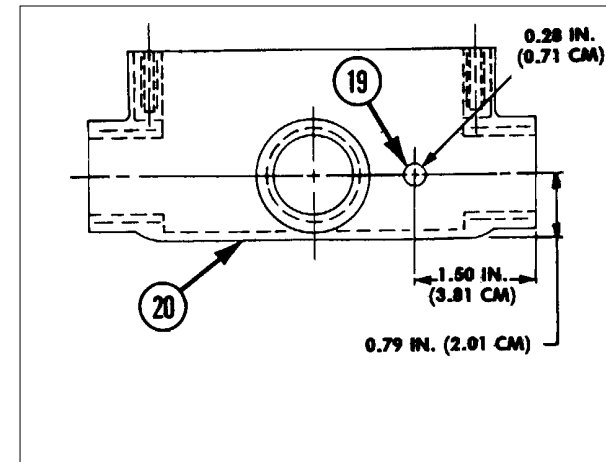
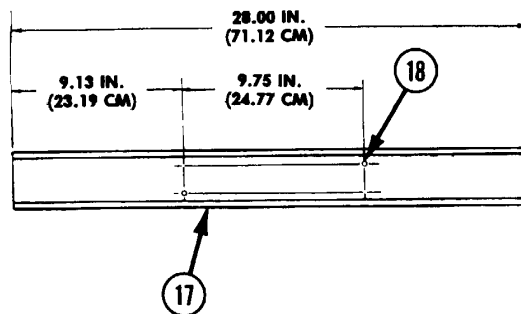
3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

MODIFICATION (cont)

- 2 WIRE (5) FROM CIRCUIT BREAKER CB4 (6) TO SWITCH S1 (7). Remove.
- 3 WIRE (8) FROM CIRCUIT BREAKER CB6 (9) TO SWITCH S2 (10). Remove.
- 4 WIRE (11) FROM CIRCUIT BREAKER CB8 (12) TO SWITCH S3 (13). Remove.
- 5 WIRE (14) FROM CIRCUIT BREAKER CB9 (15) TO SWITCH S4 (16). Remove.

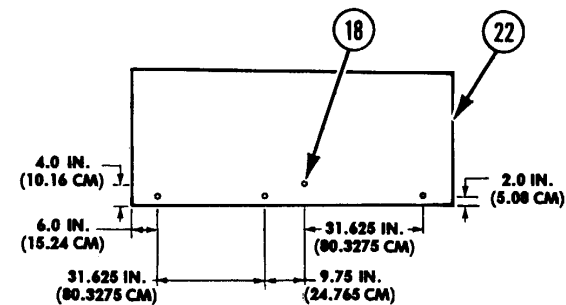
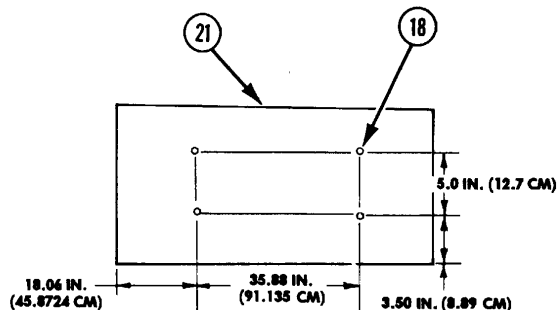


- 6 RACEWAY (17). Cut length as illustrated.
- 7 TWO 0.31-IN. (0.79-CM) HOLES (18). Drill in raceway (17) as illustrated.
- 8 ONE 0.28-IN. (0.71-CM) HOLE (19). Drill in conduit body (20) as illustrated.



9

FOUR 0.31-IN. (0.79-CM) HOLES (18). Drill in lower shelving (21) as illustrated.



10 FOUR 0.31-IN. (0.79-CM) HOLES (18). Drill through table top (22) as illustrated.

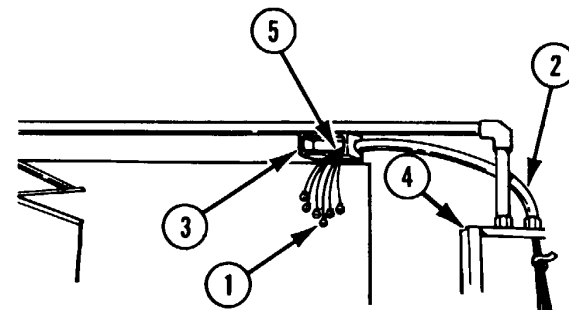
REASSEMBLY

NOTE

Before reassembling the electrical installation, check the wiring diagram (fig. 3-1), the schematic diagram (fig. 3-2), and the wire table (p 3-74).

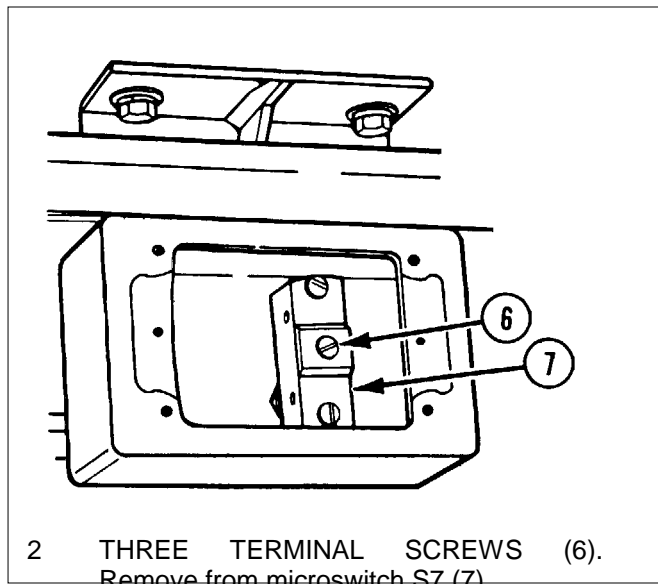
Using harness assembly with ends of six wires taped together, perform step 1, ensuring the ends with lug terminals are left in switchbox S7/S8.

- 1 HARNESS ASSEMBLY (1).
 - a. Pull through flexible conduit (2) from switchbox S7/S8 (3) to circuit breaker panel box PL1 (4).
 - b. Remove all tape (5).



3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY (cont)



NOTE
Two black wires no. 8 and no. 4B will be installed at connection.

3 BLACK WIRE NO. 4A (8) AND BLACK WIRE NO. 4B (9).

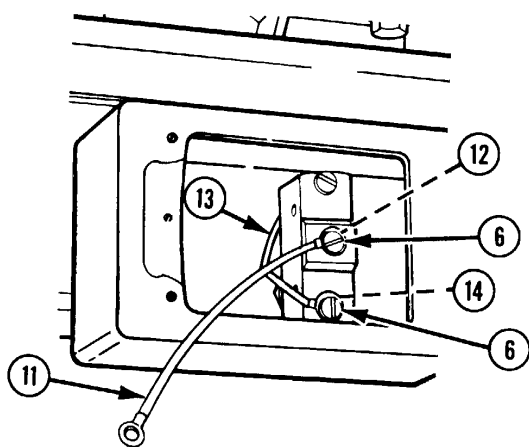
- a. Connect to terminal no. NC (10).
- b. Reinstall terminal screw (6).

- 4 BLACK WIRE NO. 8 (11).

 - a. Connect to terminal no. NO (12).
 - b. Reinstall terminal screw (6).

- 5 BLACK WIRE NO. 6A (13).

 - a. Connect to terminal no. C (14).
 - b. Reinstall terminal screw (6).



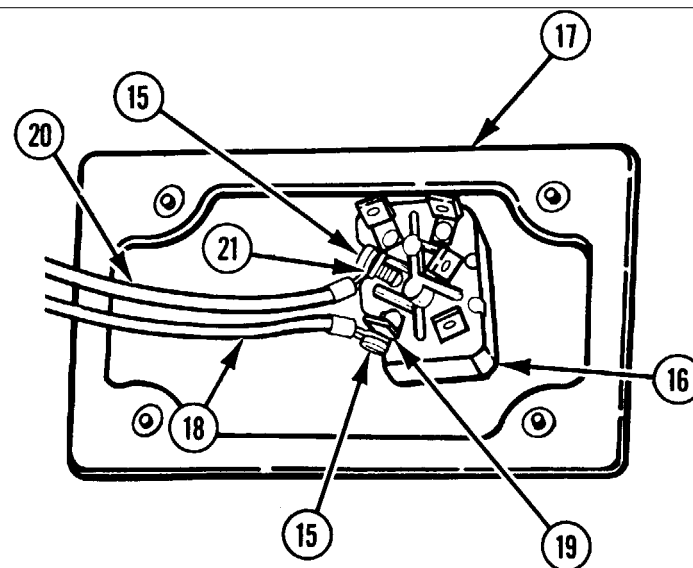
6 SIX TERMINAL SCREWS (15) IN TOGGLE SWITCH S8 (16) IN COVER (17). Remove.

7 BLACK WIRE NO. 1 (18).

- a. Connect to terminal no. 3 (19).
- b. Reinstall terminal screw (15).

8 BLACK WIRE NO. 2 (20).

- a. Connect to terminal no. 2 (21).
- b. Reinstall terminal screw (15).

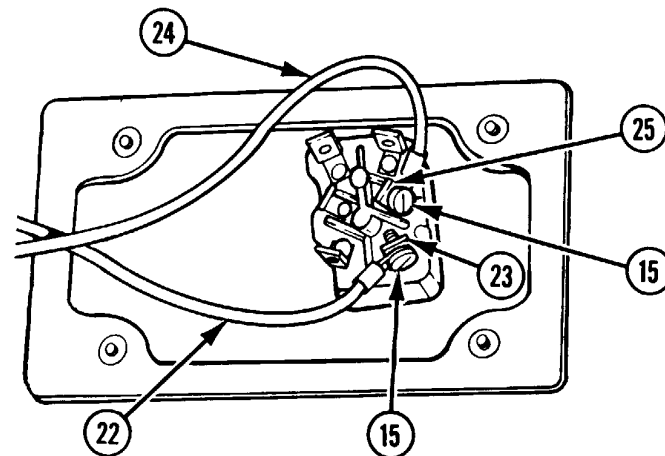


9 BLACK WIRE NO. 3 (22).

- a. Connect to terminal no. 6 (23).
- b. Reinstall terminal screw (15).

10 BLACK WIRE NO. 7 (24).

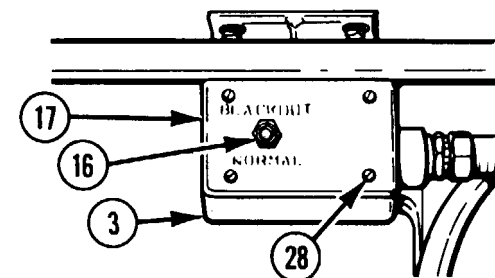
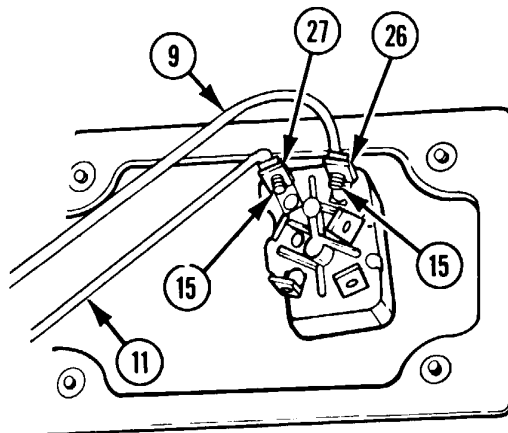
- a. Connect to terminal no. 5 (25).
- b. Reinstall terminal screw (15).



3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY (cont)

- 11 BLACK WIRE NO. 4B (9).
 - a. Connect to terminal no. 4 (26).
 - b. Reinstall terminal screw (15).
- 12 BLACK WIRE NO. 8 (11).
 - a. Connect to terminal no. 1 (27).
 - b. Reinstall terminal screw (15).

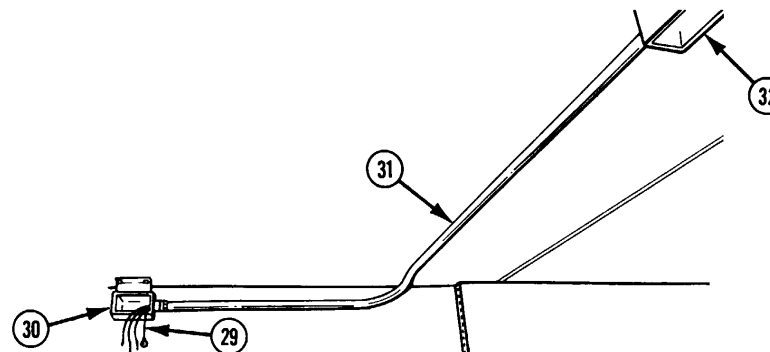


- 13 COVER (17) WITH TOGGLE SWITCH S8 (16).
 - a. Install on switchbox S7/S8 (3).
 - b. Install four screws (28).

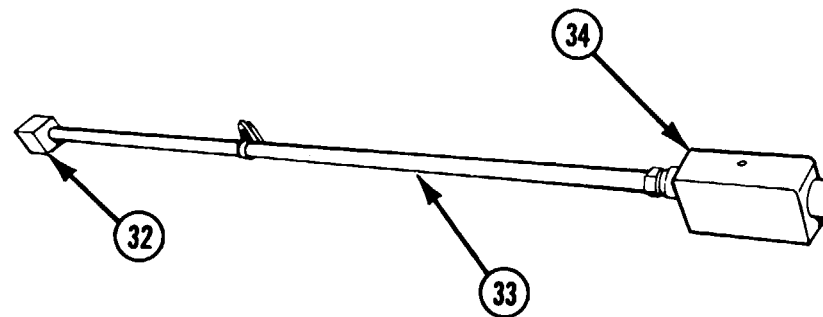
NOTE

Using harness assembly with ends of six wires taped together, perform the procedures in step 14.

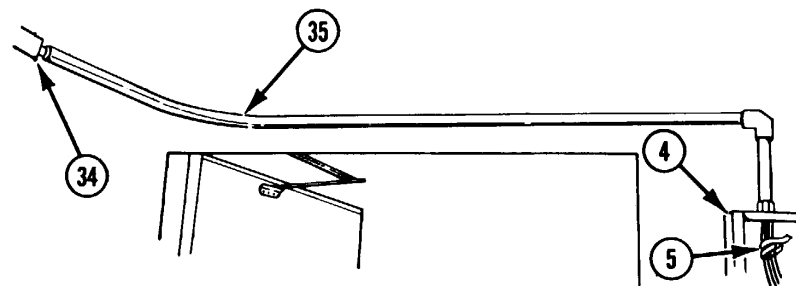
- 14 HARNESS ASSEMBLY (29).
 - a. Pull from switchbox S9 (30) through conduit (31) into conduit box J21 (32).



- b. Pull from conduit box J21 (32) through conduit (33) into conduit box J20 (34).



- c. Pull from conduit box J20 (34) through conduit (35) into circuit breaker panel box PL1 (4).
- d. Leave approximately 24 in. (60.96 cm) in circuit breaker panel box PL1 (4).
- e. Remove all tape (5).



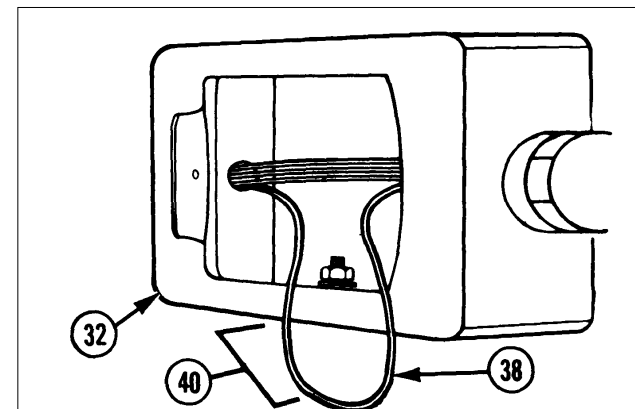
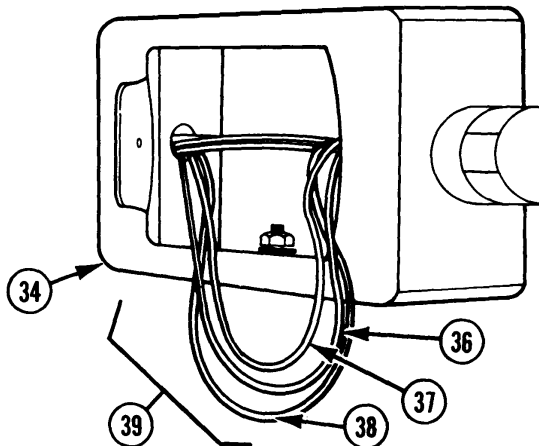
13-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)1

REASSEMBLY (cont)J

NOTE

The following five procedures pertain to wires 9, 10, and 11, for initial installation only or replacement of complete harness assembly.

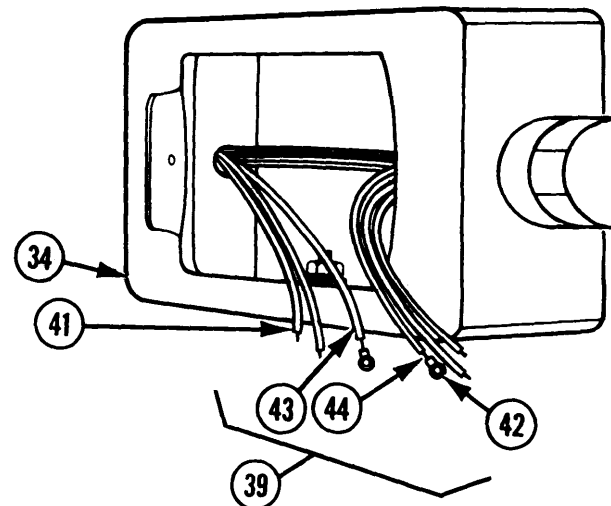
- 15 BLACK WIRE NO. 9 (36), WHITE WIRE NO. 10 (37), AND GREEN WIRE NO. 11 (38) IN CONDUIT BOX J20 (34). Form 6-in. (15.25-cm) service loop (39).



- 16 GREEN WIRE NO. 11 (38) IN CONDUIT BOX J21 (32). Form 6-in. (15.25 cm) service loop (40).

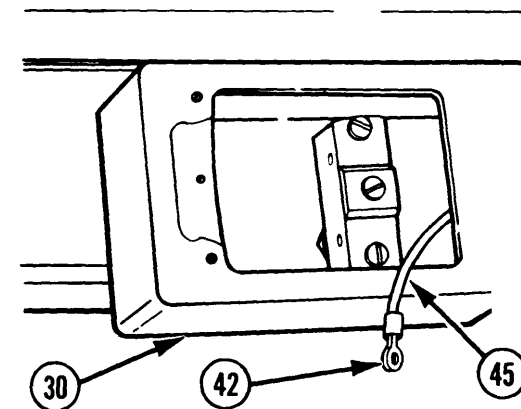
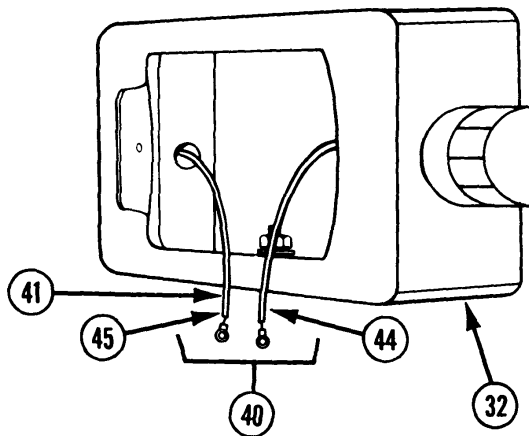
- 17 SERVICE LOOP (39) IN CONDUIT BOX J20 (34).

- a. Cut in center.
- b. Strip insulation (41) back 0.5 in. (1.27 cm) from ends of all cut wires.
- c. Install two lug terminals (42) on green wire no. 11 (43) and green wire no. 11 (44).



18 SERVICE LOOP (40) IN CONDUIT BOX J21 (32).

- a. Cut in center.
- b. Strip insulation (41) back 0.5 in. (1.27 cm) from ends on cut wires.
- c. Install two lug terminals on green wire no. 11 (44) and green wire no. 11 (45).

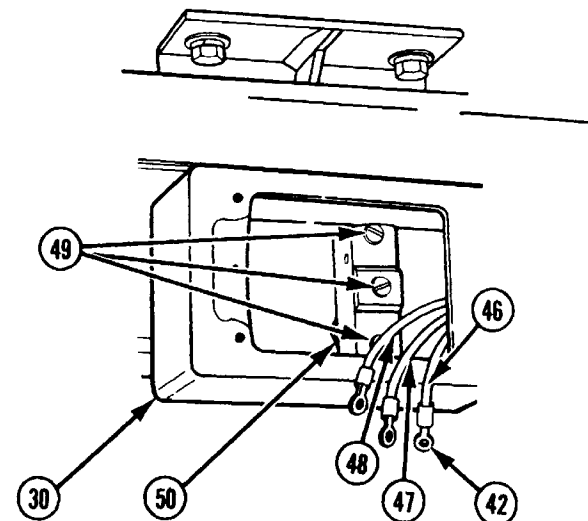


19 GREEN WIRE NO. 11 (45) IN SWITCHBOX S9 (30). Install lug terminal (42).

NOTE

The following procedure pertains to wires 4, 5, and 6, for initial installation only or replacement of complete harness assembly.

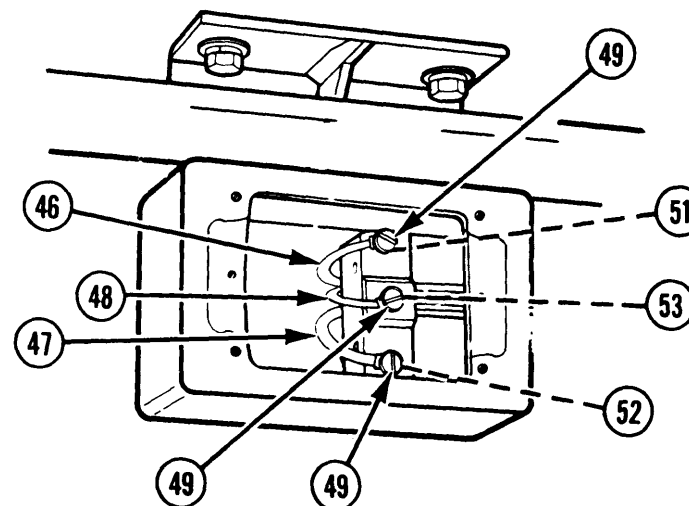
- 20 THREE LUG TERMINALS (42). Install on blue wire no. 4 (46), blue wire no. 5 (47), and blue wire no. 6 (48) in switchbox S9 (30).
- 21 THREE TERMINAL SCREWS (49). Remove from microswitch S9 (50).



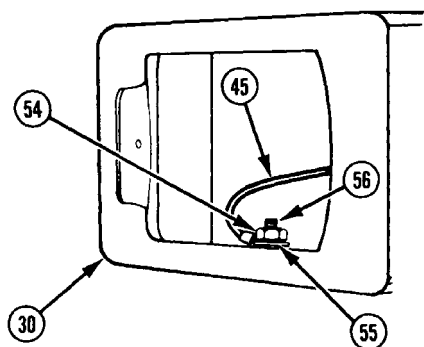
3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY (cont)

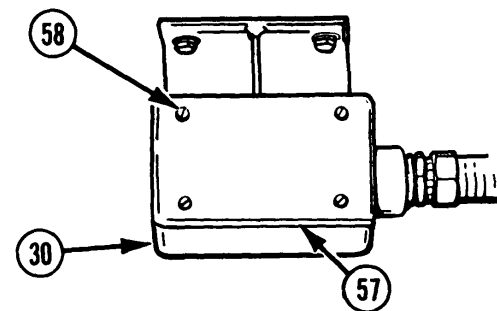
- 22 BLUE WIRE NO. 4 (46).
 - a. Connect on terminal no. NC (51).
 - b. Reinstall screw (49).
- 23 BLUE WIRE NO. 5 (47).
 - a. Connect on terminal no. C (52).
 - b. Reinstall screw (49).
- 24 BLUE WIRE NO. 6 (48).
 - a. Connect on terminal no. NO (53).
 - b. Reinstall screw (49).



- 25 NUT (54) AND WASHER (55). Remove from screw (56) in switchbox S9 (30).
- 26 GREEN WIRE NO. 11 (45).
 - a. Install on screw (56).
 - b. Reinstall washer (55) and nut (54).

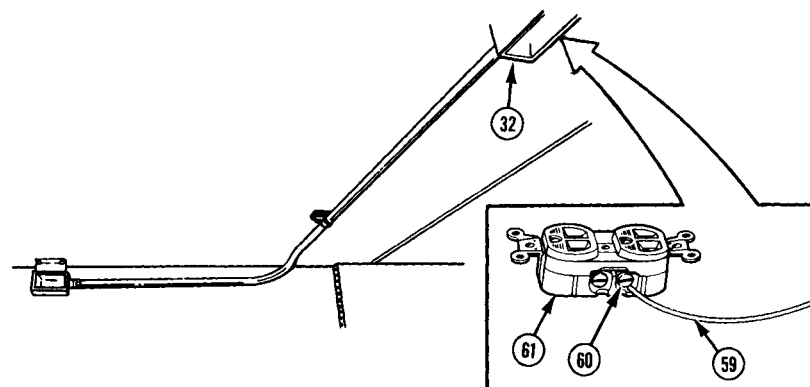


- 27 COVER (57).
 - a. Install on switchbox S9 (30).
 - b. Install four screws (58).



28 BLACK WIRE NO. 9 (59) IN CONDUIT BOX J21 (32).

- a. Connect to brass screw (60) of receptacle (61).
- b. Tighten.

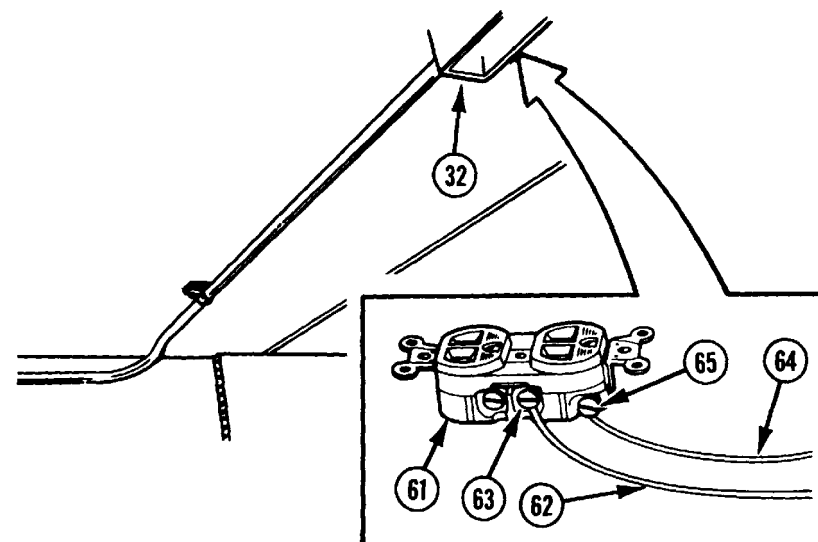


29 WHITE WIRE NO. 10 (62) IN CONDUIT BOX J21 (32).

- a. Connect to silver screw (63) of receptacle (61).
- b. Tighten.

30 GREEN WIRE NO. 11B (64).

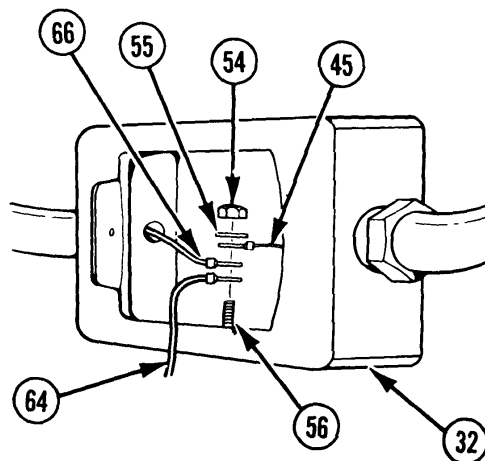
- a. Install in conduit box J21 (32).
- b. Connect to ground screw (65).
- c. Tighten.



3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY (cont)

- 31 NUT (54) AND WASHER (55). Remove from screw (56) in conduit box J21 (32).
- 32 GREEN WIRE NO. 11B (64), GREEN WIRE NO. 11 (66), AND GREEN WIRE NO. 11 (45). Install on screw (56).
- 33 WASHER (55) AND NUT (54). Reinstall on screw (56).



34 RECEPTACLE (61).

- a. Install in conduit box J21 (32).
- b. Install two screws (67).

35 COVER (68) OF CONDUIT BOX J21 (32).

- a. Install.
- b. Install screw (69).

36 BLACK WIRE NO. 9 (59) AND BLACK WIRE NO. 9 (70) IN CONDUIT BOX J20 (34).

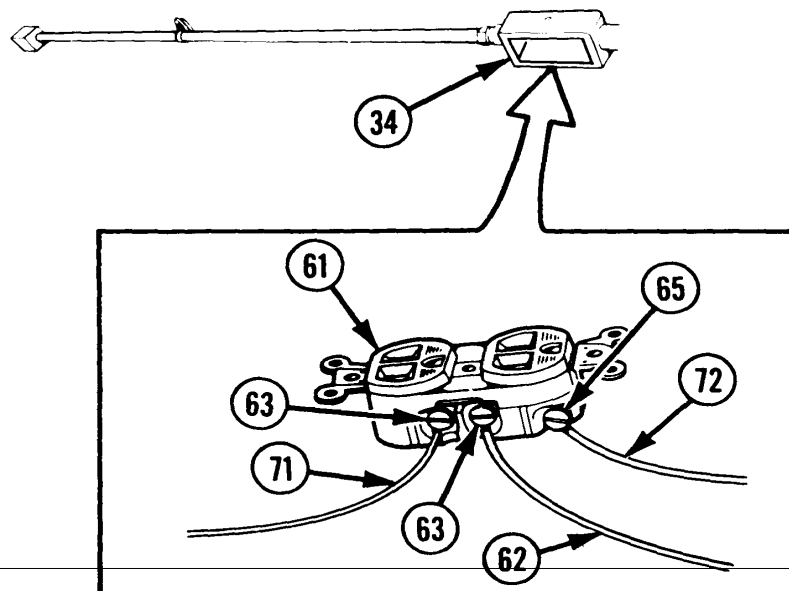
- a. Connect to two brass screws (60) of receptacle (61).
- b. Tighten.

37 WHITE WIRE NO. 10 (62) AND WHITE WIRE NO. 10 (71) IN CONDUIT BOX J20 (34).

- a. Connect to two silver screws (63) of receptacle (61).
- b. Tighten.

38 GREEN WIRE NO. 11A (72).

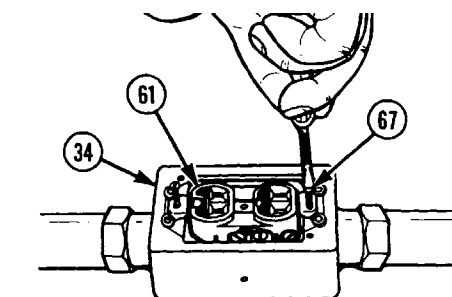
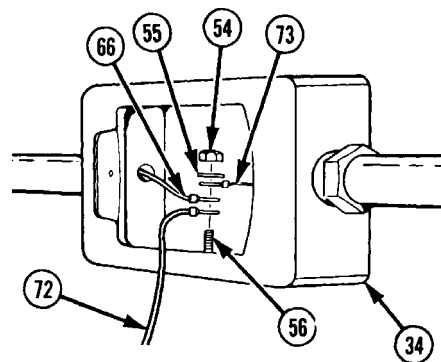
- a. Install in conduit box J20 (34).
- b. Connect to ground screw (65) of receptacle (61).
- c. Tighten.



39 NUT (54) AND WASHER (55). Remove from screw (56) in conduit box J20 (34).

40 GREEN WIRE NO. 11A (72), GREEN WIRE NO. 11 (66) AND GREEN WIRE NO. 11 (73). Install on screw (56).

41 WASHER (55) AND NUT (54). Reinstall on screw (56).

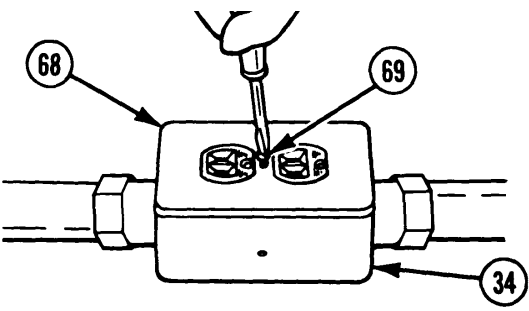


42 RECEPTACLE (61).

- a. Install in conduit box J20 (34).
- b. Install two screws (67).

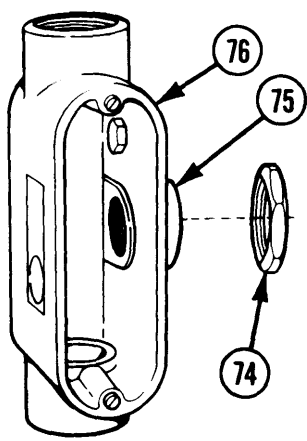
3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY (cont)

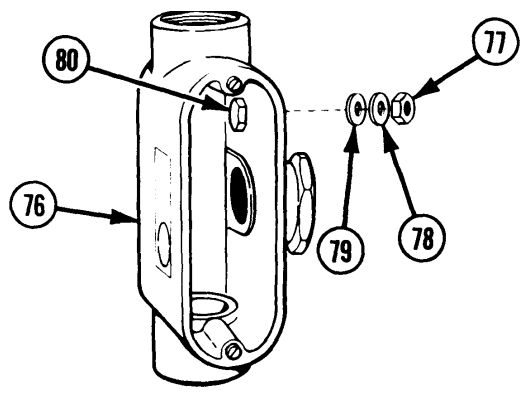


43 COVER (68) OF CONDUIT BOX J20 (34).

- Install.
- Install screw (69).



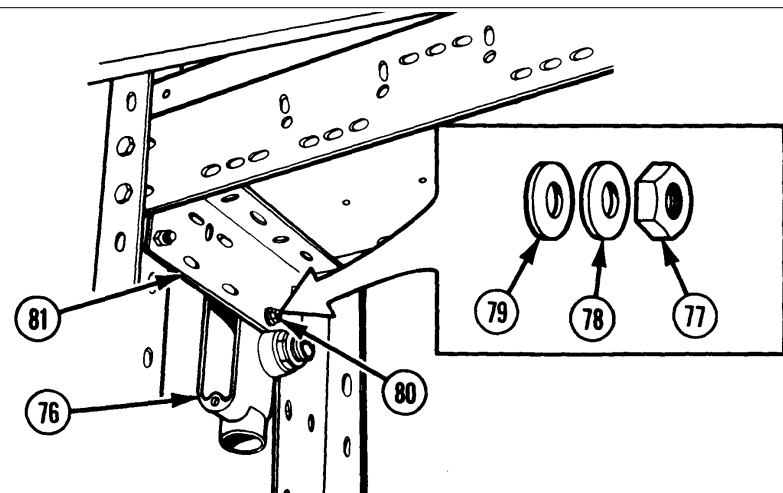
44 REDUCER (74). Install in center hole (75) of conduit body (76).

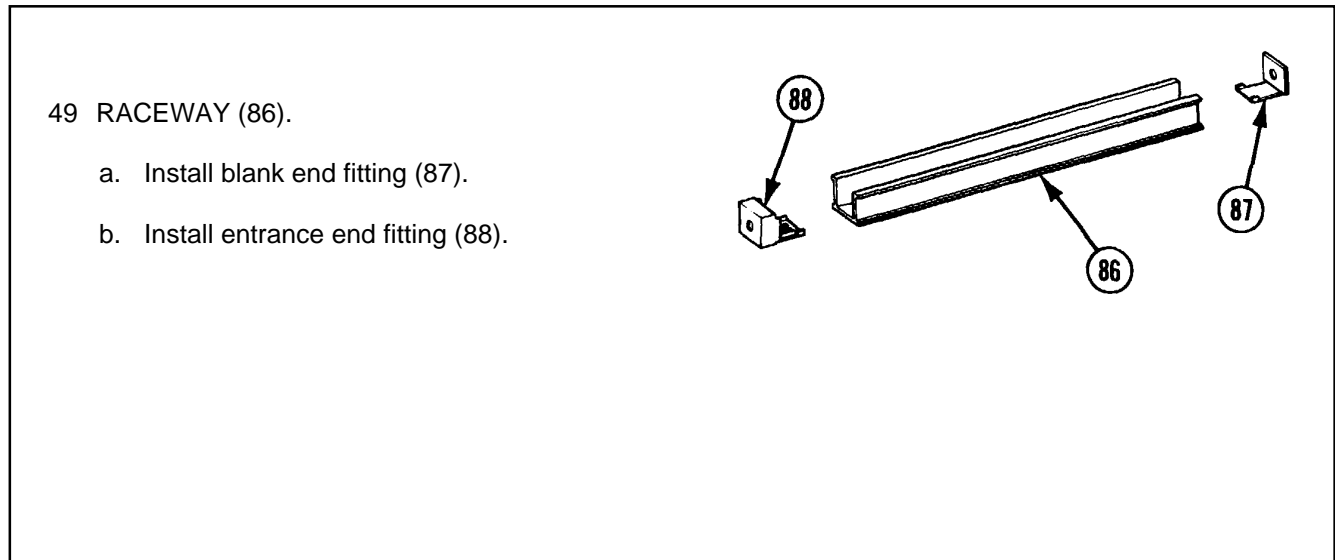
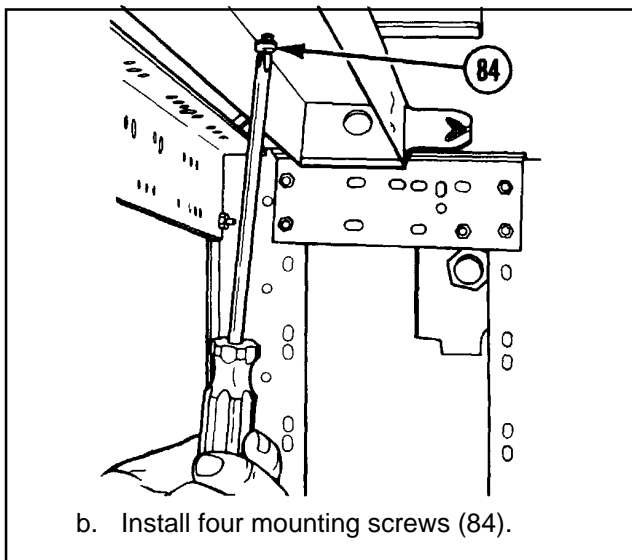
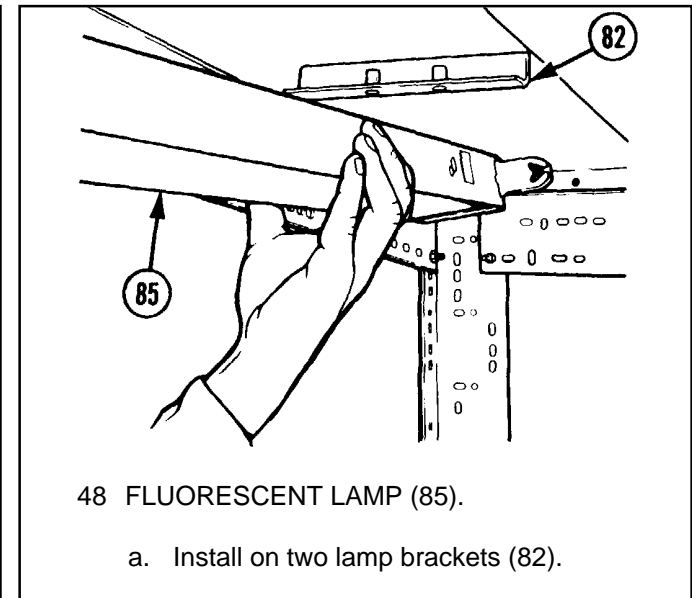
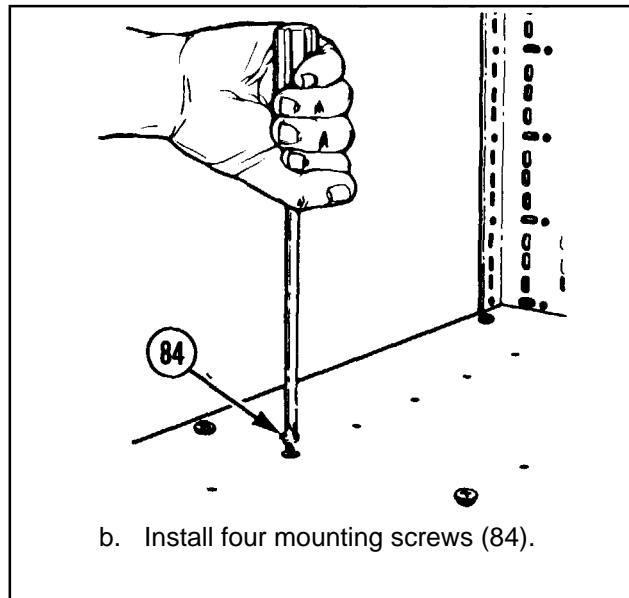
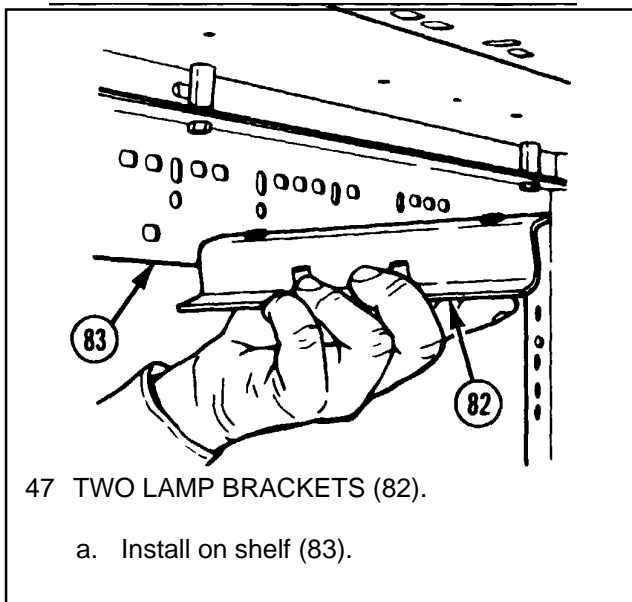


45 NUT (77), WASHER (78), AND WASHER (79). Remove from screw (80) in conduit body (76).

46 CONDUIT BODY (76) AND SCREW (80).

- Install on personnel door end of shelving assembly (81).
- Reinstall washer (79), washer (78), and nut (77).



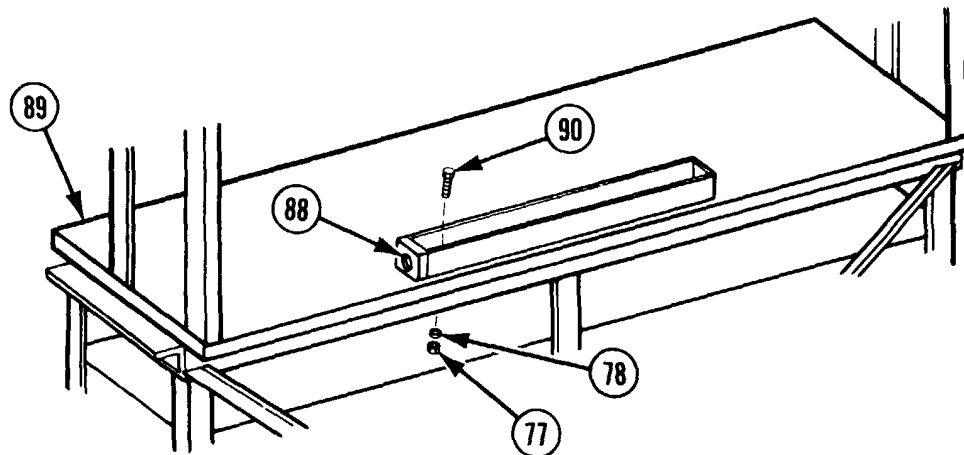


3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY (cont)

49 RACEWAY. (cont)

- c. Position on right table (89) with entrance end fitting (88) at cargo door end.
- d. Install two screws (90), two washers (78), and two nuts (77).

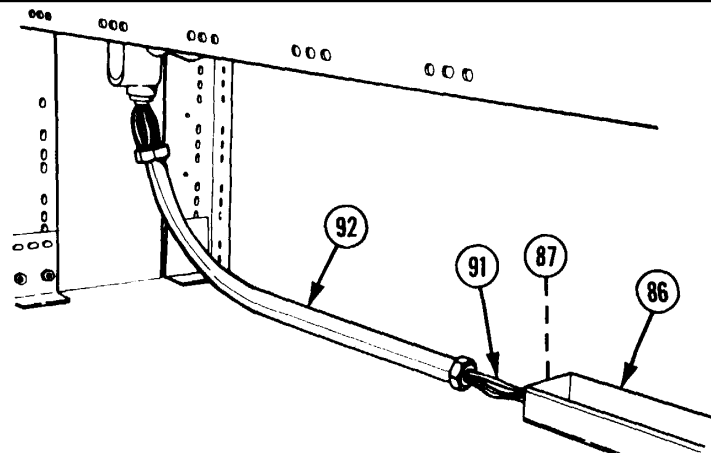


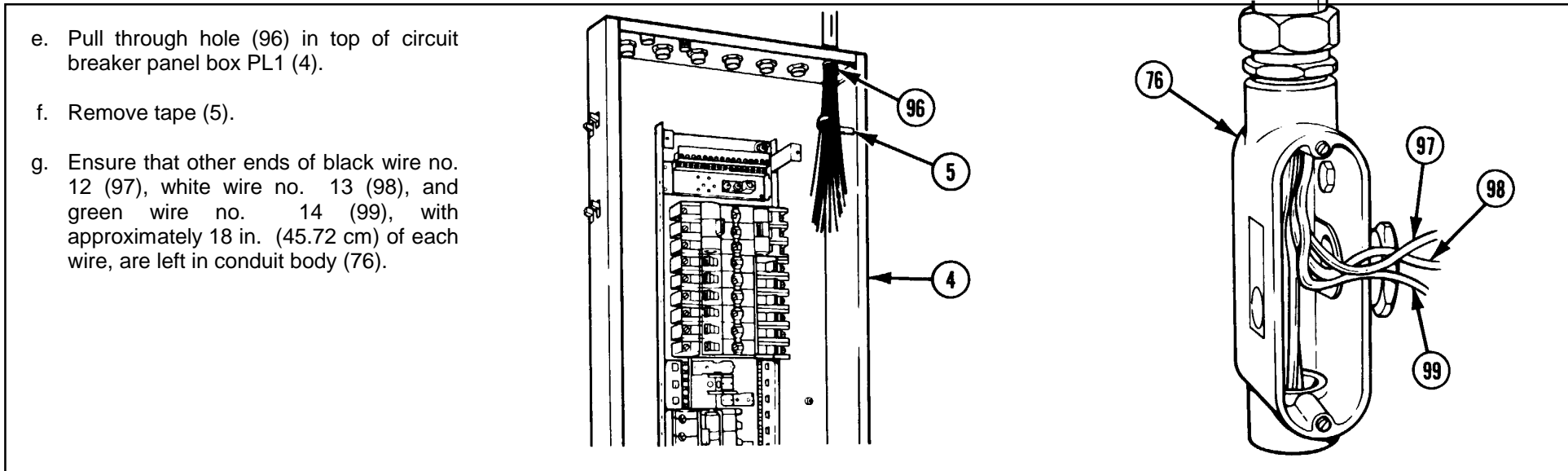
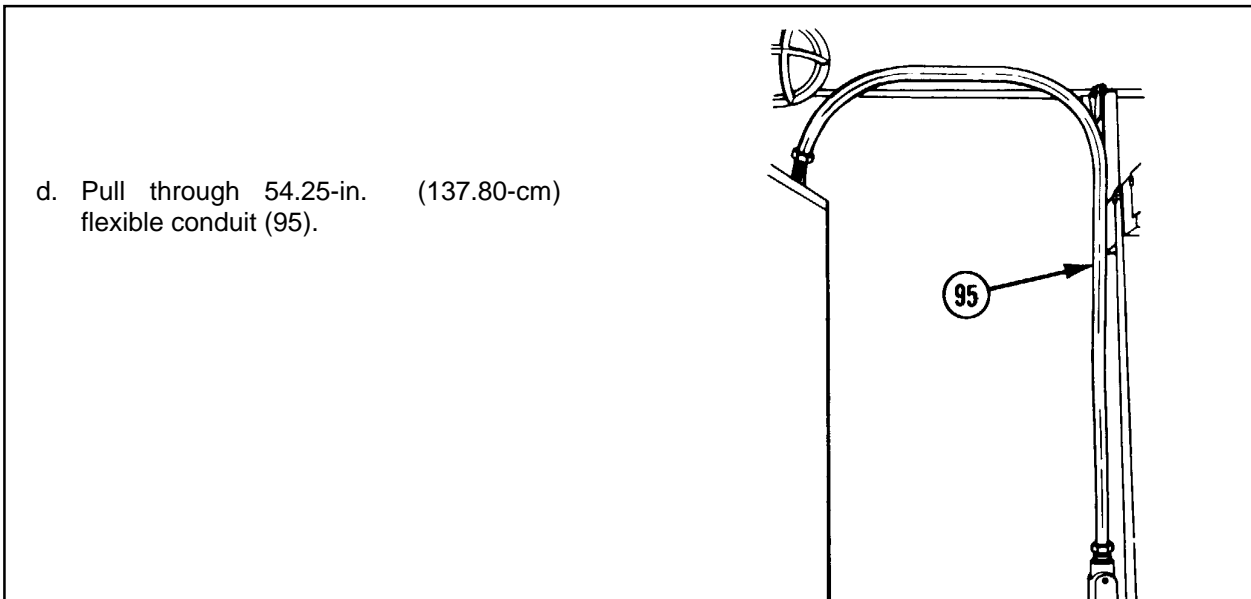
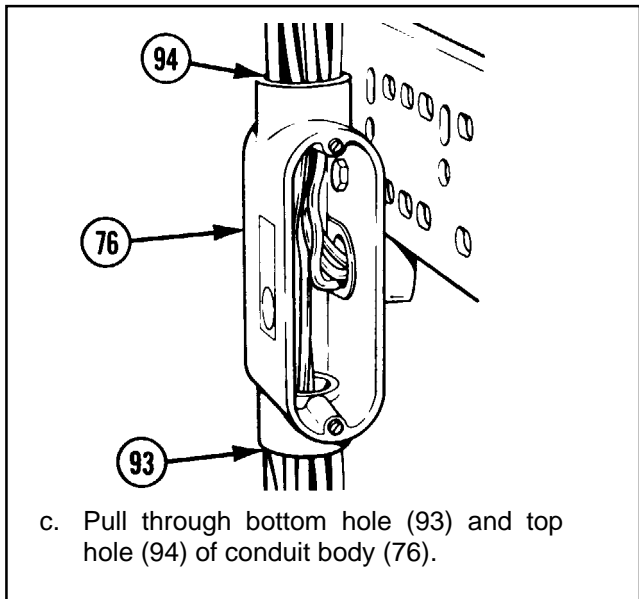
NOTE

Perform the procedure in step 50 using harness assembly with ends of eleven wires taped together.

50 HARNESS ASSEMBLY (91).

- a. Pull through blank end fitting (87) of raceway (86).
- b. Pull through 29.12-in. (73.96-cm) flexible conduit (92).



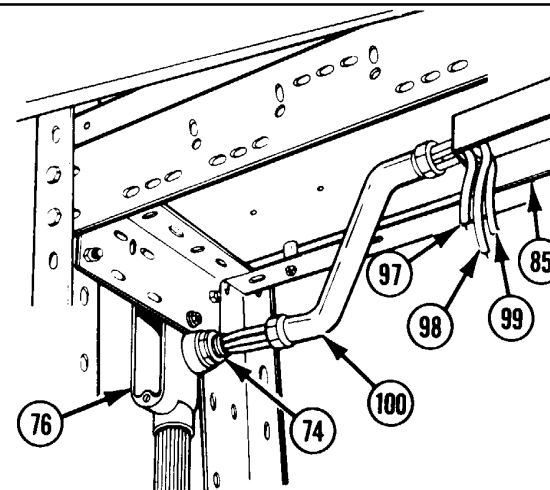


3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY (cont)

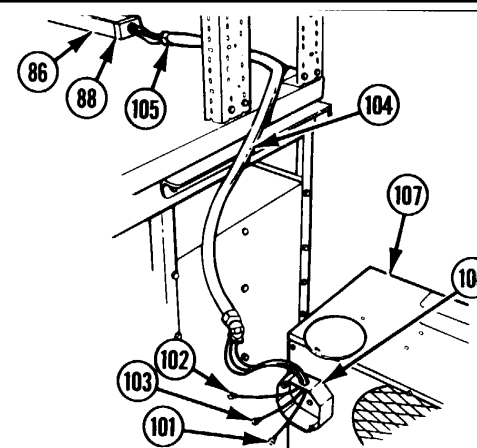
51 BLACK WIRE NO. 12 (97), WHITE WIRE NO. 13 (98), AND GREEN WIRE NO. 14 (99).

- a. Pull through reducer (74) in conduit body (76).
- b. Pull through 12.75-in. (32.39-cm) flexible conduit (100) and into end of fluorescent lamp (85).



52 BLUE WIRE NO. 20 (101), WHITE WIRE NO. 21 (102), AND GREEN WIRE NO. 22 (103).

- a. Pull through entrance end fitting (88) of raceway (86).
- b. Pull through 47.00-in. (119.38-cm) flexible conduit (104) with straight connector (105) at entrance end fitting (88).
- c. Pull into conduit box (106) on power supply (107).



53 BLUE WIRE NO. 20 (101) AND WHITE WIRE NO. 21 (102). Push into power supply (107) from conduit box (106) and out door (108) of power supply (107).

54 TERMINAL NO. 1 (109) IN TERMINAL BOARD (110) ON DOOR (108) OF POWER SUPPLY (107).

- a. Remove terminal screw (111).
- b. Connect blue wire no. 20 (101).
- c. Reinstall terminal screw (111).

55 TERMINAL NO. 4 (112) IN TERMINAL BOARD (110) ON DOOR (108) OF POWER SUPPLY (107).

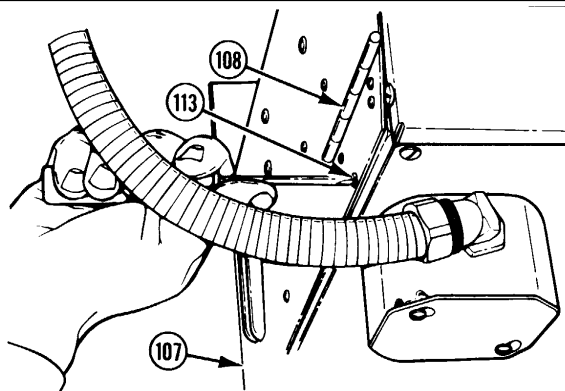
- a. Remove terminal screw (111).
- b. Connect white wire no. 21 (102).
- c. Reinstall terminal screw (111).

3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY (cont)

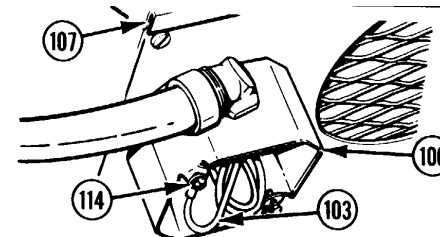
56 DOOR (108) OF POWER SUPPLY (107).

- a. Remove screw (113).
- b. Close.
- c. Reinstall screw (113).



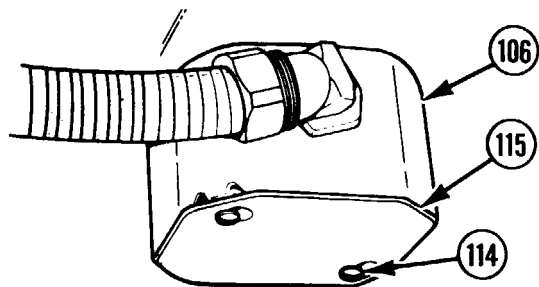
57 CONDUIT BOX (106) ON POWER SUPPLY (107).

- a. Remove screw (114).
- b. Connect green wire no.22(103).
- c. Reinstall screw (114) loosely.

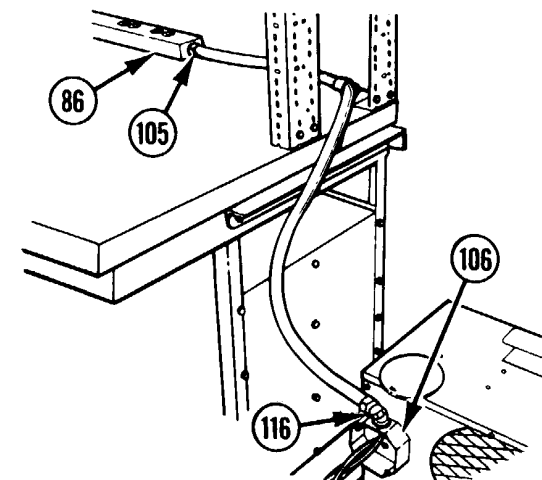


58 COVER (115) OF CONDUIT BOX (106).

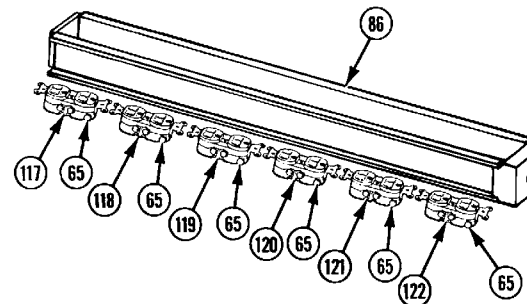
- a. Slip over two screws (114).
- b. Turn slightly.
- c. Tighten two screws (114).



59 STRAIGHT CONNECTOR (105) AND ELBOW CONNECTOR (116). Tighten at raceway (86) and conduit box (106).



60 SIX RECEPTACLES: J22 (117), J23 (118), J24 (119), J25 (120), J26 (121), AND J27 (122). Place along side of raceway (86) with all ground screws (65) towards cargo door end.

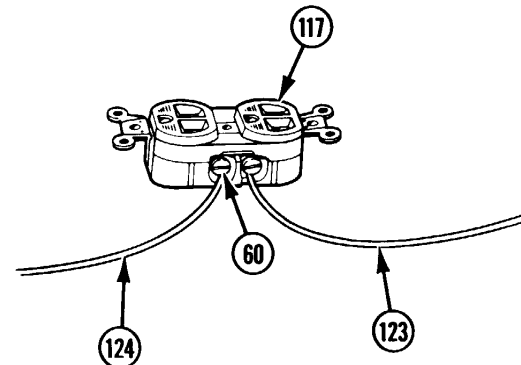


NOTE

Wires: black wire no. 15A, black wire no. 15B, white wire no. 16A, green wire no. 17A, white wire 16B, green wire no. 17B, green wire no. 17C, red wire no. 18A, white wire no. 19A, green wire no. 17D, red wire no. 18B, white wire no. 19B, and green wire no. 17E will be installed at connection.

61 RECEPTACLE J22 (117).

- a. Connect black wire no. 15 (123) and black wire no. 15A (124) to two brass screws (60) and tighten.

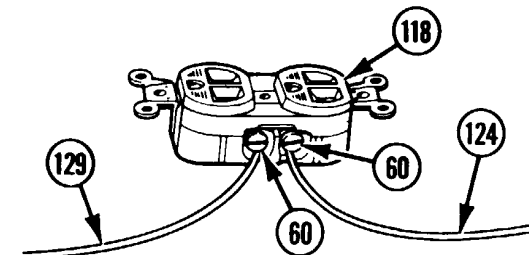
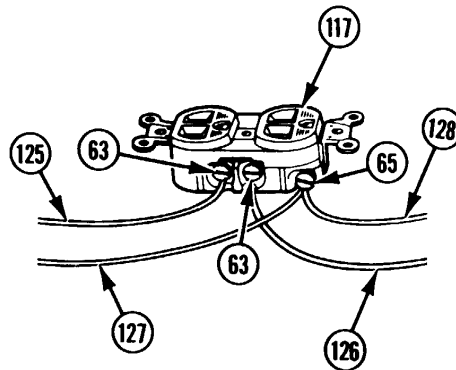


3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY (cont)

61 RECEPTACLE J22 (117). (cont)

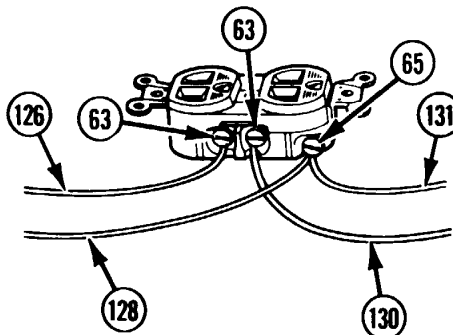
- b. Connect white wire no. 16 (125) and white wire no. 16A (126) to two silver screws (63) and tighten.
- c. Connect green wire no. 17 (127) and green wire no. 17A (128) to ground screw (65) and tighten.



62 RECEPTACLE J23 (118).

- a. Connect black wire no. 15A (124) and black wire no. 15B (129) to two brass screws (60) and tighten.

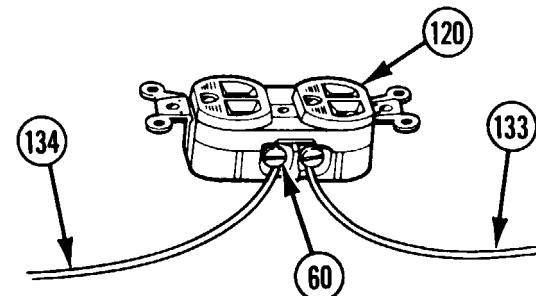
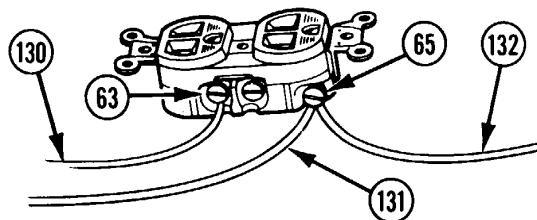
- b. Connect white wire no. 16A (126) and white wire no. 16B (130) to two silver screws (63) and tighten.
- c. Connect green wire no. 17A (128) and green wire no. 17B (131) to ground screw (65) and tighten.



63 RECEPTACLE J24 (119)

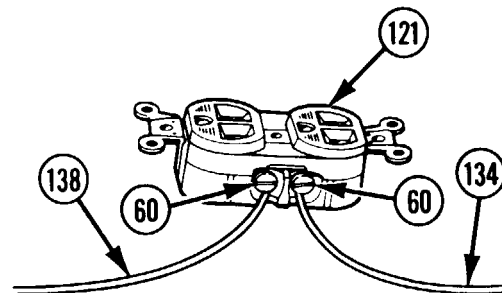
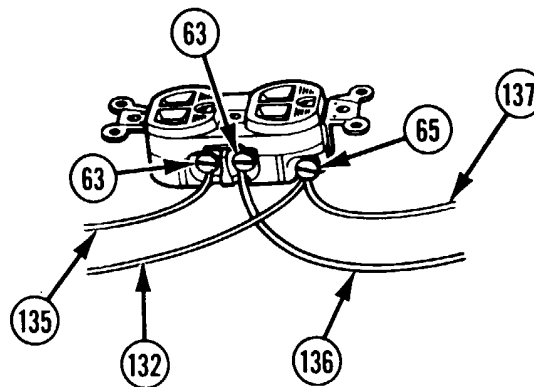
- a. Connect black wire no. 15B (129) to brass screw (60) and tighten.

- b. Connect white wire no. 16B (130) to silver screw (63) and tighten.
- c. Connect green wire no. 17B (131) and green wire no. 17C (132) to ground screw (65) and tighten.



- 64 RECEPTACLE J25 (120).
- a. Connect red wire no. 18 (133) and red wire no. 18A (134) to two brass screws (60) and tighten.

- b. Connect white wire no. 19 (135) and white wire no. 19A (136) to two silver screws (63) and tighten.
- c. Connect green wire no. 17C (132) and green wire no. 17D (137) to ground screw (65) and tighten.



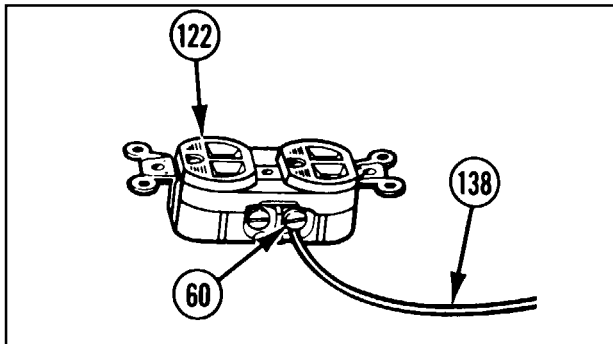
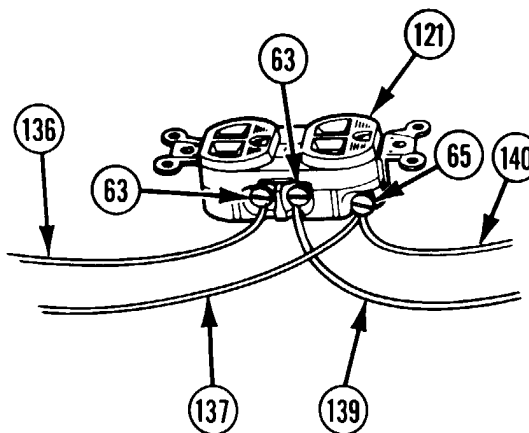
- 65 RECEPTACLE J26 (121).
- a. Connect red wire no. 18A (134) and red wire no. 18B (138) to two brass screws (60) and tighten.

3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY (cont)

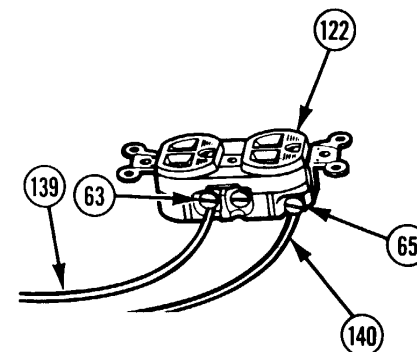
65 RECEPTACLE J26 (121). (cont)

- b. Connect white wire no. 19A (136) and white wire no. 19B (139) to two silver screws (63) and tighten.
- c. Connect green wire no. 17D (137) and green wire no. 17E (140) to ground screw (65) and tighten.

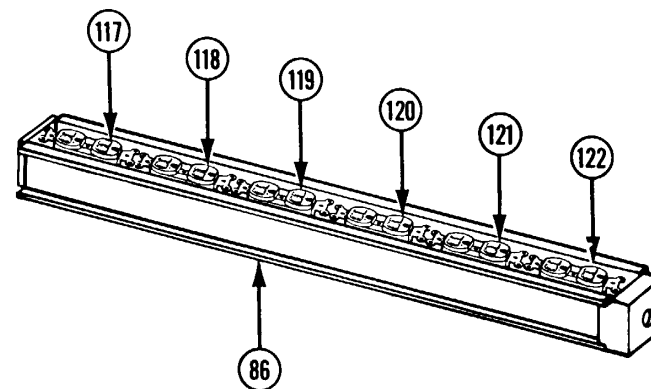


- 66 RECEPTACLE J27 (122).
- a. Connect red wire no. 18B (138) to brass screw (60) and tighten.

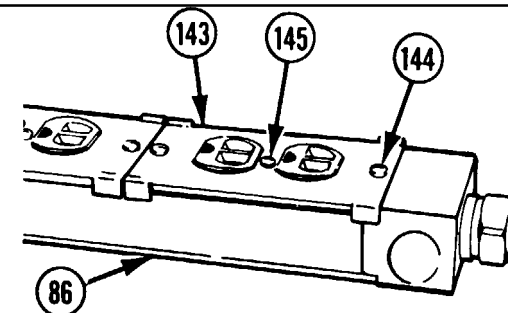
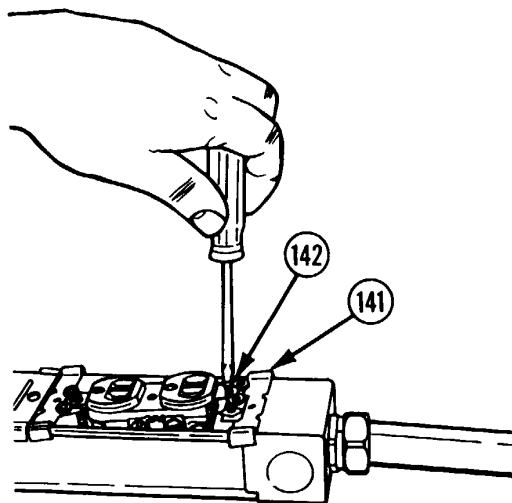
- b. Connect white wire no. 19B (139) to silver screw (63) and tighten.
- c. Connect green wire no. 17E (140) to ground screw (65) and tighten.



- 67 SIX RECEPTACLES: J22 (117), J23 (118), J24 (119), J25 (120), J26 (121), and J27 (122).
- a. Place in raceway (86).



- b. Place twelve clips (141) on both ends of receptacles.
- c. Install twelve screws (142) in both the clips and receptacles and tighten.



- 68 SIX COVERS (143).

- a. Position on raceway (86).
- b. Install twelve screws (144).
- c. Install six screws (145).

3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

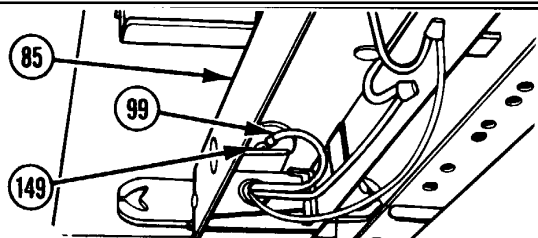
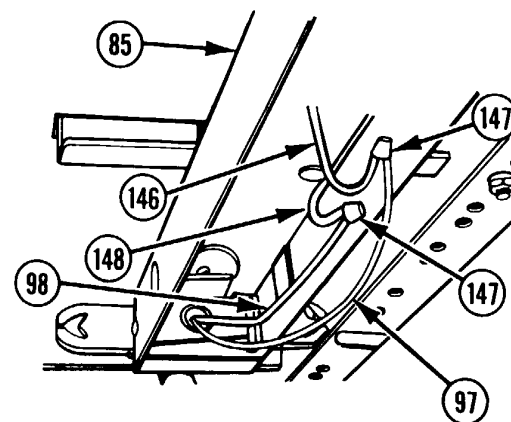
REASSEMBLY (cont)

69 BLACK WIRE NO. 12 (97).

- a. Connect to black wire (146) of fluorescent lamp (85).
- b. Install conductor splice (147).

70 WHITE WIRE NO. 13 (98).

- a. Connect to white wire (148) of fluorescent lamp (85).
- b. Install conductor splice (147).

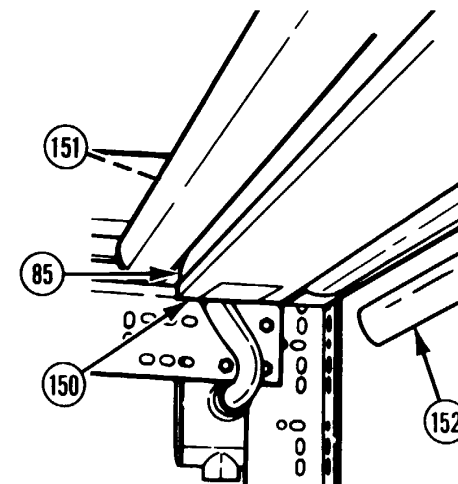


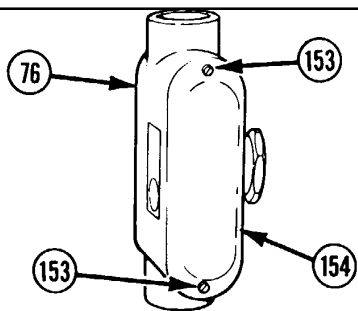
71 SCREW (149) IN FLUORESCENT LAMP (85).

- a. Loosen.
- b. Connect green wire no. 14 (99).
- c. Tighten.

72 FLUORESCENT LAMP (85).

- a. Install lamp cover (150).
- b. Install two fluorescent bulbs (151) with two shields (152).





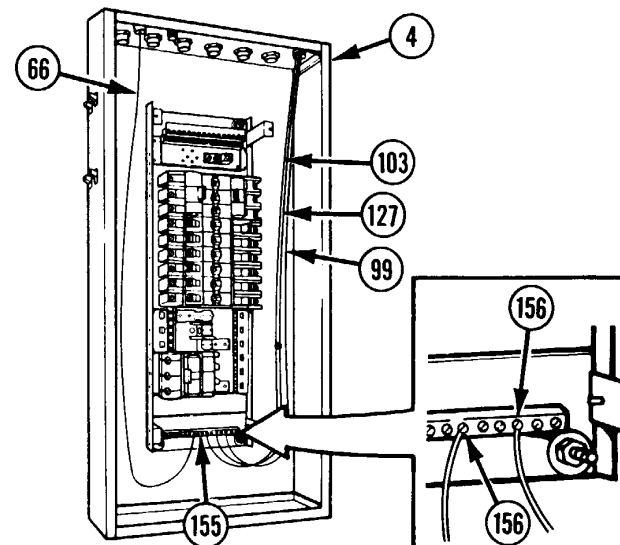
73 TWO SCREWS (153). Remove from conduit body (76).

74 COVER (154) OF CONDUIT BODY (76).

- a. Install.
- b. Reinstall two screws (153).

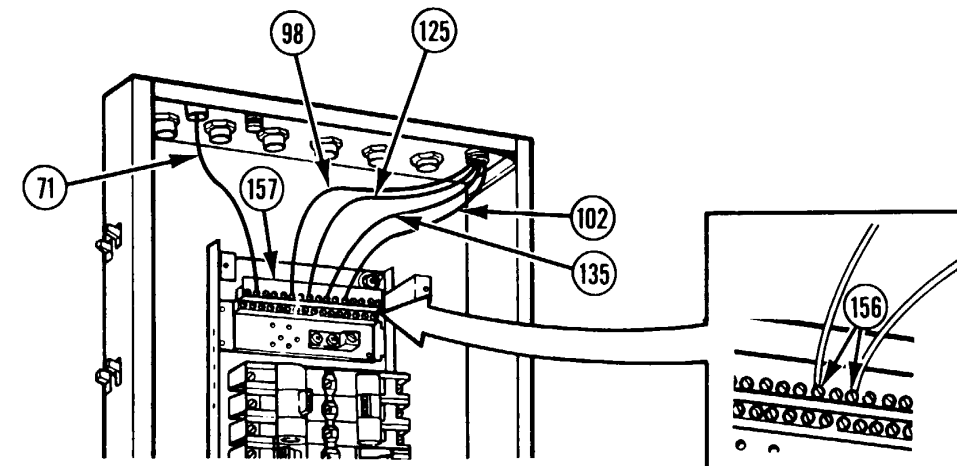
75 GROUND BUSS W2 (155) IN CIRCUIT BREAKER PANEL BOX PL1 (4).

- a. Connect four green wires no. 11 (66), no. 14 (99), no. 17 (127), and no. 22 (103).
- b. Tighten four terminal screws (156).



76 NEUTRAL BUSS W1 (157).

- a. Connect five white wires no. 10 (71), no. 13 (98), no. 16 (125), no. 19 (135), and no. 21 (102).
- b. Tighten five terminal screws (156).



3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

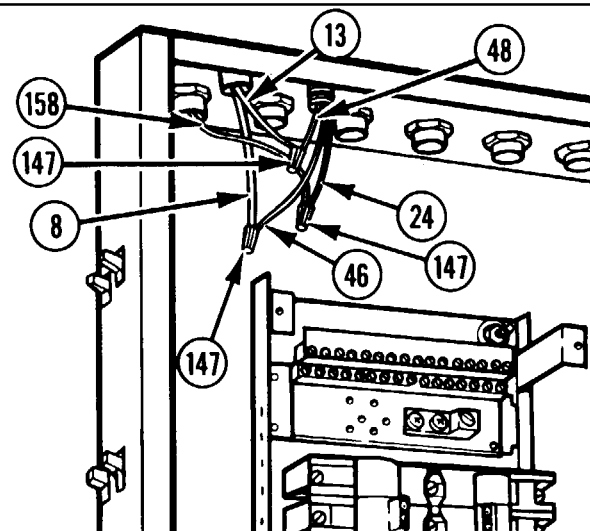
(REASSEMBLY (cont))

77 BLACK WIRE NO. 7 (24).

- a. Connect to black wire (158) of blackout lamp.
- b. Install conductor splice (147). 78 BLACK WIRE NO. 4A (8).
- a. Connect to blue wire no. 4 (46).
- b. Install conductor splice (147).

BLACK WIRE NO. 6A (13).

- a. Connect to blue wire no. 6 (48).
- b. Install conductor splice (147).

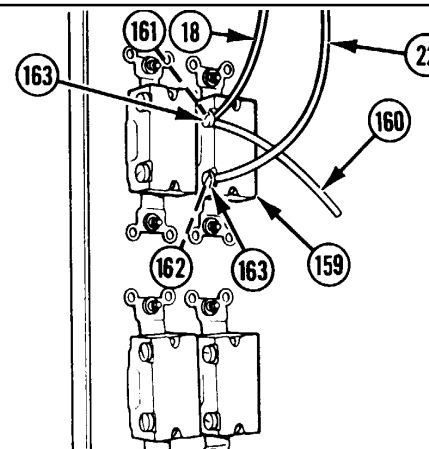


NOTE

Three black wires no. 1A, no. 2A, and no. 2B will be installed at connection.

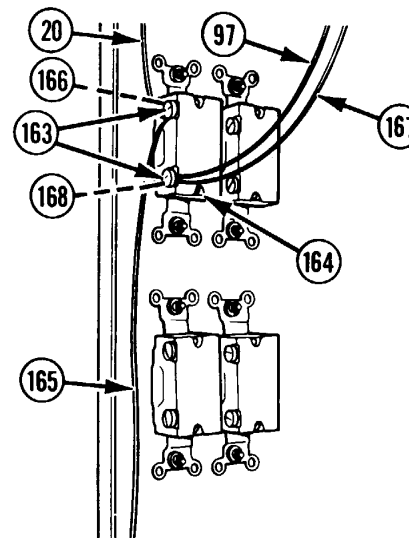
80 SWITCH S4 (159).

- a. Connect black wire no. 1 (18) and black wire no. 1A (160) to terminal E1 (161).
- b. Connect black wire no. 3 (22) to terminal E2 (162).
- c. Tighten two terminal screws (163).



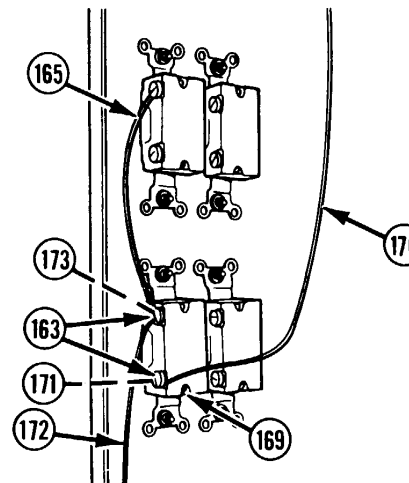
81 SWITCH S2 (164).

- a. Connect black wire no. 2 (20) and black wire no. 2A (165) to terminal E1 (166).
- b. Connect black wire no. 12 (97) and red wire (167) of center lamp assembly to terminal E2 (168).
- c. Tighten two terminal screws (163).



82 SWITCH S1 (169).

- a. Connect black wire (170) of right lamp assembly to terminal E2 (171).
- b. Connect black wire no. 2A (165) and black wire no. 2B (172) to terminal E1 (173).
- c. Tighten two terminal screws (163).

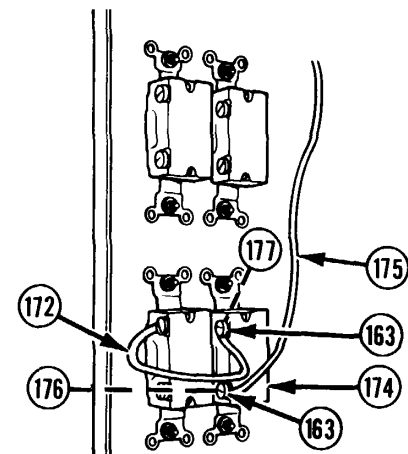


3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY (cont)

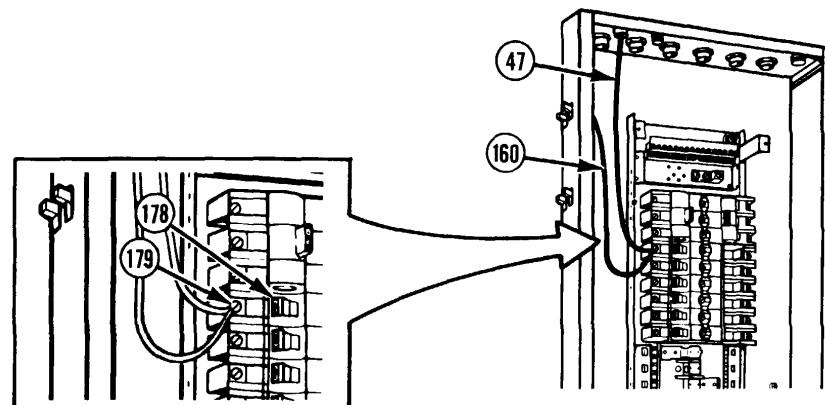
83 SWITCH S3 (174).

- a. Connect blue wire (175) of left lamp assembly to terminal E2 (176).
- b. Connect black wire no. 28 (172) to terminal E1 (177).
- c. Tighten two terminal screws (163).



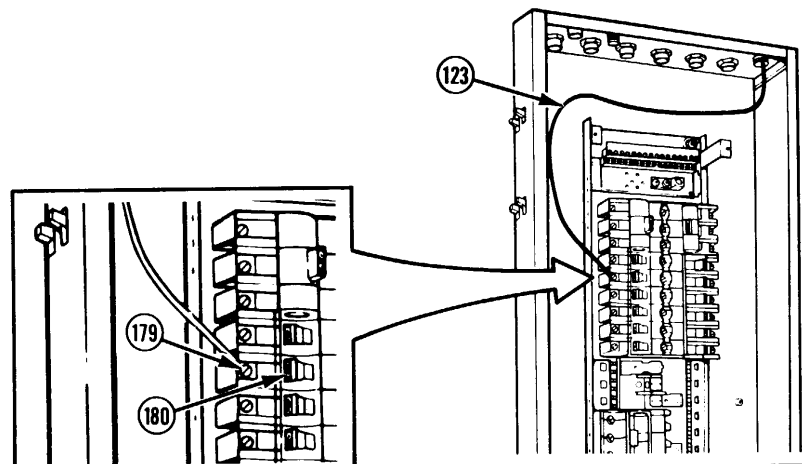
84 CIRCUIT BREAKER CB4 (178).

- a. Connect blue wire no. 5 (47) and black wire no. 1A (160).
- b. Tighten terminal screw (179).



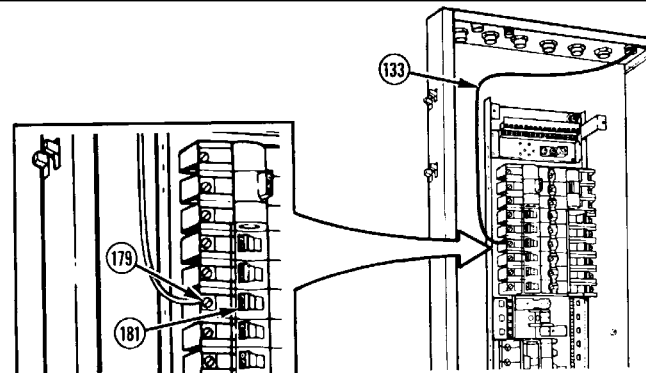
85 CIRCUIT BREAKER CB6 (180).

- a. Connect black wire no. 15 (123).
- b. Tighten terminal screw (179).



86 CIRCUIT BREAKER CB8 (181).

- a. Connect red wire no. 18 (133).
- b. Tighten terminal screw (179),

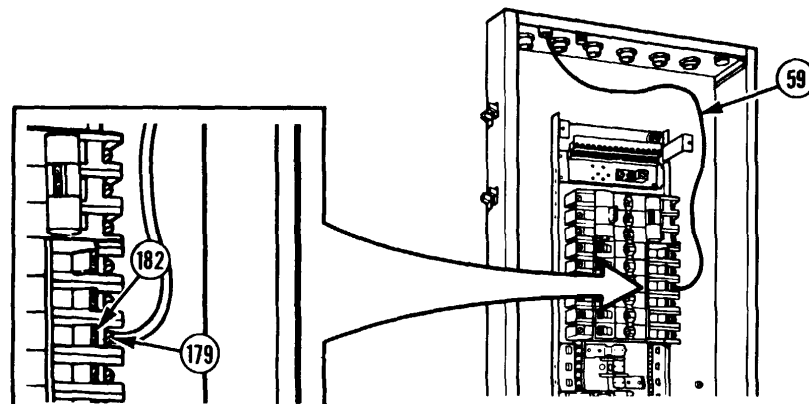


3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS I

REASSEMBLY (cont)

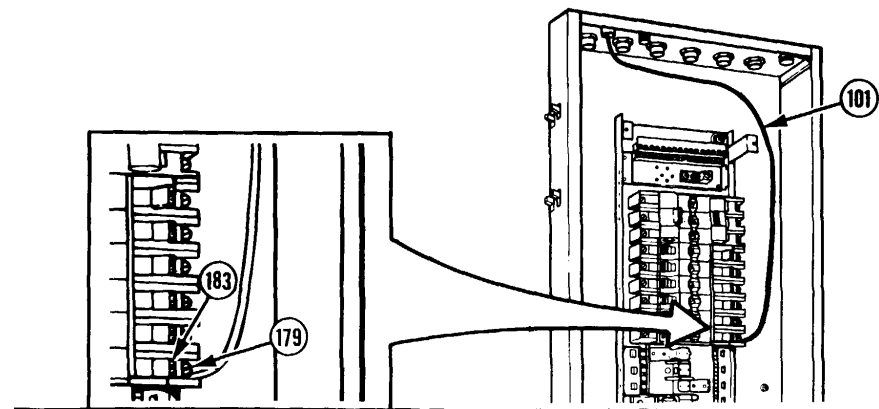
87 CIRCUIT BREAKER CB9 (182).

- a. Connect black wire no. 9 (59).
- b. Tighten terminal screw (179).



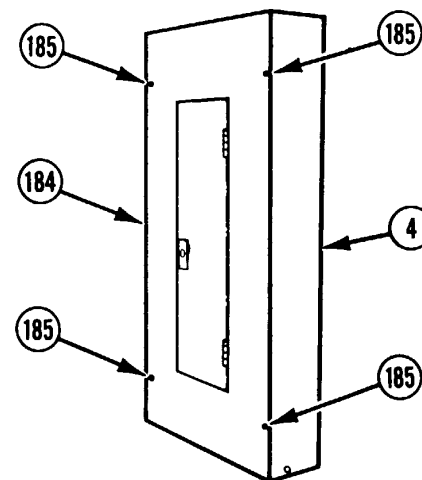
88 CIRCUIT BREAKER CB15 (183).

- a. Connect blue wire no. 20 (101).
- b. Tighten terminal screw (179).

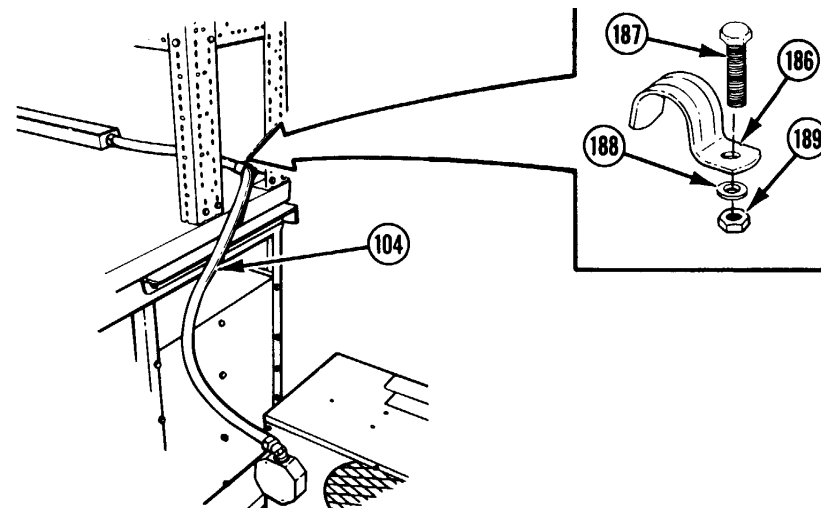


89 FRONT PANEL (184) OF CIRCUIT BREAKER PANEL BOX PL1 (4).

- a. Install.
- b. Install four screws (185).



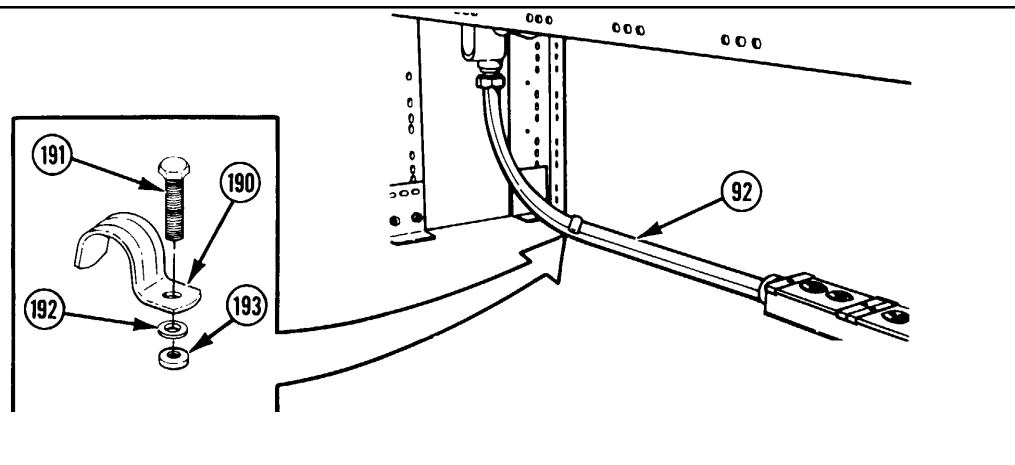
90 CLAMP (186), SCREW (187), WASHER (188), AND NUT (189). Install on flexible conduit (104).



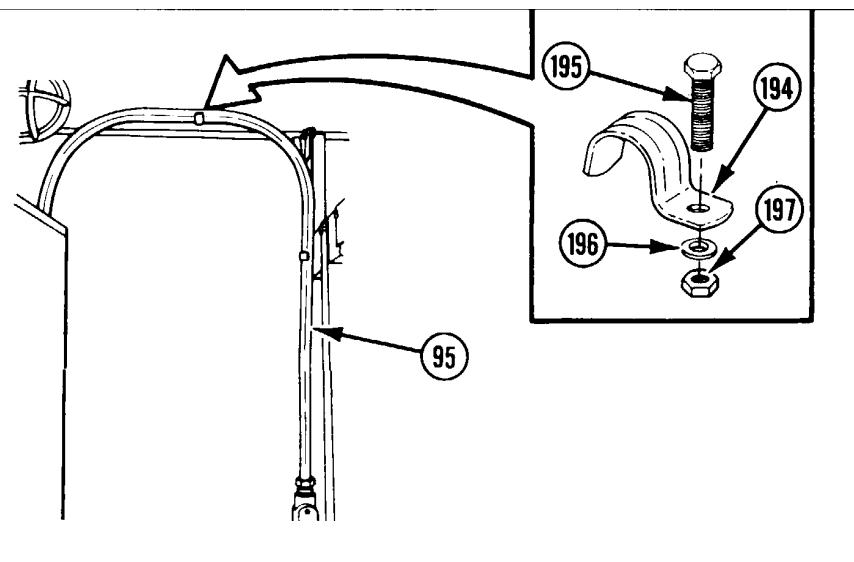
3-10. SHOP SET--ELECTRICAL INSTALLATION--MAINTENANCE INSTRUCTIONS (cont) I

REASSEMBLY (cont)

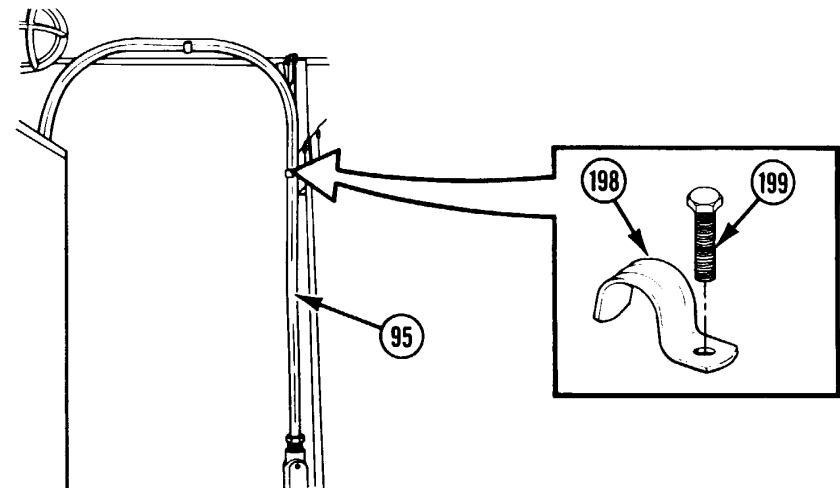
91 CLAMP (190), SCREW (191), WASHER (192), AND NUT (193). Install on flexible conduit (92).



92 CLAMP (194), SCREW (195), WASHER (196), AND NUT (197). Install on flexible conduit (95).



93 CLAMP (198) AND SCREW (199). Install on flexible conduit (95).



TEST

1 With circuit breaker on power distribution panel connected to power source in OFF position and 120/208V cable assembly disconnected, test the entire electrical installation for open and short circuits with a suitable ohmmeter.

WARNING
Before energizing shop set, ensure grounding rods are properly installed and connected at power source end of the shop set.

2 Connect 120/208V cable assembly and place circuit breaker on power distribution panel in ON position.

3 Test the entire electrical system for proper installation with a suitable voltmeter.

3-11. SHOP SET--GROUNDING STUD--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Disassembly
- b. Inspection
- c. Service
- d. Repair
- e. Reassembly

INITIAL SETUP

Special Tools
 Fire control repair shop set (SC 4931-95-CL-A21)

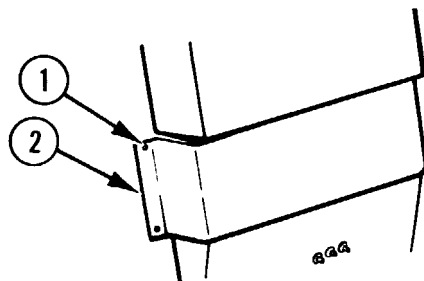
Materials/Parts
 Abrasive cloth (item 4, app D)

References
 Appendix C
 Appendix D

Equipment Condition
 2-17 Shop set must be de-energized.

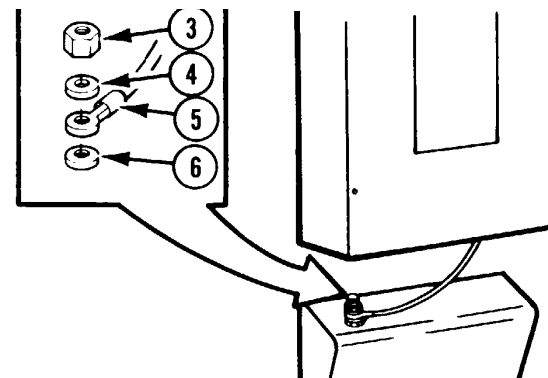
WARNING
 Before beginning maintenance on the grounding stud, de-energize the shop set by placing circuit breaker on power distribution panel connected to power source in OFF position and then disconnect 120/208V cable assembly from shelter.

DISASSEMBLY

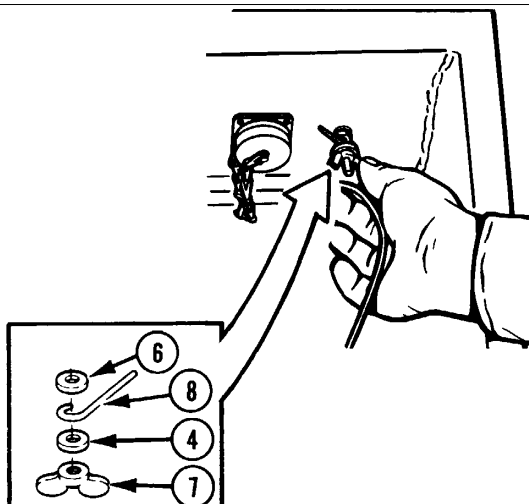


- 1 FOUR SCREWS (1). Remove.
- 2 DUST COVER (2). Remove.

- 3 NUT (3). Remove.
- 4 LOCKWASHER (4), GROUND WIRE LUG TERMINAL (5), AND FLAT WASHER (6). Remove.



- 5 WINGNUT (7). Remove.
- 6 LOCKWASHER (4), GROUND WIRE (8), AND FLAT WASHER (6). Remove.



INSPECTION

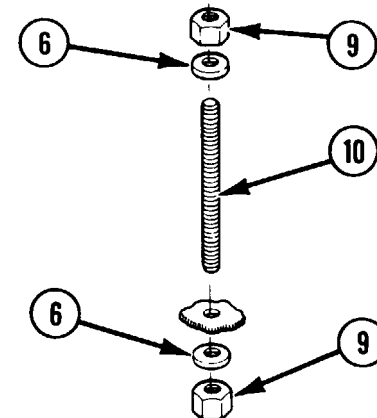
Inspect all parts for rust, corrosion, or other defects.

NOTE

The grounding stud, mounted through the power input panel, is used to connect a grounding rod on the exterior of the shelter for grounding the shop set electrical system and the shelter itself.

SERVICE

Clean any rusted or corroded parts by brushing with a wire brush or abrasive cloth (item 4, app D).



- 7 TWO NUTS (9) AND TWO FLAT WASHERS (6). Remove.

- 8 STUD (10). Remove.

REPAIR

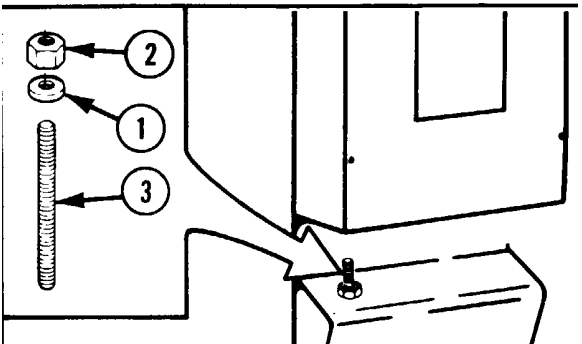
Replace any parts that are broken, cracked, or otherwise damaged in any way that would prevent good electrical contact (app C).

NOTE

For initial installation only remove grounding stud furnished with shelter and then proceed with reassembly steps 1 thru 5.

3-11. SHOP SET--GROUNDING STUD--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY

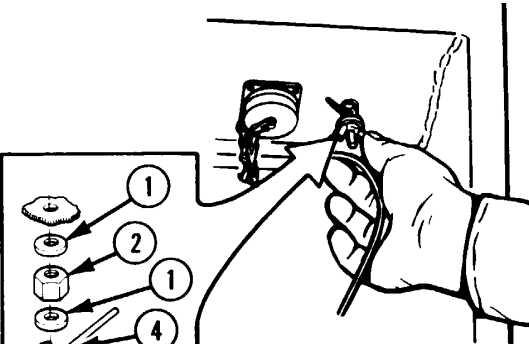


1 FLAT WASHER (1) AND NUT (2). Install on stud (3).

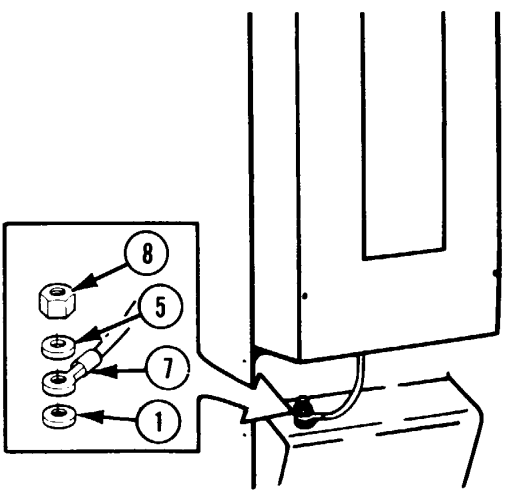
2 STUD (3). Install.

3 FLAT WASHER (1) AND NUT (2). Install.

4 FLAT WASHER (1), GROUND WIRE (4), LOCKWASHER (5), AND WINGNUT (6). Install on exterior of wall.

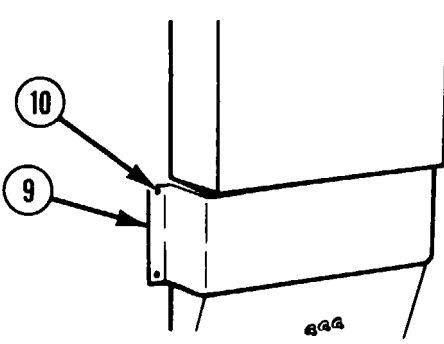


5 FLAT WASHER (1), GROUND WIRE LUG TERMINAL (7), LOCKWASHER (5), AND NUT (8). Install on interior of wall.



6 DUST COVER (9). Position below circuit breaker panel box.

7 FOUR SCREWS (10). Install in dust cover.



3-12. SHOP SET--CONDUIT INSTALLATION--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Inspection
- b. Disassembly
- c. Repair
- d. Modification
- e. Reassembly

INITIAL SETUP

Special Tools

- AVIM tool crib shop set (SC 4920-99-CL-A91, part VII)
- Basic aircraft armament repairman tool set (SC 4933-95-CL-A13)
- Fire control repair shop set (SC 4931-95-CL-A21)

Appendix D
Appendix E

Personnel Required: 2
Aircraft fire control
repairmen

Disassemble/reassemble
conduit.

Materials/Parts

- Tape (item 19, app D)

Equipment Conditions

3-46 Electrical installation removed from
conduit.

References

- Appendix C

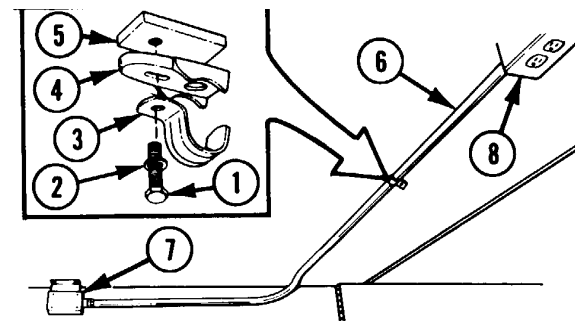
INSPECTION

CONDUIT, CONDUIT BOXES, AND CLAMPS.

- a. Inspect for breaks, cracks, dents, or missing parts.
- b. Check to ensure that all parts are securely mounted.

DISASSEMBLY

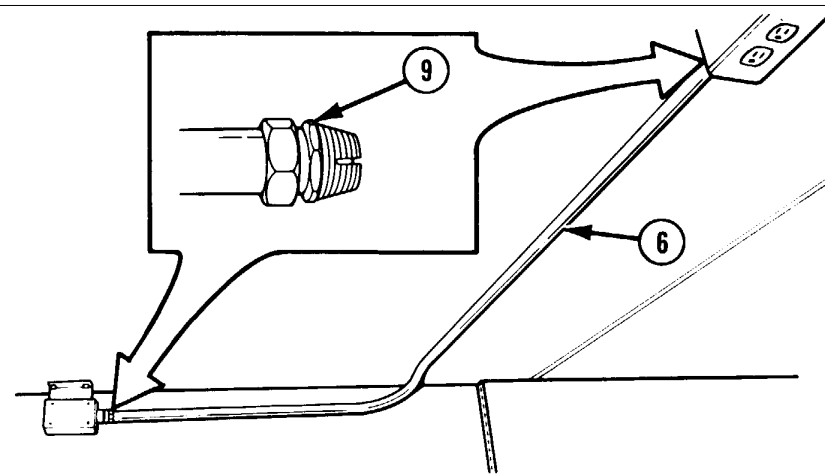
- 1 SCREW (1), WASHER (2), CLAMP (3), CLAMP BACK (4), AND SPACER (5). Remove from conduit (6) between switchbox S9 (7) and conduit box J21 (8).



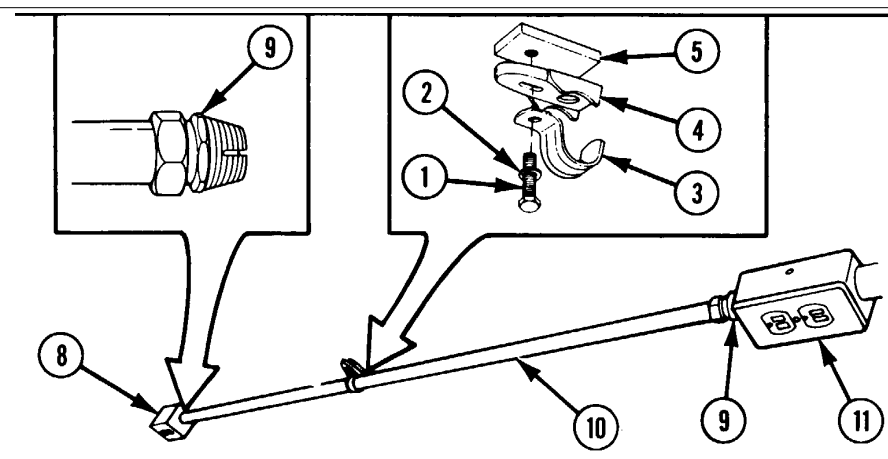
3-12. SHOP SET--CONDUIT INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

DISASSEMBLY (cont)

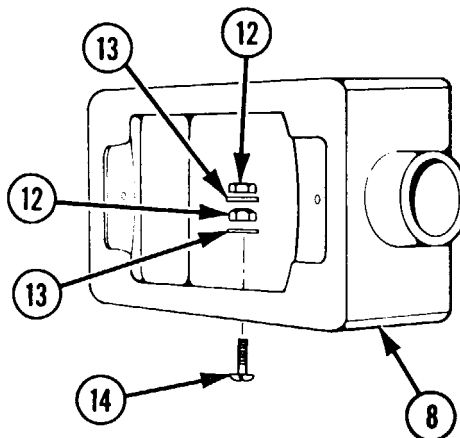
- 2 TWO FITTINGS (9). Loosen.
- 3 CONDUIT (6) AND TWO FITTINGS (9). Remove.



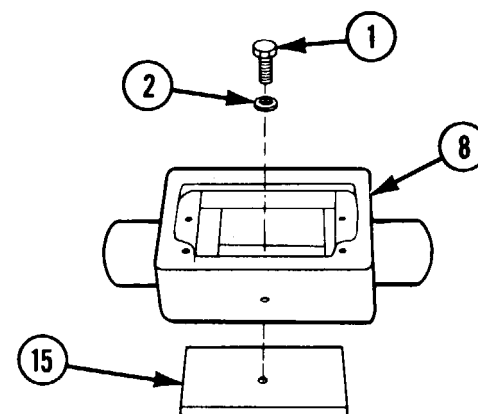
- 4 SCREW (1), WASHER (2), CLAMP (3), CLAMP BACK (4), AND SPACER (5). Remove from conduit (10) between conduit box J21 (8) and conduit box J20 (11).
- 5 TWO FITTINGS (9). Loosen.
- 6 CONDUIT (10) AND TWO FITTINGS (9). Remove.



7 NUT (12), LOCKWASHER (13), NUT (12), LOCKWASHER (13), AND SCREW (14). Remove from conduit box J21 (8).



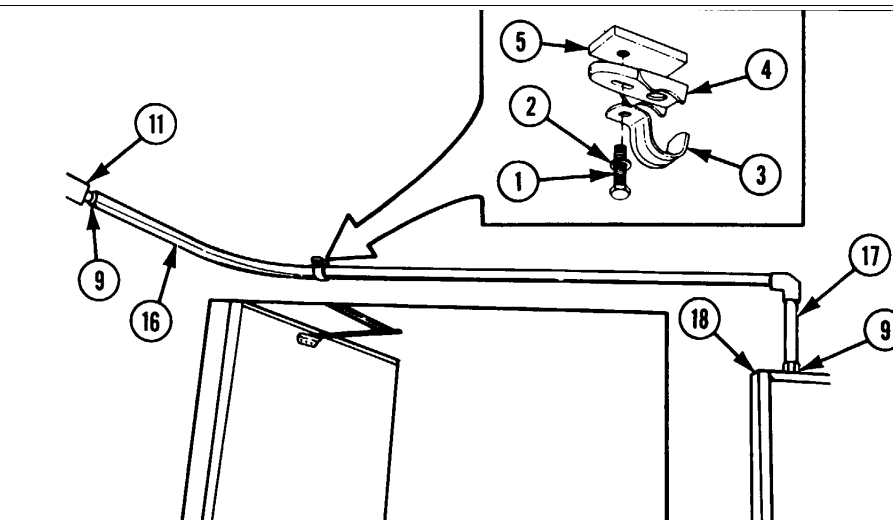
8 SCREW (1), WASHER (2), CONDUIT BOX J21 (8), AND SPACER (15). Remove.



9 SCREW (1), WASHER (2), CLAMP (3), CLAMP BACK (4), AND SPACER (5). Remove from conduit (16) and conduit (17) between conduit box J20 (11) and circuit breaker panel box PL1 (18).

10 TWO FITTINGS (9). Loosen.

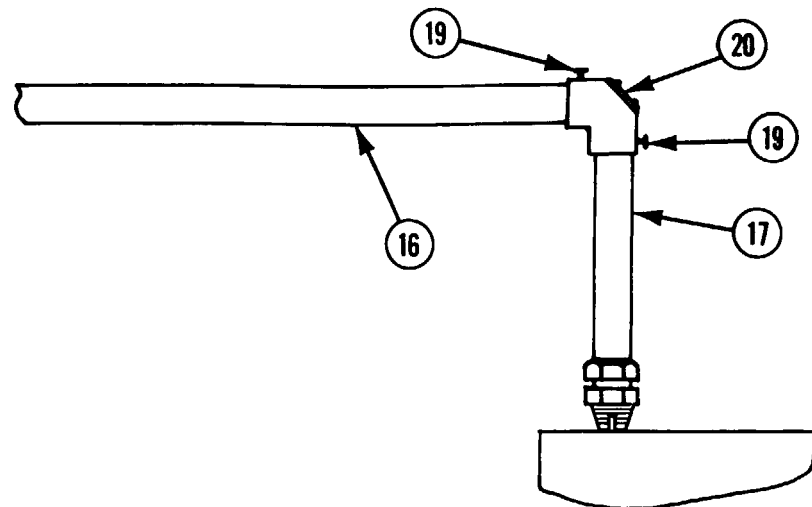
11 CONDUIT (16), CONDUIT (17), AND TWO FITTINGS (9). Remove.



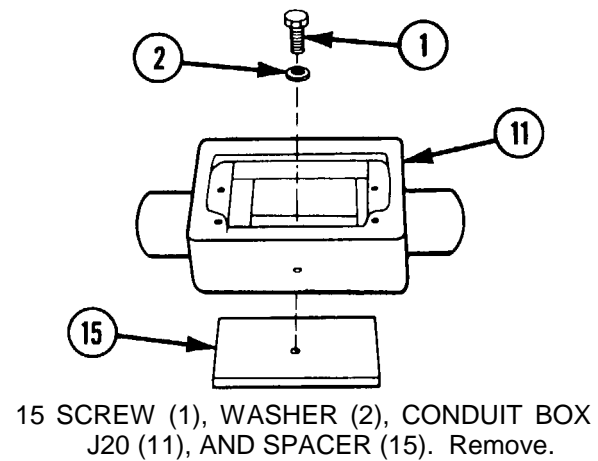
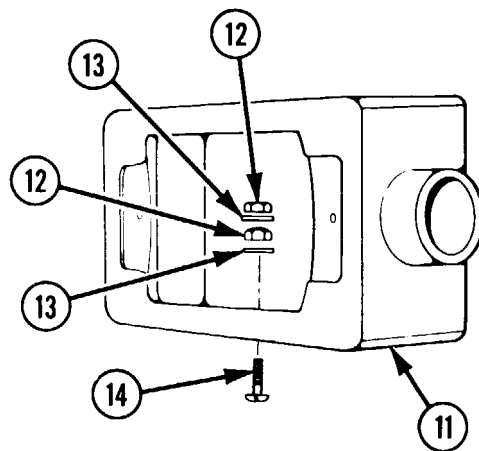
3-12. SHOP SET--CONDUIT INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

DISASSEMBLY (cont)

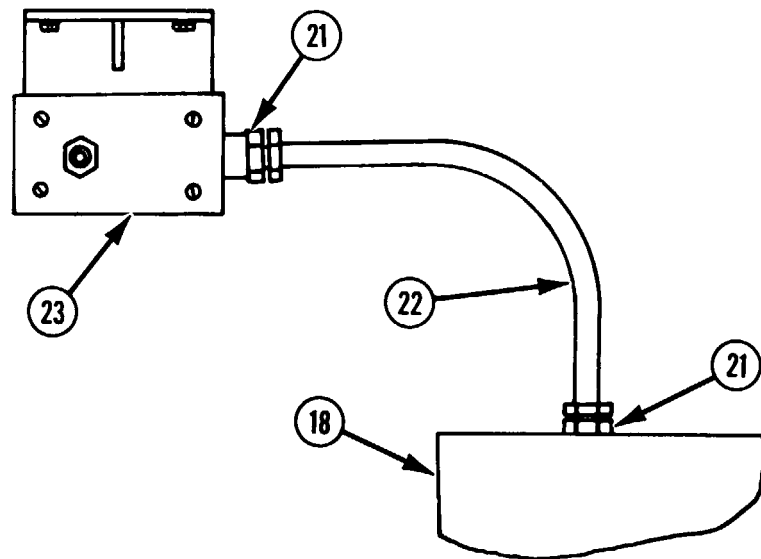
- 12 TWO SCREWS (19). Loosen.
- 13 PULLING ELBOW (20). Remove from conduit (16) and conduit (17).



- 14 NUT (12), LOCKWASHER (13), NUT (12), LOCKWASHER (13), AND SCREW (14). Remove from conduit box J20 (11).



- 16 TWO CONNECTORS (21) ON FLEXIBLE CONDUIT (22) BETWEEN SWITCHBOX S7/S8 (23) AND CIRCUIT BREAKER PANEL BOX PL1 (18). Loosen.
- 17 FLEXIBLE CONDUIT (22) AND TWO CONNECTORS (21). Remove.



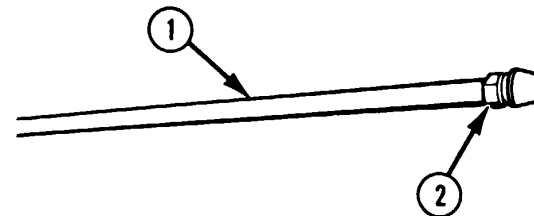
REPAIR

NOTE

Newly installed connectors and fittings may be loose and should be secured in place with tape (item 19, app D) until installed in conduit boxes.

Repair is by replacement of authorized parts (app C).

- 1 CONDUIT (1) WITH FITTING (2).
 - a. Remove fitting (2).
 - b. Replace conduit (1), if needed, by fabrication (fig. 5 and 6, app E)
 - c. Replace and install fitting (2) as required.

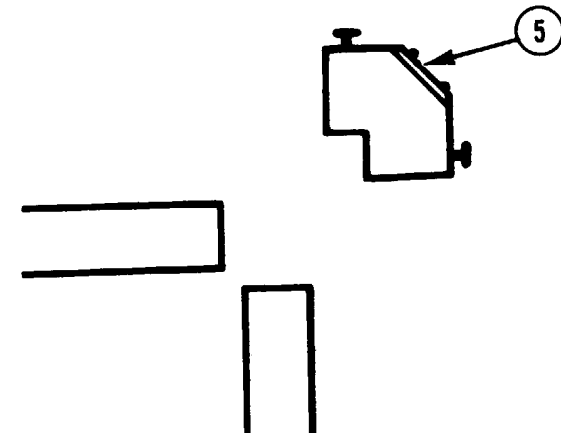
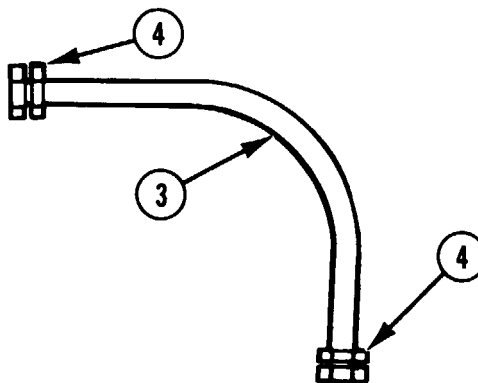


3-12. SHOP SET--CONDUIT INSTALLATION--MAINTENANCE INSTRUCTIONS (con

REPAIR (cont)

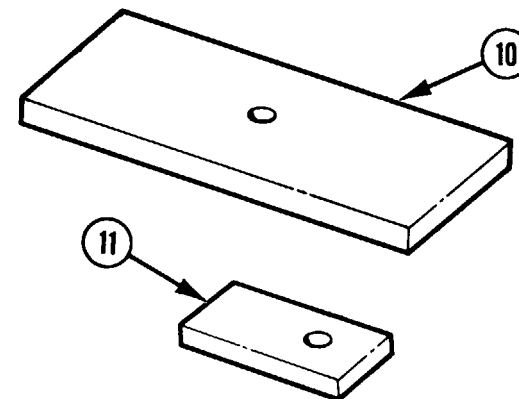
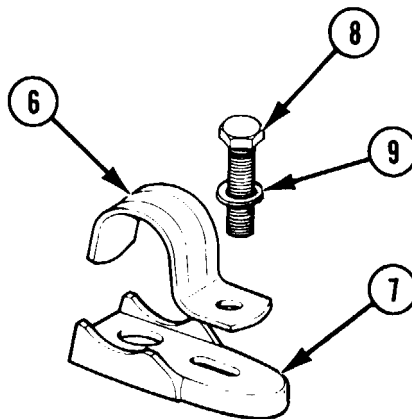
2 FLEXIBLE CONDUIT (3) WITH CONNECTORS (4).

- a. connectors (4).
- b. flexible conduit (3), if needed, by fabrication (fig. 4, app E).
- c. and install connectors (4) as required.



3 PULLING ELBOW (5). Repair by replacement.

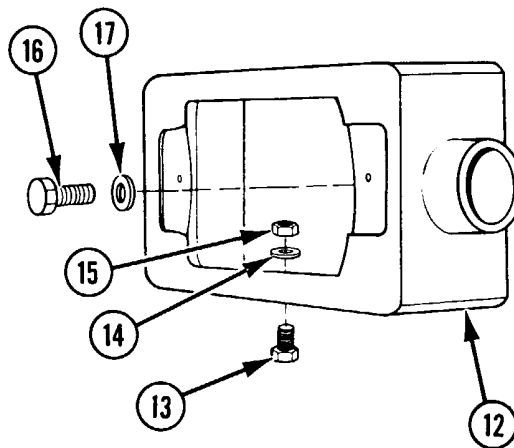
4 CLAMP (6), CLAMP BACK (7), SCREW (8), AND FLAT WASHER (9). Repair by replacement.



5 SPACER (10) AND SPACER (11). Replace, if needed, by fabrication.(fig. 7, app E).

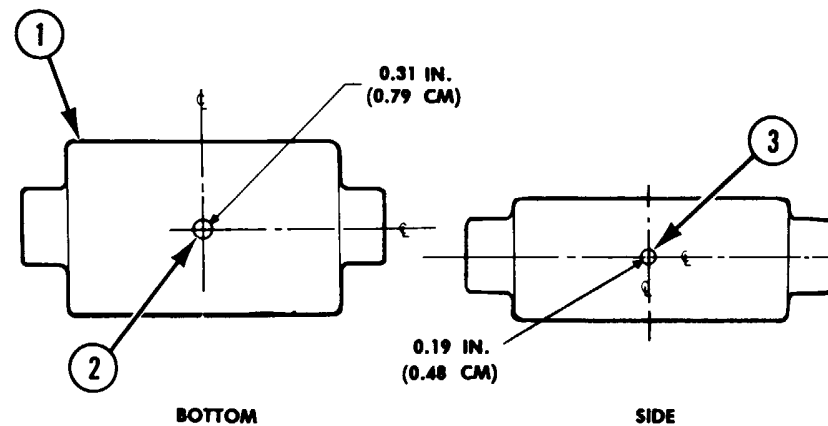
MODIFICATION

- 6 CONDUIT BOX (12). Repair by replacement.
- 7 SCREW (13), LOCKWASHERS (14), AND NUTS (15). Repair by replacement.
- 8 SCREW (16) AND LOCKWASHER (17). Repair by replacement.



NOTE
 Steps 1 and 2 below are necessary only when the listed parts have been replaced with new parts or at the time of initial installation.

- 1 CONDUIT BOX J20 AND J21 (1).
 - a. Drill one 0.31-in. (0.79-cm) hole (2) in the bottom as illustrated.
 - b. Drill one 0.19-in. (0.48-cm) hole (3) in the side as illustrated.

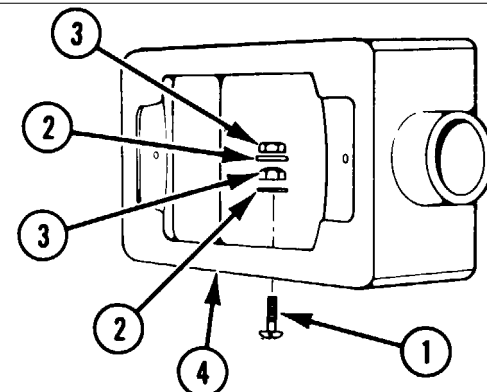
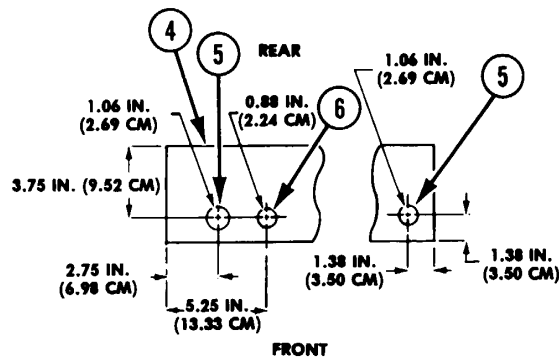


3-12. SHOP SET--CONDUIT INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

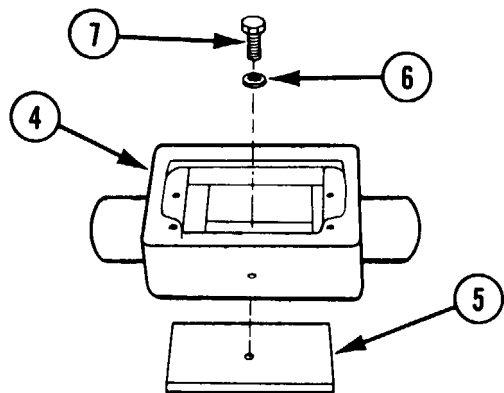
MODIFICATION (cont) REASSEMBLY

2 CIRCUIT BREAKER PANEL BOX PL1 (4).

- a. Drill two 1.06-in. (2.69-cm) holes (5) in the top front as illustrated.
- b. Drill one 0.88-in. (2.24-cm) hole (6) in

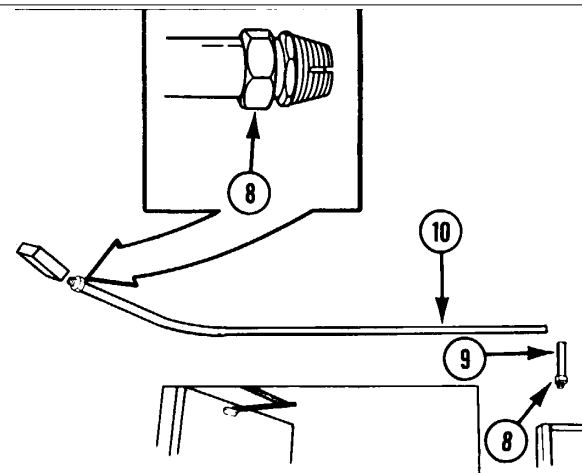


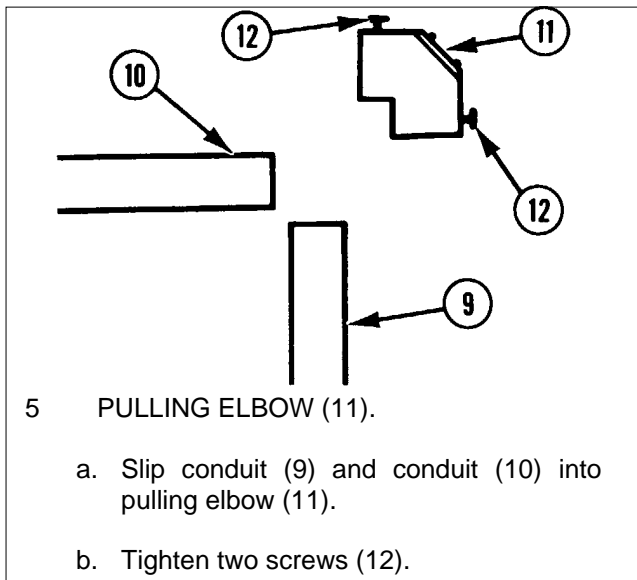
SCREW (1), LOCKWASHER (2), NUT (3), LOCKWASHER (2), AND NUT (3). Install on conduit box J20 (4).



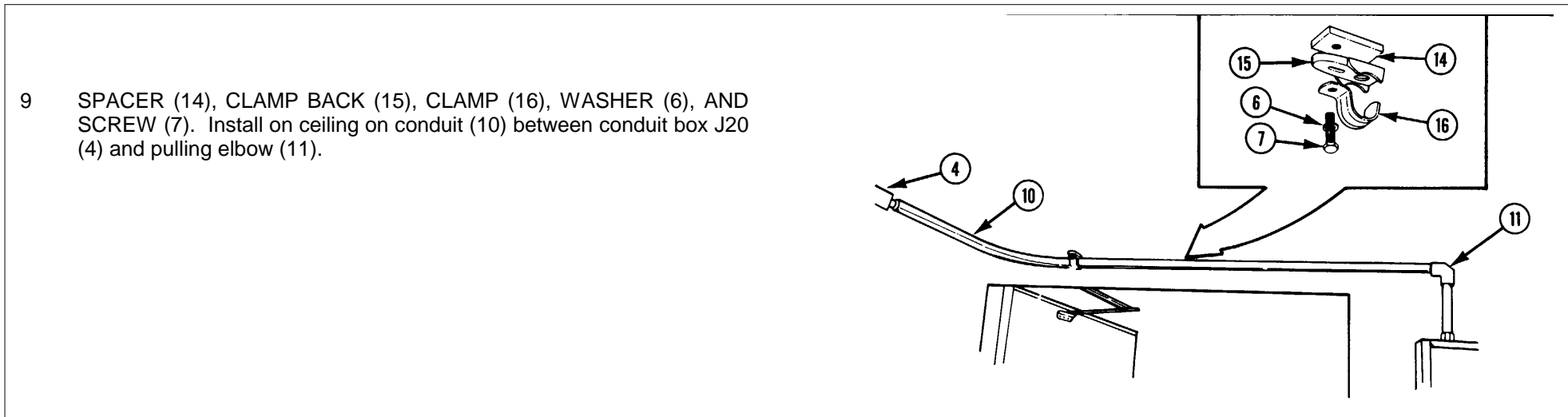
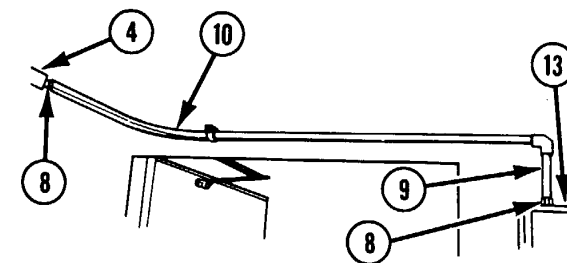
2 SPACER (5), CONDUIT BOX J20 (4), WASHER (6), AND SCREW (7). Install on ceiling.

- 3 FITTING (8). Install on conduit (9).
- 4 FITTING (8). Install on conduit (10).





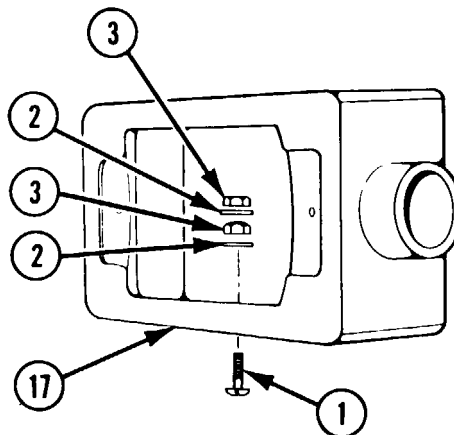
- 6 CONDUIT (9) AND FITTING (8). Install in circuit breaker panel box PL1 (13).
- 7 CONDUIT (10) AND FITTING (8). Install in conduit box J20 (4).
- 8 TWO FITTINGS (8). Tighten.



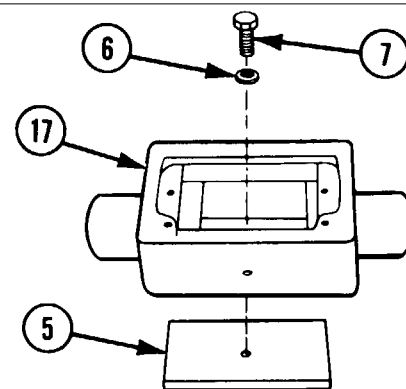
3-12. SHOP SET--CONDUIT INSTALLATION--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY (cont)

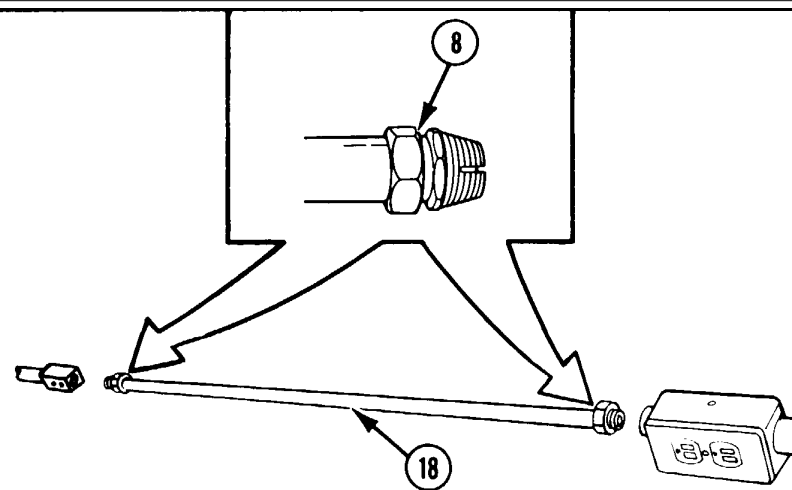
10 SCREW (1), LOCKWASHER (2), NUT (3), LOCKWASHER (2), AND NUT (3). Install on conduit box J21 (17).



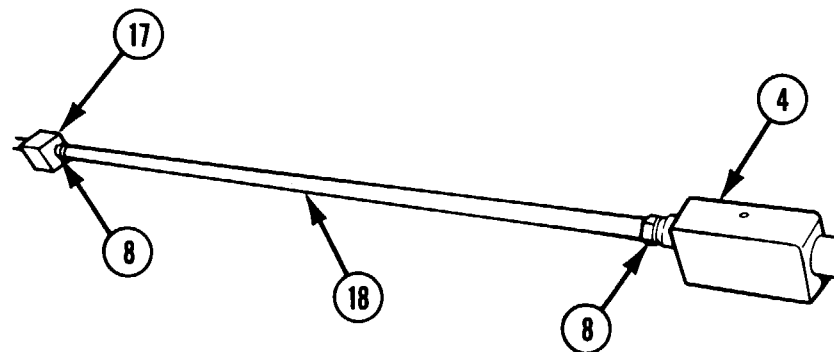
11 SPACER (5), CONDUIT BOX J21 (17), WASHER (6), AND SCREW (7). Install on ceiling.



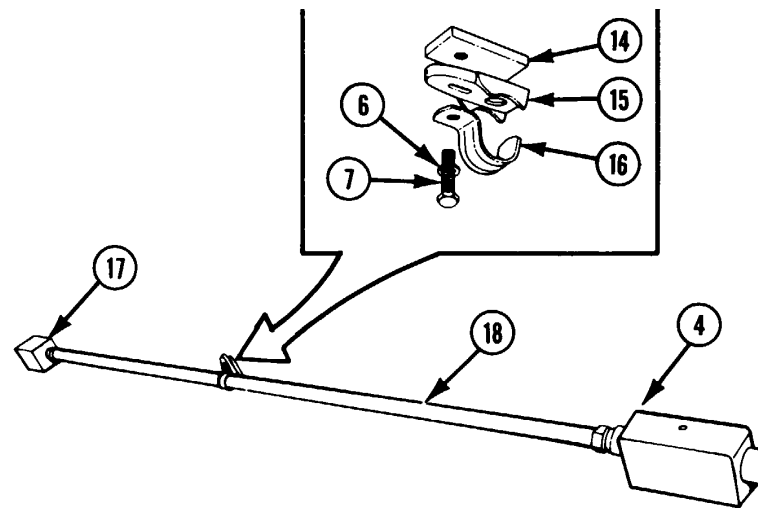
12 TWO FITTINGS (8). Install on conduit (18).



- 13 CONDUIT (18) AND FITTING (8). Install in conduit box J20 (4).
- 14 CONDUIT (18) AND FITTING (8). Install in conduit box J21 (17).
- 15 TWO FITTINGS (8). Tighten.



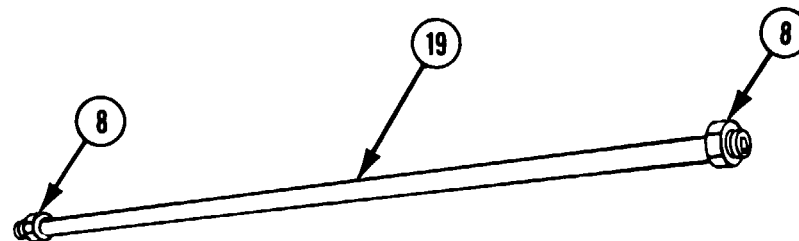
- 16 SPACER (14), CLAMP BACK (15), CLAMP (16), WASHER (6), AND SCREW (7). Install on ceiling on conduit (18) between conduit box J20 (4) and conduit box J21 (17)



3-12 SHOP SET--CONDUIT INSTALLATION--MAINTENANCE INSTRUCTIONS

REASSEMBLY (cont)

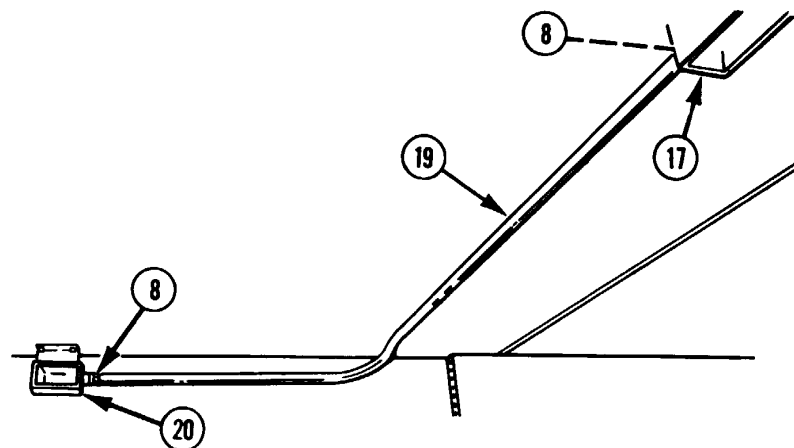
17 TWO FITTINGS (8). Install on conduit (19).



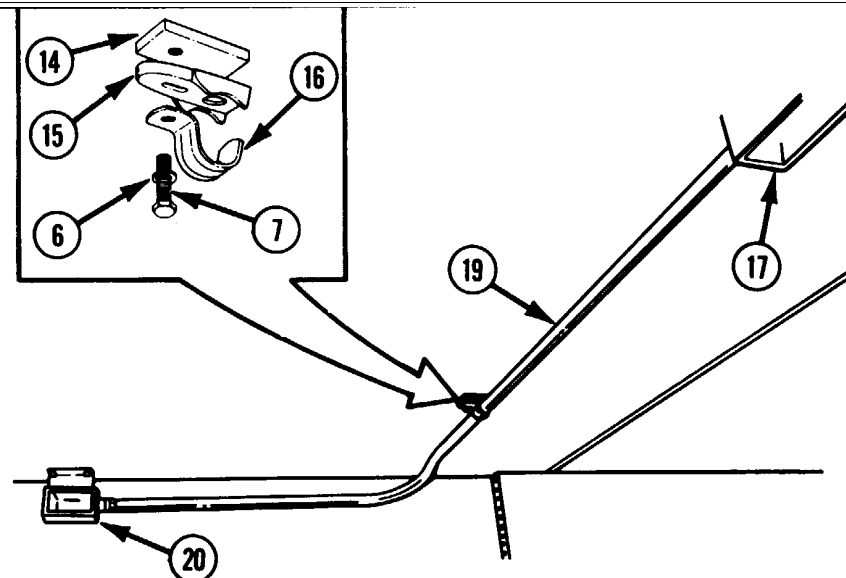
18 CONDUIT (19) AND FITTING (8). Install in conduit box J21 (17).

19 CONDUIT (19) AND FITTING (8). Install in switchbox S9 (20).

20 TWO FITTINGS (8). Tighten.



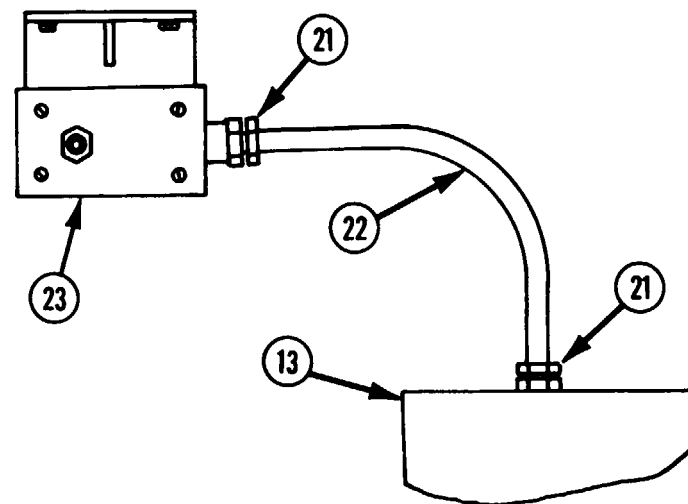
21 SPACER (14), CLAMP BACK (15), CLAMP (16), WASHER (6), AND SCREW (7). Install on ceiling on conduit (19) between conduit box .121 (17) and switchbox S9 (20)



22 TWO CONNECTORS (21). Install on flexible conduit (22).

23 FLEXIBLE CONDUIT (22) AND CONNECTOR (21). Install in switchbox S7/S8 (23).

24 FLEXIBLE CONDUIT (22) AND CONNECTOR (21). Install in circuit breaker panel box PL1 (13).



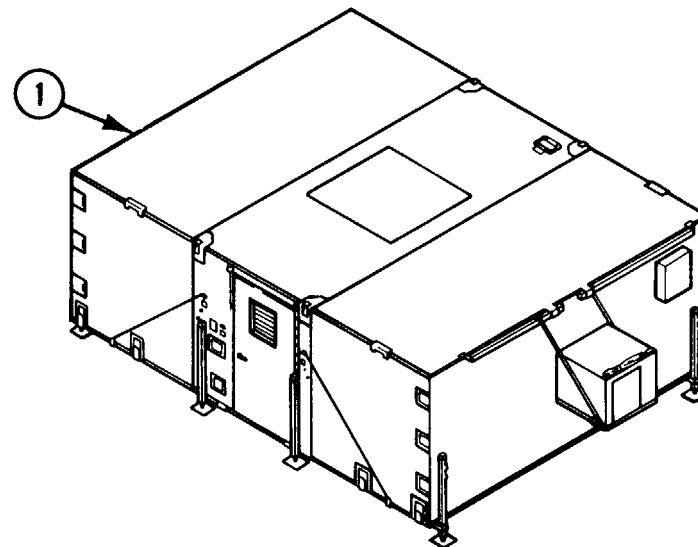
3-13. SHOP SET--INSTALLED EQUIPMENT LIST--MAINTENANCE INSTRUCTIONS

<p>THIS TASK COVERS:</p> <ul style="list-style-type: none"> a Inspection b .Service c. Removal 	<ul style="list-style-type: none"> d .Repair e. Modification of Tables f. Installation
<p>INITIAL SETUP</p> <p>Special Tools</p> <ul style="list-style-type: none"> AVIM sheet metal shop set (SC 4920-99-CL-A91, part VI) AVIM tool crib shop set (SC 4920-99-CL-A91, part VII) AVIM welding shop set (SC 4920-99-CL-A91, part IX) Basic aircraft armament repairman tool set (SC 4933-95-CL-A13) Fire control repair shop set (SC 4931-95-CL-A21) <p>Materials/Parts</p> <ul style="list-style-type: none"> Abrasive cloth (item 4, app D) Cloth (item 17, app D) Lens tissue (item 14, app D) Lubricating oil (item 12, app D) 	<p>Personnel Required: 4 Aircraft fire Lift the ECU. control repairmen</p> <p>References</p> <ul style="list-style-type: none"> SC 4931-95-CL-A21 TM 10-5410-224-14 TM 5-4120-243-14 TM 9-237 Appendix D <p style="text-align: center;">NOTE</p> <p>Maintenance procedures for components of the installed equipment list are tool cabinet (para 3-17), power supply (para 3-23), and tables (2) (para 3-16).</p>

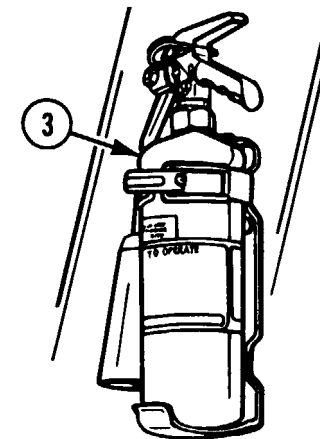
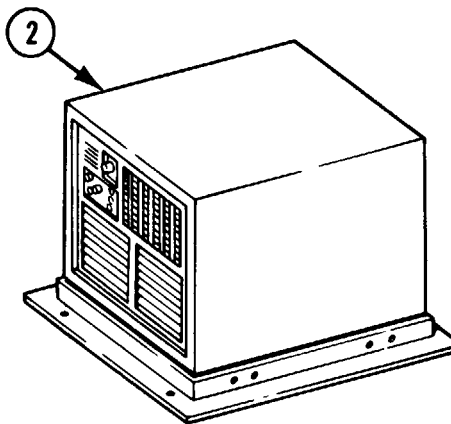
(

INSPECTION (cont)

- 1 SHELTER (1).
 - a. Inspect for cleanliness.
 - b. Inspect for structural damage and for any missing or damaged paint.
 - c. Other inspection procedures, refer to TM 10-5410-224-14.



- 2 TWO ECU'S (2). Refer to TM 54120-243-14 for inspection procedures.



- 3 FIRE EXTINGUISHER (3). Check for proper operation.

3-13. SHOP SET--INSTALLED EQUIPMENT LIST--MAINTENANCE INSTRUCTIONS (cont)

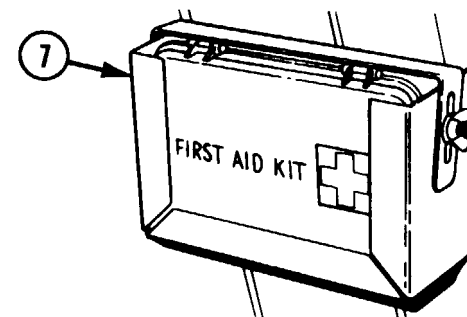
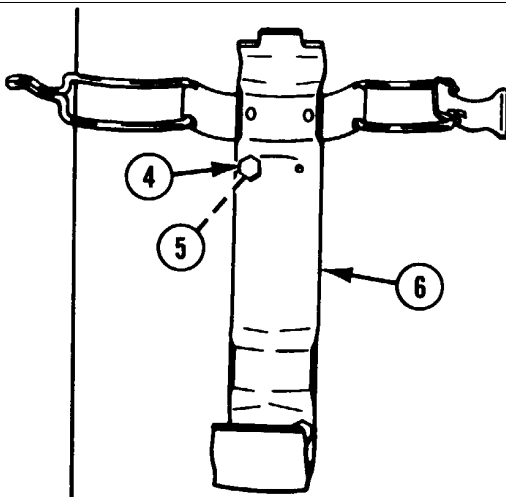
INSPECTION (cont)

NOTE

Parts (4 thru 6) are used to secure the fire extinguisher to the inside of the personnel door.

4 TWO SCREWS (4) AND TWO LOCKWASHERS (5). Check for missing, damaged, or corroded parts.

5 BRACKET (6). Check for bent or broken parts.



6 FIRST AID KIT (7). Check to ensure contents are complete.

7 FOUR STOOLS (8). Check for missing, bent, or broken parts.



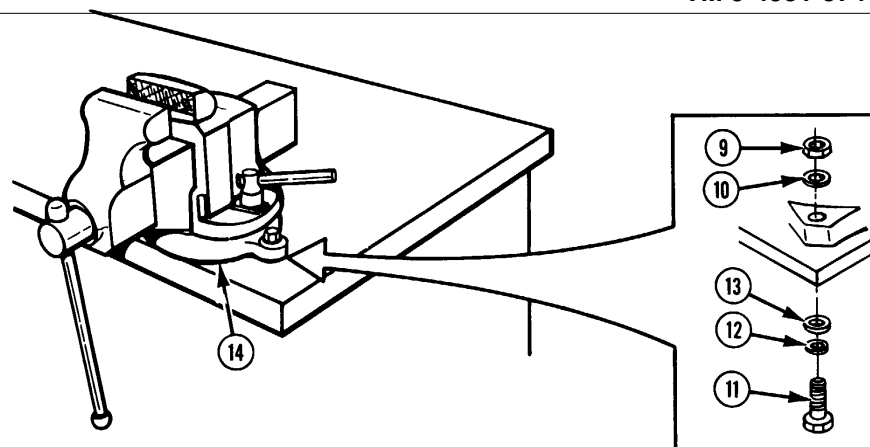
8 ALL HANDTOOLS.

- a. broken, bent, or damaged parts.
- b. for corrosion.
- c. to ensure that any items with movable parts work properly.
- d. a complete listing of all handtools included in the installed equipment list, refer to SC 4931-95-CL-A21.

NOTE

Parts (9 thru 13) are used to secure the machinist's vise to the left table.

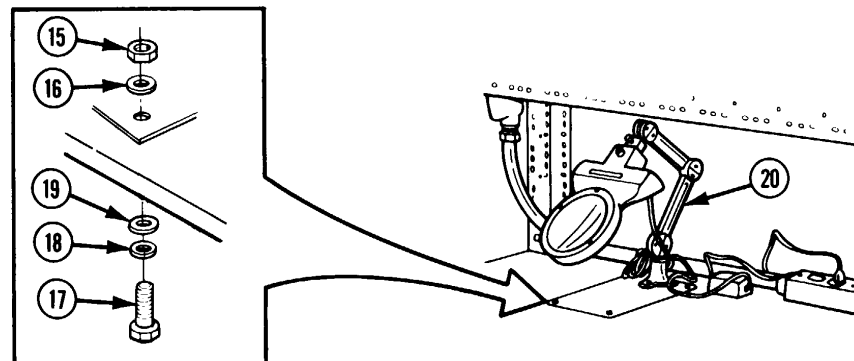
- 9 FOUR NUTS (9), FOUR FLAT WASHERS (10), FOUR SCREWS (11), FOUR LOCKWASHERS (12), AND FOUR FLAT WASHERS (13). Check for missing, damaged, or corroded parts.
- 10 MACHINIST'S VISE (14). Check for damaged or corroded parts.



NOTE

Parts (15 thru 19) are used to secure the magnifier instrument to the right table.

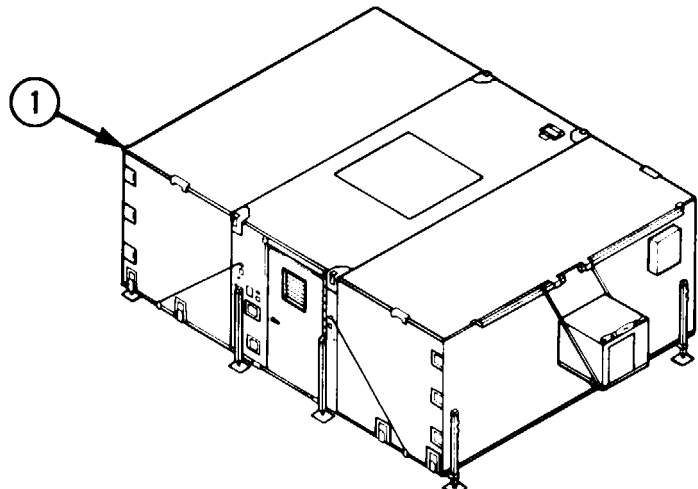
- 11 FOUR NUTS (15), FOUR FLAT WASHERS (16), FOUR SCREWS (17), FOUR LOCKWASHERS (18), AND FOUR FLAT <> WASHERS (19). Check for missing, damaged, or corroded parts.
- 2 MAGNIFIER INSTRUMENT (20).
- a. Check for cracked or broken lens.
- b. Check for bent or broken metal parts.



3-13. SHOP SET--INSTALLED EQUIPMENT LIST--MAINTENANCE INSTRUCTIONS (cont)

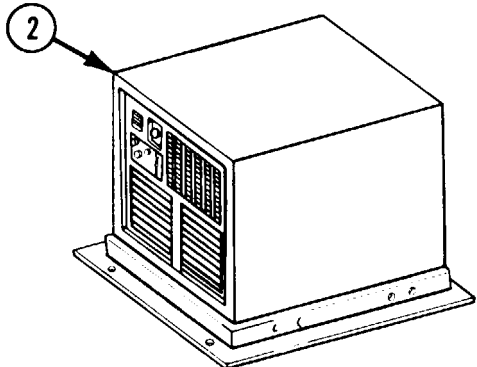
SERVICE

1 SHELTER (1). Refer to TM 10-5410-224-14 for service operations.



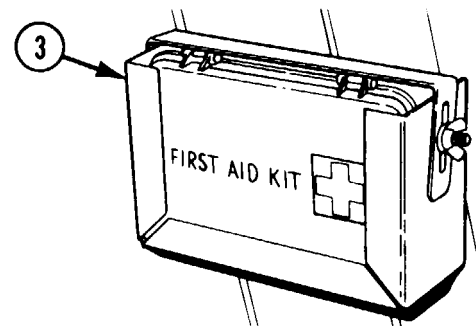
The diagram shows a rectangular shelter unit with a door on the right side. A callout circle containing the number '1' has an arrow pointing to the top surface of the unit.

2 TWO ECU's (2). Refer to TM 54120-243-14 for service procedures.



The diagram shows a rectangular Electronic Control Unit (ECU) mounted on a base. A callout circle containing the number '2' has an arrow pointing to the top surface of the unit.

3 FIRST AID KIT (3). Replace any missing items.



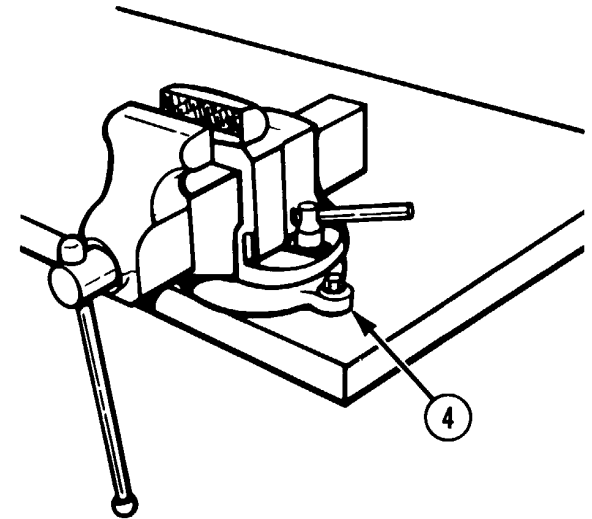
The diagram shows a rectangular first aid kit with a handle on the right side. The words 'FIRST AID KIT' and a cross symbol are visible on the front. A callout circle containing the number '3' has an arrow pointing to the top surface of the kit.

4 ALL HANDTOOLS.

- a. Remove corrosion from unpainted metal surfaces with abrasive cloth (item 4, app D).
- b. Use cloth (item 17, app D) to wipe off dirt.
- c. Apply a light film of lubricating oil (item 12, app D) to all unpainted metal surfaces.
- d. Apply lubricating oil (item 12, app D) to joints and moving parts, if required.

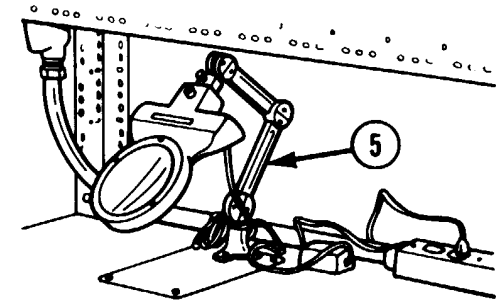
5 MACHINIST'S VISE (4).

- a. Remove corrosion from unpainted metal surfaces with abrasive cloth (item 4, app D).
- b. Apply a light film of lubricating oil (item 12, app D) to all unpainted metal surfaces.
- c. Refer to vendor's information supplied with item for other service operations.



6 MAGNIFIER INSTRUMENT (5).

- a. Wipe lens clean with lens tissue (item 14, app D).
- b. Refer to vendor's information supplied with item for other service operations.



13-13. SHOP SET--INSTALLED EQUIPMENT LIST--MAINTENANCE INSTRUCTIONS (cont)

REMOVAL

NOTE

Steps 1 and 2 pertain to removal of the ECU from its stowing frame assembly.

Steps 1 and 2 pertain to removal of only one ECU and must be repeated for the second unit.

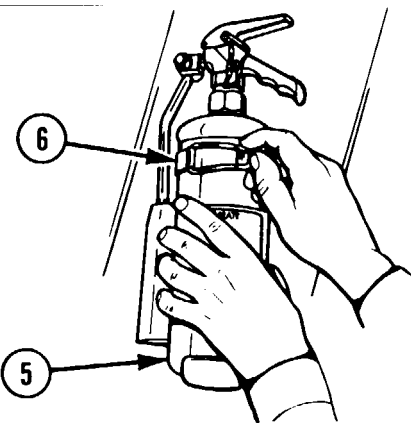
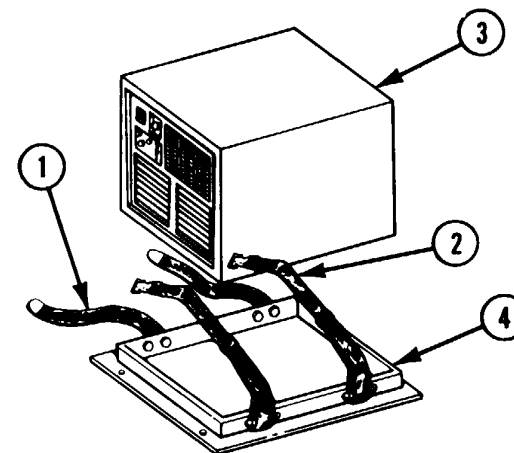
For removal procedures of ECU from shelter, refer to TM 10-5410-224-14.

- 1 TWO STRAPS (1) AND TWO STRAPS WITH BUCKLES (2). Unbuckle.

WARNING

The ECU weighs approximately 270 lb (122 kg) and requires a minimum of four personnel when lifting.

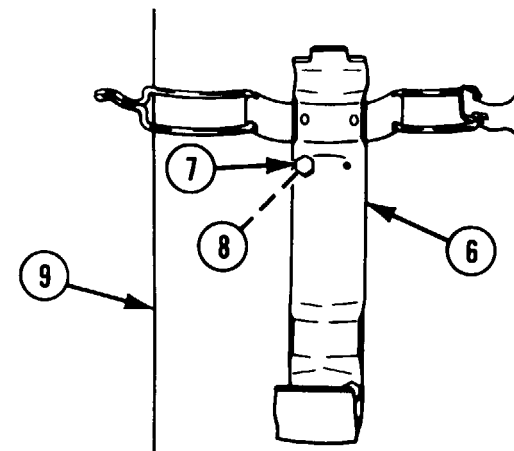
- 2 ECU (3). Lift out of frame assembly (4).

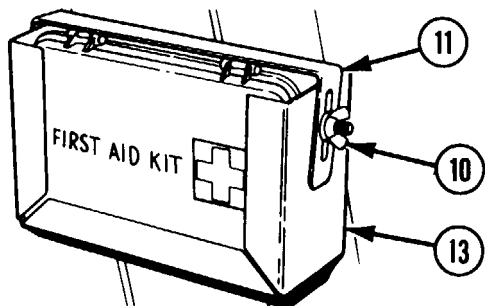


- 3 FIRE EXTINGUISHER (5). Remove from bracket (6).

- 4 TWO SCREWS (7) AND TWO LOCKWASHERS (8). Remove.

- 5 BRACKET (6). Remove from inside of personnel door (9).





NOTE

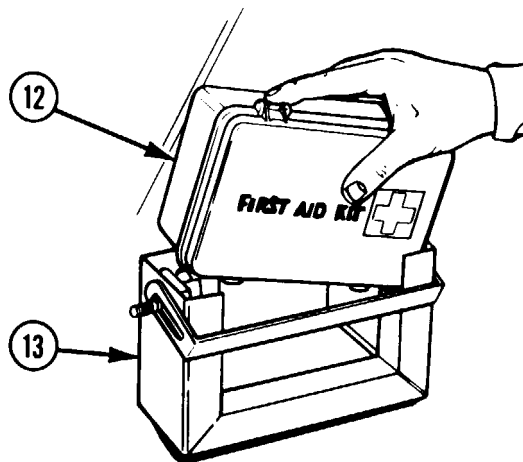
Parts (10, 11, and 13) are part of the first aid kit holder assembly.

- 6 TWO WINGNUTS (10). Loosen.
- 7 BRACKET ASSEMBLY (11). Lift and rotate forward.

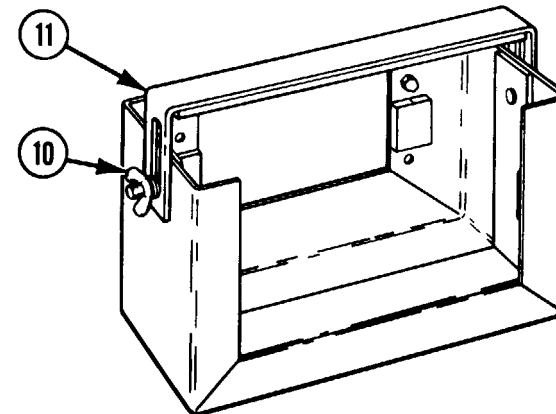
NOTE

Parts (14 thru 18) are used to secure the machinist's vise to left table.

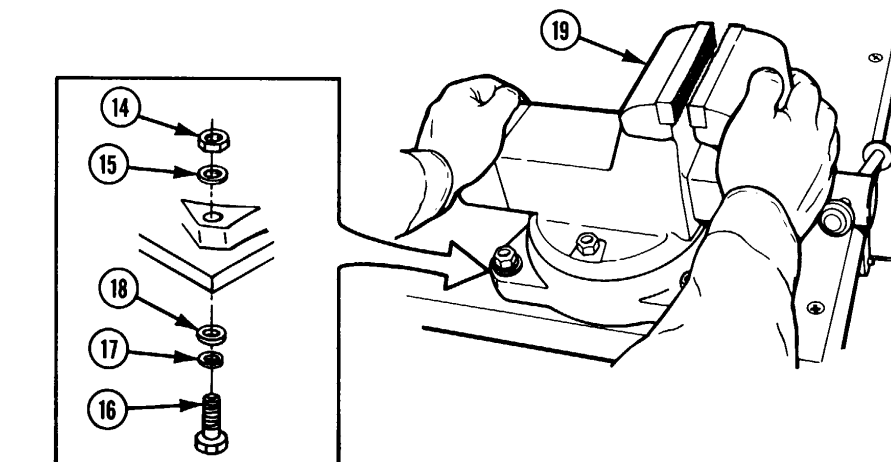
- 11 FOUR NUTS (14) AND FOUR FLAT WASHERS (15). Remove.
- 12 FOUR SCREWS (16), FOUR LOCKWASHERS (17), AND FOUR FLAT WASHERS (18). Remove and separate.
- 13 MACHINIST'S VISE (19). Remove.



- 8 FIRST AID KIT (12). Remove from holder assembly (13).



- 9 BRACKET ASSEMBLY (11). Rotate backwards.
- 10 TWO WINGNUTS (10). Tighten.



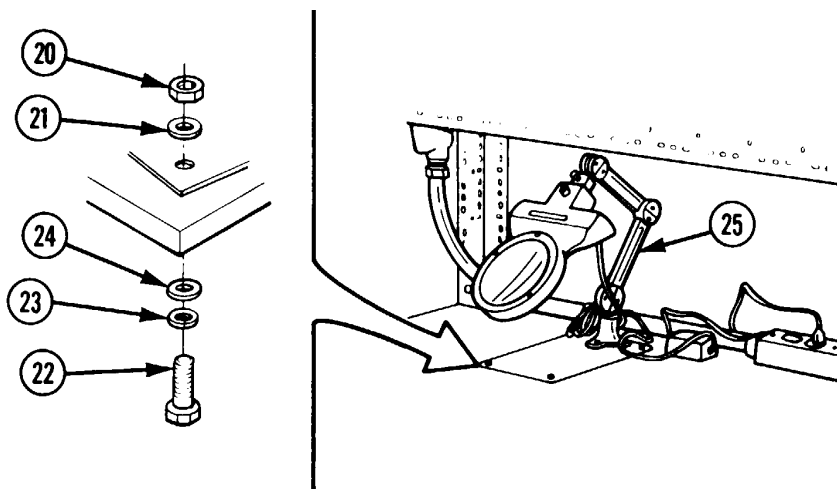
13-13. SHOP SET--INSTALLED EQUIPMENT LIST--MAINTENANCE INSTRUCTIONS (cont)

REMOVAL (cont)

NOTE

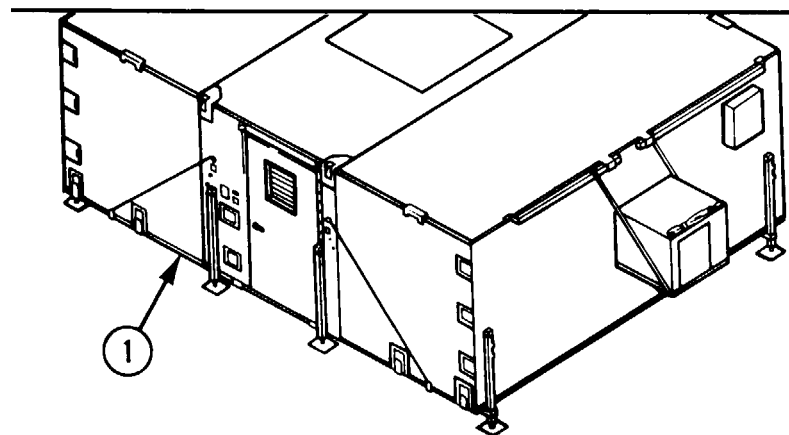
Parts (20 thru 24) are used to secure the magnifier instrument to the right table.

- 14 FOUR NUTS (20) AND FOUR FLAT WASHERS (21). Remove.
- 15 FOUR SCREWS (22), FOUR LOCKWASHERS (23), AND FOUR FLAT WASHERS (24). Remove and separate.
- 16 MAGNIFIER INSTRUMENT (25). Remove.

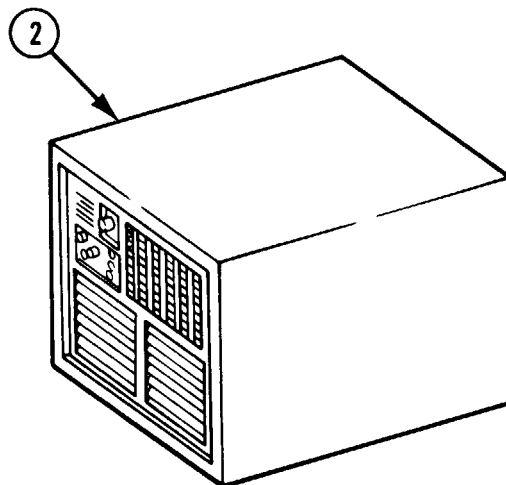


REPAIR

- 1 SHELTER (1).
 - a. Refer to TM 10-5410-224-14 for repair procedures.
 - b. Refer to SC 4931-95-CL-A21 for replacement if not repairable.

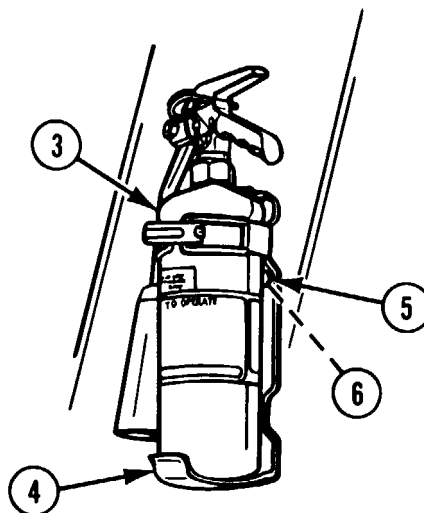


- 2 TWO ECU'S (2).
 - a. Refer to TM 5-4120-243-14 for repair procedures.
 - b. Refer to SC 4931-95-CL-A21 for replacement if not repairable.

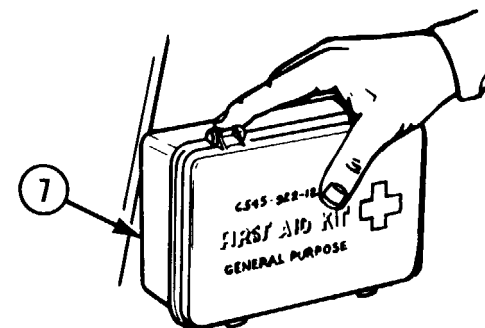


- 3 FIRE EXTINGUISHER (3) AND BRACKET (4).

- a. If repair of bracket is possible, reweld or straighten as required.
- b. Refer to SC 4931-95-CL-A21 for replacement if not repairable. (The bracket is supplied with the fire extinguisher.)



- 4 TWO SCREWS (5) AND TWO LOCKWASHERS (6). Replace if missing, damaged, or corroded.



- 5 FIRST AID KIT (7). If missing or damaged, refer to SC 4931-95-CLA21 for replacement.

3-13. SHOP SET--INSTALLED EQUIPMENT LIST--MAINTENANCE INSTRUCTIONS (cont)

REPAIR (cont)

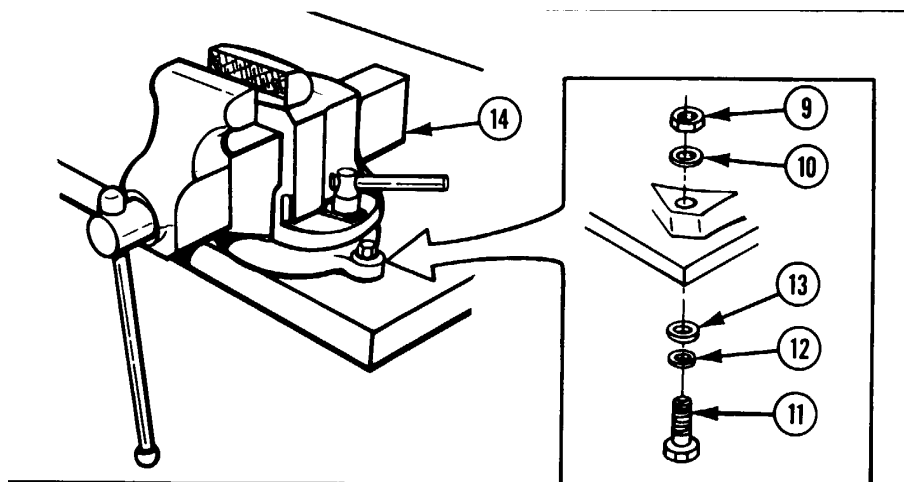
6 ALL HANDTOOLS. Refer to SC 493195-CL-A21 for replacement if any parts are damaged.

- 7 FOUR STOOLS (8).
- a. Repair any broken parts or cracked welds by rewelding.
 - b. Straighten bent parts.
 - c. If not repairable, refer to SC 4931-95-CL-A21 for replacement.

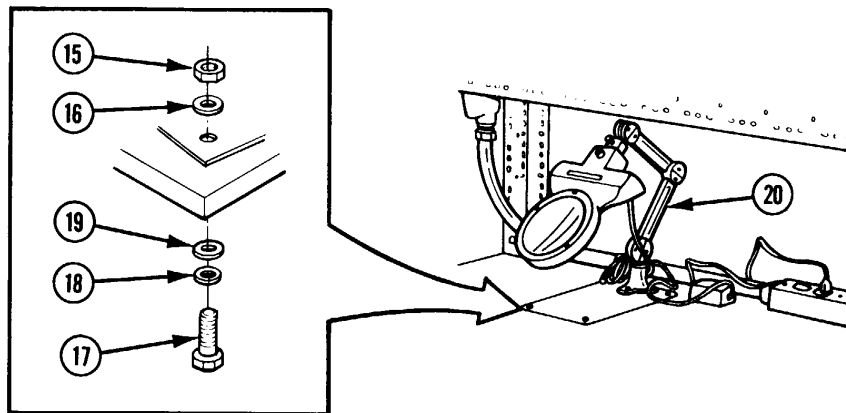


8 FOUR NUTS (9), FOUR FLAT WASHERS (10), FOUR SCREWS (11), FOUR LOCKWASHERS (12), AND FOUR FLAT WASHERS (13). Replace if missing, damaged, or corroded.

- 9 MACHINIST'S VISE (14).
- a. Refer to vendor's supplied information for repair procedures.
 - b. Refer to SC 4931-95-CL-A21 for replacement if not repairable.



- 10 FOUR NUTS (15), FOUR FLAT WASHERS (16), FOUR SCREWS (17), FOUR LOCKWASHERS (18), AND FOUR FLAT WASHERS (19). Replace if missing, damaged, or corroded.
- 11 MAGNIFIER INSTRUMENT (20).
 - a. Refer to vendor's supplied instructions for repair procedures.
 - b. Refer to SC 4931-95-CL-A21 for replacement if not repairable.



MODIFICATION OF TABLES I

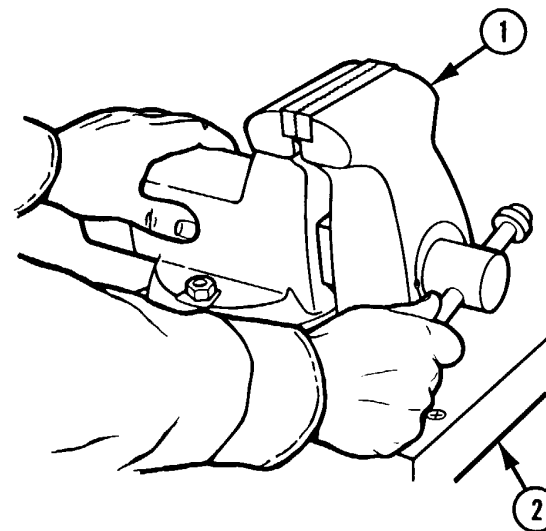
NOTE

Steps 1 thru 8 are used only for the initial installation or when the tables have been replaced with new items.

The tables are purchased from various manufacturers and there may be slight variations.

The designation of left and right tables is determined by looking into the shop set from the cargo door.

- 1 MACHINIST'S VISE (1). Position on left table (2) as follows: the front edge of vise should be flush with front edge of left table; center line of vise should be 64.75 in. (164.47 cm) from personnel door end of left table.

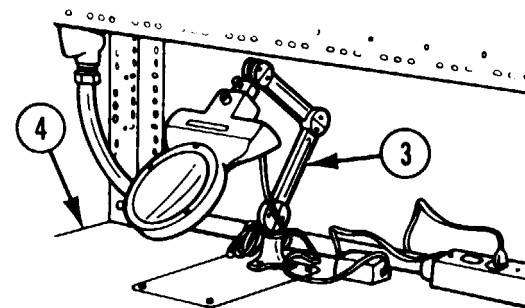
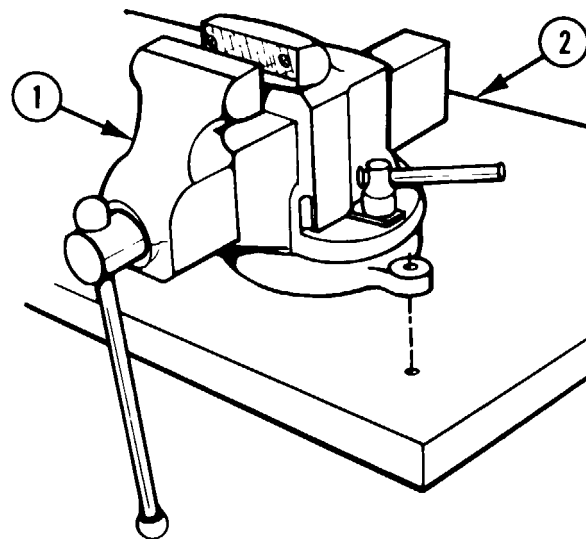


3-13. SHOP SET--INSTALLED EQUIPMENT LIST--MAINTENANCE INSTRUCTIONS (cont)

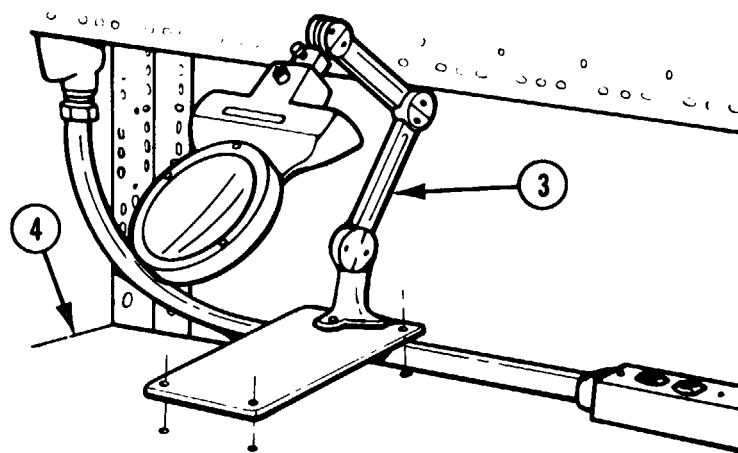
MODIFICATION OF TABLES (cont)

- 2 LEFT TABLE (2). Mark four mounting hole locations using machinist's vise (1) as a template.
- 3 MACHINIST'S VISE (1). Remove.
- 4 LEFT TABLE (2). Drill four 0.500-in. (1.27-cm) diameter holes through top at marked locations.

- 5 MAGNIFIER INSTRUMENT (3). Position on right table (4) as follows: the left edge of the magnifier instrument should be 10.00 in. (25.40 cm) from personnel door end of the right table; the front edge of the magnifier instrument should be 12.00 in. (30.48 cm) from front edge of the right table.

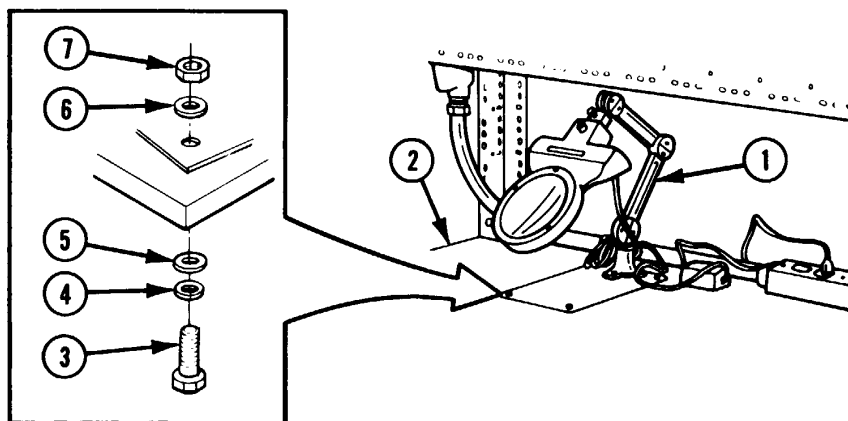


- 6 RIGHT TABLE (4). Mark four mounting hole locations using magnifier instrument (3) as a template.
- 7 MAGNIFIER INSTRUMENT (3). Remove.
- 8 RIGHT TABLE (4). Drill four 0.500-in. (1.27-cm) diameter holes through top at marked locations.



INSTALLATION

- 1 MAGNIFIER INSTRUMENT (1). Place on right table (2) over four mounting holes.
- 2 FOUR SCREWS (3), FOUR LOCKWASHERS (4), AND FOUR FLAT WASHERS (5). Assemble and install through mounting holes in right table (2) from underneath.
- 3 FOUR FLAT WASHERS (6) AND FOUR NUTS (7). Install onto four screws (3).



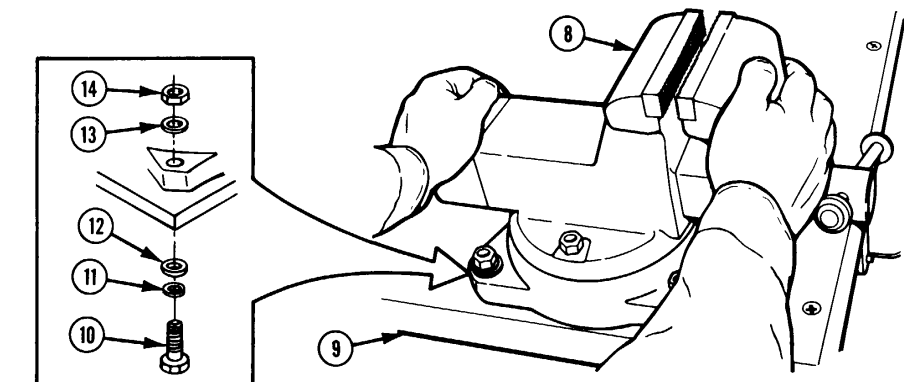
3-13. SHOP SET--INSTALLED EQUIPMENT LIST--MAINTENANCE INSTRUCTIONS (cont)

INSTALLATION (cont)

4 MACHINIST'S VISE (8). Place on left table (9) over four mounting holes.

5 FOUR SCREWS (10), FOUR LOCKWASHERS (11), AND FOUR FLAT WASHERS (12). Assemble and install through mounting holes in left table (9) from underneath.

6 FOUR FLAT WASHERS (13) AND FOUR NUTS (14). Install onto four screws (10).

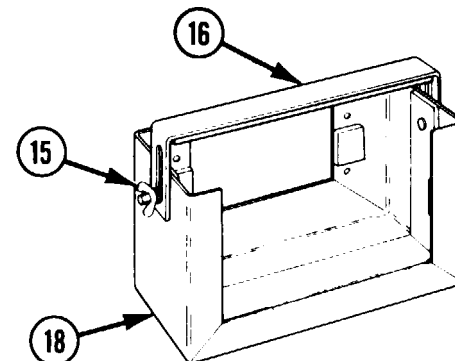


7 ALL HANDTOOLS. Place in proper storage areas (table drawers, cabinets, etc).

NOTE

Parts (15, 16, and 18) are on the first aid kit holder assembly mounted on the inside of the personnel door.

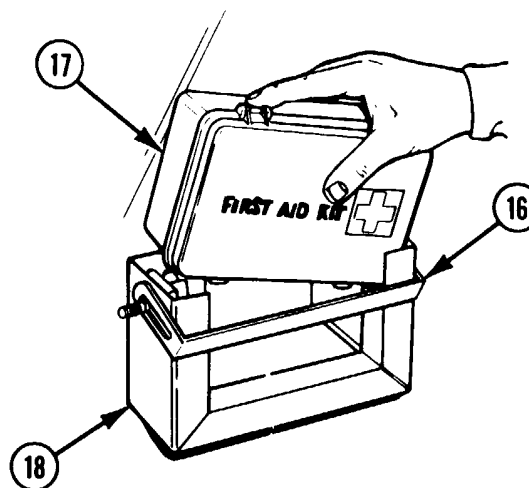
8 TWO WINGNUTS (15). Loosen.



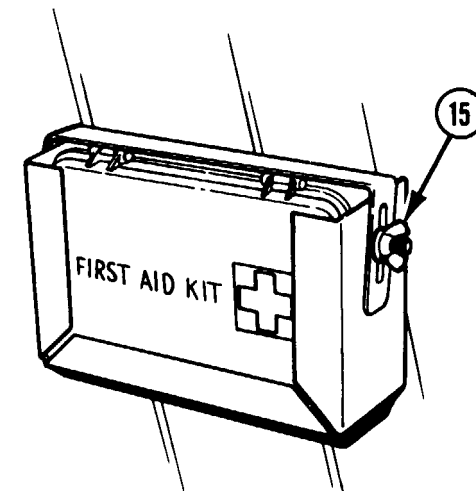
9 BRACKET ASSEMBLY (16). Rotate forward.

10 FIRST AID KIT (17). Install in holder assembly (18).

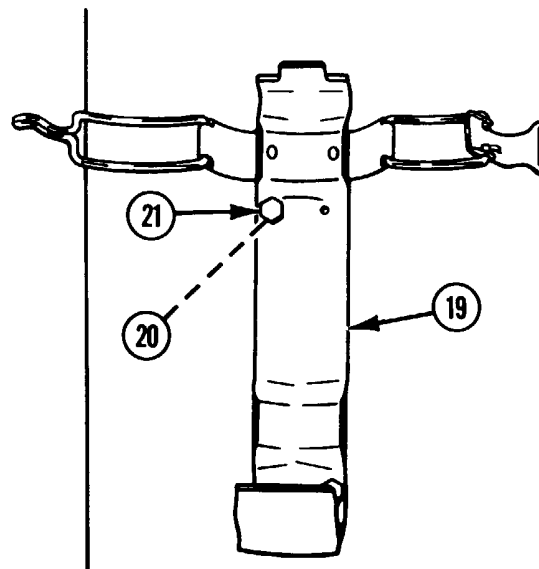
11 BRACKET ASSEMBLY (16). Rotate backwards and push down on first aid kit (17).



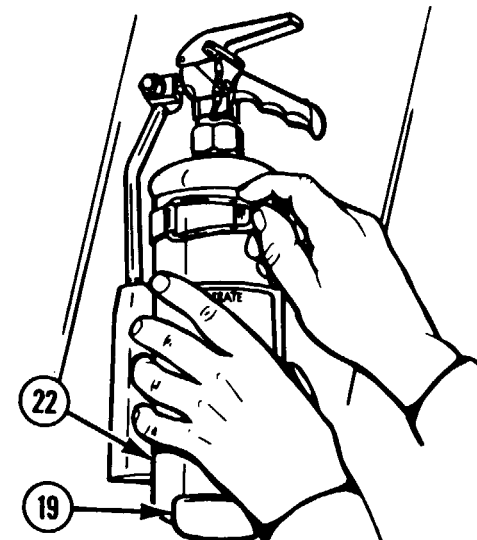
12 TWO WINGNUTS (15). Tighten.



13 BRACKET (19), TWO LOCKWASHERS (20), TWO SCREWS (21). Assemble and install on inside of personnel door.



14 FIRE EXTINGUISHER (22). Install on bracket (19).



3-13. SHOP SET--INSTALLED EQUIPMENT LIST--MAINTENANCE INSTRUCTIONS (cont)

INSTALLATION (cont)

WARNING

The ECU weighs approximately 270 lb (122 kg) and requires a minimum of four personnel when lifting.

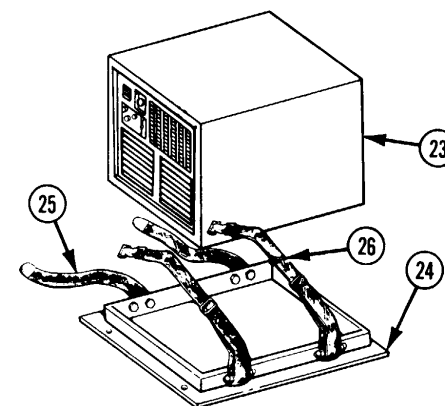
NOTE

Steps 15 and 16 pertain to installation of the ECU into its stowing frame assembly.

Steps 15 and 16 pertain to only one ECU and must be repeated for the second unit.

For installation procedures of ECU into shelter, refer to TM 10-5410-224-14.

- 15 ECU (23). Install into frame assembly (24) on shelter floor between the tables.
- 16 TWO STRAPS (25) AND TWO STRAPS WITH BUCKLES (26). Place over ECU (23) and buckle.

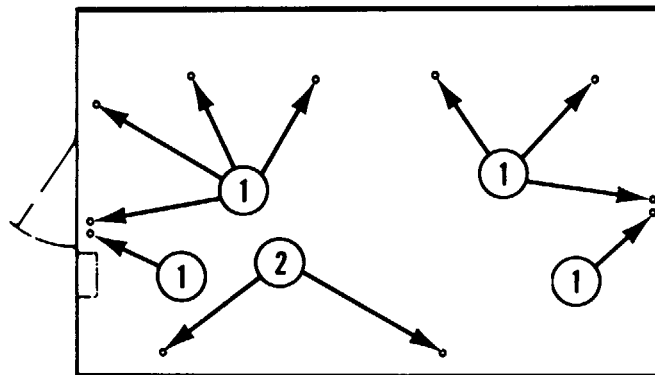


3-14. SHOP SET--CEILING MODIFICATION--MAINTENANCE INSTRUCTIONS

<p>THIS TASK COVERS:</p> <ul style="list-style-type: none"> a. Inspection b. Disassembly c. Repair 	<ul style="list-style-type: none"> d. Modification of ceiling e. Reassembly
<p>INITIAL SETUP</p> <p>Special Tools</p> <ul style="list-style-type: none"> AVIM tool crib shop set (SC 4920-99-CL-A91, part VII) Basic aircraft armament repairman tool set (SC 4933-95-CL-A13) Fire control repair shop set (SC 4931-95-CL-A21) <p>Materials/Parts</p> <ul style="list-style-type: none"> Adhesive (item 2, app D) Cloth (item 17, app D) Dry cleaning solvent (item 6, app D) 	<ul style="list-style-type: none"> Gloves (item 9, app D) Blind inserts (2) (12011684) Blind inserts (9) (12011685) <p>References</p> <ul style="list-style-type: none"> Appendix D <p>Equipment Conditions</p> <ul style="list-style-type: none"> 3-115 Conduit installation removed. 3-46 Electrical installation removed. 3-246 Shelving assembly removed.

INSPECTION

NINE BLIND INSERTS (1) AND TWO BLIND INSERTS (2). Check for missing or loose parts.



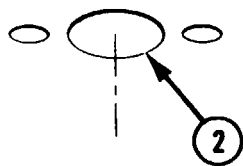
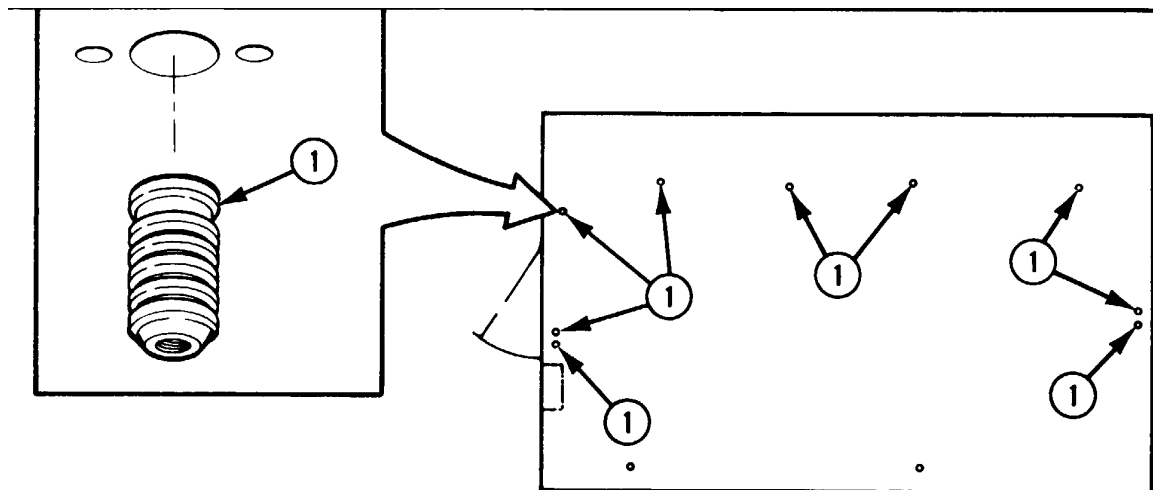
3-14. SHOP SET--CEILING MODIFICATION--MAINTENANCE INSTRUCTIONS (cont)

DISASSEMBLY

NOTE

Each blind insert is removed from a large hole which has two small holes on each side of it. These three holes must be drilled clear of cured adhesive as described in steps 2 and 3. This procedure pertains to each blind insert removed.

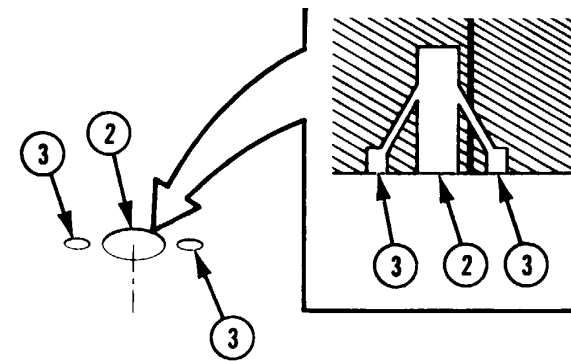
- 1 NINE BLIND INSERTS (1). If replacement is required, remove by drilling out with a 0.344-in. (0.874-cm) diameter drill.



- 2 LARGE HOLE (2). Drill a 0.375 in. (0.953-cm) diameter hole 1.50 in. (3.81 cm) deep.

- 3 TWO SMALL HOLES (3).

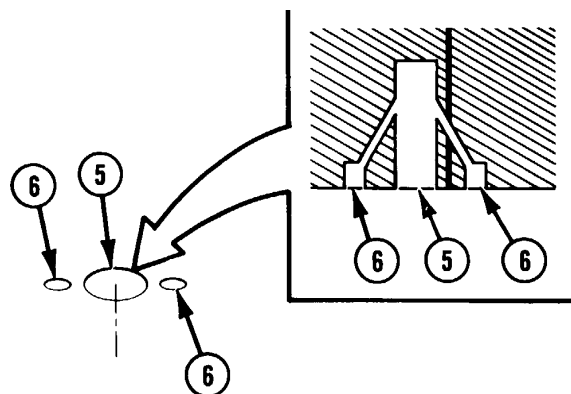
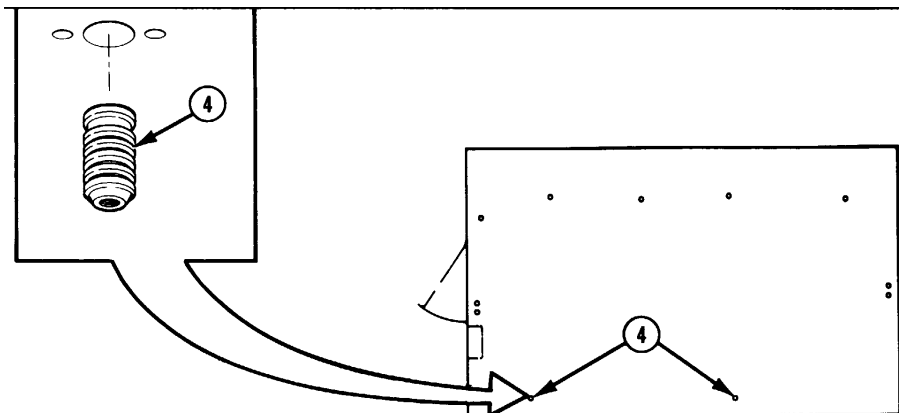
- a. Drill a 0.125-in. (0.318-cm) diameter hole 0.25 in. (0.64 cm) deep.
- b. Insert a 0.062-in. (0.157-cm) diameter drill and drill a hole at an angle to intersect the large hole (2).



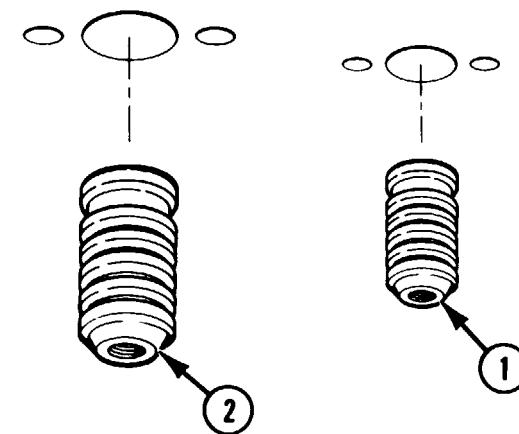
NOTE

Each blind insert is removed from a large hole which has two small holes on each side of it. These three holes must be drilled clear of cured adhesive as described in steps 5 and 6. This procedure pertains to each blind insert removed.

- 4 TWO BLIND INSERTS (4). If replacement is necessary, remove by drilling out with a 0.50-in. (1.27-cm) diameter drill.
- 5 LARGE HOLE (5). Drill a 0.531 in. (1.349-cm) diameter hole 1.50 in. (3.81 cm) deep.
- 6 TWO SMALL HOLES (6).
 - a. Drill a 0.125-in. (0.318-cm) diameter hole 0.25 in. (0.64 cm) deep.
 - b. Insert a 0.062-in. (0.157-cm) diameter drill and drill a hole at an angle to intersect the large hole (5).



REPAIR



NINE BLIND INSERTS (1) AND TWO BLIND INSERTS (2). Replace if removed.

3-14. SHOP SET--CEILING MODIFICATION--MAINTENANCE INSTRUCTIONS (cont)

MODIFICATION OF CEILING

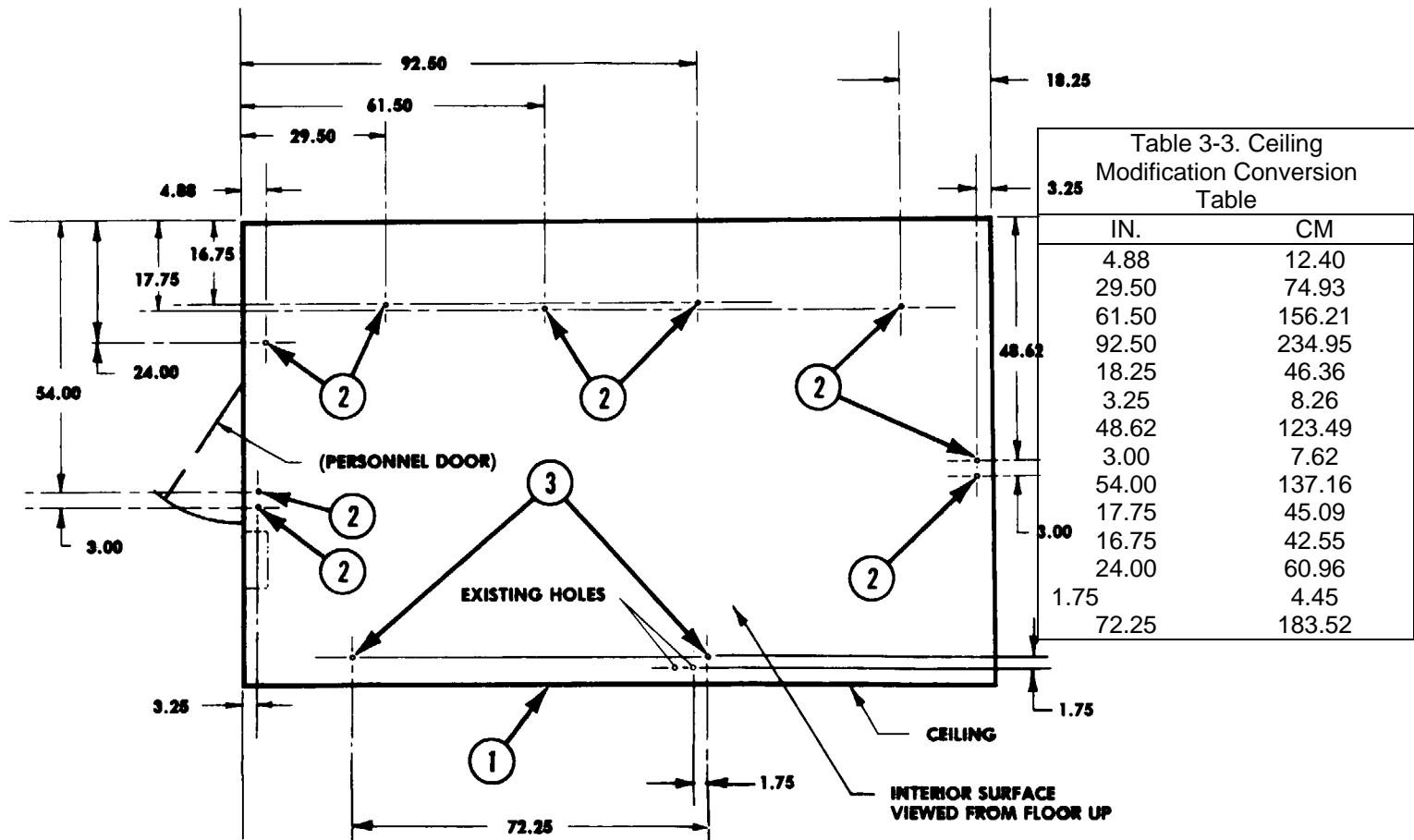


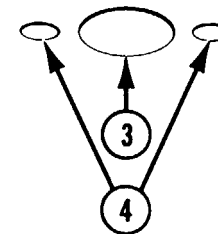
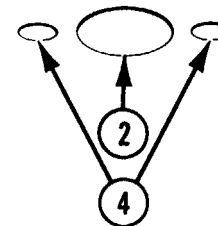
Table 3-3. Ceiling Modification Conversion Table

IN.	CM
4.88	12.40
29.50	74.93
61.50	156.21
92.50	234.95
18.25	46.36
3.25	8.26
48.62	123.49
3.00	7.62
54.00	137.16
17.75	45.09
16.75	42.55
24.00	60.96
1.75	4.45
72.25	183.52

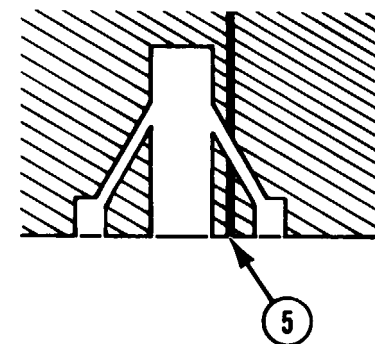
1 CEILING (1).

- a. Drill nine 0.375-in. (0.953-cm) diameter holes (2), 1.50 in. (3.81 cm) deep, into ceiling from inside of shelter as illustrated.

- b. Drill two 0.531-in. (1.349-cm) diameter holes (3), 1.50 in. (3.81 cm) deep, into ceiling from inside of shelter as illustrated.
- c. Drill twenty-two 0.125-in. (0.318-cm) diameter holes (4) through inside skin of ceiling, one on each side of the nine 0.375-in. (0.953-cm) diameter holes (2) and one on each side of the two 0.531-in. (1.349-cm) diameter holes (3).



- 2 HONEYCOMB CELL WALL (5). Cut through if it falls between 0.375-in. (0.953-cm) or 0.531-in. (1.349-cm) diameter hole and the 0.125-in. (0.318-cm) diameter holes.



3-14. SHOP SET--CEILING MODIFICATION--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY

WARNING

Dry cleaning solvent is flammable and should not be used near an open flame or in a smoking area. Use only in well-ventilated areas. The solvent evaporates quickly and has a drying, possibly damaging, effect on skin.

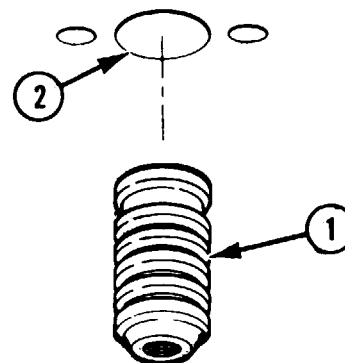
CAUTION

Clean blind inserts just prior to installation and handle only when wearing gloves.

NOTE

Steps 1 thru 6 pertain to only one blind insert. Repeat procedures as required for additional blind inserts.

- 1 BLIND INSERT (1).
 - a. Wearing gloves (item 9, app D) clean with a cloth (item 17, app D) dipped in dry cleaning solvent (item 6, app D).
 - b. Install on hydraulic gun.
 - c. Insert in 0.375-in. (0.953-cm) diameter hole (2) and set with hydraulic gun. (See page 3-148 for location of all blind inserts.)

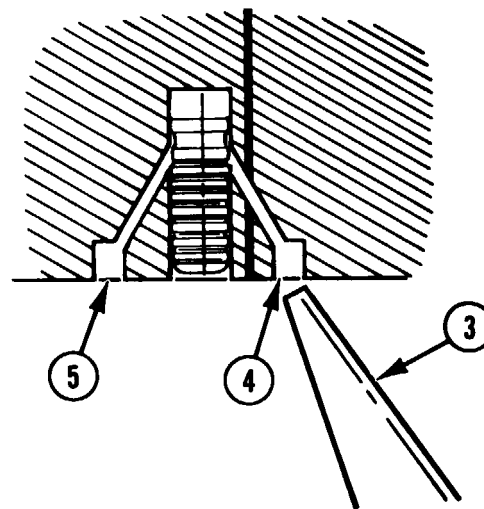


2 CAULK GUN (3).

NOTE

The adhesive is a mixture and must be mixed according to supplier's instructions.

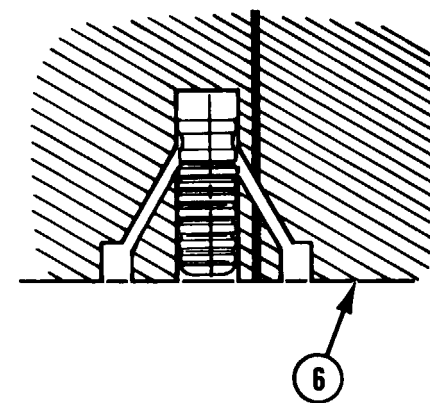
- a. Fill with adhesive (item 2, app D).
- b. Insert into one 0.125-in. (0.318-cm) diameter hole (4).
- c. Release adhesive until it flows from the other 0.125-in. (0.318-cm) diameter hole (5).



WARNING
 Dry cleaning solvent is flammable and should not be used near an open flame or in a smoking area. Use only in wellventilated areas. The solvent evaporates quickly and has a drying, possibly damaging, effect on skin.

CAUTION
 After performing step 3 allow time for adhesive to set before using blind inserts.

- 3 CEILING (6). Wipe off excess adhesive (item 2, app D) with a cloth (item 17, app D) dipped in dry cleaning solvent (item 6, app D) wearing gloves (item 9, app D).



3-14. SHOP SET--CEILING MODIFICATION--MAINTENANCE INSTRUCTIONS (cont)

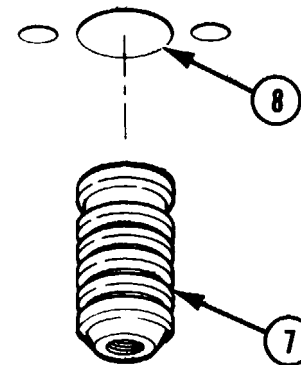
REASSEMBLY (cont)

4 BLIND INSERT (7).

WARNING

Dry cleaning solvent is flammable and should not be used near an open flame or in a smoking area. Use only in well-ventilated areas. The solvent evaporates quickly and has a drying, possibly damaging, effect on skin.

- a. Wearing gloves (item 9, app D), clean with a cloth (item 17, app D) dipped in dry cleaning solvent (item 6, app D).
- b. Install on hydraulic gun.
- c. Insert in 0.531-in. (1.349-cm) diameter hole (8) and pull up tight with hydraulic gun. (See page 3-148 for location of all blind inserts.)



5 CAULK GUN (3).

NOTE

The adhesive is a mixture and must be mixed according to supplier's instructions.

- a. Fill with adhesive (item 2, app D).
- b. Insert into one 0.125-in. (0.318-cm) diameter hole (9).
- c. Release adhesive until it flows from the other 0.125-in. (0.318 cm) diameter hole (10).

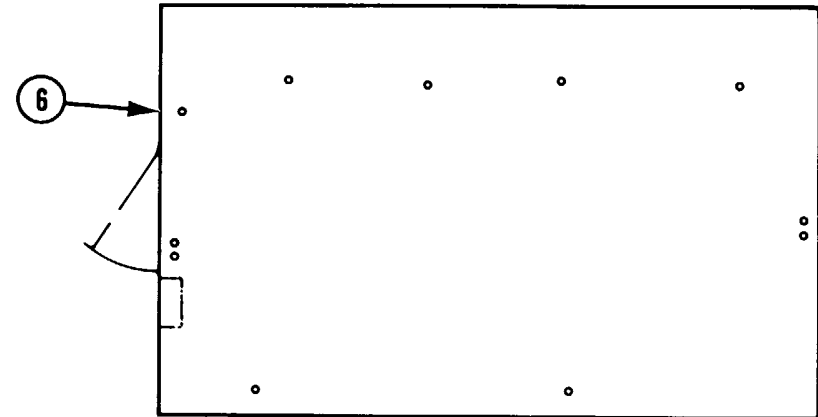
WARNING

Dry cleaning solvent is flammable and should not be used near an open flame or in a smoking area. Use only in wellventilated areas. The solvent evaporates quickly and has a drying, possibly damaging, effect on skin.

CAUTION

After performing step 6 allow time for adhesive to set before using blind inserts.

- 6 CEILING (6). Wearing gloves (item 9, app D), wipe off excess adhesive (item 2, app D) with a cloth (item 17, app D) dipped in dry cleaning solvent (item 6, app D).



3-15. SHOP SET--DOOR MODIFICATION--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Disassembly
- b. Inspection
- c. Repair
- d. Modification of door
- e. Reassembly

INITIAL SETUP

Special Tools

- Basic aircraft armament repairman tool set (SC 4933-95-CL-A13)
- Fire control repair shop set (SC 4931-95-CL-A21)

Materials/Parts

- Adhesive (item 2, app D)
- Cloth (item 17, app D)
- Dry cleaning solvent (item 6, app D)
- Gloves (item 9, app D)
- Blind inserts (4) (12011685)

References

- Appendix D
- 3-128 Installed equipment list--maintenance instructions.

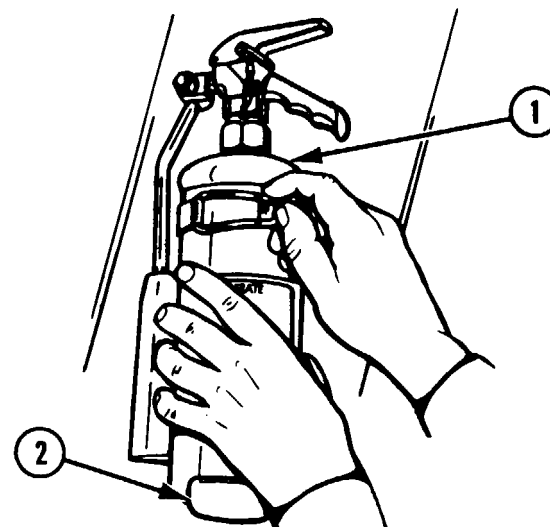
NOTE

The fire extinguisher and its mounting bracket, and the first aid kit are part of the installed equipment list. Refer to paragraph 3-13 for maintenance procedures.

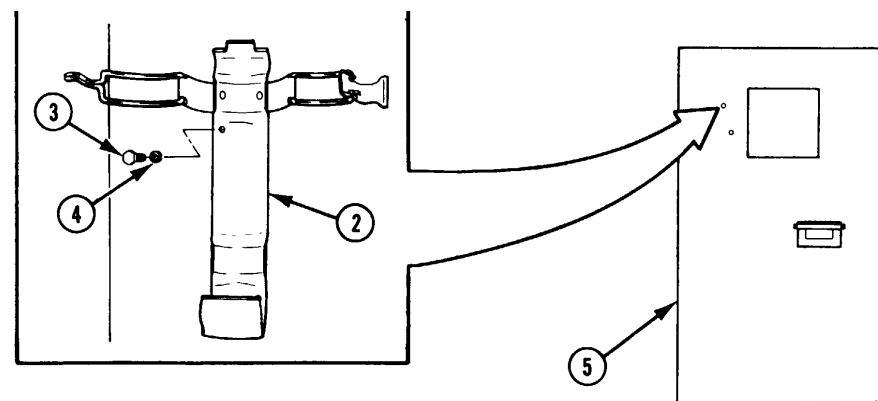
3-15. SHOP SET--DOOR MODIFICATION--MAINTENANCE INSTRUCTIONS (cont)

DISASSEMBLY

- 1 FIRE EXTINGUISHER (1). Remove from bracket (2).

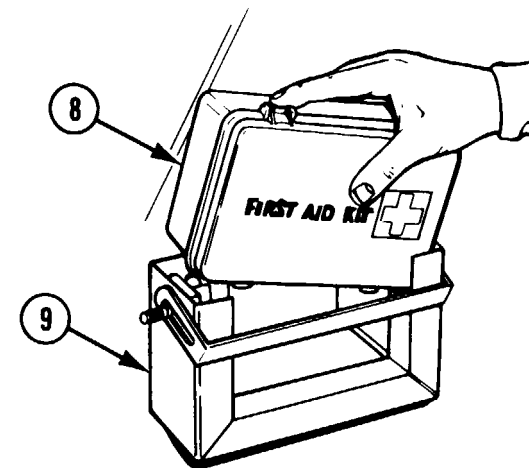
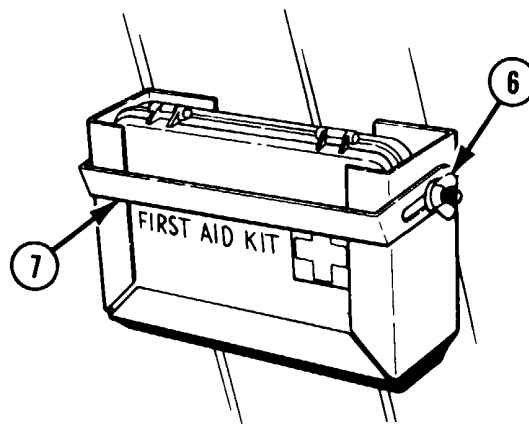


- 2 TWO SCREWS (3) AND TWO LOCKWASHERS (4). Remove.
 3 BRACKET (2). Remove from personnel door (5).



4 TWO WINGNUTS (6). Loosen from first aid kit bracket assembly (7).

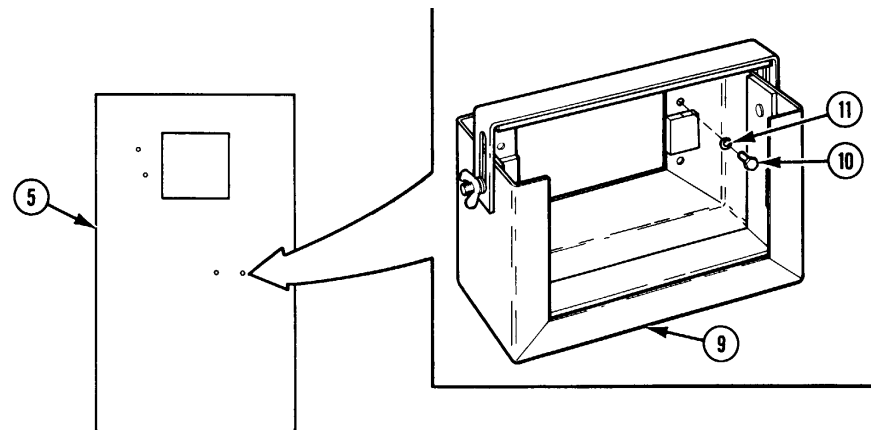
5 BRACKET ASSEMBLY (7). Lift up and rotate forward.



6 FIRST AID KIT (8). Remove from first aid kit holder assembly (9).

7 TWO SCREWS (10) AND TWO LOCKWASHERS (11). Remove.

8 FIRST AID KIT HOLDER ASSEMBLY (9). Remove from inside of personnel door (5).



3-15. SHOP SET-[DOOR MODIFICATION--MAINTENANCE INSTRUCTIONS (cont)

DISASSEMBLY (cont I

CAUTION
Do not remove blind inserts unless necessary for replacement.

9 FOUR BLIND INSERTS (12). Remove by drilling out with a 0.375-in. (0.953-cm) diameter drill.

NOTE

Each blind insert is installed in a large hole which has two small holes on each side of it. These three holes must be drilled clear of cured adhesive as described in steps 10 and 11. This procedure pertains to each blind insert to be removed.

10 LARGE HOLE (13). Drill a 0.391-in. (0.993-cm) diameter hole 1.50 in. (3.81 cm) deep.

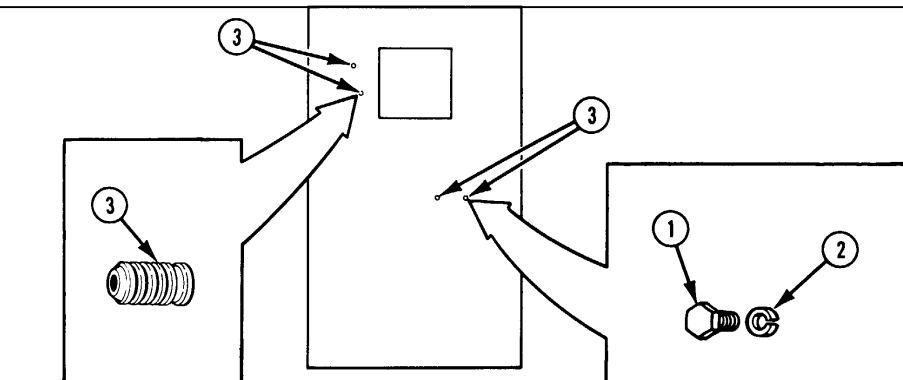
11 TWO SMALL HOLES (14).

a. Drill a 0.125-in. (0.318-cm) diameter hole 0.25 in. (0.64 cm) deep.

b. Insert a 0.062-in. (0.157-cm) diameter drill and drill a hole at an angle to intersect the large hole (13).

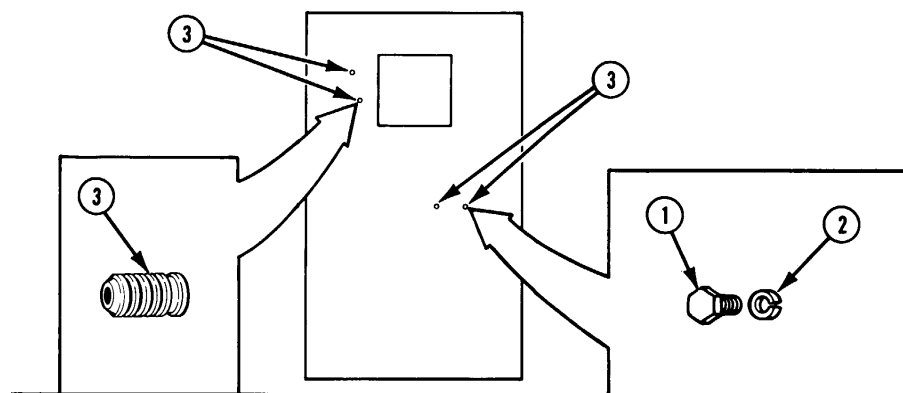
INSPECTION

- 1 FOUR SCREWS (1) AND FOUR LOCKWASHERS (2). Check for missing, damaged, or corroded parts.
- 2 FOUR BLIND INSERTS (3). Check for missing or loose parts.



REPAIR

- 1 FOUR SCREWS (1) AND FOUR LOCKWASHERS (2). Replace if missing, damaged, or corroded.
- 2 FOUR BLIND INSERTS (3). Replace with new items if removed.



3-15. SHOP SET--DOOR MODIFICATION--MAINTENANCE INSTRUCTIONS (cont) !

MODIFICATION OF DOOR

NOTE

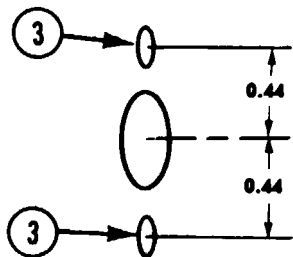
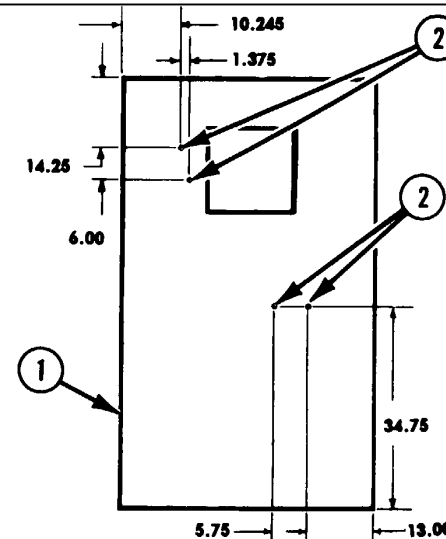
Steps 1 and 2 are used only for initial installation or if the shelter or personnel door are replaced with new parts.

1 PERSONNEL DOOR (1).

- a. Drill four 0.391-in. (0.993-cm) diameter holes (2) 1.50 in. (3.81 cm) deep in interior surface located per dimensions as illustrated.

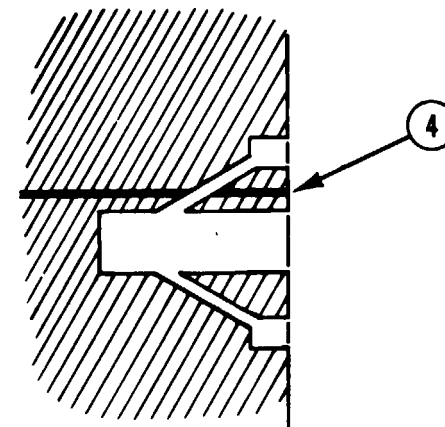
Table 3-4. Door Modification Conversion Table

IN.	CM	IN.	CM
10.245	26.02	34.75	88.27
1.375	3.493	5.75	14.61
14.25	36.20	13.00	33.02
6.00	15.24	0.44	1.12



- b. Drill two 0.125-in. (0.318-cm) diameter holes (3) through inside skin on each side of each 0.391-in. (0.993-cm) diameter hole as illustrated.

- 2 HONEYCOMB CELL WALL (4). Cut through if it falls between 0.391-in. (0.993-cm) diameter hole and either 0.125-in. (0.318-cm) diameter holes.



REASSEMBLY

WARNING

Dry cleaning solvent is flammable and should not be used near an open flame or in a smoking area. Use only in well ventilated areas. The solvent evaporates quickly and has a drying, possibly damaging, effect on skin.

CAUTION

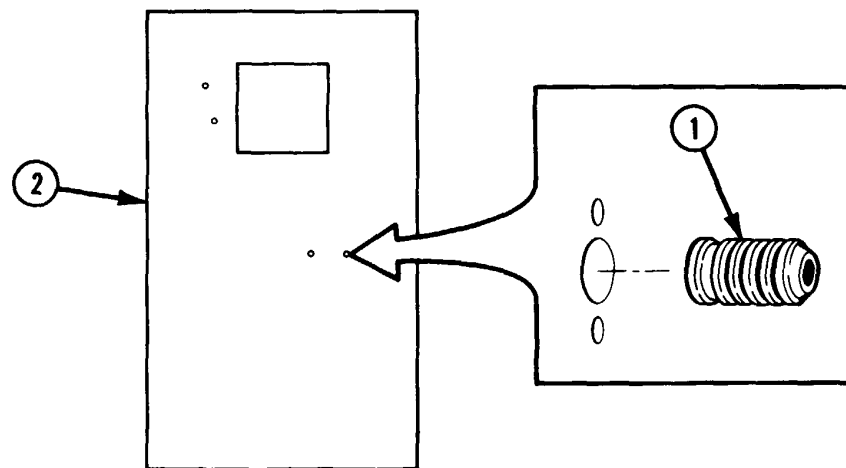
Clean blind inserts just prior to installation and handle only when wearing gloves (item 9, app D).

NOTE

Steps 1 thru 11 pertain to only one blind insert. Repeat procedures as necessary for additional blind inserts.

1 BLIND INSERT (1).

- a. Wearing gloves (item 9, app D) clean with cloth (item 17, app D) dipped in dry cleaning solvent (item 6, app D).
- b. Install on inside surface of personnel door (2) using hydraulic gun.



3-15. SHOP SET--DOOR MODIFICATION--MAINTENANCE INSTRUCTIONS (cont)

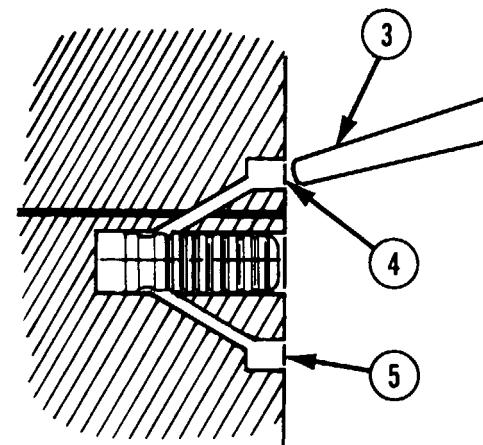
REASSEMBLY (cont)

2 CAULK GUN (3).

NOTE

The adhesive is a mixture and must be mixed according to supplier's instructions.

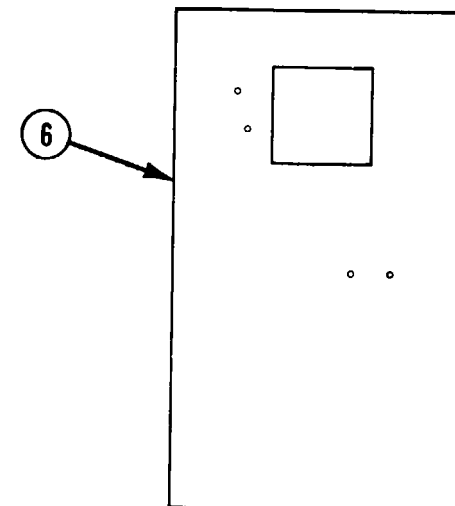
- a. Fill with adhesive (item 2, app D).
- b. Insert into one 0.125-in. (0.318-cm) diameter hole (4).
- c. Release adhesive until it flows from the other 0.125-in. (0.318-cm) diameter hole (5).



WARNING

Dry cleaning solvent is flammable and should not be used near an open flame or in a smoking area. Use only in well ventilated areas. The solvent evaporates quickly and has a drying, possibly damaging, effect on skin.

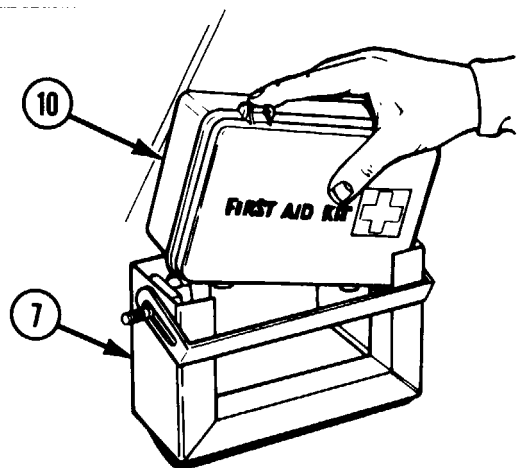
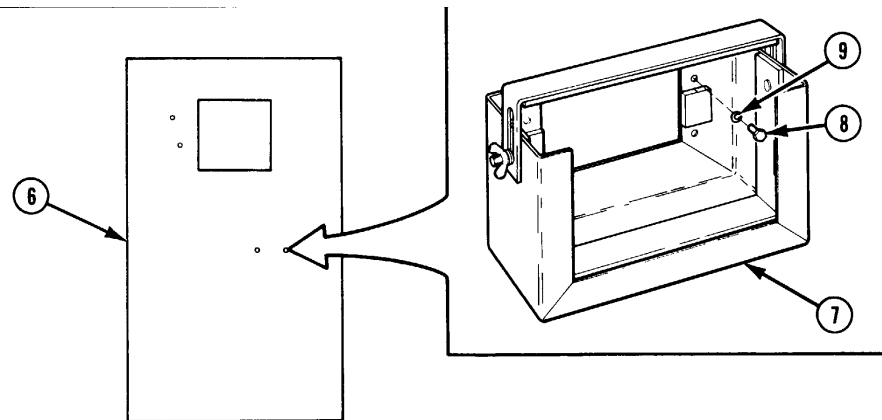
- 3 PERSONNEL DOOR (6). Wearing gloves (item 9, app D) wipe off excess adhesive (item 2, app D) with a cloth (item 17, app D) dipped in dry cleaning solvent (item 6, app D).



CAUTION

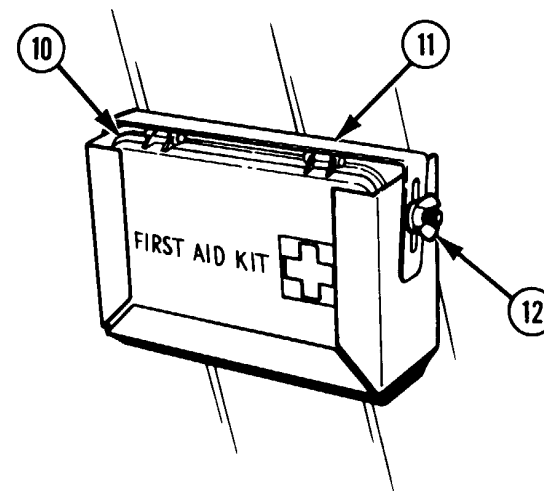
Allow time for the adhesive to set before proceeding to steps 4 thru 11.

- 4 FIRST AID KIT HOLDER ASSEMBLY (7). Position over mounting holes on inside of personnel door (6).
- 5 TWO SCREWS (8) AND TWO LOCKWASHERS (9). Assemble and install.



- 6 FIRST AID KIT (10). Install in first aid kit holder assembly (7).

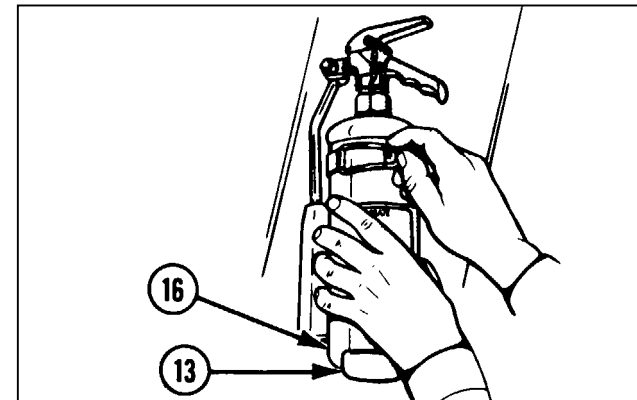
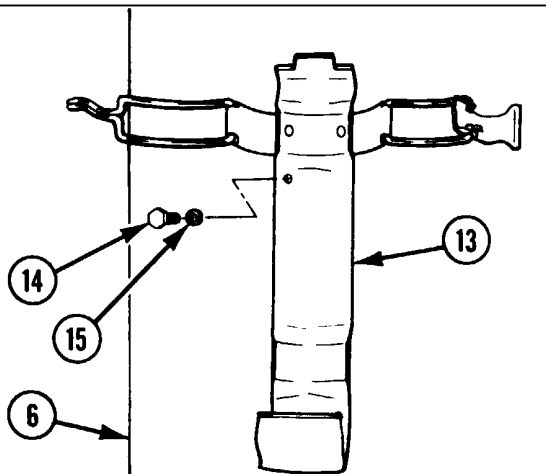
- 7 BRACKET ASSEMBLY (11). Rotate backward and press down on first aid kit (10).
- 8 TWO WINGNUTS (12). Tighten.



3-15. SHOP SET--DOOR MODIFICATION--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY (cont)

- 9 BRACKET (13). Position over fire extinguisher mounting holes on inside of personnel door (6).
- 10 TWO SCREWS (14) AND TWO LOCKWASHERS (15). Assemble and install.



- 11 FIRE EXTINGUISHER (16). Install on bracket (13).

3-16. SHOP SET--TABLE MODIFICATION--MAINTENANCE INSTRUCTIONS I

THIS TASK COVERS:

- | | |
|--|---|
| <ul style="list-style-type: none"> a. Inspection b. Removal c. Disassembly d. Repair | <ul style="list-style-type: none"> e. Modification f. Reassembly g. Installation |
|--|---|

INITIAL SETUP

Special Tools

- AVIM sheet metal shop set (SC 4920-99-CL-A91, part VI)
- AVIM welding shop set (SC 4920-99-CL-A91, part IX)

- Basic aircraft armament repairman tool set (SC 4933-95-CL-A13)
- Fire control repair shop set (SC 4931-95-CL-A21)

Personnel Required: 2
 Aircraft fire
 control repairmen

Lift table during removal/
 installation.

References
 SC 4931-95-CL-A21
 TM 9-237
 Appendix E

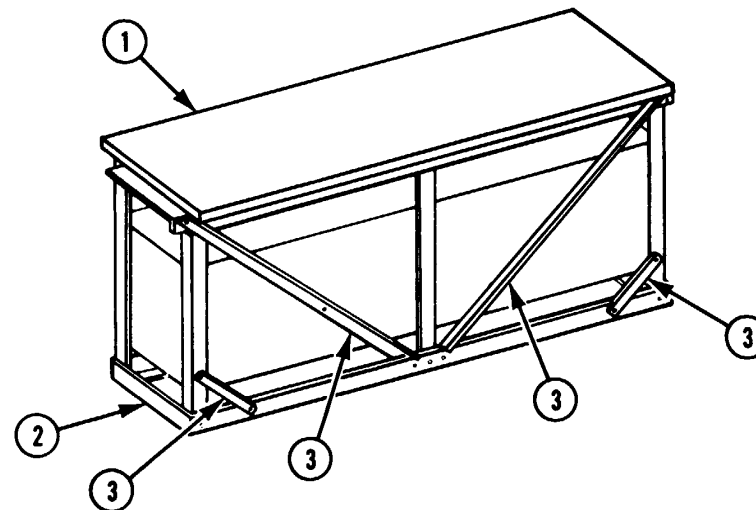
NOTE

There are two tables in the shop set. They are the same except that the right table, as viewed through the cargo door, is modified to mount the shelving assembly, magnifier instrument, and bench outlets. Maintenance procedures are given for only one table and must be repeated for the second table. The tables are supplied by various manufacturers, and may vary slightly in construction.

INSPECTION

TABLE (1), FRAME (2), AND BRACES (3).

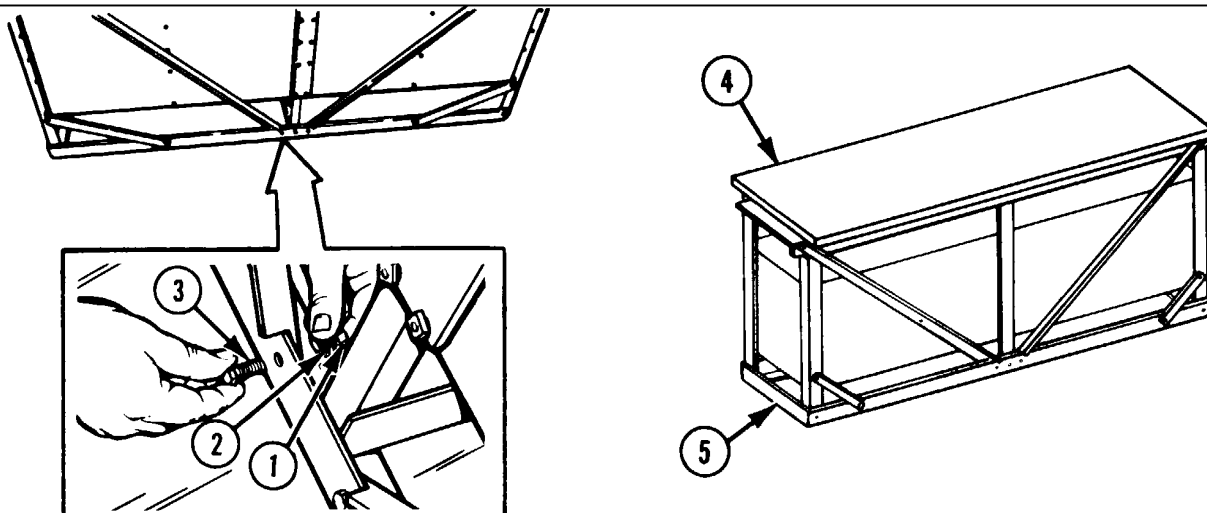
- a. Inspect for missing, damaged, or corroded hardware.
- b. Thoroughly inspect table legs, frames, and braces paying special attention to weld points for corroded, damaged, or missing parts.



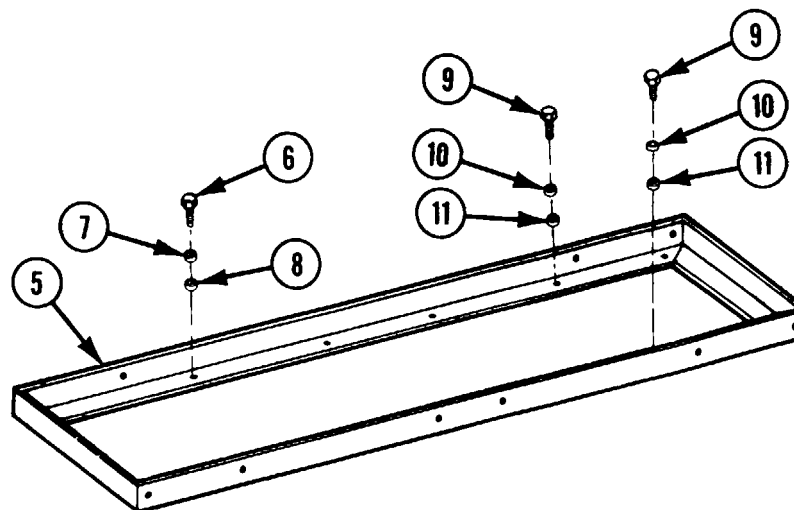
3-16. SHOP SET--TABLE MODIFICATION--MAINTENANCE INSTRUCTIONS (cont)

REMOVAL

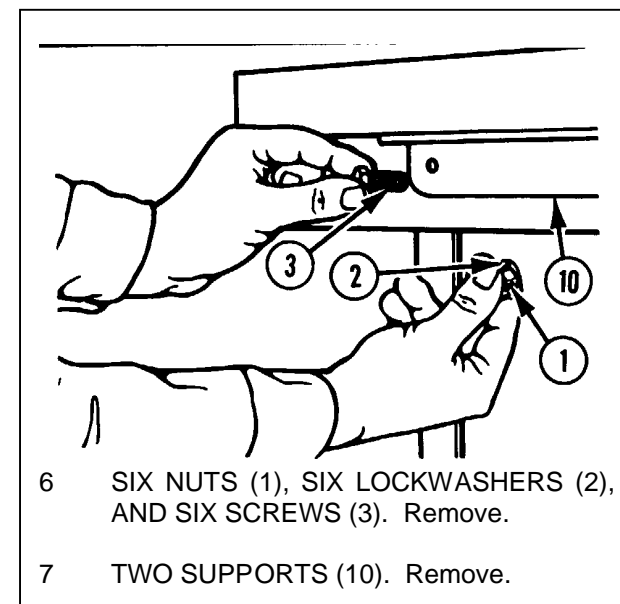
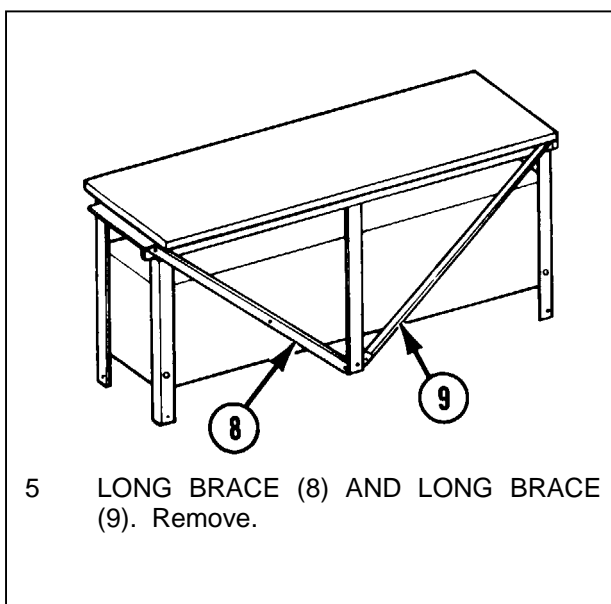
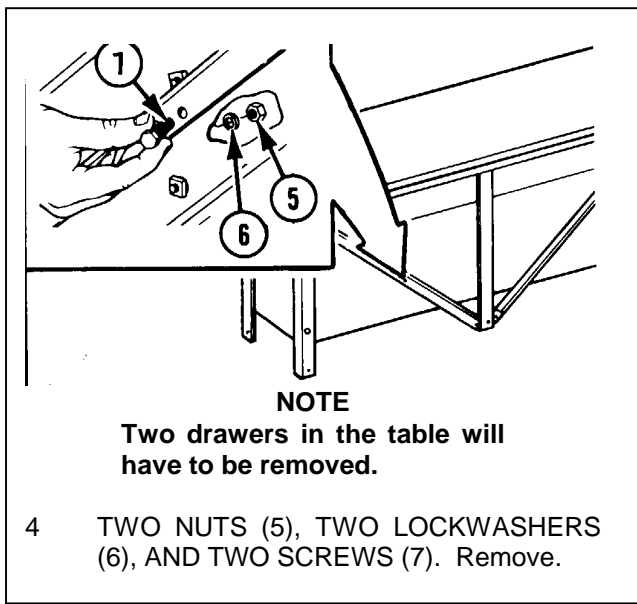
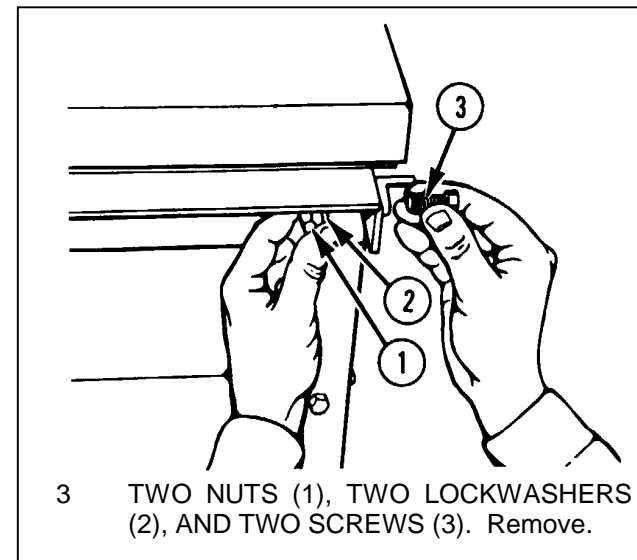
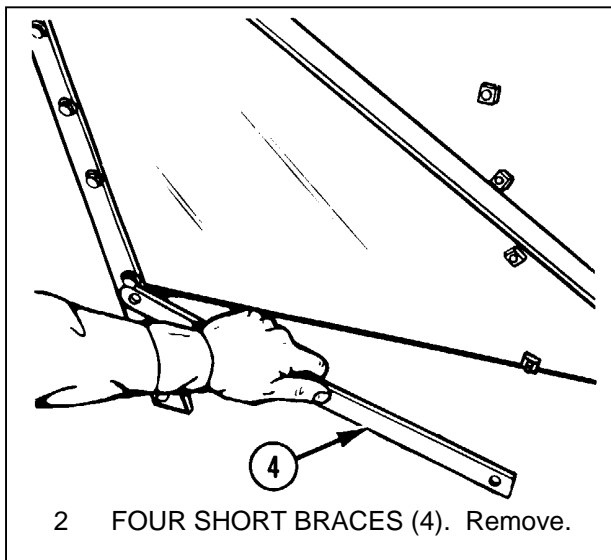
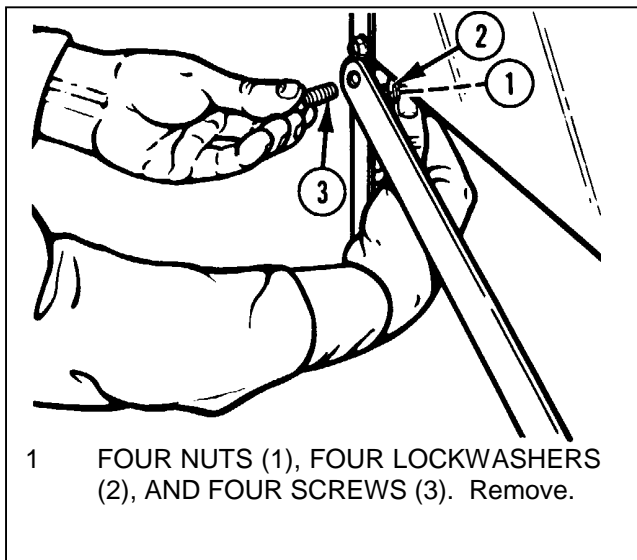
- 1 TWELVE NUTS (1), TWELVE LOCKWASHERS (2), AND TWELVE SCREWS (3). Remove.
- 2 TABLE (4). Remove from frame (5).



- 3 TEN 1-1/4-IN. (3.18-CM) SCREWS (6), TEN LOCKWASHERS (7), AND TEN FLAT WASHERS (8). Remove.
- 4 TWO 1-1/2-IN. (3.81-CM) SCREWS (9), TWO LOCKWASHERS (10), AND TWO FLAT WASHERS (11). Remove.
- 5 FRAME (5). Remove from floor.



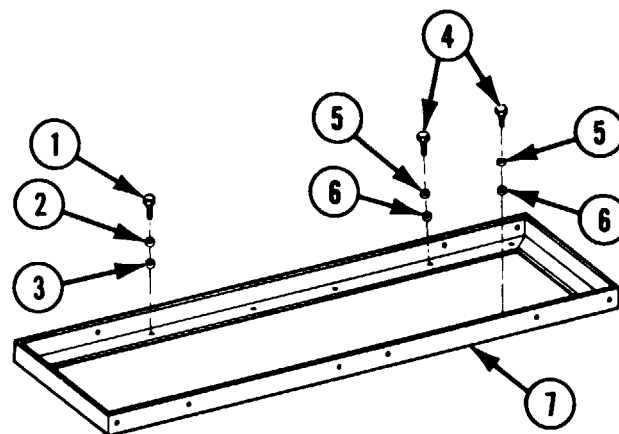
DISASSEMBLY



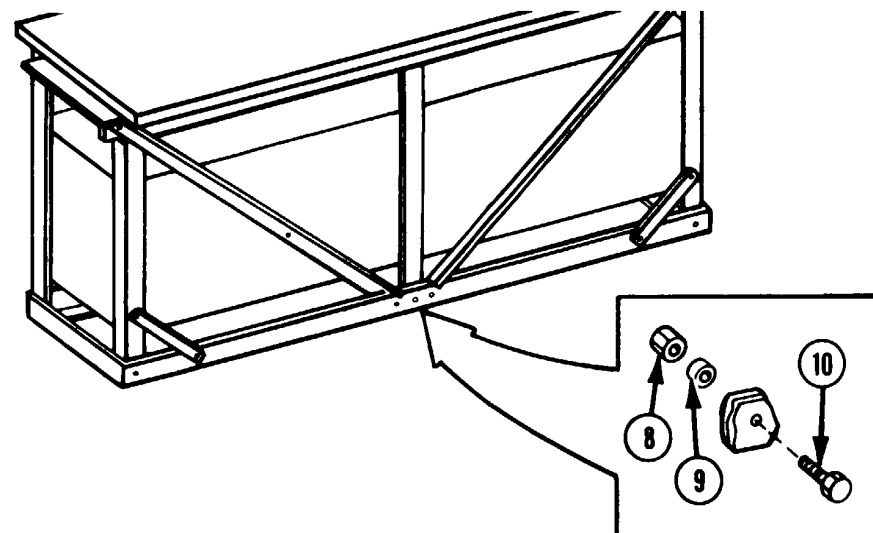
3-16. SHOP SET--TABLE MODIFICATION--MAINTENANCE INSTRUCTIONS (cont)

REPAIR

- 1 TEN 1-1/4-IN. (3.18-CM) SCREWS (1), TEN LOCKWASHERS(2), AND TEN FLAT WASHERS(3). Replace if missing, damaged, or corroded.
- 2 TWO 1-1/2-IN. (3.81-CM) SCREWS (4), TWO LOCKWASHERS (5), AND TWO FLAT WASHERS (6). Replace if missing, damaged, or corroded.
- 3 FRAME (7).
 - a. Straighten bent parts.
 - b. Weld cracked or broken parts.
 - c. Replace frame (7), if needed, by fabrication (fig. 8, app E).

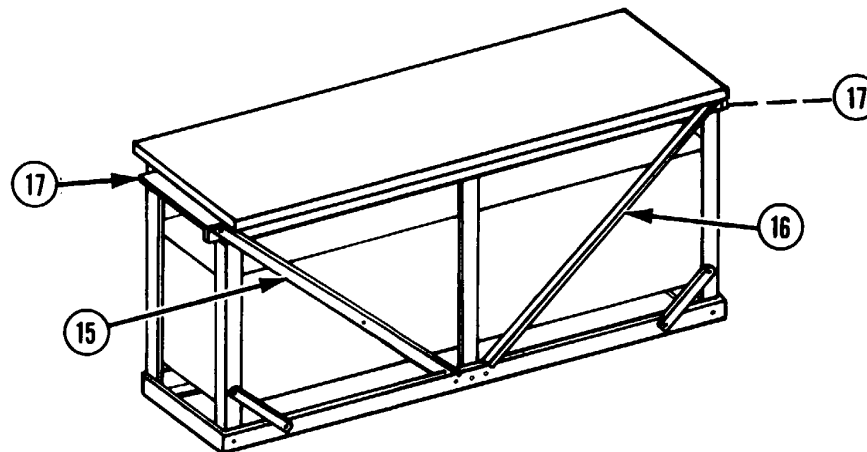


- 4 TWENTY-FOUR NUTS (8), TWENTY-FOUR LOCKWASHERS (9), AND TWENTY-FOUR SCREWS (10). Replace if missing, damaged, or corroded.

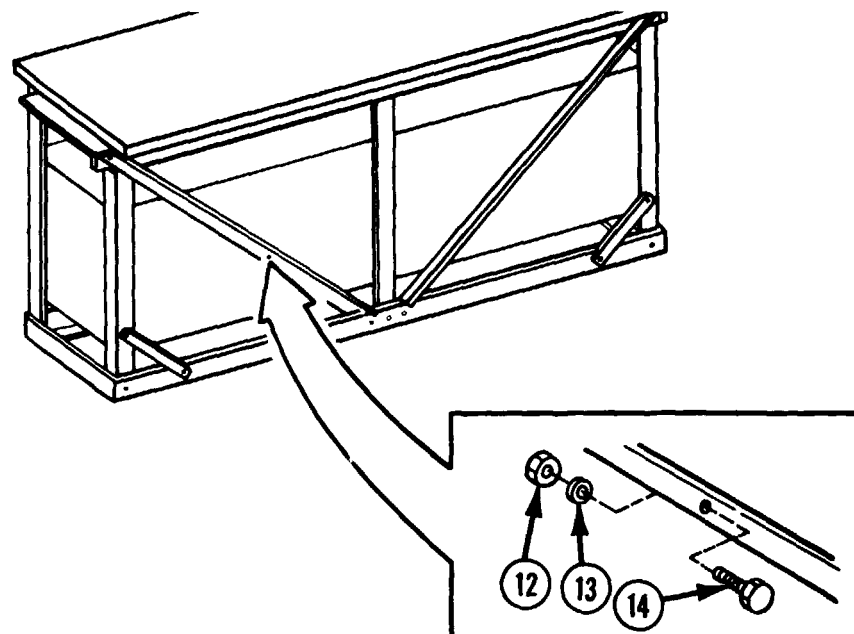


5 FOUR SHORT BRACES (11).

- a. Straighten bent parts.
- b. Weld cracked or broken parts.
- c. Replace short braces (11), if needed, by fabrication (fig. 9, app E).



6 TWO NUTS (12), TWO LOCKWASHERS (13), AND TWO SCREWS (14). Replace if missing, damaged, or corroded.

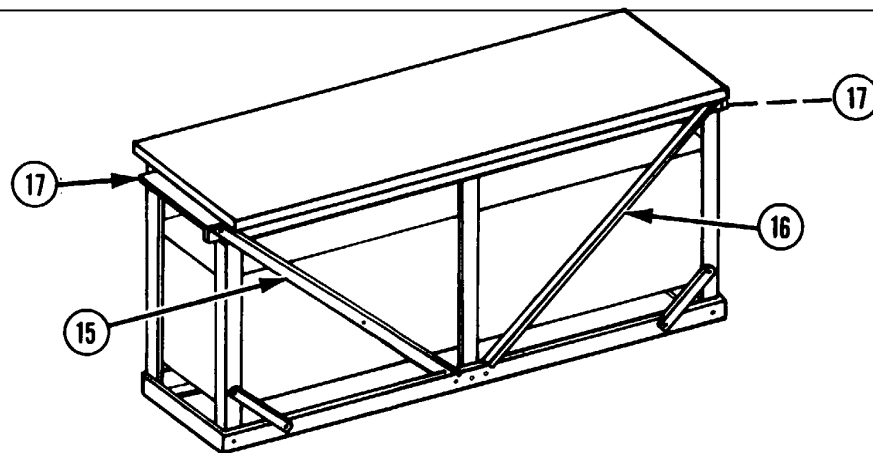


3-16. SHOP SET--TABLE MODIFICATION--MAINTENANCE INSTRUCTIONS (cont)

REPAIR (cont)

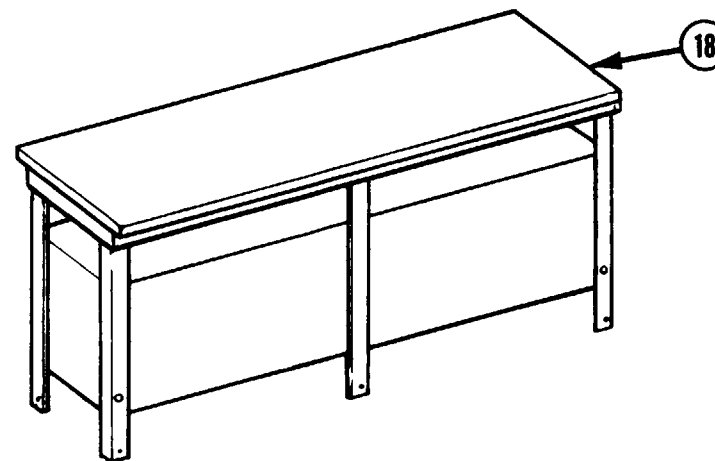
7 LONG BRACE (15), LONG BRACE (16), AND TWO SUPPORTS (17).

- a. Straighten bent parts.
- b. Weld cracked or broken parts.
- c. Replace, if needed, by fabrication (fig. 10, 11, and 12, app E).



8 TABLE (18).

- a. Straighten bent parts.
- b. Weld cracked or broken parts.
- c. Refer to SC 4931-95-CL-A21 for replacement if not repairable.



MODIFICATION

NOTE

Modification procedures are used only for initial installation or when the table has been replaced with a new unit. Install table in frame before starting modification procedures.

1 SIX 0.406-IN. (1.031-CM) DIAMETER HOLES (1). Drill in table (2) using supports (3) placed flush with back of table as templates.

The diagram shows a side view of a table. A long, thin rectangular support bar, labeled with a circled '3', is positioned horizontally against the back edge of the table's top surface, labeled with a circled '2'. The support bar is flush with the back edge. Two small circles, labeled with a circled '1', are shown on the table surface, representing the locations where holes are to be drilled. Dashed lines indicate the alignment of the support bar with the table's edge.

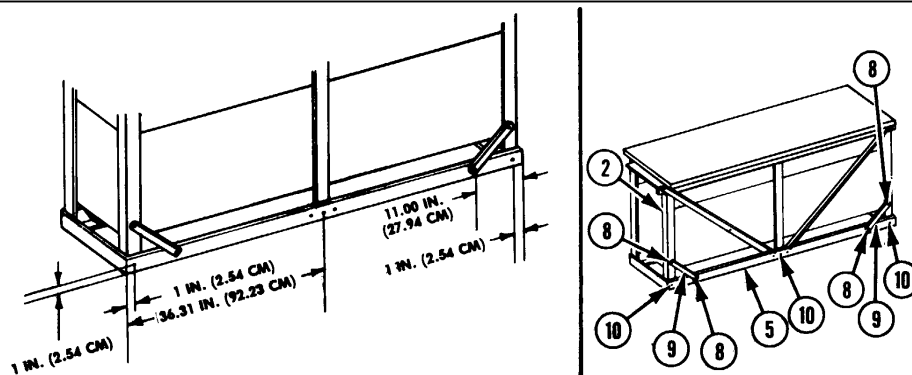
2 TWO 0.406-IN. (1.031-CM) DIAMETER HOLES (4). Drill in frame (5) using long brace (6) and long brace (7) as templates.

The diagram shows a perspective view of a table frame. The frame is labeled with a circled '5'. Two long, thin rectangular braces are attached to the frame. One brace, labeled with a circled '6', is a long brace. The other brace, labeled with a circled '7', is a long brace. Two small circles, labeled with a circled '4', are shown on the frame, representing the locations where holes are to be drilled. Dashed lines indicate the alignment of the braces with the frame's structure.

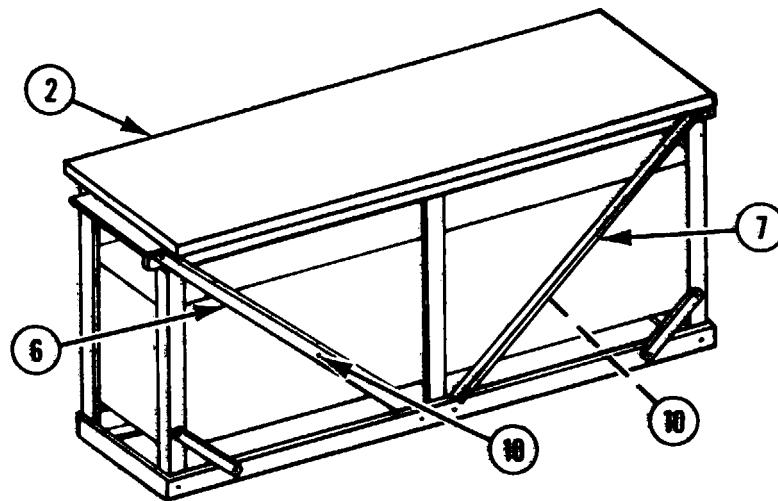
3-16. SHOP SET--TABLE MODIFICATION MAINTENANCE INSTRUCTIONS (cont)

MODIFICATION (cont)

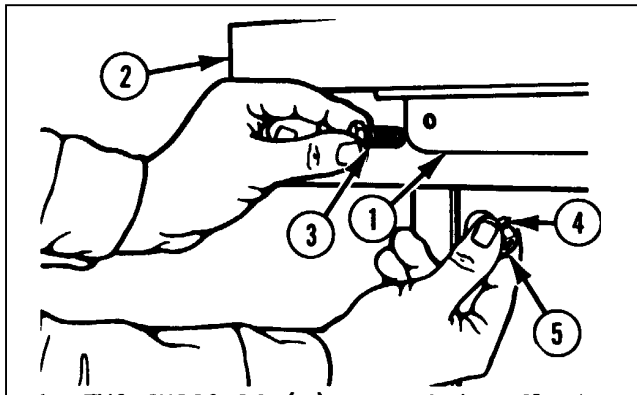
- 3 FOURTEEN 0.406-IN. (1.031-CM) DIAMETER HOLES.
- Drill eight holes (8) in table (2) and frame (5) using four short braces (9) as templates.
 - Drill six holes (10) in table (2) and frame (5) as illustrated.



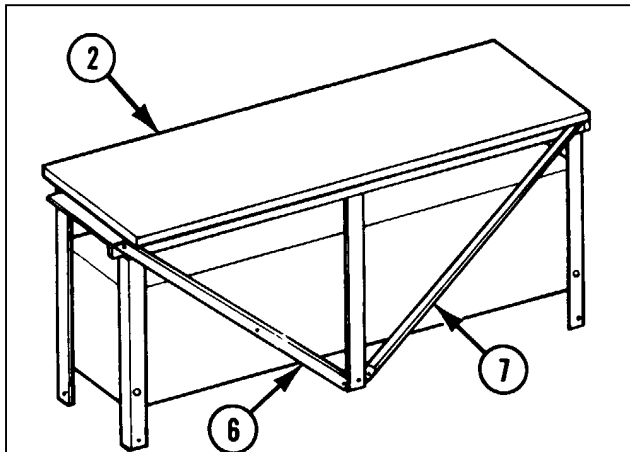
- 4 TWO 0.281-IN. (0.714-CM) DIAMETER HOLES (10). Drill in table (2) using long brace (6) and long brace (7) as templates.



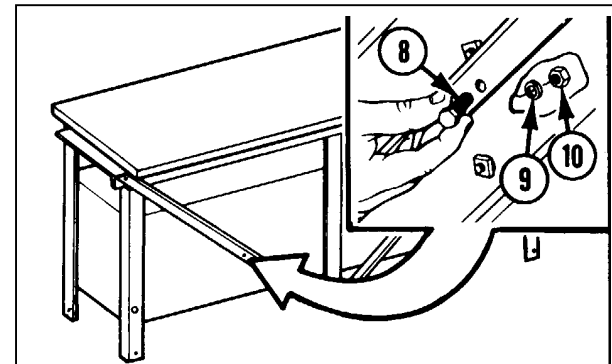
REASSEMBLY



- 1 TWO SUPPORTS (1). Position flush with back of table (2).
- 2 SIX SCREWS (3), SIX LOCKWASHERS (4), AND SIX NUTS (5). Install.



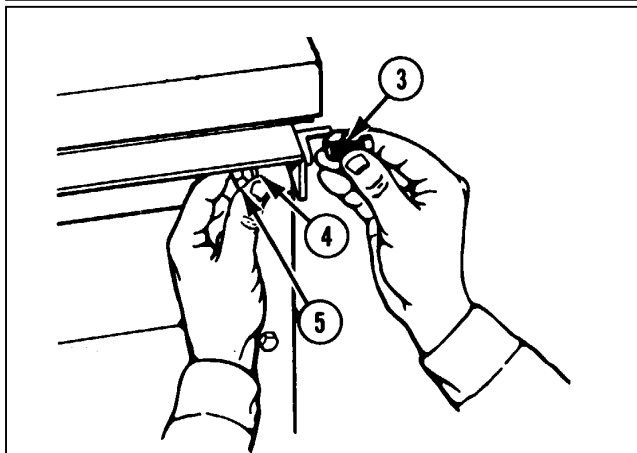
- 3 LONG BRACE (6) AND LONG BRACE (7). Position on table (2).



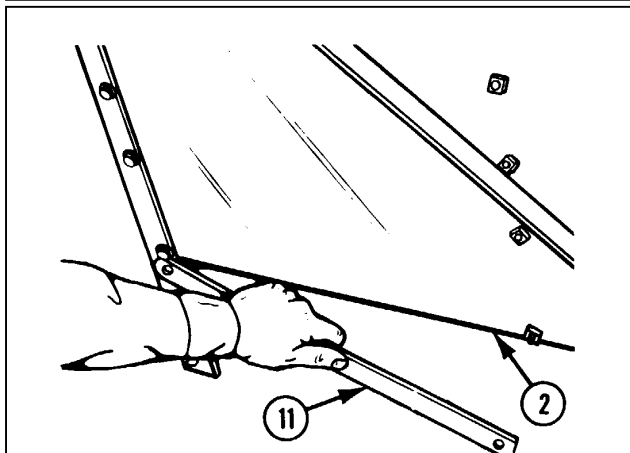
NOTE

Two drawers in the table will have to be removed.

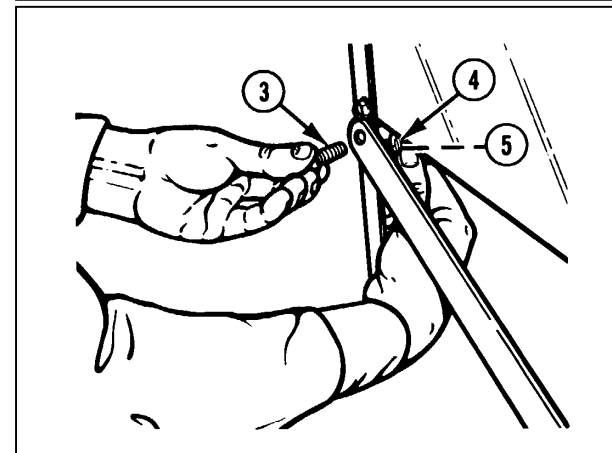
- 4 TWO SCREWS (8), TWO LOCKWASHERS (9), AND TWO NUTS (10). Install.



- 5 TWO SCREWS (3), TWO LOCKWASHERS (4), AND TWO NUTS (5). Install.



- 6 FOUR SHORT BRACES (11). Position on table (2).

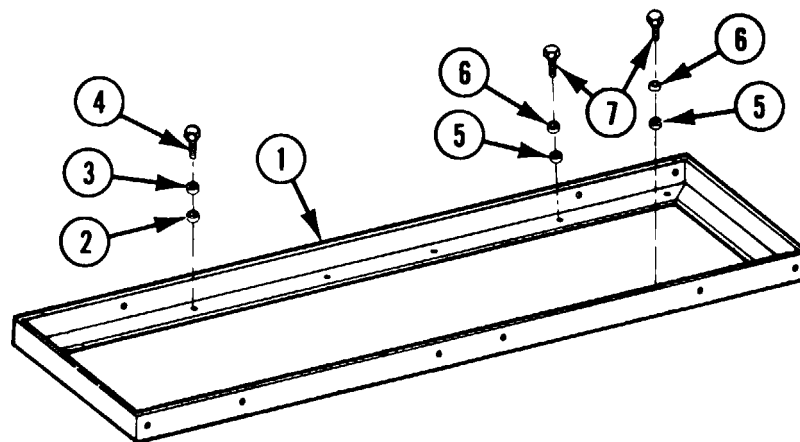


- 7 FOUR SCREWS (3), FOUR LOCKWASHERS (4), AND FOUR NUTS (5). Install.

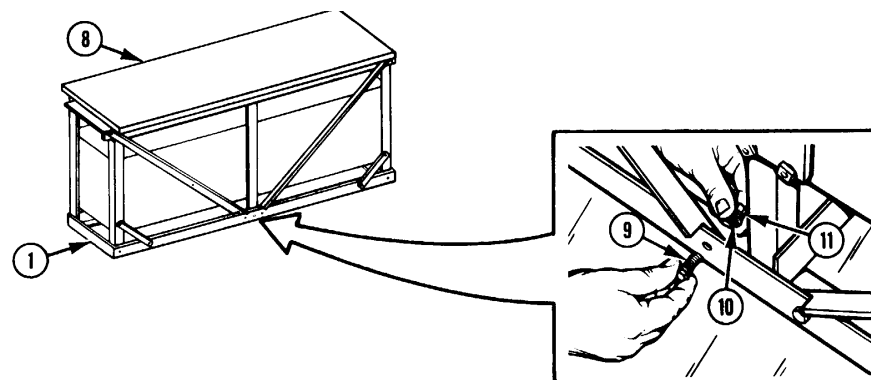
3-16. SHOP SET--TABLE MODIFICATION--MAINTENANCE INSTRUCTIONS (cont)

INSTALLATION

- 1 FRAME (1). Aline holes with holes in floor.
- 2 TEN FLAT WASHERS (2), TEN LOCKWASHERS (3), AND TEN 1-1/4-IN. (3.18-CM) SCREWS (4). Install.
- 3 TWO FLAT WASHERS (5), TWO LOCKWASHERS (6), AND TWO 1-1/2 IN. (3.81-CM) SCREWS (7). Install.



- 4 TABLE (8). Install in frame (1).
- 5 TWELVE SCREWS (9), TWELVE LOCKWASHERS (10), AND TWELVE NUTS (11). Install.



3-17. SHOP SET--TOOL CABINET MODIFICATION--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Removal
- b. Inspection
- c. Disassembly
- d. Repair
- e. Modification of tool cabinet
- f. Reassembly
- g. Installation

INITIAL SETUP

Special Tools

- AVIM sheet metal shop set (SC 4920-99-CL-A91, part VI)
- AVIM tool crib shop set (SC 4920-99-CL-A91, part VII)
- AVIM welding shop set (SC 4920-99-CL-A91, part IX)
- Basic aircraft armament repairman tool set (SC 4933-95-CL-A13)
- Fire control repair shop set (SC 4931-95-CL-A21)

Materials/Parts

- Blind nut (4) (12011679-2)

References

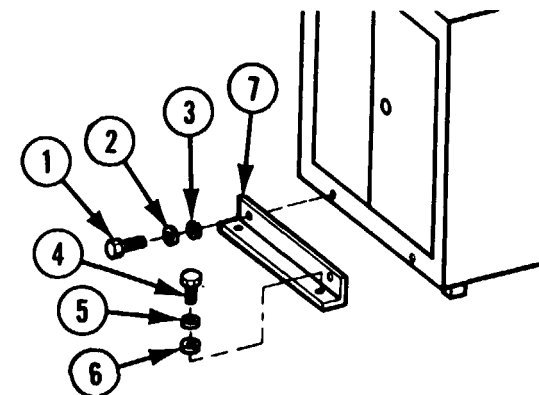
- SC 4931-95-CL-A21
- TM 9-237
- Appendix E

NOTE

The tool cabinet is part of the installed equipment list.

REMOVAL

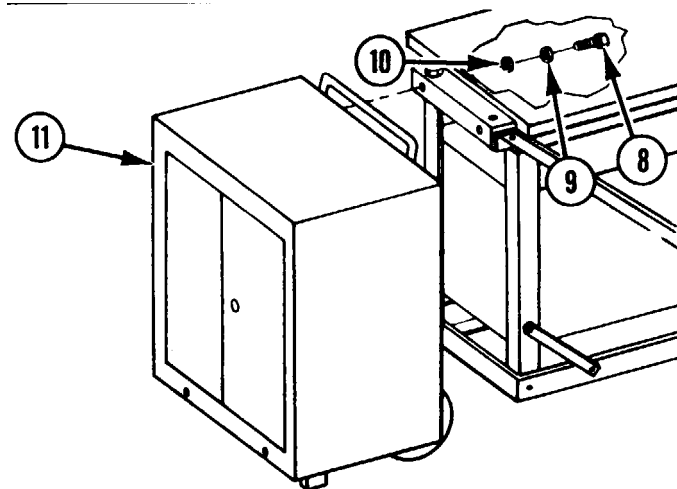
- 1 TWO SCREWS (1), TWO LOCKWASHERS (2), AND TWO FLAT WASHERS (3). Remove.
- 2 TWO SCREWS (4), TWO LOCKWASHERS (5), AND TWO FLAT WASHERS (6). Remove.
- 3 BRACE (7). Remove.



3-17. SHOP SET--TOOL CABINET MODIFICATION--MAINTENANCE INSTRUCTIONS (cont)

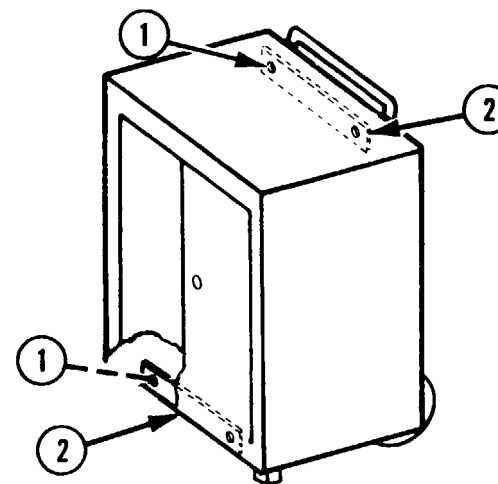
REMOVAL (cont)

- 4 TWO SCREWS (8), TWO LOCKWASHERS (9), AND TWO FLAT WASHERS (10). Remove.
- 5 MODIFIED TOOL CABINET (11). Remove.

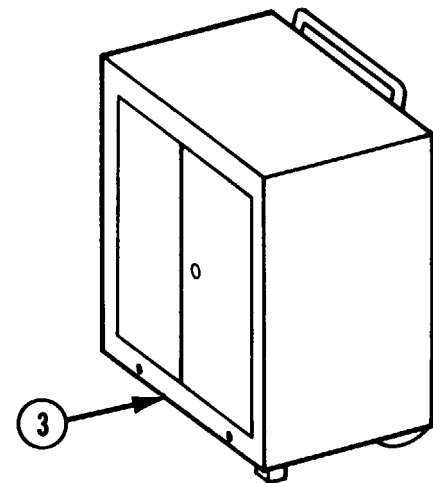


INSPECTION

- 1 FOUR BLIND NUTS (1).
 - a. Check for tight mounting.
 - b. Check to see if internal threads are stripped.
- 2 TWO REINFORCING STRIPS (2). Check for bent or broken parts.

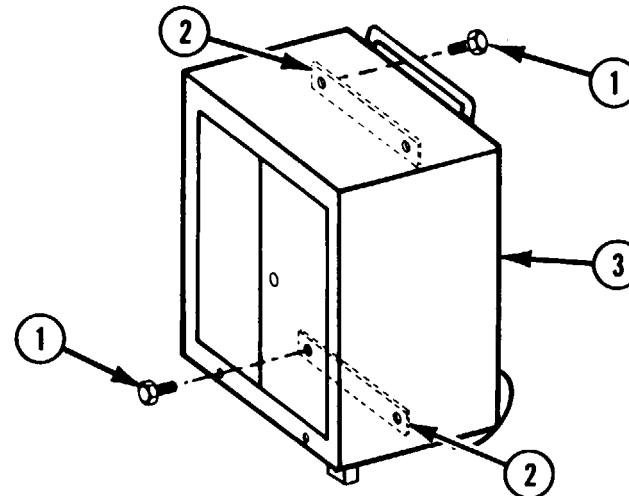


- 3 MODIFIED TOOL CABINET (3).
 - a. Check handle and wheels for damage.
 - b. Check that doors open, close, and latch properly.
 - c. Check cabinet for dents or missing paint.



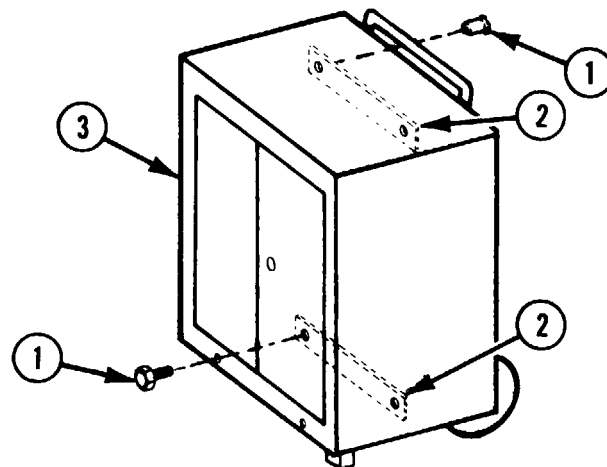
DISASSEMBLY

- 1 FOUR BLIND NUTS (1). If replacement is necessary, remove by drilling out with a 0.407-in. (1.034-cm) diameter drill.
- 2 TWO REINFORCING STRIPS (2) AND MODIFIED TOOL CABINET (3). Separate.



3-17. SHOP SET--TOOL CABINET MODIFICATION--MAINTENANCE INSTRUCTIONS (cont)

- 1 FOUR BLIND NUTS (1). Replace if removed.
- 2 TWO REINFORCING STRIPS (2). If bent or broken, replace by fabrication (fig. 13, app E).
- 3 MODIFIED TOOL CABINET (3).
 - a. Repair minor dents with soft-faced hammer.
 - b. Repaint any damaged painted surfaces.
 - c. Replace if not repairable. Refer to SC 4931-95-CL-A21.



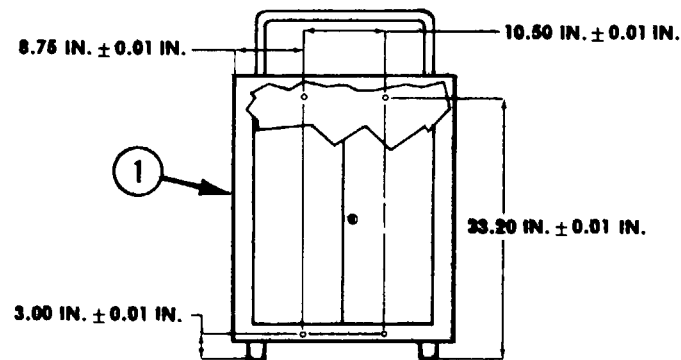
MODIFICATION OF TOOL CABINET

NOTE

Perform this procedure only when a new tool cabinet is to be modified.

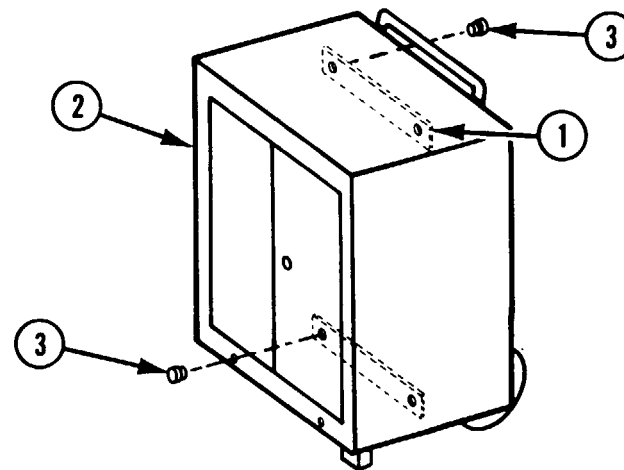
TOOL CABINET (1). Drill four 0.413-in. (1.049-cm) holes (two through front and two through back) as illustrated.

IN.	CM
8.75±0.01	22.22±0.03
10.50±0.01	26.67±0.03
33.20±0.01	84.33±0.03
3.00±0.01	7.62±0.03



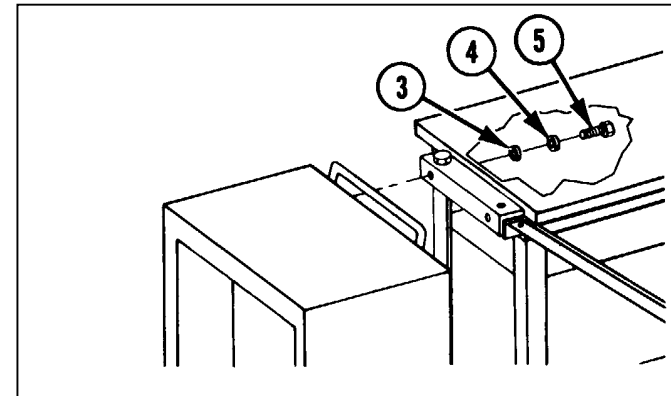
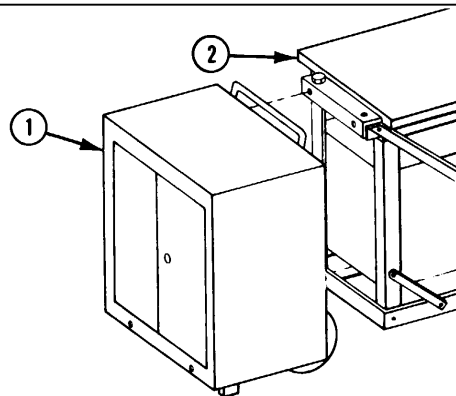
REASSEMBLY

- 1 TWO REINFORCING STRIPS (1). Assemble inside modified tool cabinet (2).
- 2 FOUR BLIND NUTS (3).
 - a. Install in four holes from outside.
 - b. Pull up tight using hydraulic gun.



INSTALLATION

- 1 MODIFIED TOOL CABINET (1). Position at cargo door end of left table (2).



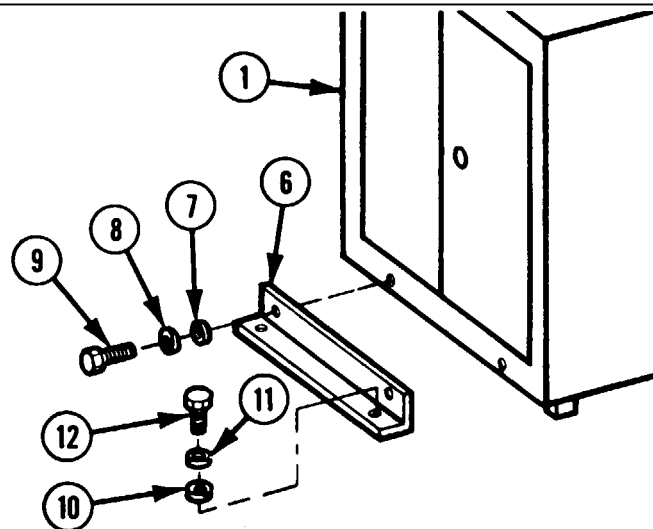
- 2 TWO FLAT WASHERS (3), TWO LOCKWASHERS (4), AND TWO SCREWS (5). Install through angle into back of modified tool cabinet.



3-17. SHOP SET--TOOL CABINET MODIFICATION--MAINTENANCE INSTRUCTIONS (cont)

INSTALLATION (cont)

- 3 BRACE (6). Aline with holes in modified tool cabinet (1).
- 4 TWO FLAT WASHERS (7), TWO LOCKWASHERS (8), AND TWO SCREWS (9). Install through brace into front of modified tool cabinet.
- 5 TWO FLAT WASHERS (10), TWO LOCKWASHERS (11), AND TWO SCREWS (12). Install through brace into floor.



3-18. SHOP SET--MISCELLANEOUS SPARE ACCESSORIES--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Inspection
- b. Removal
- c. Repair
- d. Installation

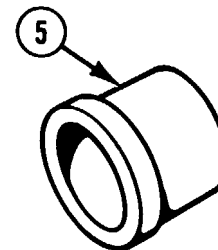
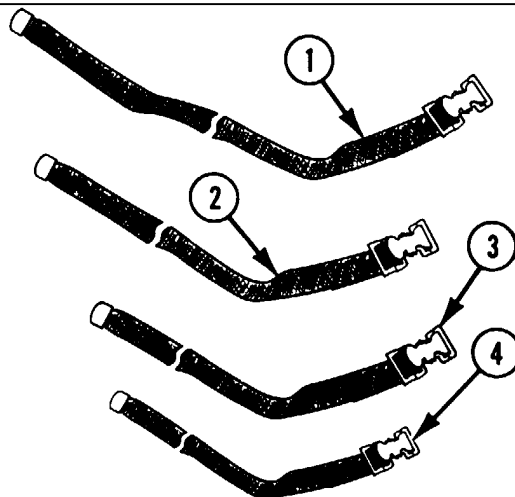
INITIAL SETUP

Special Tools
 AVIM welding shop set (SC 4920-99-CL-A91, part IX)
 Fire control repair shop set (SC 4931-95-CL-A21)

Reference
 TM 9-237

INSPECTION

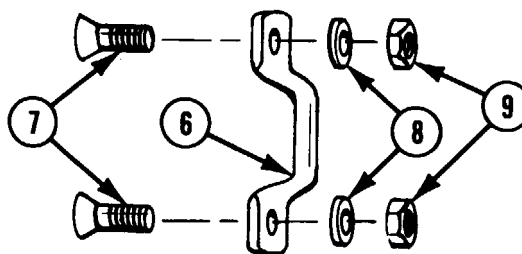
- 1 TWELVE 12-IN. (30.48-CM) STRAP WEBBINGS (1), SIX 30-IN. (76.20-CM) STRAP WEBBINGS (2), SIX 66-IN. (167.64-CM) STRAP WEBBINGS (3), AND SIX 110-IN. (279.40-CM) STRAP WEBBINGS (4). Check for missing, frayed, or cut condition.



- 2 TWENTY-FOUR PLASTIC PLUGS (5). Check for missing, cracked, or broken parts.

- 3 TWELVE LOOPS (6). Check for missing, bent, or broken parts.

- 4 TWENTY-FOUR SCREWS (7), TWENTY-FOUR LOCKWASHERS (8), AND TWENTY-FOUR NUTS (9). Check for missing, damaged, or corroded parts.



REMOVAL

ALL PARTS. Remove from storage areas.

3-18. SHOP SET--MISCELLANEOUS SPARE ACCESSORIES--MAINTENANCE INSTRUCTIONS (cont)

REPAIR

- 1 TWELVE LOOPS. Repair any cracked parts by welding.
- 2 ALL REMAINING PARTS. Replace any missing or damaged parts with new items.



INSTALLATION

ALL PARTS. Place in proper storage area (table drawers, tool cabinet, or equipment storage chest).

3-19. ELECTRICAL CABLE ASSEMBLY--MAINTENANCE INSTRUCTIONS I

THIS TASK COVERS:

- a. Removal
- b. Inspection
- c. Disassembly
- d. Repair
- e. Reassembly
- f. Installation

INITIAL SETUP

Special Tools

References

- Appendix D
- Appendix E

Fire control repair shop set (SC 4931-95-CL-A21)

Materials/Parts

- Marking ink (item 13, app D)
- Solder (item 18, app D)
- Connector (MS3106R-20-8S(C))
- Terminal (MS25036-110)

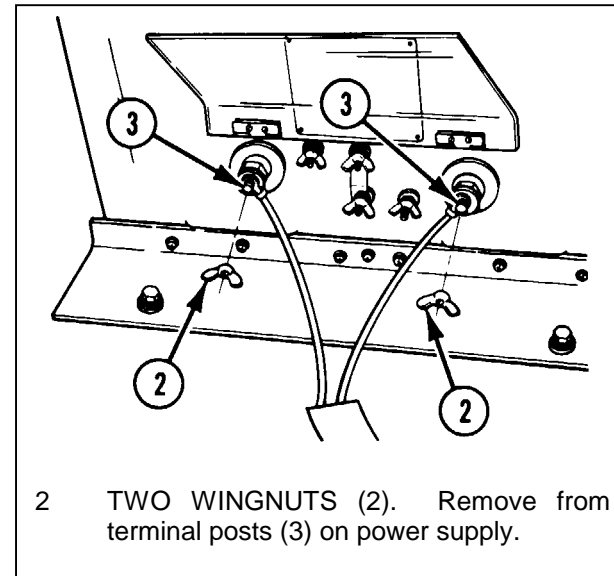
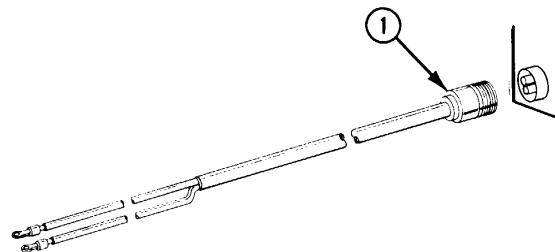
NOTE

The electrical cable assembly is used to connect the power distribution panel to the power supply.

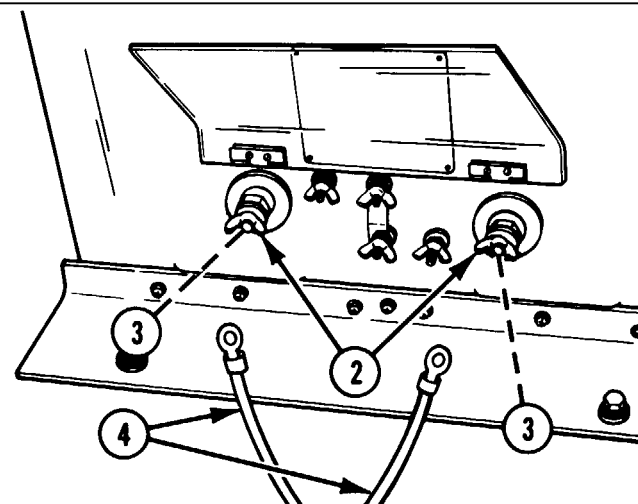
REMOVAL

WARNING
Turn power supply off before removing electrical cable assembly.

- 1 CONNECTOR (1). Disconnect.



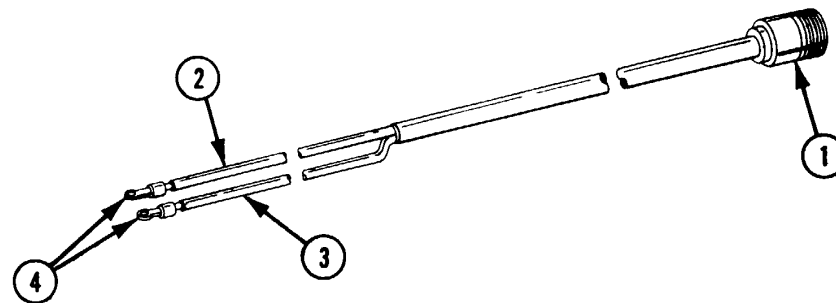
- 3 ELECTRICAL CABLE ASSEMBLY (4). Remove.
- 4 TWO WINGNUTS (2). Replace on terminal posts (3).



3-19. ELECTRICAL CABLE ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

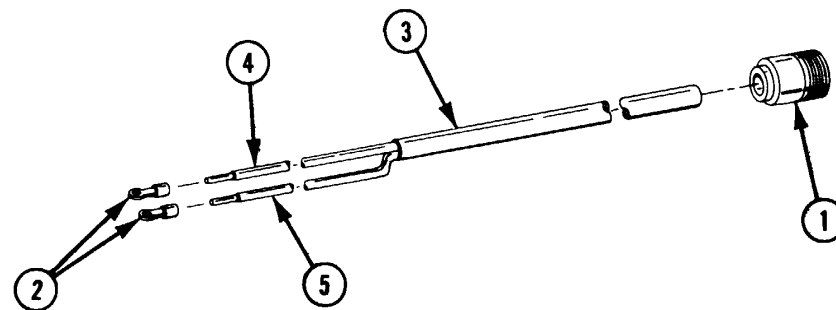
INSPECTION

- 1 CONNECTOR (1). Check for damage.
- 2 WIRE (2) AND WIRE (3). Check for cracked or worn insulation, and broken wires.
- 3 TWO LUG TERMINALS (4). Check for damaged, corroded, or missing parts.



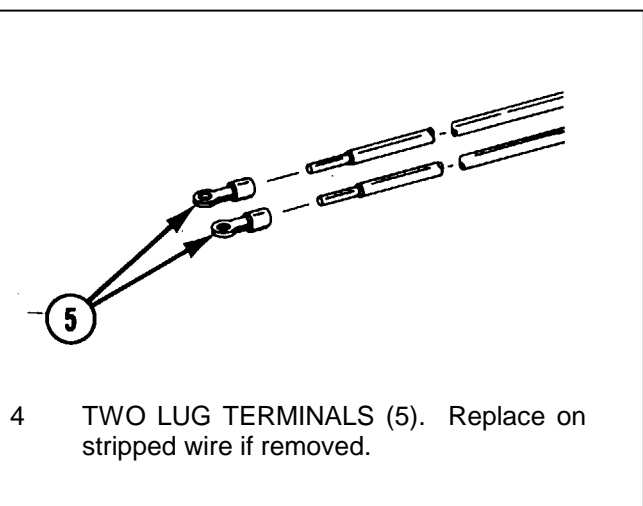
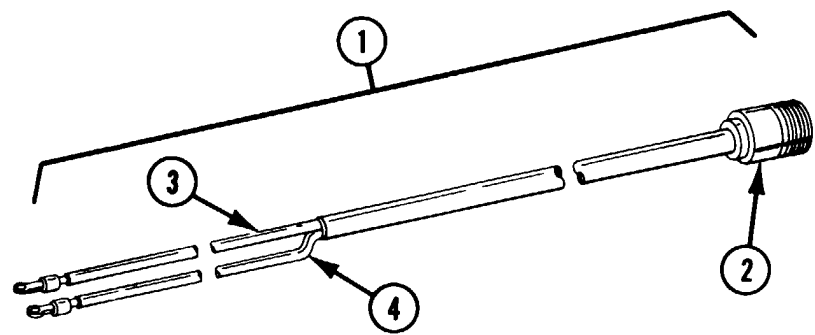
DISASSEMBLY

- 1 CONNECTOR (1). Remove by cutting.
- 2 TWO LUG TERMINALS (2). Remove by cutting.
- 3 INSULATION (3). Remove by slitting with a knife.
- 4 WIRE (4) AND WIRE (5). Separate.



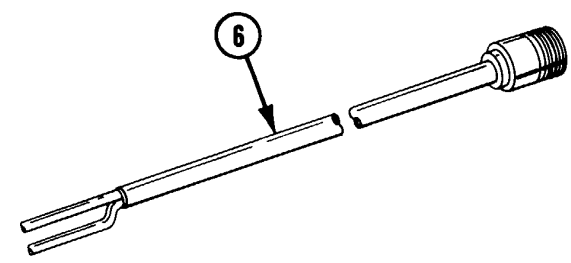
REPAIR

- 1 ELECTRICAL CABLE ASSEMBLY (1). Replace if not repairable.
- 2 CONNECTOR (2). Replace if removed.
- 3 WIRE (3) AND WIRE (4).
 - a. Repair by shortening slightly if possible.
 - b. If not repairable, replace with 12-ft (3.66-m) long pieces of red and black wire (fig. 14 and 15, app E).



- 4 TWO LUG TERMINALS (5). Replace on stripped wire if removed.

- 5 INSULATION (6). Replace if removed with an 11.5-ft (3.51-m) long piece of insulation (fig. 16, app E).



3-19. ELECTRICAL CABLE ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY

1 WIRE (1).

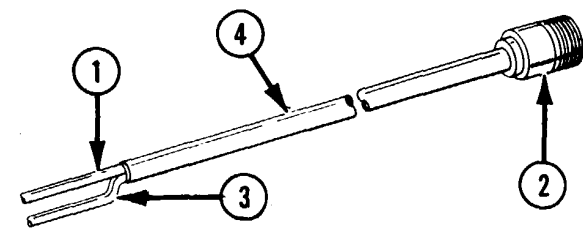
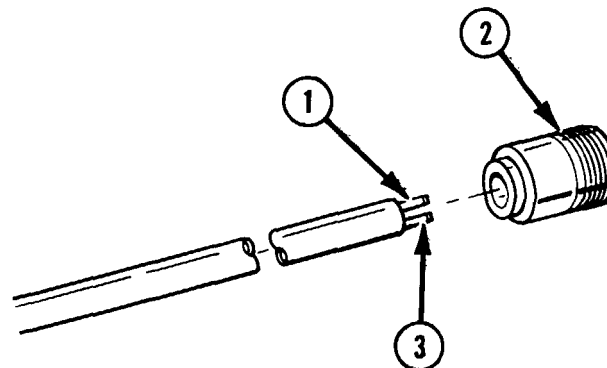
NOTE
This wire has red insulation.

- a. Strip insulation from each end.
- b. Solder to contact A of connector (2) using solder (item 18, app D).

2 WIRE (3).

NOTE
This wire has black insulation.

- a. Strip insulation from each end.
- b. Solder to contact D of connector (2) using solder (item 18, app D).



3 INSULATION (4).

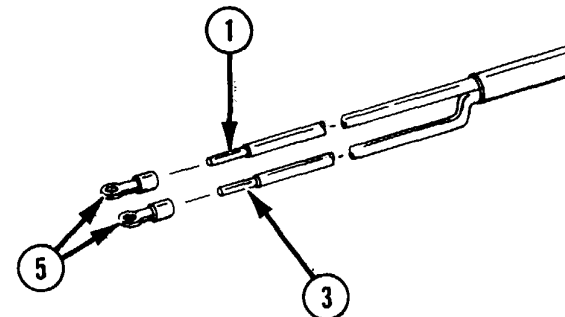
- a. Slip over wire (1) and wire (3) until it is flush with rear end of connector (2).
- b. Shrink in place using heat gun.

4 TWO LUG TERMINALS (5).

- a. Drill out holes to 0.375-in. (0.953-cm) diameter.
- b. Install on ends of stripped wires (1 and 3).

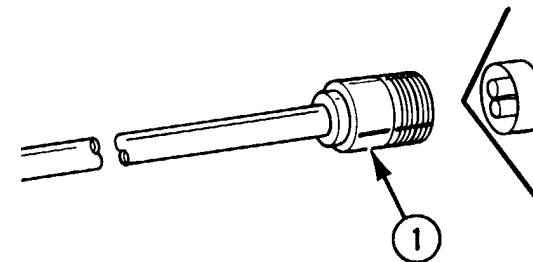
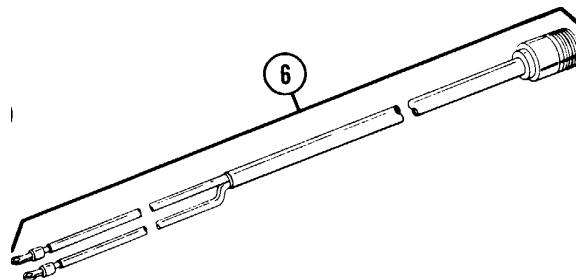
NOTE
Ensure there are no exposed wires at rear of lug terminals.

- c. Crimp in place using crimping tool.



INSTALLATION

- 5 ELECTRICAL CABLE ASSEMBLY (6). Use marking ink (item 13, app D) to inscribe PART NO. 7540635.



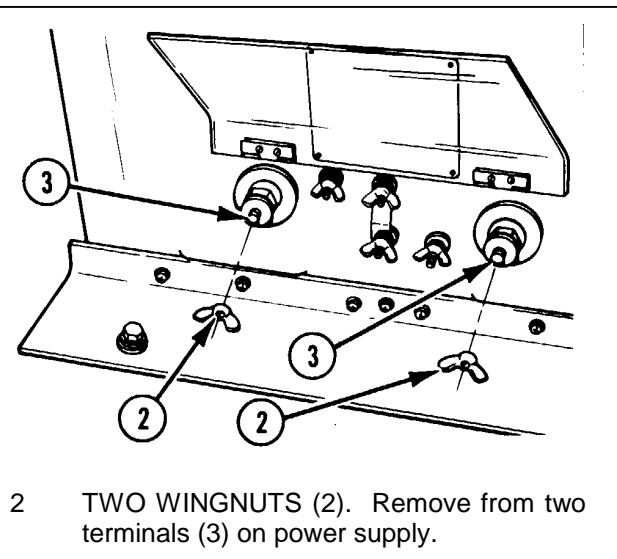
WARNING
Turn power supply off before installing electrical cable assembly.

- 1 CONNECTOR (1). Install.

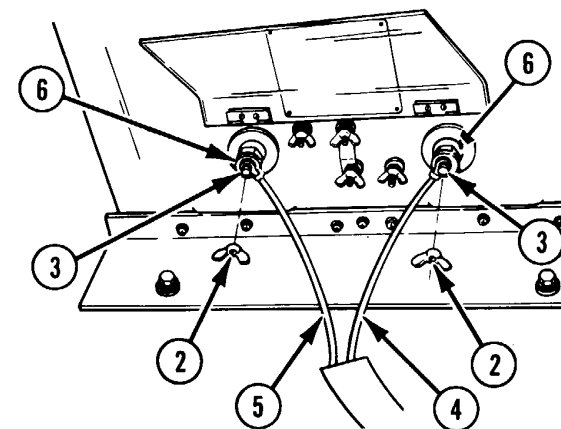
CAUTION

Lug terminal on red wire (4) should be placed on positive terminal of power supply, and lug terminal on black wire (5) should be placed on negative terminal.

- 3 TWO LUG TERMINALS (6). Install on terminals (3) on power supply.
4 TWO WINGNUTS (2). Install.



- 2 TWO WINGNUTS (2). Remove from two terminals (3) on power supply.



3-20. SWITCHBOX AND MOUNTING BRACKET (WITH TOGGLE SWITCH)--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Inspection
- b. Removal/disassembly
- c. Repair
- d. Modification
- e. Reassembly/installation
- f. Adjustment of microswitch
- g. Test

INITIAL SETUP

Special Tools
 Fire control repair shop set (SC 4931-95-CL-A21)

Troubleshooting Reference
 3-7 Lights fail to come on.

Materials/Parts
 Black semigloss lacquer (item 10, app D)

WARNING

The shop set contains voltages which are dangerous if contacted. Before performing any maintenance on the switchbox, move circuit breaker CB4 to OFF position.

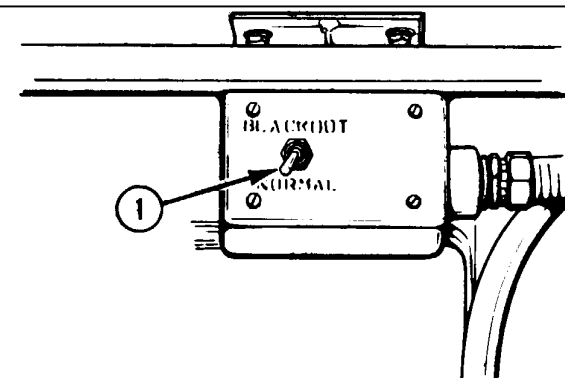
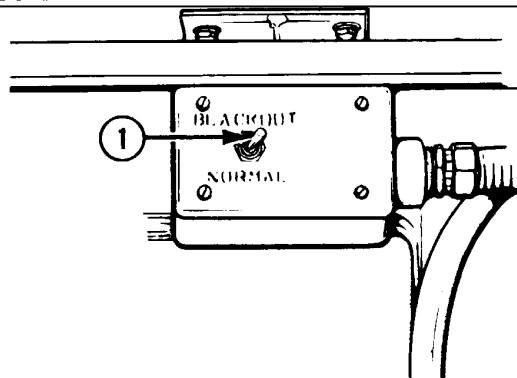
References
 Appendix C
 Appendix D

INSPECTION

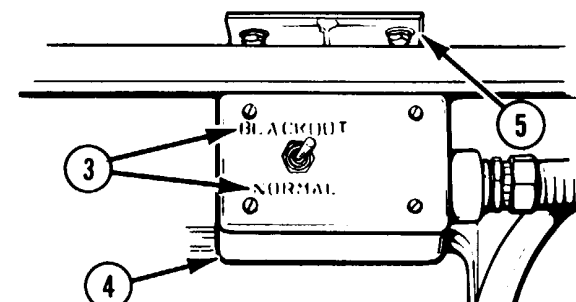
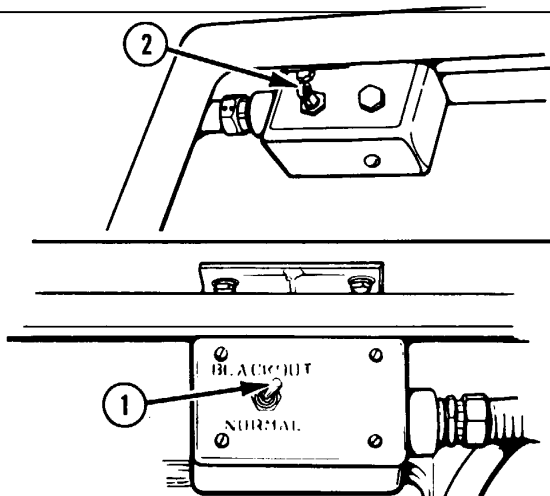
NOTE

The switchbox with the toggle switch is located above the personnel door.

- 1 TOGGLE SWITCH (1). Inspect for proper operation in BLACKOUT and NORMAL positions.



2 MICROSWITCH (2). Inspect for proper operation when toggle switch (1) is in BLACKOUT position.

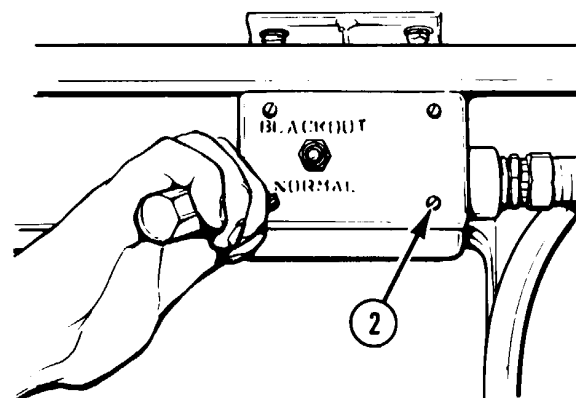
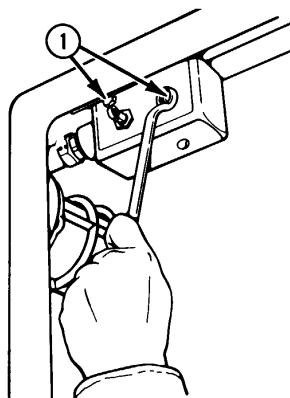


3 STENCIL MARKINGS (3). Inspect for readability.
 4 SWITCHBOX (4) AND MOUNTING BRACKET (5). Inspect for secure mounting and loose or missing parts.

REMOVAL/DISASSEMBLY

NOTE
 For clarity, existing wires not mentioned in text have been removed.

1 TWO HEX HEAD CAPSCREWS (1). Remove.



2 FOUR SCREWS (2). Remove.

3-20. SWITCHBOX AND MOUNTING BRACKET (WITH TOGGLE SWITCH)--MAINTENANCE INSTRUCTIONS(cont)

REMOVAL/DISASSEMBLY (cont)

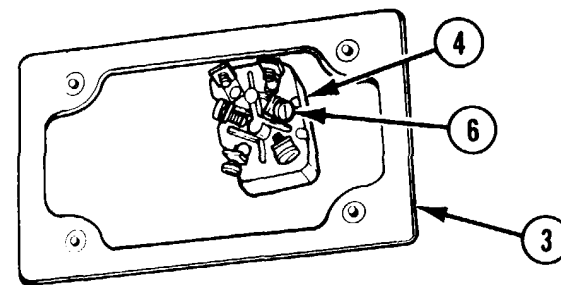
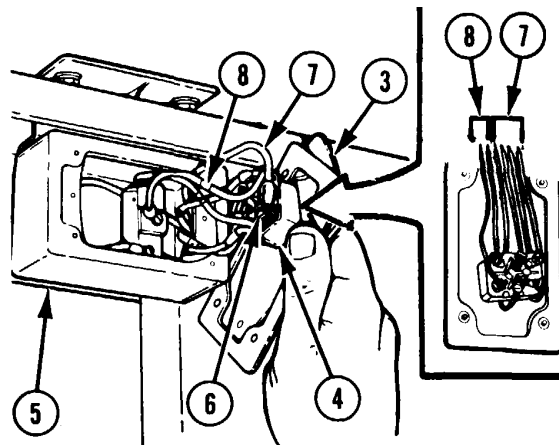
3 COVER (3) WITH TOGGLE SWITCH (4). Pull away from switchbox (5).

4 SIX TERMINAL SCREWS (6). Remove.

NOTE

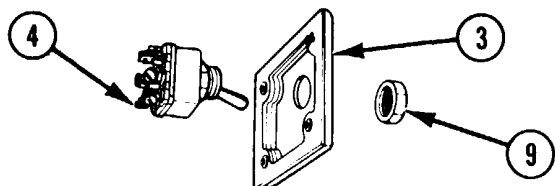
Tag all wires for identification before disconnecting.

5 FOUR WIRES (7) AND TWO WIRES (8). Disconnect.



6 COVER (3) WITH TOGGLE SWITCH (4). Remove.

7 SIX TERMINAL SCREWS (6). Reinstall.



NOTE

The hex nut (9) is a component of the toggle switch (4).

8 HEX NUT (9). Remove from cover (3) with toggle switch (4).

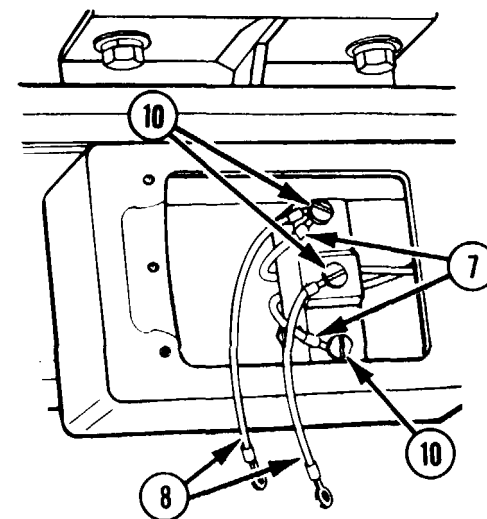
9 COVER (3) AND TOGGLE SWITCH (4). Separate.

10 THREE TERMINAL SCREWS (10). Remove.

11 TWO WIRES (7) AND TWO WIRES (8). Disconnect.

12 TWO WIRES (8). Remove.

13 THREE TERMINAL SCREWS (10). Reinstall.



14 HEX NUT (11) AND WASHER (12). Remove.

15 MICROSWITCH (13). Remove.

16 SWITCHBOX (5).

- Loosen connector (14).
- Pull from six wires (7).

17 MOUNTING BRACKET (15).

- Remove two hex head capscrews (16) and two flat washers (17).
- Remove.

REPAIR

NOTE

The hex nut is a component of the toggle switch.

Repair is by replacement of authorized parts (app C) as required.

MODIFICATION

NOTE

Modification of the switchbox may be necessary when the switchbox is replaced by a new one.

1 SWITCHBOX (1).

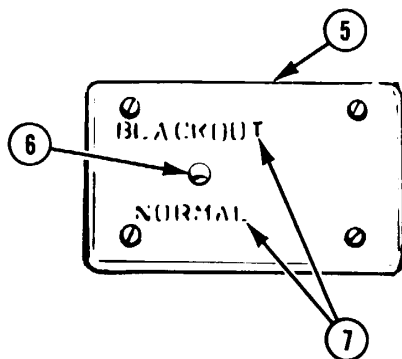
- On the back, drill two 0.25-in. (0.64-cm) holes (2), using the mounting bracket (3) as a template.
- On the back, drill one 0.53-in. (1.35-cm) hole (4), using the mounting bracket (3) as a template.

3-20. SWITCHBOX AND MOUNTING BRACKET (WITH TOGGLE SWITCH)--MAINTENANCE INSTRUCTIONS (cont)

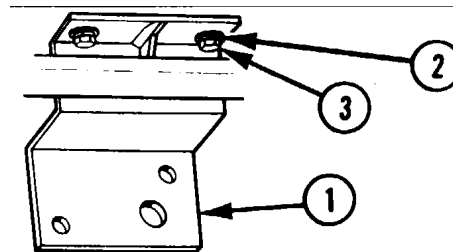
MODIFICATION (cont)

2 COVER (5).

- a. Drill one 0.47-in. (1.19-cm) hole (6) as illustrated.
- b. Stencil black lettering (7) in 0.25-in. (0.64-cm) letters using black semigloss lacquer (item 10, app D) as illustrated.



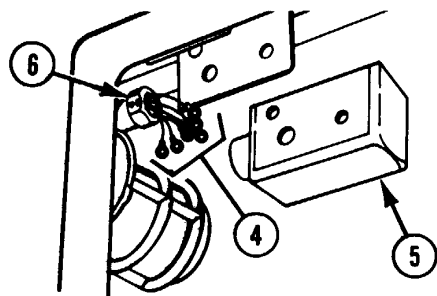
REASSEMBLY/INSTALLATION



NOTE

For clarity, existing wires not mentioned in text have been removed.

- 1 MOUNTING BRACKET (1). Install two flat washers (2) and two hex head capscrews (3).



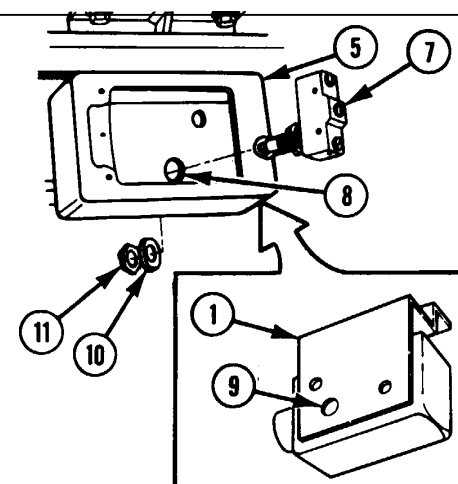
- 2 HARNESS ASSEMBLY (4). Push into switchbox (5).
- 3 CONNECTOR (6). Install in switchbox (5).

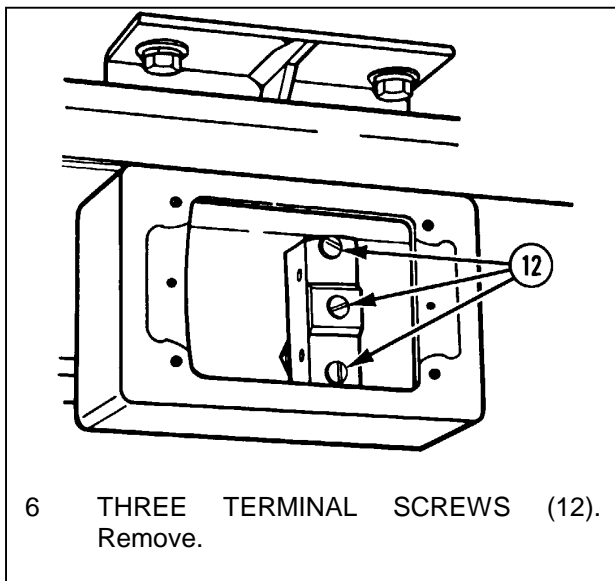
- 4 MICROSWITCH (7). Install in hole (8) in back of switchbox (5) and through hole (9) in mounting bracket (1).

NOTE

Adjust microswitch so that plunger protrudes enough so when door bolt is closed the plunger is depressed, and when door bolt is open the plunger is released. For further instructions, refer to adjustment of microswitch, p 3-194.

- 5 WASHER (10) AND HEX NUT (11). Install.





NOTE

Black wire no. 8 and black wire no. 4B will be installed when connected.

7 BLACK WIRE NO. 4A (13) AND BLACK WIRE NO. 4B (14).

- a. Connect to terminal no. NC (15).
- b. Reinstall terminal screw (12).

8 BLACK WIRE NO. 8 (16).

- a. Connect to terminal no. NO (17).
- b. Reinstall terminal screw (12).

9 BLACK WIRE NO. 6A (18).

- a. Connect to terminal no. C (19).
- b. Reinstall terminal screw (12).

NOTE

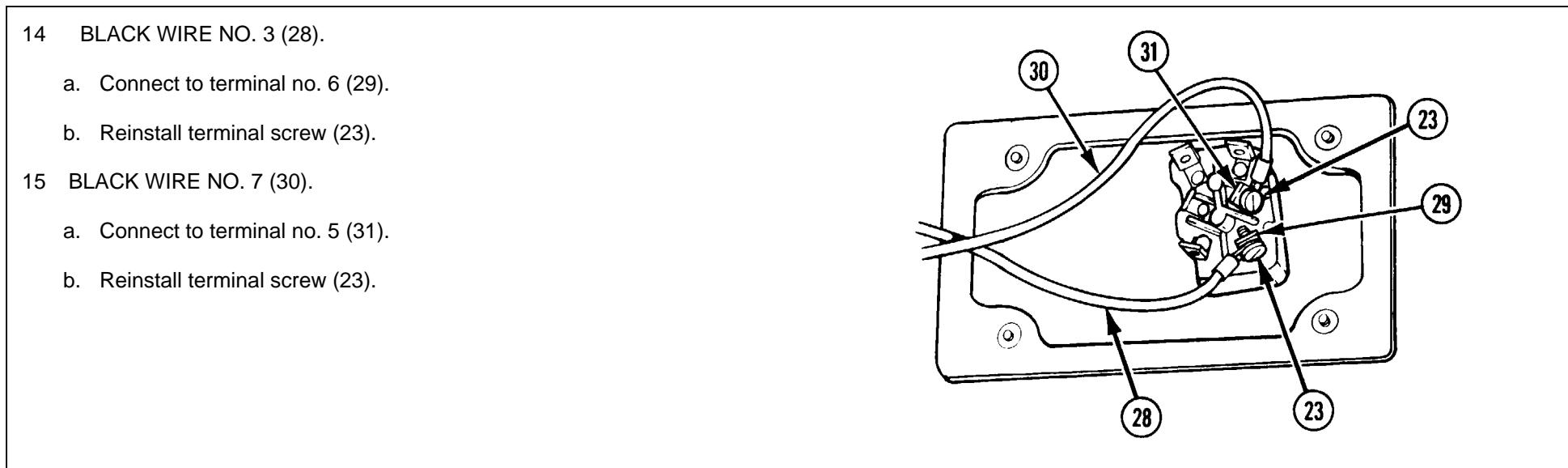
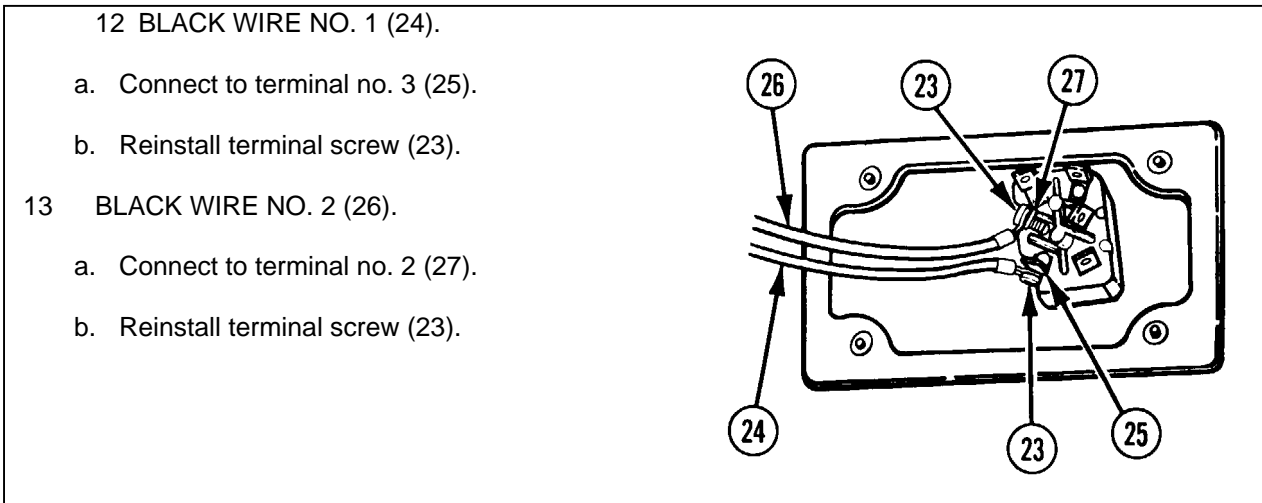
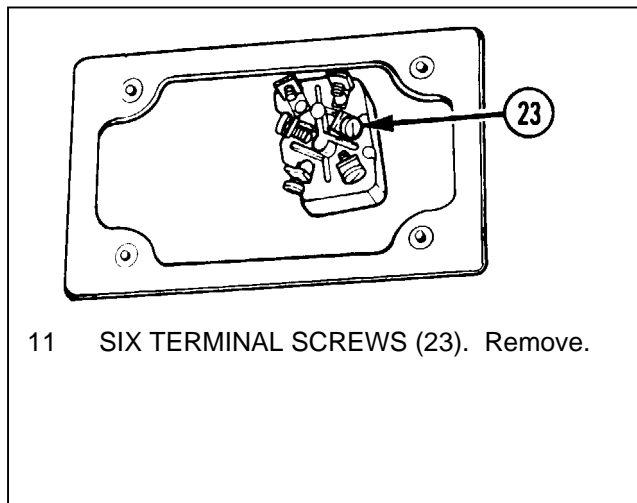
The hex nut is a component of the toggle switch.

10 TOGGLE SWITCH (20).

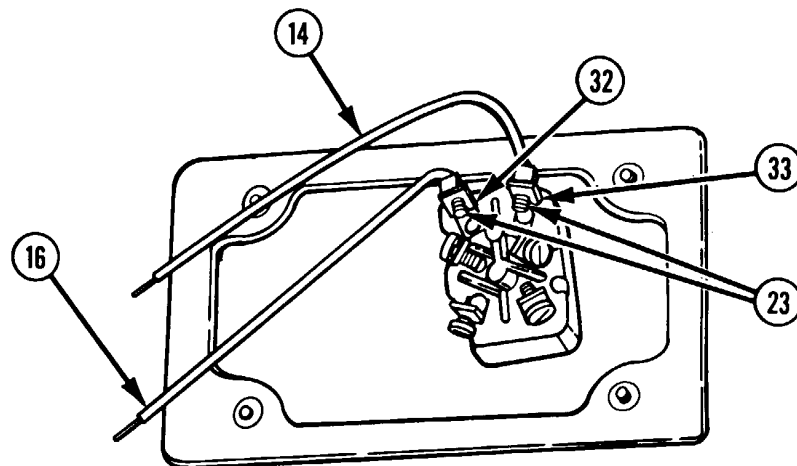
- a. Install in cover (21).
- b. Install hex nut (22).

3-20. SWITCHBOX AND MOUNTING BRACKET (WITH TOGGLE SWITCH)--MAINTENANCE INSTRUCTIONS (cont)

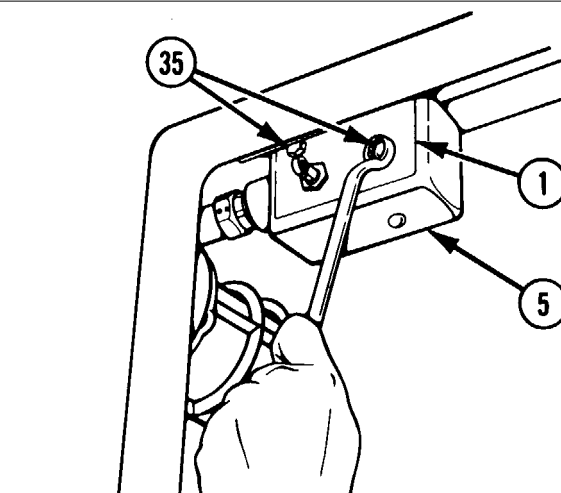
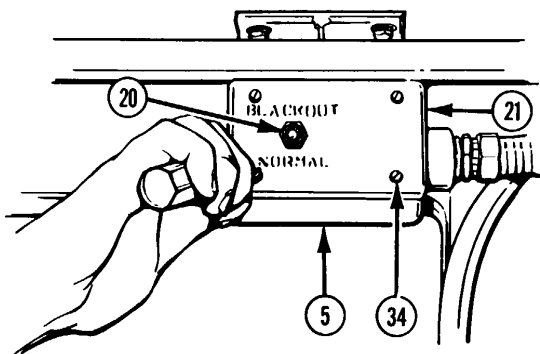
REASSEMBLY/INSTALLATION (cont)



- 16 BLACK WIRE NO. 8 (16).
 - a. Connect to terminal no. 1 (32).
 - b. Reinstall terminal screw (23).
- 17 BLACK WIRE NO. 4B (14).
 - a. Connect to terminal no. 4 (33).
 - b. Reinstall terminal screw (23).



- 18 COVER (21) WITH TOGGLE SWITCH (20).
 - a. Install on switchbox (5).
 - b. Install four screws (34).



- 19 TWO HEX HEAD CAPSCREWS (35) Install in mounting bracket (1) and switchbox (5).

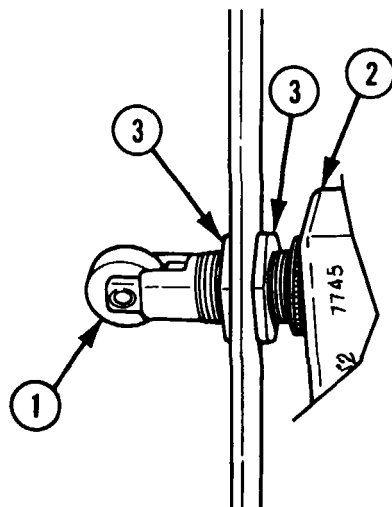
3-20. SWITCHBOX AND MOUNTING BRACKET (WITH TOGGLE SWITCH)---MAINTENANCE INSTRUCTIONS (cont)

ADJUSTMENT OF MICROSWITCH

NOTE

Adjusting two hex nuts inward moves plunger forward, adjusting outward moves plunger backwards.

PLUNGER (1) OF MICROSWITCH (2). Adjust two hex nuts (3).



TEST

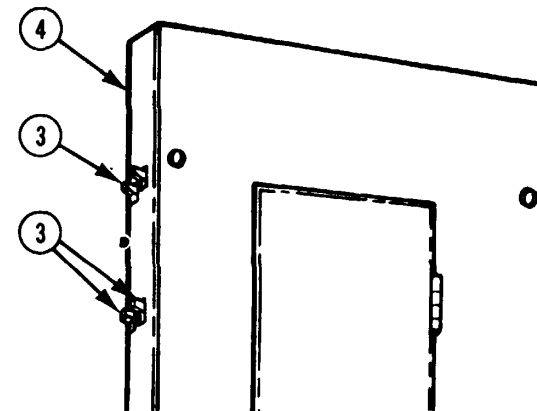
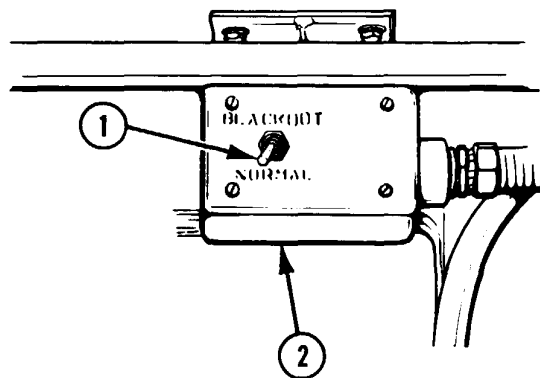
1 PERSONNEL DOOR AND CARGO DOOR. Close.

NOTE

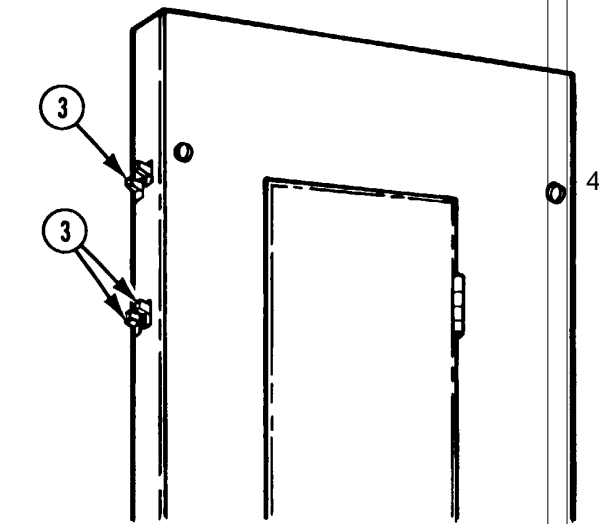
Blackout switch (1) is located on switchbox (2) above personnel door.

The three switches (S1, S2, and S3) (3) are located on the circuit breaker panel box (4) to the right of the personnel door.

2 BLACKOUT SWITCH (1). Turn to NORMAL position.

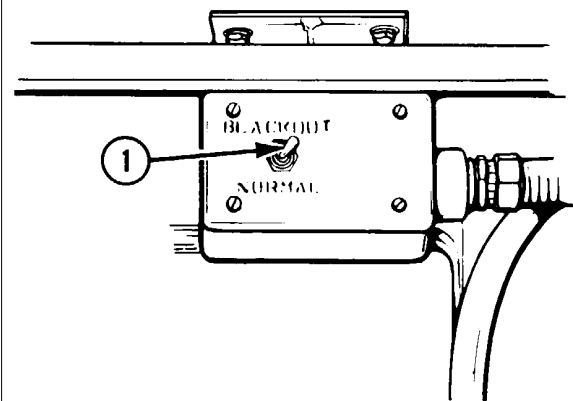


3 THREE SWITCHES (S1, S2, AND S3) (3). Turn to ON position. Lights should come on.



PERSONNEL DOOR.

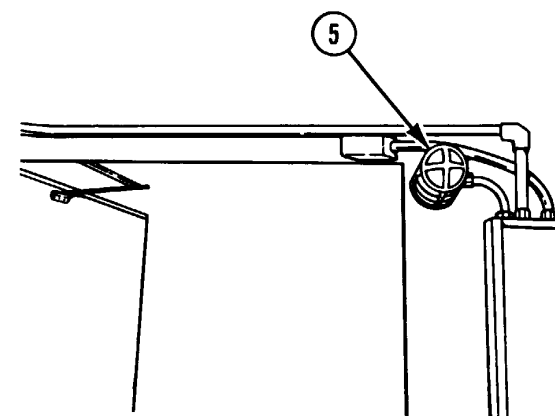
- a. Open. Lights should stay on.
- b. Close.



5 BLACKOUT SWITCH (1). Turn to BLACKOUT position. Lights should stay on.

6 PERSONNEL DOOR.

- a. Open. Lights should go off and blackout light (5) over personnel door should come on.
- b. Close.



3-21. SWITCHBOX AND MOUNTING BRACKET (WITHOUT TOGGLE SWITCH)--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Inspection
- b. Removal/disassembly
- c. Repair
- d. Modification
- e. Reassembly/installation
- f. Adjustment of microswitch
- g. Test

INITIAL SETUP

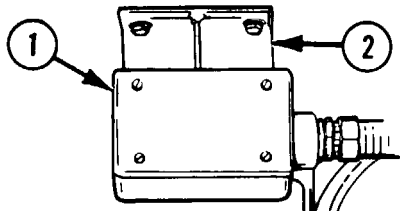
Special Tools
 Fire control repair shop set (SC 4931-95-CL-A21)

Reference
 Appendix C
 Troubleshooting Reference
 3-7 Lights fail to come on.

WARNING

The shop set contains voltages which are dangerous if contacted. Before performing any maintenance on the switchbox, move circuit breaker CB4 to OFF position.

INSPECTION

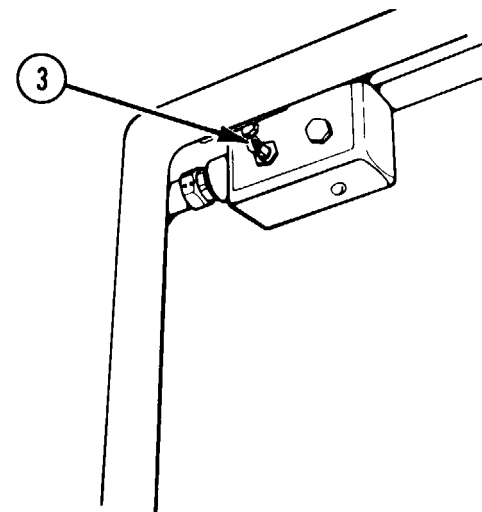


NOTE

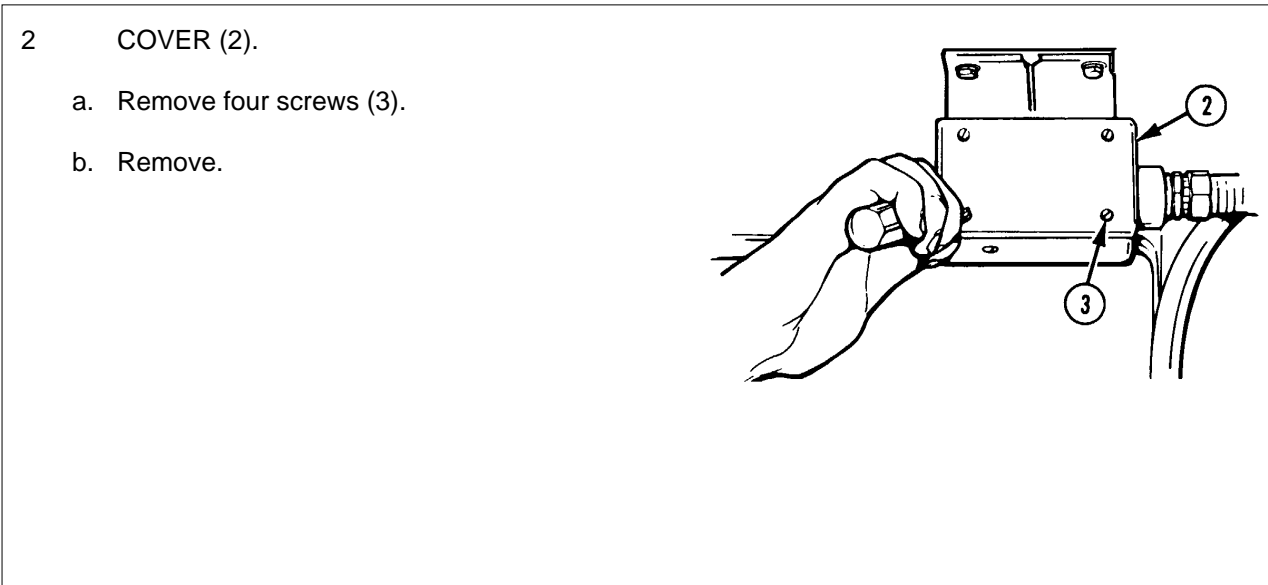
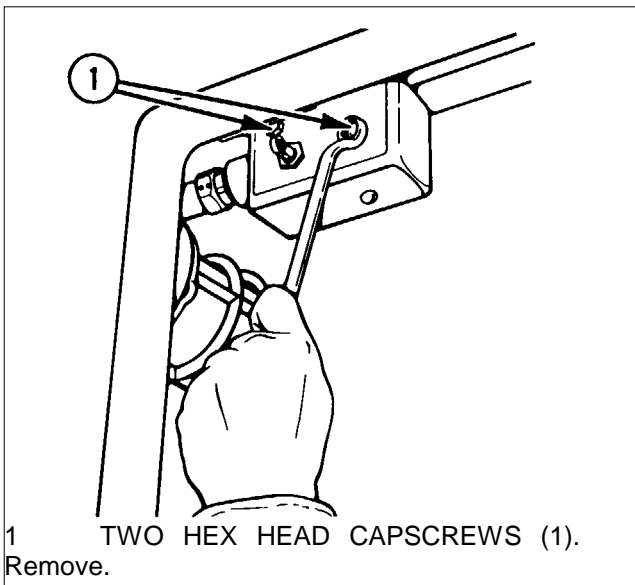
The switchbox without the toggle switch is located above the cargo door.

1 SWITCHBOX (1) AND MOUNTING BRACKET (2). Inspect for secure mounting and loose or missing parts.

2 MICROSWITCH (3). Inspect for proper operation when in blackout mode.



REMOVAL/DISASSEMBLY



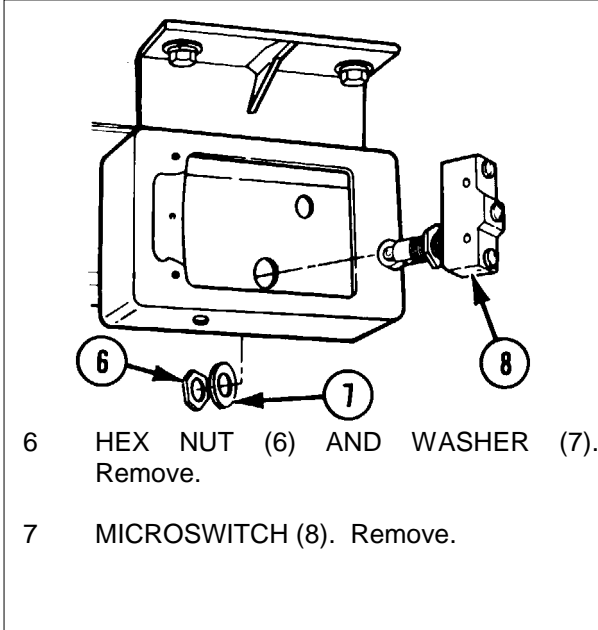
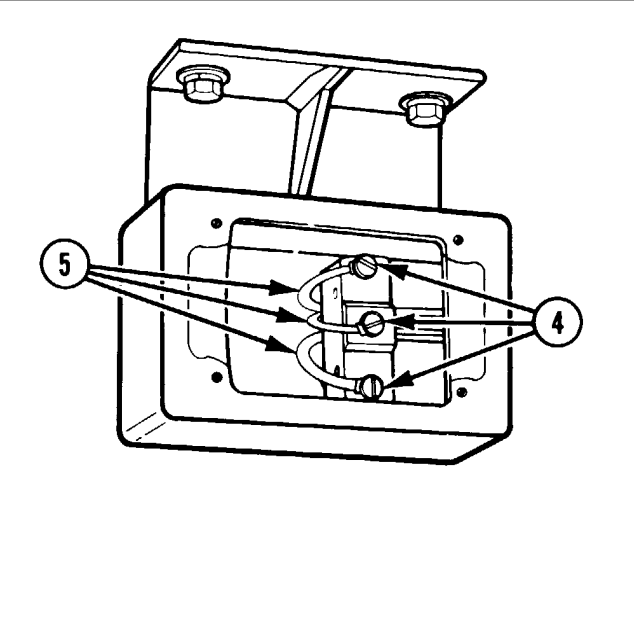
NOTE
For clarity, existing wires not mentioned in text have been removed.

3 THREE TERMINAL SCREWS (4).
Remove.

NOTE
Tag all wires for identification before disconnecting.

4 THREE BLUE WIRES (5). Remove.

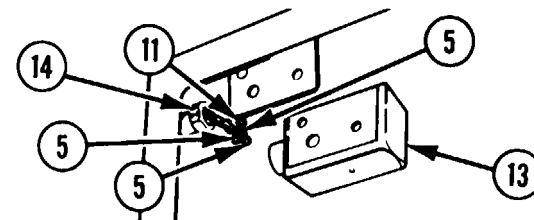
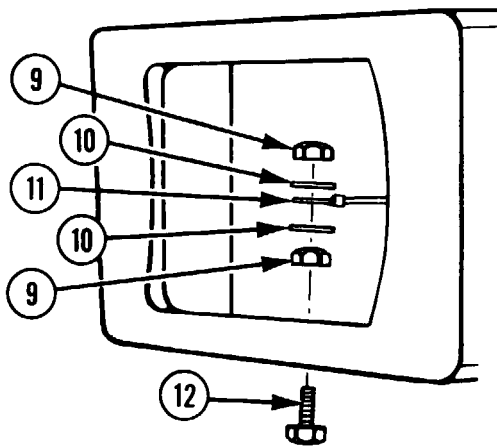
5T THREE TERMINAL SCREWS (4). Reinstall.



3-21. SWITCHBOX AND MOUNTING BRACKET (WITHOUT TOGGLE SWITCH)--MAINTENANCE INSTRUCTIONS (cont)

REMOVAL/DISASSEMBLY (cont)

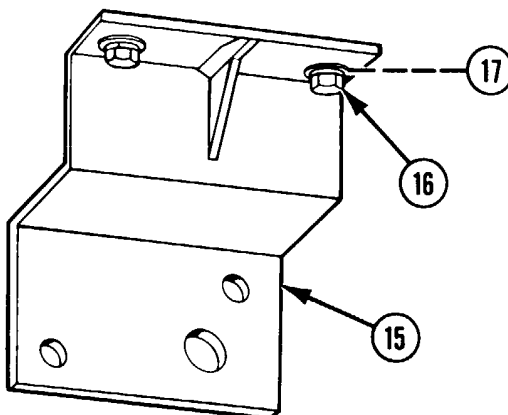
- 8 NUT (9) AND LOCKWASHER (10). Remove.
- 9 GREEN WIRE (11). Disconnect.
- 10 LOCKWASHER (10) AND NUT (9). Remove. SCREW (12). Remove.



- 12 SWITCHBOX (13).
 - a. (14).
 - b. away from three blue wires (5) and green wire (11).

REPAIR

- 13 MOUNTING BRACKET (15).
 - a. Remove two hex head capscrews (16) and two flat washers (17).
 - b. Remove.



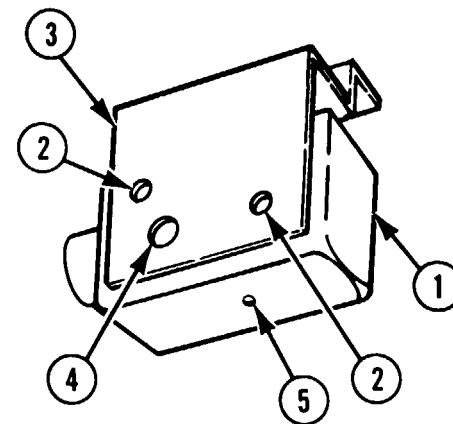
Repair is by replacement of authorized parts (app C) as required.

MODIFICATION

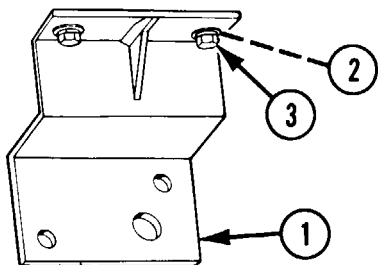
NOTE
Modification of the switchbox may be necessary when the switchbox is replaced by a new one.

SWITCHBOX (1).

- a. On the back, drill two 0.25in. (0.64-cm) holes (2), using the mounting bracket (3) as a template.
- b. On the back, drill one 0.53in. (1.35-cm) hole (4), using the mounting bracket (3) as a template.
- c. On the side, drill one 0.19in. (0.48-cm) hole (5) as illustrated.



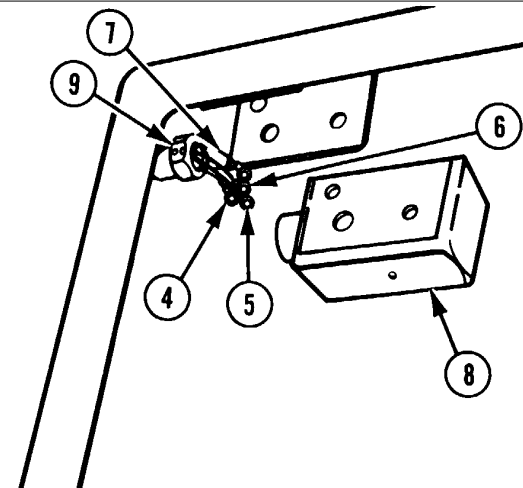
REASSEMBLY/INSTALLATION



- 1 MOUNTING BRACKET (1). Install two flat washers (2) and two hex head capscrews (3).

NOTE
For clarity, existing wires not mentioned in the text have been removed.

- 2 BLUE WIRE NO. 4 (4), BLUE WIRE NO. 5 (5), BLUE WIRE NO. 6 (6), AND GREEN WIRE NO. 11 (7). Push into switchbox (8).
- 3 CONNECTOR (9). Install in switchbox (8).



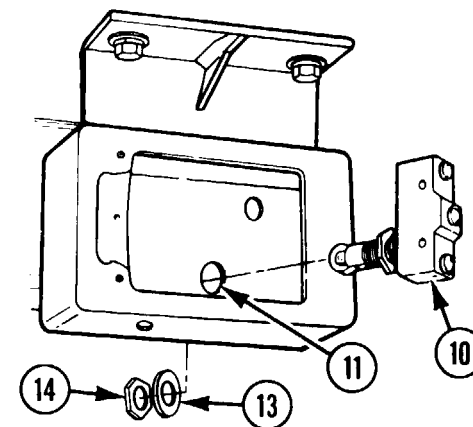
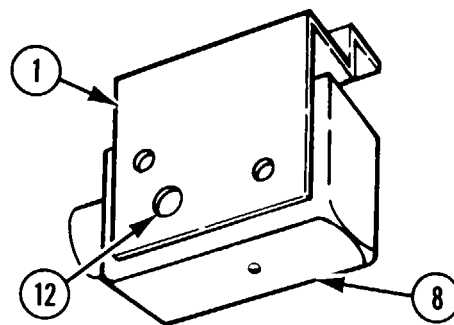
3-21. SWITCHBOX AND MOUNTING BRACKET (WITHOUT TOGGLE SWITCH)--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY/INSTALLATION (cont)

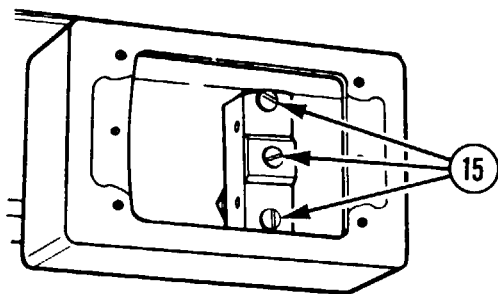
4 MICROSWITCH (10). Install in hole (11) in back of switchbox (8) and through hole (12) in

NOTE

Adjust microswitch so that plunger protrudes enough so when door bolt is closed the plunger is depressed, and when door bolt is open the plunger is released. For further instructions, refer to adjustment of microswitch, p 3-202.



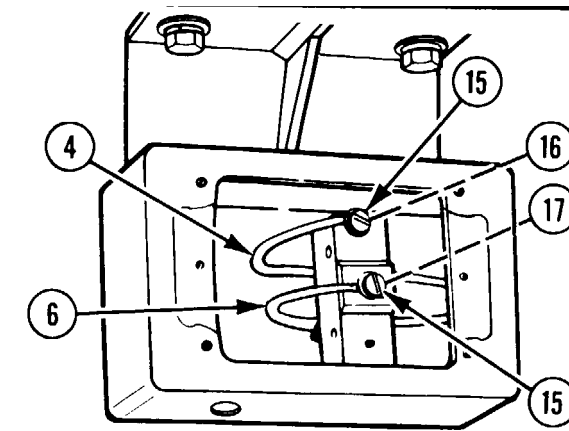
5 WASHER (13) AND HEX NUT (14). Install.

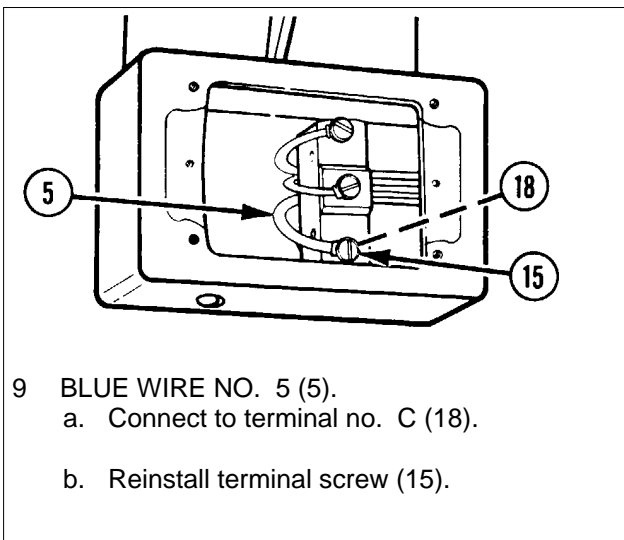


6 THREE TERMINAL SCREWS (15). Remove.

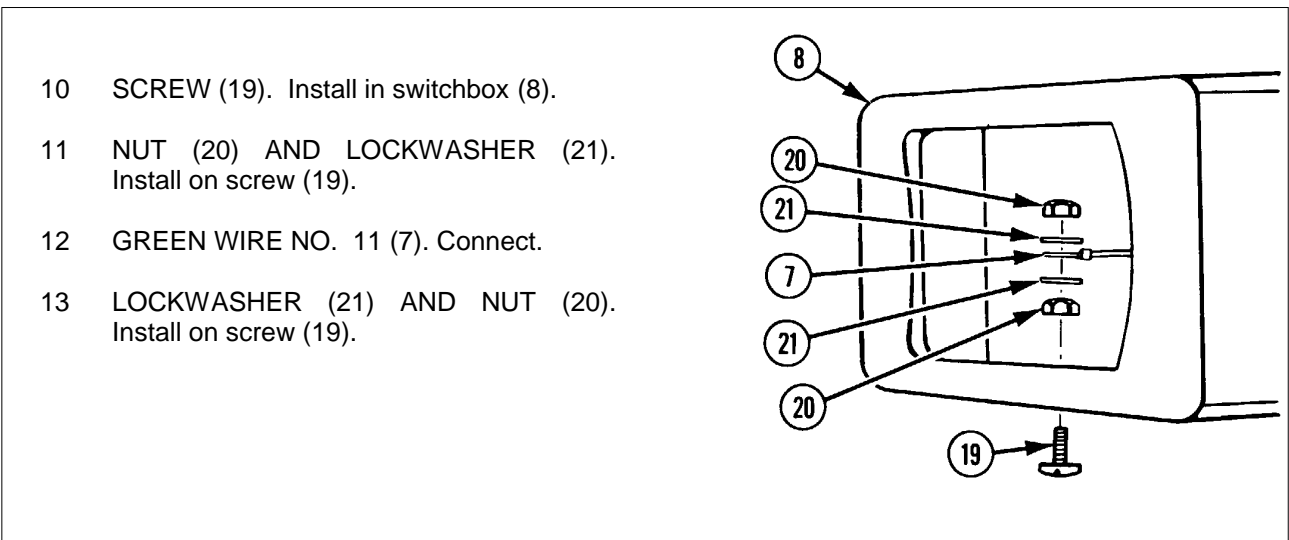
7 BLUE WIRE NO. 4 (4).
 a. Connect to terminal no. NC (16).
 b. Reinstall terminal screw (15).

8 BLUE WIRE NO. 6 (6).
 a. Connect to terminal no. NO (17).
 b. Reinstall terminal screw (15).

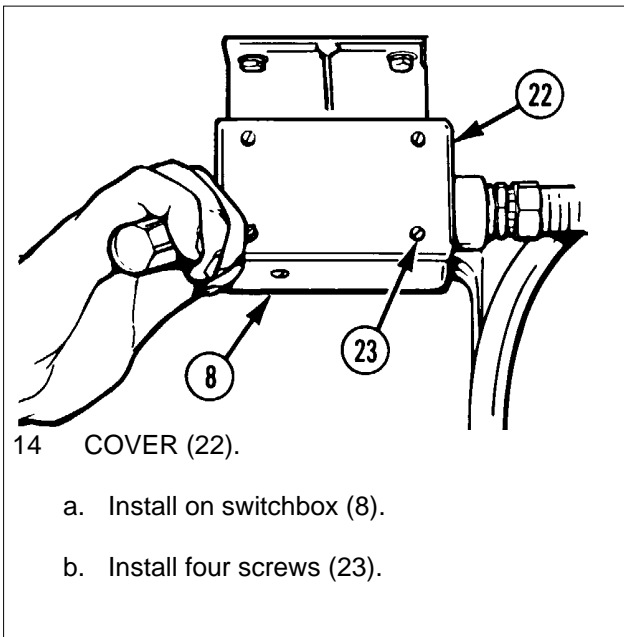




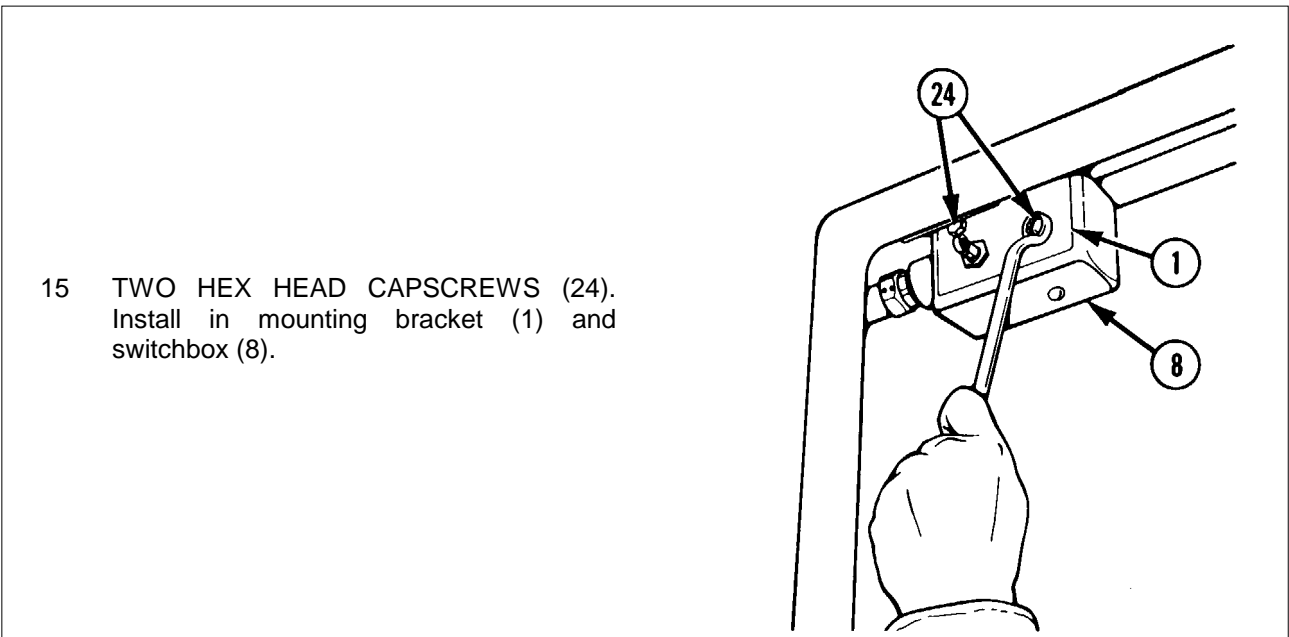
- 9 BLUE WIRE NO. 5 (5).
 a. Connect to terminal no. C (18).
 b. Reinstall terminal screw (15).



- 10 SCREW (19). Install in switchbox (8).
 11 NUT (20) AND LOCKWASHER (21). Install on screw (19).
 12 GREEN WIRE NO. 11 (7). Connect.
 13 LOCKWASHER (21) AND NUT (20). Install on screw (19).



- 14 COVER (22).
 a. Install on switchbox (8).
 b. Install four screws (23).

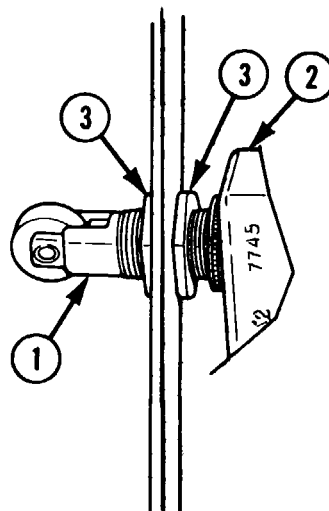


- 15 TWO HEX HEAD CAPSCREWS (24). Install in mounting bracket (1) and switchbox (8).

3-21. SWITCHBOX AND MOUNTING BRACKET (WITHOUT TOGGLE SWITCH)--MAINTENANCE INSTRUCTIONS (cont)

ADJUSTMENT OF MICROSWITCH

NOTE
 Adjusting two hex nuts inward moves plunger forward, adjusting outward moves plunger backwards.
PLUNGER (1) OF MICROSWITCH (2).
 Adjust two hex nuts (3).

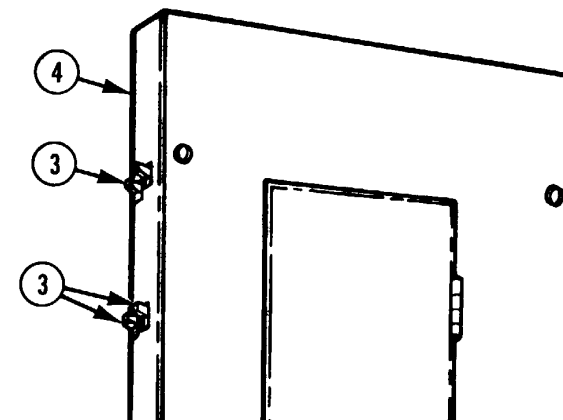
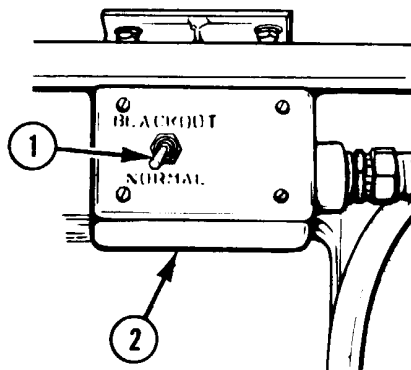


TEST

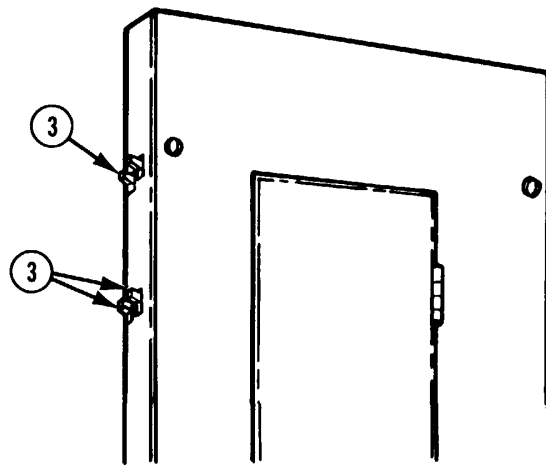
- 1 PERSONNEL DOOR AND CARGO DOOR. Close.

NOTE
 Blackout switch (1) is located on switchbox (2) above personnel door.
 The three switches (S1, S2, and S3) (3) are located on the circuit breaker panel box (4) to the right of the personnel door.

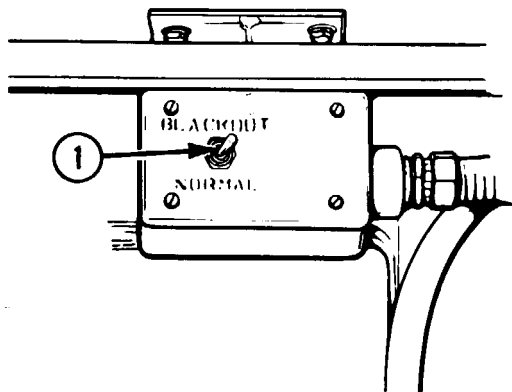
- 2 BLACKOUT SWITCH (1). Turn to NORMAL position.



3 THREE SWITCHES (S1, S2, AND S3) (3). Turn to ON position. Lights should come on.

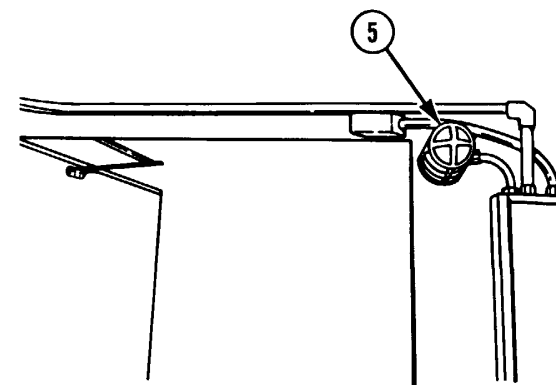


4 CARGO DOOR.
 a. Open. Lights should stay on.
 b. Close.



5 BLACKOUT SWITCH (1). Turn to BLACKOUT position. Lights should stay on.

6 CARGO DOOR.
 a. Open. Lights should go off and blackout light (5) over personnel door should come on.
 b. Close.



3-22. FAN BLACKOUT COVER--MAINTENANCE INSTRUCTIONS

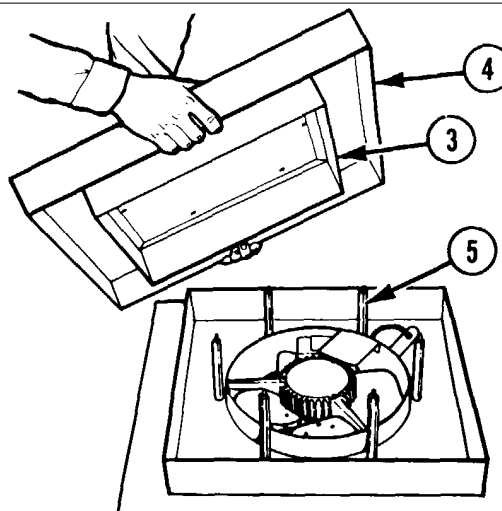
THIS TASK COVERS:	
a. Removal b. Inspection	c. Repair d. Installation
INITIAL SETUP	
Special Tools AVIM sheet metal shop set (SC 4920-99-CL-A91, part VI) AVIM welding shop set (SC 4920-99-CL-A91, part IX)Basic aircraft armament repairman tool set (SC 4933-95-CL-A13) Fire control repair shop set (SC 4931-95-CL-A21)	References Appendix C Appendix D Appendix E TM 10-5410-224-14 TM 43-0139 TM 9-237
Materials/Parts Black semigloss lacquer (item 10, app D) Green enamel (item 7, app D)	Equipment condition 2-7 Ventilation fan and mounting panel removed from shelter wall.

REMOVAL

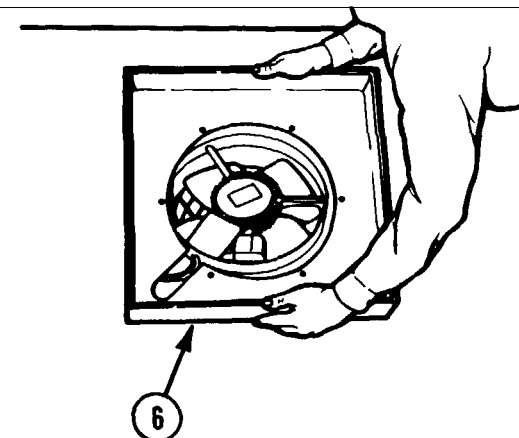
WARNING
 Ventilation fan and mounting panel should be removed from shelter wall prior to removal of fan blackout cover. Refer to TM 10-5410-224-14 for instructions. Mounting panel should be placed in horizontal position with fan blackout cover up.

<ol style="list-style-type: none"> 1 SIX WINGNUTS (1). Remove. 2 SIX WASHERS (2). Remove. 	
---	--

3 BAFFLE (3), OUTER COVER (4) AND SIX SPACERS (5). Remove.

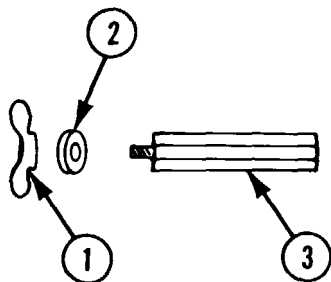


4 INNER COVER (6). Remove.



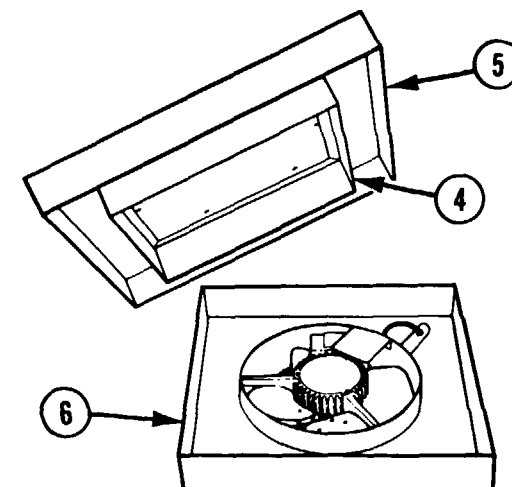
INSPECTION

1 SIX WINGNUTS (1), SIX WASHERS (2), AND SIX SPACERS (3). Check for damaged or missing parts.



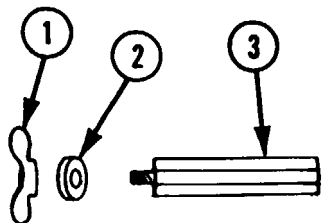
2 BAFFLE (4), OUTER COVER (5), AND INNER COVER (6).

- a. Check for dents or similar damage.
- b. Check for any cracked welds.
- c. Check for chipped or missing paint.



3-22. FAN BLACKOUT COVER--MAINTENANCE INSTRUCTIONS (cont)

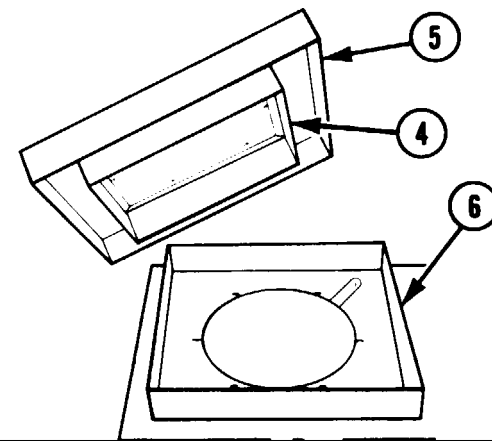
REPAIR



- 1 SIX WINGNUTS (1) AND SIX WASHERS (2). Replace if damaged or missing (app C).
- 2 SIX SPACERS (3). Replace, if needed, with new fabricated items (fig. 17, app E).

3 BAFFLE (4), OUTER COVER (5), AND INNER COVER (6).

- a. Remove any small dents or deformations with a hammer.

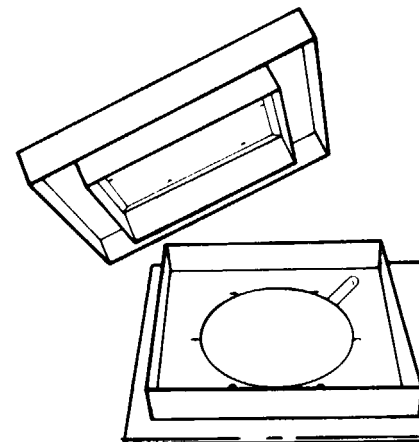


- b. Reweld any cracked welds.
- c. Touch up as required any interior surfaces with black semigloss lacquer (item 10, app D). Touch up exterior surfaces with green enamel (item 7, app D) as required.

NOTE

If either baffle or outer cover are replaced, they must be rewelded to each other.

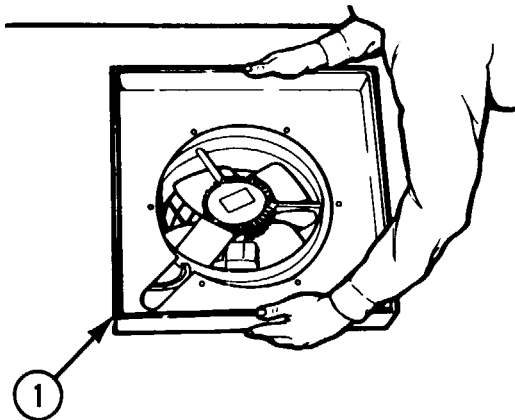
- d. If not repairable, replace with new fabricated items (fig. 18, 19, and 20, app E)



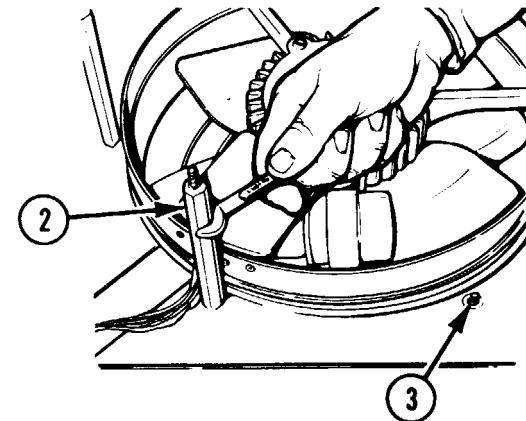
INSTALLATION

WARNING

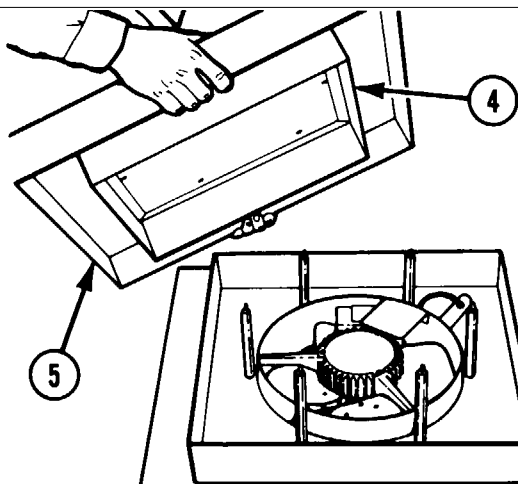
Ventilation fan and mounting panel should be removed from shelter wall prior to installation of fan blackout cover. Refer to TM 10-5410-22414 for instructions. Mounting panel should be placed in horizontal position with mounting screws vertical.



1 INNER COVER (1). Install.

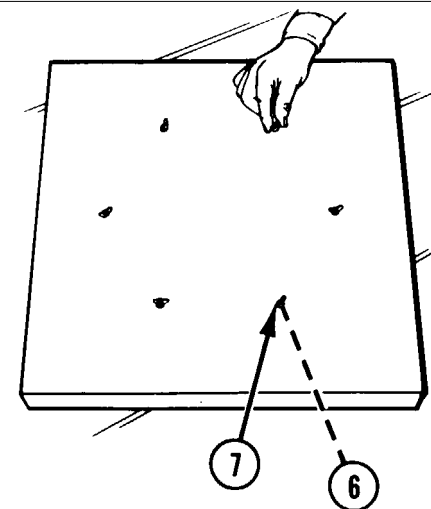


2 SIX SPACERS (2). Screw onto six mounting screws (3) holding ventilation fan to mounting panel.



3 BAFFLE (4) AND OUTER COVER (5). Install.

- 4 SIX WASHERS (6). Install.
- 5 SIX WINGNUTS (7). Install.



3-23. POWER SUPPLY MOUNTING--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- | | |
|--|---|
| <ul style="list-style-type: none"> a. Inspection b. Removal c. Disassembly d. Repair | <ul style="list-style-type: none"> e. Modification of power supply f. Reassembly g. Installation |
|--|---|

INITIAL SETUP

Special Tools

- AVIM sheet metal shop set (SC 4920-99-CL-A91, part VI)
- AVIM welding shop set (SC 4920-99-CL-A91, part IX)
- Basic aircraft armament repairman tool set (SC 4933-95-CL-A13)
- Fire control repair shop set (SC 4931-95-CL-A21)

SC 4931-95-CL-A21

TM 11-6130-246-12

TM 9-237

3-46 Disassembly procedure for electrical installation--maintenance instructions

3-46 Reassembly procedure for electrical installation--maintenance instructions

References

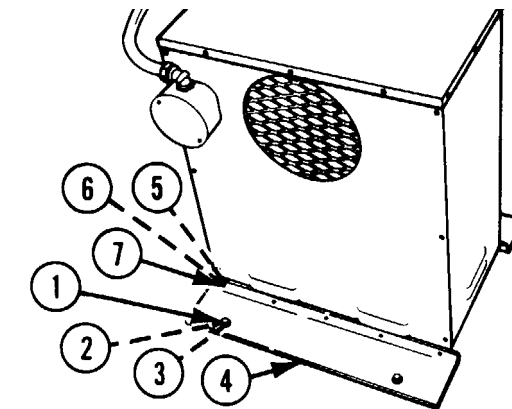
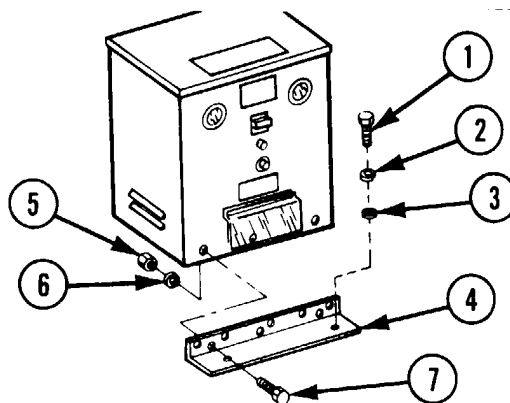
Appendix E

NOTE

The power supply is part of the installed equipment list.

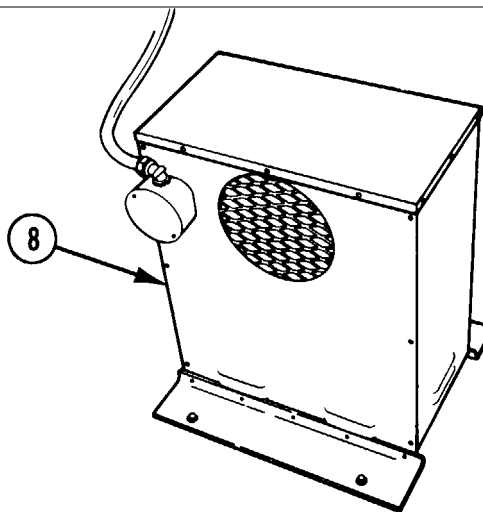
INSPECTION

- 1 FOUR SCREWS (1), FOUR LOCKWASHERS (2), AND FOUR FLAT WASHERS (3). Check for missing, damaged, or corroded condition.
- 2 TWO BRACES (4). Check for bent or broken parts.
- 3 SIX NUTS (5), SIX LOCKWASHERS (6), and SIX SCREWS (7). Check for missing, damaged, or corroded parts.



REMOVAL

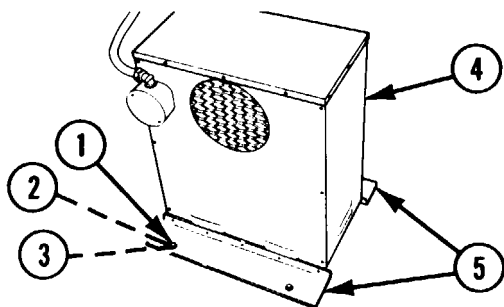
- 4 POWER SUPPLY (8).
 - a. Check to ensure it operates when turned on.
 - b. Refer to TM 11-6130-246-12 for other inspection procedures.



WARNING
 Open circuit breaker CB15 before removing/installing wiring on the power supply.

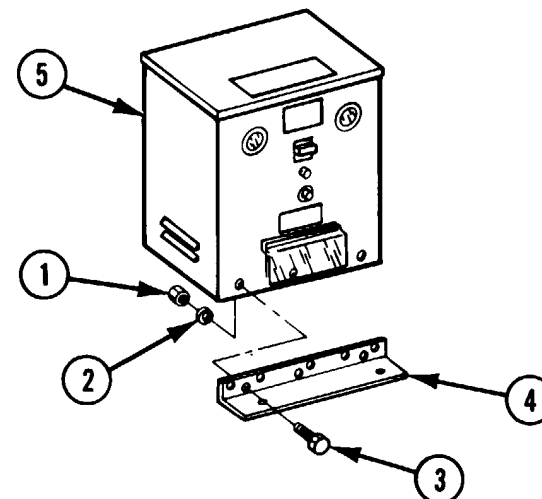
NOTE
 Before performing steps 1 and 2, disconnect the wiring to the power supply according to disassembly procedure (p 3-46) for electrical installation.

DISASSEMBLY



- 1 FOUR SCREWS (1), FOUR LOCKWASHERS (2), AND FOUR FLAT WASHERS (3). Remove.
- 2 POWER SUPPLY (4) AND POWER SUPPLY MOUNTING (5). Remove.

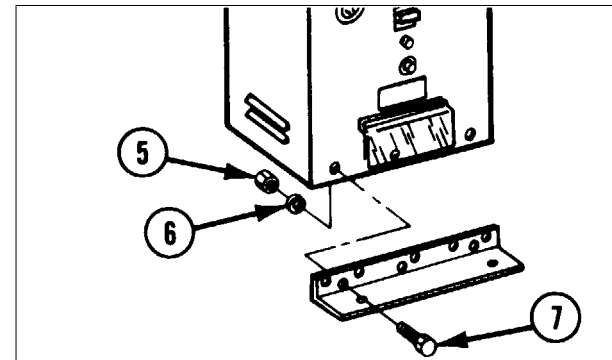
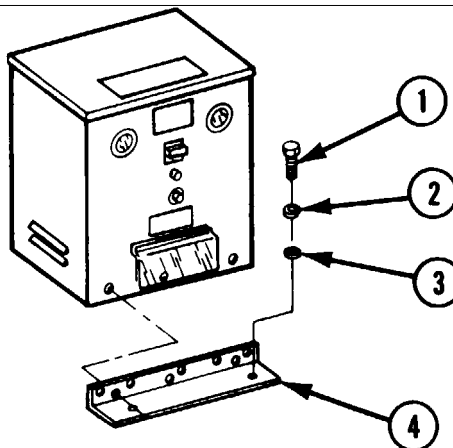
- 1 SIX NUTS (1). Remove.
- 2 SIX LOCKWASHERS (2). Remove.
- 3 SIX SCREWS (3). Remove.
- 4 TWO BRACES (4) AND POWER SUPPLY (5). Separate.



3-23. POWER SUPPLY MOUNTING--MAINTENANCE INSTRUCTIONS (cont)

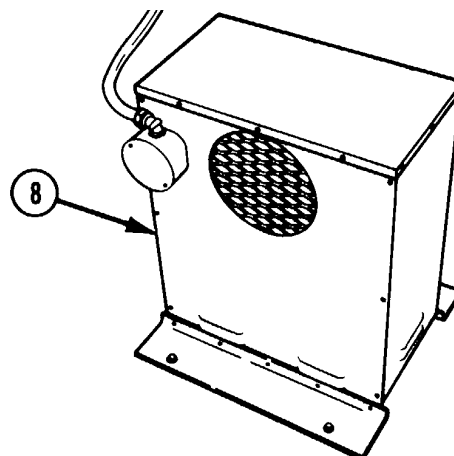
REPAIR

- 1 FOUR SCREWS (1), FOUR LOCKWASHERS (2), AND FOUR FLAT WASHERS (3). Replace if missing, damaged, or corroded.
- 2 TWO BRACES (4). Replace, if not repairable, with fabricated items (fig. 34, app E).



- 3 SIX NUTS (5), SIX LOCKWASHERS (6), AND SIX SCREWS (7). Replace if missing, damaged, or corroded.

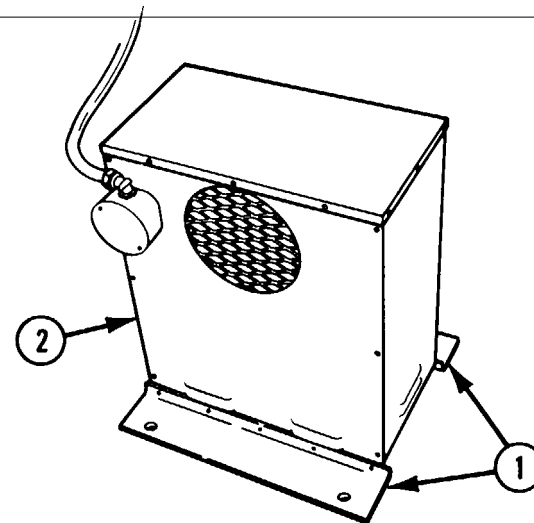
- 4 POWER SUPPLY (8).
 - a. Refer to TM 11-6130-246-12 for repair procedures.
 - b. If repair is not possible, refer to SC 4931-95-CL-A21 for replacement.



MODIFICATION OF POWER SUPPLY

NOTE
 Steps 1 thru 4 are used only for initial installation or when the power supply has been replaced with a new unit.

- 1 TWO BRACES (1) AND POWER SUPPLY (2). Clamp together temporarily with clearance holes in braces over existing screws in power supply.
- 2 POWER SUPPLY (2). Drill six 0.281-in. (0.714-cm) diameter holes (three on each side) in flanges, using 0.281-in. (0.714cm) diameter holes in braces (1) as a guide.

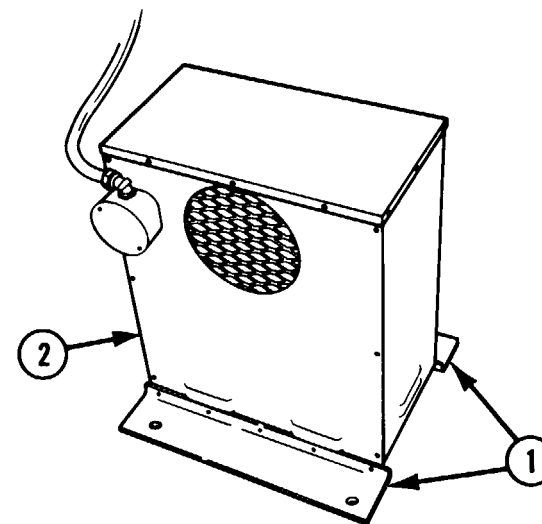


- 3 TWO BRACES (1). Remove.

CAUTION

The power supply operates on 120-volt electrical power. Some power supplies when received new may be wired internally for 220-volt electrical power and must be rewired.

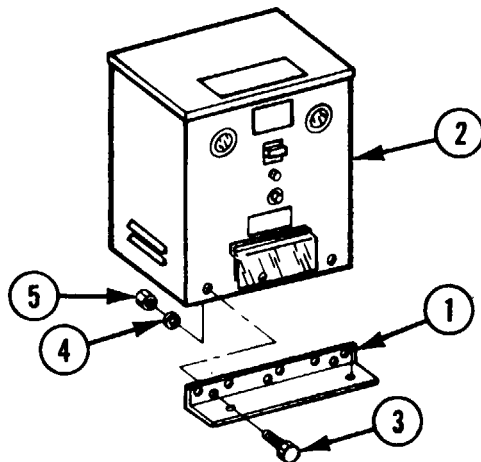
- 4 POWER SUPPLY (2). If necessary rewire unit internally for 120volt operation. Refer to TM 11-6130-246-12 for instructions.



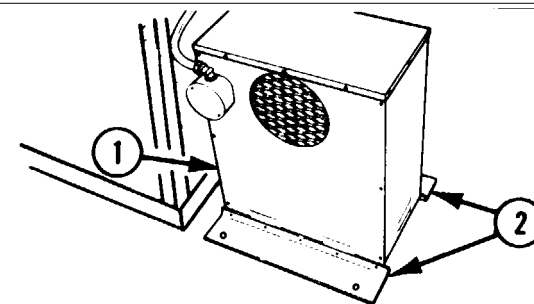
3-23. POWER SUPPLY MOUNTING--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY

- 1 TWO BRACES (1) AND POWER SUPPLY (2). Position together.
- 2 SIX SCREWS (3). Install.
- 3 SIX LOCKWASHERS (4). Install.
- 4 SIX NUTS (5). Install.



INSTALLATION

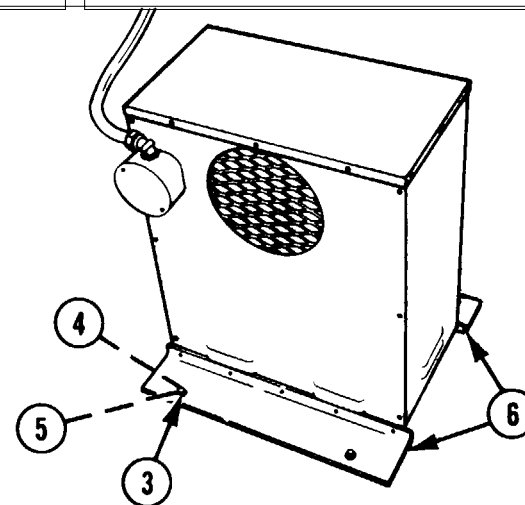


- 1 POWER SUPPLY (1) AND POWER SUPPLY MOUNTING (2). Position in place on shelter floor at cargo door end of right table. The front of power supply should face right when viewed from cargo door.

- 2 FOUR SCREWS (3), FOUR LOCKWASHERS (4), AND FOUR FLAT WASHERS (5). Assemble and install through two braces (6).

WARNING Open circuit breaker CB15 before removing/installing wiring on the power supply.

- 3 WIRING. Connect to power supply according to reassembly procedure (p 3-46) for electrical installation.



3-24. FLUORESCENT LAMP--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Removal
- b. Disassembly
- c. Inspection
- d. Service
- e. Repair
- f. Reassembly
- g. Modification of fluorescent lamp
- h. Installation

INITIAL SETUP

Special Tools
 Fire control repair shop set (SC 4931-95-CL-A21)

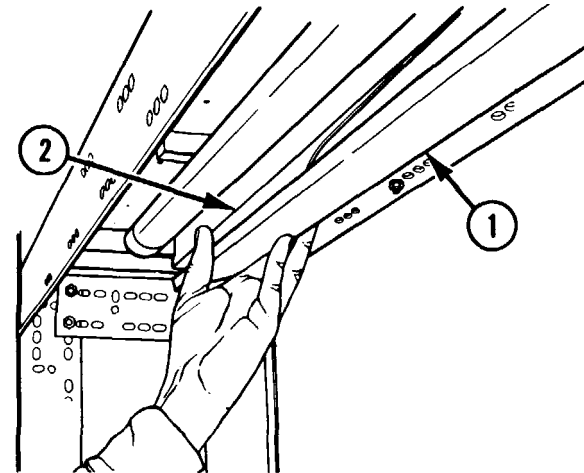
Reference
 Appendix D

Material s/Parts
 Cloth (item 17, app D)

REMOVAL

WARNING
 Switch S2 in circuit breaker panel box must be turned to OFF position before removing fluorescent lamp.

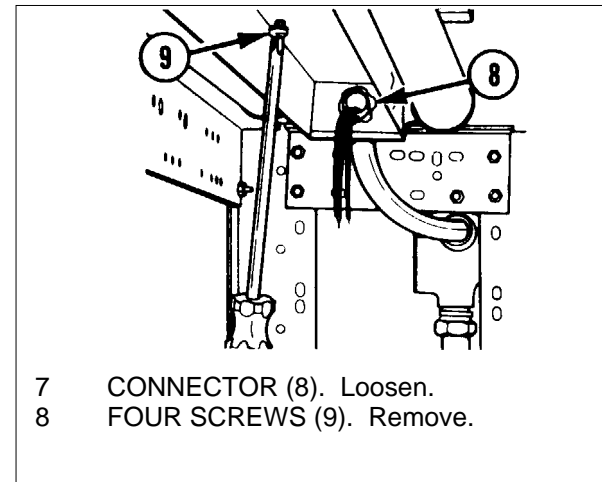
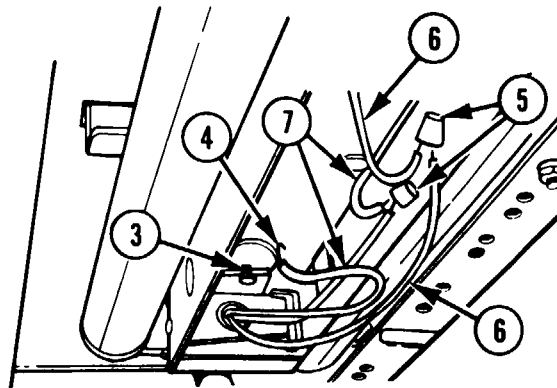
1 COVER (1). Remove from fluorescent lamp (2).



13-24. FLUORESCENT LAMP--MAINTENANCE INSTRUCTIONS (cont)

REMOVAL (cont)

- 2 SCREW (3). Loosen.
- 3 GREEN WIRE (4). Remove from screw (3).
- 4 TWO CONDUCTOR SPLICES (5). Remove.
- 5 TWO BLACK WIRES (6). Separate.
- 6 TWO WHITE WIRES (7). Separate.

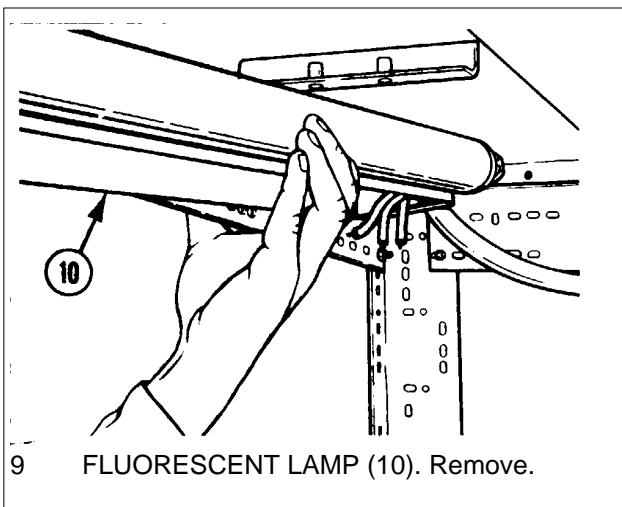


- 7 CONNECTOR (8). Loosen.
- 8 FOUR SCREWS (9). Remove.

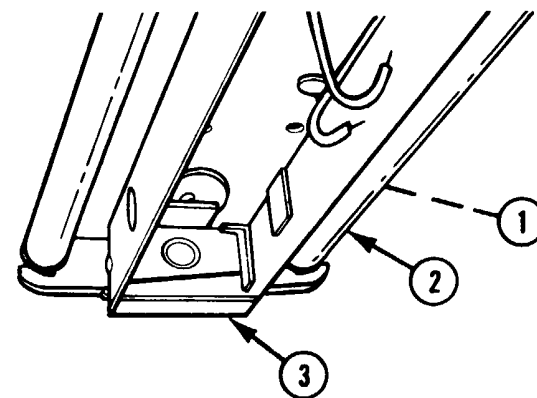
DISASSEMBLY

TWO FLUORESCENT BULBS (1) AND TWO SHIELDS (2).

- a. Remove from fluorescent lamp (3).
- b. Separate.

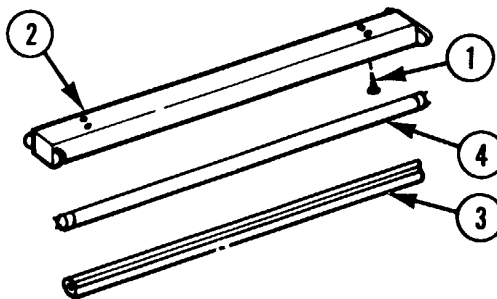


- 9 FLUORESCENT LAMP (10). Remove.



INSPECTION

- 1 FOUR SCREWS (1). Check for missing or damaged parts.
- 2 FLUORESCENT LAMP (2). Check for proper operation.
- 3 TWO SHIELDS (3). Check for missing or damaged parts.
- 4 TWO FLUORESCENT BULBS (4). Check for missing or faulty parts.



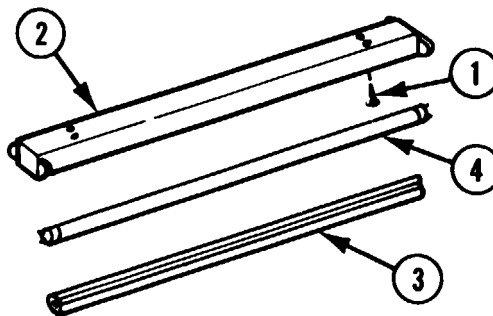
SERVICE



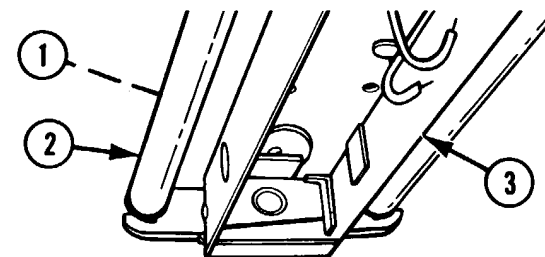
TWO SHIELDS. Wipe off dust using a cloth (item 17, app D).

REPAIR

- 1 FOUR SCREWS (1). Replace if missing, damaged, or corroded.
- 2 FLUORESCENT LAMP (2). Replace if it does not operate properly.
- 3 TWO SHIELDS (3). Replace if missing or damaged.
- 4 TWO FLUORESCENT BULBS (4). Replace if missing or faulty.



REASSEMBLY



TWO FLUORESCENT BULBS (1) AND TWO SHIELDS (2).
 a. Assemble.
 b. Install in fluorescent lamp (3).

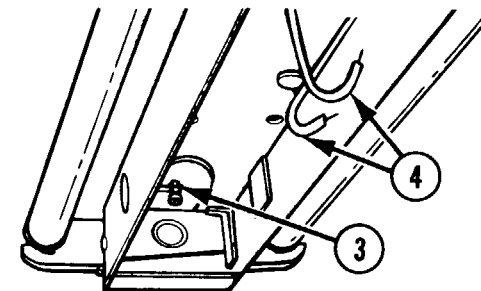
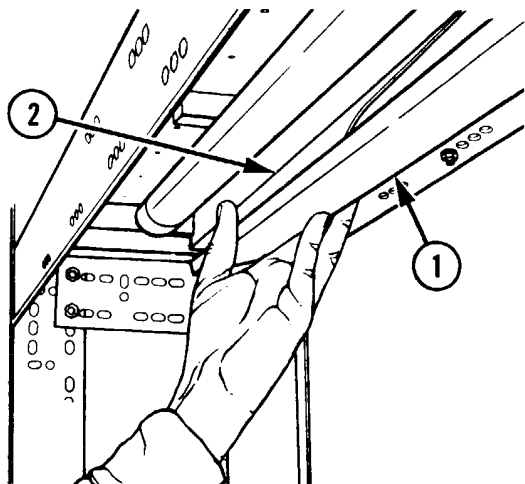
3-24. FLUORESCENT LAMP--MAINTENANCE INSTRUCTIONS (cont)

MODIFICATION OF FLUOPESCENT LAMP

NOTE

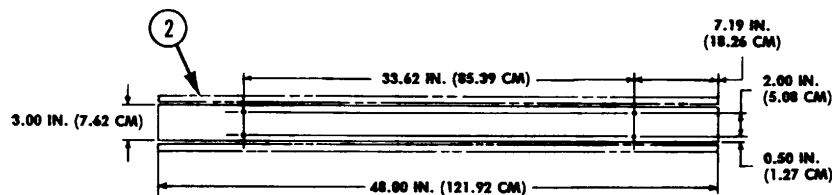
Steps 1 thru 4 are used only for initial installation or when the fluorescent lamp has been replaced with a new unit.

- 1 COVER (1). Remove from fluorescent lamp (2).



- 2 SCREW (3). Loosen.
3 TWO WIRES (4). Remove 0.50 in. (1.27 cm) of insulation from ends.

- 4 FLUORESCENT LAMP (2). Drill four 0.281-in. (0.714-cm) diameter holes through the back as illustrated.



INSTALLATION

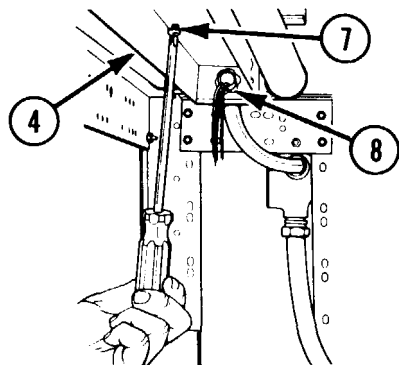
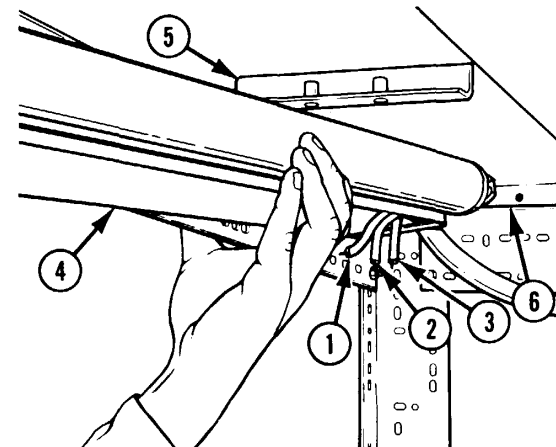
WARNING

Switch S2 in circuit breaker panel box must be turned to OFF position before installing fluorescent lamp.

NOTE

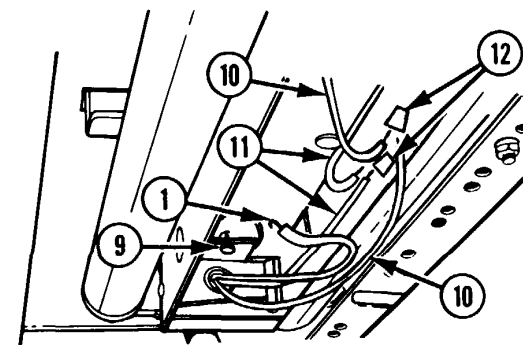
The harness assembly has three wires (green, black, and white) which must be connected to the fluorescent lamp. The fluorescent lamp has two wires (black and white).

- 1 GREEN WIRE (1), BLACK WIRE (2), AND WHITE WIRE (3). Pull into fluorescent lamp (4).
- 2 FLUORESCENT LAMP (4). Position under two bracket assemblies (5) located under lower shelf (6) of shelving assembly.



- 3 FOUR SCREWS (7). Install.
- 4 CONNECTOR (8). Tighten to secure to fluorescent lamp (4).

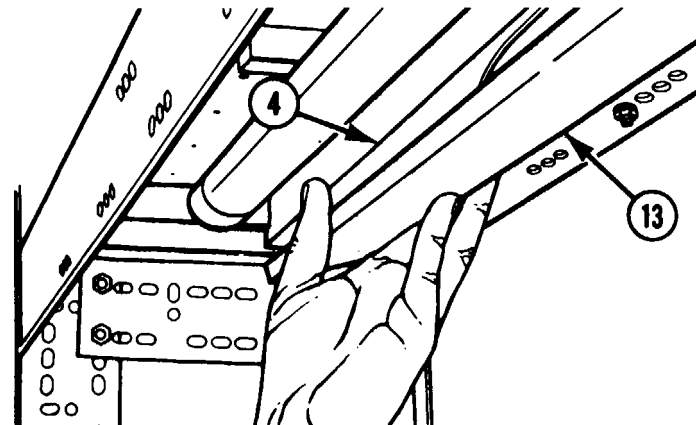
- 5 GREEN WIRE (1). Wrap bare end around screw (9).
- 6 SCREW (9). Tighten.
- 7 TWO BLACK WIRES (10). Twist bare ends together.
- 8 TWO WHITE WIRES (11). Twist bare ends together.
- 9 TWO CONDUCTOR SPLICES (12). Install on two black wires (10) and two white wires (11).



3-24. FLUORESCENT LAMP--MAINTENANCE INSTRUCTIONS (cont)

INSTALLATION (cont)

10 COVER (13). Install on fluorescent lamp (4).



3-25. LAMP BRACKET ASSEMBLY--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Inspection
- b. Removal
- c. Disassembly
- d. Repair
- e. Reassembly
- f. Modification of shelving assembly
- g. Installation

INITIAL SETUP

Special Tools

- AVIM tool crib shop set (SC 4920-99-CL-A91, part VII)
- Fire control repair shop set (SC 4931-95-CL-A21)

Materials/Parts

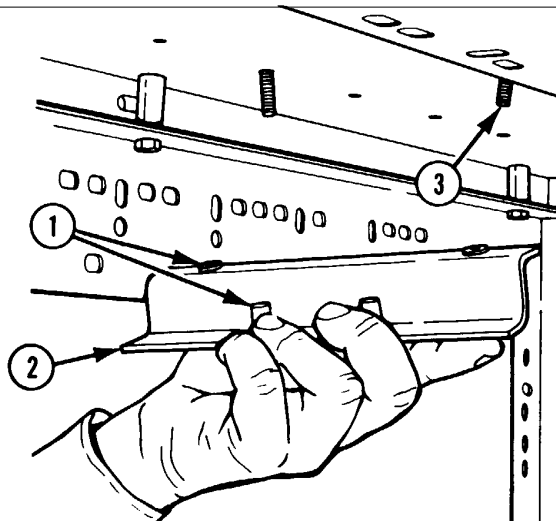
- Blind nuts (8) (12011679-1)

NOTE

There is a total of two lamp bracket assemblies for each shop set. The following procedures are written for both lamp bracket assemblies.

INSPECTION

- 1 EIGHT BLIND NUTS (1). Check for loose or missing parts.
- 2 TWO BRACKETS (2). Check for missing or damaged parts.
- 3 FOUR SCREWS (3). Check for missing, damaged, or corroded parts.



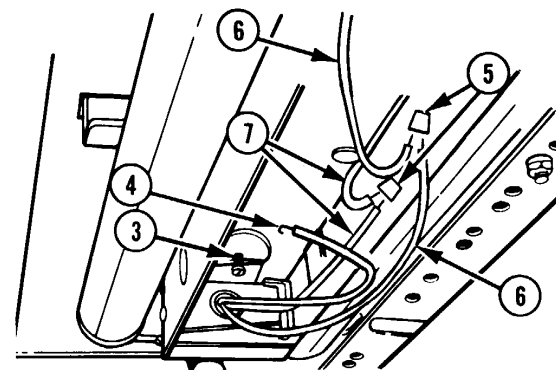
REMOVAL

WARNING
Switch S2 in circuit breaker panel box must be turned to OFF position before removing fluorescent lamp.

A line drawing showing a hand removing a cover from a fluorescent lamp. Callout number '1' points to the cover being lifted away, and callout number '2' points to the lamp tube remaining in the fixture.

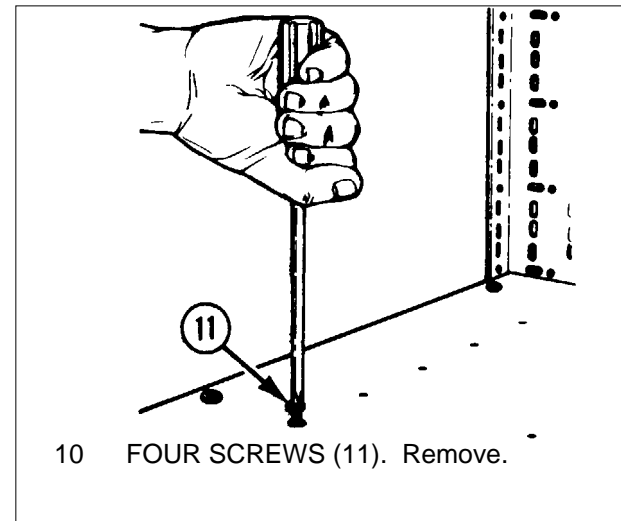
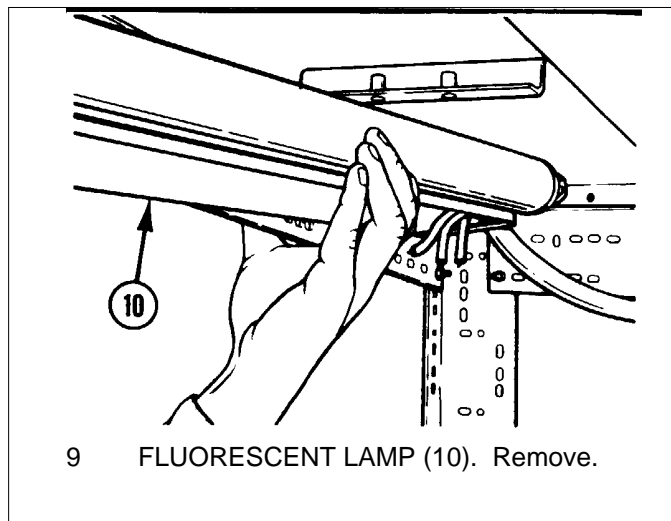
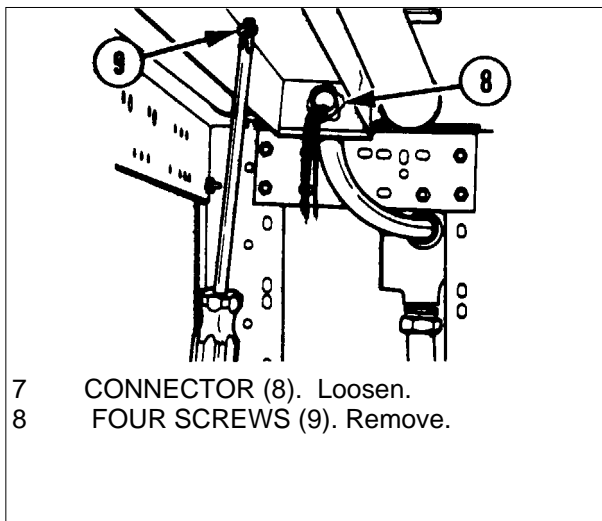
- 1 COVER (1). Remove from fluorescent lamp (2).

- 2 SCREW (3). Loosen.
- 3 GREEN WIRE (4). Remove from screw (3).
- 4 TWO CONDUCTOR SPLICES (5). Remove.
- 5 TWO BLACK WIRES (6). Separate.
- 6 TWO WHITE WIRES (7). Separate.

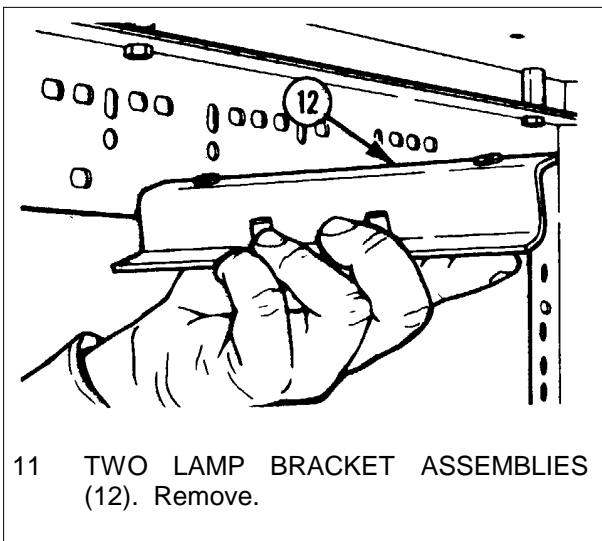


3-25. LAMP BRACKET ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

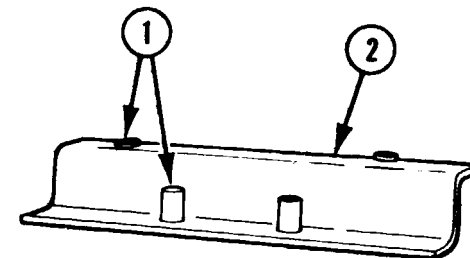
REMOVAL (cont)



DISASSEMBLY

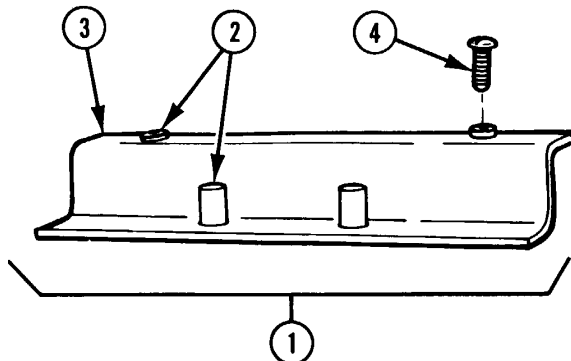


EIGHT BLIND NUTS (1). If replacement is required, remove from two brackets (2) by drilling out using a 0.312-in. (0.792-an) diameter drill.



REPAIR

- 1 TWO BRACKET ASSEMBLIES (1). If missing or damaged, replace with new items.
- 2 EIGHT BLIND NUTS (2). Replace with new items if removed.
- 3 TWO BRACKETS (3). If damaged replace with two new bracket assemblies (1).
- 4 FOUR SCREWS (4). Replace if missing, damaged, or corroded.



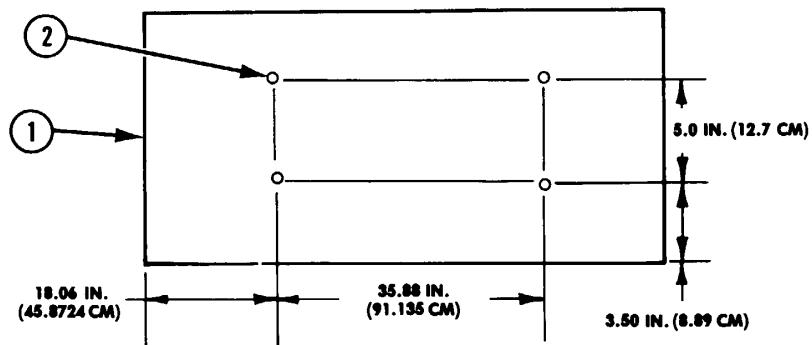
REASSEMBLY

-
- A perspective view of a lower shelf assembly. Callout 1 points to a blind nut on the top surface. Callout 2 points to a bracket on the top surface.
- EIGHT BLIND NUTS (1).
 - a. Install in two brackets (2).
 - b. Set in place using hydraulic gun.

MODIFICATION OF SHELVING ASSEMBLY

NOTE
 The following procedure is used only for initial installation or when the shelving assembly has been replaced with a new unit.

LOWER SHELF (1). Drill four 0.281in. (0.714-cm) diameter holes (2) through lower shelf (1) as illustrated.



3-25. LAMP BRACKET ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

INSTALLATION

1 TWO BRACKET ASSEMBLIES (1). Position on under side of lower shelf (2) of shelving assembly.

The diagram shows a hand holding a bracket assembly (1) and positioning it under a shelf (2) of a shelving assembly. The shelf has several screws and a row of small circular components. The bracket assembly is being aligned with the shelf's edge.

2 FOUR SCREWS (3). Install.

The diagram shows a hand using a screwdriver to install a screw (3) into a bracket assembly. The screw is being driven into a hole in the bracket, which is attached to a vertical surface.

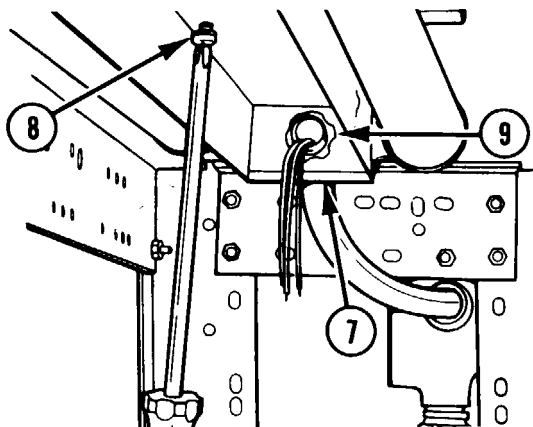
WARNING
Switch S2 in circuit breaker panel box must be turned to OFF position before installing fluorescent lamp.

NOTE
The harness assembly has three wires (green, black, and white) which must be connected to the fluorescent lamp. The fluorescent lamp has two wires (black and white).

3 GREEN WIRE (4), BLACK WIRE (5), AND WHITE WIRE (6). Pull into fluorescent lamp (7).

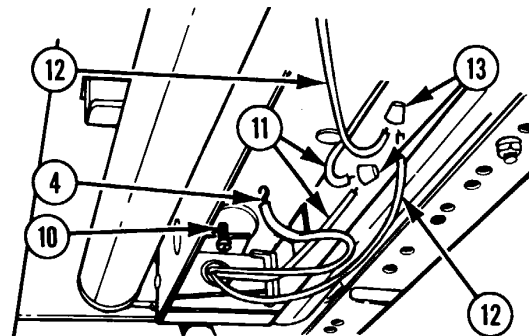
4 FLIIORESCENT LAMP (7). Position under two bracket assemblies (1).

The diagram shows a hand pulling three wires (4, 5, 6) into a fluorescent lamp (7). The lamp is positioned under two bracket assemblies (1). The wires are being inserted into the lamp's terminals. The bracket assemblies are secured to the shelf with screws.

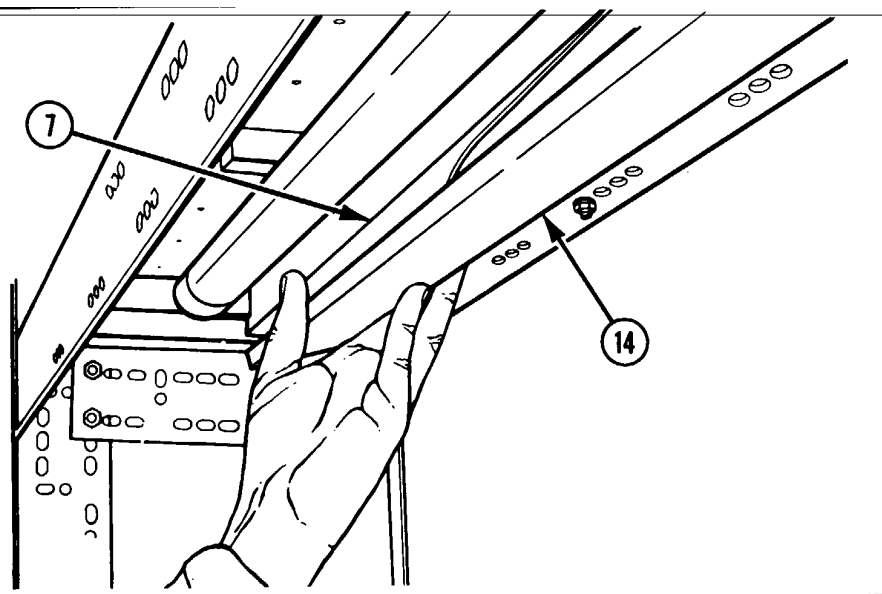


- 5 FOUR SCREWS (8). Install.
- 6 CONNECTOR (9). Tighten to secure to fluorescent lamp (7)

- 7 GREEN WIRE (4). Wrap bare end around screw (10).
- 8 SCREW (10). Tighten.
- 9 TWO BLACK WIRES (11). Twist bare ends together.
- 10 TWO WHITE WIRES (12). Twist bare ends together.
- 11 TWO CONDUCTOR SPLICES (13). Install on two black wires (11) and two white wires (12).



- 12 COVER (14). Install on fluorescent lamp (7).



3-26. WIRING HARNESS ASSEMBLY (BENCH)--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Removal
- b. Inspection
- c. Disassembly
- d. Repair
- e. Reassembly
- f. Installation

INITIAL SETUP

Test Equipment
Ohmmeter

Special Tools

- Basic aircraft armament repairman tool set (SC 4933-95-CL-A13)
- Fire control repair shop set (SC 4931-95-CL-A21)
- Supplemental aircraft armament repairman tool set (SC 4933-95-CL-A14)

Materials/Parts

- Tape (item 19, app D)
- Lug terminal (MS25036-111)
- Lug terminal (MS25036-156)
- Wire 12011690-10
- Wire 12011690-11
- Wire 12011690-12
- Wire 12011690-13
- Wire 12011690-14
- Wire 12011690-16
- Wire 12011690-18
- Wire 12011690-20
- Wire 12011690-21
- Wire 12011690-22
- Wire 12011690-23

References

Appendix C

- Appendix D
- Appendix E
- 3-74 Wire table.
- 3-46 Disassembly procedure for electrical installation.
- 3-46 Reassembly procedure for electrical installation.
- Troubleshooting References
- 3-9 The power supply does not operate.
- 3-9 There is no electrical power at work table outlets.

WARNING

The shop set contains voltages which are dangerous if contacted. Before performing any maintenance on the harness assembly, be sure the circuit breaker on the power distribution panel connected to power source is in OFF position and the 120/208V cable assembly is disconnected from the shop set.

NOTE

The harness assembly is comprised of eleven wires tagged numbers 12 thru 22. Refer to wire table (p 3-74) for further description.

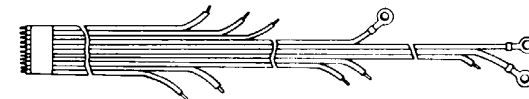
REMOVAL

For removal procedures for the harness assembly, refer to disassembly procedure on page 3-46, paragraph 3-10, for electrical installation.

INSPECTION

ALL WIRES.

- a. Check for breaks, corrosion, and worn or deteriorated insulation.
- b. Check for continuity with suitable ohmmeter.



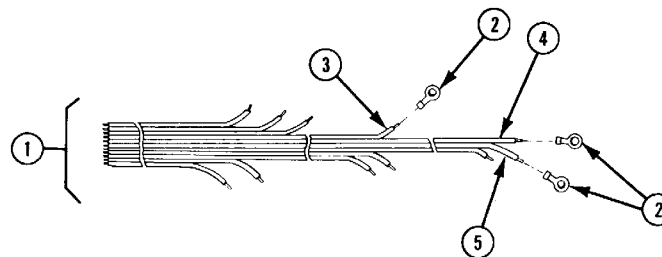
DISASSEMBLY

- 1 ELEVEN WIRES (1). Separate.

NOTE

Remove lug terminals only when necessary to replace defective parts.

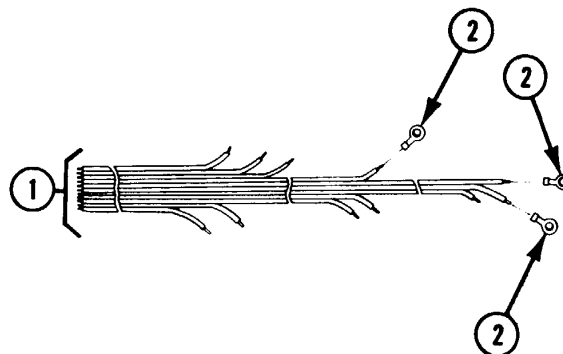
- 2 THREE LUG TERMINALS (2) ON BLUE WIRE NO. 20 (3), WHITE WIRE NO. 21 (4), AND GREEN WIRE NO. 22 (5). Remove by cutting.



3-26. WIRING HARNESS ASSEMBLY (BENCH)--MAINTENANCE INSTRUCTIONS (cont)

REPAIR

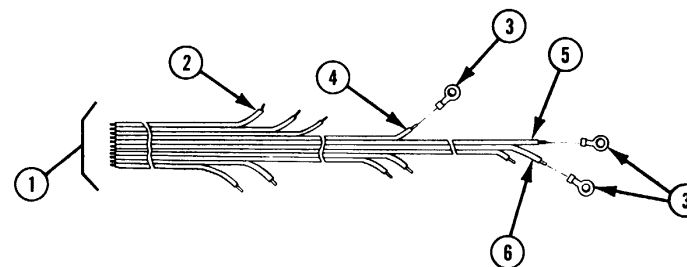
- 1 ELEVEN WIRES (1). Replace by fabrication (fig. 3, app E).
- 2 THREE LUG TERMINALS (2). Repair by replacement (app C).



REASSEMBLY

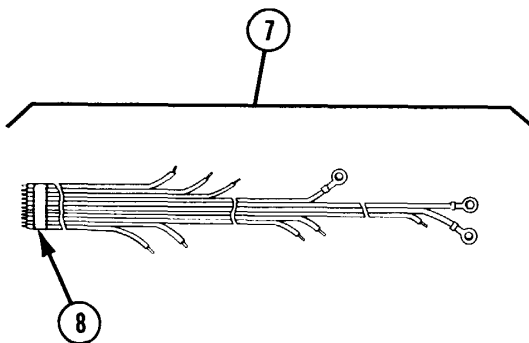
NOTE
 Steps 1 and 2 are necessary only when wires or lug terminals are replaced or at initial installation.

- 1 ELEVEN WIRES (1). Strip insulation (2) back 0.50 in. (1.27 cm) at each end.
- 2 THREE LUG TERMINALS (3).
 - a. Install on blue wire no. 20 (4), white wire no. 21 (5), and green wire no. 22 (6), one on each wire.
 - b. Install by crimping.



INSTALLATION

- 3 TAG NUMBER. If not present, add to respective wire. Refer to wire table, page 3-74.
- 4 HARNESS ASSEMBLY (7). Apply tape (8) (item 19, app D) as required to keep all stripped wire ends together for installation.



For installation procedures, refer to reassembly procedure on page 3-46, paragraph 3-10, for electrical installation.

3-27. WIRING HARNESS ASSEMBLY (CEILING)--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- | | |
|---|---|
| <ul style="list-style-type: none"> a. Removal b. Inspection c. Disassembly | <ul style="list-style-type: none"> d. Repair e. Reassembly f. Installation |
|---|---|

INITIAL SETUP

Test Equipment
Ohmmeter

Special Tools

Basic aircraft armament repairman tool set (SC 4933-95-CL-A13)
Fire control repair shop set (SC 4931-95-CL-A21)
Supplemental aircraft armament repairman tool set (SC 4933-95-CL-A14)

Materials/Parts

Tape (item 19, app D)
Lug terminal (MS25036-111)
Lug terminal (MS25036-156)
Wire (3) (12011690-5)
Wire (12011690-6)
Wire (12011690-7)
Wire (12011690-8)

3-27. WIRING HARNESS ASSEMBLY (CEILING)--MAINTENANCE INSTRUCTIONS (cont)

INITIAL SETUP:

References

- Appendix C
- Appendix D
- Appendix E

3-74

Wire table.

3-46

Disassembly procedure for electrical installation.

3-46

Reassembly procedure for electrical installation.

Troubleshooting Reference

3-7

There is no electrical power at outlets.

WARNING

The shop set contains voltages which are dangerous if contacted. Before performing

any maintenance on the harness assembly, be sure the circuit breaker on the power distribution panel connected to power source is in OFF position and the 120/208V cable assembly is disconnected from the shop set.

NOTE

The harness assembly is comprised of ten wire sections of various lengths. All sections are tagged with the following numbers: no. 4, no. 5, no. 6, no. 9, no. 10, and no. 11. (Refer to wire table, p 3-74.) Four wire sections were removed separately and six were removed together.

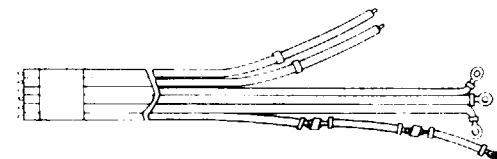
REMOVAL

For removal procedures for the harness assembly, refer to disassembly procedure on page 3-46, paragraph 3-10, for electrical installation.

INSPECTION

ALL WIRE SECTIONS.

- a. Check for breaks, corrosion, and worn or deteriorated insulation.
- b. Check for continuity with a suitable ohmmeter.

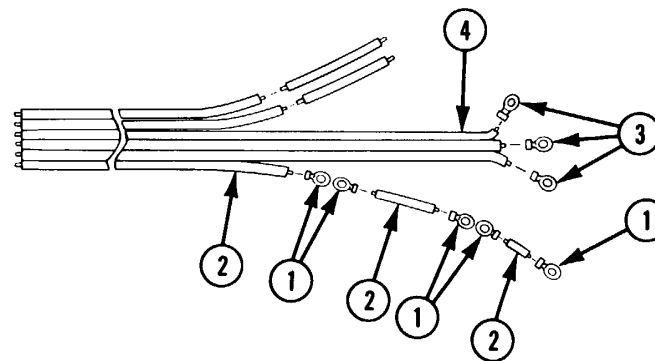


DISASSEMBLY

NOTE

Lug terminals should be removed only when necessary to replace defective parts.

- 1 FIVE LUG TERMINALS (1). Remove by cutting from three green wires (2).
- 2 THREE LUG TERMINALS (3). Remove by cutting from three blue wires (4).

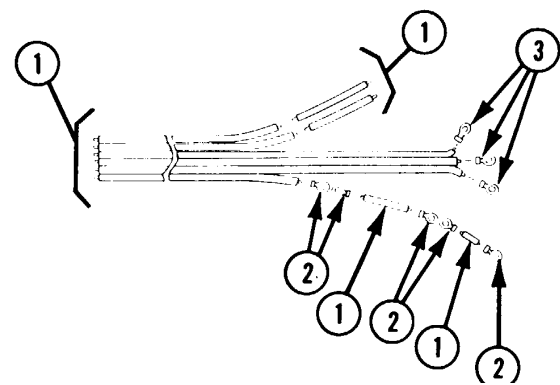


REPAIR

NOTE

Each individual wire section may be repaired if possible, or replaced by a like item. Refer to wire table, page 3-74. For initial installation of harness assembly or replacement of complete harness assembly, refer to reassembly procedure on page 3-46, paragraph 3-10, for electrical installation.

- 1 TEN WIRE SECTIONS (1). Repair by fabrication (fig. 3, app E).
- 2 FIVE LUG TERMINALS (2) AND THREE LUG TERMINALS (3). Repair by replacement (app C).



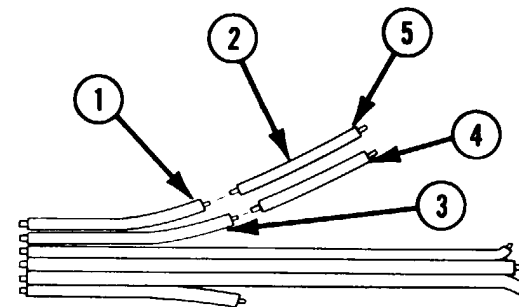
3-27. WIRING HARNESS ASSEMBLY (CEILING)--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY

NOTE

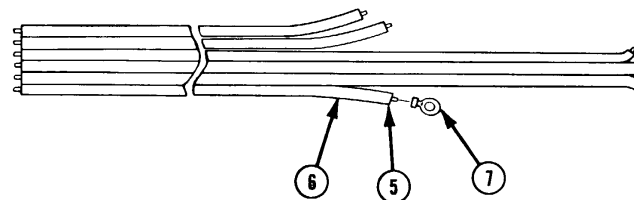
The following five procedures are performed only if any or all wire sections are being replaced.

- 1 BLACK WIRE SECTION NO. 9 (1),
 BLACK WIRE SECTION NO. 9 (2),
 WHITE WIRE SECTION NO. 10 (3), AND
 WHITE WIRE SECTION NO. 10 (4).
 Strip insulation (5) back 0.50 in. (1.27 cm)
 from both ends.



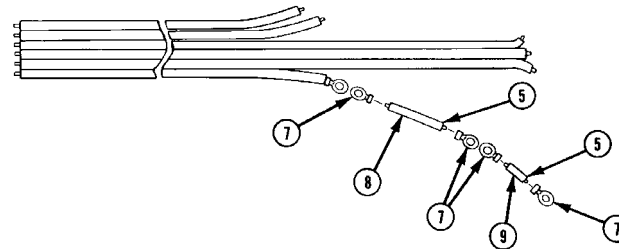
- 2 GREEN WIRE SECTION NO. 11 (6).

- a. Strip insulation (5) back 0.50 in. (1.27 cm) from both ends.
- b. Install lug terminal (7) by crimping at one end.



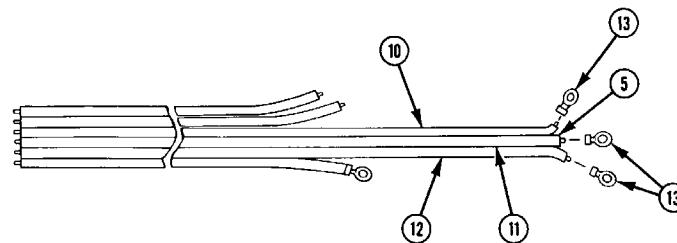
3 GREEN WIRE SECTION NO. 11 (8) AND GREEN WIRE SECTION NO. 11 (9).

- a. Strip insulation (5) back 0.50 in. (1.27 cm) from both ends.
- b. Install four lug terminals (7) by crimping two lug terminals (7) to each wire.



4 BLUE WIRE SECTION NO. 4 (10), BLUE WIRE SECTION NO. 5 (11), AND BLUE WIRE SECTION NO. 6 (12).

- a. Strip insulation (5) back 0.50 in. (1.27 cm) from both ends.
- b. Install three lug terminals (13) by crimping one lug terminal (13) to each wire.



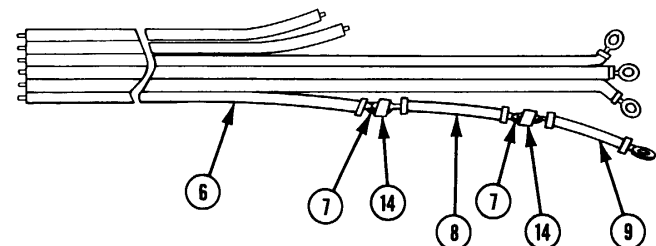
3-27. WIRING HARNESS ASSEMBLY (CEILING)--MAINTENANCE INSTRUCTIONS (cant) I

REASSEMBLY (cont)

5 TAG NUMBER. If not present, add to respective wire section. Refer to wire table, page 3-74.

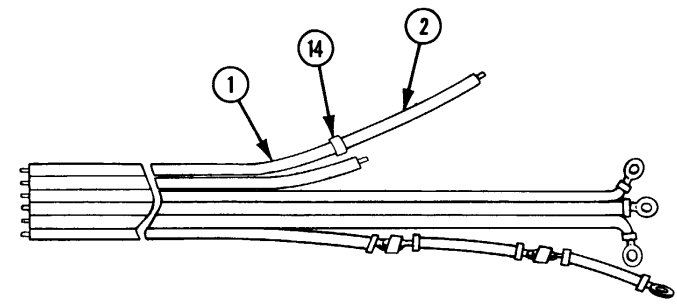
6 GREEN WIRE SECTION NO. 11 (6) FROM PL1 TO J20, GREEN WIRE SECTION NO. 11 (8) FROM J20 TO J21, AND GREEN WIRE SECTION NO. 11 (9) FROM J21 TO S9.

- a. Place end to end.
- b. Secure the two places where lug terminals (7) overlap with tape (14) (item 19, app D).



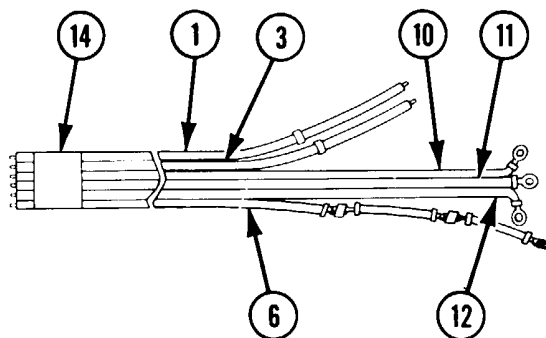
7 BLACK WIRE SECTION NO. 9 (1) FROM PL1 TO J20 AND BLACK WIRE SECTION NG. 9 (2) FROM J20 TO J21.

- a. Place end to end.
- b. Secure place where bare wires overlap with tape (14) (item 19, app D).



- 8 WHITE WIRE SECTION NO. 10 (3) FROM PL1 TO J20, AND WHITE WIRE SECTION NO. 10 (4) FROM J20 TO J21.
- a. Place end to end.
 - b. Secure place where bare wires overlap with tape (14) (item 19, app D).

- 9 BLUE WIRE SECTION NO. 4 (10), BLUE WIRE SECTION NO. 5 (11), BLUE WIRE SECTION NO. 6 (12), WHITE WIRE SECTION NO. 10 (3), BLACK WIRE SECTION NO. 9 (1), AND GREEN WIRE SECTION NO. 11 (6). Secure bare wire ends (tagged PL1) evenly together for installation with tape (14) (item 19, app D).



INSTALLATION

For installation procedures refer to reassembly procedure on page 3-46, paragraph 3-10, for electrical installation.

3-28. WIRE ASSEMBLY (CEILING OUTLETS)--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- | | |
|----------------|-----------------|
| a. Removal | d. Repair |
| b. Inspection | e. Reassembly |
| c. Disassembly | f. Installation |

INITIAL SETUP

Special Tools

- Basic aircraft armament repairman tool set (SC 4933-95-CL-A13)
- Fire control repair shop set (SC 4931-95-CL-A21)
- Supplemental aircraft armament repairman tool set (SC 4933-95-CL-A14)

Material s/Parts

- Abrasive cloth (item 4, app D)
- Lug terminal (MS25036-156)

References

- Appendix D
- Appendix E
- 3-46 Disassembly and reassembly procedures for shop set--electrical installation--main-tenance instructions.

WARNING

The shop set contains voltages which are dangerous if contacted. Before performing any maintenance on the wiring assembly, be sure the circuit breaker on power distribution panel connected to power source is in OFF position and the 120/-208V cable assembly is disconnected from the shop set.

NOTE

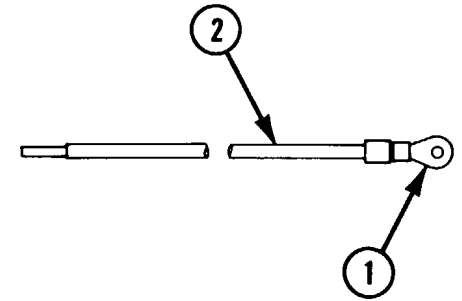
There are two wire assemblies (tagged no. 11A and no. 11B) used in the J20 and J21 conduit boxes to ground the electrical receptacles. Each assembly consists of one 4.00-in. (10.16-cm) green wire with a lug terminal attached to one end. The following procedures are written for a quantity of one wire assembly and must be repeated for the second wire assembly.

REMOVAL

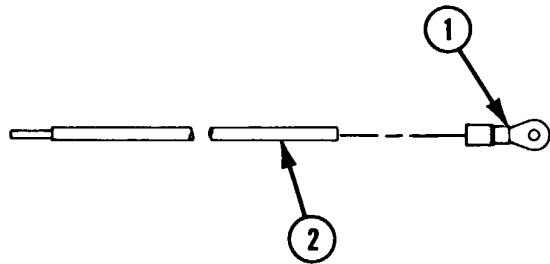
Refer to disassembly procedure on page 3-46, paragraph 3-10, for electrical installation-maintenance instructions.

INSPECTION

- 1 LUG TERMINAL (1). Check for missing, damaged, or corroded parts.
- 2 WIRE (2).
 - a. Check for damaged insulation.
 - b. Check for broken conductors.



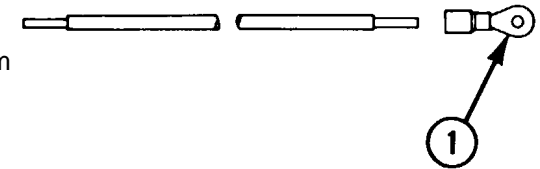
DISASSEMBLY



LUG TERMINAL (1) AND WIRE (2). Separate by cutting only if re-placement of any parts is required.

REPAIR

- 1 LUG TERMINAL (1).
 - a. Remove corrosion with abrasive cloth (item 4, app D)
 - b. Replace with new part if disassembled.

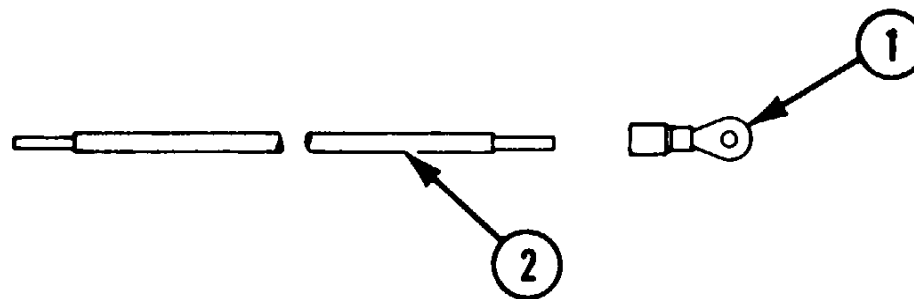


3-28. WIRE ASSEMBLY (CEILING OUTLETS)--MAINTENANCE INSTRUCTIONS (cont)

REPAIR (cont)

2 WIRE (2).

- a. If disassembled but still useable, strip 0.50 in. (1.27 cm) of insulation from the end where lug terminal (1) was removed.
- b. If not repairable, replace with a new fabricated part (fig. 3, app E).

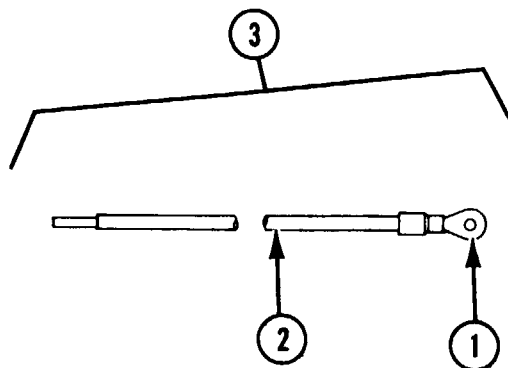


REASSEMBLY

1 LUG TERMINAL (1) AND WIRE (2).

- a. Assemble.
- b. Crimp together.

2 WIRE ASSEMBLY (3) Add tag (no. 11A or no. 11B) if not present.



INSTALLATION

Refer to the reassembly procedure on page 3-46, paragraph 3-10, for electrical installation--maintenance instructions

3-29. WIRING HARNESS ASSEMBLY (SWITCHBOX TO DISTRIBUTION PANEL)--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Removal
- b. Inspection
- c. Disassembly
- d. Repair
- e. Reassembly
- f. Installation

INITIAL SETUP

Test Equipment
Ohmmeter

- 3-239 Reassembly procedure for wire assembly.
- 3-46 Reassembly procedure for electrical installation.

Special Tools

- Basic aircraft armament repairman tool set (SC 4933-95-CL-A13)
- Fire control repair shop set (SC 4931-95-CL-A21)
- Supplemental aircraft armament repairman tool set (SC 4933-95-CL-A14)

WARNING

De-energize shop set by placing circuit breaker on power distribution panel connected to power source in OFF position and disconnect 120/208V cable assembly from shelter.

Materials/Parts

- Tape (item 19, app D)
- Wire (6) (12011690-1)

NOTE

The harness assembly is comprised of six wire assemblies which are tagged no. 1, no. 2, no. 3, no. 4A, no. 6A, and no. 7. Refer to wire table, page 3-74.

References

- Appendix D
- 3-74 Wire table.
- 3-46 Disassembly procedure for electrical installation.



3-29. WIRING HARNESS ASSEMBLY (SWITCHBOX TO DISTRIBUTION PANEL)--MAINTENANCE INSTRUCTIONS (cont)

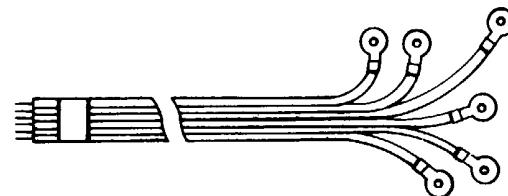
REMOVAL

For removal procedures for the harness assembly, refer to disassembly procedure on page 3-46, paragraph 3-10, for electrical installation.

INSPECTION

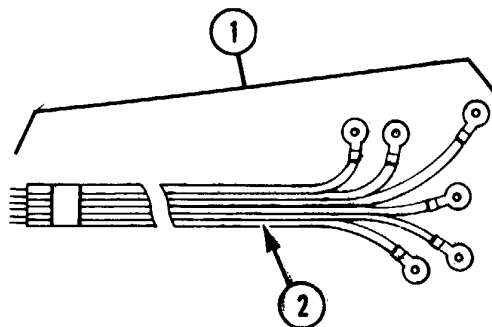
SIX WIRE ASSEMBLIES.

- a. Inspect for breaks, corrosion, and worn or deteriorated parts.
- b. Check continuity with an ohmmeter.



DISASSEMBLY

HARNESS ASSEMBLY (1). Separate six wire assemblies (2).

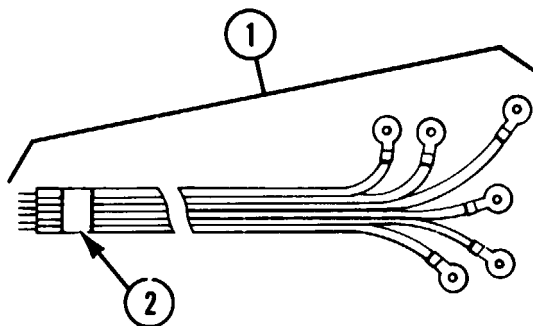


REPAIR

Repair by replacement. Refer to reassembly procedure on page 3-239, paragraph 3-30, for wire assembly. (switchbox to distribution panel).

REASSEMBLY

HARNESS ASSEMBLY (1). Apply tape (2) (item 19, app D) as required to secure stripped wire ends together for installation.



INSTALLATION

For installation procedures, refer to reassembly procedure on page 3-46, paragraph 3-10, for electrical installation.

3-30. WIRE ASSEMBLY--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Removal
- b. Inspection
- c. Disassembly
- d. Repair
- e. Reassembly
- f. Installation

INITIAL SETUP

Special Tools

- Basic aircraft armament repairman tool set (SC 4933-95-CL-A13)
- Fire control repair shop set (SC 4931-95-CL-A21)
- Supplemental aircraft armament repairman tool set (SC 4933-95-CL-A14)

Materials/Parts

- Abrasive cloth (item 4, a p D)
- Lug terminal (MS25036-111)
- Wire (12011690-1)

References

- Appendix D
- Appendix E
- 3-74 Wire table.
- 3-237 Disassembly procedure for wiring harness assembly (switchbox to distribution panel).
- 3-237 Reassembly procedure for wiring harness assembly (switchbox to distribution panel).



3-30. WIRE ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

INITIAL SETUP (cont)

WARNING

De-energize shop set by placing circuit breaker on power distribution panel connected to power source in OFF position and disconnect 120/208V cable assembly from shelter.

NOTE

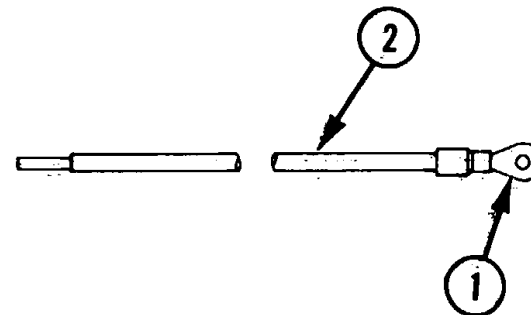
There are six wire assemblies tagged no. 1, no. 2, no. 3, no. 4A, no. 6A, and no. 7 used in connecting the S7/S8 switchbox assembly to the circuit breaker panel box PL1. Each assembly consists of one 30.00-in. (76.20-cm) stranded black wire with a lug terminal at one end. The following procedures are written for only one wire assembly and must be repeated for the other five wire assemblies.

REMOVAL

Refer to disassembly procedures on page 3-237, paragraph 3-29, for wiring harness assembly (switchbox to distribution panel).

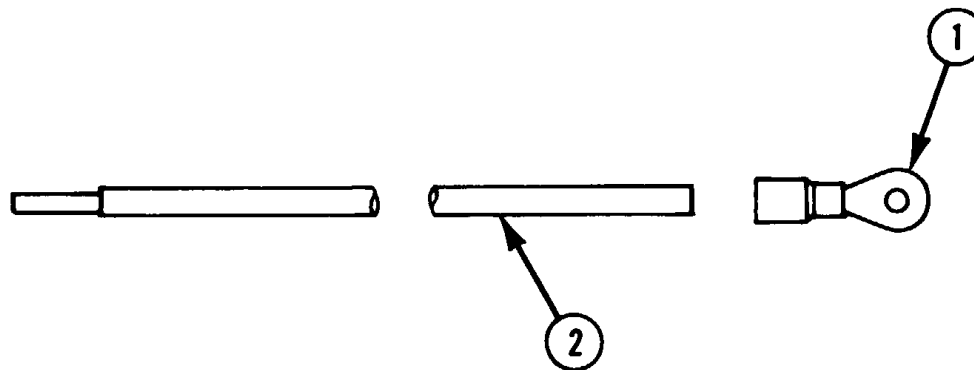
INSPECTION

- 1 LUG TERMINAL (1). Check for missing, damaged, or corroded parts.
- 2 WIRE (2).
 - a. Check for damaged insulation.
 - b. Check for broken conductors.

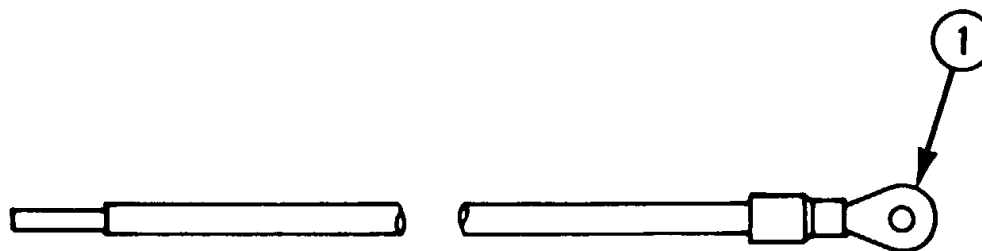


DISASSEMBLY

LUG TERMINAL (1) AND WIRE (2). Separate by cutting only if replacement of any parts is required.

**REPAIR****1 LUG TERMINAL (1).**

- a. Remove corrosion with abrasive cloth (item 4, app D).
- b. Replace with new parts if disassembled.

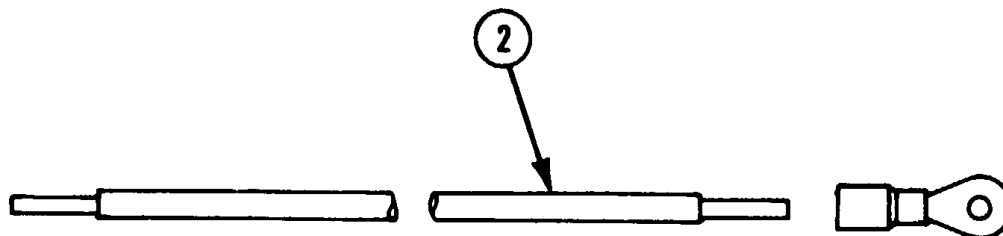


3-30. WIRE ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

REPAIR (cont)

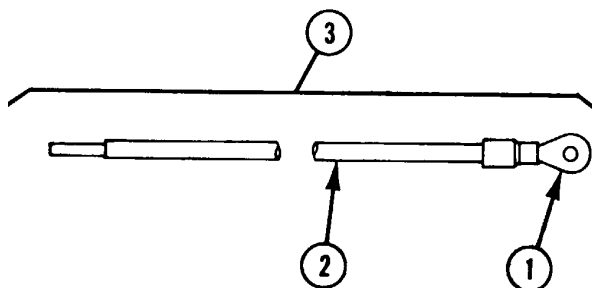
2 WIRE (2).

- a. If disassembled but still useable, strip 0.5 in. (1.27 cm) of insulation from each end.
- b. If not repairable, replace with a new fabricated part (fig. 3, app E).



REASSEMBLY

- 1 LUG TERMINAL (1) AND WIRE (2). Assemble by crimping.
- 2 WIRE ASSEMBLY (3). If the tag number is not present, add appropriate tag number.



INSTALLATION

Refer to the reassembly procedure on page 3-237, paragraph 3-29, for wiring harness assembly (switchbox to distribution panel).

3-31. WIRE ASSEMBLY (SWITCHBOX)--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Removal
- b. Inspection
- c. Disassembly
- d. Repair
- e. Reassembly
- f. Installation

INITIAL SETUP

Special Tools

- Basic aircraft armament repairman tool set (SC 4933-95-CL-A13)
- Fire control repair shop set (SC 4931-95-CL-A21)
- Supplemental aircraft armament repairman tool set (SC 4933-95-CL-A14)

Materials/Parts

- Abrasive cloth (item 4, app D)
- Lug terminal (MS25036-111)

References

- Appendix D
- Appendix E
- 3-46 Disassembly and reassembly procedures for shop set--electrical installation--maintenance instructions.

WARNING

The shop set contains voltages which are dangerous if contacted. Before performing any maintenance on the wiring assembly, ensure the circuit breaker on power distribution panel connected to power source is in OFF position and the 120/208V cable assembly is disconnected from the shop set.

NOTE

There are two wire assemblies (tagged no. 4B and no. 8) used in the S7/S8 switchbox assembly as interconnections between the S7 microswitch and the S8 toggle switch. Each assembly consists of one 4.00-in. (10.16-cm) stranded black wire with a lug terminal at each end. The following procedures pertain to only one wire assembly and must be repeated for the second wire assembly.



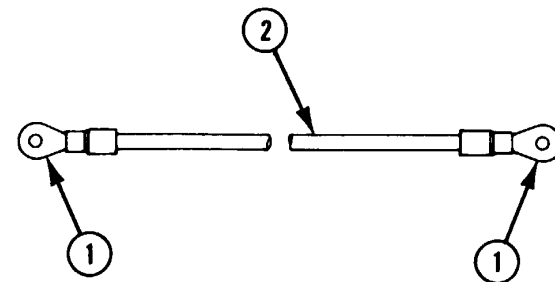
3-31. WIRE ASSEMBLY (SWITCHBOX)--MAINTENANCE INSTRUCTIONS (cont)

REMOVAL

Refer to the disassembly procedure on page 3-46, paragraph 3-10, for electrical installation--maintenance instructions.

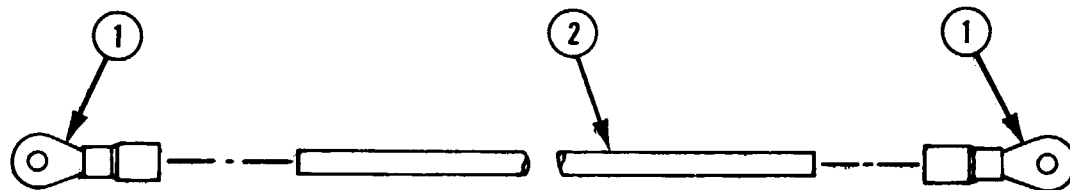
INSPECTION

- 1 TWO LUG TERMINALS (1). Check for missing, damaged, or corroded parts.
- 2 WIRE (2).
 - a. Check for damaged insulation.
 - b. Check for broken conductors.



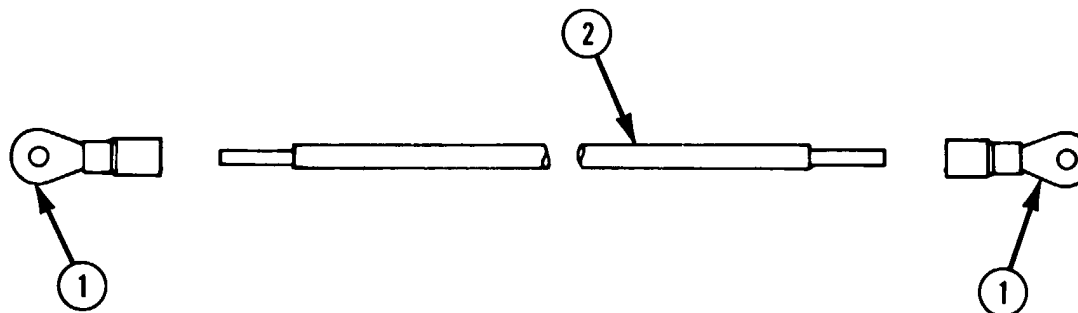
DISASSEMBLY

TWO LUG TERMINALS (1) AND WIRE (2). Separate by cutting only if replacement of any parts is required.



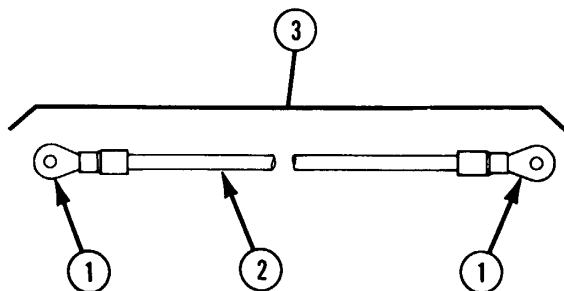
REPAIR

- 1 TWO LUG TERMINALS (1).
 - a. Remove corrosion with abrasive cloth (item 4, app D).
 - b. Replace with new parts if disassembled.
- 2 WIRE (2).
 - a. If disassembled but still useable, strip 0.50 in. (1.27 cm) of insulation from each end.
 - b. If not repairable, replace with new fabricated part (fig. 3, app E).



REASSEMBLY

- 1 TWO LUG TERMINALS (1) AND WIRE (2).
 - a. Assemble.
 - b. Crimp together.
- 2 WIRE ASSEMBLY (3). Add tag (no. 4B or no. 8) if not already present.



INSTALLATION

Refer to the reassembly procedure on page 3-46, paragraph 3-10, for electrical installation--maintenance instructions.



3-32. SHELVING ASSEMBLY--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Inspection
- b. Service
- c. Removal
- d. Disassembly
- e. Repair
- f. Reassembly
- g. Installation

INITIAL SETUP

Special Tools

- AVIM sheet metal shop set (SC 4920-99-CL-A91, part VI)
- AVIM welding shop set (SC 4920-99-CL-A91, part IX)
- Basic aircraft armament repairman tool set (SC 4933-95-CL-A13).
- Fire control repair shop set (SC 4931-95-CL-A21)

Material s/Parts

- Cloth (item 5, app D)
- White paint (item 11, app D)

References

- Appendix D
- Appendix E

Personnel Required: 2

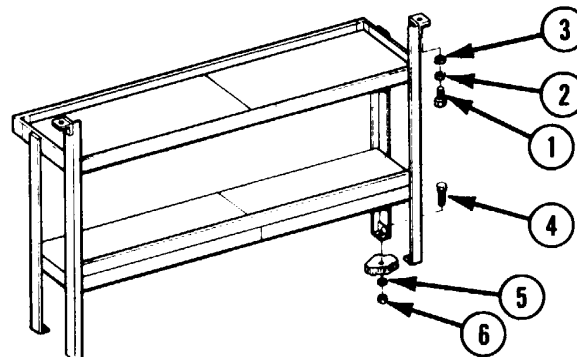
- Aircraft fire control repairmen To remove/install the shelving assembly.

Equipment Conditions

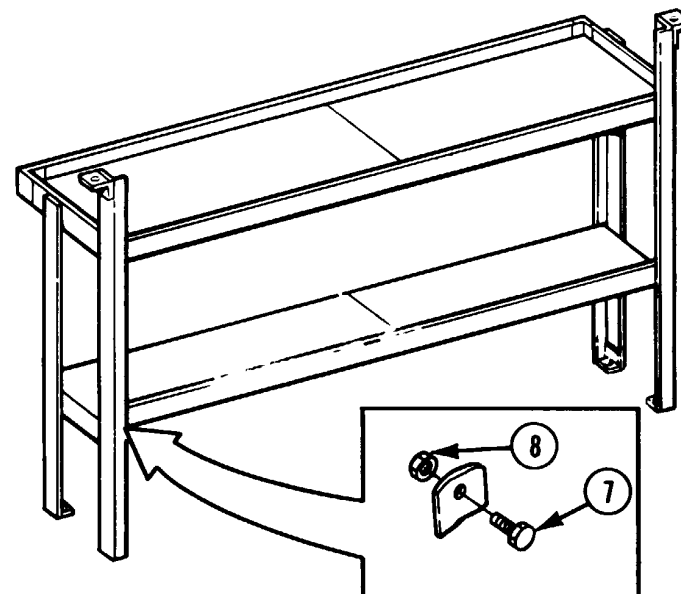
- 3-115 Conduit installation already removed.
- 3-46 Electrical installation already removed.

INSPECTION

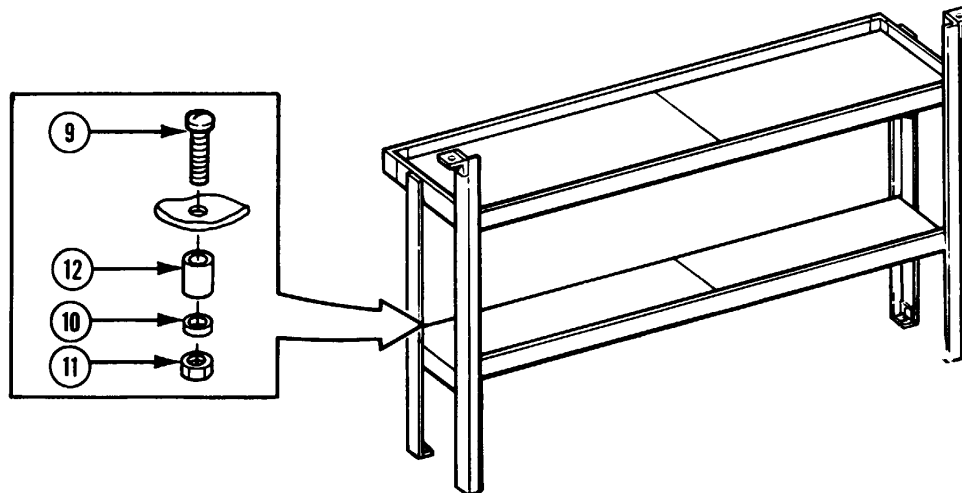
- 1 TWO SCREWS (1), TWO LOCKWASHERS (2), AND TWO FLAT WASHERS (3). Check for missing, damaged, or corroded parts.
- 2 FOUR SCREWS (4), FOUR LOCKWASHERS (5), AND FOUR NUTS (6). Check for missing, damaged, or corroded parts.



- 3 THIRTY-EIGHT BOLTS (7) AND THIRTY-EIGHT NUTS (8). Check for missing, damaged, or corroded parts.



- 4 TWENTY-FOUR SCREWS (9), TWENTY-FOUR LOCKWASHERS (10), AND TWENTY-FOUR NUTS (11). Check for missing, damaged, or corroded parts.
- 5 TWENTY-FOUR SPACERS (12). Check for missing or damaged parts.



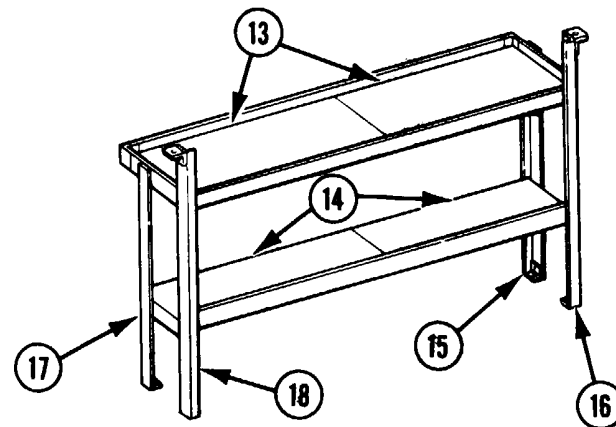
3-32. SHELVING ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont).

INSPECTION (cont)

6 TWO SHELVINGS (13) AND TWO SHELVINGS (14).

- a. Inspect for bent or dented parts.
- b. Inspect to ensure finish is not damaged.

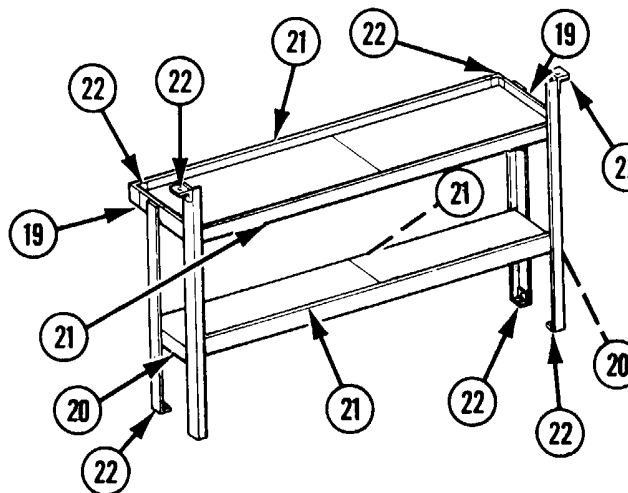
7 LEFT-HAND ANGLE (15), LEFT-HAND ANGLE (16), RIGHT-HAND ANGLE (17), AND RIGHT-HAND ANGLE (18). Check for bent or broken parts.



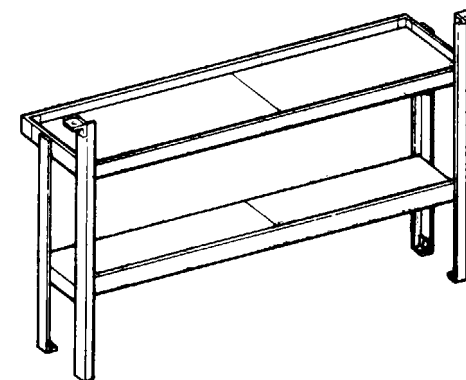
8 TWO ANGLES (19) AND TWO ANGLES (20). Check for bent or broken parts.

9 FOUR ANGLES (21). Check for bent or broken parts.

10 EIGHT ANGLES (22). Check for bent or broken parts.



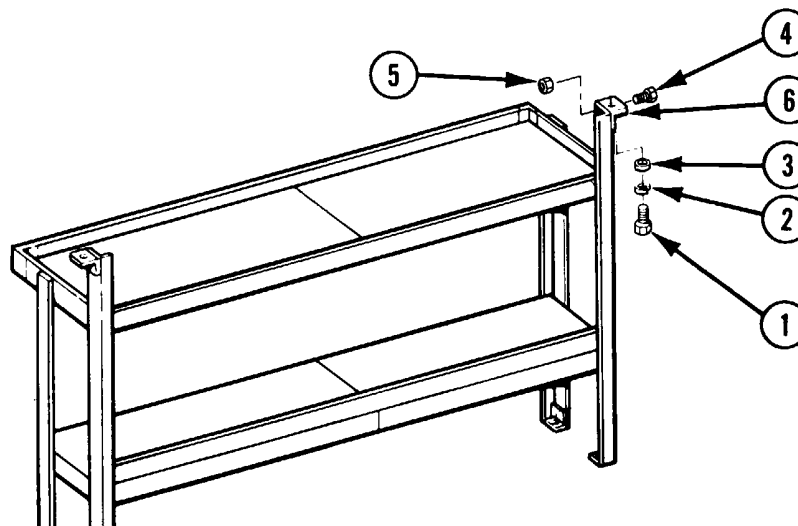
SERVICE



SHELVING ASSEMBLY. Wipe off dirt or dust using cloth (item 5, app D).

REMOVAL

- 1 TWO SCREWS (1), TWO LOCKWASHERS (2), AND TWO FLAT WASHERS (3). Remove and separate.
- 2 FOUR BOLTS (4) AND FOUR NUTS (5). Loosen.
- 3 TWO ANGLES (6). Push downward.

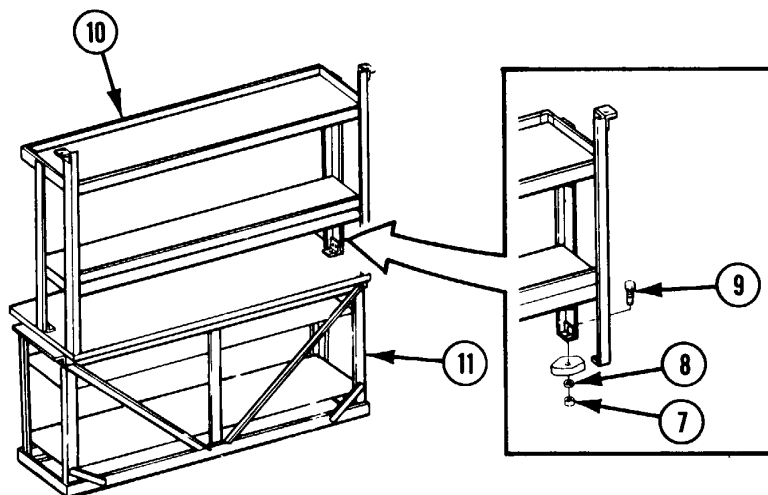


- 4 FOUR NUTS (7) AND FOUR LOCKWASHERS (8). Remove.
- 5 FOUR SCREWS (9). Remove.

CAUTION

Two personnel are required to remove shelving assembly from right table.

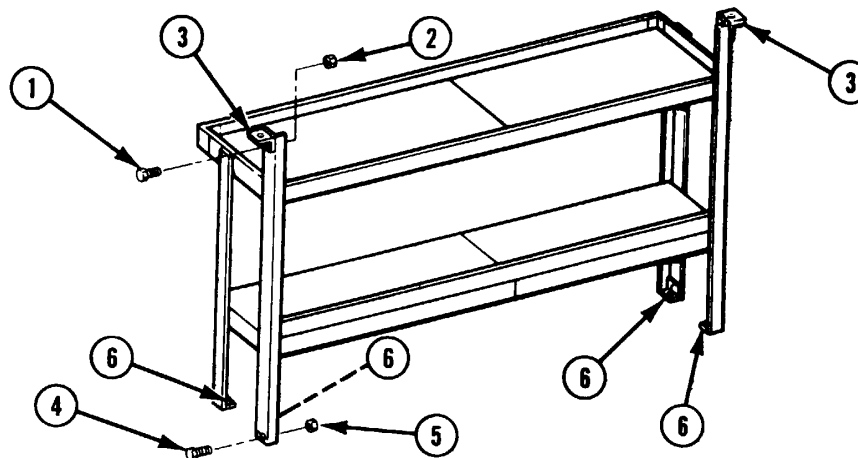
- 6 SHELVING ASSEMBLY (10). Remove from right table (11).



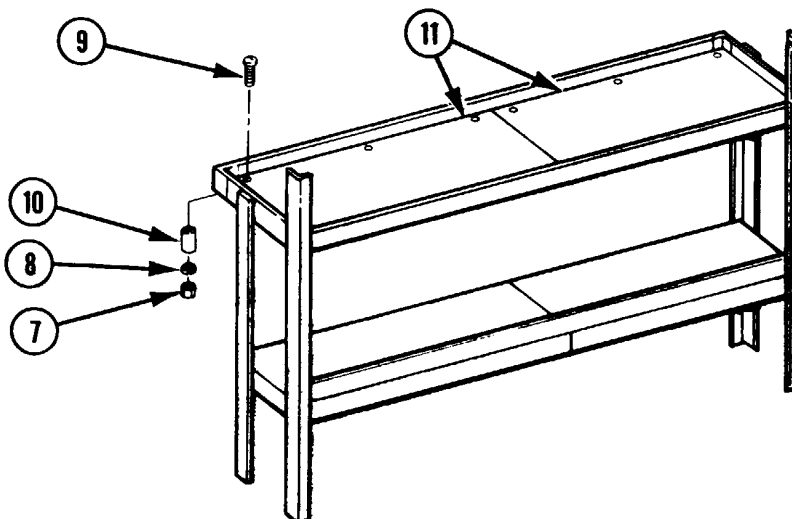
3-32. SHELVING ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

DISASSEMBLY

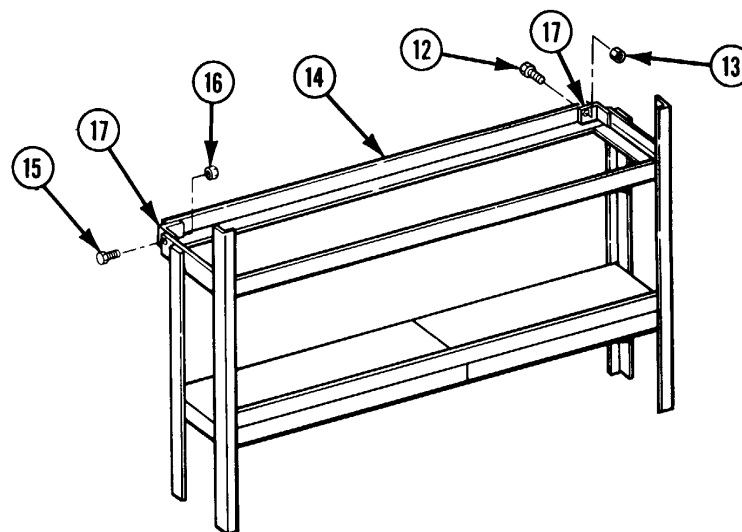
- 1 FOUR BOLTS (1) AND FOUR NUTS (2). Remove.
- 2 TWO ANGLES (3). Remove.
- 3 EIGHT BOLTS (4) AND EIGHT NUTS (5). Remove.
- 4 FOUR ANGLES (6). Remove.



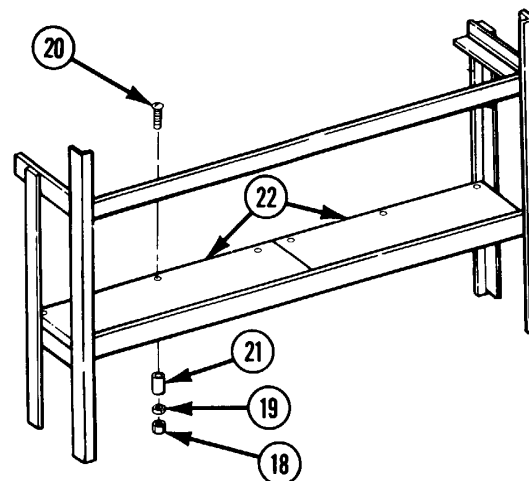
- 5 TWELVE NUTS (7) AND TWELVE LOCKWASHERS (8). Remove.
- 6 TWELVE SCREWS (9). Remove.
- 7 TWELVE SPACERS (10). Remove.
- 8 TWO SHELVINGS (11). Remove.



- 9 TWO BOLTS (12) AND TWO NUTS (13).
Remove.
- 10 ANGLE (14). Remove.
- 11 TWO BOLTS (15) AND TWO NUTS (16).
Remove.
- 12 TWO ANGLES (17). Remove.



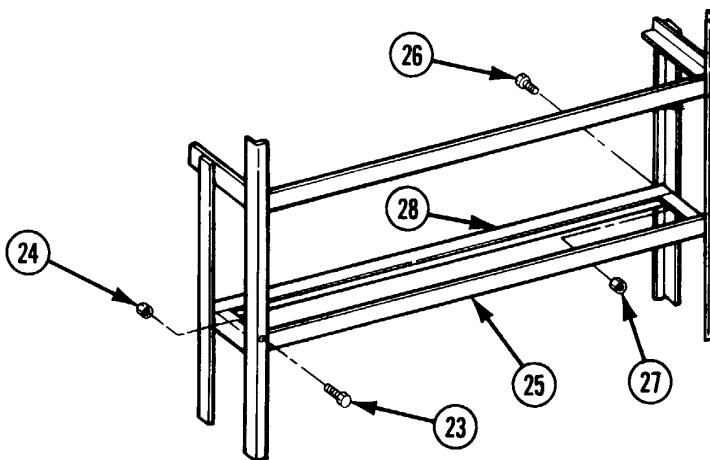
- 13 TWELVE NUTS (18) AND TWELVE
LOCKWASHERS (19). Remove.
- 14 TWELVE SCREWS (20). Remove.
- 15 TWELVE SPACERS (21). Remove.
- 16 TWO SHELVINGS (22). Remove.



3-32. SHELVING ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

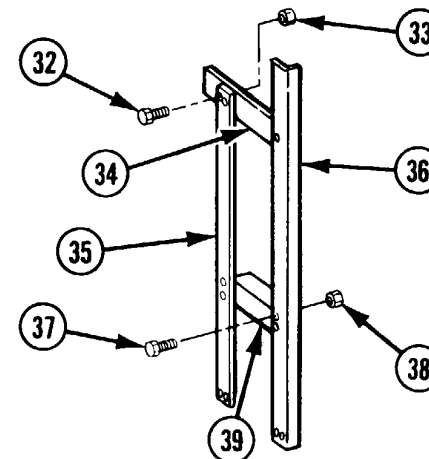
DISASSEMBLY (cont)

- 17 TWO BOLTS (23) AND TWO NUTS (24). Remove.
- 18 ANGLE (25). Remove.
- 19 FOUR BOLTS (26) AND FOUR NUTS (27). Remove.
- 20 ANGLE (28). Remove.

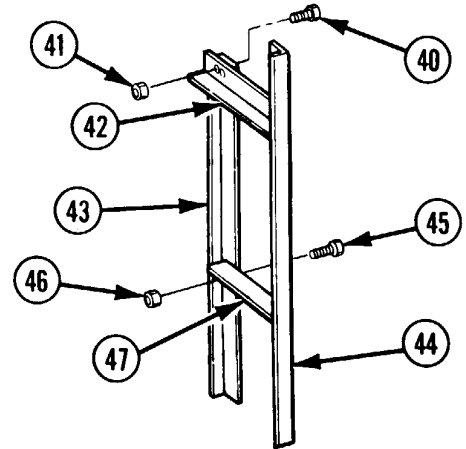


- 21 TWO BOLTS (29) AND TWO NUTS (30). Remove.
- 22 ANGLE (31). Remove.

- 23 THREE BOLTS (32) AND THREE NUTS (33). Remove.
- 24 ANGLE (34). Separate from righthand angle (35) and right-hand angle (36).
- 25 FOUR BOLTS (37) AND FOUR NUTS (38). Remove.
- 26 ANGLE (39). Separate from righthand angle (35) and right-hand angle (36).

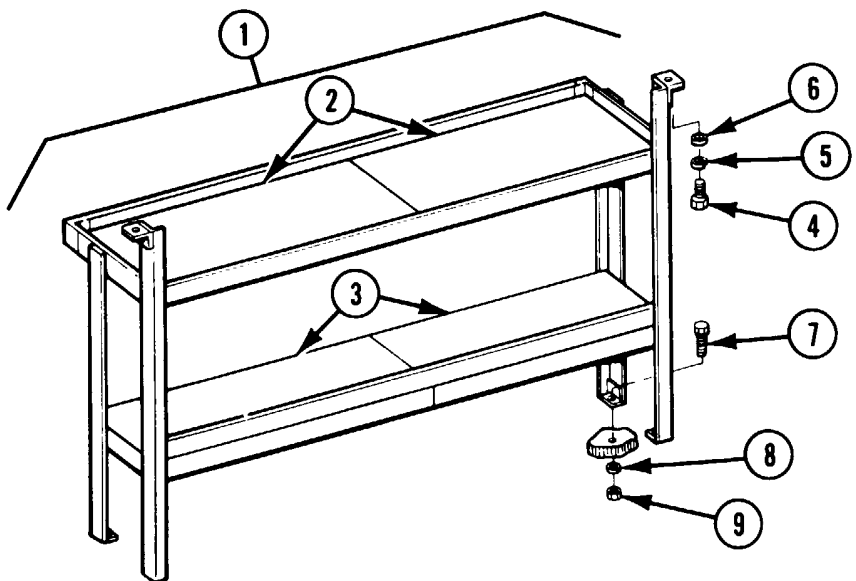


- 27 THREE BOLTS (40) AND THREE NUTS (41). Remove.
- 28 ANGLE (42). Separate from left-hand angle (43) and left-hand angle (44).
- 29 FOUR BOLTS (45) AND FOUR NUTS (46). Remove.
- 30 ANGLE (47). Separate from left-hand angle (43) and left-hand angle (44).



REPAIR

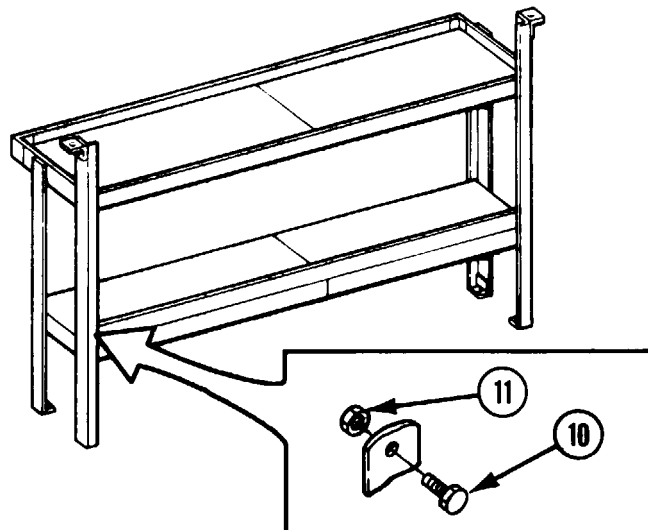
- 1 SHELVING ASSEMBLY (1).
 - a. Replace if missing or not repairable.
 - b. Replace if two shelvings (2) or two shelvings (3) are not repairable.
- 2 TWO SCREWS (4), TWO LOCKWASHERS (5), AND TWO FLAT WASHERS (6). Replace if missing, damaged, or corroded.
- 3 FOUR SCREWS (7), FOUR LOCKWASHERS (8), AND FOUR NUTS (9). Replace if missing, damaged, or corroded.



3-32. SHELVING ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

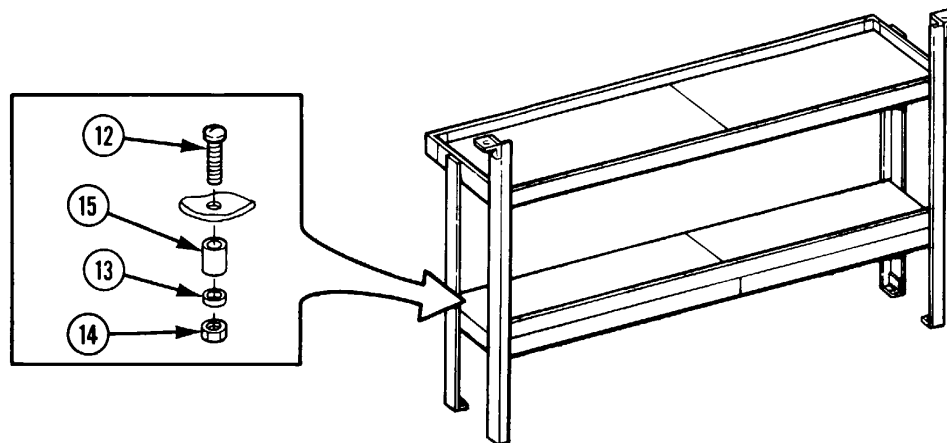
REPAIR (cont)

- 4 THIRTY-EIGHT BOLTS (10) AND THIRTY-EIGHT NUTS (11). Replace if missing, damaged, or corroded.



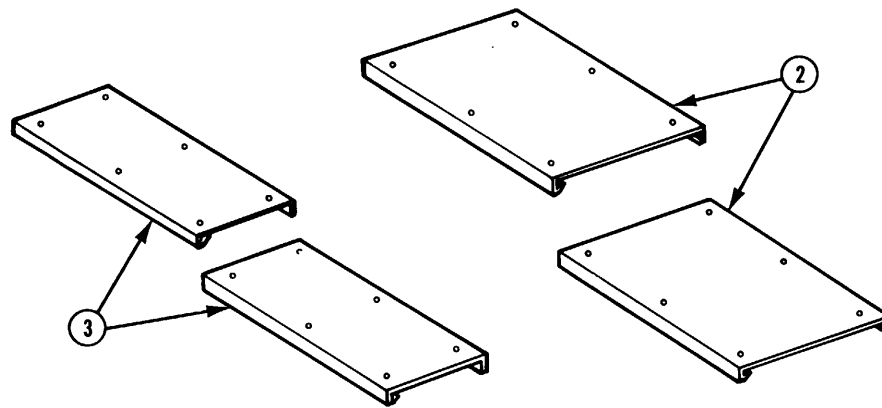
- 5 TWENTY-FOUR SCREWS (12), TWENTY-FOUR LOCKWASHERS (13), AND TWENTY-FOUR NUTS (14). Replace if missing, damaged, or corroded.

- 6 TWENTY-FOUR SPACERS (15). If damaged, replace with new fabricated parts (fig. 21, app E).



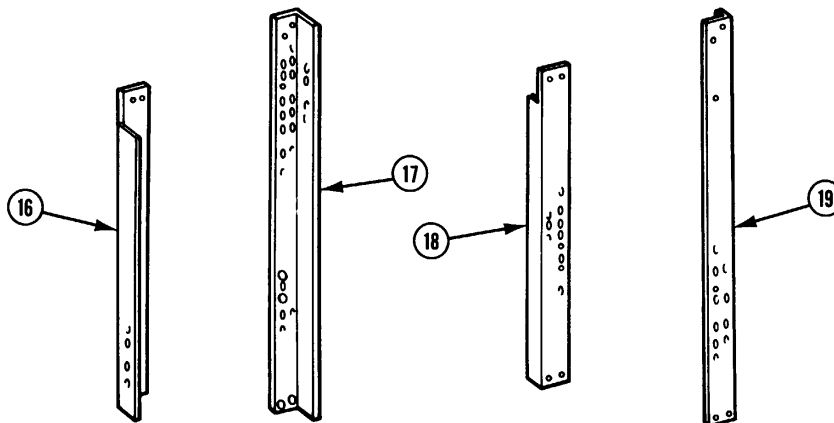
7 TWO SHELVINGS (2) AND TWO SHELVINGS (3) .

- a. Straighten bent or dented parts.
- b. Refinish if necessary using white paint (item 11, app D).
- c. If not repairable, replace the entire shelving assembly.



8 LEFT-HAND ANGLE (16), LEFT-HAND ANGLE (17), RIGHT-HAND ANGLE (18), AND RIGHT-HAND ANGLE (19).

- a. Straighten if bent.
- b. Repair cracks by welding.
- c. If not repairable, replace with a new fabricated part (fig. 22 and 23, app E).

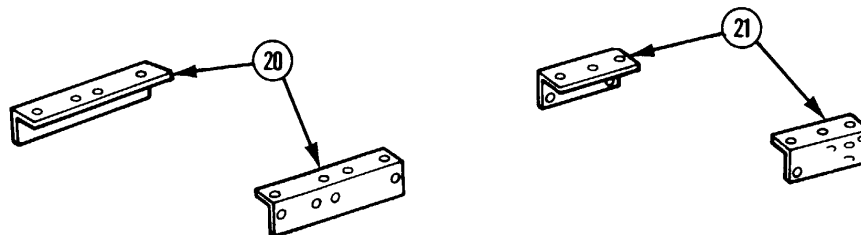


3-32. SHELVING ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

REPAIR (cont)

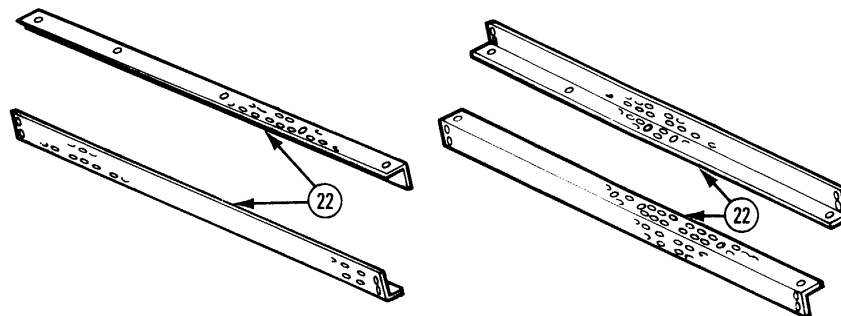
9 TWO ANGLES (20) AND TWO ANGLES (21).

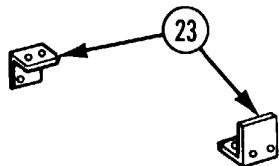
- a. Straighten if bent.
- b. Repair cracks by welding.
- c. If not repairable, replace with a new fabricated part (fig. 24, app E).



10 FOUR ANGLES (22)

- a. Straighten if bent.
- b. Repair cracks by welding.
- c. If not repairable, replace with a new fabricated part (fig. 24, app E).





11 EIGHT ANGLES (23).

- a. Straighten if bent.
- b. Repair cracks by welding.
- c. If not repairable, replace with a new fabricated part (fig. 24, app E).

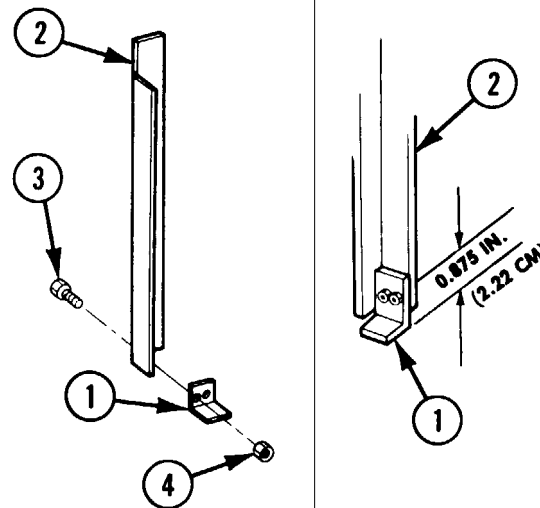
REASSEMBLY

1 ANGLE (1). Position long leg against long leg of front lefthand angle (2) as illustrated.

NOTE

When bolted together, the bottom of angle (5) should extend below the bottom of rear left-hand angle (6) as illustrated.

2 TWO BOLTS (3) AND TWO NUTS (4). Install so that center line of two bolts (3) is approximately 0.875 in. (2.22 cm) from bottom of angle (1).

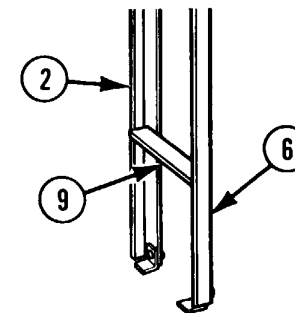
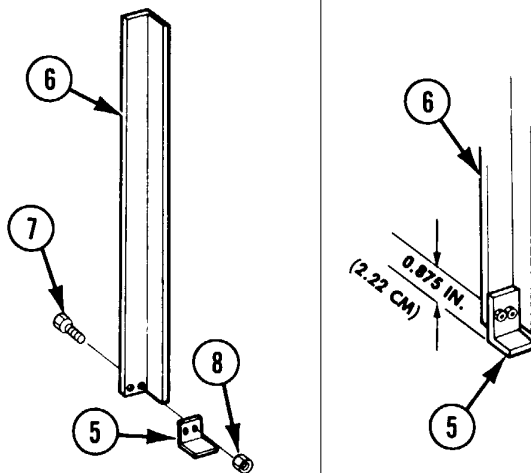


3 ANGLE (5). Position long leg against long leg of rear left-hand angle (6) as illustrated.

NOTE

When bolted together, the bottom of angle (1) should extend below the bottom of front left-hand angle (2) as illustrated.

4 TWO BOLTS (7) AND TWO NUTS (8). Install so that center line of two bolts (7) is approximately 0.875 in. (2.22 cm) from bottom of angle (5) as illustrated.



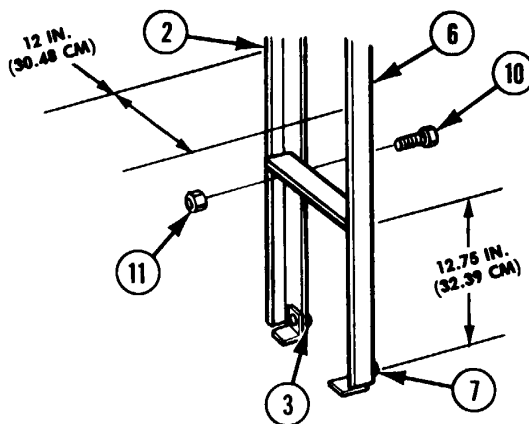
5 ANGLE (9). Position long leg against long legs of front left-hand angle (2) and rear left-hand angle (6) as illustrated.

3-32. SHELVING ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

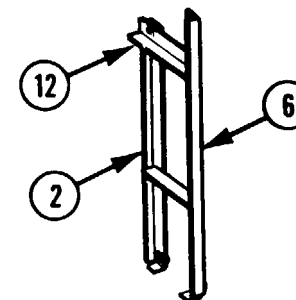
REASSEMBLY (cont)

NOTE

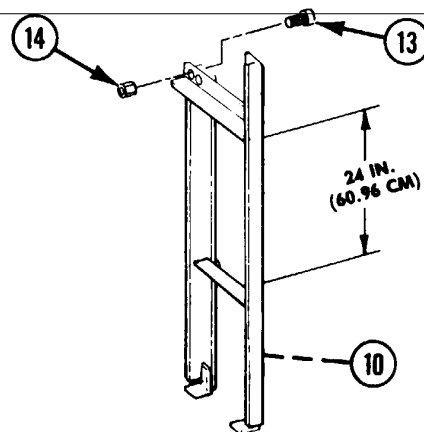
When bolted together there should be approximately 12.00 in. (30.48 cm) between the short legs of front left-hand angle (2) and rear left-hand angle (6).



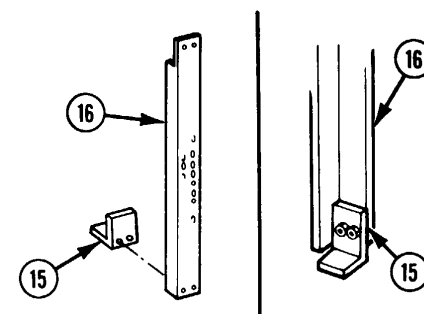
- 6 FOUR BOLTS (10) AND FOUR NUTS (11). Install so that center line of bottom two bolts (10) is approximately 12.75 in. (32.39 cm) from center line of two bolts (3) and two bolts (7) as illustrated.



- 7 ANGLE (12). Position long leg on long legs of front left-hand angle (2) and rear left-hand angle (6) as illustrated.



- 8 THREE BOLTS (13) AND THREE NUTS (14). Install so that center line of three bolts (13) is approximately 24.00 in. (60.96 cm) from center line of bottom two bolts (10) as illustrated.

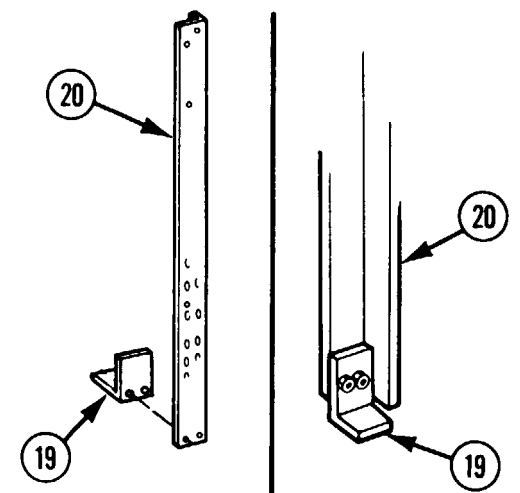
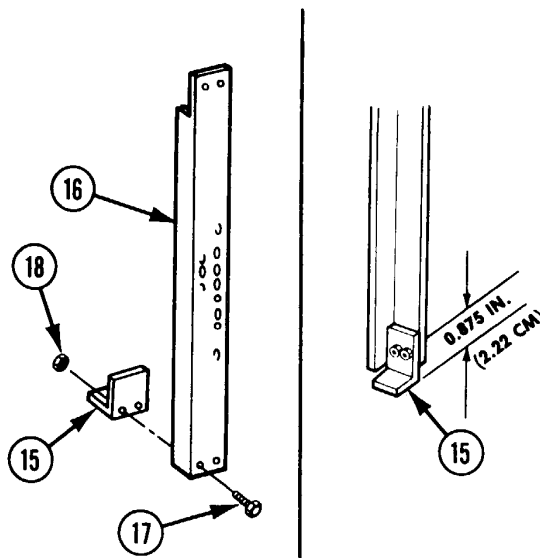


- 9 ANGLE (15). Position long leg against long leg of front right-hand angle (16) as illustrated.

NOTE

When bolted together, the bottom of angle (15) should extend below the bottom of front right-hand angle (16) as illustrated.

- 10 TWO BOLTS (17) AND TWO NUTS (18). Install so that center line of two bolts (17) is approximately 0.875 in. (2.22 cm) from bottom of angle (15) as illustrated.

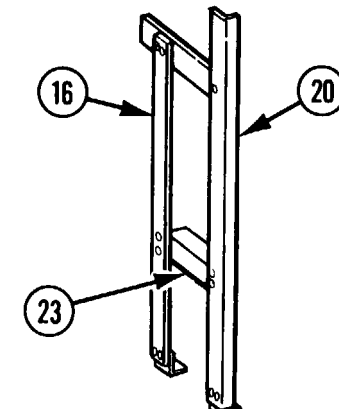
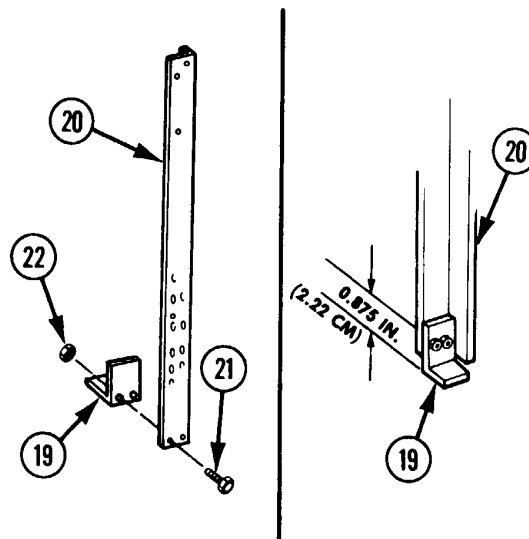


- 11 ANGLE (19). Position long leg against long leg of rear right-hand angle (20) as illustrated.

NOTE

When bolted together, the bottom of angle (19) should extend below the bottom of rear right-hand angle (20) as illustrated.

- 12 TWO BOLTS (21) AND TWO NUTS (22). Install so that center line of two bolts (21) is approximately 0.875 in. (2.22 cm) from bottom of angle (19) as illustrated.



- 13 ANGLE (23). Position long leg on long legs of front right-hand angle (16) and rear right-hand angle (20) as illustrated.

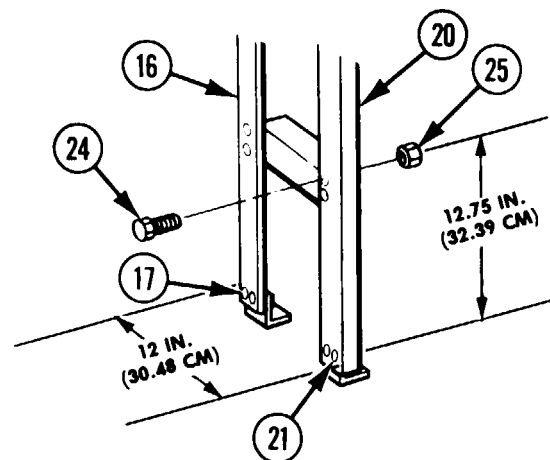
3-32. SHELVING ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY (cont)

NOTE

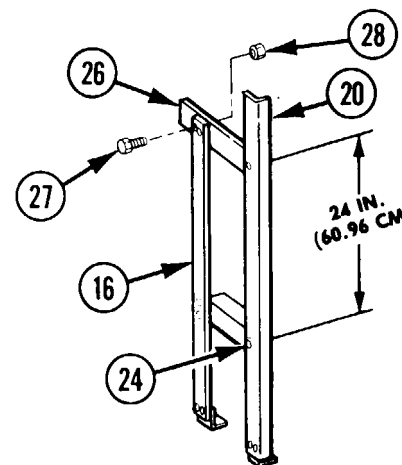
When bolted together there should be approximately 12.00 in. (30.48 cm) between the short legs of front right-hand angle (16) and rear right-hand angle (20).

- 14 FOUR BOLTS (24) AND FOUR NUTS (25). Install so that center line of bottom two bolts (24) is approximately 12.75 in. (32.39 cm) from center line of two bolts (17) and two bolts (21) as illustrated.



- 15 ANGLE (26). Position long leg on long legs of front right-hand angle (16) and rear right-hand angle (20) as illustrated.

- 16 THREE BOLTS (27) AND THREE NUTS (28). Install so that center line of three bolts (27) is approximately 24.00 in. (60.96 cm) from center line of bottom two bolts (24) as illustrated.

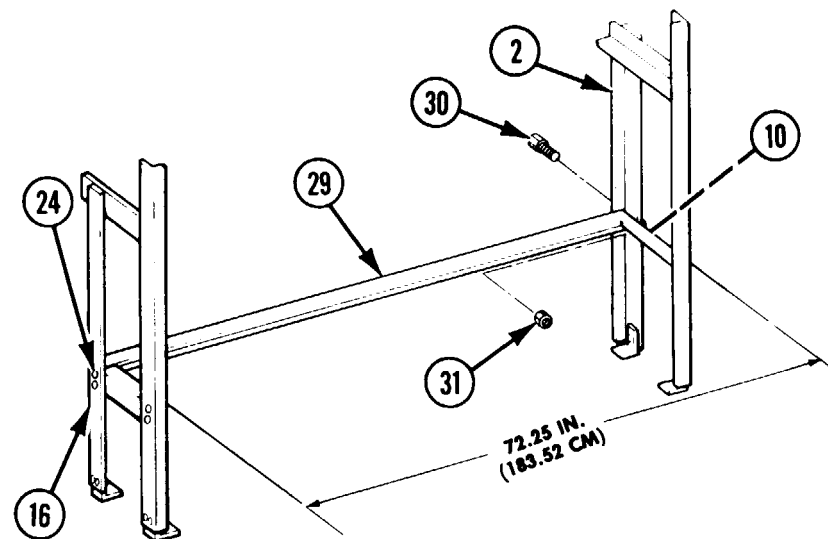


- 17 ANGLE (29). Position long leg against short legs of front left-hand angle (2) and front right-hand angle (16) as illustrated.

NOTE

When bolted together there should be approximately 72.25 in. (183.52 cm) between the long legs of front left-hand angle (2) and front right-hand angle (16).

- 18 FOUR BOLTS (30) AND FOUR NUTS (31). Install so that center line of bottom two bolts (30) is aligned with center line of bottom two bolts (10) and bottom two bolts (24) as illustrated.

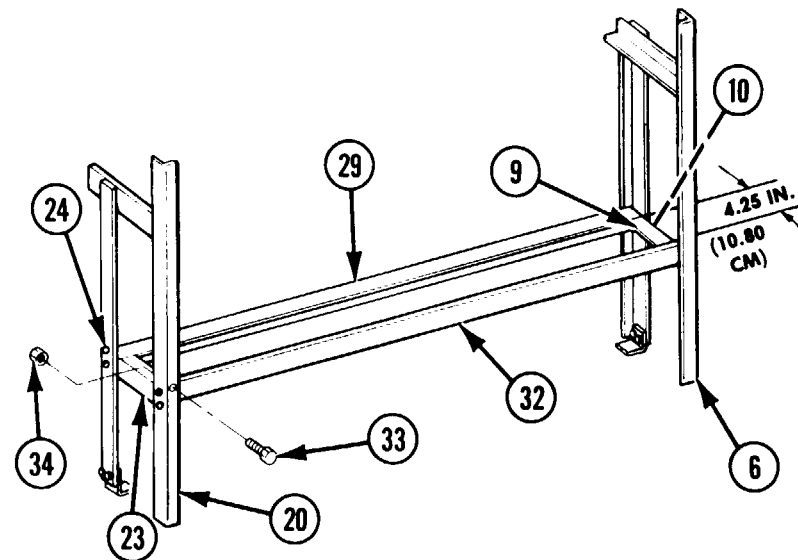


- 19 ANGLE (32). Position long leg against short legs of rear lefthand angle (6) and rear right-hand angle (20) as illustrated.

NOTE

When parts are bolted together, the short legs of angles (9, 23, 29, and 32) should be in one plane.

- 20 TWO BOLTS (33) AND TWO NUTS (34). Install so that center line of two bolts (33) is approximately 4.25 in. (10.80 cm) above center line of bottom two bolts (10) and bottom two bolts (24) as illustrated.



3-32. SHELVING ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

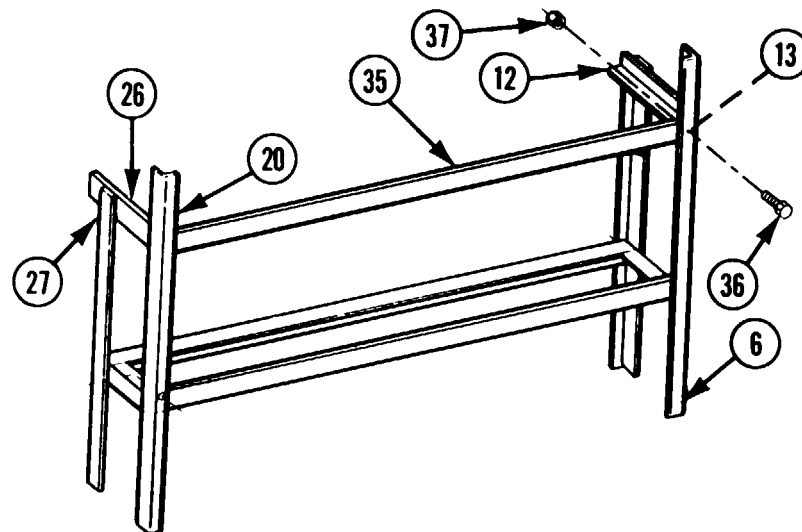
REASSEMBLY (cont)

- 21 ANGLE (35). Position with long leg against short legs of rear left-hand angle (6) and rear right-hand angle (20) as illustrated.

NOTE

When parts are bolted together, the short legs of angles (12, 26, and 35) should be in one plane.

- 22 TWO BOLTS (36) AND TWO NUTS (37). Install so that center line of two bolts (36) is aligned with center line of three bolts (13) and three bolts (27) as illustrated.



- 23 ANGLE (38). Position long leg against long leg of angle (12) as illustrated.

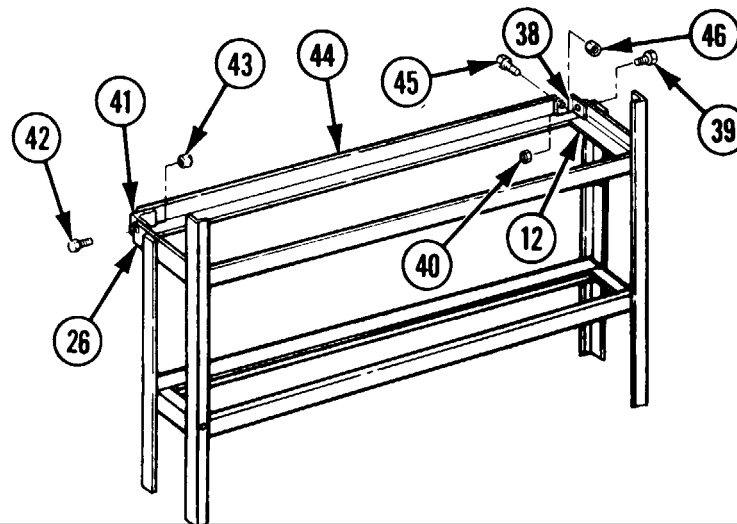
- 24 BOLT (39) AND NUT (40). Install.

- 25 ANGLE (41). Position long leg against long leg of angle (26) as illustrated.

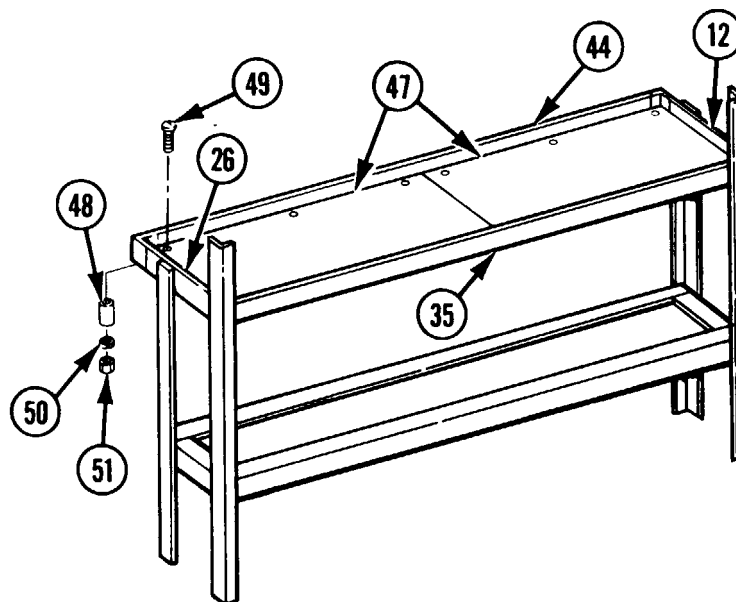
- 26 BOLT (42) AND NUT (43). Install.

- 27 ANGLE (44). Position long leg against short legs of angle (38) and angle (41) as illustrated.

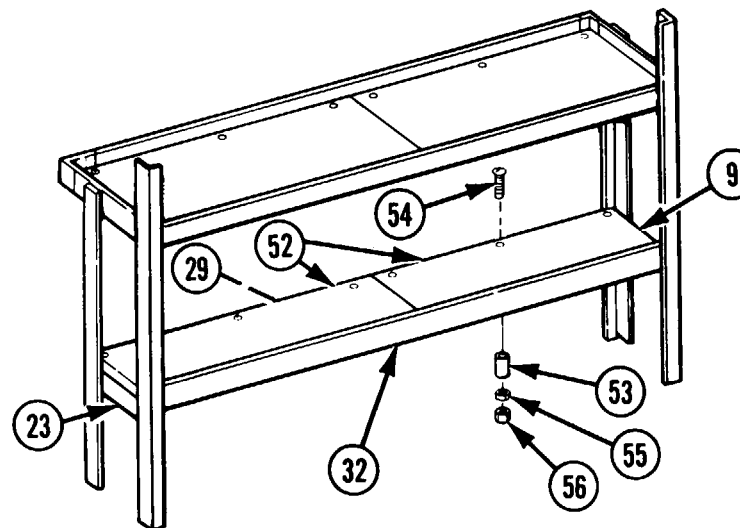
- 28 TWO BOLTS (45) AND TWO NUTS (46). Install.



- 29 TWO SHELVINGS (47). Place in position on angles (12, 26, 35, and 44).
- 30 TWELVE SPACERS (48). Install into two shelvings (47).
- 31 TWELVE SCREWS (49). Install.
- 32 TWELVE LOCKWASHERS (50) AND TWELVE NUTS (51). Install.



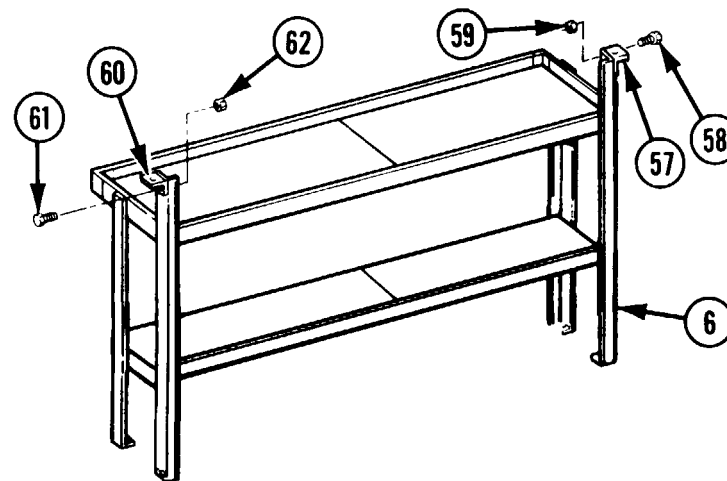
- 33 TWO SHELVINGS (52). Place in position on angles (9, 23, 29, and 32).
- 34 TWELVE SPACERS (53). Install into two shelvings (52).
- 35 TWELVE SCREWS (54). Install.
- 36 TWELVE LOCKWASHERS (55) AND TWELVE NUTS (56). Install.



3-32. SHELVING ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY (cont)

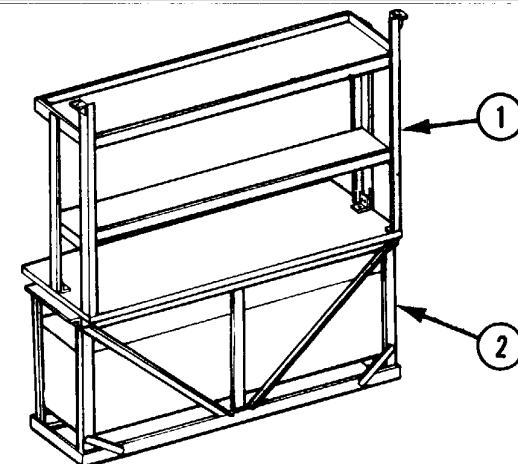
- 37 ANGLE (57). Position long leg against long leg of rear lefthand angle (6) as illustrated.
- 38 TWO BOLTS (58) AND TWO NUTS (59). Install as illustrated but do not tighten.
- 39 ANGLE (60). Position long leg against long leg of rear righthand angle (20) as illustrated.
- 40 TWO BOLTS (61) AND TWO NUTS (62). Install as illustrated but do not tighten.



INSTALLATION

CAUTION
 Two personnel are required to lift shelving assembly onto right table.

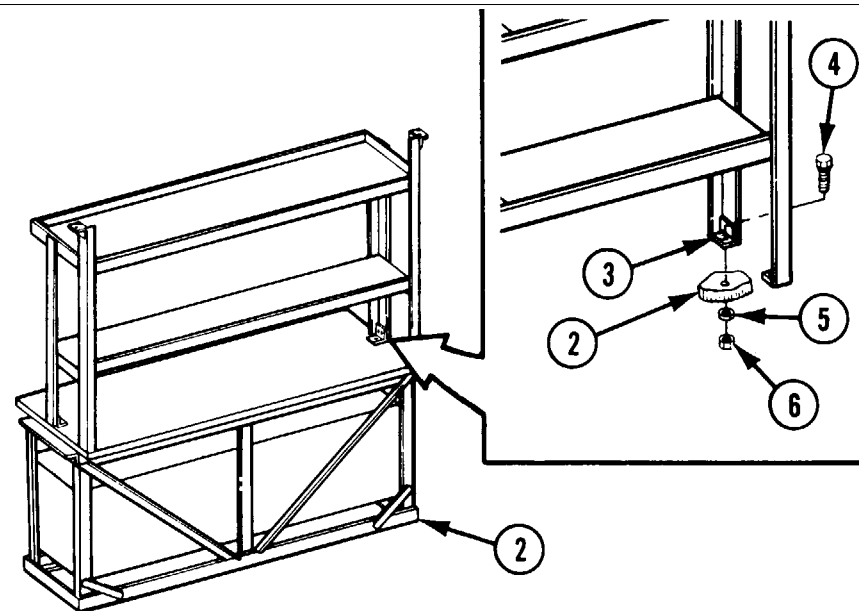
- 1 SHELVING ASSEMBLY (1). Position on right table (2) with back flush with rear of table and centered along the length of the table.



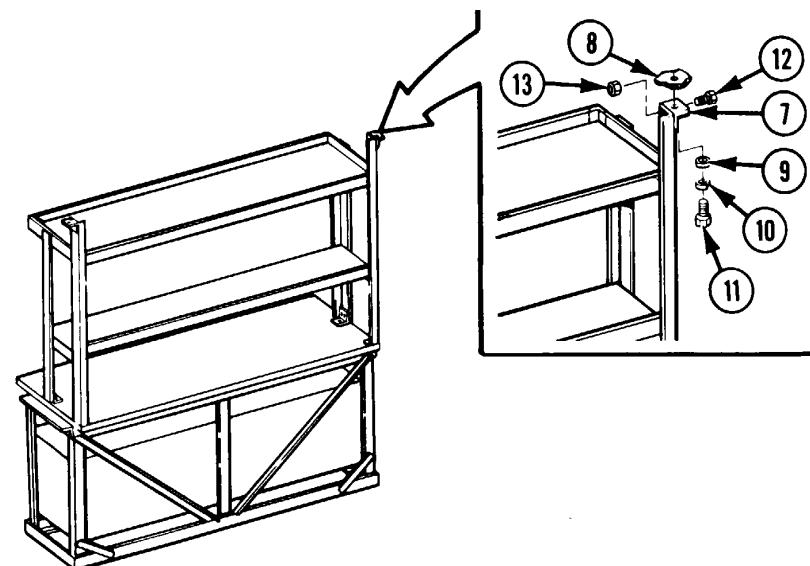
NOTE

Step 2 only needs to be performed at the time of initial installation or when the right table has been replaced with a new item.

- 2 RIGHT TABLE (2). Drill four 0.312-in. (0.792-cm) diameter holes through table top as illustrated, using four angles (3) as templates.
- 3 FOUR SCREWS (4). Install.
- 4 FOUR LOCKWASHERS (5) AND FOUR NUTS (6). Install.



- 5 TWO ANGLES (7). Push up against ceiling (8).
- 6 TWO FLAT WASHERS (9), TWO LOCKWASHERS (10), AND TWO SCREWS (11). Install.
- 7 FOUR BOLTS (12) AND FOUR NUTS (13). Tighten.



3-33. ECU STOWING FRAME ASSEMBLY--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Inspection
- b. Removal
- c. Disassembly
- d. Repair
- e. Reassembly
- f. Installation

INITIAL SETUP

Special Tools

- AVIM sheet metal shop set (SC 4920-99-CL-A91, part VI)
- AVIM welding shop set (SC 4920-99-CL-A91, part IX)
- Basic aircraft armament repairman tool set (SC 4933-95-CL-A13)
- Fire control repair shop set (SC 4931-95-CL-A21)

TM 10-5410-224-14
TM 9-237

3-273 Repair procedure for ECU stowing frame assembly--webbing strap--maintenance instructions.

Equipment Condition

2-11 ECU unit removed from stowing frame assembly.

References

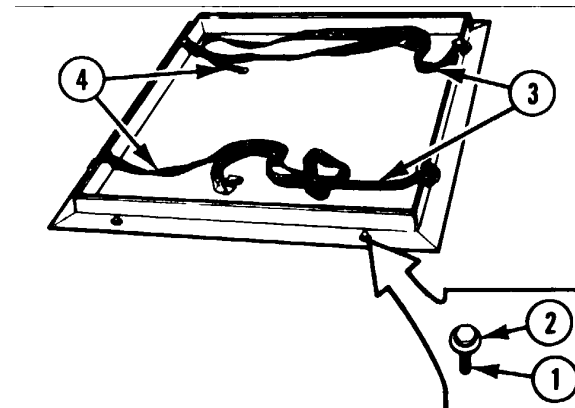
Appendix E

INSPECTION

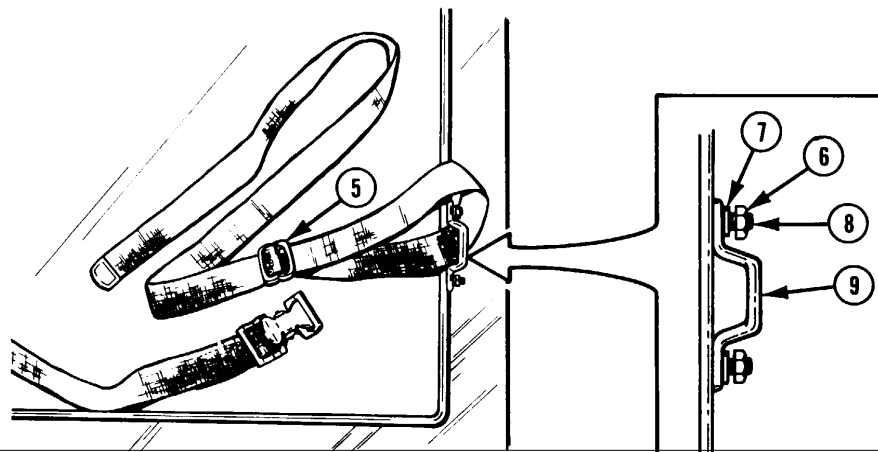
NOTE

There are two ECU stowing frame assemblies mounted on the shelter floor between the two tables. The following procedures pertain to only one ECU stowing frame assembly.

- 1 FOUR SCREWS (1) AND FOUR LOCKWASHERS (2). Check for missing, damaged, or corroded parts.
- 2 TWO STRAPS (3) AND TWO STRAPS (4).
 - a. Check for damaged end clips or buckles.
 - b. Check for frayed or torn webbing.



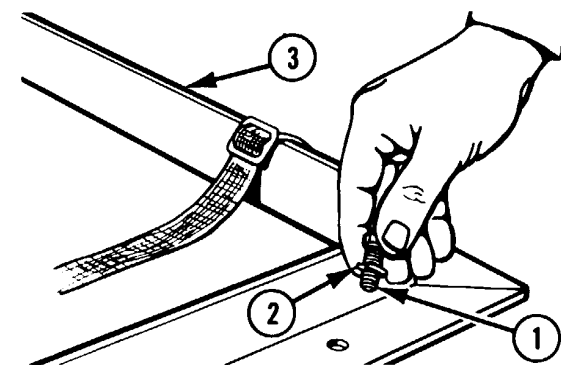
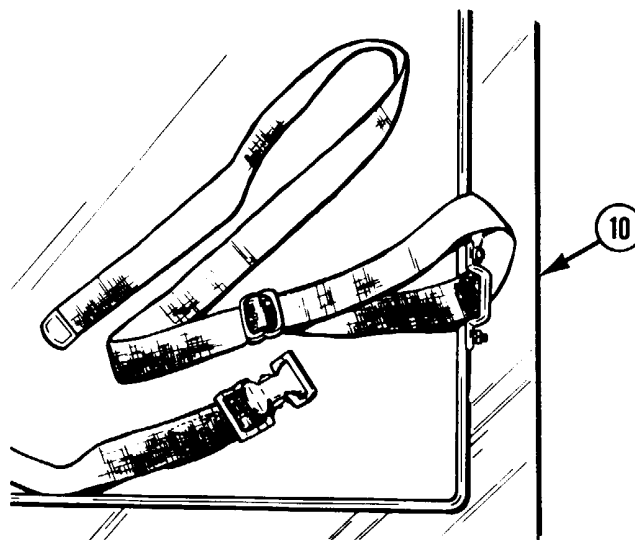
- 3 FOUR SLIDES (5). Check for bent or broken parts.
- 4 EIGHT NUTS (6), EIGHT LOCKWASHERS (7), AND EIGHT SCREWS (8). Check for missing, damaged, or corroded parts.
- 5 FOUR LOOPS (9). Check for bent or broken parts.



REMOVAL

- 6 FRAME (10).
 - a. Check for bent or broken parts.
 - b. Check for cracked welds.

NOTE
 Instructions for the removal/installation of the ECU are contained in TM 10-5410-224-14.

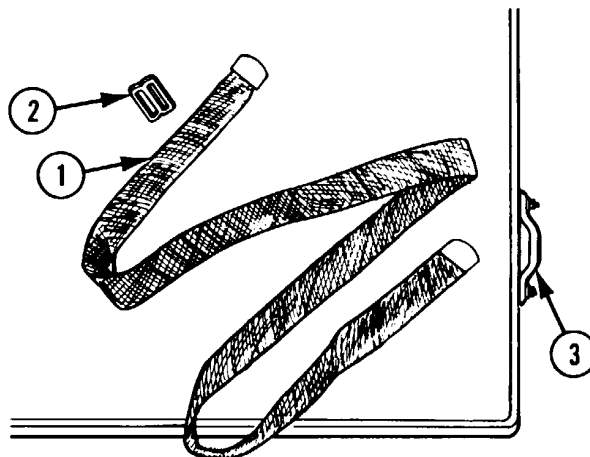


- 1 FOUR SCREWS (1). Remove.
- 2 FOUR LOCKWASHERS (2). Remove.
- 3 FRAME ASSEMBLY (3). Remove.

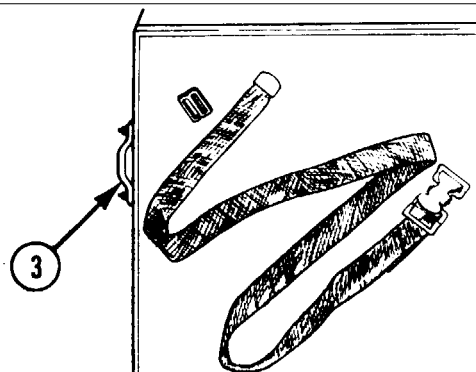
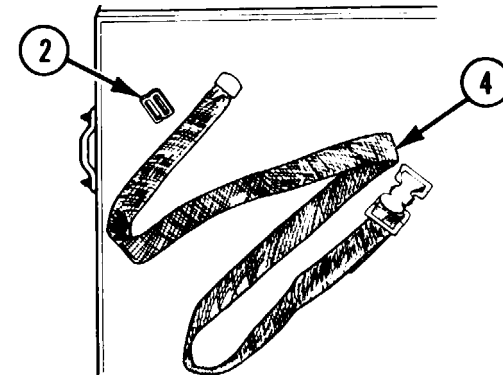
3-33. ECU STOWING FRAME ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

DISASSEMBLY

- 1 TWO STRAPS (1) AND TWO SLIDES (2).
- a. Loosen and remove straps from two loops (3).
 - b. Separate.

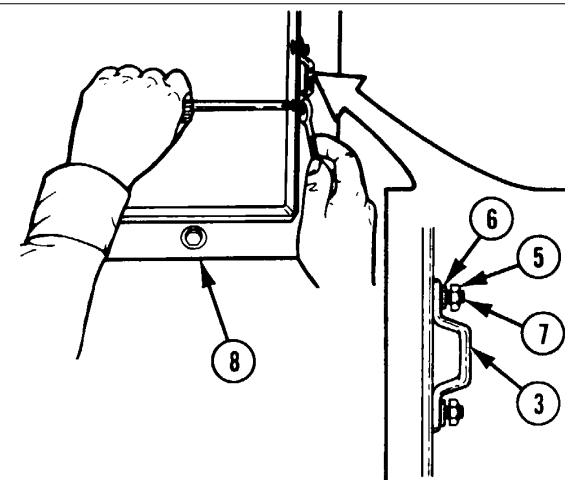


- 2 TWO STRAPS (4) AND TWO SLIDES (2).
- a. Loosen.

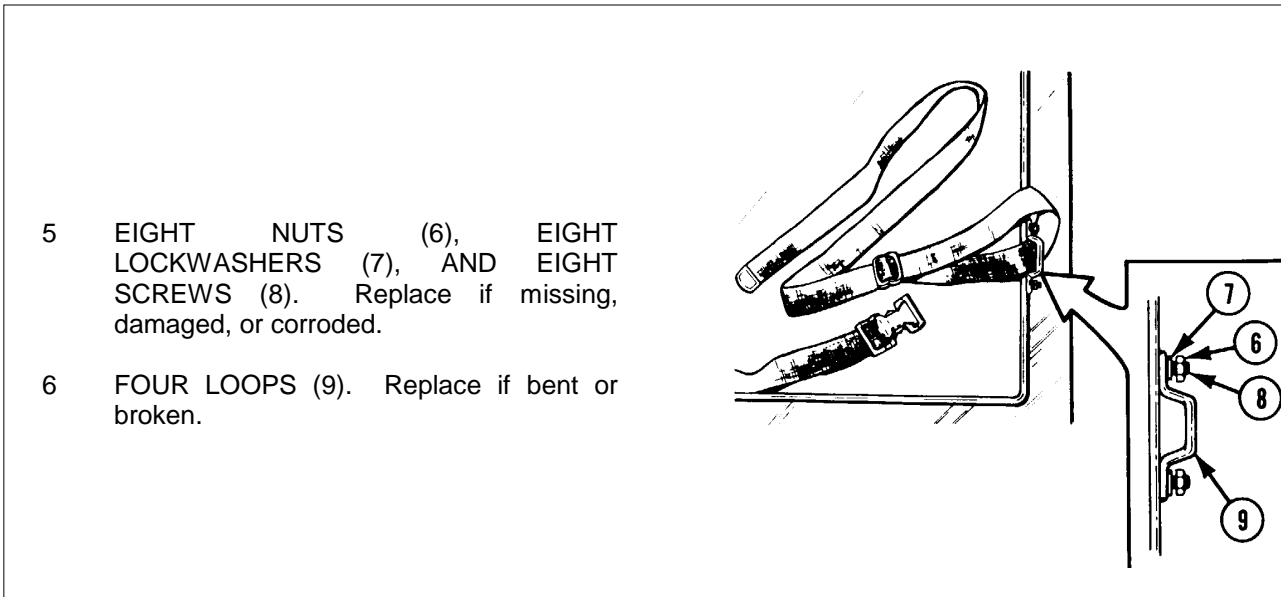
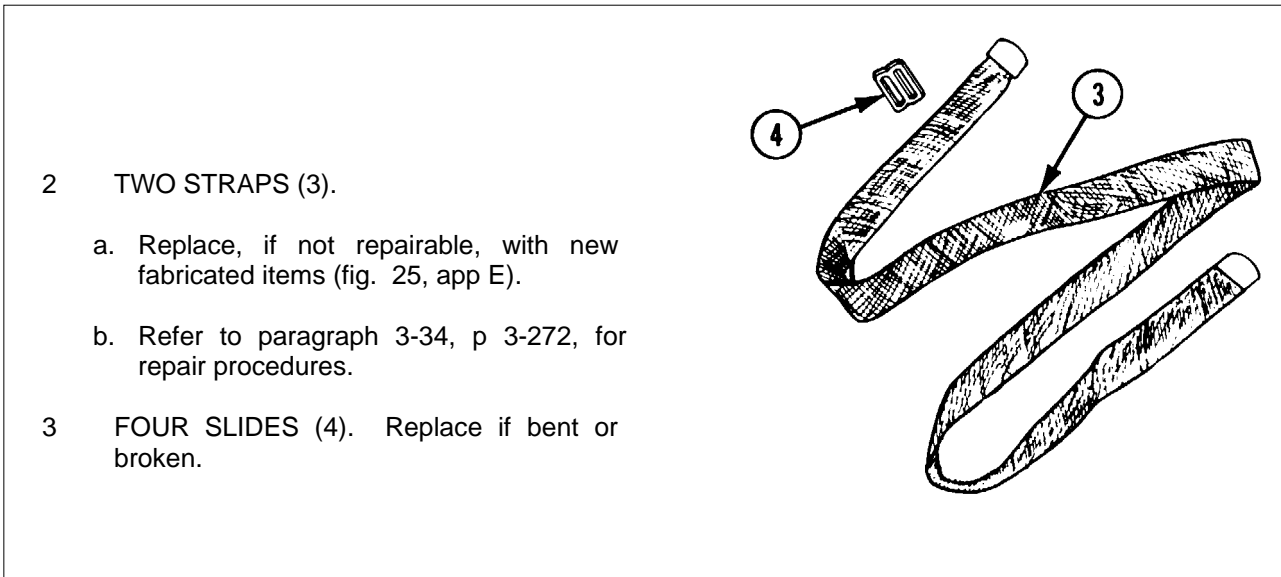
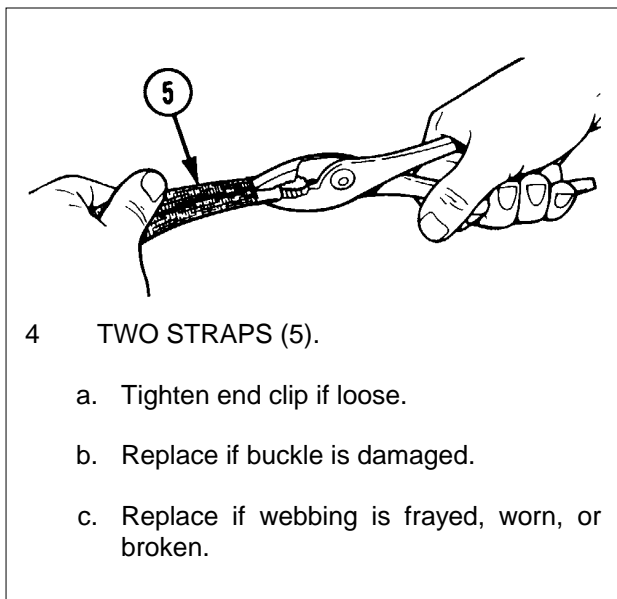
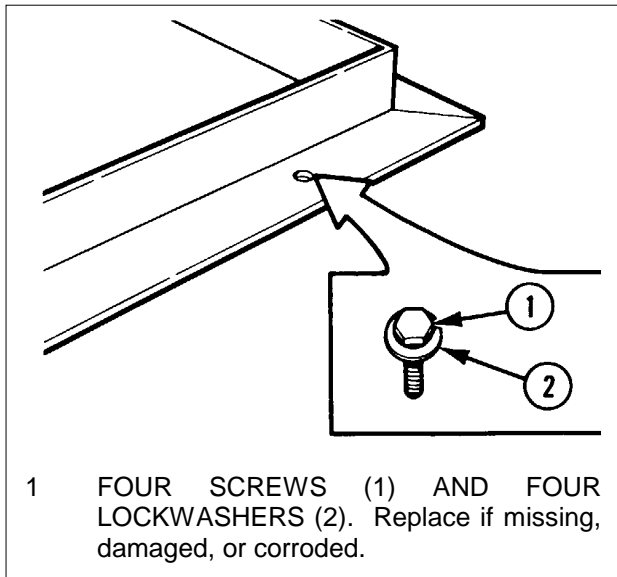


- b. Remove from two loops (3).
- c. Separate.

- 3 EIGHT NUTS (5). Remove.
- 4 EIGHT LOCKWASHERS (6). Remove.
- 5 EIGHT SCREWS (7) AND FOUR LOOPS (3).
- a. Remove from frame (8).
 - b. Separate.

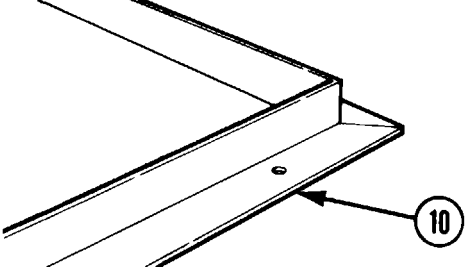


REPAIR



3-33. ECU STOWING FRAME ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

REPAIR (cont)

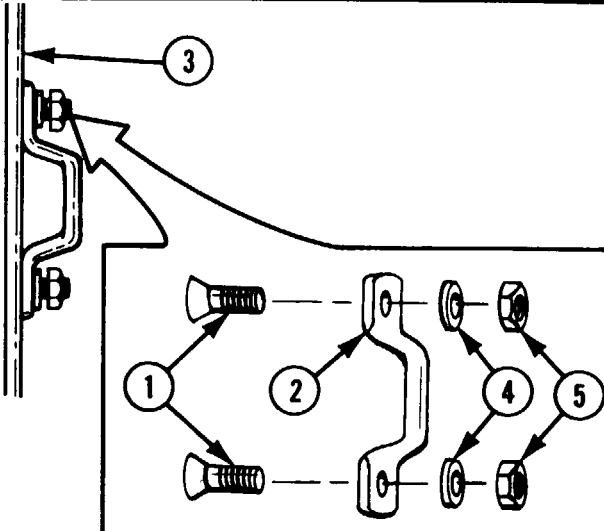


7 FRAME (10).

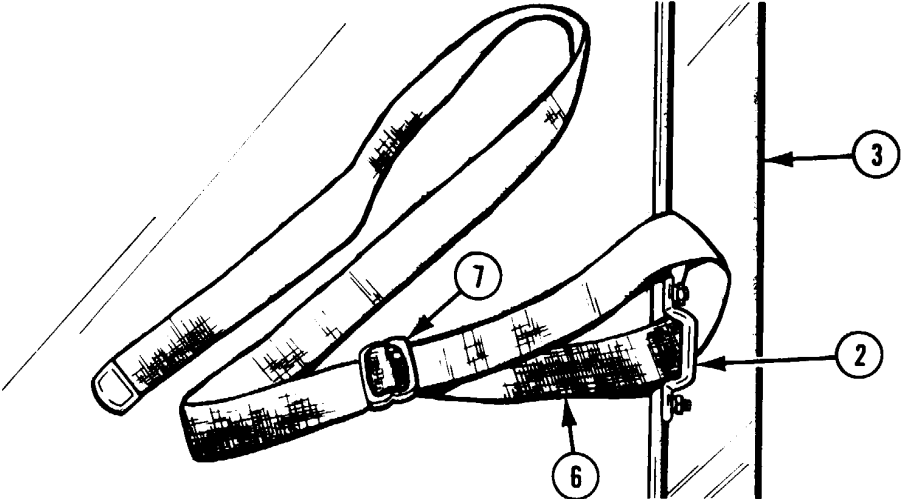
- a. Reweld any cracked welds.
- b. Replace, if not repairable, with new fabricated item (fig. 26, app E).

REASSEMBLY

- 1 EIGHT SCREWS (1) AND FOUR LOOPS (2).
- a. Assemble.
- b. Place in position on frame (3).
- 2 EIGHT LOCKWASHERS (4). Install.
- 3 EIGHT NUTS (5). Install.

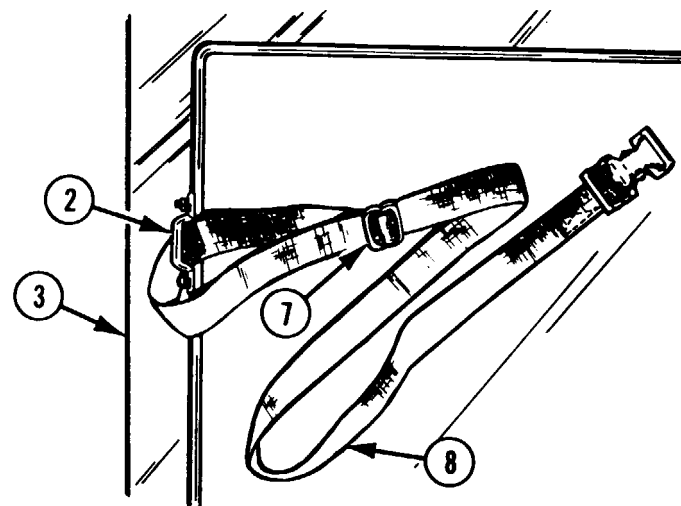


- 4 TWO STRAPS (6) AND TWO SLIDES (7).
- a. Assemble.
- b. Install through two loops (2) on one side of frame (3).



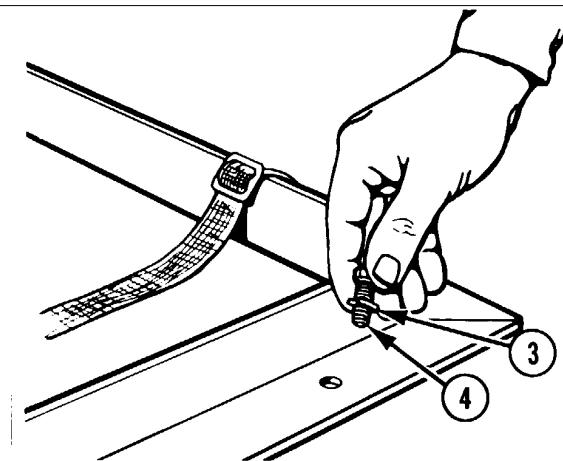
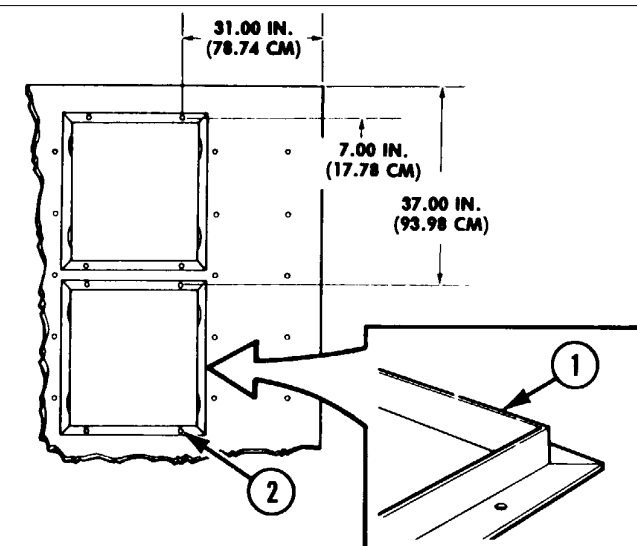
5 TWO STRAPS (8) AND TWO SLIDES (7).

- a. Assemble.
- b. Install through two loops (2) on other side of frame (3).



INSTALLATION

1 FRAME ASSEMBLY (1). Place on shelter floor and align mounting holes with blind inserts (2) in floor as illustrated.



2 FOUR LOCKWASHERS (3) AND FOUR SCREWS (4). Install.

3-34. ECU STOWING FRAME ASSEMBLY--WEBBING STRAP--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- | | |
|-------------------------|----------------------------|
| a. Inspection | c. Repair |
| b. Removal /disassembly | d. Reassembly/installation |

INITIAL SETUP

Special Tools
Fire control repair shop set (SC 4931-95-CL-A21)

References
Appendix C
Appendix E

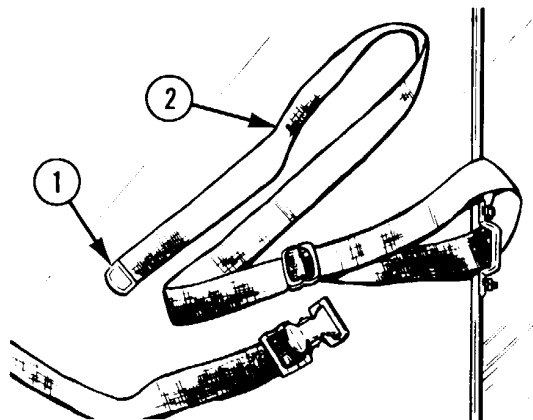
Equipment Conditions
2-11 ECU removed from stowing frame assembly.

NOTE

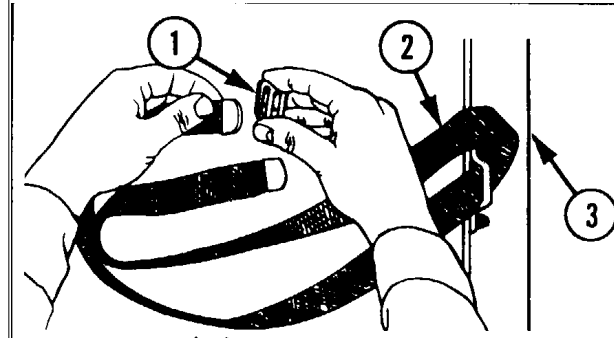
There are two webbing straps for each ECU stowing frame assembly. The following procedures pertain to only one webbing strap and must be repeated for the second webbing strap.

INSPECTION

- 1 TWO END CLIPS (1). Check to ensure they are not missing or loose.
- 2 STRAP (2). Check for frayed, worn, or broken condition.



REMOVAL/DISASSEMBLY



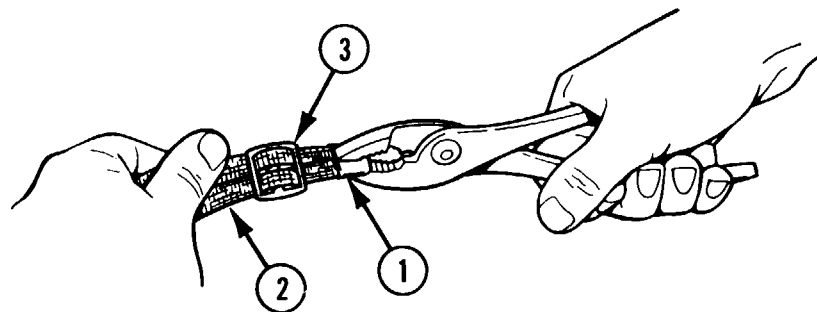
- 1 SLIDE (1). Remove.
- 2 WEBBING STRAP (2). Remove from ECU stowing frame assembly (3).

REPAIR

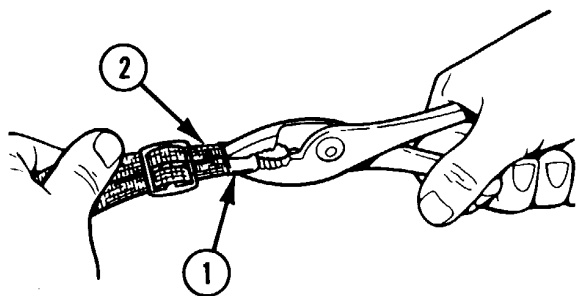
CAUTION

Do not remove end clips unless necessary for replacement.

- 1 TWO END CLIPS (1).
 - a. Reclamp if loose.
 - b. Replace if missing or damaged.
- 2 STRAP (2). Replace with new item (fig. 25, app E) if frayed, worn, or broken.
- 3 SLIDE (3). Replace if missing or damaged (app C).

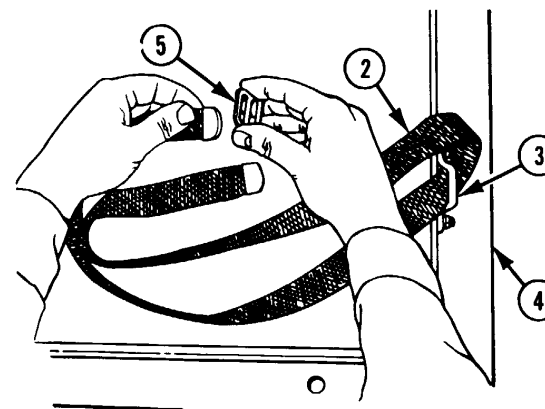


REASSEMBLY/INSTALLATION



- 1 TWO END CLIPS (1) AND STRAP (2). Assemble by clamping one end clip on each end of strap.

- 2 WEBBING STRAP (2). Install through loop (3) on ECU stowing frame assembly (4).
- 3 SLIDE (5). Install.



3-35. FIRST AID KIT HOLDER ASSEMBLY--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Removal
- b. Inspection
- c. Disassembly
- d. Repair
- e. Reassembly
- f. Installation

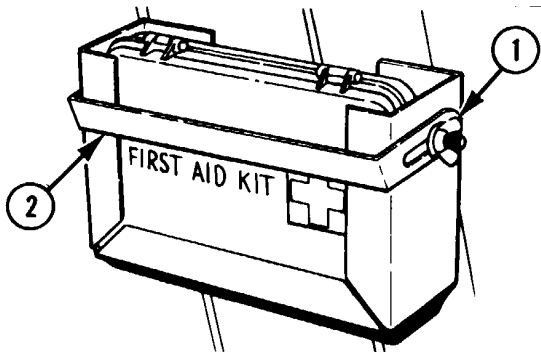
INITIAL SETUP

Special Tools
 Fire control repair shop set (SC 4931-95-CL-A21)

3-279 Repair procedures for first aid kit holder assembly--holder assembly--main-tenance instructions.

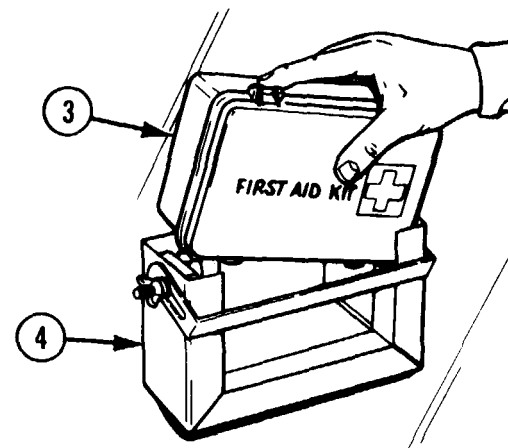
References
 3-284 Repair procedures for first aid kit holder assembly--bracket assembly--maintenance instructions.

REMOVAL



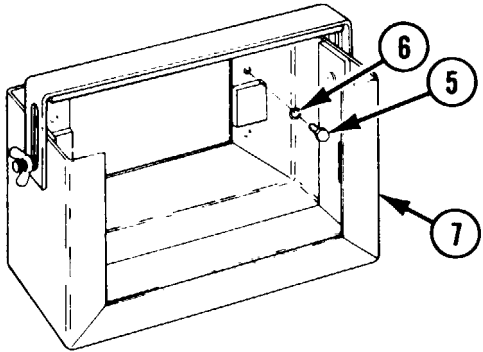
- 1 TWO WINGNUTS (1). Loosen.
- 2 BRACKET ASSEMBLY (2). Pull up and rotate forward.

3 FIRST AID KIT (3). Remove from holder assembly (4).



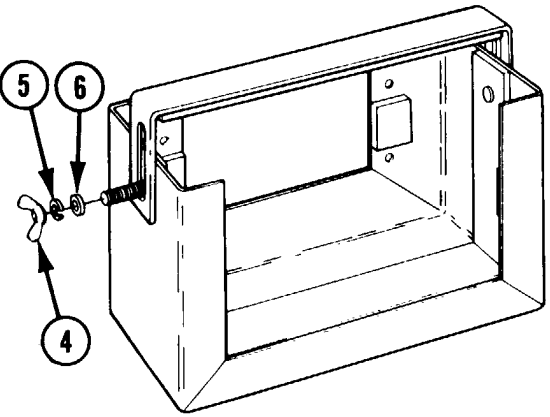
I

INSPECTION

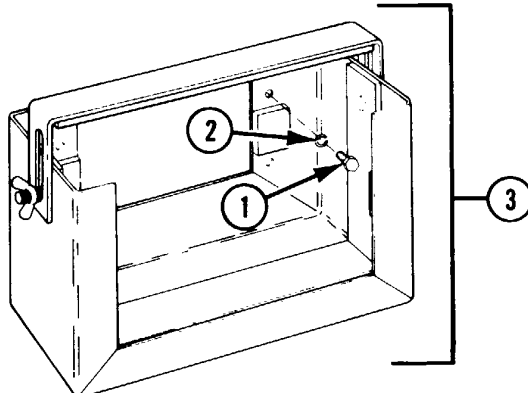


4 TWO SCREWS (5) AND TWO LOCKWASHERS (6). Remove.

5 FIRST AID KIT HOLDER ASSEMBLY (7). Remove.

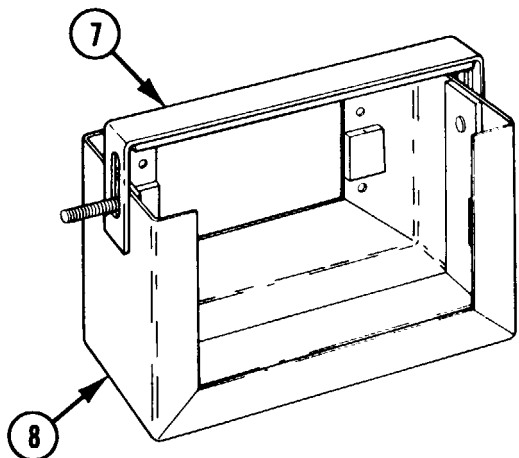


3 TWO WINGNUTS (4), TWO LOCKWASHERS (5), AND TWO FLAT WASHERS (6). Check for missing, damaged, or corroded parts.



1 TWO SCREWS (1) AND TWO LOCKWASHERS (2). Check for missing, damaged, or corroded condition.

2 FIRST AID KIT HOLDER ASSEMBLY (3). Check to ensure it is not missing.



4 BRACKET ASSEMBLY (7).

a. Check for bent or broken metal parts.

b. Check for missing or damaged pad.

5 HOLDER ASSEMBLY (8).

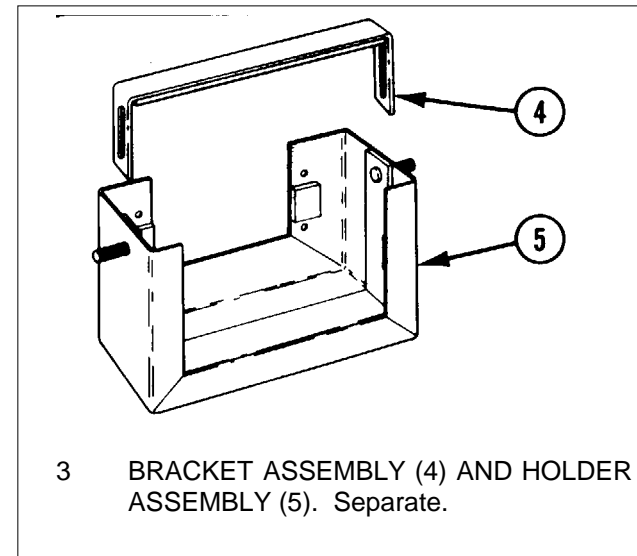
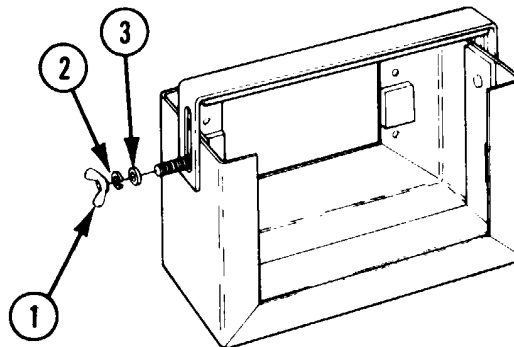
a. Check for bent or broken metal parts.

b. Check for missing or damaged pads.

3-35. FIRST AID KIT HOLDER ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

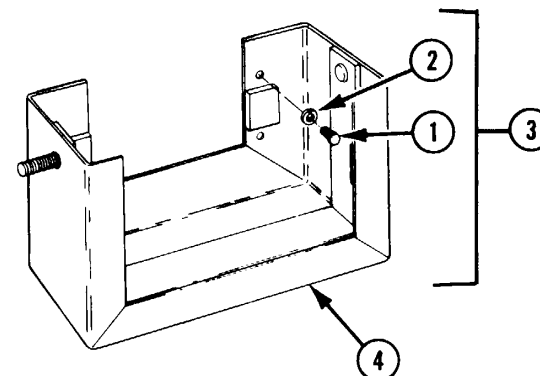
DISASSEMBLY

- 1 TWO WINGNUTS (1). Remove.
- 2 TWO LOCKWASHERS (2) AND TWO FLAT WASHERS (3). Remove.

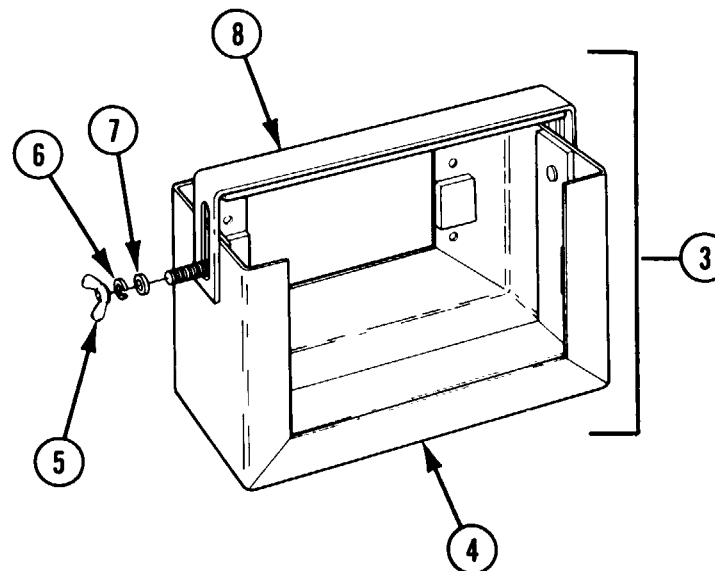


REPAIR

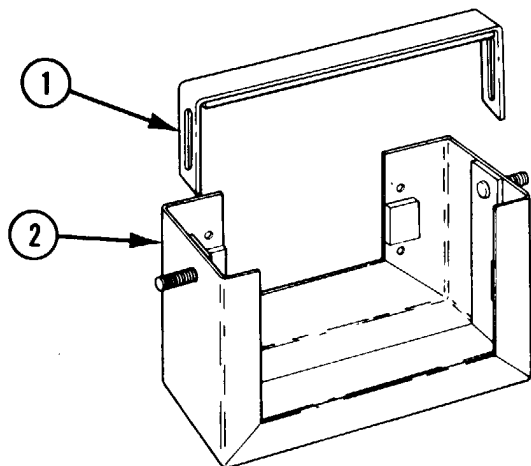
- 1 TWO SCREWS (1) AND TWO LOCKWASHERS (2). Replace if missing, damaged, or corroded.
- 2 FIRST AID KIT HOLDER ASSEMBLY (3).
 - a. Replace if missing.
 - b. Replace if metal parts of holder assembly (4) are damaged.



- 3 TWO WINGNUTS (5), TWO LOCKWASHERS (6), AND TWO FLAT WASHERS (7). Replace if missing, damaged, or corroded.
- 4 BRACKET ASSEMBLY (8). Refer to p 3-284, paragraph 3-37, for repair procedures.
- 5 HOLDER ASSEMBLY (4).
 - a. Refer to p 3-279, paragraph 3-36, for repair procedures.
 - b. If repair is not possible, replace entire first aid kit holder assembly (3).

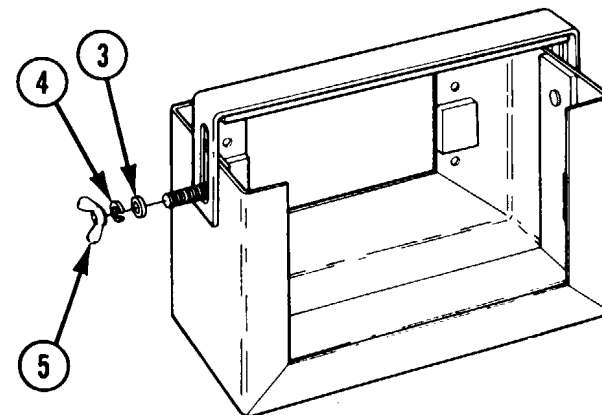


REASSEMBLY



- 1 BRACKET ASSEMBLY (1) AND HOLDER ASSEMBLY (2). Assemble.

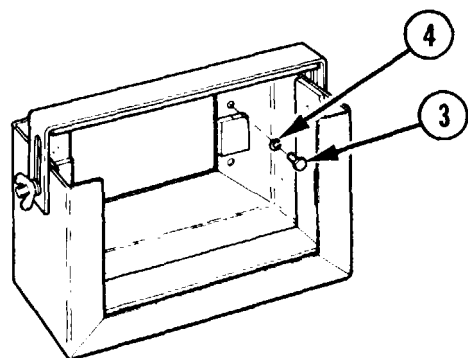
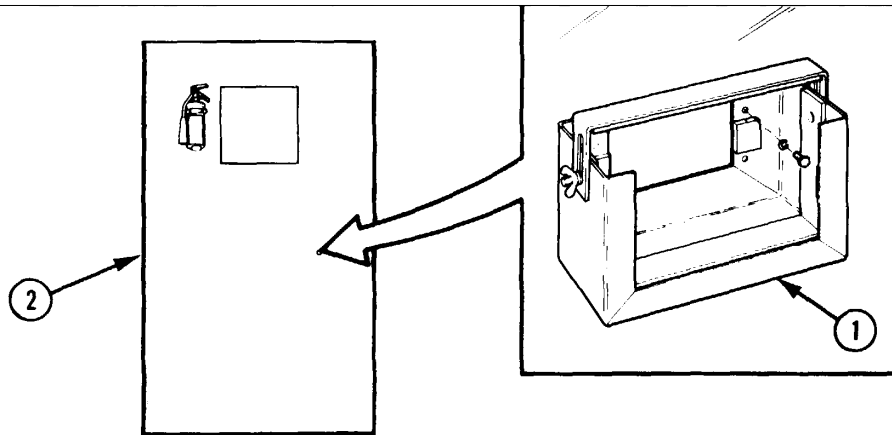
- 2 TWO FLAT WASHERS (3). Install.
- 3 TWO LOCKWASHERS (4). Install.
- 4 TWO WINGNUTS (5). Install.



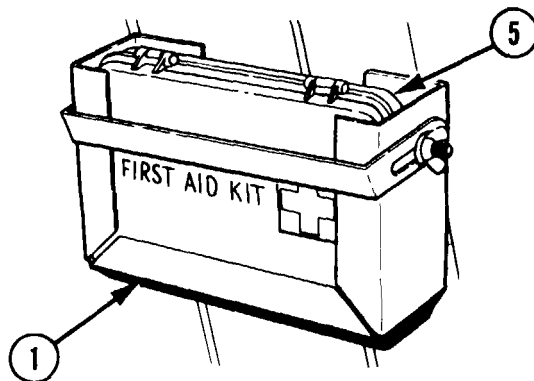
3-35. FIRST AID HOLDER ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

INSTALLATION

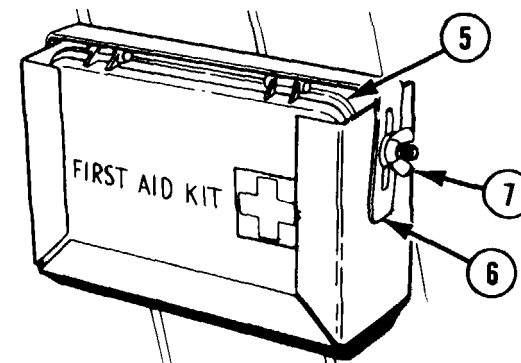
1 FIRST AID KIT HOLDER ASSEMBLY (1). Position over mounting holes on interior of personnel door (2).



2 TWO SCREWS (3) AND TWO LOCKWASHERS (4). Assemble and install.



3 FIRST AID KIT (5). Install in first aid kit holder assembly (1).



4 BRACKET ASSEMBLY (6). Rotate backwards and push down against first aid kit (5).

5 TWO WINGNUTS (7). Tighten.

3-36. FIRST AID KIT HOLDER ASSEMBLY--HOLDER ASSEMBLY--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- | | |
|----------------|-----------------|
| a. Removal | d. Repair |
| b. Inspection | e. Reassembly |
| c. Disassembly | f. Installation |

INITIAL SETUP

Special Tools

Fire control repair shop set (SC 4931-95-CL-A21)

Materials/Parts

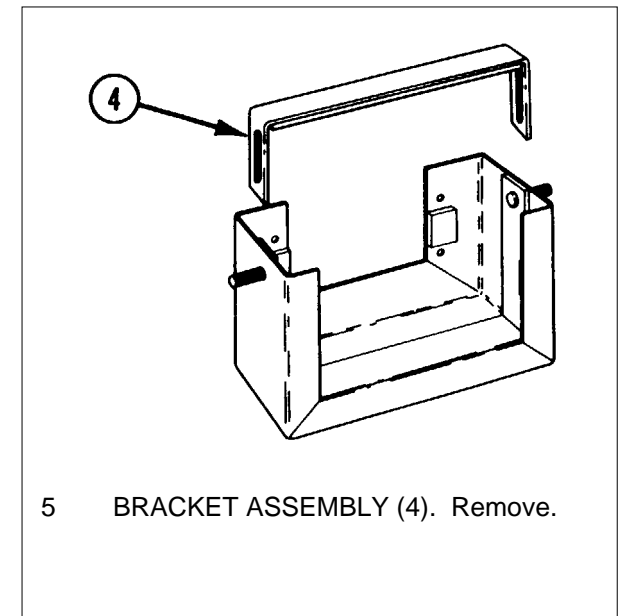
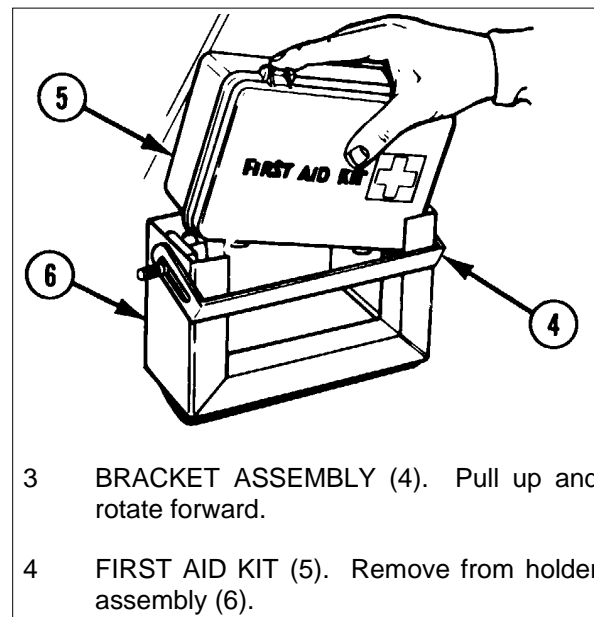
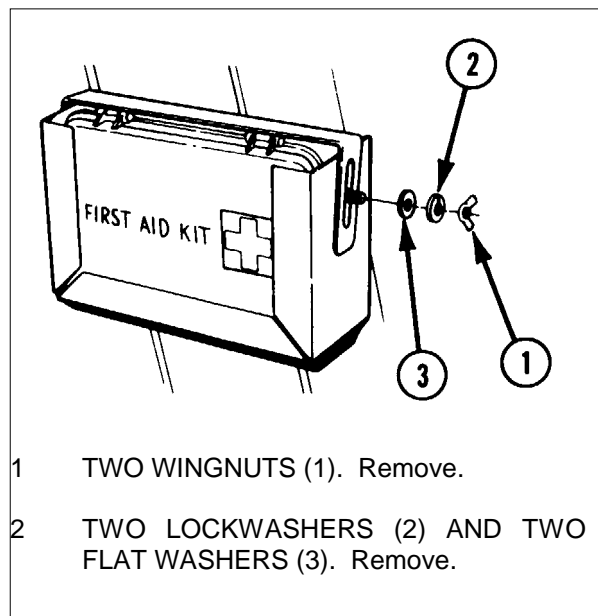
Adhesive (item 3, app D)

References

Appendix D

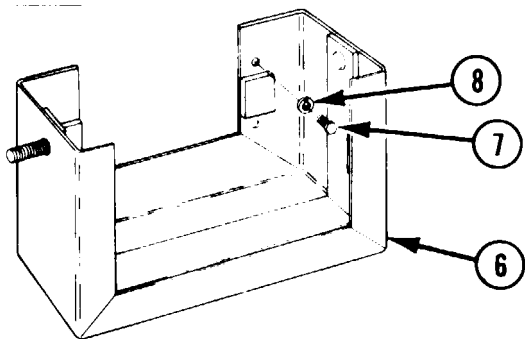
Appendix E

REMOVAL



3-36. FIRST AID KIT HOLDER ASSEMBLY--HOLDER ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

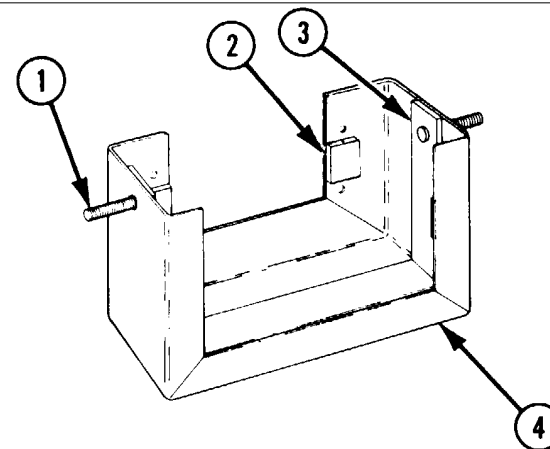
REMOVAL (cont)



- 6 TWO SCREWS (7) AND TWO LOCKWASHERS (8). Remove.
- 7 HOLDER ASSEMBLY (6). Remove.

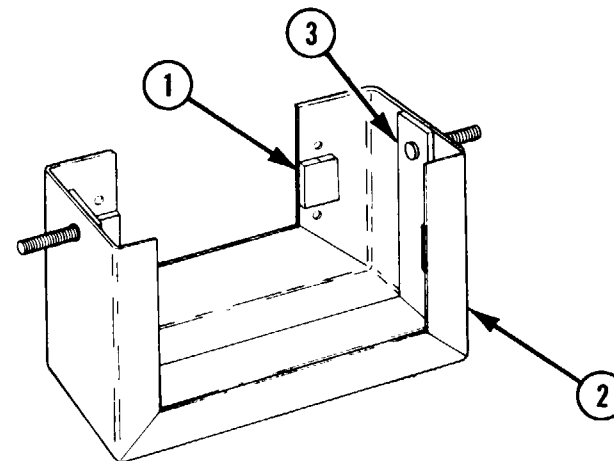
INSPECTION

- 1 TWO BOLTS (1). Check for missing, damaged, or corroded parts.
- 2 FOUR PADS (2) AND PAD (3). Check for loose, torn, or deteriorated parts.
- 3 HOLDER (4). Check for broken or bent parts.



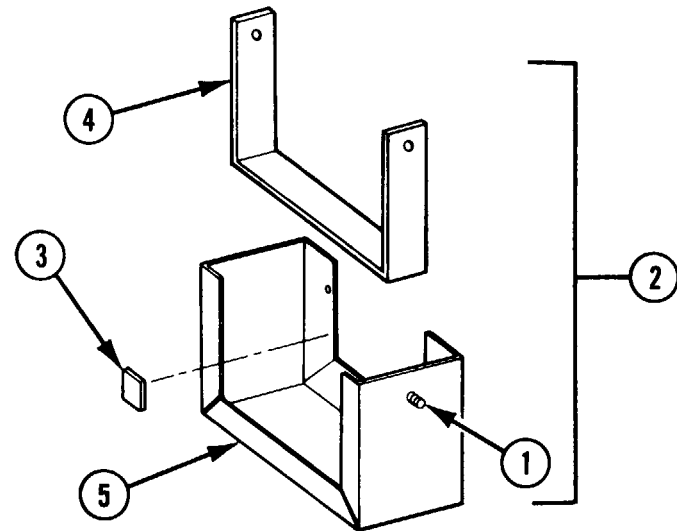
DISASSEMBLY

- 1 FOUR PADS (1). Remove from front and back of holder (2) only if loose or if replacement is required.
- 2 PAD (3) AND HOLDER (2). Separate only if pad needs to be replaced.



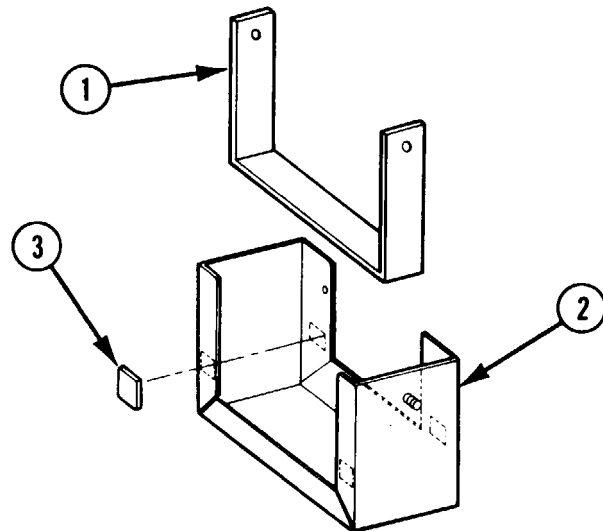
REPAIR

- 1 TWO BOLTS (1). If missing, damaged, or corroded replace entire holder assembly (2).
- 2 FOUR PADS (3) AND PAD (4). Replace if torn or deteriorated with new items (fig. 27, app E).
- 3 HOLDER (5).
 - a. Straighten bent parts.
 - b. If not repairable, replace entire first aid kit holder assembly.



REASSEMBLY

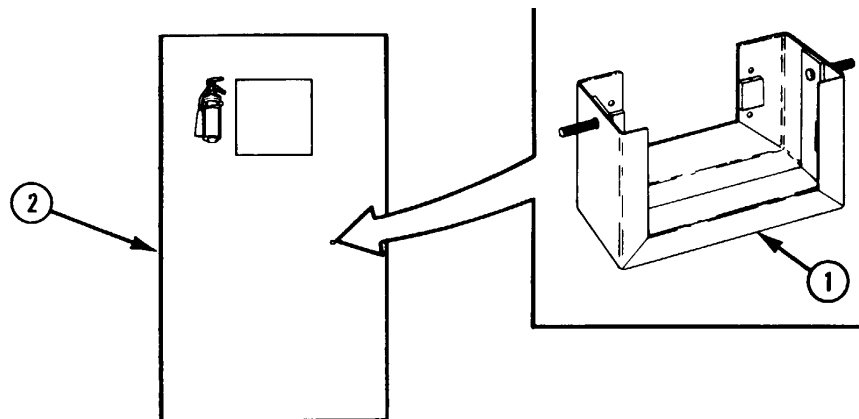
- 1 PAD (1) AND HOLDER (2). Secure together using adhesive (item 3, app D). Pad should be applied to sides and bottom of holder, centered between the front and back.
- 2 FOUR PADS (3). Secure two pads to front of holder (2) and two pads to back of holder with adhesive (item 3, app D).
- 3 PAD (1). Cut two 0.28-in. (0.71-cm) diameter holes (one through each side) to match bolt holes in sides of holder (2).



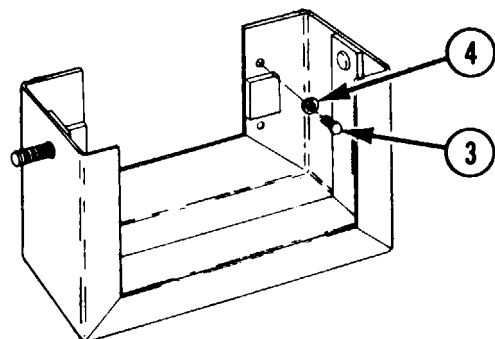
3-36. FIRST AID KIT HOLDER ASSEMBLY--HOLDER ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

INSTALLATION

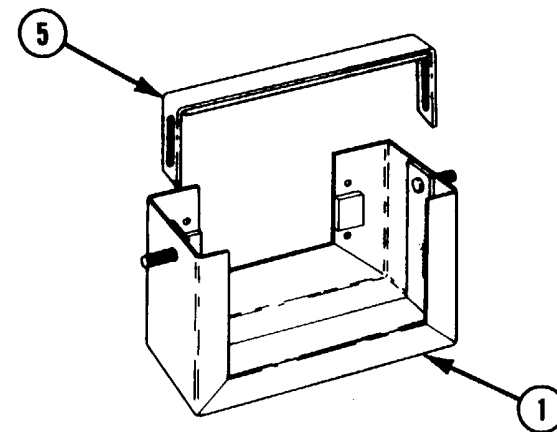
1 HOLDER ASSEMBLY (1). Position over mounting holes on inside of personnel door (2).

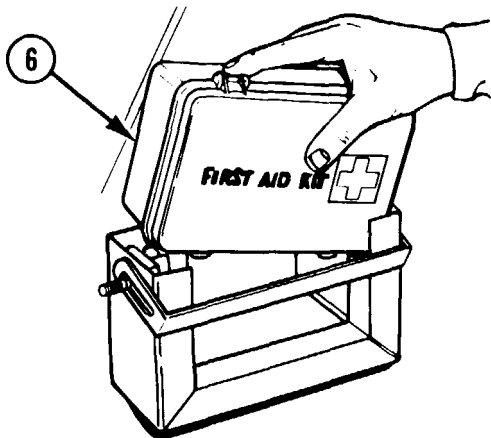


2 TWO SCREWS (3) AND TWO LOCKWASHERS (4). Assemble and install.



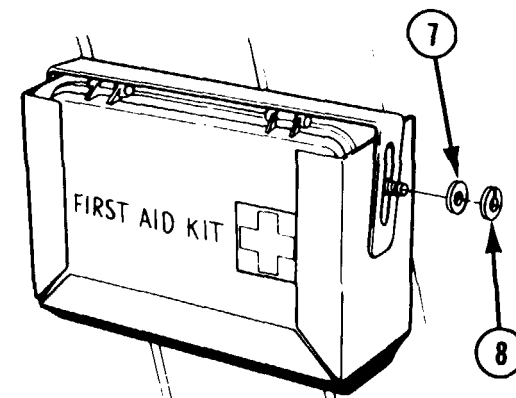
3 BRACKET ASSEMBLY (5). Install on holder assembly (1).



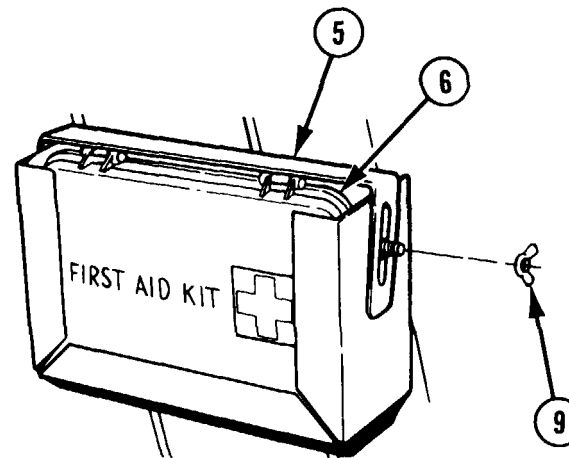


4 FIRST AID KIT (6). Install.

- 5 TWO FLAT WASHERS (7). Install.
- 6 TWO LOCKWASHERS (8). Install.



- 7 BRACKET ASSEMBLY (5). Rotate backwards and push down on first aid kit (6).
- 8 TWO WINGNUTS (9). Install.



3-37. FIRST AID KIT HOLDER ASSEMBLY--BRACKET ASSEMBLY--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Removal
- b. Inspection
- c. Disassembly
- d. Repair
- e. Reassembly
- f. Installation

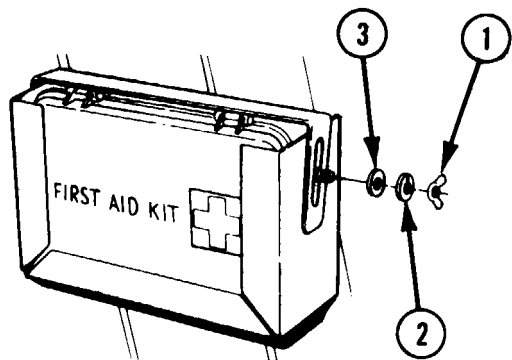
INITIAL SETUP

Special Tools
Fire control repair shop set (SC 4931-95-CL-A21)

References
Appendix D
Appendix E

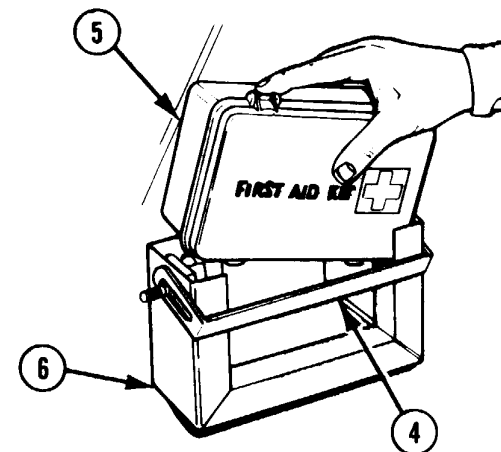
Materials/Parts
Adhesive (item 3, app D)

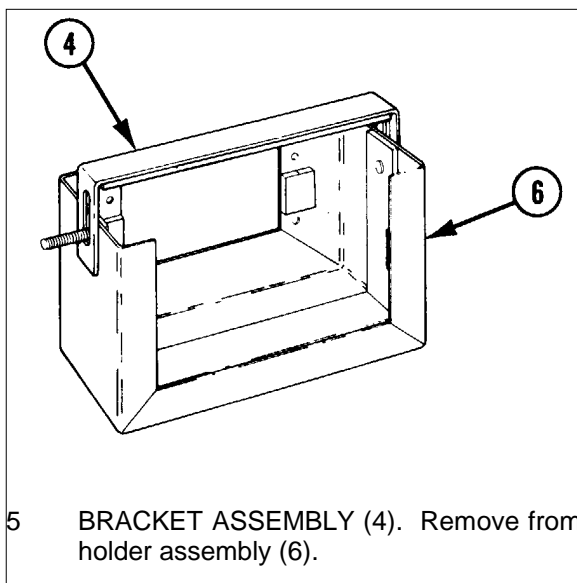
REMOVAL



- 1 TWO WINGNUTS (1). Remove.
- 2 TWO LOCKWASHERS (2) AND TWO FLAT WASHERS (3). Remove.

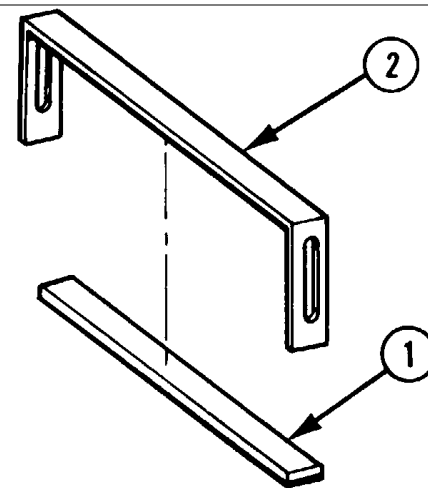
- 3 BRACKET ASSEMBLY (4). Pull up and rotate forward.
- 4 FIRST AID KIT (5). Remove from holder assembly (6).



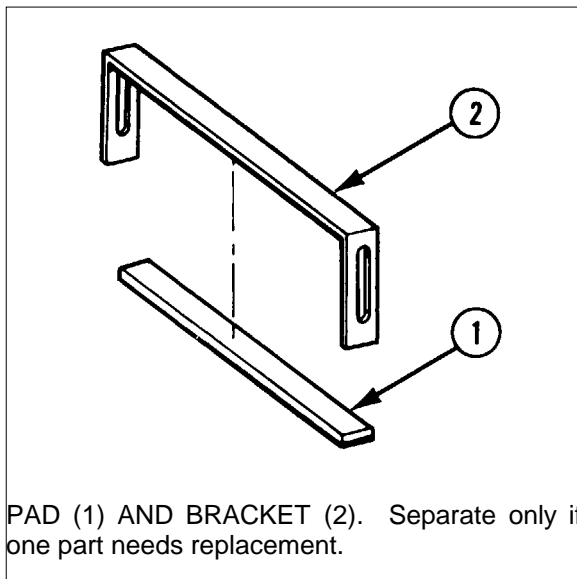


INSPECTION

- 1 PAD (1). Check for loose, torn, or deteriorated parts.
- 2 BRACKET (2). Check for bent or broken parts.

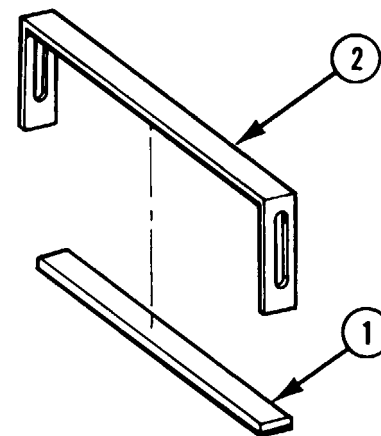


DISASSEMBLY



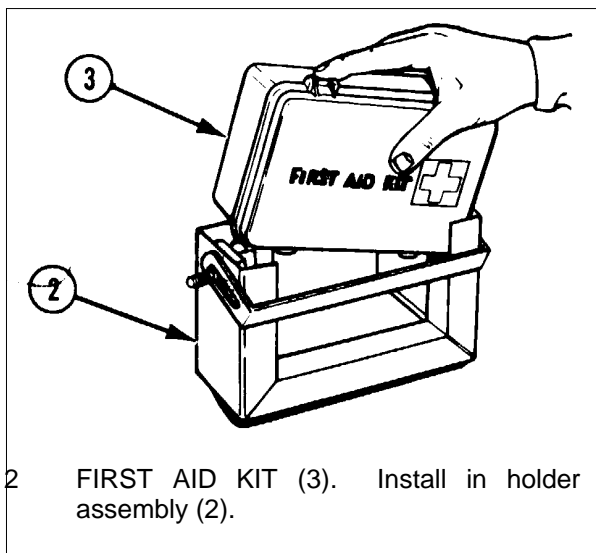
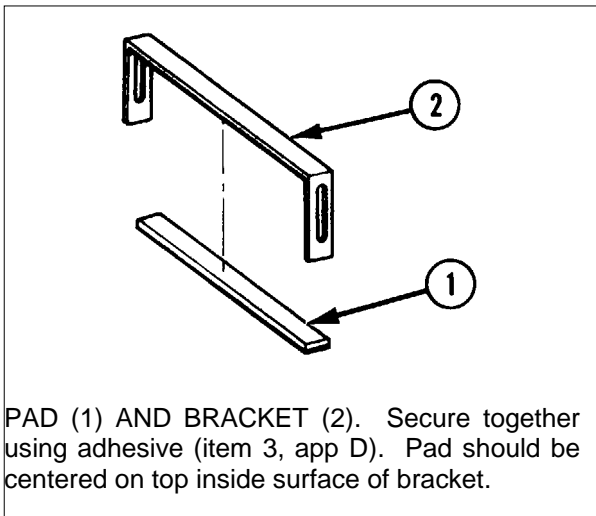
REPAIR

- 1 PAD (1). Replace with new item (fig. 28, app E) if torn or deteriorated.
- 2 BRACKET (2).
 - a. Straighten bent parts.
 - b. Replace entire first aid kit holder assembly if not repairable.



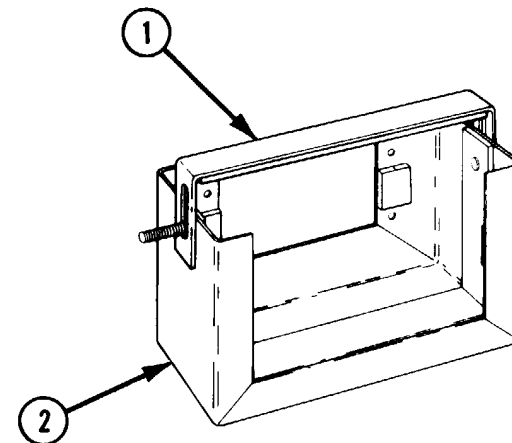
3-37 FIRST AID KIT HOLDER ASSEMBLY--BRACKET ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY

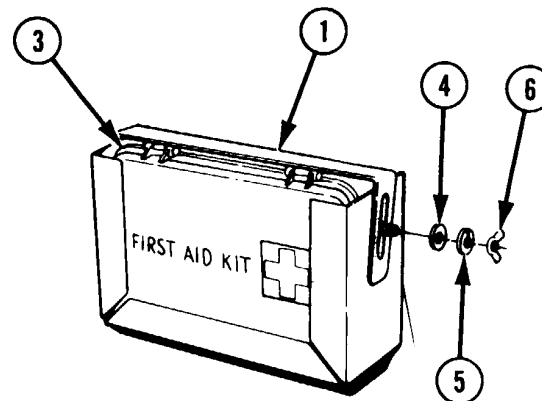


INSTALLATION

- 1 BRACKET ASSEMBLY (1). Position on holder assembly (2).



- 3 BRACKET ASSEMBLY (1). Rotate backwards and push down against first aid kit (3).
- 4 TWO FLAT WASHERS (4). Install.
- 5 TWO LOCKWASHERS (5). Install.
- 6 TWO WINGNUTS (6). Install.



3-38. CABLE ADAPTER ASSEMBLY--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Inspection
- b. Service
- c. Removal
- d. Disassembly
- e. Repair
- f. Preparation of cable for plug connector
- g. Reassembly
- h. Test procedures
- i. Installation

INITIAL SETUP

Test Equipment
Ohmmeter

Special Tools

- Basic aircraft armament repairman tool set (SC 4933-95-CL-A13)
- Fire control repair shop set (SC 4931-95-CL-A21)
- Removal tool no. 4 (MS90562-5)
- Removal tool no. 6 (MS90562-6)
- Supplemental aircraft armament repairman tool set (SC 4933-95-CL-A14)

Materials/Parts

- Abrasive cloth (item 4, app D)
- Cloth (item 5, app D)
- Marking ink (item 13, app D)
- Solder (item 18, app D)
- Band (MIL-P-15024/8)
- Bushings (4) (MS3348-4-6L)
- Compression connector (12011667)
- Preformed packing (M529513-132)

References

- Appendix C
- Appendix D
- Appendix E
- 3-310 Repair procedures for cable adapter assembly--female connector.
- 3-314 Repair procedures for cable adapter assembly--cable assembly.

Troubleshooting References

- 3-8 Environmental control units or exhaust fans do not operate correctly.

NOTE

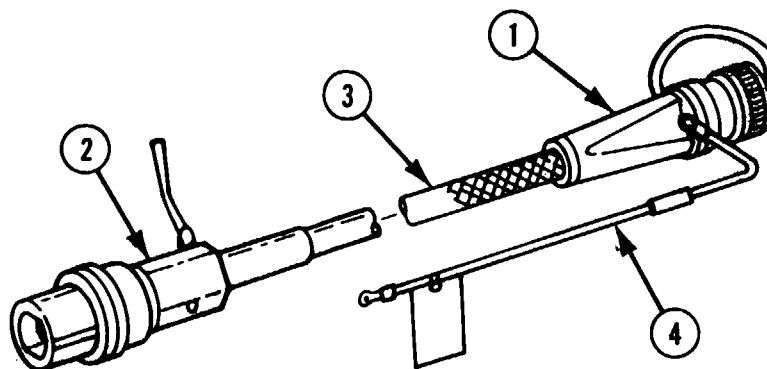
The cable adapter assembly is used to adapt the 120/208V cable assembly to power source. Power distribution panels having an MS90555 mating connector do not require a cable adapter assembly.



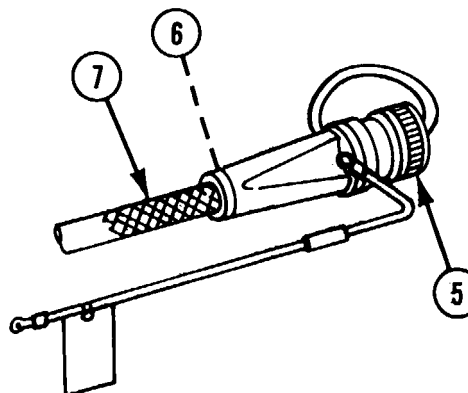
3-38. CABLE ADAPTER ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

INSPECTION

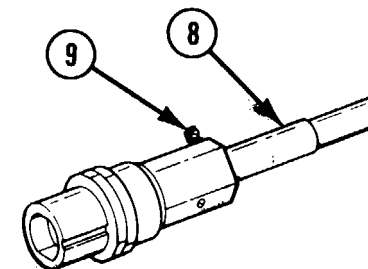
- 1 FEMALE CONNECTOR (1) AND PLUG CONNECTOR (2). Check for bent or broken parts.
- 2 CABLE (3).
 - a. Check for worn, cracked, or cut insulation.
 - b. Check for cut or broken wires.
- 3 CABLE ASSEMBLY (4). Check for missing or broken parts.



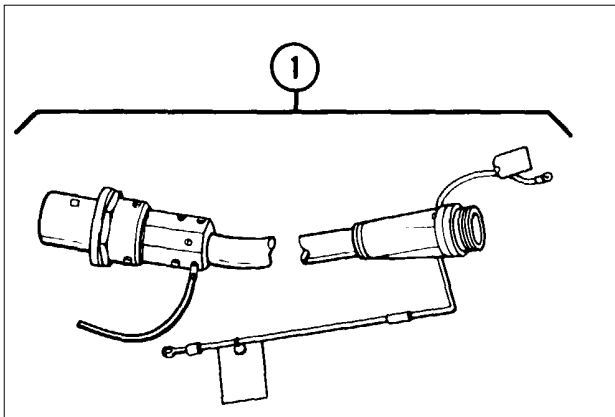
- 4 DUST COVER (5). Check for bent or broken parts.
- 5 GLAND (6). Check for any deformed or deteriorated parts.
- 6 GRIP (7). Check for broken parts.



- 7 BAND (8). Check for missing or hard to read parts.
- 8 TERMINAL LUG (9). Check for missing or broken parts.



SERVICE



1 CABLE ADAPTER ASSEMBLY (1).
Remove dirt with a cloth (item 5, app D).

WARNING
Do not remove or install the grounding rod when shop set is energized.

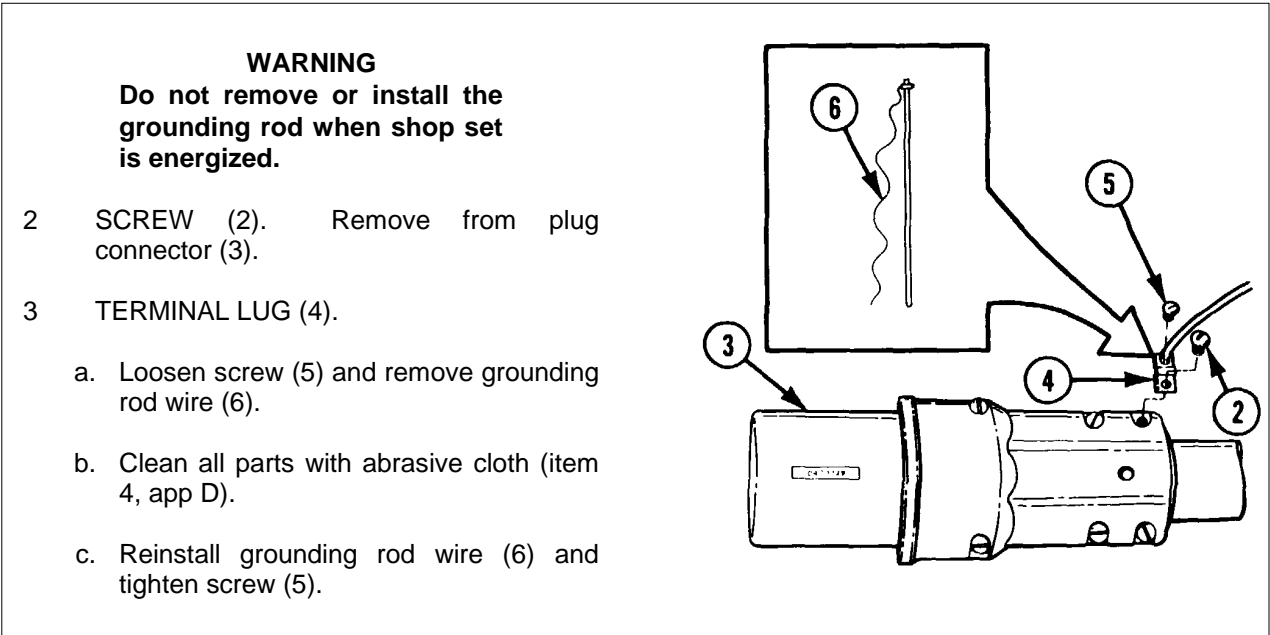
2 SCREW (2). Remove from plug connector (3).

3 TERMINAL LUG (4).

a. Loosen screw (5) and remove grounding rod wire (6).

b. Clean all parts with abrasive cloth (item 4, app D).

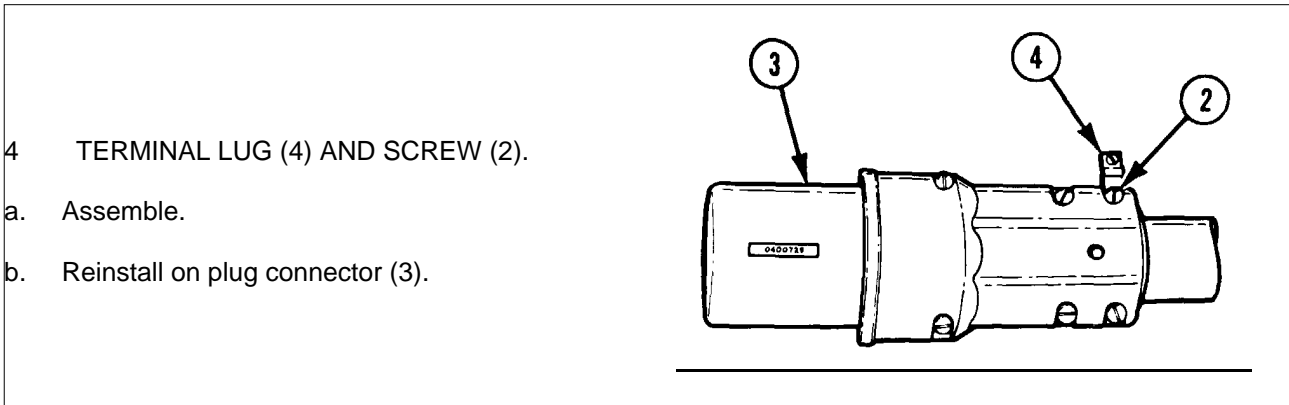
c. Reinstall grounding rod wire (6) and tighten screw (5).



4 TERMINAL LUG (4) AND SCREW (2).

a. Assemble.

b. Reinstall on plug connector (3).



REMOVAL

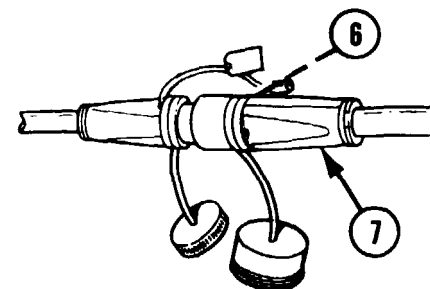
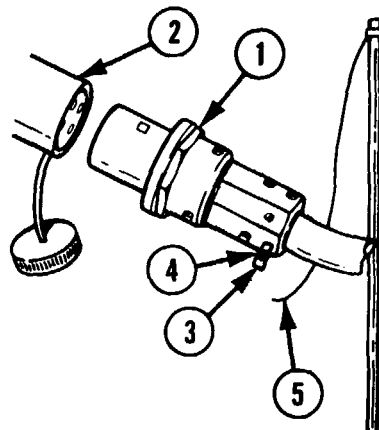
WARNING
De-energize shop set by placing circuit breaker on power distribution panel connected to power source in OFF position and then disconnect 120/ 208V cable assembly from shelter.



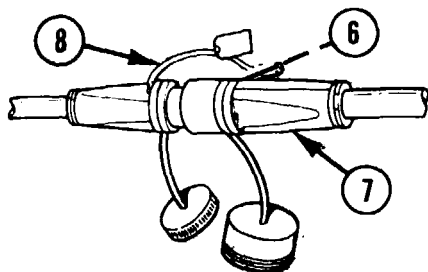
3-38. CABLE ADAPTER ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont).

REMOVAL (cont)

- 1 PLUG CONNECTOR (1). Disconnect from mating connector (2) of power distribution panel.
- 2 TERMINAL LUG (3). Loosen screw (4).
- 3 GROUNDING ROD WIRE (5). Remove from terminal lug (3).



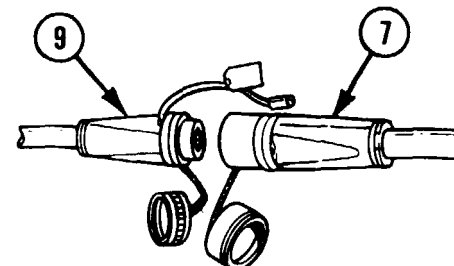
- 4 SCREW (6). Remove from electrical plug connector (male) (7) on 120/208V cable assembly.

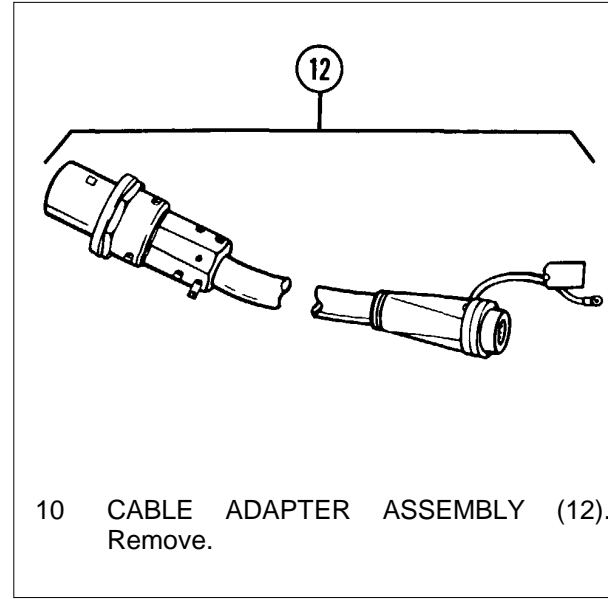
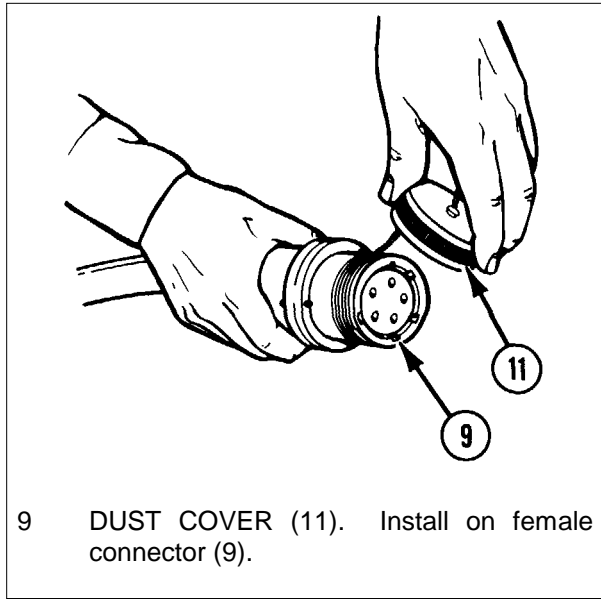
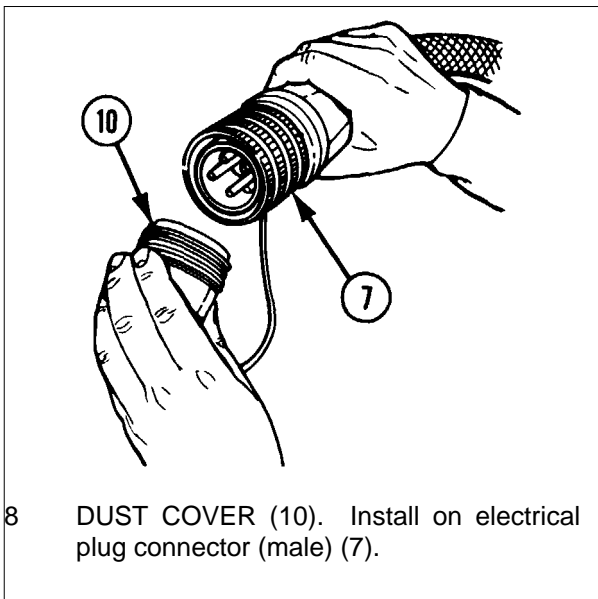


- 5 CABLE ASSEMBLY (8). Free one end from screw (6).
- 6 SCREW (6). Replace on electrical plug connector (male) (7).

CAUTION
Install dust covers on connectors immediately after disconnection to protect against dirt, dust, etc.

- 7 FEMALE CONNECTOR (9). Disconnect from electrical plug connector (male) (7) on 120/ 208V cable assembly.

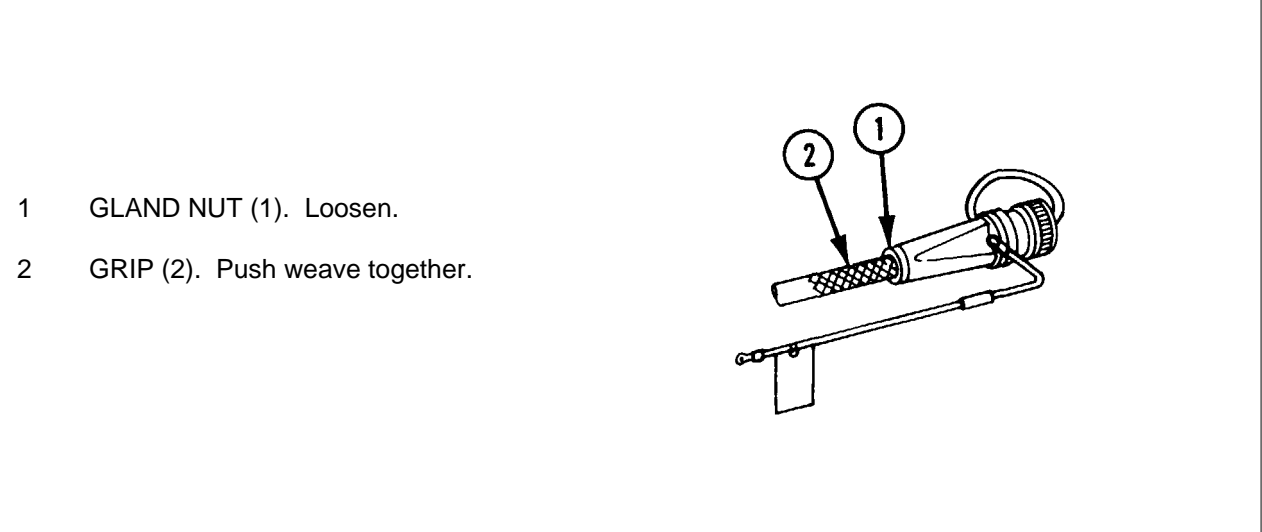




DISASSEMBLY

CAUTION
 The gland nut has lefthand threads and must be loosened by turning in the opposite direction from that used to loosen standard right-hand threaded nuts.

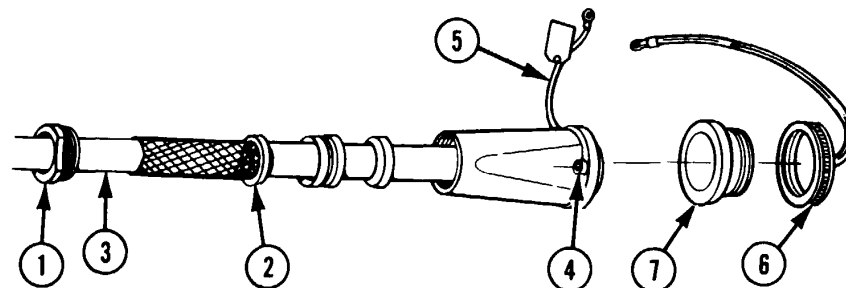
NOTE
 Steps 1 thru 10 pertain to disassembly of the female connector and cable assembly.



3-38. CABLE ADAPTER ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

DISASSEMBLY (cont)

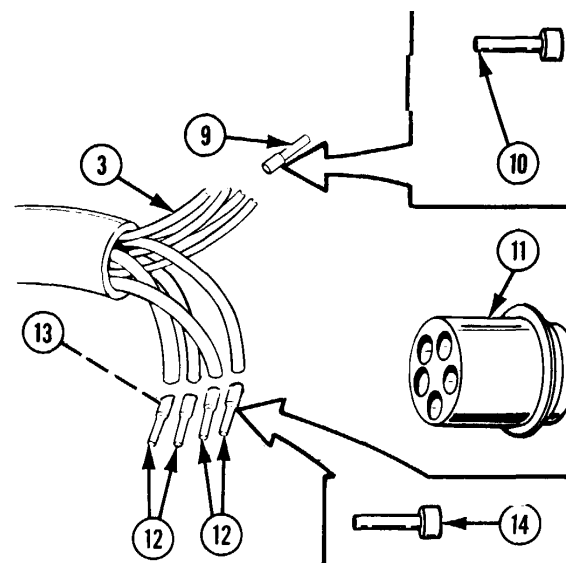
- 3 GLAND NUT (1) AND GRIP (2). Slide back over cable (3).
- 4 THREE SCREWS (4). Remove.
- 5 CABLE ASSEMBLY (5), DUST COVER (6), AND FORWARD CONNECTOR HOUSING (7). Remove.



This diagram shows a close-up of the cable adapter housing with the preformed packing (8) being removed. An arrow points from the packing to the text label.

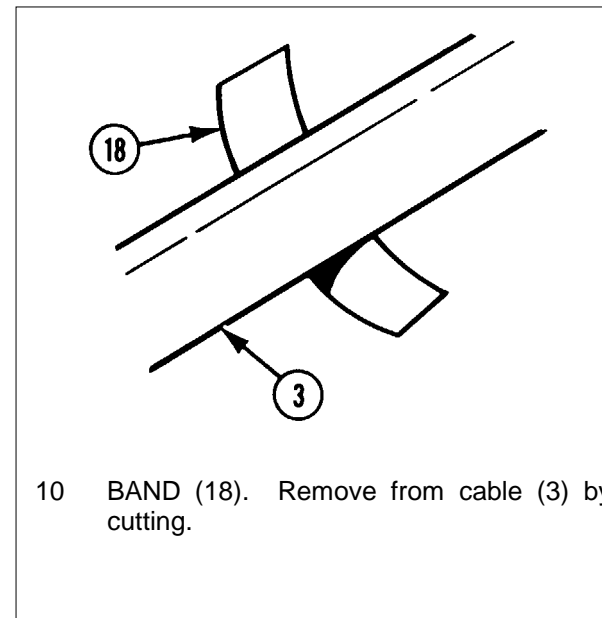
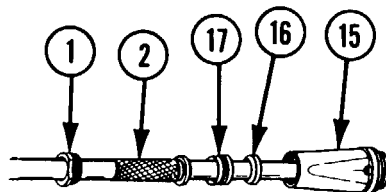
- 6 PREFORMED PACKING (8). Remove.

- 7 GROUND SOCKET (9).
 - a. Use removal tool no. 6 (10) to release from socket insert (11).
 - b. Remove from cable (3) by cutting.
- 8 FOUR SOCKETS (A, B, C, AND N) (12) AND FOUR BUSHINGS (13).
 - a. Use removal tool no. 4 (14) to release from socket insert (11).
 - b. Remove from cable (3) by cutting.



9

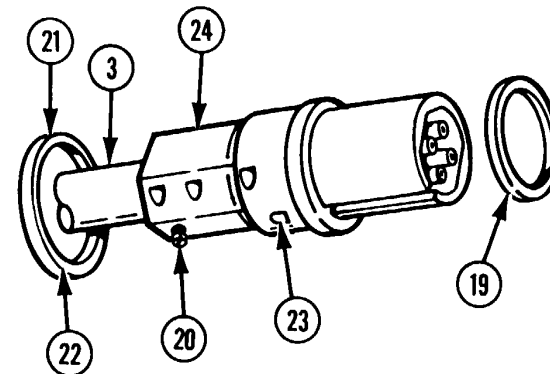
REAR CONNECTOR HOUSING (15),
SPACER (16), GLAND (17), GRIP (2),
AND GLAND NUT (1). Remove.



10 BAND (18). Remove from cable (3) by cutting.

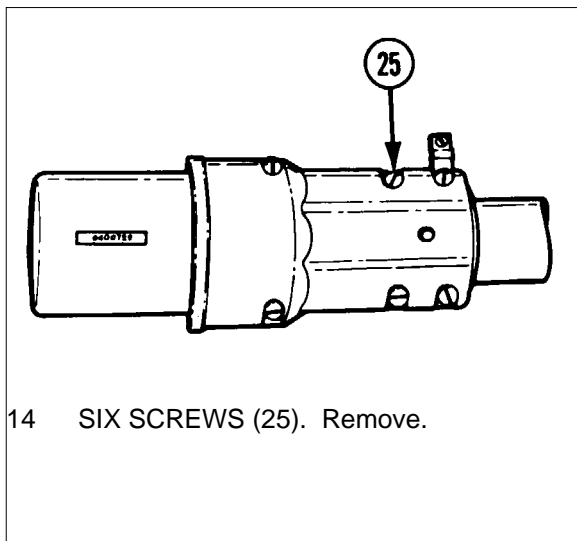
NOTE
Steps 11 thru 23 pertain to
disassembly of the plug
connector.

- 11 GASKET (19). Remove.
- 12 TWO CABLE CLAMP SCREWS (20). Loosen.
- 13 CLAMPING NUT (21).
 - a. Rotate until notch (22) in nut is alined with boss (23) on lower half of body (24).
 - b. Slide back over cable (3).

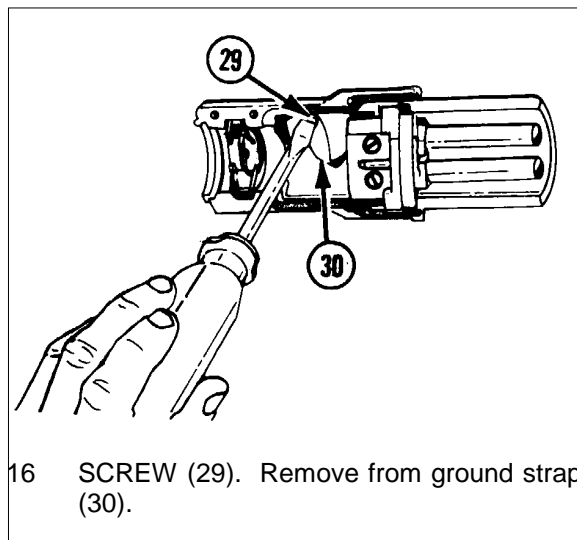
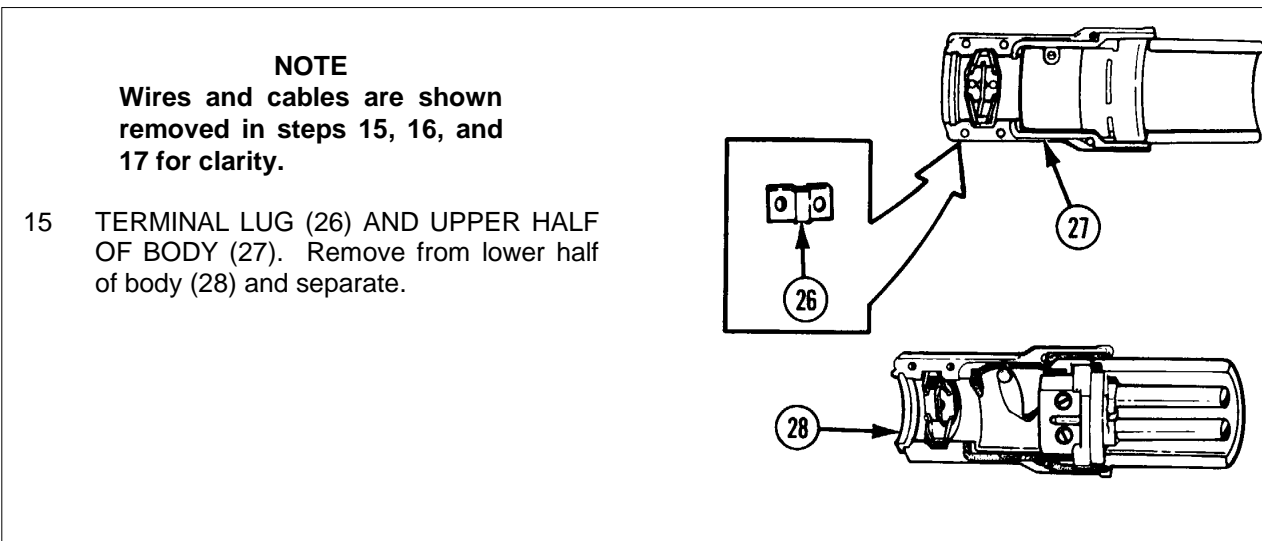


3-38. CABLE ADAPTER ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

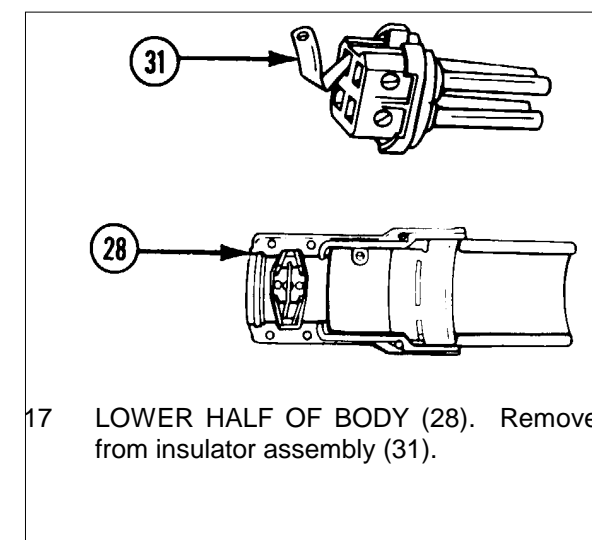
DISASSEMBLY (cont)



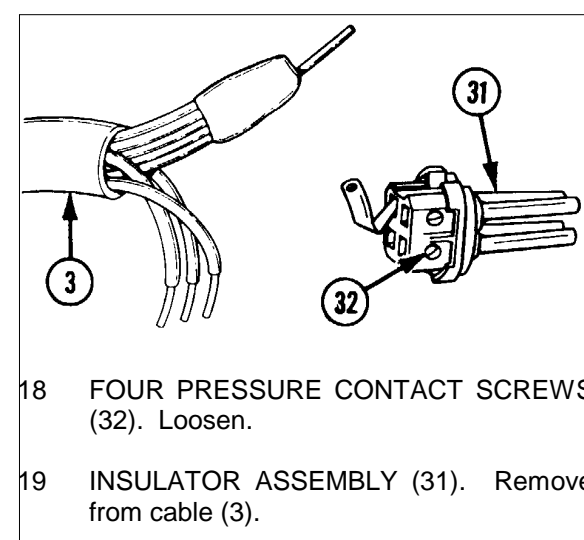
14 SIX SCREWS (25). Remove.



16 SCREW (29). Remove from ground strap (30).

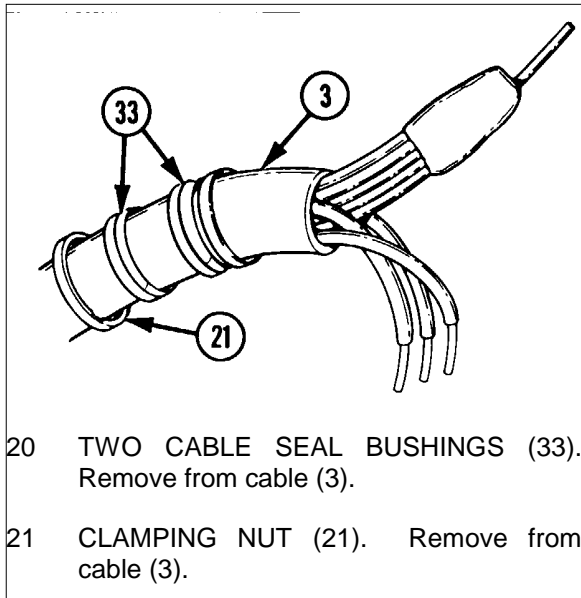


17 LOWER HALF OF BODY (28). Remove from insulator assembly (31).



18 FOUR PRESSURE CONTACT SCREWS (32). Loosen.

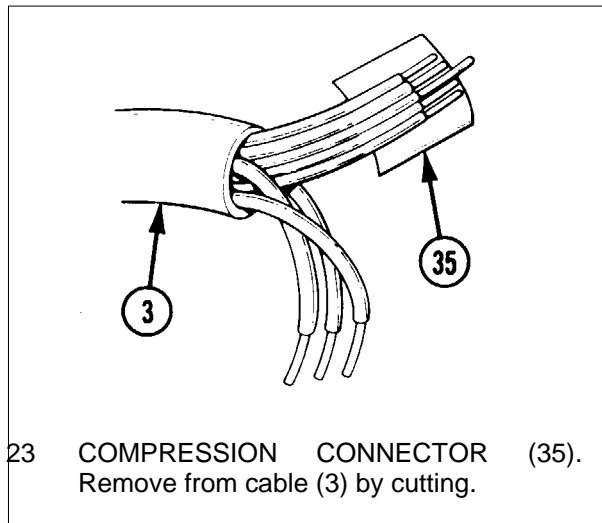
19 INSULATOR ASSEMBLY (31). Remove from cable (3).



NOTE

Insulation (34) and compression connector (35) are to be removed from cable (3) only if replacement is required.

22 INSULATION (34). Remove from cable (3) by cutting.



REPAIR

1 FEMALE CONNECTOR (1).

a. Replace with a new item if not repairable.

b. Refer to page 3-310, paragraph 3-39, for repair procedures.

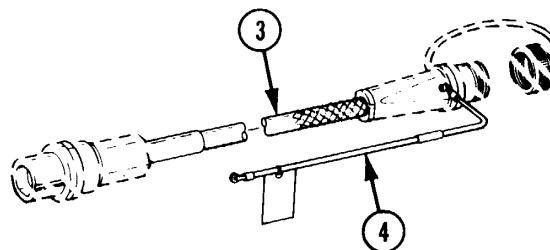
2 PLUG CONNECTOR (2). Replace if any part is damaged.



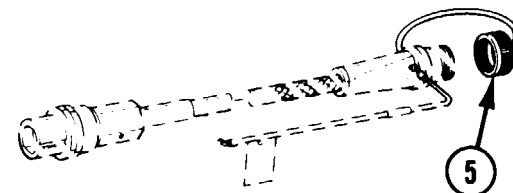
3-38. CABLE ADAPTER ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

REPAIR (cont)

- 3 CABLE (3).
- a. If ends of insulation or wires are damaged, repair by shortening slightly.
 - b. If unable to repair, replace with a 2-ft (0.610-m) long piece of cable (fig. 29, app E).



- 4 CABLE ASSEMBLY (4). Refer to page 3-3-314, paragraph 3-41, for repair procedures.



- 5 DUST COVER (5). Replace if bent or broken.

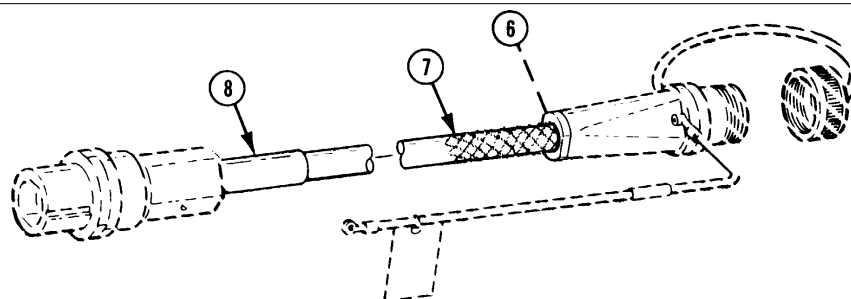
- 6 GLAND (6). Replace if deformed or deteriorated.

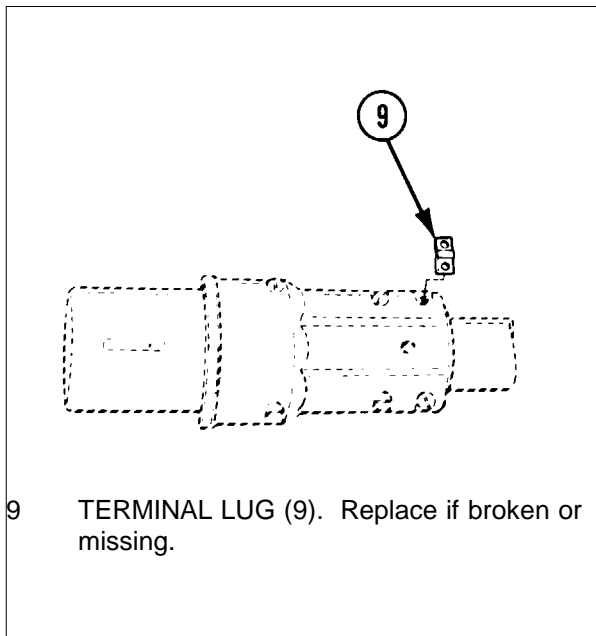
- 7 GRIP (7). Replace if broken.

- 8 BAND (8).

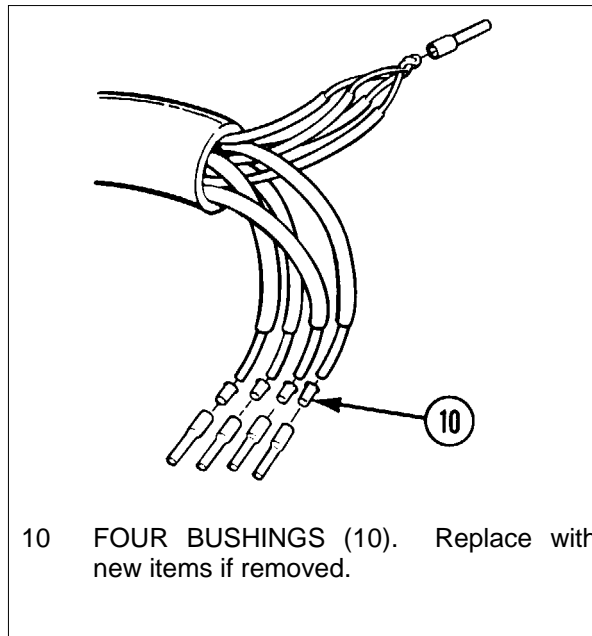
- a. Clearly mark any hard to read parts with black letters 0.31-in. (0.79-cm) high, using marking ink (item 13, app D), to read as follows: CABLE ADAPTER ASSY PART NO. 12011687.

- b. If unable to repair, replace with a new fabricated item (fig. 30, app E).

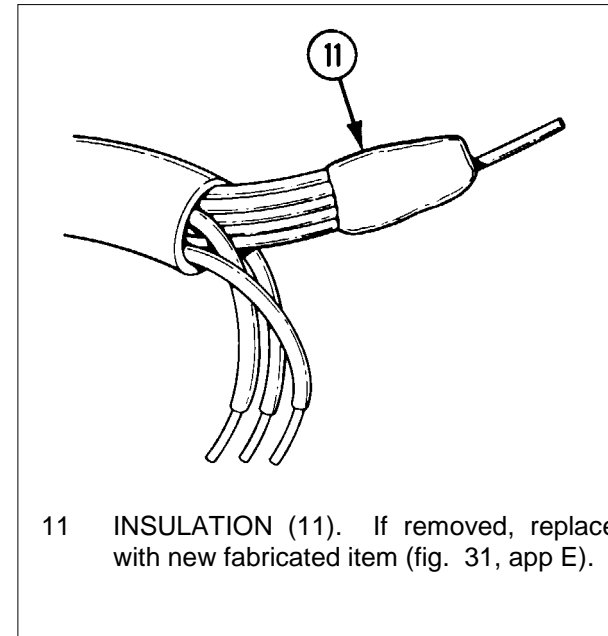




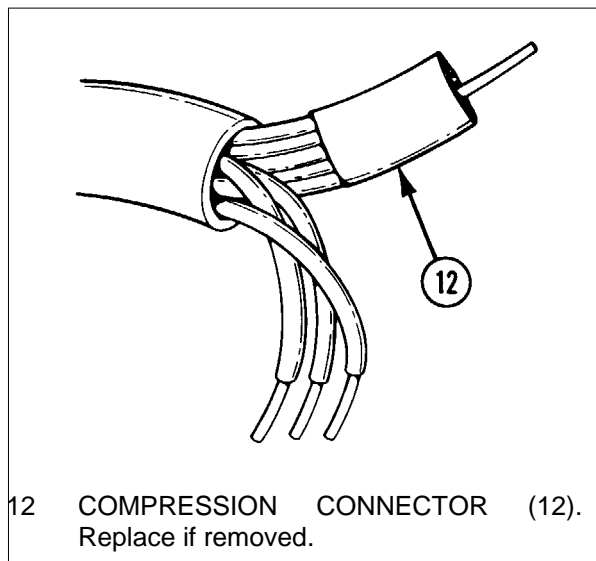
9 TERMINAL LUG (9). Replace if broken or missing.



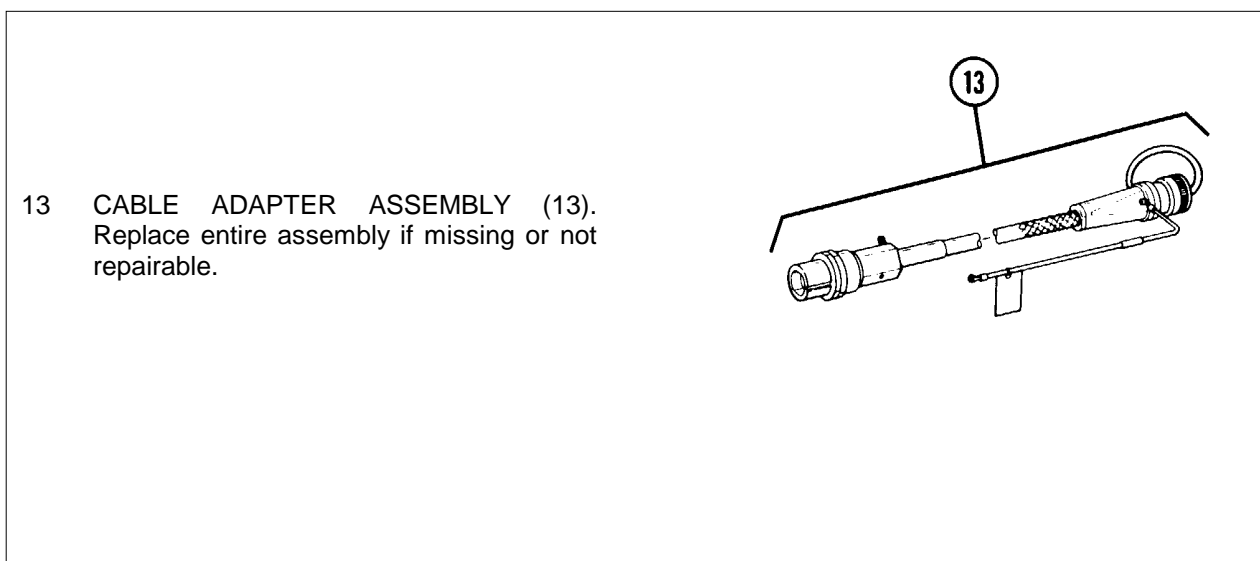
10 FOUR BUSHINGS (10). Replace with new items if removed.



11 INSULATION (11). If removed, replace with new fabricated item (fig. 31, app E).



12 COMPRESSION CONNECTOR (12). Replace if removed.



13 CABLE ADAPTER ASSEMBLY (13). Replace entire assembly if missing or not repairable.



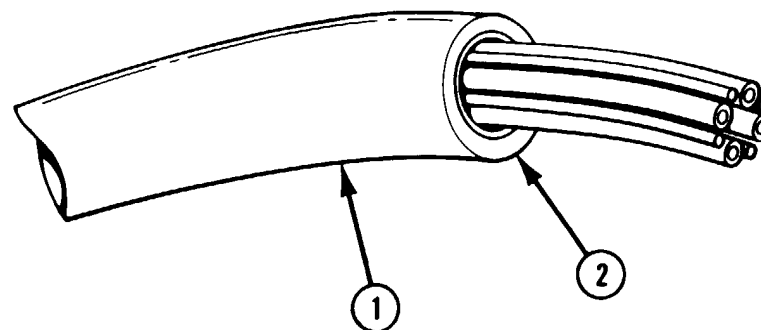
3-38. CABLE ADAPTER ASSEMBLY-- MAINTENANCE INSTRUCTIONS (cont)

PREPARATION OF CABLE FOR PLUG CONNECTOR

NOTE

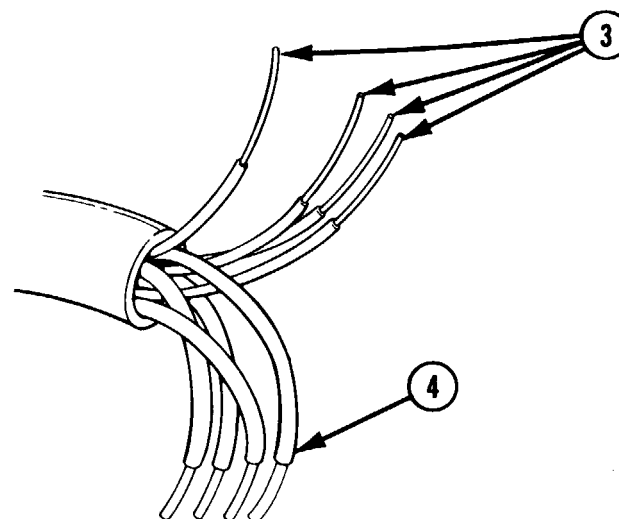
The following procedure is used only for initial assembly or when the cable, insulation, or compression connector has been replaced with a new item.

- 1 CABLE (1).
 - a. Cut ends square.
 - b. Remove 3 in. (7.62 cm) of jacket (2) from end.

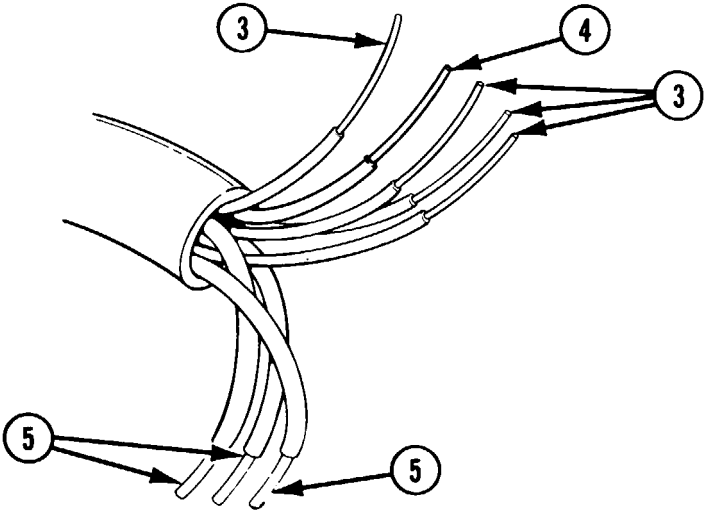


- 2 FOUR GREEN WIRES (3).
 - a. Remove 1.50 in. (3.81 cm) of insulation.
 - b. Twist exposed end of wire.

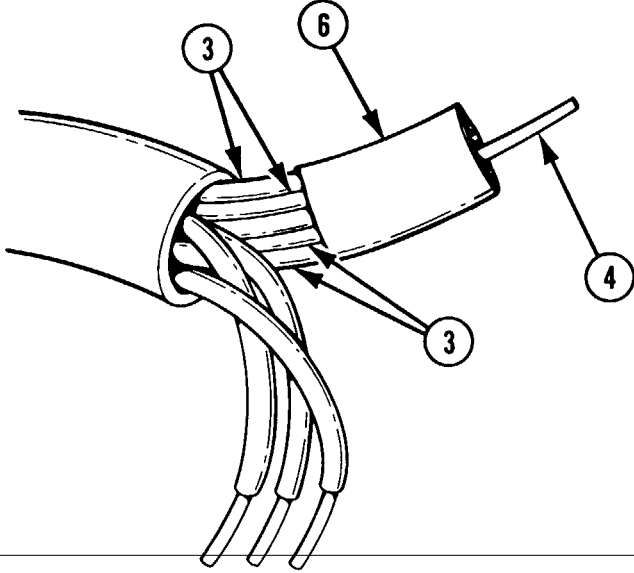
- 3 WHITE WIRE (4).
 - a. Remove 1.50 in. (3.81 cm) of insulation.
 - b. Twist exposed end of wire.



- 4 THREE (RED, BLACK, AND BLUE OR ORANGE) WIRES (5).
- a. Remove 0.625 in. (1.59 cm) of insulation.
 - b. Twist exposed wire end.
- 5 FOUR GREEN WIRES (3).
- a. Bring to white wire (4).
 - b. Line up wire ends.



- 6 COMPRESSION CONNECTOR (6).
- a. Install over four green wires (3) and white wire (4) with 0.625 in. (1.59 cm) of white wire protruding from compression connector.
 - b. Solder in place using solder (item 18, app D).

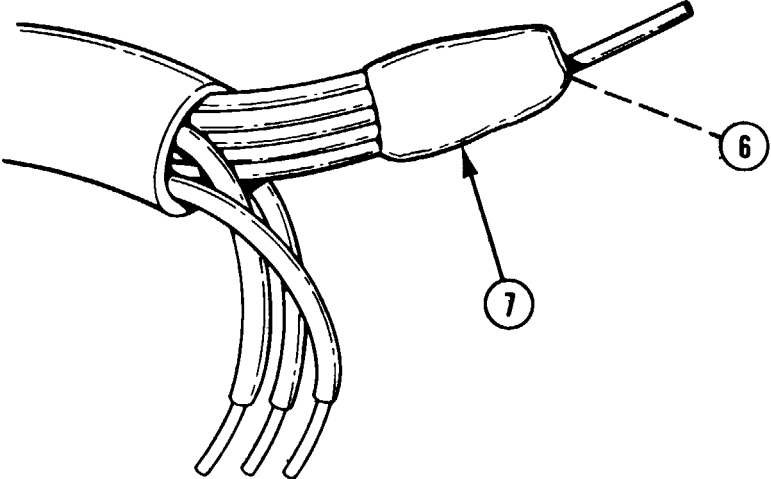


3-38. CABLE ADAPTER ASSEMBLY-- MAINTENANCE INSTRUCTIONS (cont)

PREPARATION OF CABLE FOR PLUG CONNECTOR (cont)

7 INSULATION (7).

- a. Slip over compression connector (6).
- b. Shrink in place using heat gun.



REASSEMBLY

NOTE

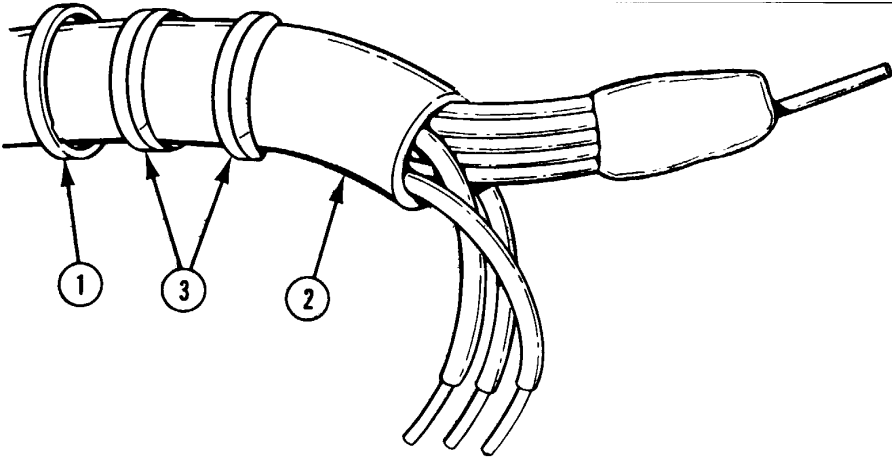
Steps 1 thru 17 pertain to assembly of the plug connector.

1 CLAMPING NUT (1). Install on cable (2).

CAUTION

Cable seal bushings must fit snugly on cable.

2 TWO CABLE SEAL BUSHINGS (3). Install on cable (2).



NOTE

White wire (4) is soldered into compression connector (5) along with four green wires (6).

- 3 WHITE WIRE (4) AND THREE (RED, BLACK, AND BLUE OR ORANGE) WIRES (7). Install in four contact recesses (8) of insulator assembly (9) according to table 3-6.
- 4 FOUR PRESSURE CONTACT SCREWS (10). Tighten.

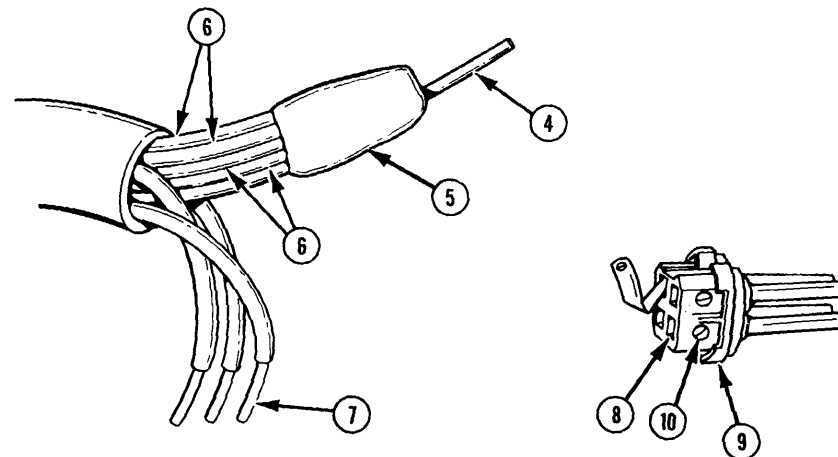


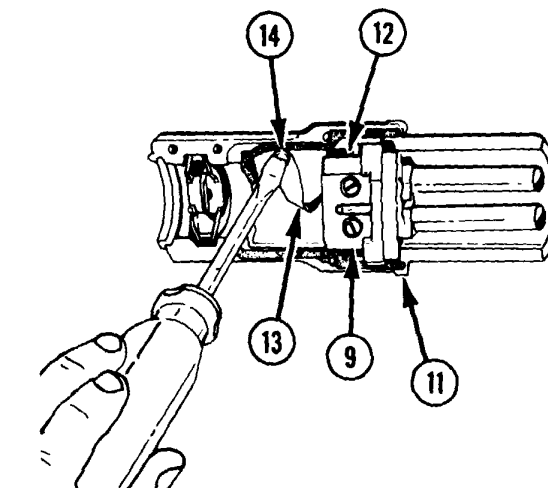
Table 3-6. Wire Polarity

NOTE

Use this table to get correct polarity on wires.

Contact Recess Designation	Wire Color
1	Black
2	Red
3	Blue or Orange
4	White

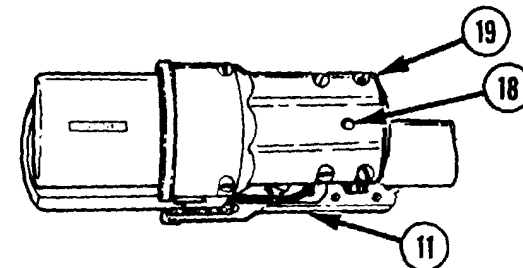
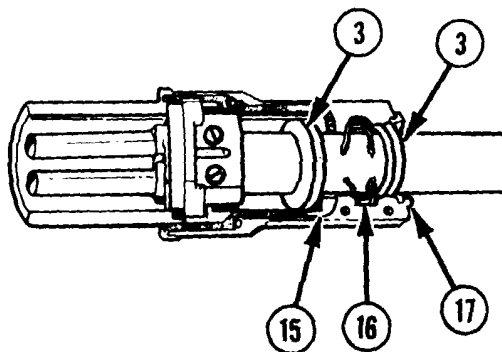
- 5 INSULATOR ASSEMBLY (9). Install in lower half of body (11) with wide notch (12) to left (viewed from cable side).
- 6 GROUND STRAP (13). Position over tapped hole in lower half of body (11).
- 7 SCREW (14). Install.



CABLE ADAPTER ASSEMBLY-- MAINTENANCE INSTRUCTIONS (cont)

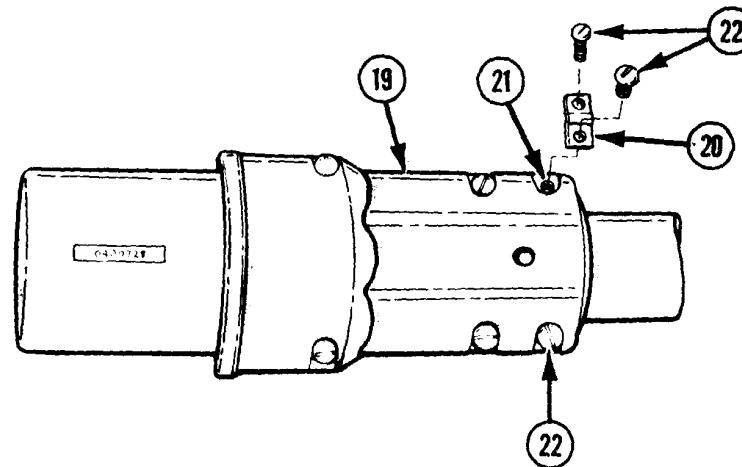
REASSEMBLY (cont)

- 8 TWO CABLE SEAL BUSHINGS (3).
- a. Adjust one bushing until it sits on land (15) in front of cable clamp (16).
 - b. Adjust other bushing until it sits on land (17) in back of cable clamp (16).



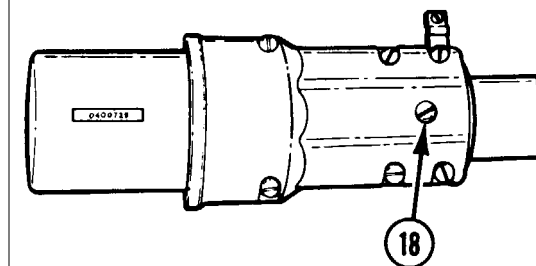
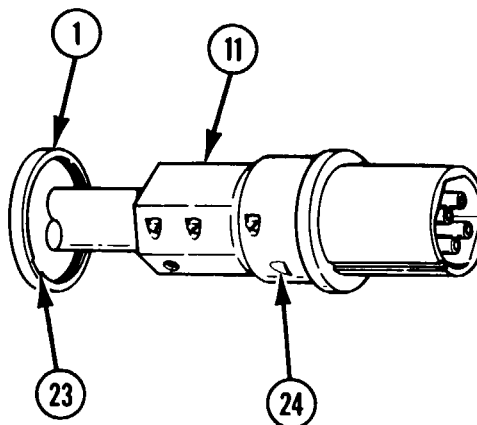
- 9 TWO CABLE CLAMP SCREWS (18). Loosen.
- 10 UPPER HALF OF BODY (19). Assemble over lower half of body (11).

- 11 TERMINAL LUG (20). Install over one screw hole (21) in upper half of body (19).
- 12 SIX SCREWS (22).
- a. Install in upper half of body (19).
 - b. Tighten.

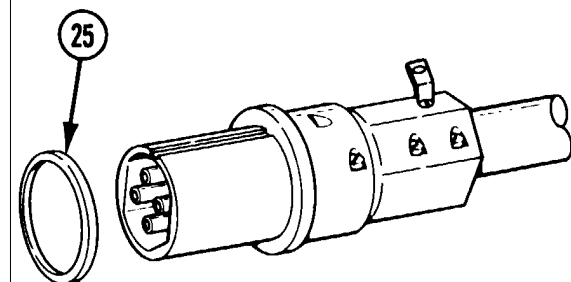


13 CLAMPING NUT (1).

- a. Rotate until notch (23) is aligned with boss (24) on lower half of body (11).
- b. Push into position by sliding over boss (24).



14 TWO CABLE CLAMP SCREWS (18). Tighten evenly.

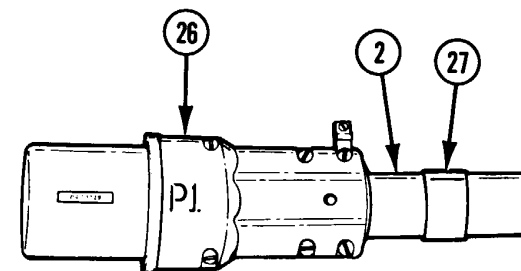


15 GASKET (25). Install.

16 PLUG CONNECTOR (26). Mark designation "P1" on exterior using marking ink (item 13, app D).

17 BAND (27).

- a. Slip on cable (2).
- b. Position at rear of plug connector (26) and shrink in place using heat gun.

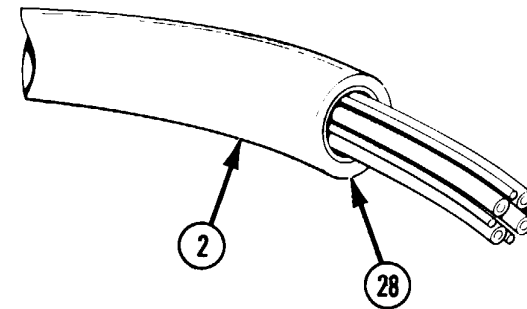


3-38. CABLE ADAPTER ASSEMBLY-- MAINTENANCE INSTRUCTIONS (cont)

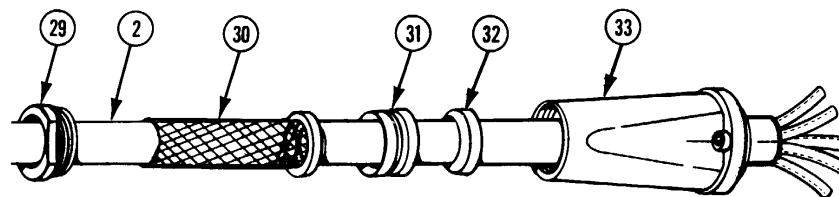
REASSEMBLY (cont)

NOTE
Steps 18 thru 39 pertain to assembly of the female connector and cable assembly.

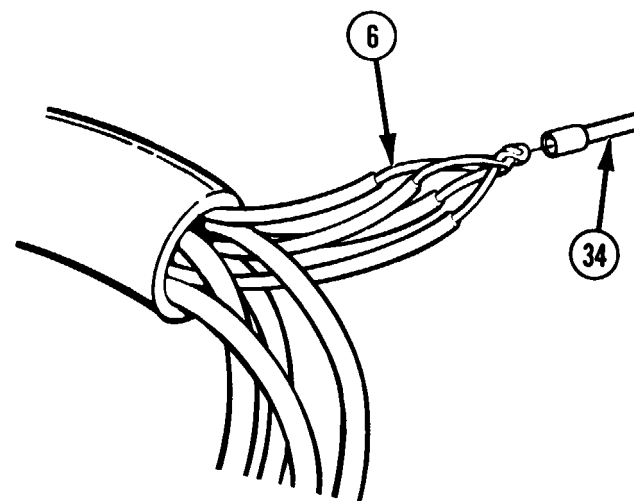
- 18 CABLE (2).
- a. Cut end square.
 - b. Remove outer jacket (28) for 4.25 in. (10.80 cm) from each end.



- 19 GLAND NUT (29). Slip on cable (2).
- 20 GRIP (30). Slip on cable (2).
- 21 GLAND (31). Slip on cable (2).
- 22 SPACER (32). Slip on cable (2).
- 23 REAR CONNECTOR HOUSING (33). Slip on cable (2).

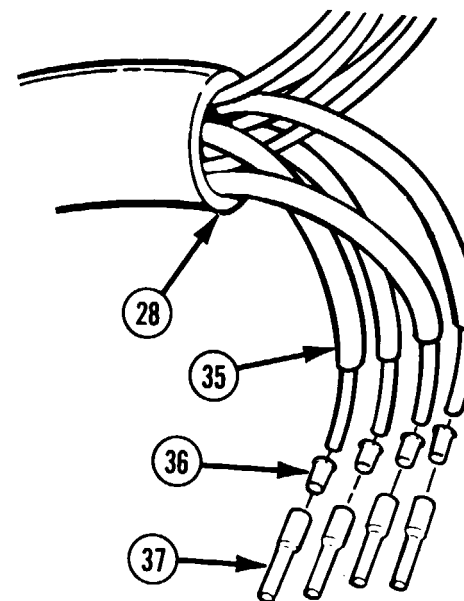


- 24 FOUR GREEN WIRES (6).
- Remove insulation for 1.50 in. (3.81 cm) from end.
 - Bring three of the green wires to the green wire between the red wire and blue or orange wire; twist the ends of all four green wires together.
 - Cut twisted ends 0.75 in. (1.91 cm) from insulation.



- 25 GROUND SOCKET (34).
- Slip on twisted ends of four green wires (6).
 - Solder in place using solder (item 18, app D).

- 26 FOUR WIRES (WHITE, BLACK, RED, AND BLUE OR ORANGE) (35).
- Cut cable outer jacket (28) so wires protrude 3.25 in. (8. cm).
 - Remove 0.75 in. (1.91 cm) of insulation from end of wires.
 - Twist individual ends.



- 27 FOUR BUSHINGS (36).
- Slip on four wires (35).
 - Solder in place using solder (item 18, app D).

- 28 FOUR SOCKETS (37).
- Slip over four bushings (36).
 - Solder in place using solder (item 18, app D).

3-38. CABLE ADAPTER ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY (cont)

29 GROUND SOCKET (34) AND FOUR SOCKETS (37). Install in socket insert (38) according to table 37.

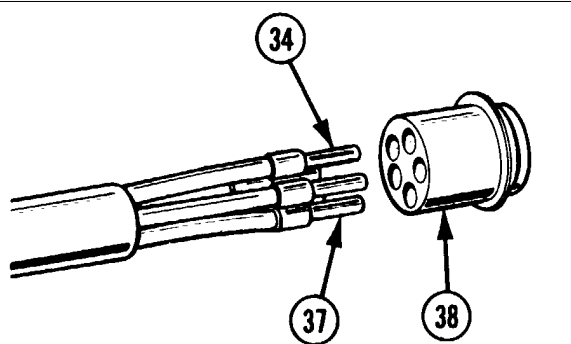


Table 3-7. Female Connector Socket Position

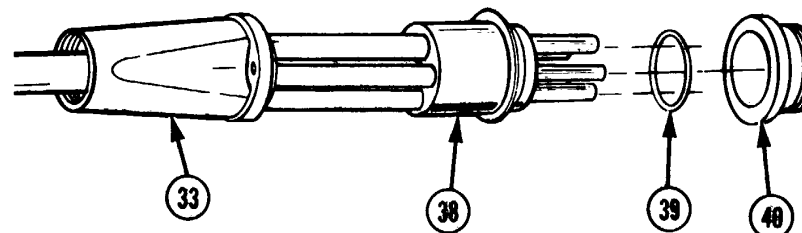
NOTE
Use the following information to obtain correct wire polarity.

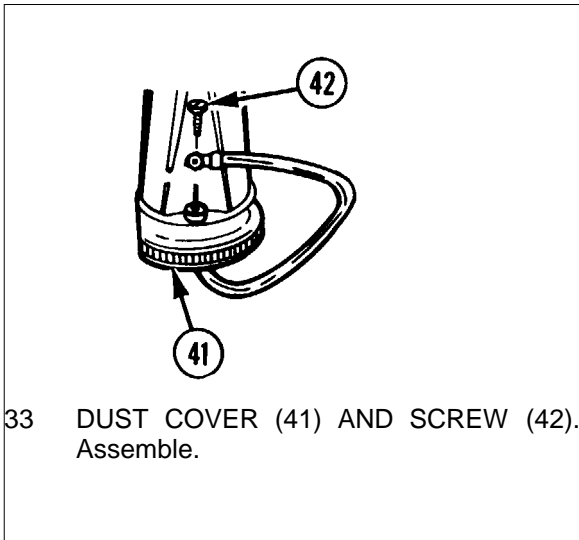
Wire Color	Socket Insert Designation
Black	A
Red	B
Blue or Orange	C
White	N
Green	G

30 SOCKET INSERT (38) AND REAR CONNECTOR HOUSING (33). Assemble.

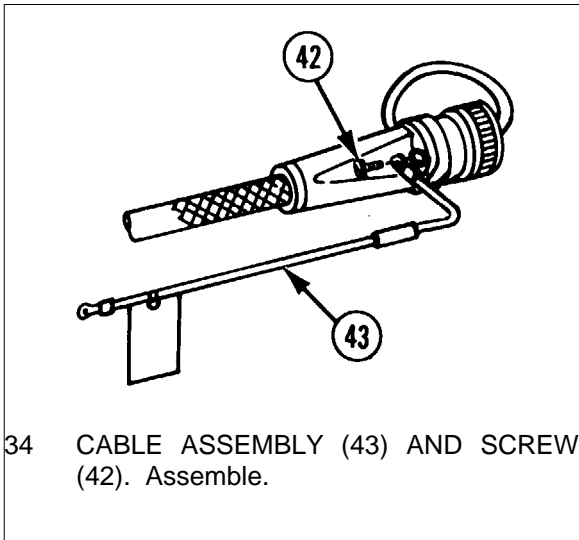
31 PREFORMED PACKING (39). Install.

32 FORWARD CONNECTOR HOUSING (40). Install.

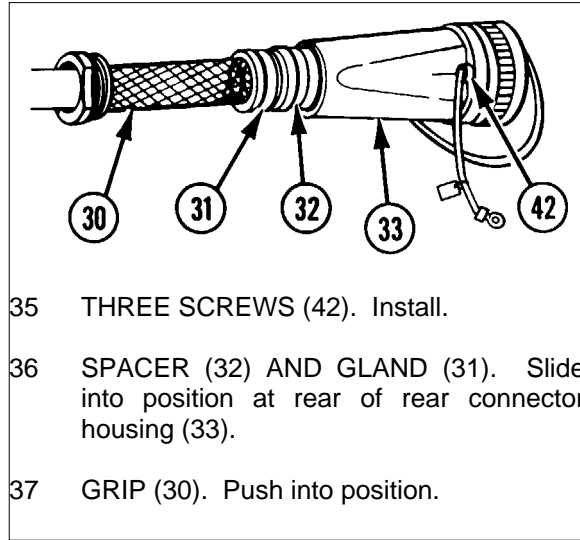




33 DUST COVER (41) AND SCREW (42). Assemble.



34 CABLE ASSEMBLY (43) AND SCREW (42). Assemble.



35 THREE SCREWS (42). Install.

36 SPACER (32) AND GLAND (31). Slide into position at rear of rear connector housing (33).

37 GRIP (30). Push into position.

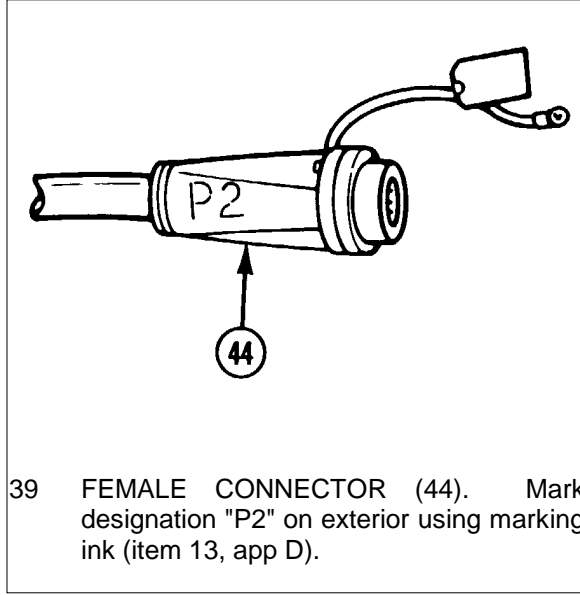
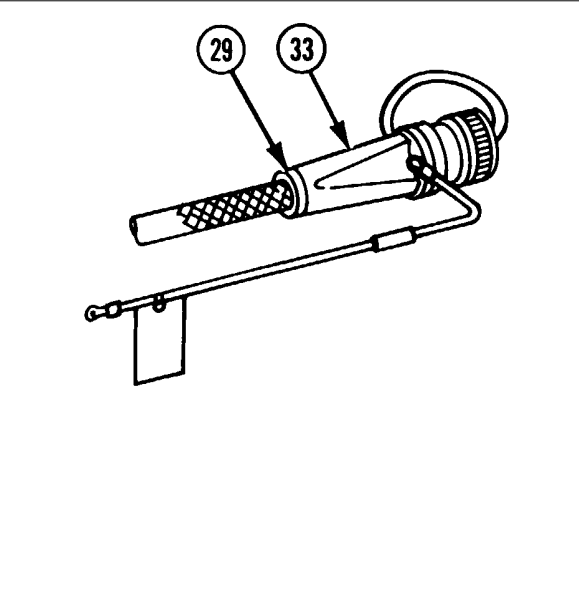
38 GLAND NUT (29).

a. Slide toward rear connector housing (33).

CAUTION
The gland nut has left hand threads and should be tightened by turning in the opposite direction from that used to tighten standard right-hand threaded nuts.

b. Tighten to a torque level of 35 to 40 lb-ft (47.25 to 54 N-m).

c. Retorque to same level after approximately 12 hours.



39 FEMALE CONNECTOR (44). Mark designation "P2" on exterior using marking ink (item 13, app D).



3-38. CABLE ADAPTER ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

TEST PROCEDURES

NOTE

Correct wiring of the cable adapter assembly should be checked with an ohmmeter (electrical continuity test).

- 1 OHMMETER LEAD #1 (1). Place on a contact (2) on female connector (3).
- 2 OHMMETER LEAD #2 (4). Place on appropriate contact (5) on plug connector (6) according to table 3-8.

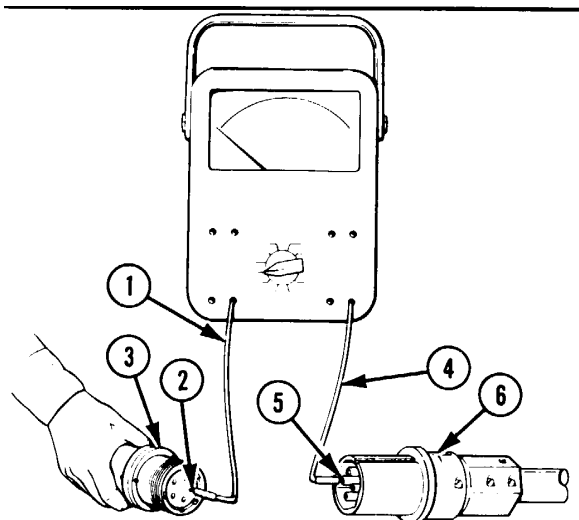


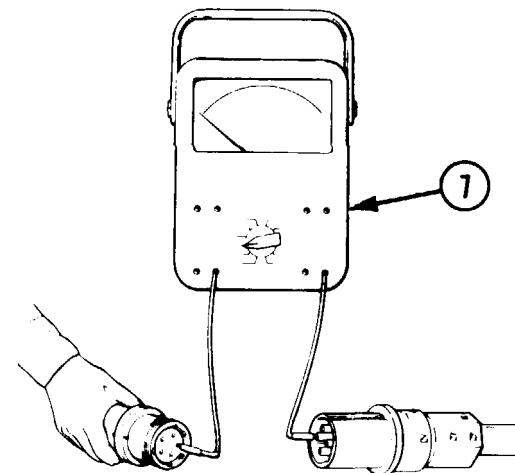
Table 3-8. Wire Locations

NOTE

Use this table to place leads on correct contacts.

Lead #1 on contact on female connector	Lead #2 on contact on plug connector
A	1
B	2
C	3
G	4
N	4

- 3 OHMMETER (7). Should read approximately zero for each of the five readings (on contact combinations).

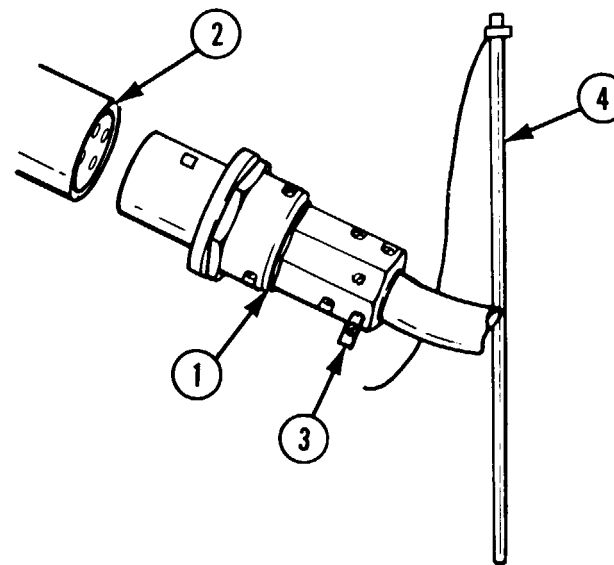


INSTALLATION

WARNING

Do not connect or disconnect cable adapter assembly when shop set is energized.

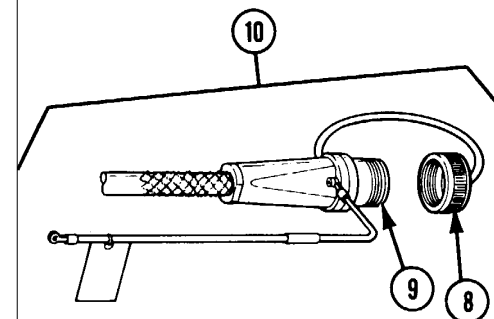
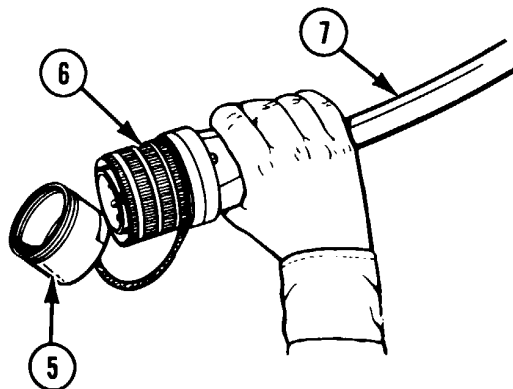
- 1 PLUG CONNECTOR (1). Install on mating connector (2) on power distribution panel.
- 2 TERMINAL LUG (3).
 - a. Attach wire of grounding rod (4).
 - b. Tighten.
- 3 GROUNDING ROD (4). Push into ground near plug connector (1).



CAUTION

Remove dust covers just prior to connection to protect connectors from dirt, dust, etc.

- 4 DUST COVER (5). Remove from electrical plug connector (male) (6) on 120/208V cable assembly (7).



- 5 DUST COVER (8). Remove from female connector (9) on cable adapter assembly (10).

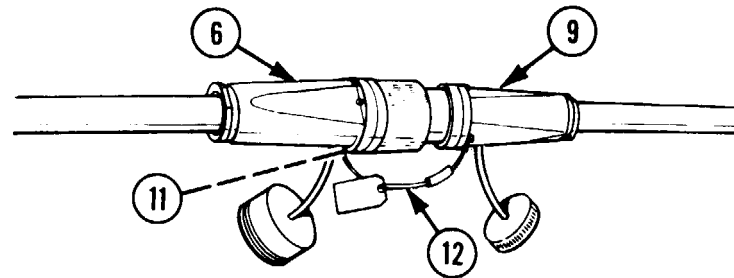


**3-38. CABLE ADAPTER ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)
INSTALLATION--(cont)**

6 ELECTRICAL PLUG CONNECTOR (MALE) (6) AND FEMALE CONNECTOR (9). Plug together.

SCREW (11).

- a. Remove from electrical plug connector (male) (6) of 120/ 208V cable assembly.
- b. Assemble through one end of cable assembly (12) and reinstall in electrical plug connector (male) (6).



3-39. CABLE ADAPTER ASSEMBLY--FEMALE CONNECTOR--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Removal
- b. Inspection
- c. Service

- d. Repair
- e. Installation

INITIAL SETUP

Test Equipment
Ohmmeter

Special Tools

- Basic aircraft armament repairman tool set (SC 4933-95-CL-A13)
- Fire control repair shop set (SC 4931-95-CL-A21)
- Removal tool (MS90562-5)
- Removal tool (MS90562-6)
- Supplemental aircraft armament repairman tool set (SC 4933-95-CL-A14)

Materials/Parts

- Cloth (item 5, app D)
- Solder (item 18, app D)

- Bushings (4) (MS3348-4-6L)
- Ground socket (MS90560-7)
- Preformed packing (MS29513-132)
- Sockets (A, B, C, and N) (4) (MS90560-5)

References

- Appendix D
3-287 Reassembly, test procedures, and installation procedures for cable adapter assembly.
- 3-287 Removal and disassembly procedures for cable adapter assembly.

Troubleshooting Reference

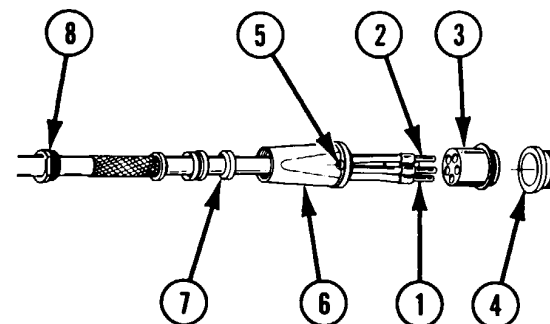
- 3-8 Environmental control units or exhaust fans do not operate correctly.

REMOVAL

Refer to removal and disassembly procedures on page 3-287, paragraph 3-38, for the Gable adapter assembly.

INSPECTION

- 1 GROUND SOCKET (1) AND FOUR SOCKETS (A, B, C, AND N) (2). Check for damaged or corroded parts.
- 2 SOCKET INSERT (3), FORWARD CONNECTOR HOUSING (4), THREE SCREWS (5), REAR CONNECTOR HOUSING (6), SPACER (7), AND GLAND NUT (8). Check for bent or broken parts.



SERVICE

FEMALE CONNECTOR. Remove dirt with a cloth (item 5, app D).

The illustration shows a female connector with a cleaning cloth (item 5) attached to its handle. A separate gland nut is shown nearby. The connector has a textured grip section and a threaded end.

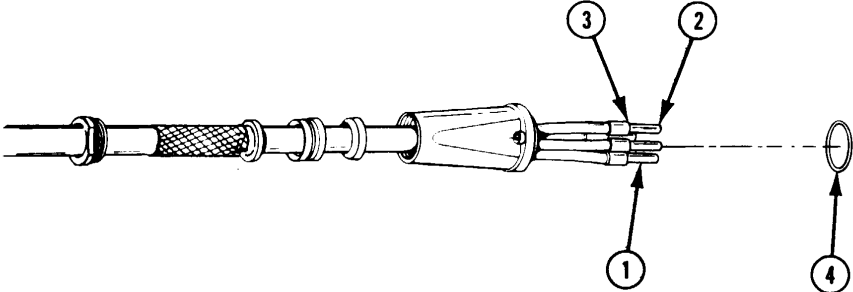
FEMALE CONNECTOR



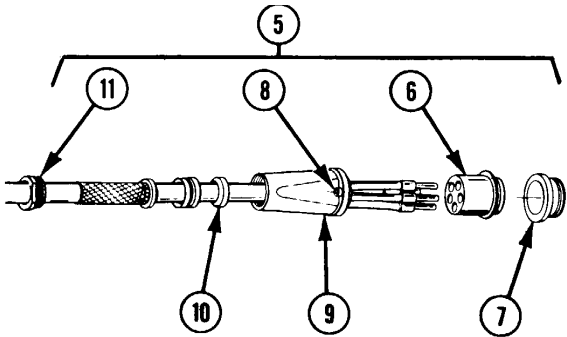
3-39. CABLE ADAPTER ASSEMBLY--FEMALE CONNECTOR--MAINTENANCE INSTRUCTIONS (cont)

REPAIR

1 GROUND SOCKET (1), FOUR SOCKETS (A, B, C, AND N) (2), FOUR BUSHINGS (3), AND PREFORMED PACKING (4. Replace with new parts if removed.



2 FEMALE CONNECTOR (5). Replace with a new item if any of the following parts are damaged: socket insert (6), forward connector housing (7), three screws (8), rear connector housing (9), spacer (10), and gland nut (11).



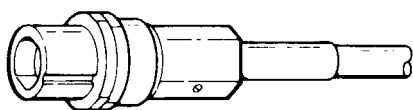
INSTALLATION

Refer to reassembly, test procedures, and installation procedures on page 3-287, paragraph 3-38, for cable adapter assembly.

3-40. CABLE ADAPTER ASSEMBLY--PLUG CONNECTOR--MAINTENANCE INSTRUCTIONS

<p>THIS TASK COVERS:</p> <ul style="list-style-type: none"> a. Inspection b. Service 	<ul style="list-style-type: none"> c. Removal d. Installation
<p>INITIAL SETUP</p> <p>Test Equipment Ohmmeter</p> <p>Special Tools Basic aircraft armament repairman tool set (SC 4933-95-CL-A13) Fire control repair shop set (SC 4931-95-CL-A21) Supplemental aircraft armament repairman tool set (SC 4933-95-CL-A14)</p> <p>Materials/Parts Abrasive cloth (item 4, app D) Cloth (item 5, app D)</p>	<p>References</p> <p>Appendix D 3-287 Reassembly, test procedures, and installation procedures for cable adapter assembly. 3-287 Removal and disassembly procedures for cable adapter assembly.</p> <p>Troubleshooting Reference 3-8 Environmental control units or exhaust fans do not operate correctly.</p>

INSPECTION



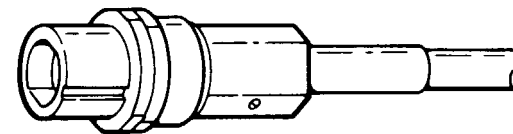
PLUG CONNECTOR

PLUG CONNECTOR. Check for bent, broken, or corroded parts.

SERVICE

PLUG CONNECTOR.

- a. Remove dirt with cloth (item 5, app D).
- b. Remove corrosion with abrasive cloth (item 4, app D).



PLUG CONNECTOR



3-40. CABLE ADAPTER ASSEMBLY--PLUG CONNECTOR--MAINTENANCE INSTRUCTIONS (cont)

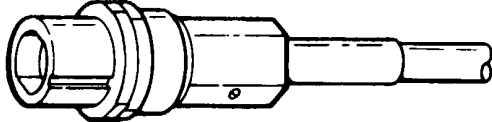
REMOVAL

Refer to removal and disassembly procedures on page 3-287, paragraph 3-38., for the cable adapter assembly.

INSTALLATION

NOTE
 Replace entire assembly with new item if any part of plug connector is damaged.

Refer to reassembly, test procedures, and installation procedures on page 3-287, paragraph 3-38, for the cable adapter assembly.



PLUG CONNECTOR

3-41. CABLE ADAPTER ASSEMBLY--CABLE ASSEMBLY--MAINTENANCE INSTRUCTIONS

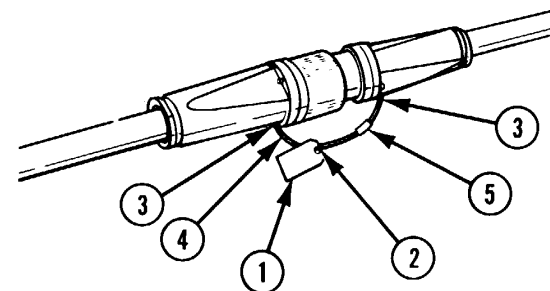
THIS TASK COVERS:	
<ul style="list-style-type: none"> a. Inspection b. Removal c. Disassembly 	<ul style="list-style-type: none"> d. Repair e. Reassembly f. Installation
<p>INITIAL SETUP</p> <p>Special Tools</p> <ul style="list-style-type: none"> Basic aircraft armament repairman tool set (SC 4933-95-CL-A13) Fire control repair shop set (SC 4931-95-CL-A21) Supplemental aircraft armament repairman tool set (SC 4933-95-CL-A14) 	<p>Material s/Parts</p> <ul style="list-style-type: none"> Marking ink (item 13, app D) Terminals (2) (MS25036-112) <p>References</p> <ul style="list-style-type: none"> Appendix D Appendix E

INSPECTION

NOTE

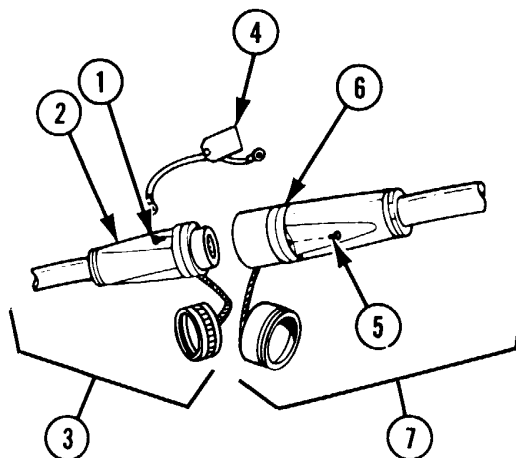
The cable assembly is used to mechanically attach the cable adapter assembly to the 120/208V cable assembly. The purpose of the cable assembly is to discourage the electrical disconnection of the cable adapter assembly from the 120/208V cable assembly.

- 1 TAG (1). Check to ensure it is not missing and is readable.
- 2 STRAP (2). Check to see if missing or damaged.
- 3 TWO TERMINALS (3). Check for missing or broken parts.
- 4 WIRE ROPE (4). Check for broken or worn parts.
- 5 BAND (5). Check to ensure it is not missing and is readable.



REMOVAL

- 1 SCREW (1). Remove from female connector (2) on cable adapter assembly (3).
- 2 CABLE ASSEMBLY (4). Remove one end from screw (1).
- 3 SCREW (1). Reinstall in female connector (2).
- 4 SCREW (5). Remove from electrical plug connector (male) (6) on 120/208V cable assembly (7).
- 5 CABLE ASSEMBLY (4). Remove one end from screw (5).



- 6 SCREW (5). Reinstall in electrical plug connector (male) (6).

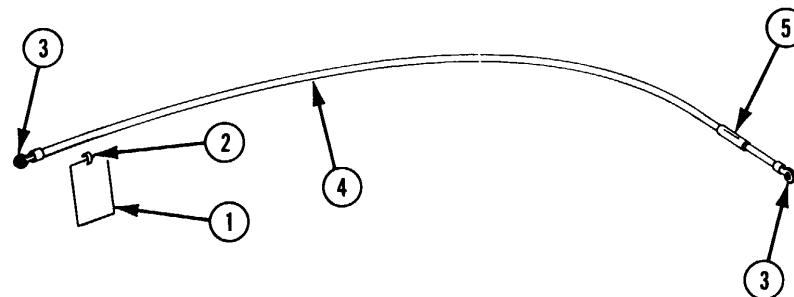
3-41. CABLE ADAPTER ASSEMBLY--CABLE ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

DISASSEMBLY

TAG (1) AND STRAP (2). Remove and separate.

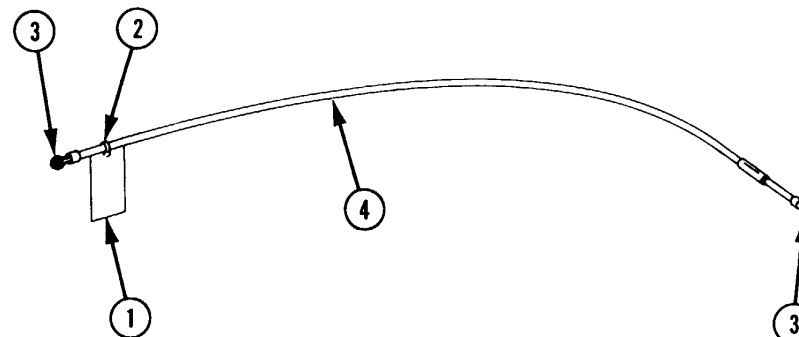
NOTE

The two terminals (3), wire rope (4), or band (5) cannot be salvaged through disassembly. If any of these parts are damaged, all parts must be replaced and reassembled.



REPAIR

- 1 TAG (1). Replace if missing or hard to read.
- 2 STRAP (2). Replace if worn or broken.
- 3 TWO TERMINALS (3). Replace if missing or broken.
- 4 WIRE ROPE (4). Replace if worn or broken with new fabricated item (fig. 32, app E).

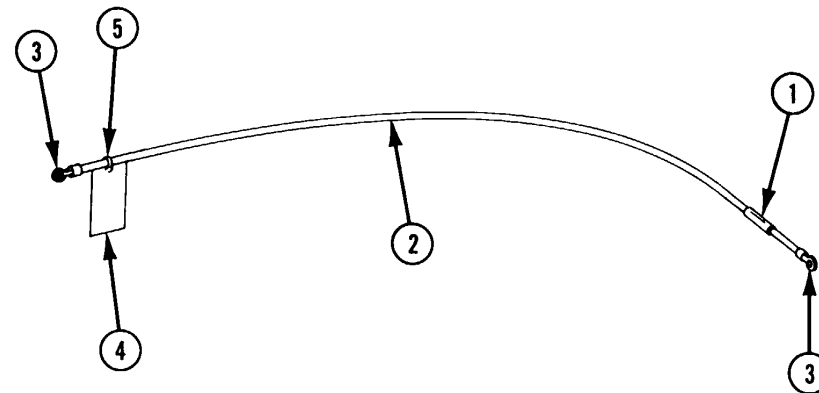


- 5 BAND (5).
 - a. Use marking ink (item 13, app D) to inscribe PART NO. 12011638 on hard to read items. (Letters should be approximately 0.10 in. (0.25 cm) high.)
 - b. Replace with a new fabricated item (fig. 33, app E) if damaged or removed.



REASSEMBLY

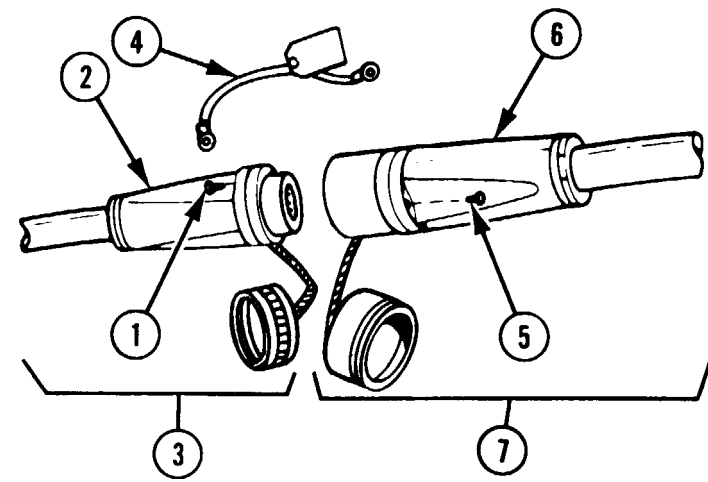
- 1 BAND (1). Slip over wire rope (2).
- 2 TWO TERMINALS (3). Crimp on each end of wire rope (2).
- 3 BAND (1).
- a. Position with 0.50 in. (1.27 cm) between end and one terminal (3).
 - b. Use heat gun to shrink in place.
- 4 TAG (4) AND STRAP (5). Assemble and attach to wire rope (2).



3-41. CABLE ADAPTER ASSEMBLY--CABLE ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

INSTALLATION

- 1 SCREW (1). Remove from female connector (2) on cable adapter assembly (3).
- 2 CABLE ASSEMBLY (4). Assemble one end with screw (1).
- 3 SCREW (1). Reinstall in female connector (2).
- 4 SCREW (5). Remove from electrical plug connector (male) (6) on 120/208V cable assembly (7).
- 5 CABLE ASSEMBLY (4). Assemble one end on screw (5).
- 6 SCREW (5). Reinstall in electrical plug connector (male) (6).



3-42. AIRHOSE--MAINTENANCE INSTRUCTIONS

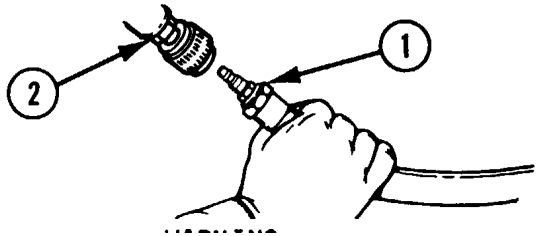
THIS TASK COVERS:

- | | |
|---|---|
| <ul style="list-style-type: none"> a. Removal b. Inspection c. Disassembly | <ul style="list-style-type: none"> d. Repair e. Reassembly f. Installation |
|---|---|

INITIAL SETUP

Special Tool s
 Fire control repair shop set (SC 4931-95-CL-A21)

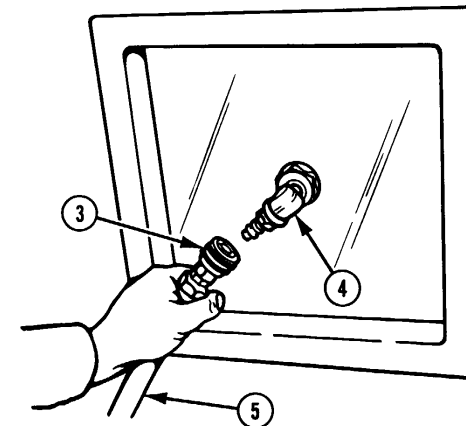
REMOVAL



WARNING
Injury to personnel may result if pressure is not relieved before beginning any maintenance on airhose.

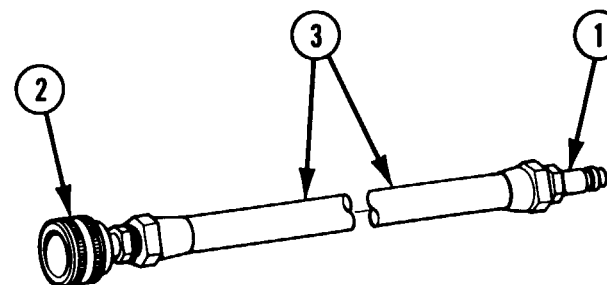
1 QUICK-DISCONNECT MALE COUPLING ASSEMBLY (1). Disconnect from quick-disconnect female coupling assembly (2) on compressed air source.

- 2 QUICK-DISCONNECT FEMALE COUPLING ASSEMBLY (3). Disconnect from quick-disconnect male coupling assembly (4) on the outside shelter wall to the left of the personnel door.
- 3 AIRHOSE (5). Remove.



INSPECTION

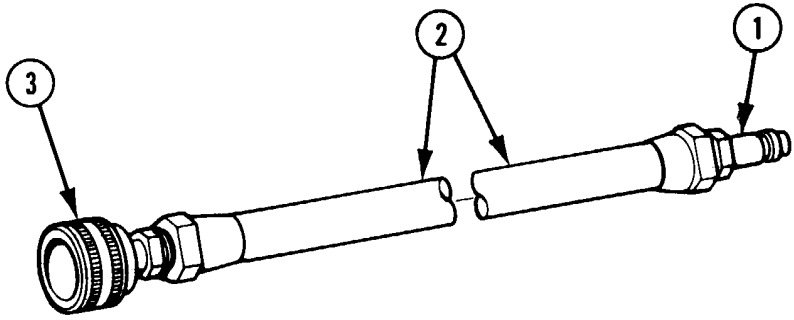
- 1 QUICK-DISCONNECT MALE COUPLING ASSEMBLY (1) AND QUICK-DISCONNECT FEMALE COUPLING ASSEMBLY (2). Check to ensure parts connect/ disconnect properly with the mating parts.
- 2 HOSE (3).
- a. Check for worn, cracked, or deteriorated rubber.
 - b. Check each end for damaged nipples.



3-42. AIRHOSE--MAINTENANCE INSTRUCTIONS (cont)

DISASSEMBLY

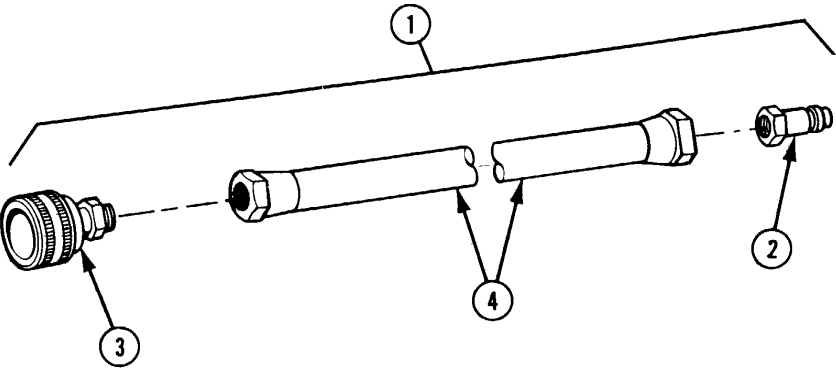
1	QUICK-DISCONNECT MALE COUPLING ASSEMBLY (1). Unscrew from hose (2).
2	QUICK-DISCONNECT FEMALE COUPLING ASSEMBLY (3). Unscrew from hose (2).



REPAIR

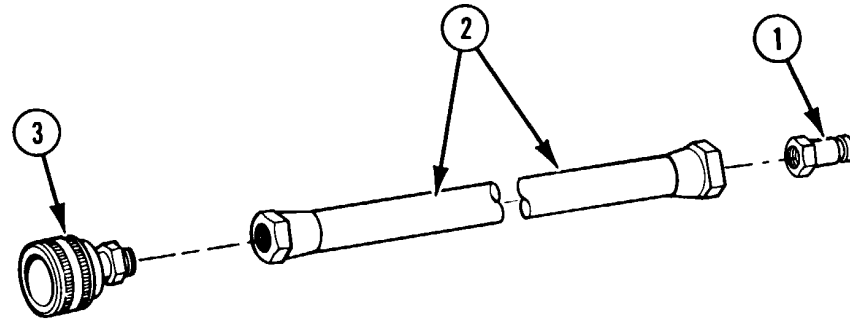
1	AIRHOSE (1). Replace entire assembly if any parts are missing or unrepairable.
2	QUICK-DISCONNECT MALE COUPLING ASSEMBLY (2) AND QUICK-DISCONNECT FEMALE COUPLING ASSEMBLY (3).
3	Replace if items do not connect/disconnect properly with mating parts. 3 HOSE (4).

- a. Replace if rubber is worn, cracked, or deteriorated.
- b. Replace if nipples on either end are damaged.



REASSEMBLY

- 1 QUICK-DISCONNECT MALE COUPLING ASSEMBLY (1). Screw onto hose (2).
- 2 QUICK-DISCONNECT FEMALE COUPLING ASSEMBLY (3). Screw onto hose (2).



INSTALLATION

- 1 AIRHOSE (1). Place between compressed air source and quick-disconnect male coupling assembly (2) on outside shelter wall to left of personnel door.

- 2 QUICK-DISCONNECT MALE COUPLING ASSEMBLY (3). Connect to quick-disconnect female coupling assembly (4) on compressed air source.

- 3 QUICK-DISCONNECT FEMALE COUPLING ASSEMBLY (5). Connect to quick-disconnect male coupling assembly (2) on outside shelter wall to the left of the personnel door.

3-43. SORTING FILE--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Inspection
- b. Service
- c. Removal
- d. Disassembly
- e. Repair
- f. Reassembly
- g. Installation

INITIAL SETUP

Special Tools

- AVIM sheet metal shop set (SC 4920-99-CL-A91, part VI)
- AVIM welding shop set (SC 4920-99-CL-A91, part IX)
- Basic aircraft armament repairman tool set (SC 4933-95-CL-A13)
- Fire control repair shop set (SC 4931-95-CL-A21)

Materials/Parts

- Wiping rag (item 17, app D)

References

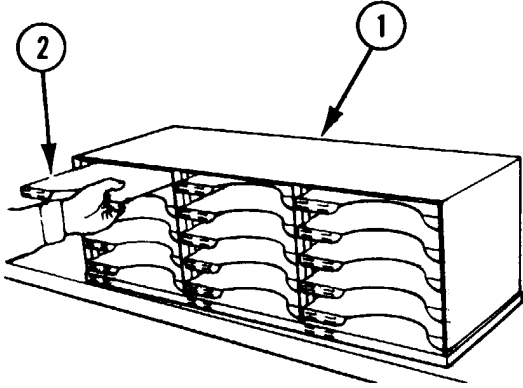
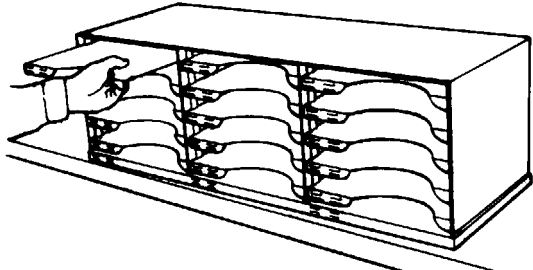
- TM 9-237
- Appendix D

INSPECTION

SERVICE

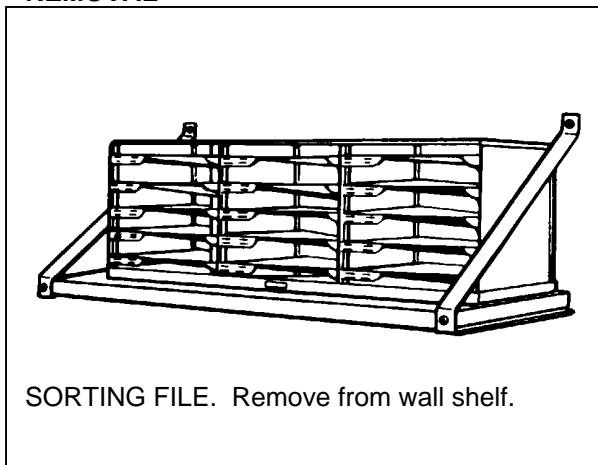
1 FILE (1). Inspect for bent or broken parts.

2 FIFTEEN SHELVES (2). Inspect for bent or broken parts.

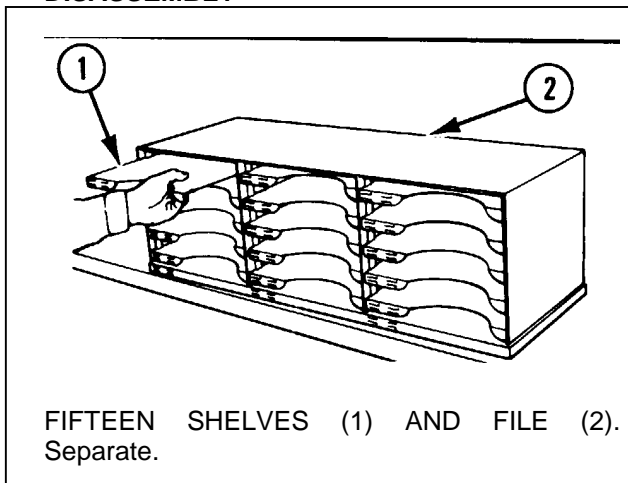
SORTING FILE. Remove dust or dirt using wiping rag (item 17, app D).

REMOVAL



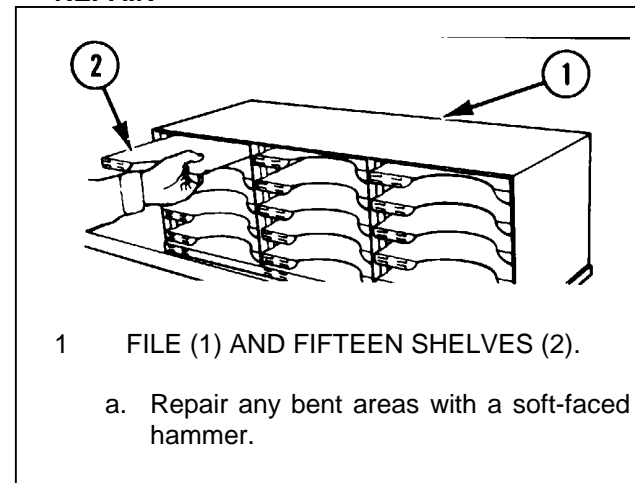
SORTING FILE. Remove from wall shelf.

DISASSEMBLY



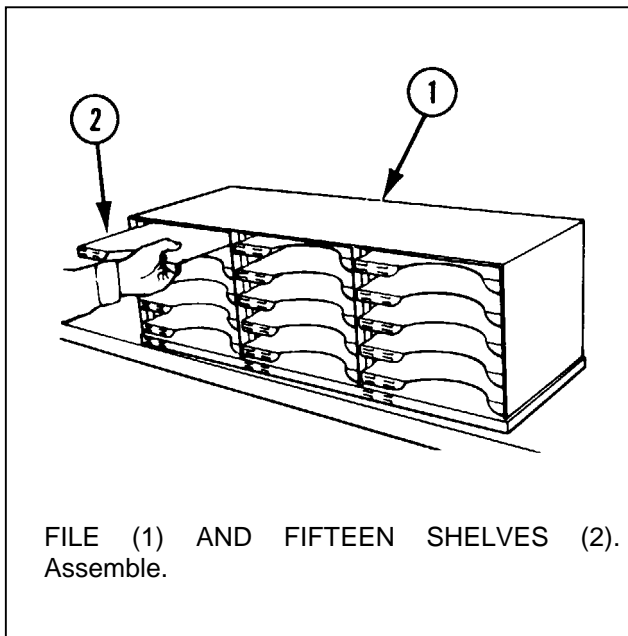
FIFTEEN SHELVES (1) AND FILE (2). Separate.

REPAIR



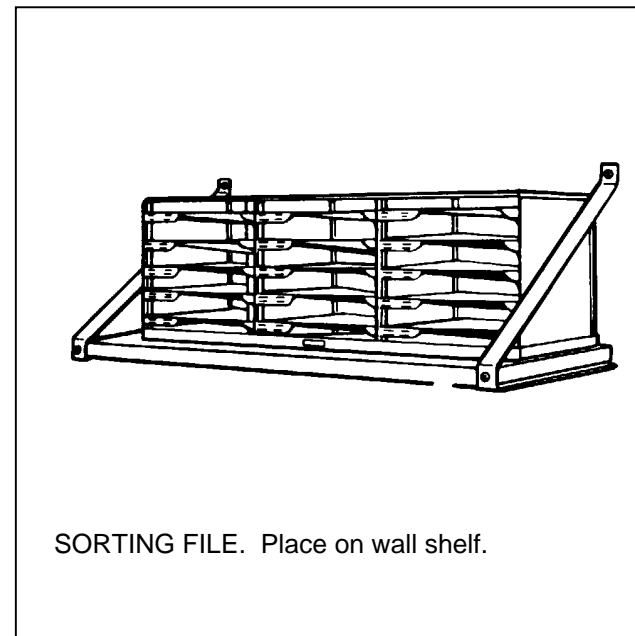
1 FILE (1) AND FIFTEEN SHELVES (2).
 a. Repair any bent areas with a soft-faced hammer.

REASSEMBLY

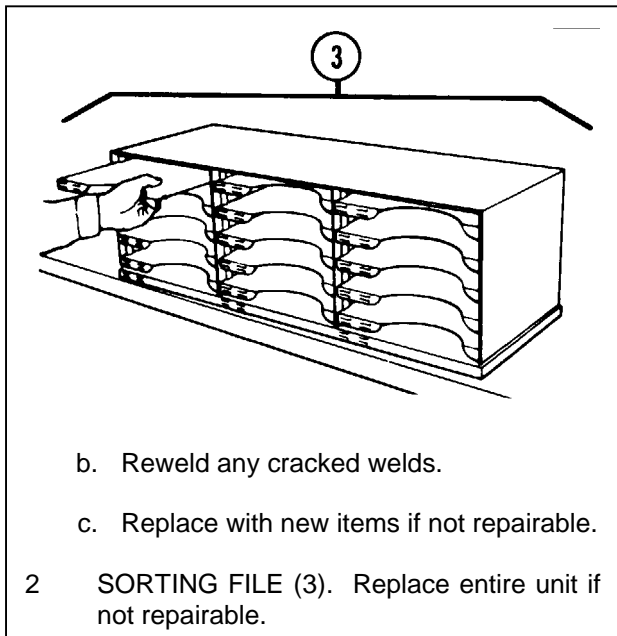


FILE (1) AND FIFTEEN SHELVES (2). Assemble.

INSTALLATION



SORTING FILE. Place on wall shelf.



b. Reweld any cracked welds.
 c. Replace with new items if not repairable.
2 SORTING FILE (3). Replace entire unit if not repairable.

3-44. 120/208V CABLE ASSEMBLY--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Inspection
- b. Removal
- c. Disassembly
- d. Repair
- e. Reassembly
- f. Test Procedures
- g. Installation

INITIAL SETUP

Test Equipment
Ohmmeter

3-346 Repair procedures for 120/208V cable assembly--electrical plug connector (male).

Special Tools

- Basic aircraft armament repairman tool set (SC 4933-95-CL-A13)
- Fire control repair shop set (SC 4931-95-CL-A21)
- Removal tool no. 4 (MS90562-5)
- Removal tool no. 6 (MS90562-6)
- Supplemental aircraft armament repairman tool set (SC 4933-95-CL-A14)

Troubleshooting Reference

3-8 Environmental control units or exhaust fans do not operate correctly.

NOTE

There are two 120/208V cable assemblies furnished to connect the cable adapter assembly to the shop set. One or both 120/208V cable assemblies may be used as required.

The procedures listed pertain to only one 120/208V cable assembly. Repeat procedures for second 120/208V cable assembly.

Materials/Parts

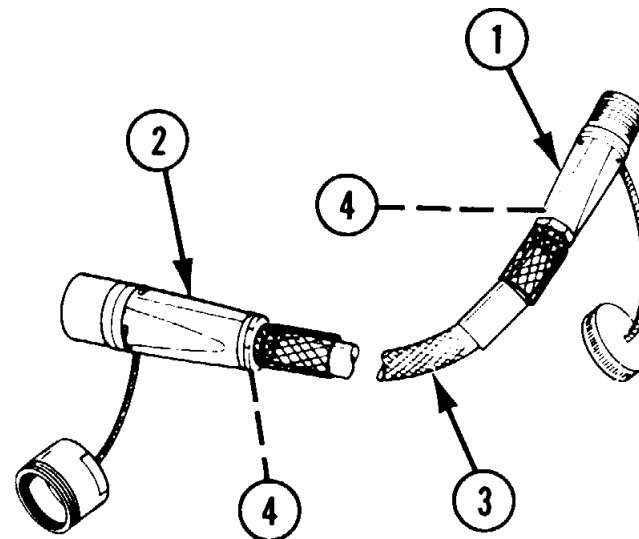
- Marking ink (item 13, app D)
- Solder (item 18, app D)
- Bushings (8) (MS3348-4-6L)

References

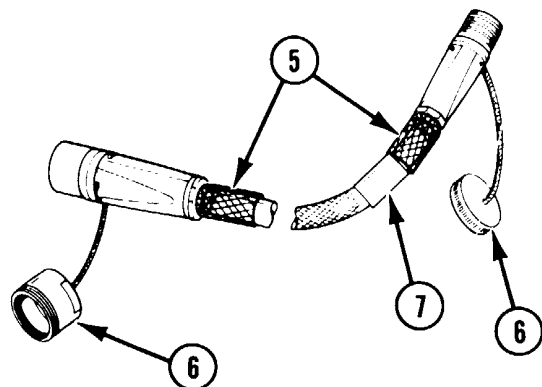
- Appendix D
- Appendix E
- 3-344 Repair procedures for 120/208V cable assembly--electrical plug connector (female).

INSPECTION

- 1 ELECTRICAL PLUG CONNECTOR (FEMALE) (1) AND ELECTRICAL PLUG CONNECTOR (MALE) (2). Check for bent or broken parts.
- 2 CABLE (3).
 - a. Check for worn, cracked, or cut insulation.
 - b. Check for cut or broken wires.
- 3 TWO GLANDS (4). Check for deformed or deteriorated condition.



- 4 TWO GRIPS (5). Check for broken parts.
- 5 TWO DUST COVERS (6). Check for bent or broken parts.
- 6 BAND (7). Check to ensure it is not missing and is readable.



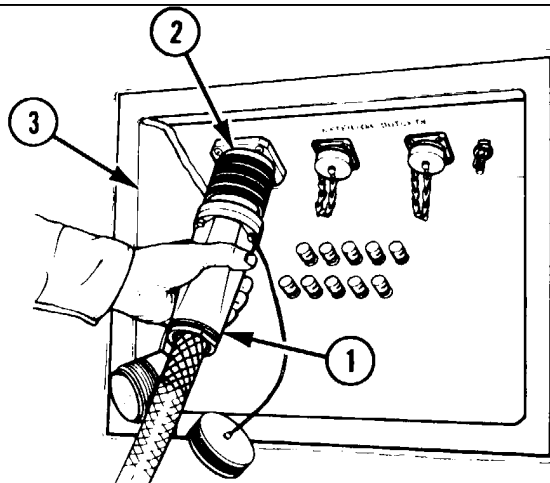
REMOVAL

WARNING
 De-energize shop set by placing circuit breaker on power distribution panel connected to power source in OFF position and then disconnect 120/208V cable assembly from shelter.

3-44. 120/208V CABLE ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

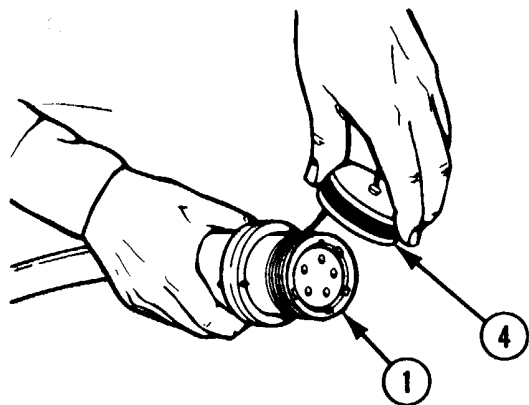
REMOVAL (cont)

1 ELECTRICAL PLUG CONNECTOR (FEMALE) (1). Disconnect from male connector (2) on power input panel (3) on exterior shelter wall to the left of personnel door.



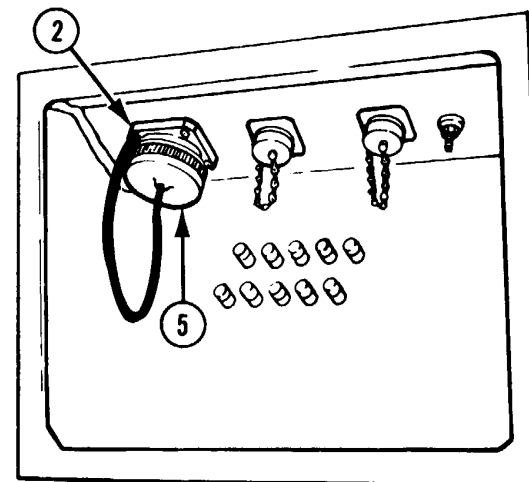
CAUTION

Install dust covers on electrical plug connectors immediately after disconnection for protection against dirt, dust, etc.

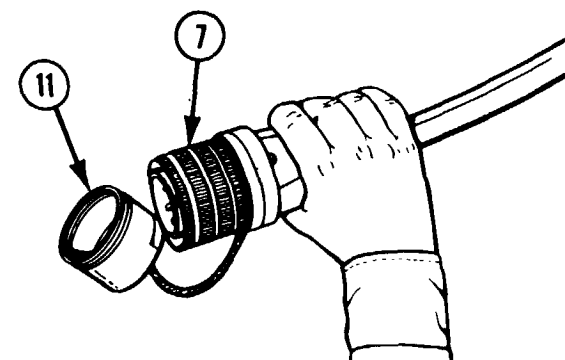
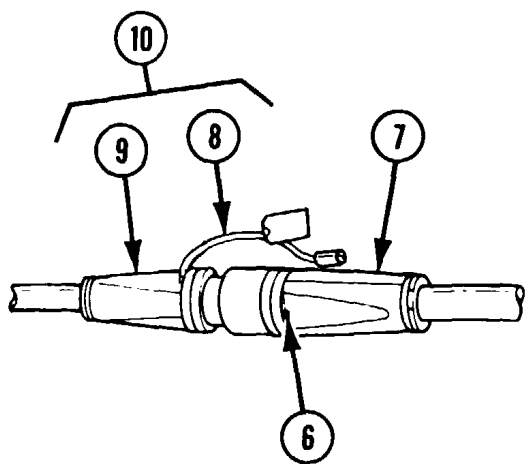


2 DUST COVER (4). Install on electrical plug connector (female) (1).

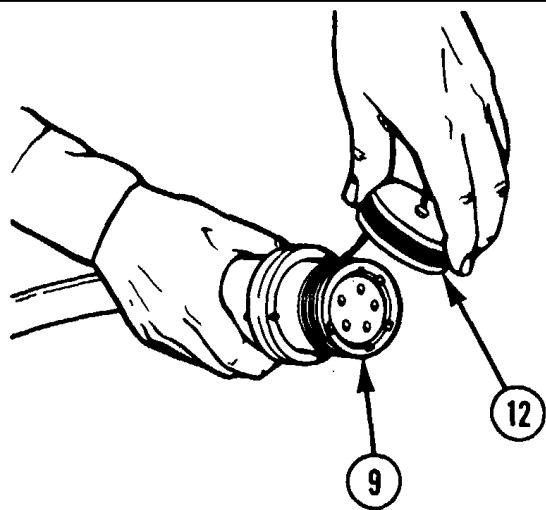
3 DUST COVER (5). Install on male connector (2).



- 4 SCREW (6). Remove from electrical plug connector (male) (7).
- 5 CABLE ASSEMBLY (8). Remove one end from electrical plug connector (male) (7).
- 6 SCREW (6). Replace on electrical plug connector (male) (7).
- 7 ELECTRICAL PLUG CONNECTOR (MALE) (7). Disconnect from female connector (9) on cable adapter assembly (10).

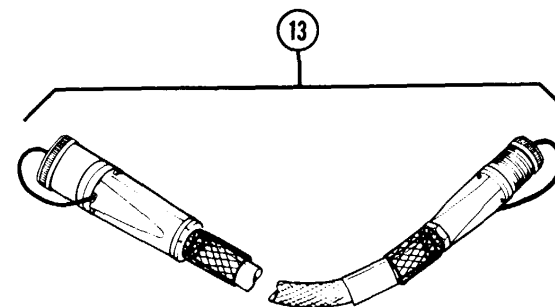


- 8 DUST COVER (11). Install on electrical plug connector (male) (7).



- 9 DUST COVER (12). Install on female connector (9).

- 10 120/208V CABLE ASSEMBLY (13). Remove.



3-44. 120/208V CABLE ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

DISASSEMBLY

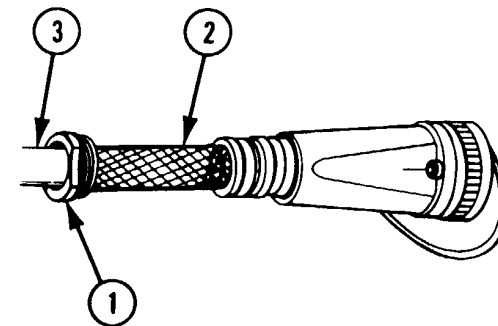
CAUTION

Gland nut has left-hand threads and should be loosened by turning in the opposite direction from that used to loosen standard right-hand threaded nuts.

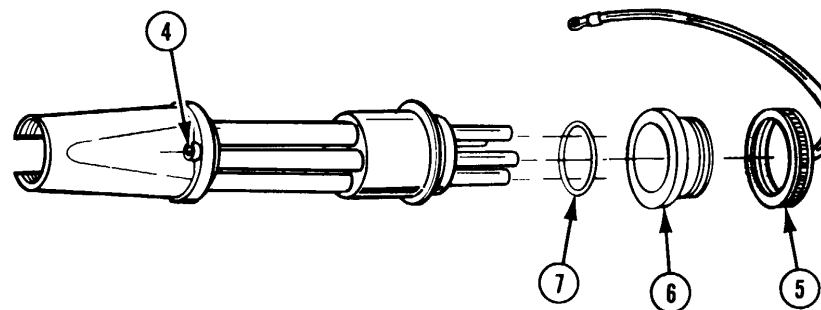
NOTE

Steps 1 thru 10 pertain to removal of the electrical plug connector (female).

- 1 GLAND NUT (1). Loosen.
- 2 GRIP (2). Push weave together.
- 3 GLAND NUT (1) AND GRIP (2). Slide back over cable (3).

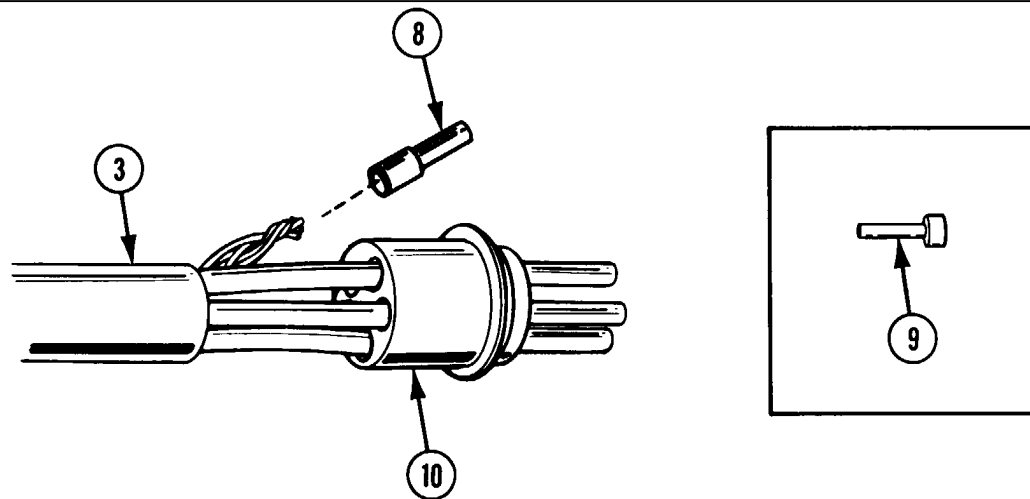


- 4 THREE SCREWS (4). Remove.
- 5 DUST COVER (5) AND FORWARD CONNECTOR HOUSING (6). Remove.
- 6 PREFORMED PACKING (7). Remove.



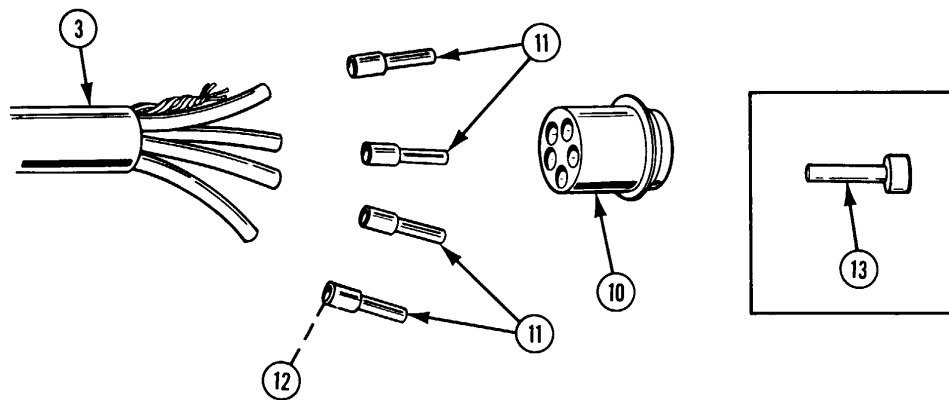
7 GROUND SOCKET (8).

- a. Use removal tool no. 6 (9) to release from socket insert (10).
- b. Remove from wire of cable (3) by cutting.



8 FOUR SOCKETS (A, B, C, AND N) (11) AND FOUR BUSHINGS (12).

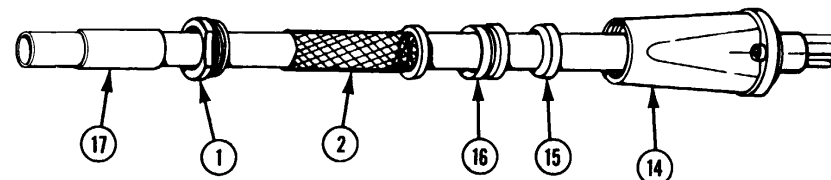
- a. Use removal tool no. 4 (13) to release from socket insert (10).
- b. Remove from wires of cable (3) by cutting.



3-44. 120/208V CABLE ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

DISASSEMBLY (cont)

- 9 REAR CONNECTOR HOUSING (14), SPACER (15), GLAND (16), GRIP (2), AND GLAND NUT (1). Remove.
- 10 BAND (17). Remove.



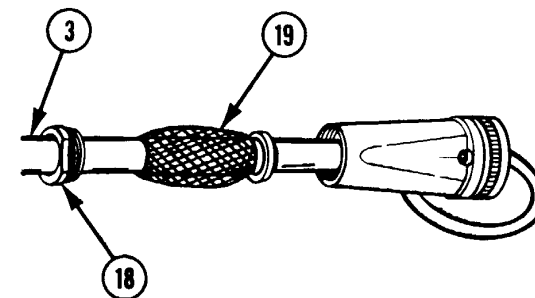
CAUTION

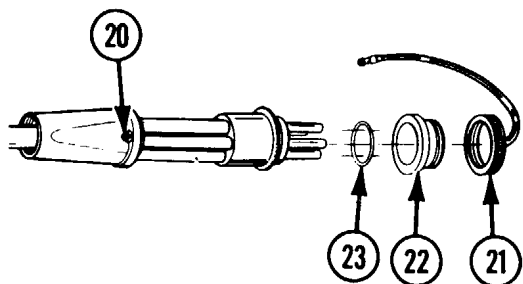
Gland nut has left-hand threads and should be loosened by turning in the opposite direction from that used to loosen standard right-hand threaded nuts.

NOTE

Steps 11 thru 20 pertain to removal of the electrical plug connector (male).

- 11 GLAND NUT (18). Loosen.
- 12 GRIP (19). Push weave together.
- 13 GLAND NUT (18) AND GRIP (19). Slide back over cable (3).

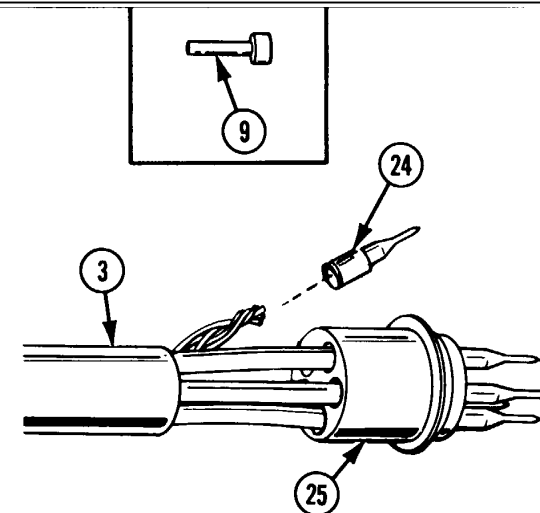




- 14 THREE SCREWS (20). Remove.
- 15 DUST COVER (21) AND FORWARD CONNECTOR HOUSING (22). Remove.
- 16 PREFORMED PACKING (23). Remove.

17 CONTACT PIN (G) (24).

- a. Use removal tool no. 6 (9) to release from pin socket (25).
- b. Remove from wires of cable (3) by cutting.

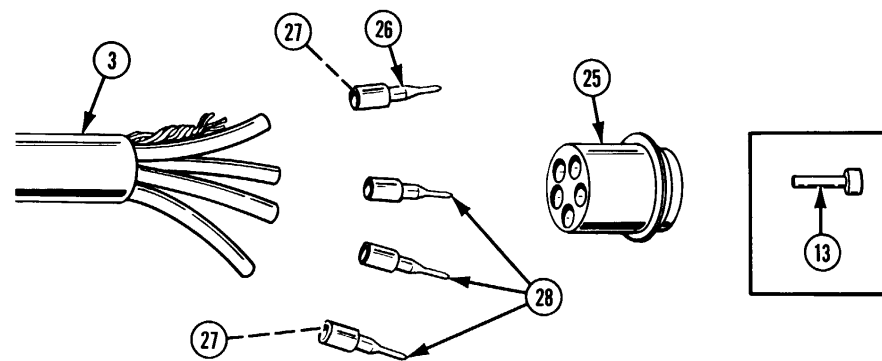


18 CONTACT PIN (N) (26) AND BUSHING (27).

- a. Use removal tool no. 4 (13) to release from pin socket (25).
- b. Remove from wire of cable (3) by cutting.

19 THREE CONTACT PINS (A, B, AND C) (28) AND THREE BUSHINGS (27).

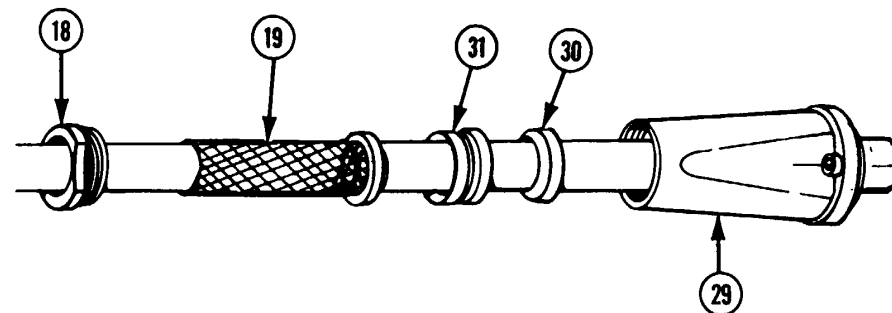
- a. Use removal tool no. 4 (13) to release from pin socket (25).
- b. Remove from wires of cable (3) by cutting.



3-44. 120/208V CABLE ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

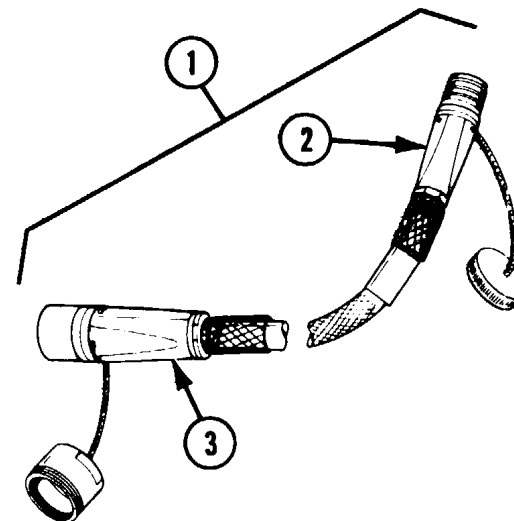
DISASSEMBLY (cont)

- 20 REAR CONNECTOR HOUSING (29), SPACER (30), GLAND (31), GRIP (19), AND GLAND NUT (18). Remove.



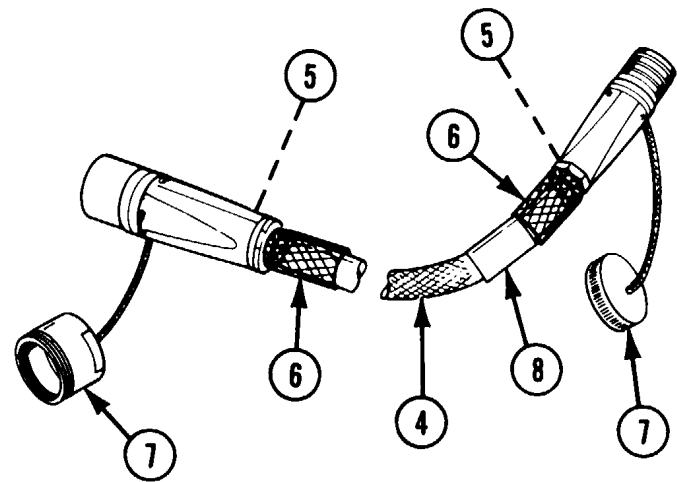
REPAIR

- 1 120/208V CABLE ASSEMBLY (1). Replace entire assembly if missing or not repairable.
- 2 ELECTRICAL PLUG CONNECTOR (FEMALE) (2).
 - a. Replace if not repairable.
 - b. Refer to page 3-344, paragraph 3-45, for repair instructions.
- 3 ELECTRICAL PLUG CONNECTOR (MALE) (3).
 - a. Replace if not repairable.
 - b. Refer to page 3-346, paragraph 3-46, for repair instructions.



- 4 CABLE (4).
- a. Repair, if possible, damaged insulation or wires by shortening slightly.
- b. Replace with a 100-ft (30.48-m) long piece of cable (fig. 29, app E) if not repairable.
- 5 TWO GLANDS (5). Replace if deformed or deteriorated.
- 6 TWO GRIPS (6). Replace if broken.
- 7 TWO DUST COVERS (7). Replace if bent or broken.
- 8 BAND (8).
- a. Clearly mark any hard to read parts with black letters 0.31-in. (0.79-cm) high, using marking ink (item 13, app D), to read as follows:

CABLE ASSEMBLY PART NO. 72289-100
- b. If unable to repair, replace with a new fabricated item (fig. 30, app E).

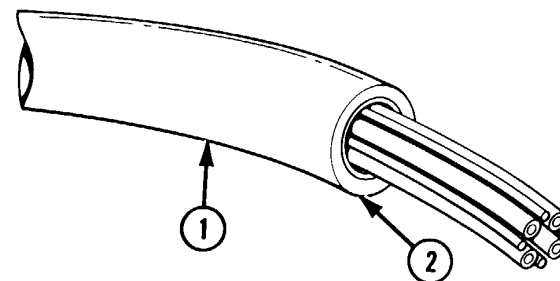


REASSEMBLY

NOTE

The following procedures pertain to assembly of the electrical plug connector (male).

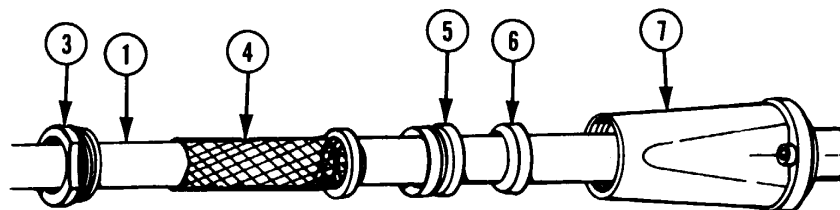
- 1 CABLE (1).
- a. Cut both ends square.
- b. Remove outer jacket (2) to 4.25 in. (10.80 cm) from each end.



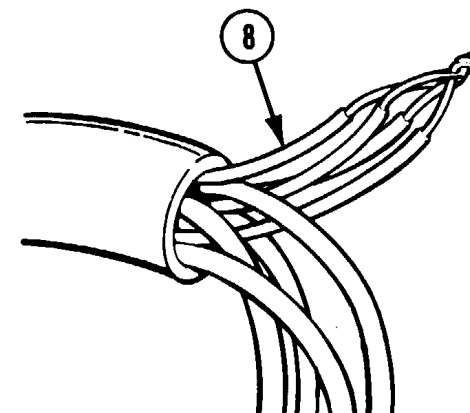
3-44. 120/208V CABLE ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY (cont)

- 2 GLAND NUT (3). Slip on cable (1).
- 3 GRIP (4). Slip on cable (1).
- 4 GLAND (5). Slip on cable (1).
- 5 SPACER (6). Slip on cable (1).
- 6 REAR CONNECTOR HOUSING (7). Slip on cable (1).

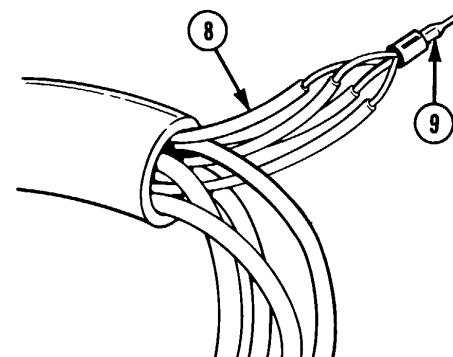


- 7 FOUR GREEN WIRES (8).
 - a. Remove insulation to 1.50 in. (3.81 cm) from end.
 - b. Bring three of the green wires to the green wire between the red and blue or orange wire; twist ends of all four green wires together.
 - c. Cut twisted ends to 0.75 in. (1.91 cm) from insulation.



8 CONTACT PIN (G) (9).

- a. Slip onto twisted ends of four green wires (8).
- b. Solder in place using solder (item 18, app D).



9 WHITE WIRE (10).

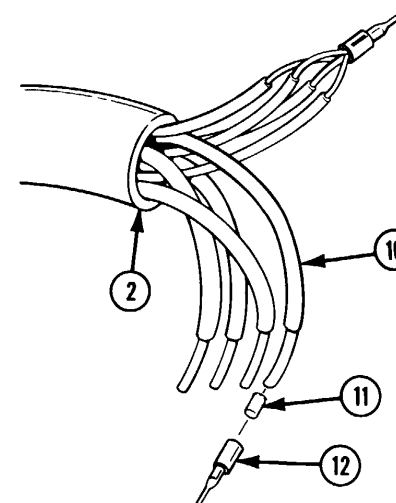
- a. Cut carefully to allow wire to protrude 3.25 in. (8.26 cm) from outer jacket (2).
- b. Remove 0.75 in. (1.91 cm) of insulation from end of wire.
- c. Twist end.

10 BUSHING (11).

- a. Slip onto white wire (10).
- b. Solder in place using solder (item 18, app D).

11 CONTACT PIN (N) (12).

- a. Slip on bushing (11) attached to white wire (10).
- b. Solder in place using solder (item 18, app D).



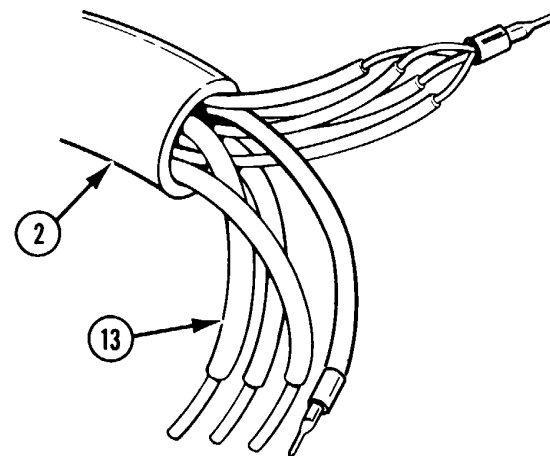
3-44. 120/208V CABLE ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY (cont)

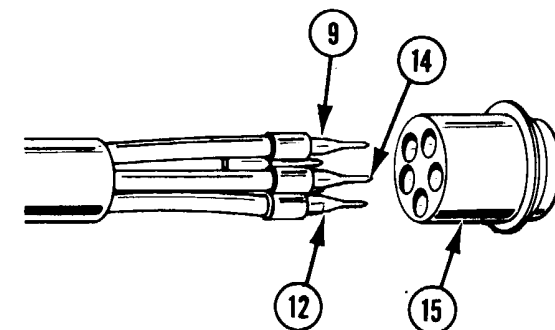
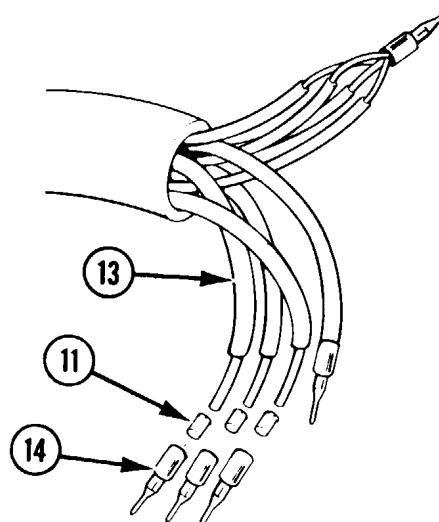
NOTE

Step 12 pertains to three wires which are black, red, and blue or orange in color.

- 12 THREE WIRES (13).
 - a. Cut carefully to allow wires to protrude 3.25 in. (8.26 cm) from outer jacket (2).
 - b. Remove 0.75 in. (1.91 cm) of insulation from end of wires.
 - c. Twist ends.



- 13 THREE BUSHINGS (11).
 - a. Slip onto three wires (13).
 - b. Solder in place using solder (item 18, app D).
- 14 THREE CONTACT PINS (A, B, AND C) (14).
 - a. Slip on three bushings (11) attached to three wires (13).
 - b. Solder in place using solder (item 18, app D).



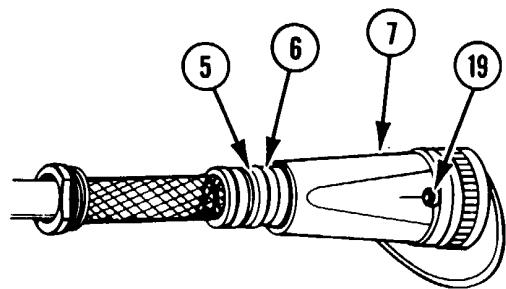
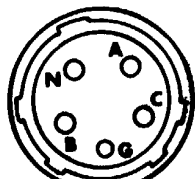
- 15 CONTACT PIN (G) (9), CONTACT PIN (N) (12), AND THREE CONTACT PINS (A, B, AND C) (14). Install in pin socket (15) according to information in table 3-9.

Table 3-9. Wire Positioning on Connector

NOTE
Use the following information to obtain correct wire polarity.

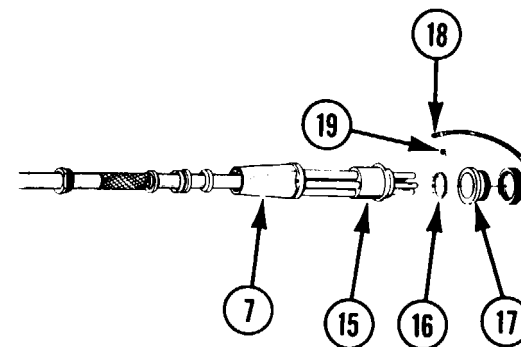
Wire color	Designation on socket
------------	-----------------------

Black	A
Red	B
Blue or Orange	C
White	N
Green	G



- 20 THREE SCREWS (19). Install.
- 21 SPACER (6) AND GLAND (5). Slide into position at end of rear connector housing (7).

- 16 PIN SOCKET (15). Slide into rear connector housing (7).
- 17 PREFORMED PACKING (16). Install.
- 18 FORWARD CONNECTOR HOUSING (17). Install.
- 19 EYELET OF DUST COVER (18) AND SCREW (19). Assemble.

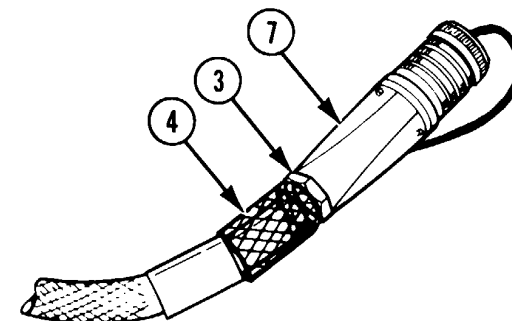


- 22 GRIP (4). Push together.

CAUTION

Gland nut has left-hand threads and should be tightened by turning in the opposite direction from that used to tighten standard right-hand threaded nuts.

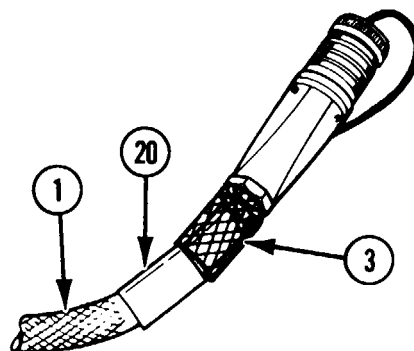
- 23 GLAND NUT (3).
 - a. Slide toward rear connector housing (7).



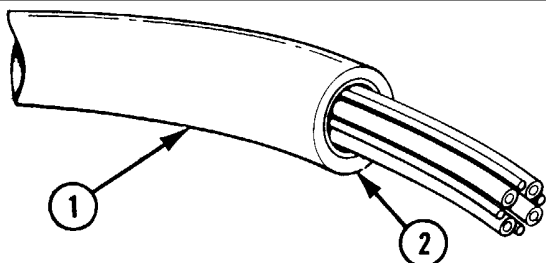
3-44. 120/208V CABLE ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY (cont)

- 23 GLAND NUT (3). (cont)
 - b. Tighten to a torque level of 35 to 40 lb-ft (47.25 to 54 N-m).
 - c. Retorque to same level after approximately 12 hours.
- 24 BAND (20). Slip on cable (1).

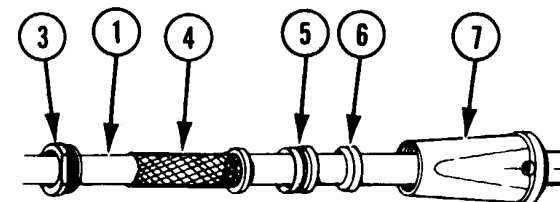


NOTE
The following procedures pertain to assembly of the electrical plug connector (female).



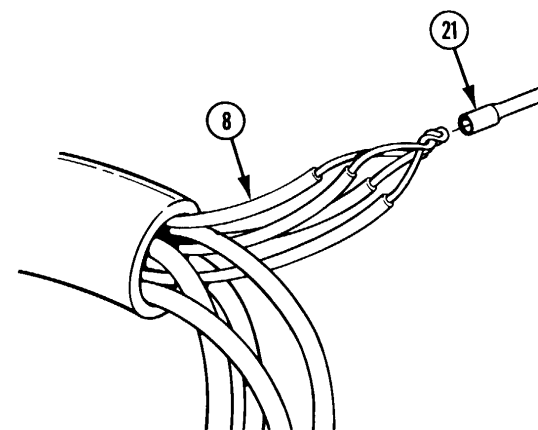
- 25 CABLE (1).
 - a. Cut both ends square.
 - b. Remove outer jacket (2) to 4.25 in. (10.80 cm) from each end.

- 26 GLAND NUT (3). Slip on cable (1).
- 27 GRIP (4). Slip on cable (1).
- 28 GLAND (5). Slip on cable (1).
- 29 SPACER (6). Slip on cable (1).
- 30 REAR CONNECTOR HOUSING (7). Slip on cable (1).



31 FOUR GREEN WIRES (8).

- a. Remove insulation to 1.50 in. (3.81 cm) from end.
- b. Bring three of the green wires to the green wire between the red and blue or orange wire; twist ends of all four green wires together.
- c. Cut twisted ends to 0.75 in. (1.91 cm) from insulation.



32 GROUND SOCKET (21).

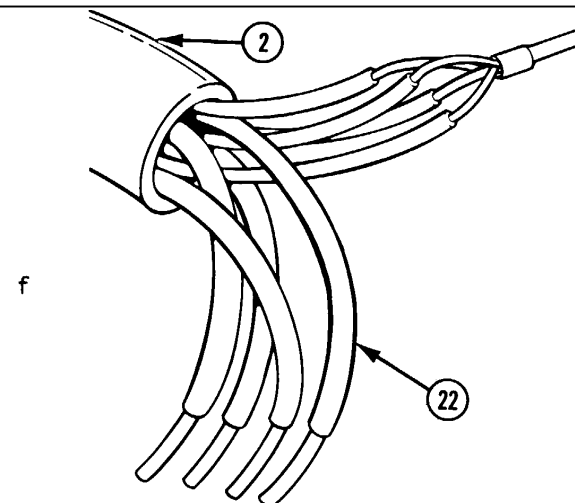
- a. Slip on twisted ends of four green wires (8).
- b. Solder in place using solder (item 18, app D).

NOTE

Step 33 pertains to four wires which are white, black, red, and blue or orange in color.

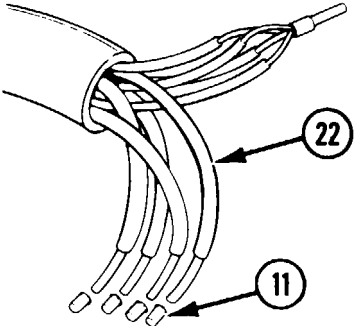
33 FOUR WIRES (22).

- a. Cut carefully to allow wire to protrude 3.25 in. (8.26 cm) from outer jacket (2).
- b. Remove 0.75 in. (1.91 cm) of insulation from end of wires.
- c. Twist ends.



3-44. 120/208V CABLE ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

REASSEMBLY (cont)



34 FOUR BUSHINGS (11).

- Slip onto four wires (22).
- Solder in place using solder (item 18, app D).

Table 3-10. Wire Positioning on Female Connector

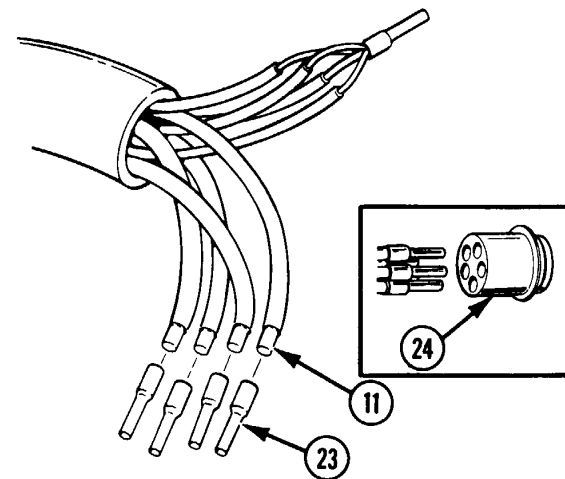
NOTE
Use the following information to obtain correct wire polarity.

Wire color	Designation on socket
Black	A
Red	B
Blue or Orange	C
White	N
Green	G

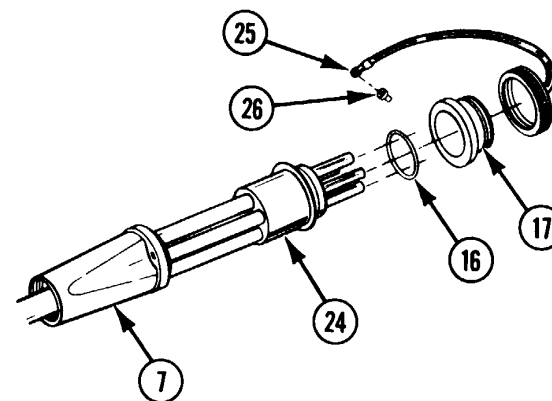
Black	A
Red	B
Blue or Orange	C
White	N
Green	G



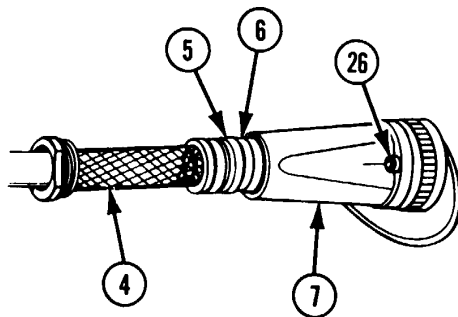
- 35 FOUR SOCKETS (A, B, C, AND N) (23).
- Slip on four bushings (11).
 - Solder in place using solder (item 18, app D).
 - Install in socket insert (24) according to information in table 3-10.



- 36 SOCKET INSERT (24) AND REAR CONNECTOR HOUSING (7). Assemble.
- 37 PREFORMED PACKING (16). Install.
- 38 FORWARD CONNECTOR HOUSING (17). Install.
- 39 EYELET OF DUST COVER (25) AND SCREW (26). Assemble.

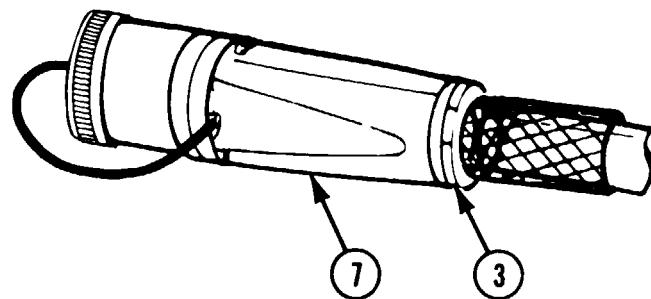


- 40 THREE SCREWS (26). Install.
- 41 SPACER (6) AND GLAND (5). Slide into position at end of rear connector housing (7).
- 42 GRIP (4). Push together.



CAUTION
 Gland nut has left-hand threads and should be tightened by turning in the opposite direction from that used to tighten standard right-hand threaded nuts.

- 43 GLAND NUT (3).
 - a. Slide toward rear connector housing (7).
 - b. Tighten to a torque level of 35 to 40 lb-ft (47.25 to 54 N.m).
 - c. Retorque to same level after approximately 12 hours.



3-44. 120/208V CABLE ASSEMBLY--MAINTENANCE INSTRUCTIONS (cont)

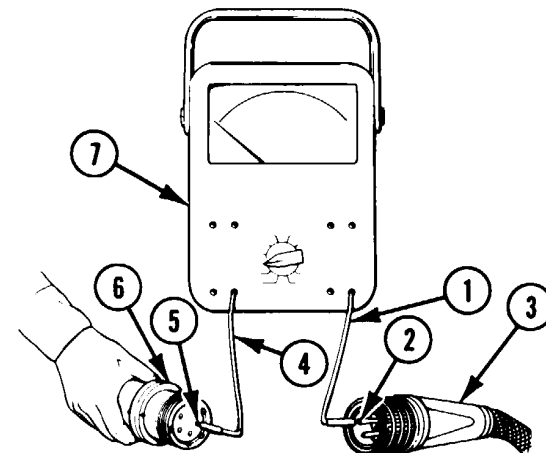
TEST PROCEDURES

NOTE

Correct wiring of the 120/208V cable assembly should be checked with an ohmmeter as described below (electrical continuity test). An end view of the connector is shown for reference.

All five sets of contact pins (A, B, C, G, and N) should be checked according to steps 1 thru 3.

- 1 OHMMETER LEAD NO. 1 (1). Place on one contact pin (A, B, C, G, or N) (2) on electrical plug connector (male) (3).
- 2 OHMMETER LEAD NO. 2 (4). Place on corresponding socket (5) on electrical plug connector (female) (6) at other end of 120/208V cable assembly.
- 3 OHMMETER (7). Check to ensure reading is approximately zero.



INSTALLATION

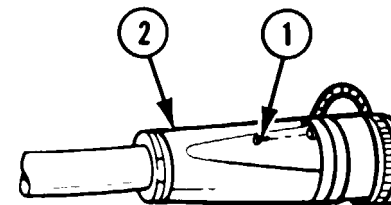
WARNING

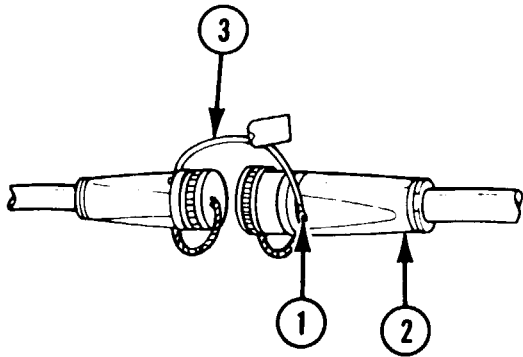
De-energize shop set by placing circuit breaker on power distribution panel connected to power source in OFF position and then disconnect 120/ 208V cable assembly from shelter.

CAUTION

Remove dust covers from connectors just prior to connection to ensure protection against dirt, dust, etc.

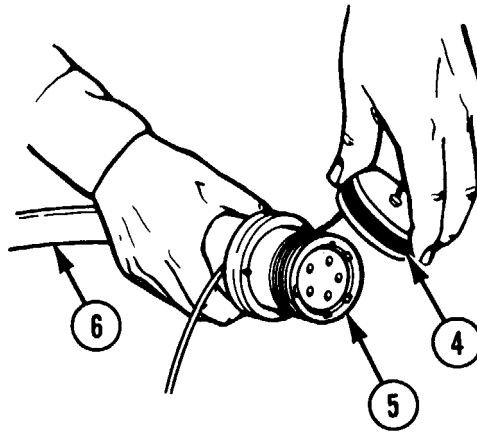
- 1 SCREW (1). Remove from electrical plug connector (male) (2) on 120/208V cable assembly.



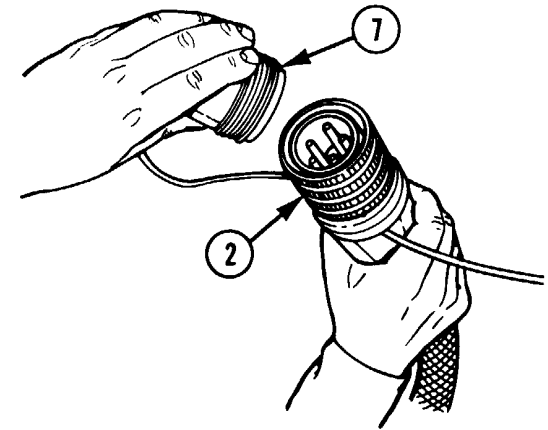


2 SCREW (1) AND CABLE ASSEMBLY (3). Assemble.

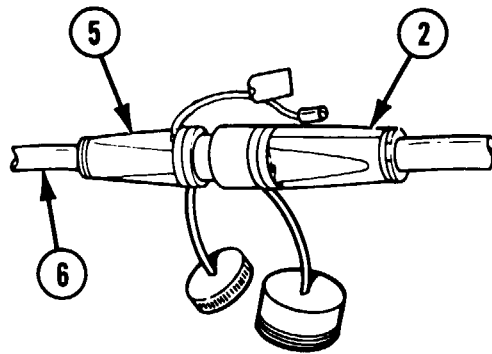
3 SCREW (1). Install in electrical plug connector (male) (2).



4 DUST COVER (4). Remove from female connector (5) on cable adapter assembly (6).



5 DUST COVER (7). Remove from electrical plug connector (male) (2).

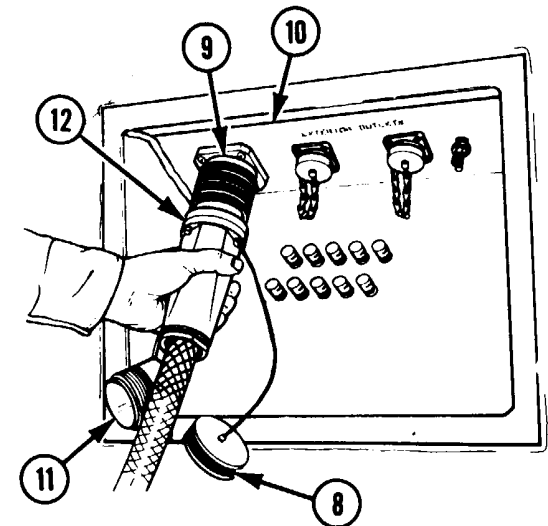


6 ELECTRICAL PLUG CONNECTOR (MALE) (2). Connect to female connector (5) on cable adapter assembly (6).

7 DUST COVER (8). Remove from male connector (9) on power input panel (10).

8 DUST COVER (11). Remove from electrical plug connector (female) (12) on 120/208V cable assembly.

9 ELECTRICAL PLUG CONNECTOR (FEMALE) (12). Connect to male connector (9).



3-45. 120/208V CABLE ASSEMBLY--ELECTRICAL PLUG CONNECTOR (FEMALE)--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Removal
- b. Inspection
- c. Service
- d. Repair
- e. Installation

INITIAL SETUP

Special Tools

- Basic aircraft armament repairman tool set (SC 4933-95-CL-A13)
- Fire control repair shop set (SC 4931-95-CL-A21)
- Removal tool no. 4 (MS90562-5)
- Removal tool no. 6 (MS90562-6)
- Supplemental aircraft armament repairman tool set (SC 4933-95-CL-A14)

Materials/Parts

- Cloth (item 5, app D)
- Solder (item 18, app D)
- Bushings (4) (MS3348-4-6L)
- Ground Socket (MS90560-7)

- Preformed packing (MS29513-132)
- Sockets (A, B, C, AND N) (4) (MS90560-5)

References

- Appendix D
- 3-324 Reassembly, test procedures and installation procedures for 120/208V cable assembly.
- 3-324 Removal and disassembly procedures for 120/208V cable assembly.

Troubleshooting Reference

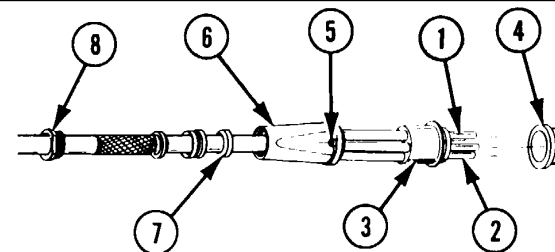
- 3-8 Environmental control units or exhaust fans do not operate correctly.

REMOVAL

Refer to removal and disassembly procedures on page 3-324, paragraph 3-44, for the 120/208V cable assembly.

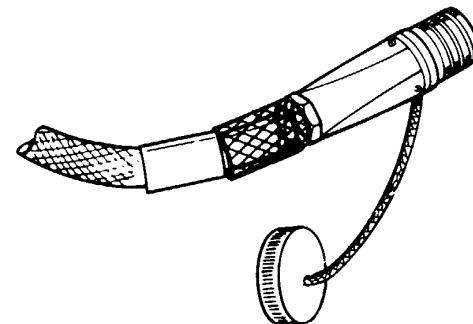
INSPECTION

- 1 GROUND SOCKET (1) AND FOUR SOCKETS (A, B, C, AND N) (2). Check for damaged or corroded parts.
- 2 SOCKET INSERT (3), FORWARD CONNECTOR HOUSING (4), THREE SCREWS (5), REAR CONNECTOR HOUSING (6), SPACER (7), AND GLAND NUT (8). Check for bent or broken parts.



SERVICE

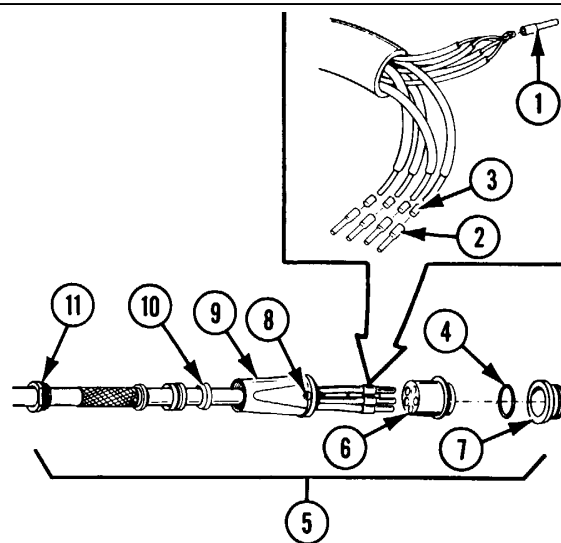
ELECTRICAL PLUG CONNECTOR (FEMALE). Remove dirt with cloth (item 5, app D).



ELECTRICAL PLUG CONNECTOR (FEMALE)

REPAIR

- 1 GROUND SOCKET (1), FOUR SOCKETS (A, B, C, AND N) (2), FOUR BUSHINGS (3), AND PREFORMED PACKING (4). Replace with new parts if removed.
- 2 ELECTRICAL PLUG CONNECTOR (FEMALE) (5). Replace with a new item if any of the following parts are damaged: socket insert (6), forward connector housing (7), three screws (8), rear connector housing (9), spacer (10), and gland nut (11).



3-345

INSTALLATION

Refer to reassembly, test procedures, and installation procedures on page 3-324, paragraph 3-44, for the 120/208V cable assembly.

3-46. 120/208V CABLE ASSEMBLY--ELECTRICAL PLUG CONNECTOR (MALE)--MAINTENANCE INSTRUCTIONS

THIS TASK COVERS:

- a. Removal
- b. Inspection
- c. Service
- d. Repair
- e. Installation

INITIAL SETUP

Special Tools

- Basic aircraft armament repairman tool set (SC 4933-95-CL-A13)
- Fire control repair shop set (SC 4931-95-CL-A21)
- Removal tool no. 4 (MS90562-5)
- Removal tool no. 6 (MS90562-6)
- Supplemental aircraft armament repairman tool set (SC 4933-95-CL-A14)

Materials/Parts

- Cloth (item 5, app D)
- Solder (item 18, app D)
- Contact pin (G) (MS90559-12)
- Contact pin (N) (MS90559-9)

- Contact pins (A, B, and C) (3) (MS90559-8)
- Preformed packing (MS29513-132)

References

- Appendix D
- 3-324 Reassembly, test procedures, and installation procedures for 120/208V cable assembly.
- 3-324 Removal and disassembly procedures for 120/208V cable assembly.

Troubleshooting Reference

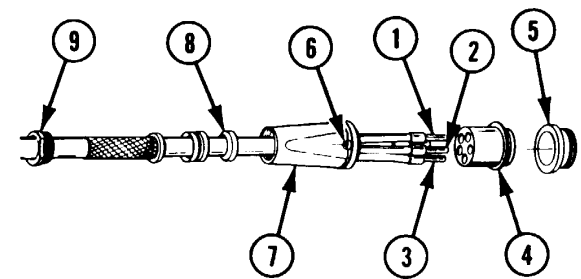
- 3-8 Environmental control units or exhaust fans do not operate correctly.

REMOVAL

Refer to removal and disassembly procedures on page 3-324, paragraph 3-44, for the 120/208V cable assembly.

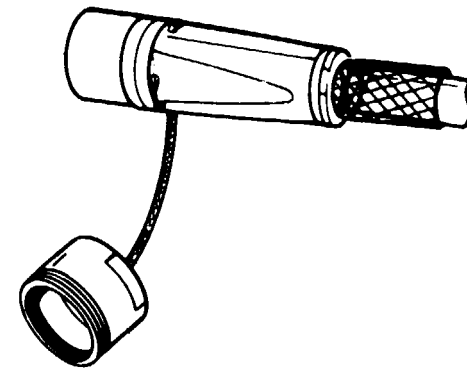
INSPECTION

- 1 CONTACT PIN (G) (1), CONTACT PIN (N) (2), AND THREE CONTACT PINS (A, B, AND C) (3). Check for bent, broken, or corroded parts.
- 2 PIN SOCKET (4), FORWARD CONNECTOR HOUSING (5), THREE SCREWS (6), REAR CONNECTOR HOUSING (7), SPACER (8), AND GLAND NUT (9). Check for bent or broken parts.



SERVICE

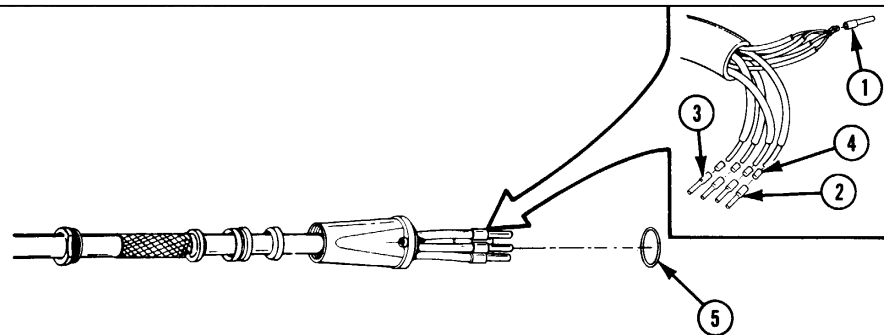
ELECTRICAL PLUG CONNECTOR (MALE). Remove dirt with cloth (item 5, app D).



ELECTRICAL PLUG CONNECTOR (MALE)

REPAIR

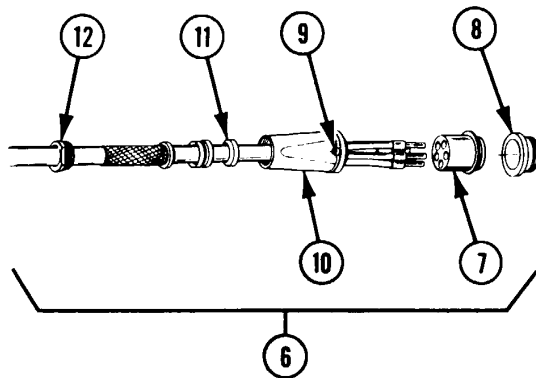
1 CONTACT PIN (G) (1), CONTACT PIN (N) (2), THREE CONTACT PINS (A, B, AND C) (3), FOUR BUSHINGS (4), AND PREFORMED PACKING (5). Replace with new parts if removed.



3-46. 120/208V CABLE ASSEMBLY--ELECTRICAL PLUG CONNECTOR (MALE)--MAINTENANCE INSTRUCTIONS (cont)

REPAIR (cont)

2 ELECTRICAL PLUG CONNECTOR (MALE) (6). Replace with a new item if any of the following parts are damaged: pin socket (7), forward connector housing (8), three screws (9), rear connector housing (10), spacer (11), and gland nut (12).



INSTALLATION

Refer to reassembly, test procedures, and installation procedures on page 3-324, paragraph 3-44, for the 120/208V cable assembly.

Section V. PREPARATION FOR STORAGE OR SHIPMENT

3-47. STORAGE OR SHIPMENT

For instructions on preservation, packaging, packing, shipping requirements, and storage; refer to TM 740-90-1.

**APPENDIX A
REFERENCES**

A-1. TECHNICAL MANUALS (TM)

- TM 10-5410-224-14.....Operator, Organizational, Direct Support, and General Support Maintenance Manual for Shelter, Expandable for Shop, Portable, Aircraft Maintenance (SPAM), NSN 5410-01-003-2933. 400 Hz (Trane Model MAC4H18-208-1201-03); (Harvey W. Hottel Model CH20-4-08); (KECO Model Air Conditioners (Horizontal Compact) 18,000 BTU KECO: F18H-4S MAC6H18-230-120101 and (KECO Model F18H) (4120-00-411-3729) Changes 1-5.
- TM 11-6130-246-12.....Operator's and Organizational Maintenance Manual: Power Supply, PP-1104C/G (NSN 6130-00-542-6385) (w/Instructions for Use as Battery Charger) Changes 1-4.
- TM 38-750The Army Maintenance Management System (TAMMS) (Reprinted W/Basic Incl C1) Changes 1.
- TM 43-0139Painting Instructions for Field Use.
- TM 5-4120-243-14.....Operator's, Organizational, Direct Support and General Support Maintenance Manual for Air Conditioner, Horizontal Compact: 18,000 BTU, 208 V, 3 Phase, 50/60 Hz (Trane Model MAC6H18208-1201-02); (Harvey W. Hottel Model CH20-6-08); (American Air Filter Model A-1 CH618-2) (NSN 4120-00-4113730); 208 V, 3 Phase,
- TM 740-90-1Administrative Storage of Equipment.
- TM 750-244-1-4.....Procedures for the Destruction of Aviation Ground Support Equipment (FSC4920) to Prevent Enemy Use, Changes 1.
- TM 750-244-3.....Procedures for Destruction of Equipment to Prevent Enemy Use (Mobility Equipment Command).
- TM 9-237Operator's Manual: Welding Theory and Application (TO 34W4-1-5).
- TM 9-4933-223-13&PShop Set, Aviation Intermediate Maintenance, Armament Repair, Airmobile, Shelter-Mounted.

A-2. OTHER

AR 700-42Classification, Reclassification, Maintenance, Issuance and Reporting of Maintenance Training Aircraft.

DA Form 2028Recommended Changes to Publications and Blank Forms.

DA Form 2028-2Recommended Changes to Equipment Technical Manuals.

DA Form 2404Equipment Inspection and Maintenance Worksheet.

FM 21-11First Aid for Soldiers.

SB 708-41/42Federal Supply Code for Manufacturers: United States and Canada--Name to Code and Code to Name (GSAFSS H4-1/H4-2).

SC 4931-95-CL-A21Shop Set, Aviation Intermediate Maintenance, (DIV) Fire Control Repair, Airmobile, Shelter-Mounted.

SF 368Quality Deficiency Report.

**APPENDIX B
MAINTENANCE ALLOCATION CHART**

Section I. INTRODUCTION

B-1. MAINTENANCE ALLOCATION CHART

a. This Maintenance Allocation Chart (MAC) assigns maintenance functions in accordance with the three levels of maintenance concept for Army aviation. These maintenance levels (categories)-Aviation Unit Maintenance (AVUM), Aviation Intermediate Maintenance (AVIM), and Depot Maintenance-are depicted on the MAC as:

AVUM, which corresponds to an O code in the Repair Parts and Special Tools List (RPSTL)

AVIM, which corresponds to an F code in the Repair Parts and Special Tools List (RPSTL)

DEPOT, which corresponds to a D code in the Repair Parts and Special Tools List (RPSTL)

b. The maintenance to be performed below depot and in the field is described as follows:

(1) Aviation Unit Maintenance (AVUM) activities will be staffed and equipped to perform high frequency "On-Aircraft" maintenance tasks required to retain or return aircraft systems to a serviceable condition. The maintenance capability of the AVUM will be governed by the Maintenance Allocation Chart (MAC) and limited by the amount and complexity of ground support equipment (GSE), facilities required, authorized manning strength, and critical skills available. The range and quantity of authorized spare

modules/components will be consistent with the mobility requirements B-1 dictated by the air mobility concept. (Assignments of maintenance tasks to divisional company size aviation units will consider the overall maintenance capability of the division, the requirement to conserve personnel and equipment resources, and air mobility requirements.)

(a) Company Size Aviation Units: Perform those tasks which consist primarily of preventive maintenance and maintenance repair and replacement functions associated with sustaining a high level of aircraft operational readiness. Perform maintenance inspections and servicing to include preflight, daily, intermediate, periodic (or phased), and special inspections as authorized by the MAC or higher headquarters. Identify the cause of equipment/system malfunctions using applicable technical manual troubleshooting instructions, built-in-test equipment (BITE), installed aircraft instruments, or test, measurement, and diagnostic equipment (TMDE). Replace worn or damaged modules/components that do not require complex adjustments or system alinement and which can be removed/installed with available skills, tools, and ground support equipment. Perform operational and continuity checks and make minor repairs to the electrical system. Inspect, service and make operational, capacity, and pressure checks to hydraulic systems. Perform servicing, functional adjustments, and minor repair/replacement to the flight control, propulsion, power train, and fuel systems. Accomplish air frame repair that does not require extensive disassembly, jiggling, or alinement. The manufacture of air frame parts will be limited to those items which can be fabricated with tools and equipment found in current air mobile tool and shop sets.



B-1. MAINTENANCE ALLOCATION CHART (cont)

Evacuate unserviceable modules/components and end items beyond the repair capability of AVUM to the supporting AVIM.

(b) Less than Company Size Aviation Units: Aviation elements organic to brigade, group, battalion headquarters, and detachment size units are normally small and have less than ten aircraft assigned. Maintenance tasks performed by these units will be those which can be accomplished by the aircraft crew chief or assigned aircraft repairman and will normally be limited to preventive maintenance, inspections, servicing, spot painting, stop drilling, application of nonstress patches, minor adjustments, module/component fault diagnosis, and replacement of selected modules/ components. Repair functions will normally be accomplished by the supporting AVIM unit.

(2) Aviation Intermediate Maintenance (AVIM) provides mobile, responsive "One-Stop" maintenance support. (Maintenance functions which are not conducive to sustaining air mobility will be assigned to depot maintenance.) AVIM may perform all maintenance functions authorized to be done at AVUM. Repair of equipment for return to user will emphasize support or operational readiness requirements. Authorized maintenance includes replacement and repair of modules/ components and end items which can be accomplished efficiently with available skills, tools, and equipment. AVIM establishes the Direct Exchange (DX) program for AVUM units by repairing selected items for return to stock when such repairs cannot be accomplished at the AVUM level. The AVIM level inspects, troubleshoots, performs diagnostic tests, repairs, adjusts, calibrates, and aligns aircraft system modules/components. AVIM units will have capability to determine the serviceability of specified modules/ components removed prior to the expiration of the Time Between Overhaul (TBO) or finite life. Module/

component disassembly and repair will support the DX program and will normally be limited to tasks requiring cleaning and the replacement of seals, fittings, and items of common hardware. Air frame repair and fabrication of parts will be limited to those maintenance tasks which can be performed with available tools and test equipment. Unserviceable reparable modules/components and end items which are beyond the capability of AVIM to repair will be evacuated to Depot Maintenance. AVIM will perform aircraft weight and balance inspections and other special inspections which exceed AVUM capability. Provides quick response maintenance support, including aircraft recovery and air evacuation, on-the-job training, and technical assistance through the use of mobile maintenance contact teams. Maintains authorized operational readiness float aircraft. Provides collection and classification services for serviceable/unserviceable material. Operates a cannibalization activity in accordance with AR 750-50. (The aircraft maintenance company within the maintenance battalion of a division will perform AVIM functions consistent with air mobility requirements and conservation of personnel and equipment resources. Additional intermediate maintenance support will be provided by the supporting nondivisional AVIM unit.)

B-2. USE OF THE MAINTENANCE ALLOCATION CHART (SECTION II)**NOTE**

Nomenclatures used throughout the MAC are approved item names. Those terms/ nomenclatures expressed in parentheses are generic in nature and are not to be considered as official terminology.

a. The Maintenance Allocation Chart assigns maintenance functions to the lowest category of maintenance based on past experience and the following considerations:

- (1) Skills available.
- (2) Work time required.
- (3) Tools and test equipment required and/or available.

b. Only the lowest category of maintenance authorized to perform a maintenance function is indicated. If the lowest maintenance category cannot perform all tasks of any single maintenance function (e.g., test, repair), then the higher maintenance level(s) that can accomplish additional tasks will also be indicated.

c. A maintenance function assigned to a maintenance category will automatically be authorized to be performed at any higher maintenance category.

d. A maintenance function that cannot be performed at the assigned category of maintenance for any reason may be evacuated to the next higher maintenance category. Higher maintenance categories will perform the maintenance functions of lower maintenance categories when required or directed by the commander that has the authority to direct such tasking.

e. The assignment of a maintenance function will not be construed as authorization to carry the related repair parts or spares in stock. Information to requisition or otherwise secure the necessary repair parts will be as specified in the associated Repair Parts and Special Tools List (RPSTL).

f. Normally there will be no deviation from the assigned level of maintenance. In cases of operational necessity, maintenance functions assigned to a maintenance level may, on a one-time basis and at the request

of the lower maintenance level, be specifically authorized by the maintenance officer of the level of maintenance to which the function is assigned. The special tools, equipment, etc. required by the lower level of maintenance to perform this function will be furnished by the maintenance level to which the function is assigned. This transfer of a maintenance function to a lower maintenance level does not relieve the higher maintenance level of the responsibility for the function. The higher level of maintenance will provide technical supervision and inspection of the function being performed at the lower level.

g. Changes to the Maintenance Allocation Chart will be based on continuing evaluation and analysis by responsible technical personnel and on reports received from field activities.

B-3. 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 by measuring the mechanical or electrical characteristics of an item and comparing those characteristics with prescribed standards.

c. Service. Operations required periodically to keep an item in proper operating condition, i.e., to clean (includes decontaminate, when required), to preserve, to drain, to paint, or to replenish fuel, lubricants, chemical fluids, or gases.



B-3. MAINTENANCE FUNCTIONS (cont)

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

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

f. Calibrate. To determine and cause corrections to be made or to be adjusted on instruments or test, measuring, and diagnostic equipment used in precision measurement. Consists of comparisons of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.

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

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

i. Repair. The application of maintenance services¹ or other maintenance actions² to restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module (component or assembly), end item, or system.

j. Overhaul. That maintenance effort (service/ action) necessary to restore an item to a completely serviceable/operational condition as prescribed by maintenance standards in appropriate technical publications (i.e., DMWR). 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 equipments/components.

B-4. STANDARD GROUPS (COLUMNS 1 AND 2)

a. Column 1, Group Number. Column 1 lists functional group code numbers, the purpose of which is to identify components, assemblies, subassemblies, and modules with the next higher assembly.

b. Column 2, Component/Assembly. Column 2 contains the names of components, assemblies, subassemblies, and modules for which maintenance is authorized.

B-5. MAINTENANCE FUNCTION (COLUMN 3)

Column 3 lists the functions to be performed on the items listed in column 2.

¹Services--inspect, test, service, adjust, aline, calibrate, or replace.

²Actions--welding, grinding, riveting, straightening, facing, remachining, or resurfacing.

B-6. MAINTENANCE CATEGORIES AND WORK TIMES (COLUMN 4)

The maintenance categories (levels) AVUM, AVIM, and DEPOT are listed on the Maintenance Allocation Chart with individual columns that include the work times for maintenance functions at each maintenance level. Work time presentations such as "0.1" indicate the average time it requires a maintenance level to perform a specified maintenance function. If a work time has not been established, the columnar presentation shall indicate "_ _". Maintenance levels higher than the level of maintenance indicated are authorized to perform the indicated function.

alphabetically in section III with a reference number to permit cross-referencing to column 5 in the MAC. In addition, the maintenance category authorized to use the device is listed along with the item National Stock Number (NSN) and, if applicable, the tool number to aid in identifying the tool/device.

B-7. TOOLS AND TEST EQUIPMENT (COLUMN 5 AND SECTION III)

Common tool sets (not individual tools), special tools, test, and support equipment required to perform maintenance functions are listed

B-8. REMARKS (COLUMN 6 AND SECTION IV)

Remarks (identified by an alphabetic code in column 6) and other notes (identified by a number in parentheses in the applicable column) are listed in section IV to provide a ready reference to the definition of the remark/note.

Section II. MAINTENANCE ALLOCATION CHART

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE CATEGORY			(5) TOOLS AND EQUIPMENT	(6) REMARKS
			AVUM	AVIM	DEPOT		
00	SHOP SET, FIRE CONTROL AVIM	Inspect Service Repair		5.0 0.2 27.2		7 1 thru 4 1 thru 4	A and B
01	CABLE ASSEMBLY, SPECIAL PURPOSE	Inspect Replace Repair		0.1 1.0 1.0		7 7 7	
02	SWITCHBOX AND MOUNTING BRACKET (with toggle switch)	Inspect Repair		0.1 0.5		7 7	



MAINTENANCE ALLOCATION CHART (cont)

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE CATEGORY			(5) TOOLS AND EQUIPMENT	(6) REMARKS
			AVUM	AVIM	DEPOT		
03	SWITCHBOX AND MOUNTING BRACKET (without toggle switch)	Inspect		0.1		7	
		Repair		0.5		7	
04	COVER ASSEMBLY, BLACK- OUT, FAN	Inspect		0.5		4	
		Replace		2.0		1, 3, 4, and 7	
		Repair		1.5		1, 3, 4, and 7	
05	MOUNTING, POWER SUPPLY	Inspect		0.1		7	
		Replace		2.0		1, 3, 4, and 7	
		Repair		1.0		1, 3, 4, and 7	
06	LAMP, FLUORESCENT	Inspect		0.1		7	
		Service		0.2		7	
		Replace		1.0		7	
		Repair		0.5		7	
07	BRACKET ASSEMBLY, LAMP	Inspect		0.2		7	
		Replace		1.0		2 and 7	
		Repair		0.7		2 and 7	
08	HARNESS ASSEMBLY, WIRING (bench)	Inspect		1.0		7	
		Replace		2.0		4, 7, and 8	
		Repair		1.5		4, 7, and 8	

09	HARNESS ASSEMBLY, WIRING (ceiling)	Inspect	0.5	7
		Replace	1.5	4, 7, and 8
		Repair	1.0	4, 7, and 8
10	WIRE ASSEMBLY (ceiling outlets)	Inspect	0.5	7
		Replace	1.0	4, 7, and 8
		Repair	1.0	4, 7, and 8
11	HARNESS ASSEMBLY, WIRING (switchbox to distribution panel)	Inspect	0.5	7
		Replace	1.0	4, 7, and 8
		Repair	1.0	4, 7, and 8
1101	WIRE ASSEMBLY	Inspect	0.5	7
		Replace	1.0	4, 7, and 8
		Repair	1.0	4, 7, and 8
12	WIRE ASSEMBLY (switchbox)	Inspect	0.5	7
		Replace	1.0	4, 7, and 8
		Repair	0.7	4, 7, and 8
13	SHELVING ASSEMBLY	Inspect	0.5	7
		Service	0.5	1, 3, 4, and 7
		Replace	3.0	1, 3, 4, and 7
		Repair	1.0	1, 3, 4, and 7
14	FRAME ASSEMBLY, ECU STOWING	Inspect	0.1	7
		Replace	3.0	1, 3, 4, and 7
		Repair	1.0	1, 3, 4, and 7
1401	STRAP, WEBBING	Inspect	0.1	7
		Replace	0.5	7
		Repair	0.2	7

MAINTENANCE ALLOCATION CHART (cont)

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE CATEGORY			(5) TOOLS AND EQUIPMENT	(6) REMARKS
			AVUM	AVIM	DEPOT		
15	HOLDER ASSEMBLY, FIRST AID KIT	Inspect		0.1		7	
		Replace		1.0		7	
		Repair		0.5		7	
1501	HOLDER ASSEMBLY	Inspect		0.1		7	
		Replace		0.5		7	
		Repair		0.2		7	
1502	BRACKET ASSEMBLY	Inspect		0.1		7	
		Replace		0.5		7	
		Repair		0.2		7	
16	CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL	Inspect		0.1		5	C
		Service		0.2		4 thru 8	
		Replace		2.0		4 thru 8	
		Repair		1.0		4 thru 8	
1601	CONNECTOR, PLUG, ELECTRICAL	Inspect		0.1		5	C
		Service		0.2		4 thru 8	
		Replace		1.5		4 thru 8	
		Repair		1.0		4 thru 8	
1602	CONNECTOR, PLUG	Inspect		0.1		7	
		Service		0.5		4 and 8	
		Replace		1.5		4 and 8	
1603	CABLE ASSEMBLY	Inspect		0.1		7	
		Replace		0.7		4 and 8	
		Repair		0.2		4 and 8	
17	AIRHOSE ASSEMBLY	Inspect		0.1		7	
		Replace		1.0		7	
		Repair		0.5		7	

18	FILE, WORK ORGANIZER	Inspect	0.2	7	C
		Service	1.0	1, 3, and 4	
		Replace	2.0	1, 3, and 4	
		Repair	1.0	1, 3, and 4	
19	CABLE ASSEMBLY, POWER ELECTRICAL	Inspect	0.5	5	C
		Replace	2.0	4 thru 8	
		Repair	1.5	4 thru 8	
1901	CONNECTOR, PLUG, ELECTRICAL (female)	Inspect	0.1	5	C
		Service	0.2	4 thru 8	
		Replace	1.5	4 thru 8	
		Repair	1.0	4 thru 8	
1902	CONNECTOR, PLUG, ELECTRICAL (male)	Inspect	0.1	5	C
		Service	0.2	4 thru 8	
		Replace	1.5	4 thru 8	
		Repair	1.0	4 thru 8	

SECTION III. TOOLS AND TEST EQUIPMENT REQUIREMENTS

Tools or Test Equipment Reference Code	Maintenance Category	Nomenclature	National/NATO Stock Number	Tool Number
1	AVIM	AVIM Sheet Metal Shop Set	4920-00-166-5505	SC 4920-99-CL-A91, part VI
2	AVIM	AVIM Tool Crib Shop Set	4920-00-472-4183	SC 4920-99-CL-A91, part VII
3	AVIM	AVIM Welding Shop Set	4920-00-163-5093	SC 4920-99-CL-A91, part IX
4	AVIM	Basic Aircraft Armament Repairman Tool Set	4933-00-987-9816	SC 4933-95-CL-A13



TOOL AND TEST EQUIPMENT REQUIREMENTS (cont)

Tools or Test Equipment Reference Code	Maintenance Category	Nomenclature	National/NATO Stock Number	Tool Number
5	AVIM	Connector Electrical Contact Removal Tool	4931-00-122-7088	MS90562-5
6	AVIM	Connector Electrical Contact Removal Tool	4931-00-122-7088	MS90562-6
7	AVIM	Fire Control Repair Shop Set	4931-00-122-7088	SC 4931-95-CL-A21
8	AVIM	Supplemental Aircraft Armament Repairman Tool Set	4933-00-994-9242	SC 4933-95-CL-A14

Section IV. REMARKS

Reference Code	Remarks/Notes
A	Straightening of the strap buckle and reclamping of loose strap clips is authorized. Welding of broken footman loops is also authorized.
B	Operation, maintenance, and repair of the 5410-01-003-2933 shelter are covered in TM 10-5410-224-14 and 24&P. Operation, maintenance, and repair of the 4120-00-441-3730 environmental control units are covered by TM 5-4120-243-14. Operation, maintenance, and repair of the 6130-00-542-6385 power supply are covered in TM 11-6130-246-12. Fire extinguisher instructions are on the extinguisher data plate. SC 4931-95-CL-A21 provides a listing of shop set components.
C	The MS90562-5 and-6 electrical connector removal tools are provided to permit contact removal from the MS90556, MS90557, and MS90558 connectors.

APPENDIX C

OPERATOR'S AND AVIATION INTERMEDIATE MAINTENANCE
REPAIR PARTS AND SPECIAL TOOLS LIST

CURRENT AS OF FEBRUARY 9, 1982

Section I. INTRODUCTION

C-1. SCOPE

This manual lists spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE), and other special support equipment required for performance of operator's and aviation intermediate maintenance of the fire control repair shop set. It authorizes the requisitioning and issue of spares and repair parts as indicated by the source and maintenance codes.

C-2. GENERAL

This Repair Parts and Special Tools List is divided into the following sections:

a. Section II. Repair Parts List. A list of spares and repair parts authorized for use in 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 numeric sequence, with the parts in each group listed in figure and item number sequence. Bulk materials are listed in NSN sequence.

b. Section III. Special Tools List. A list of special tools, special TMDE, and other special support equipment authorized for the performance of maintenance.

c. Section IV. National Stock Number and Part Number Index. A list, in National item identification number (NIIN) sequence, of all National stock

numbers (NSN) appearing in the listings, followed by a list in alphameric sequence of all part numbers appearing in the listings. National stock numbers and part numbers are cross-referenced to each illustration figure and item number appearance. This index is followed by a cross-reference list of reference designators to figure and item numbers.

C-3. EXPLANATION OF COLUMNS

a. Illustration. This column is divided as follows:

(1) Figure Number. Indicates the figure number of the illustration on which the item is shown.

(2) Item Number. The number used to identify item called out in the illustration.

b. Source, Maintenance, and Recoverability (SMR) Codes.

(1) Source Code. Source codes indicate the manner of acquiring support items for maintenance, repair, or overhaul of end items. Source codes are entered in the first and second positions of the Uniform SMR Code format as follows:

C-3. EXPLANATION OF COLUMNS (cont)

Code	Definition
PA.....	Item procured and stocked for anticipated or known usage.
PB.....	Item procured and stocked for insurance purpose because essentiality dictates that a minimum quantity be available in the supply system.
PC.....	Item procured and stocked and which otherwise would be coded PA except that it is deteriorative in nature.
PD.....	Support item, excluding support equipment, procured for initial issue or outfitting and stocked only for subsequent or additional initial issues or outfittings. Not subject to automatic replenishment.
PE.....	Support equipment procured and stocked for initial issue or outfitting to specified maintenance repair activities.
PF.....	Support equipment which will not be stocked but which will be centrally procured on demand.

Code	Definition
PG.....	Item procured and stocked to provide for sustained support for the life of the equipment. It is applied to an item peculiar to the equipment which, because of probable discontinuance or shutdown of production facilities, would prove uneconomical to reproduce at a later time.
KD.....	An item of a depot overhaul/repair kit and not purchased separately. Depot kit defined as a kit that provides items required at the time of overhaul or repair.
KF.....	An item of a maintenance kit and not purchased separately. Maintenance kit defined as a kit that provides an item that can be replaced at organizational or intermediate levels of maintenance.
KB.....	Item included in both a depot overhaul/repair kit and a maintenance kit.
MO.....	Item to be manufactured or fabricated at organizational level.

Code	Definition
MF	Item to be manufactured or fabricated at the direct support maintenance level.
MH	Item to be manufactured or fabricated at the general support maintenance level.
MD	Item to be manufactured or fabricated at the depot maintenance level.
AO	Item to be assembled at organizational level.
AF	Item to be assembled at direct support maintenance level.
AH.....	Item to be assembled at general support maintenance level.
AD.....	Item to be assembled at depot maintenance level.
XA.....	Item is not procured or stocked because the requirements for the item will result in the replacement of the next higher assembly.
XB.....	Item is not procured or stocked If not available through salvage, requisition.

Code	Definition
XC.....	Installation drawing, diagram, instruction sheet, field service drawing, that is identified by manufacturer's part number.
XD.....	A support item that is not stocked When required, item will be procured through normal supply channels.

NOTE
Cannibalization or salvage may be used as a source of supply for any items coded above except those coded XA and aircraft support items as restricted by AR 700-42.

(2) Maintenance Code Maintenance codes are assigned to indicate the levels of maintenance authorized to USE and REPAIR support itemsThe maintenance codes are entered in the third and fourth positions of the Uniform SMR Code format as follows:

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

Code	Application/Explanation
C.....	Crew or operator maintenance performed within organizational maintenance.



C-3. EXPLANATION OF COLUMNS (cont)

Code	Application/Explanation
O.....	Support item is removed, replaced, used at the organizational level.
F.....	Support item is removed, replaced, used at the direct support level.
H.....	Support item is removed, replaced, used at the general support level.
D.....	Support items that are removed, replaced, used at depot, mobile depot, or specialized repair activity only.

(b) The maintenance code entered in the fourth position indicates 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) This position will contain one of the following maintenance codes.

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 the direct support level.

Code	Application/Explanation
H.....	The lowest maintenance level capable of complete repair of the support item is the general support level.
D.....	The lowest maintenance level capable of complete repair of the support item is the depot level.
L.....	Repair restricted to applicable 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 for the maintenance of this item.

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

Recoverability Code	Definition
Z.....	Nonreparable item When unserviceable, condemn and dispose at the level indicated in position 3.

Recoverability Code

Definition

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 depot/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). Refer to appropriate manuals/directives for specific instructions

c. National Stock Number. Indicates the National stock number assigned to the item and which will be used for requisitioning.

d. Federal Supply Code for Manufacturer (FSCM). The FSCM is a 5-digit numeric code listed in SB 708-42 which is used to identify the manufacturer, distributor, or Government agency, etc.

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

NOTE

When a stock numbered item is requisitioned, the item received may have a different part number than the part being replaced.

f. Description. Indicates the Federal item name and, if required, a minimum description to identify the item. The physical security classification of the item is indicated by the parenthetical entry applicable physical security classification abbreviation, e.g., Phy Sec C1 (C)-Confidential, Phy Sec C1 (S) Secret, Phy Sec CI (T)-Top Secret. Items that are included in kits and sets are listed below the name of the kit or set with the quantity of each item in the kit or set indicated in the quantity incorporated in unit column. When the part to be used differs between serial numbers of the same model, the effective serial numbers are shown as the last line of the description. In the Special Tools List, the initial basis of issue (B01) appears as the last line in the entry for each special tool, special TMDE, and other special support equipment. When density of equipments supported exceeds density spread indicated in the basis of issue, the total authorization is increased accordingly.



C-3. EXPLANATION OF COLUMNS (cont)

g. Unit of Measure (U/M). Indicates the standard of the basic quantity of the listed item as used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr, etc). When the unit of measure differs from the unit of issue, the lowest unit of issue that will satisfy the required units of measure will be requisitioned.

h. Quantity Incorporated in Unit. Indicates the quantity of the item used in the breakout shown on the illustration figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column in lieu of a quantity indicates that no specific quantity is applicable (e.g., shims, spacers, etc).

C-4. SPECIAL INFORMATION

a. Detailed manufacturing instructions for items source coded to be manufactured or fabricated are found in appendix E of this manual. Bulk materials required to manufacture items are listed in the Bulk Material Group of this manual.

b. Detailed assembly instructions for items source coded to be assembled are found in appendix E of this manual. Assembly components are listed immediately following the item to be assembled.

C-5. HOW TO LOCATE REPAIR PARTS

a. When National Stock Number or Part Number is Unknown:

(1) First. Using the table of contents, determine the applicable functional group or subgroup within which the item belongs. This is necessary since illustrations are prepared for functional groups or subgroups, and listings are divided into the same groups.

(2) Second. Find the illustration covering the applicable functional group or subgroup to which the item belongs.

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

(4) Fourth. Using the Repair Parts Listing, find the figure and item number noted on the illustration.

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

(1) First. Using the Index of National Stock Numbers and Part Numbers, find the pertinent National stock number or part number. This index is in NIIN sequence followed by a list of part numbers in alphameric sequence, cross-referenced to the illustration figure number and item number.

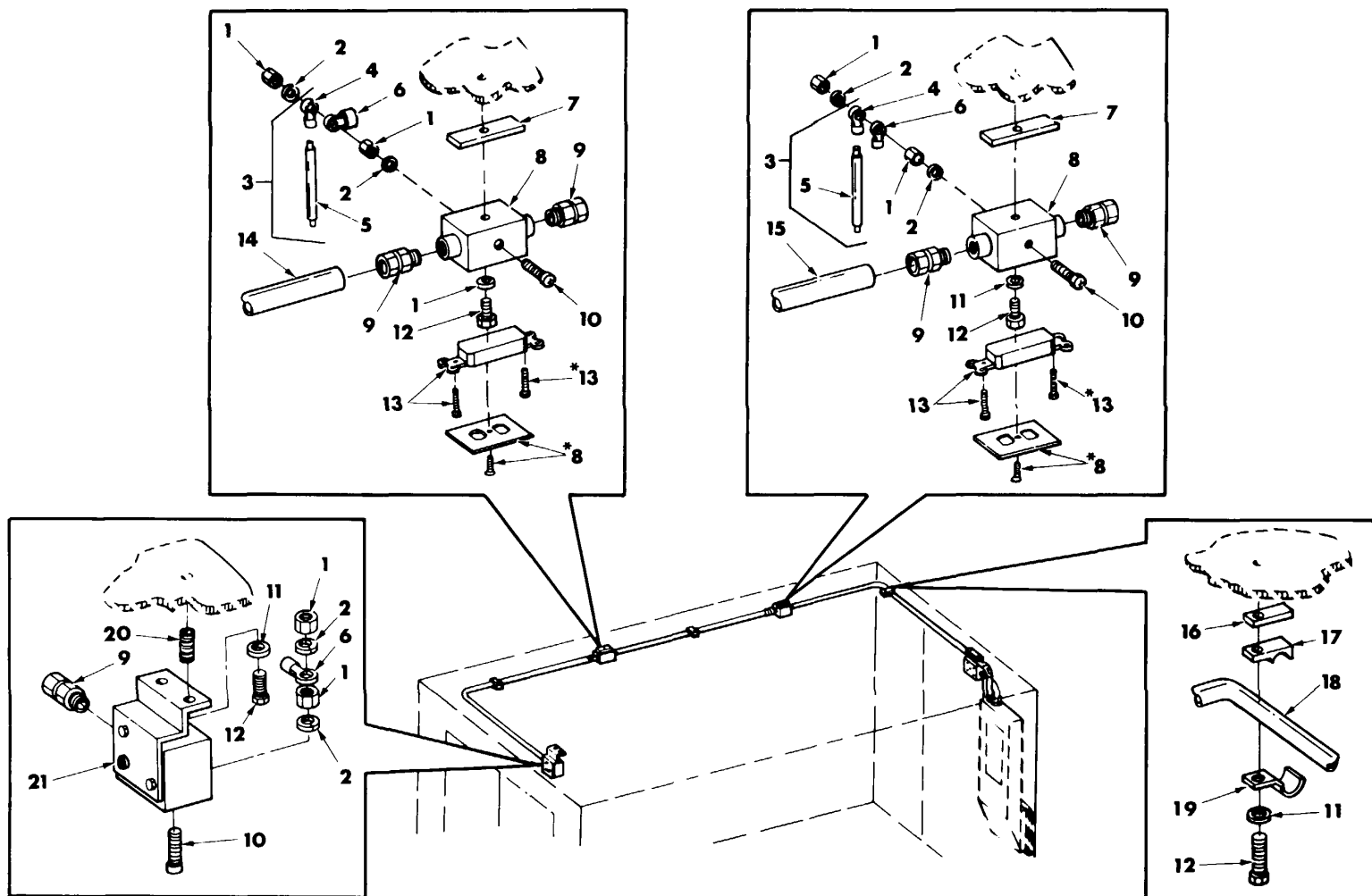
(2) Second. After finding the figure and item number, locate the figure and item number in the repair parts list.

C-6. ABBREVIATIONS

Not applicable.

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Section II. REPAIR PARTS LIST



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NOTE: *SUPPLIED WITH IDENTICALLY NUMBERED PART.

Figure 1. Shop set, fire control AVIM 11729123 and wire assembly 12011690-9, ceiling outlets.

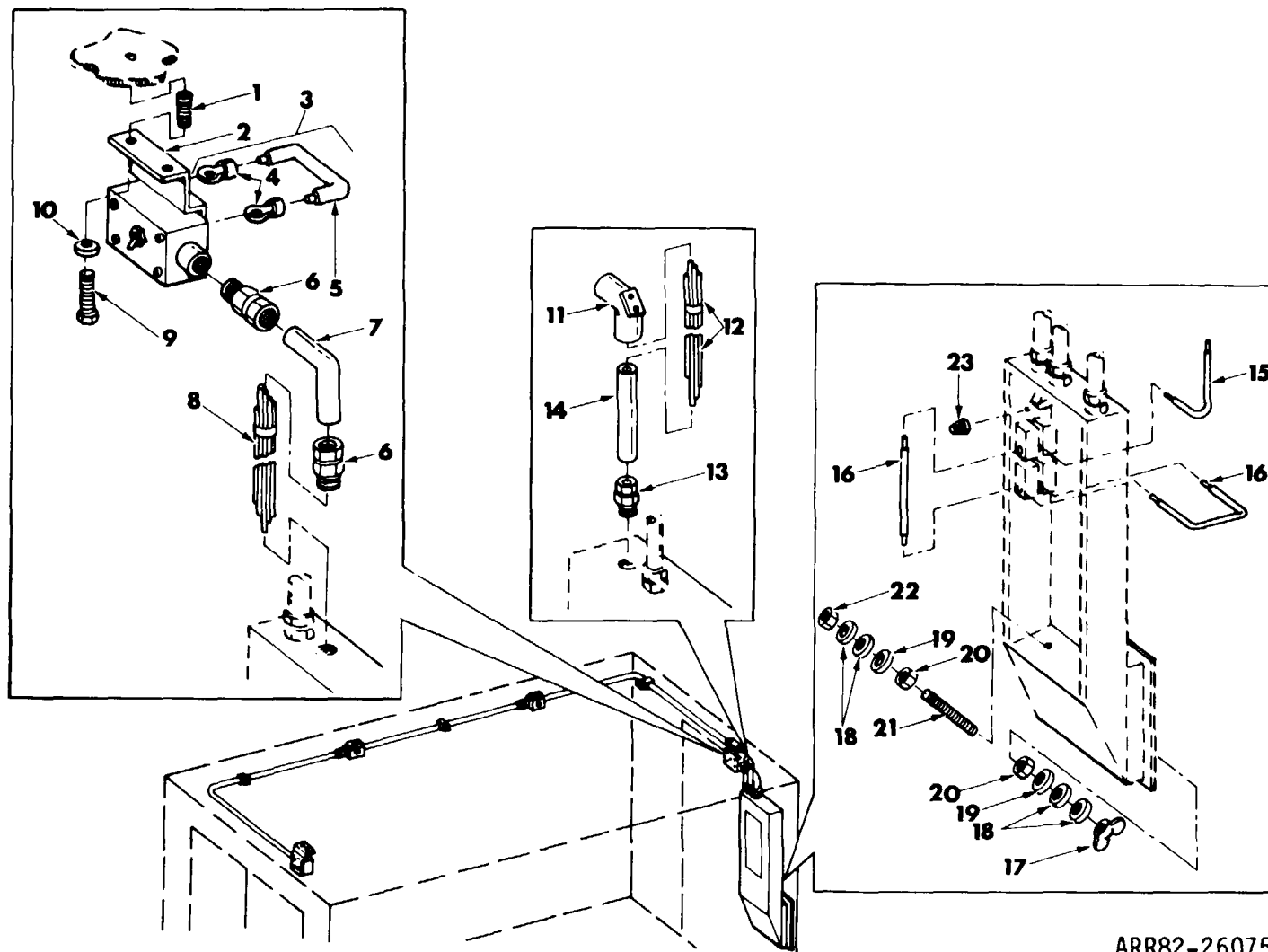
(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 00 SHOP SET, FIRE CONTROL AVIM 11729123 AND GROUP 10 WIRE ASSEMBLY 12011690-1, CEILING OUTLETS		
1	1	PBFZZ	5310-00-934-9757	96906	MS35649-282	NUT: PLAIN, HEXAGON	EA	8
1	2	PBFZZ	5310-00-045-3299	96906	MS35338-42	WASHER, LOCK	EA	8
1	3	AFFFF		19204	12011690-9	WIRE ASSEMBLY (CEILING OUTLETS)	EA	2
1	4	PBFZZ	5940-00-143-4775	96906	MS25036-156	TERMINAL, LUG	EA	1
1	5	MFFZZ		19204	12011690	WIRE, ELECTRICAL, BLACK (MFR FROM 6145-00-239-1245)	EA	1
1	6	PBFZZ	5940-00-143-4775	96906	MS25036-156	TERMINAL, LUG	EA	3
1	7	MFFZZ		19204	7551093-1	SPACER, PLATE (MFR FROM 9530-00-236-7671)	EA	2
1	8	PBFZZ	5975-01-094-1586	19204	7551739	CONDUIT OUTLET	EA	2
1	9	PBFZZ		81348	W-F-408	BOX CONNECTOR, ELECTRICAL	EA	5
1	10	PBFZZ	5305-00-984-6194	96906	MS35206-246	SCREW, MACHINE	EA	3
1	11	PBFZZ	5310-00-141-1795	88044	AN960-416	WASHER, FLAT	EA	7
1	12	PBFZZ	5305-00-267-8974	96906	MS90726-8	SCREW, CAP HEXAGON HEAD	EA	7
1	13	PBFZZ	5935-01-012-3080	81348	WC596-12-4	CONNECTOR, RECEPTACLE GROUNDING, DUPLEX	EA	2
1	14	MFFZZ		19204	7551084	CONDUIT, METAL, RIGID (MFR FROM 5975-00-178-1217)	EA	1
1	15	MFFZZ		19204	7551085-3	CONDUIT, METAL, RIGID (MFR FROM 5975-00-178-1217)	EA	1
1	16	MFFZZ		19204	7551093-2	SPACER, PLATE (MFR FROM 9530-00-236-7671)	EA	3
1	17	PBFZZ	5975-00-243-5447	03743	CLB-50M	SUPPORT, ELECTRICAL	EA	3

C-9(C-10 blank)



(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 00 SHOP SET, FIRE CONTROL AVIM 11729123 AND GROUP 10 WIRE ASSEMBLY 12011690-1, CEILING OUTLETS CONT.		
1	18	MFFZZ		19204	7551085-2	CONDUIT, METAL, RIGID (MFR FROM 5975-00-178-1217)	EA	1
1	19	PBFZZ	5340-01-089-5523	03743	TWCL-75M	STRAP, RETAINING LOOP	EA	3
1	20	PBFZZ	5320-01-032-3030	19204	12011685	RIVET, BLIND SCREW THREAD	EA	7
1	21	PEFFF		19204	7551735-2	SWITCHBOX AND MOUNTING BRACKET	EA	1

REPAIR PARTS LIST (cont)



ARR82-26075

Figure 2. Shop set, fire control AVIM 11729123 and wire assembly 12011690-4, switchbox.

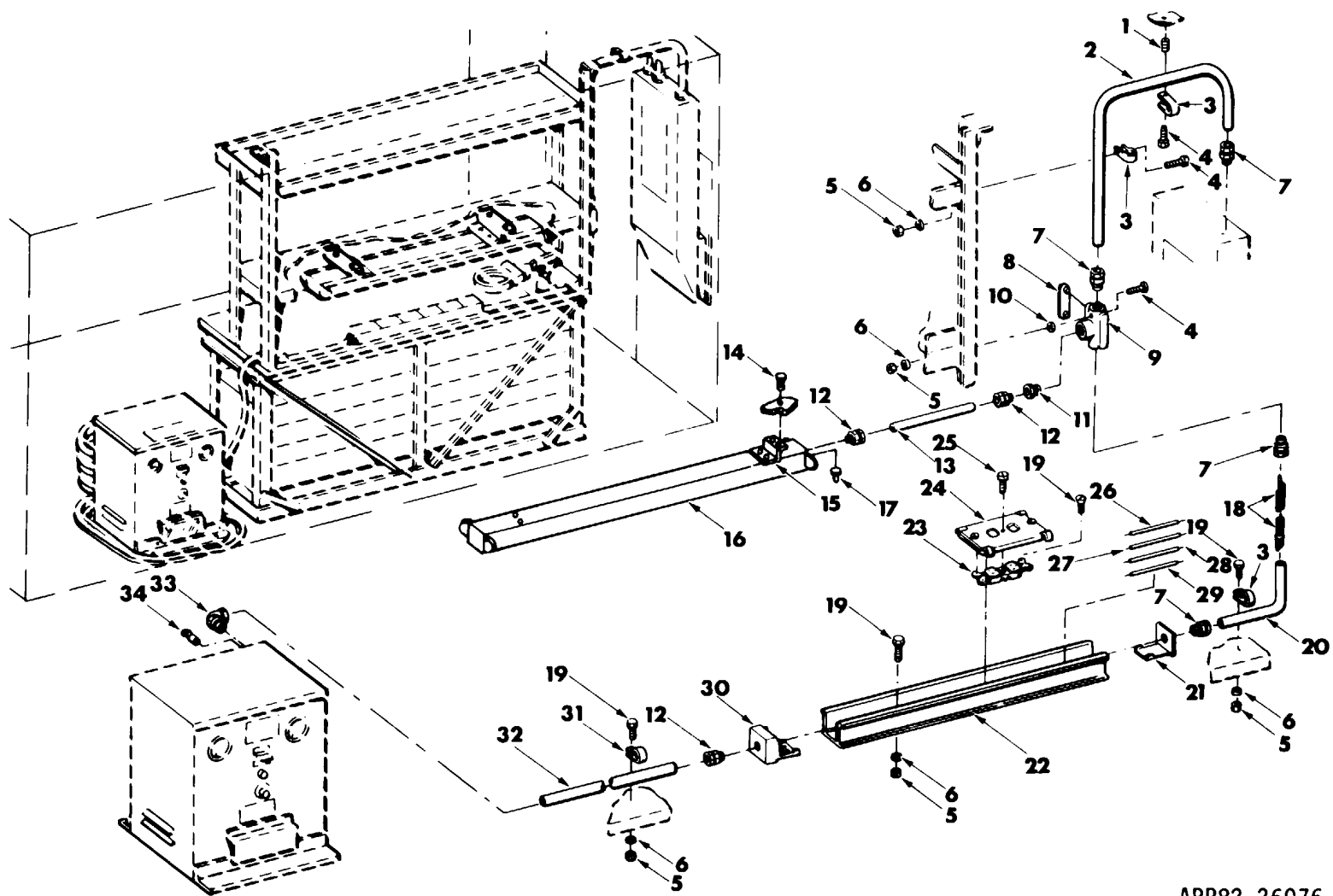
(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 00 SHOP SET, FIRE CONTROL AVIM 11729123 AND GROUP 12 WIRE ASSEMBLY 12011690-4, SWITCHBOX		
2	1	PBFZZ	5320-01-032-3030	19204	12011685	RIVET BLIND SCREW THREAD	EA	2
2	2	PEFFF		19204	7551735-1	SWITCHBOX AND MOUNTING BRACKET	EA	1
2	3	AFFFF		19204	12011690-4	WIRE ASSEMBLY (SWITCHBOX)	EA	2
2	4	PBFZZ	5940-00-204-8990	96906	MS25036-111	TERMINAL, LUG	EA	2
2	5	MFFZZ		19204	12011690	WIRE, ELECTRICAL, BLACK (MFR FROM 6145-00-239-1245)	EA	1
2	6	PBFZZ	5975-01-123-4612	19204	7551098-5	BOX CONNECTOR, ELECTRICAL	EA	2
2	7	MFFZZ		19204	7551429-7	CONDUIT, METAL, FLEXIBLE (MFR FROM 4720-00-965-9319).....	EA	1
2	8	AFFFF		19204	7551097-1	HARNESS ASSEMBLY, WIRING (SWITCHBOX TO DISTRIBUTION PANEL).....	EA	1
2	9	PBFZZ	5305-00-267-8974	96906	MS90726-8	SCREW, CAP, HEXAGON HEAD	EA	2
2	10	PBFZZ	5310-00-41-1795	88044	AN960-416	WASHER, FLAT	EA	2
2	11	PBFZZ	4730-01-092-6575	96160	5863-2	ELBOW, ELECTRICAL CONDUIT	EA	1
2	12	AFFFF		19204	7551097-2	HARNESS ASSEMBLY, WIRING (CEILING)	EA	1
2	13	PBFZZ		81348	W-F-408	BOX CONNECTOR, ELECTRICAL	EA	1
2	14	MFFZZ		19204	7551085-1	CONDUIT, METAL, RIGID (MFR FROM 5975-00-178-1217)	EA	1
2	15	MFFZZ		19204	12011690-2	LEAD, ELECTRICAL BLACK (MFR FROM 6145-00-239-1245)	EA	1
2	16	MFFZZ		19204	12011690-3	LEAD, ELECTRICAL, BLACK (MFR FROM 6145-00-239-1245)	EA	2
2	17	PAFZZ	5310-00-982-6827	96906	MS35425-40	NUT, PLAIN WING	EA	1

C-13(C-14 blank)



(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 00 SHOP SET, FIRE CONTROL AVIM 11729123 AND GROUP 12 WIRE ASSEMBLY 12011690-4, SWITCHBOX CONT.		
2	18	PBFZZ	5310-00-045-5211	96906	MS15795-911	WASHER, FLAT.....	EA	4
2	19	PBFZZ	5310-00-889-2528	96906	MS45904-68	WASHER, LOCK.....	EA	2
2	20	PBFZZ	5310-00-842-1699	96906	MS35691-4	NUT PLAIN, HEXAGON.....	EA	2
2	21	PBFZZ	5307-01-098-3847	19204	7550795-2	STUD, CONTINUOUS THREAD.....	EA	1
2	22	PBFZZ	5310-00-939-2653	96906	MS51969-1	NUT, PLAIN, HEXAGON.....	EA	1
2	23	PBFZZ	5940-01-094-2173	75037	212	SPLICE CONDUCTOR.....	EA	3

REPAIR PARTS LIST (cont)



ARR82-26076

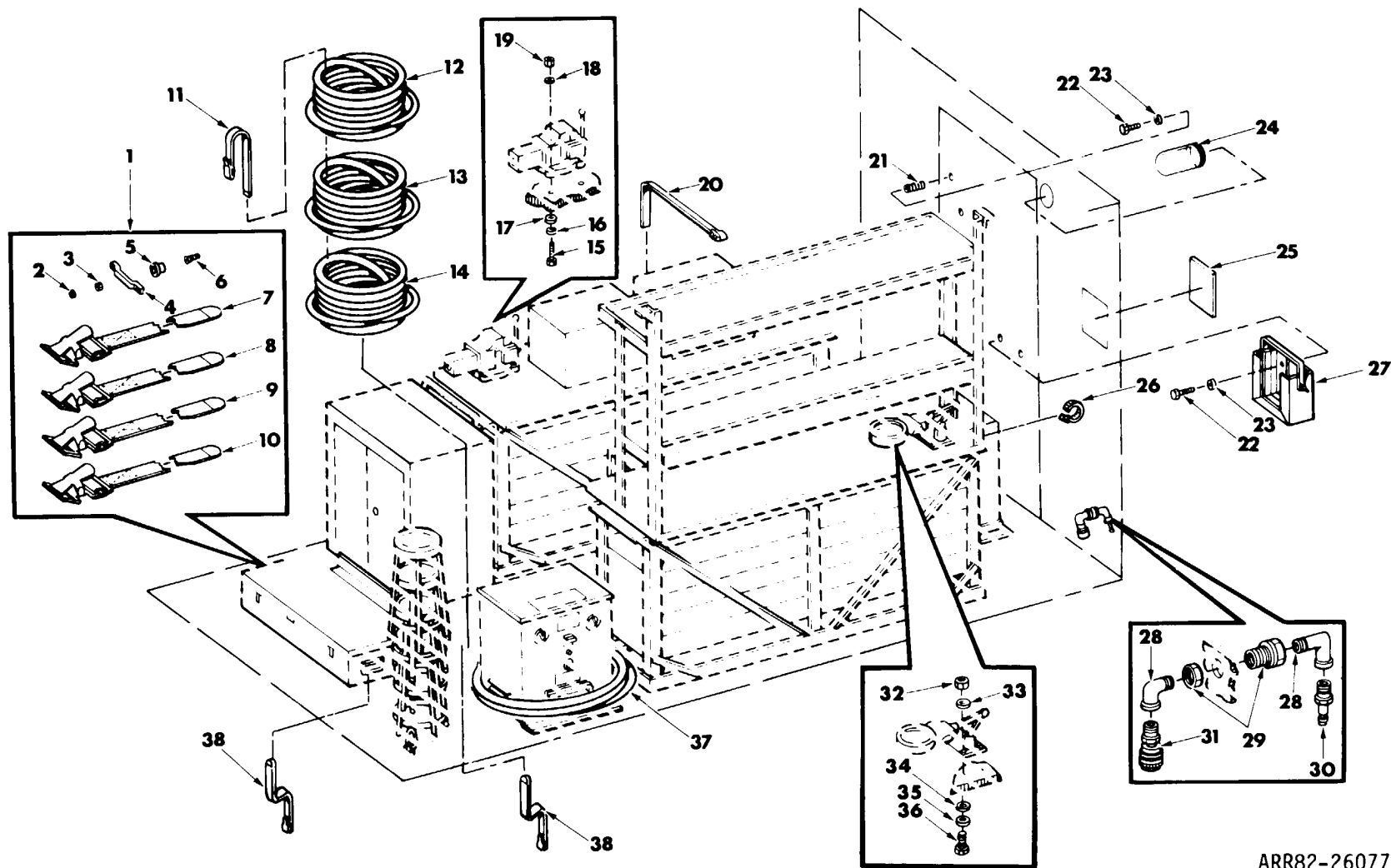
Figure 3. Shop set, fire control AVIM 11729123, bench, conduit, and electrical parts.

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 00 SHOP SET, FIRE CONTROL AVIM 11729123, BENCH, CONDUIT AND ELECTRICAL PARTS		
3	1	PBFZZ	5320-01-032-3030	19204	12011685	RIVET. BLIND SCREW THREAD	EA	1
3	2	MFFZZ		19204	7551429-6	CONDUIT- METAL, FLEXIBLE (MFR FROM 4720-00-965-9318).....	EA	1
3	3	PBFZZ	5340-01-036-7664	03743	CL-100M	STRAP, RETAINING LOOP	EA	3
3	4	PBFZZ	5305-00-068-0506	96906	M5S90726-6	SCREW, CAP. HEXAGON	EA	3
3	5	PBFZZ	5310-00-768-0319	96906	MS51968-2	NUT PLAIN HEXAGON	EA	6
3	6	PBFZZ	5310-00-582-5965	96906	MS35338-44	WASHER, LOCK	EA	6
3	7	PBFZZ		19204	7551098-6	BOX CONNECTOR, ELECTRICAL	EA	4
3	8	PBFZZ	5975-01-077-7944	03743	K75-A	COVER, CONDUIT OUTLET.....	EA	1
3	9	PBFZZ	5975-01-115-9740	19204	7551096	BOX CONNECTOR, ELECTRICAL	EA	1
3	10	PBFZZ	5310-00-809-4058	96906	MS27183-10	WASHER, FLAT	EA	1
3	11	PBFZZ	5975-00-284-6655	81348	WF408	ADAPTER, ELECTRICAL CONDUIT.....	EA	1
3	12	PBFZZ	5975-01-123-4612	19204	7551098-5	BOX CONNECTOR, ELECTRICAL	EA	3
3	13	MFFZZ		19204	7551429-3	CONDUIT, METAL, FLEXIBLE (MFR FROM 4720-00-965-9319).....	EA	1
3	14	PBFZZ	5305-00-988-1727	96906	MS35206-283	SCREW, MACHINE.....	EA	4
3	15	XBFFF		19204	12011693	BRACKET ASSEMBLY, LAMP.....	EA	2
3	16	PBFFF	6240-01-111-7717	19204	7551089	LAMP, FLUORESCENT	EA	1
3	17	PBFZZ	5940-01-094-2173	75037	212	SPLICE, CONDUCTOR.....	EA	2

C-17(C-18 blank)

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USUABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 00 SHOP SET, FIRE CONTROL AVIM 11729123, BENCH. CONDUIT AND ELECTRICAL PARTS CONT.		
3	18	AFFFF		19204	7551097-4	HARNESSE ASSEMBLY, WIRING (BENCH)	EA	1
3	19	PBFZZ	5305-00-267-8961	96906	MS90727-17	SCREW, CAP, HEXAGON HEAD	EA	16
3	20	MFFZZ		19204	7551429-5	CONDUIT, METAL, FLEXIBLE (MFR FROM 4720-00-965-9318).....	EA	1
3	21	PBFZZ	5975-01-114--9345	19204	7550878	BRACKET, ELECTRICAL CONNECTOR	EA	1
3	22	XBFZZ		19204	7551099	CONDUIT, RACEWAY, METAL	EA	1
3	23	PBFZZ	5935-01-012-3080	81348	WC596/12-4	CONNECTOR, RECEPTACLE, ELECTRICAL	EA	6
3	24	PBFZZ	5975-01-110-4428	19204	7550826-2	COVER, CONDUIT OUTLET.....	EA	6
3	25	PBFZZ	5305-00-984-4983	96906	MS35206-226	SCREW, MACHINE.....	EA	6
3	26	MFFZZ		19204	12011690-15	LEAD, ELECTRICAL, WHITE (MFR FROM 6145-00-990-3003).....	EA	4
3	27	MFFZZ		19204	12011690-17	LEAD, ELECTRICAL, GREEN (MFR FROM 6145-00-904-3811).....	EA	5
3	28	MFFZZ		19204	12011690-19	LEAD, ELECTRICAL, RED (MFR FROM 6145-00-990-3001).....	EA	2
3	29	MFFZZ		19204	12011690-3	LEAD, ELECTRICAL, BLACK (MFR FROM 6145-00-239-1245)	EA	2
3	30	PBFZZ	5975-01-115-9741	19204	7550877	BRACKET, ELECTRICAL CONNECTOR	EA	1
3	31	PBFZZ	5340-00-900-4218	03743	CL-75M	STRAP, RETAINING LOOP	EA	1
3	32	MFFZZ		19204	7551429-4	CONDUIT..... METAL, FLEXIBLE (MFR FROM 4720-00-965-9319)	EA	1
3	33	PBFZZ	5975-01-110-4381	19204	7551098-7	ELBOW, ELECTRICAL CONDUIT	EA	1
3	34	PBFZZ	5940-00-204-8990	96906	MS25036-111	TERMINAL. LUG.....	EA	3

REPAIR PARTS LIST (cont)



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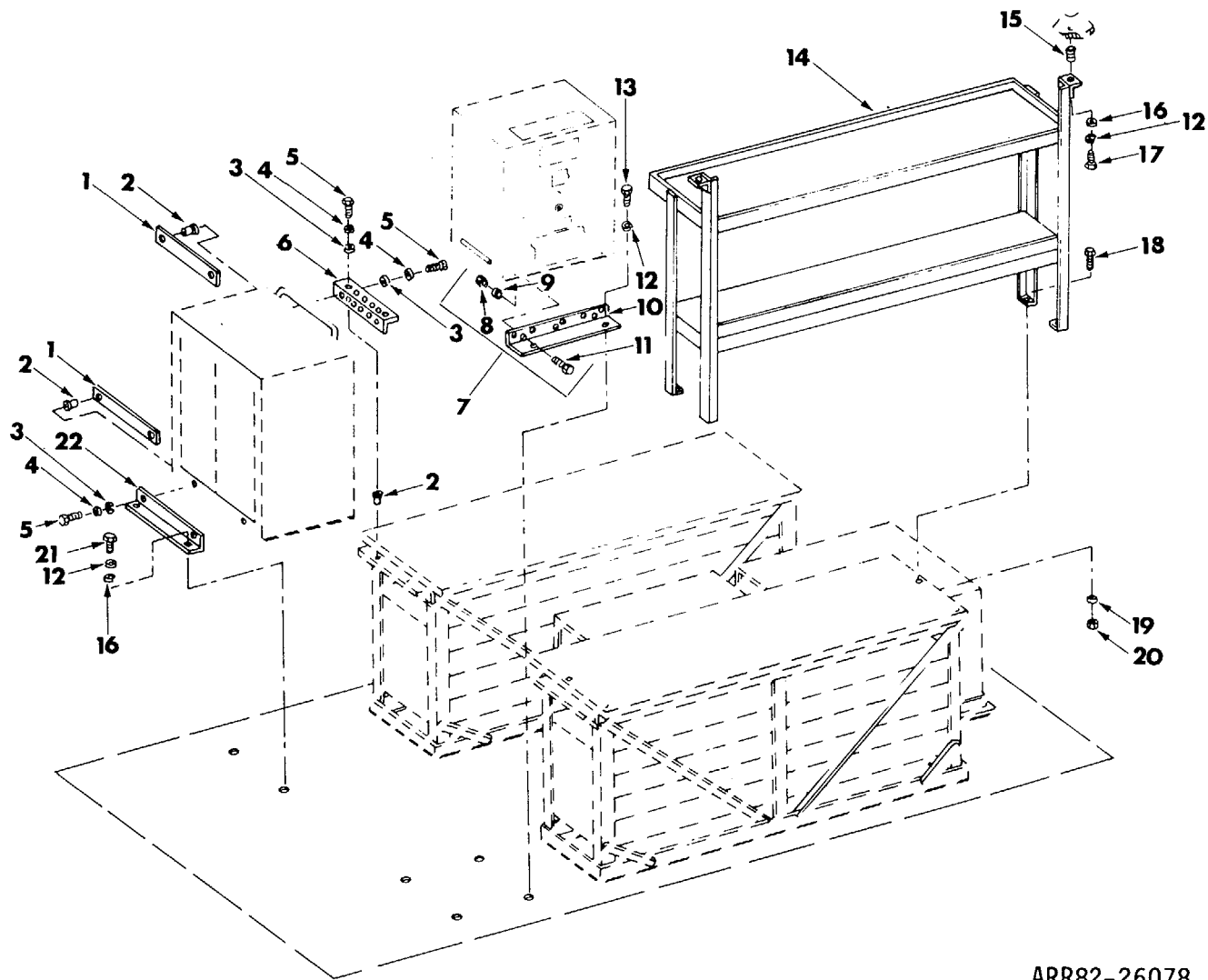
Figure 4. Shop set, fire control AVIM 11729123, strap assemblies, cable assemblies, and door modification parts.

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 00 SHOP SET,FIRE CONTROL AVIM 11729123,STRAP ASSEMBLIES, CABLE ASSEMBLIES,AND DOOR MODIFICATION PARTS		
4	1	XBFZZ		19204	7551432	ACCESSORIES, PACKAGE	EA	1
4	2	PAFZZ	5310-00-045-3296	96906	M535338-43	.WASHER, LOCK	EA	24
4	3	PAFZZ	5310-00-934-9758	96906	MS35649-202	.NUT, PLAIN, HEXAGON	EA	24
4	4	PAFZZ	5340-00-764-2334	96906	MS51939-1	.LOOP, SIRAP FASTENER.....	EA	12
4	5	PAFZZ	5999-01-089-8138	52758	EC4	.CAP, PROTECTIVE, DUST AND MOISTURE.....	EA	24
4	6	PAFZZ	5305-00-957-6273	96906	MS35190-270	SCREW, MACHINE.....	EA	24
4	7	PAFZZ	4933-01-085-7258	19204	75505PR-6	.STRAP, WEBBING,12 LONG.....	EA	12
4	8	PAFZZ	5340-00-431-8853	19204	7550588-8	.STRAP, WEBBING,30 LONG.....	EA	6
4	9	PAFZZ	5340-00-450-4031	19204	7550588-9	.STRAP, WEBBING,66 LONG.....	EA	6
4	10	PAFZZ	5340-00-457-1043	19204	7550588-10	.STRAP, WEBBING,110 LONG.....	EA	6
4	11	PAFZZ	5340-00-431-6949	19204	7550588-3	STRAP, WEBBING	EA	3
4	12	PBFFF	6150-00-255-8332	07878	72289-100	CABLE ASSEMBLY. POWER,ELECTRICAL	EA	2
4	13	PAFFF	4720-01-094-1893	19204	7551086	AIR HOSE ASSEMBLY	EA	1
4	14	PBFFF	4931-01-064-2821	19204	12011687	CABLE ASSEMBLY, SPECIAL PURPOSE,ELECTRICAL	EA	1
4	15	PBFZZ	5305-00-071-2077	96906	MS90728-121	SCREW,CAP,HEXAGON HEAD	EA	4
4	16	PBFZZ	5310-00-809-5998	96906	MS27183-18	WASHER, FLAT	EA	4
4	17	PBFZZ	5310-00-167-0770	88044	AN970-8	WASHER, FLAT	EA	4
4	18	PBFZZ	5310-00-584-5272	96906	MS35338-48	WASHER, LOCK.....	EA	4
4	19	PBFZZ	5310-00-768-0318	96906	MS51967-14	NUT, PLAIN,HEXAGON.....	EA	4

C-21(C-22 blank)

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 00 SHOP SET.FIRE CONTROL AVIM 11729123 STRAP ASSEMBLIES.CABLE ASSEMBDLIES,AND DOOR MODIFICATION PARTS CONT.		
4	20	PAFZZ	5340-00-457-1043	19204	7550588-10	STRAP, WEBBING	EA	4
4	21	PBFZZ	5320-01-032-3030	19204	12011685	RIVET, BLIND SCREW THREAD	EA	4
4	22	PBFZZ	5305-00-068-0505	96906	MS90726-5	SCREW, CAP, HEXAGON HEAD	EA	4
4	23	PBFZZ	5310-00-582-5965	96906	MS35338-44	WASHER, LOCK.....	EA	4
4	24	PBFZZ	6210-01-094-0711	19204	7551088	GLODE, ELECTRIC LIGHT.....	EA	1
4	25	XDFZZ		19204	12011686	PLATE, INSTRUCTION.....	EA	1
4	26	PBFZZ	4730-00-908-6294	96906	MS35842-16	CLAMP, HOSE.....	EA	1
4	27	PBFFF	4933-01-085-1582	19204	7551436	HOLDER ASSEMBLY, FIRST AID KIT.....	EA	1
4	28	PBFZZ		96906	MS51952-3	ELBOW. PIPE	EA	2
4	29	PBFZZ		19204	7551741	COUPLINOG, PIPE.....	EA	1
4	30	PAFZZ	4730-01-094-1902	81349	M4109-09-12-00-B	COUPLING HALF, QUICK DISCONNECT (MALE)	EA	1
4	31	PAFZZ	4730-00-203-0178	81349	M4109-01-12-00-B	COUPLING HALF, QUICK DISCONNECT (FEMALE).....	EA	1
4	32	PBFZZ	5310-00-934-9751	96906	MS35650-302	NUT, PLAIN HEXAGON	EA	4
4	33	PBFZZ	5310-00-167-0765	88044	AN970-3	WASHER, FLAT	EA	4
4	34	PBFZZ	5310-00-014-5850	96906	MS27183-42	WASHER, FLAT	EA	4
4	35	PBFZZ	5310-00-045-3296	96906	MS35338-43	WASHER, LOCK.....	EA	4
4	36	PBFZZ	5305-00-984-7364	96906	M5S35206-273	SCREW, MACHINE.....	EA	4
4	37	PBFFF	4931-01-101-5893	19204	7540635	CABLE ASSEMBLY, SPECIAL PURPOSE	EA	1
4	38	PAFZZ	5340-00-431-8853	19204	7550588-8	STRAP, WEBBING	EA	4

REPAIR PARTS LIST (cont)



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Figure 5. Shop set, fire control AVIM 11729123, cabinet and shelf mounting parts; and mounting, power supply 11020141.

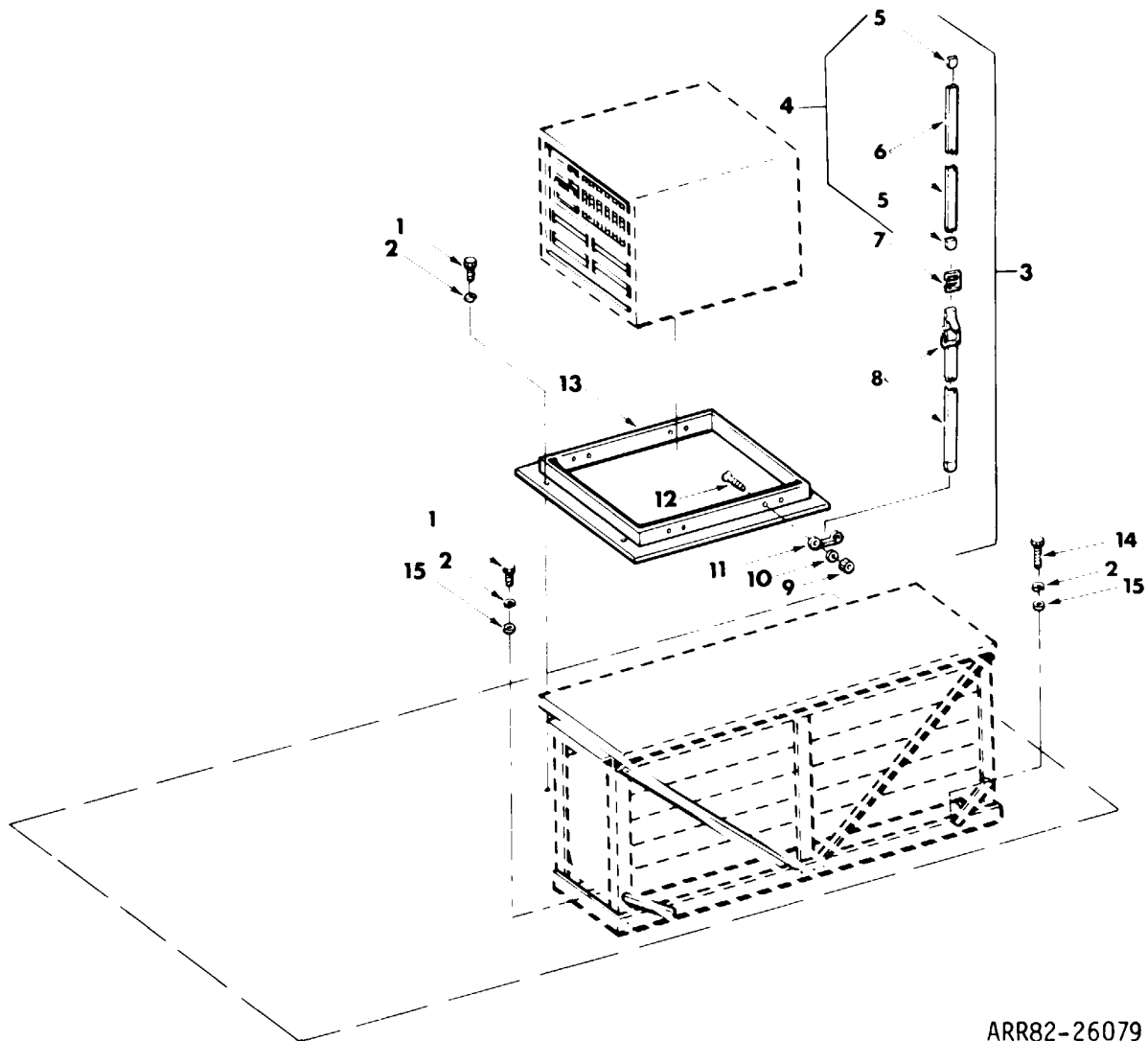
(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USUABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 00 SHOP SET,FIRE CONTROL AVIM 11729123,CABINET AND SHELF MOUNTING PARTS;AND GROUP 05 MOUNTING, POWER SUPPLY 11020141		
5	1	MFFZZ		19204	12011675	REINFORCEMENT PLATE (MFR FROM 9515-00-066-1015).....	EA	2
5	2	PBFZZ		19204	12011679-2	NUT, PLAIN,BLIND RIVET.....	EA	6
5	3	PBFZZ	5310-00-081-4219	96906	MS27183-12	WASHER, FLAT.....	EA	6
5	4	PBFZZ	5310-00-407-9566	96906	MS35338-45	WASHER, LOCK.....	EA	6
5	5	PBFZZ	5306-00-225-8499	96906	MS90725-34	BOLT, MACHINE.....	EA	6
5	6	MFFZZ		19204	12011661-5	BRACKET, ANGLE (MFR FROM 7125-00-197-9050).....	EA	1
5	7	AFFFF		19204	11020141	MOUNTING POWER SUPPLY.....	EA	1
5	8	PBFZZ	5310-00-043-0520	96906	MS35650-3252	.NUT, PLAIN,HEXAGON.....	EA	6
5	9	PBFZZ	5310-00-582-5965	96906	MS35338-44	.WASHER, LOCK.....	EA	6
5	10	MFFZZ		19204	11020138	.BRACKET, ANGLE(MFR FROM 9535-00-232-7599).....	EA	2
5	11	PBFZZ	5305-00-267-8974	96906	MS90726-8	SCREW, CAP,HEXAGON HEAD.....	EA	6
5	12	PBFZZ	5310-00-637-9541	96906	MS35338-46	WASHER, LOCK.....	EA	8
5	13	XDFZZ	5305-00-543-2419	96906	MS90728-61	SCREW,CAP,HEXAGON HEAD.....	EA	4
5	14	PEFFF	4931-01-101-5696	19204	12011654	SHELVING ASSEMBLY.....	EA	1
5	15	PAFZZ	5320-01-075-8245	19204	12011684	RIVET,BLIND SCREW THREAD.....	EA	2
5	16	PBFZZ	5310-00-080-6004	96906	MS27183-14	WASHER, FLAT.....	EA	4

C-25(C-26 blank)



(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 00 SHOP SET,FIRE CONTROL AVIM 11729123,CABINET AND SHELF MOUNTING PARTS;AND GROUP 05 MOUNTING, POWER SUPPLY 11020141 CONT.		
5	17	PBFZZ	5305-00-269-2805	96906	MS90726-62	SCREW, CAP, HEXAGON HEAD	EA	2
5	18	PBFZZ	5305-00-267-8961	96906	M5S90727-17	SCREW, CAP, HEXAGON HEAD	EA	4
5	19	PBFZZ	5310-00-582-5965	96906	MS35338-44	WASHER, LOCK.....	EA	4
5	20	PBFZZ	5310-00-768-0319	96906	MS51968-2	NUT, PLAIN HEXAGON.....	EA	4
5	21	PBFZZ	5305-00-942-2196	96906	MS18154-60	SCREW,CAP,HEXAGON HEAD	EA	2
5	22	MFFZZ		19204	12011676	BRACE, TOOL CABINET (MFR FROM 9535-00-232-7599).....	EA	1

REPAIR PARTS LIST (cont)

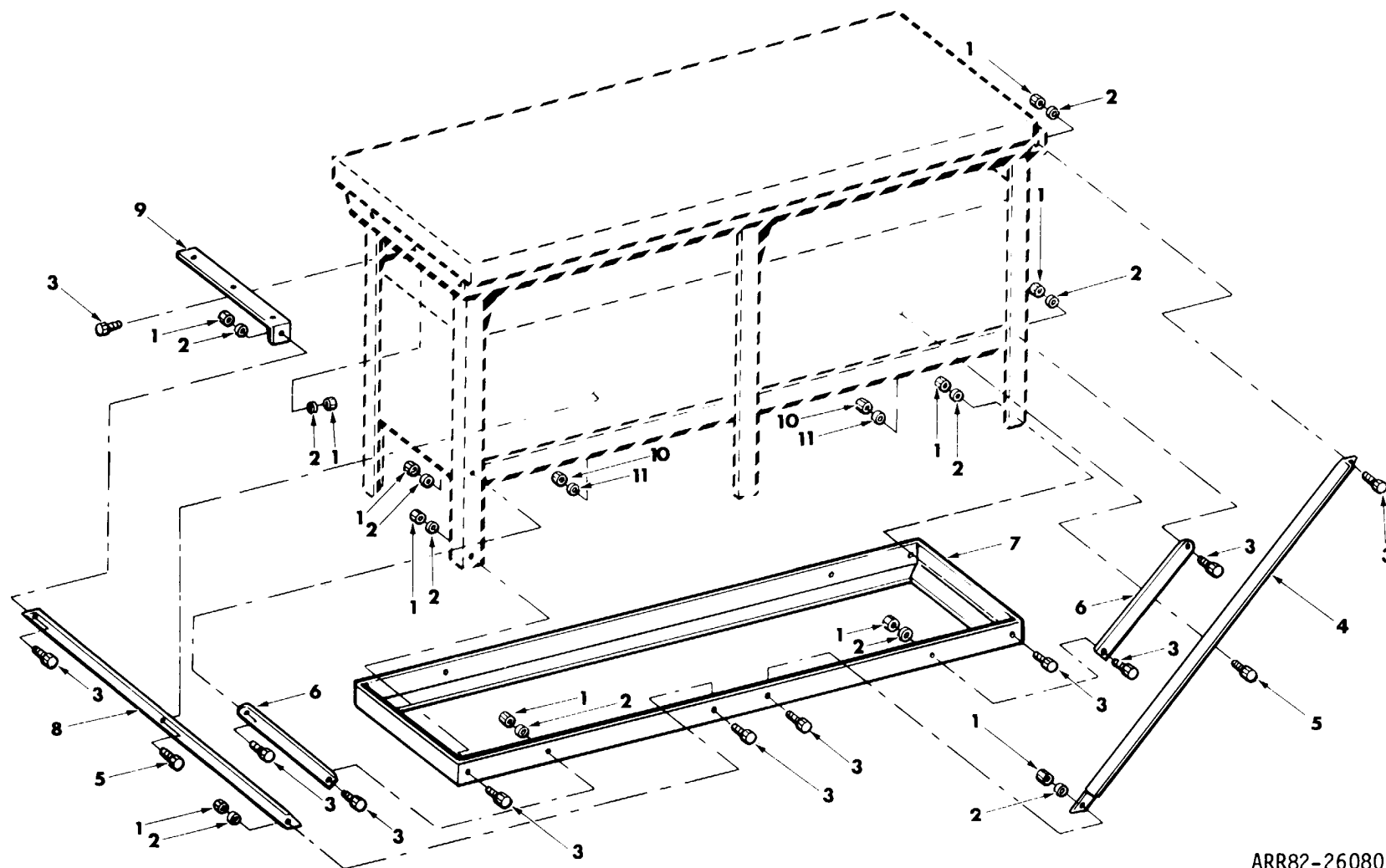


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Figure 6. Shop set, fire control AVIM 11729123, frame assembly, ECU stowing 12011669, and strap, webbing 12011671.

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USUABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 00 SHOP SET,FIRE CONTROL AVIM 11729123,GROUP 14 FRAME ASSEMBLY,ECU STOWING 12011669;AND GROUP 1401 STRAP, WEBBING 12011671		
6	1	PBFZZ	5305-00-543-2419	96906	MS90728-61	SCREW, CAP, HEXAGON HEAD	EA	28
6	2	PBFZZ	5310-00-637-9541	96906	MS35338-46	WASHIER, LOCK.....	EA	32
6	3	AFFFF		19204	12011669	FRAME ASSEMBLY ECU STOWING	EA	2
6	4	AFFFF		19204	12011671	.STRAP, WEBBING	EA	2
6	5	PAFZZ	5340-00-078-7029	96906	M551926-3	..CLIP, END,STRAP	EA	2
6	6	MFFZZ		81349	MIL-W-4088	..WEBBING TEXTILE,WOVEN (MFR FROM 8305-00-267-3009)	EA	1
6	7	PAFZZ		96906	MS51940-4S	.SLIDE.....	EA	4
6	8	PAFZZ	4933-01-085-8018	19204	12011670	.STRAP, WEBBING	EA	2
6	9	PAFZZ	5310-00-934-9751	96906	MS35650-302	.NUT PLAIN.HEXAGON.....	EA	8
6	10	PAFZ7	5310-00-045-3296	96906	MS35338-43	.WASHER, LOCK.....	EA	8
6	11	PAFZZ	5340-00-764-2334	96906	MS51939-1	.LOOP, STRAP FASTENER.....	EA	4
6	12	PBFZZ	5305-00-984-7341	96906	MS35191-273	.SCREW, MACHINE.....	EA	8
6	13	MFFZZ		19204	2011668	.FRAME (MFR FROM 9520-00-277-4912).....	EA	1
6	14	PBFZZ	5305-00-269-3214	96906	MS90725-64	SCREW, CAP, HEXAGON HEAD	EA	4
6	15	PBFZZ	5310-00-080-6004	96906	MS27183-14	WASHER, FLAT	EA	24

REPAIR PARTS LIST (cont)



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Figure 7. Shop set, fire control AVIM 11729123, table modification parts for rh and lh tables.

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USUABLE ON CODE</i>	QTY U/M	INC IN UNIT
						GROUP 00 SHOP SET,FIRE CONTROL AVIM 11729123, TABLE MODIFICATION PARTS FOR RH AND LH TABLES		
7	1	PBFZZ	5310-00-732-0559	96906	M551968-8	NUT, PLAIN,HEXAGON.....	EA	48
7	2	PBFZZ	5310-00-637-9541	96906	MS35338-46	WASHER, LOCK.....	EA	48
7	3	PBFZZ	5305-00-269-2803	96906	MS90726-60	SCREW, CAP, HEXAGON HEAD	EA	48
7	4	MFFZZ		19204	12011665	BRACE, TABLE, LONG, LH (MFR FROM 9520-00-277-5987).....	EA	2
7	5	PBFZZ	5305-00-068-0505	96906	MS90726-5	SCREW, CAP, HEXAGON HEAD	EA	4
7	6	MFFZZ		19204	12011663	BRACE, TABLE, SHORT (MFR FROM 9515-00-204-3991).....	EA	8
7	7	MFFZZ		19204	12011662	FRAME, TABLE.BASE (MFR FROM 9520-00-277-4912).....	EA	2
7	8	MFFZZ		19204	12011664	BRACE, TABLE, LONG, RH (MFR FROM 9520-00-277-5987).....	EA	2
7	9	MFFZZ		19204	12011666	BRACE, TABLE, SUPPORT (MFR FROM 9520-00-277-4902 & 9515-00- 204-3991).....	EA	4
7	10	PBFZZ	5310-00-768-0319	96906	MS51968-2	NUT, PLAIN,HEXAGON.....	EA	4
7	11	PBFZZ	5310-00-582-5965	96906	MS35338-44	WASHER, LOCK.....	EA	4

REPAIR PARTS LIST (cont)

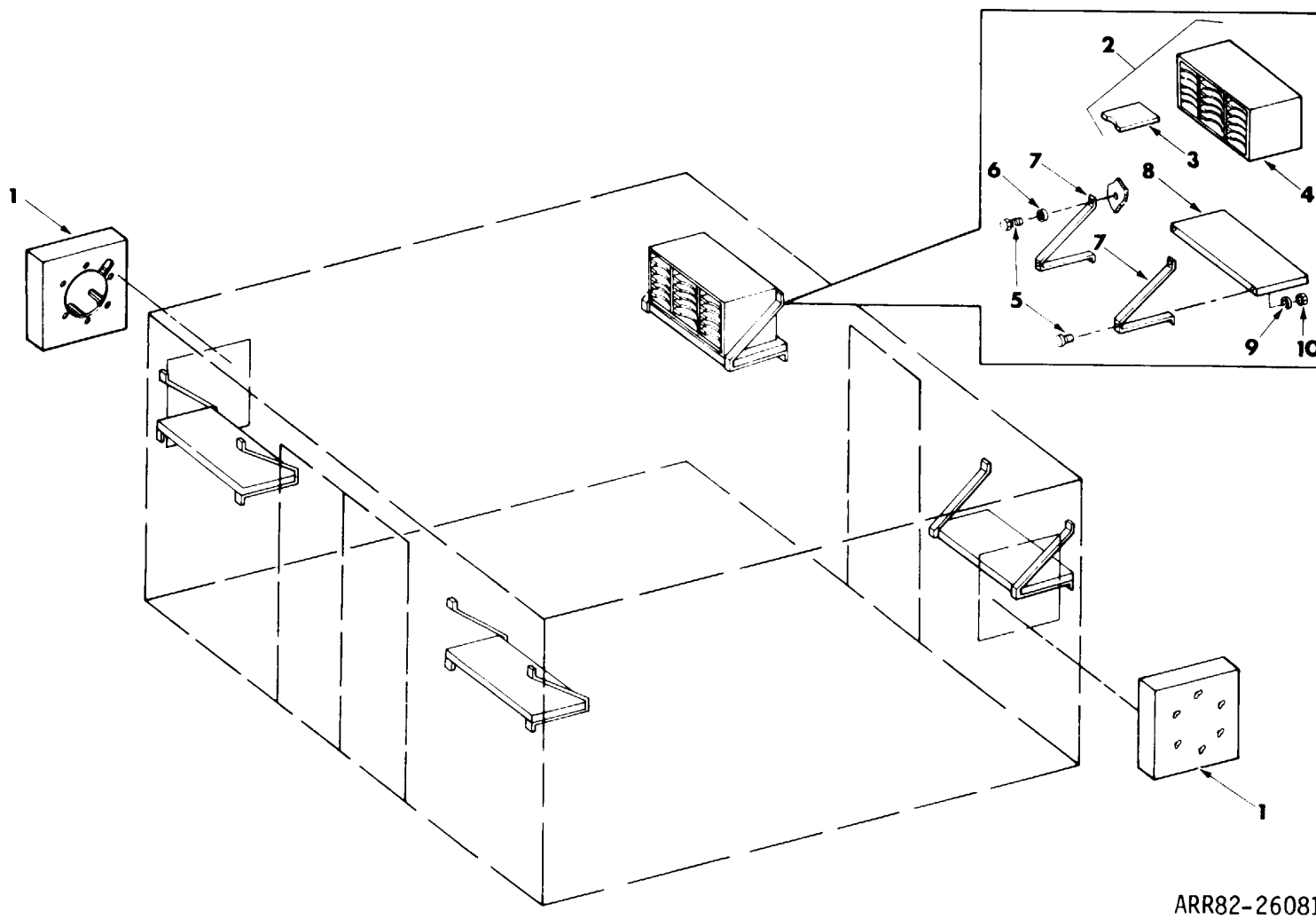
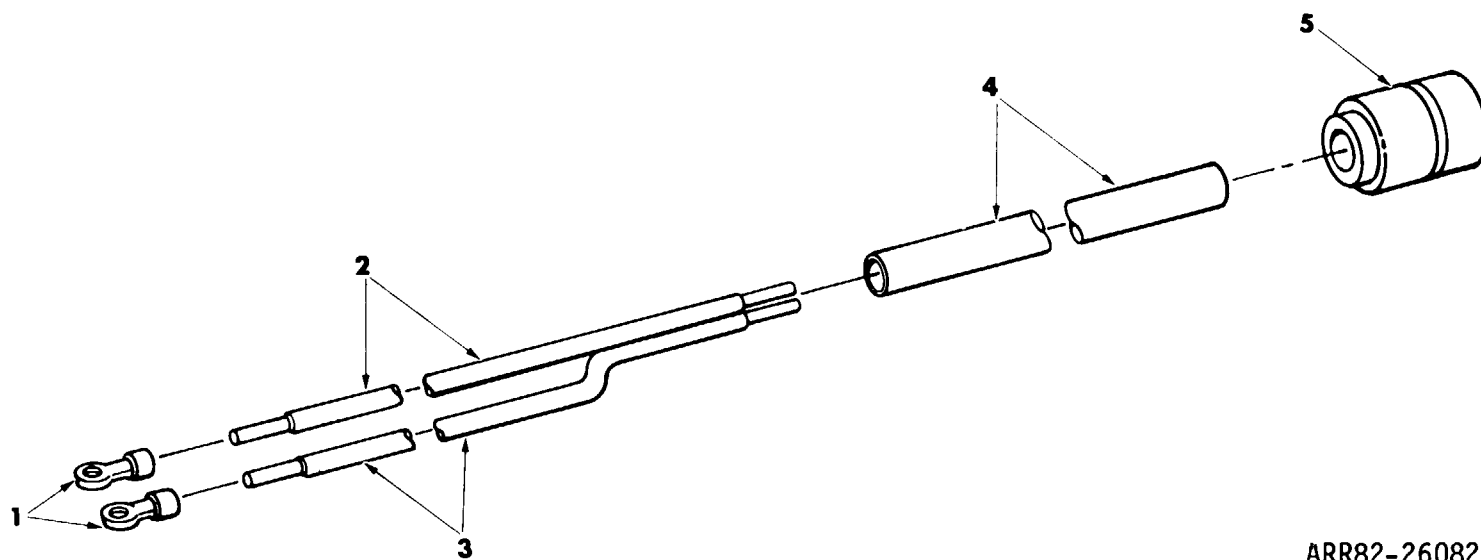


Figure 8. Shop set, fire control AVIM 11729123, deployed; and file, work organizer 7551094.

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USUABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 00 SHOP SET,FIRE CONTROL AVIM 11729123,DEPLOYED.AND GROUP 18 FILE,WORK ORGANIZER 7551094		
8	1	AFFFF		19204	7551733	COVER, BLACKOUT FAN	EA	2
8	2	AFFFF		19204	7551094	FILE, WORK ORGANIZER	EA	1
8	3	PBFZZ	4933-01-090-5677	76038	1310	.SHELVES,FILE, WORK ORGANIZER,EXTRA (EACH PACKAGE CONTAINS 6 SHELVES).....	EA	1
8	4	PBFZZ	7110-00-567-1901	76038	1300	.CABINET, MAIL SORTING.WORK ORGANIZER (INCLUDING 15 SHELVES).....	EA	1
8	5	PBFZZ	5305-00-068-0506	96906	MS90726-6	SCREW, CAP, HEXAGON HEAD	EA	24
8	6	PBFZZ	5310-00-141-1795	88044	AN960-416	WASHER, FLAT	EA	16
8	7	MFFZZ		19204	7551731	BRACKET, SHELF,WALL (MFR FROM 9515-00-204-3977)	EA	8
8	8	PBFZZ	7125-01-107-2183	19204	7551087	SHELVING, WAL.L	EA	4
8	9	PBFZZ	5310-00-582-5965	96906	MS35338-44	WASHER,LOCK	EA	8
8	10	PBFZZ	5310-00-043-0520	96906	MS35650-3252	NUT, PLAIN,HEXAGON	EA	8

REPAIR PARTS LIST (cont)

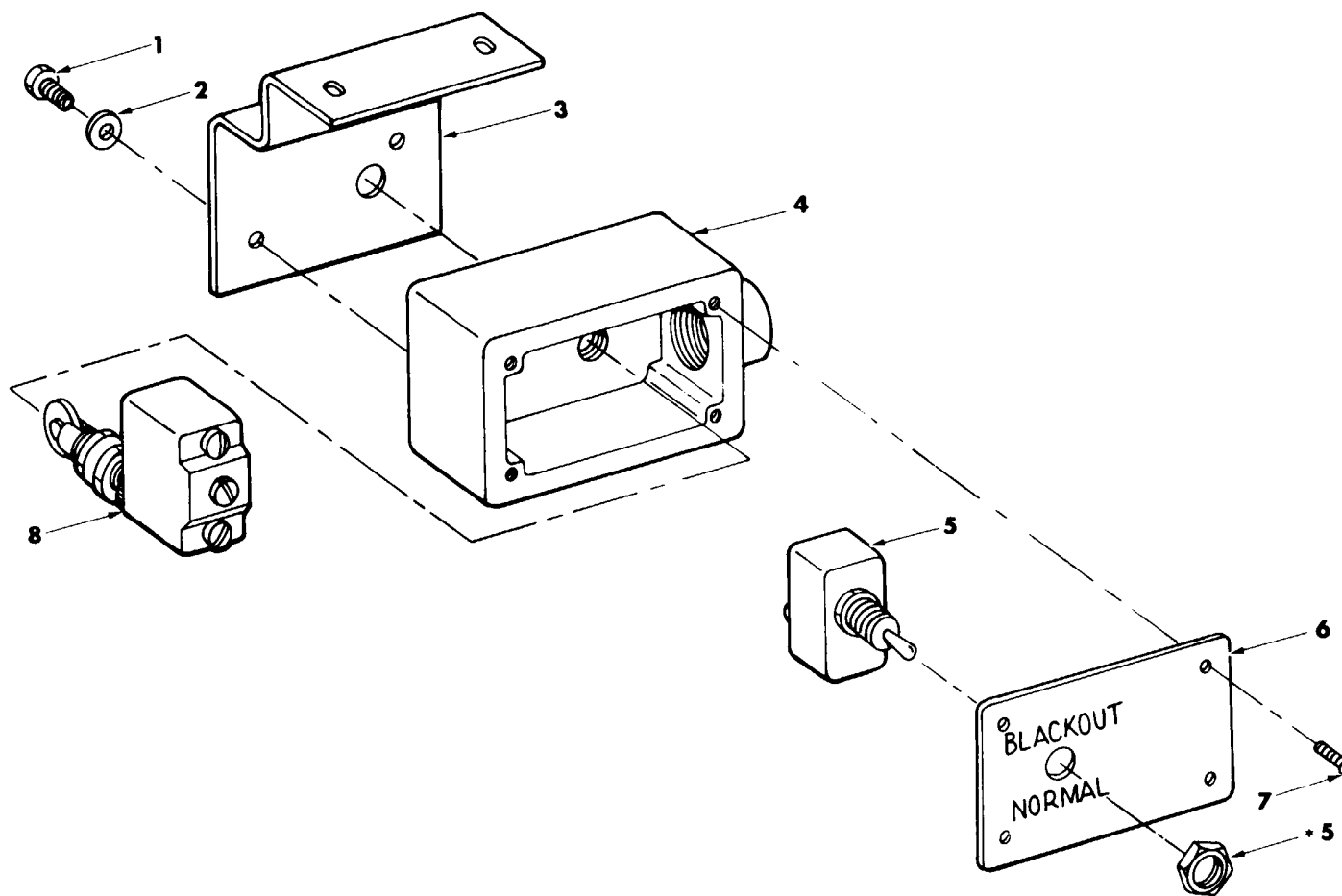


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Figure 9. Cable assembly, special purpose 7540635.

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 01 CABLE ASSEMBLY, SPECIAL PURPOSE 7540635		
9	1	PAFZZ	5940-00-143-4793	96906	MS25036-110	TERMINAL LUG.....	EA	2
9	2	MFFZZ		81349	MIL-W-16878/4	LEAD, ELECTRICAL, BLACK (MFR FROM 6145-00-894-1000)	EA	1
9	3	MFFZZ		81349	MIL-W-16878/4	LEAD, ELECTRICAL, RED (MFR FROM 6145-00-027-5955).....	EA	1
9	4	MFFZZ		81349	MIL-I-23053/10	INSULATION SLEEVING, ELECTRICAL (MFR FROM 5970-00-008-3295)	EA	1
9	5	PBFZZ	5935-00-807-0050	96906	MS3106R20-8S	CONNECTOR, PLUG, ELECTRICAL.....	EA	1

REPAIR PARTS LIST (cont)



NOTE: *SUPPLIED WITH IDENTICALLY NUMBERED PART.

Figure 10. Switchbox and mounting bracket 7551735-1, with toggle switch.

ARR82- 26083

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USUABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 02 SWITCHBOX AND MOUNTING BRACKET 7551735-1, WITH TOGGLE SWITCH		
10	1	PAFZZ	5305-00-068-0500	96906	MS90725-3	SCREW, CAP. HEXAGON HEAD	EA	2
10	2	PAFZZ	5310-00-823-8804	96906	MS27183-9	WASHER, FLAT	EA	2
10	3	XDFZZ		19204	7551734	BRACKET, ANGLE	EA	1
10	4	PBFZZ	5975-01-094-6250	19204	7551740	CONDUIT OUTLET	EA	1
10	5	PAFZZ	5930-00-702-6431	96906	MS25307-212	SWITCH, TOGGLE	EA	1
10	6	PBFZZ		03743	FSK1BCA	COVER, CONDUIT OUTLET	EA	1
10	7	PAFZZ	5305-00-984-4992	96906	MS35206-232	SCREW, MACHINE	EA	4
10	8	PAFZZ	5930-00-683-2703	91929	BZ-2RG18-A2	SWITCH, SENSITIVE	EA	1

REPAIR PARTS LIST (cont)

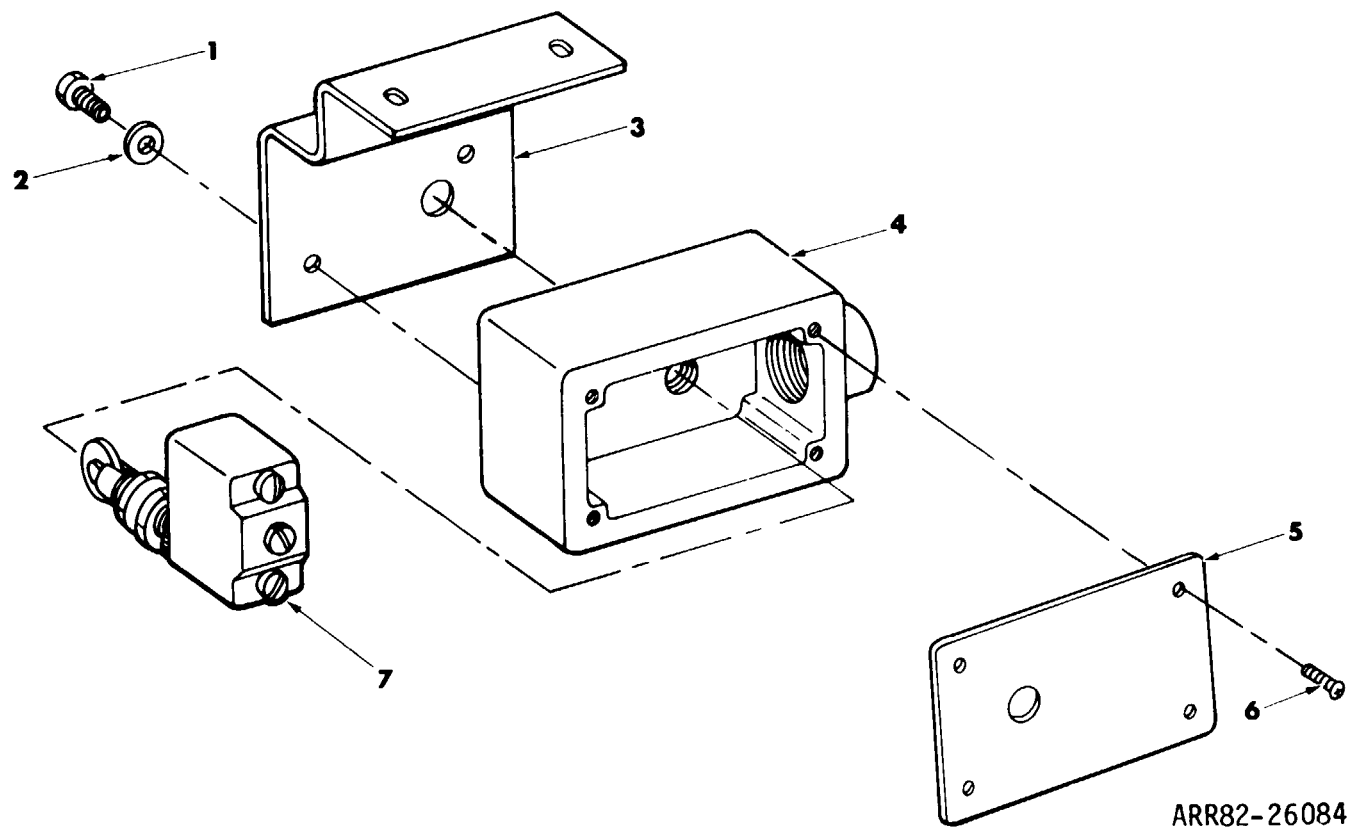
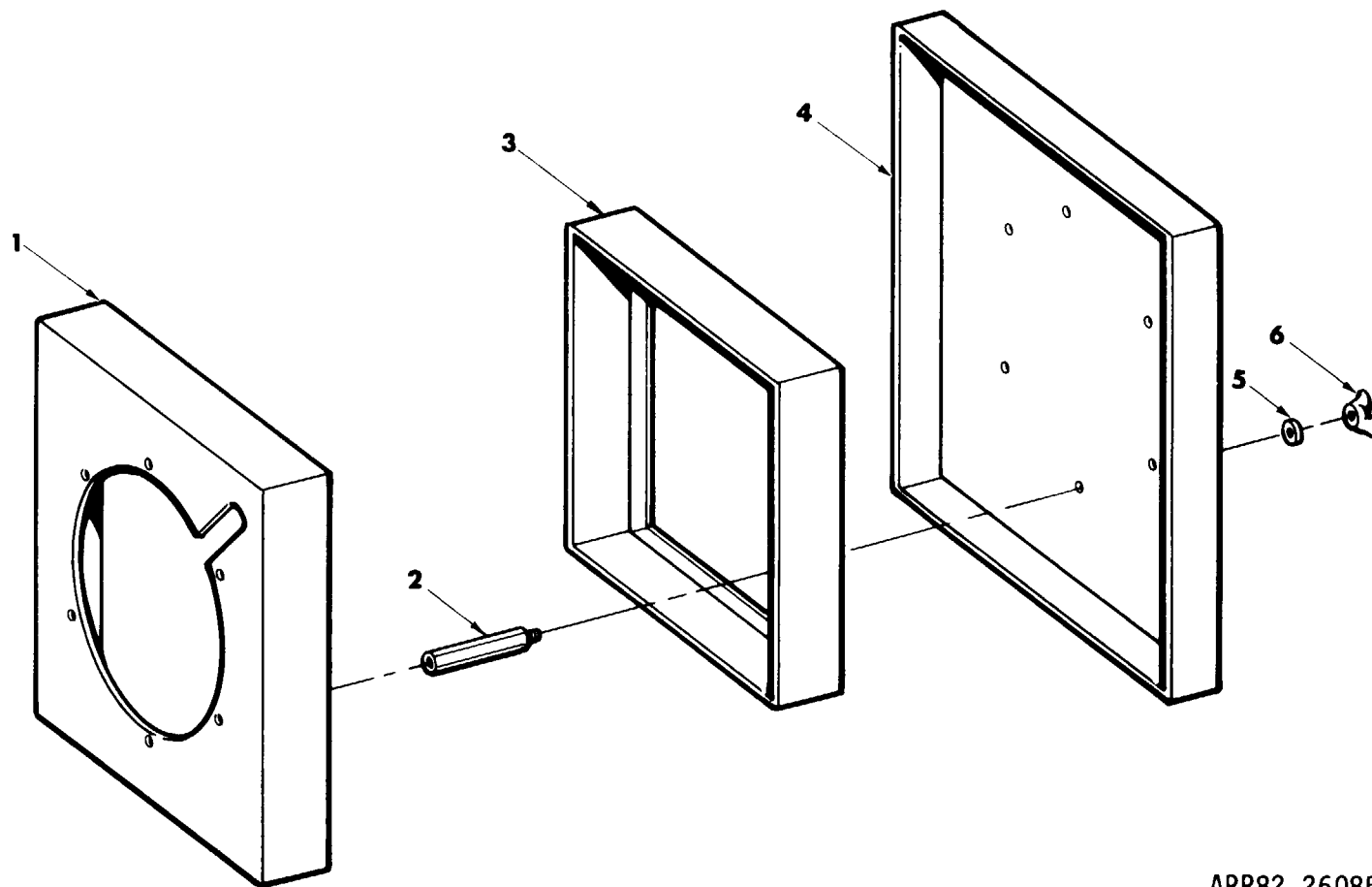


Figure 11. Switchbox and mounting bracket 7551735-2, without toggle switch.

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USUABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 03 SWITCHBOX.AND MOUNTING BRACKET 7551735-2,WITHOUT TOGGLE SWITCH		
11	1	PAFZZ	5305-00-068-0500	96906	MS90725-3	SCREW,CAP,HEXAGON HEAD	EA	2
11	2	PAFZZ	5310-00-823-8804	96906	MS27183-9	WASHER, FLAT	EA	2
11	3	XBFZZ		19204	7551734	BRACKET, ANGLE	EA	1
11	4	PBFZZ	5975-01-094-6250	19204	7551740	CONDUIT OUTLET	EA	1
11	5	PBFZZ		03743	FSKIBCA	COVER, CONDUIT OUTLET.....	EA	1
11	6	PBFZZ	5305-00-984-4992	96906	MS35206-232	SCREW, MACHINE.....	EA	4
11	7	P8FZZ	5930-00-683-2703	91929	BZ-2RO18-A2	SWITCH, SENSITIVE	EA	1



REPAIR PARTS LIST (cont)



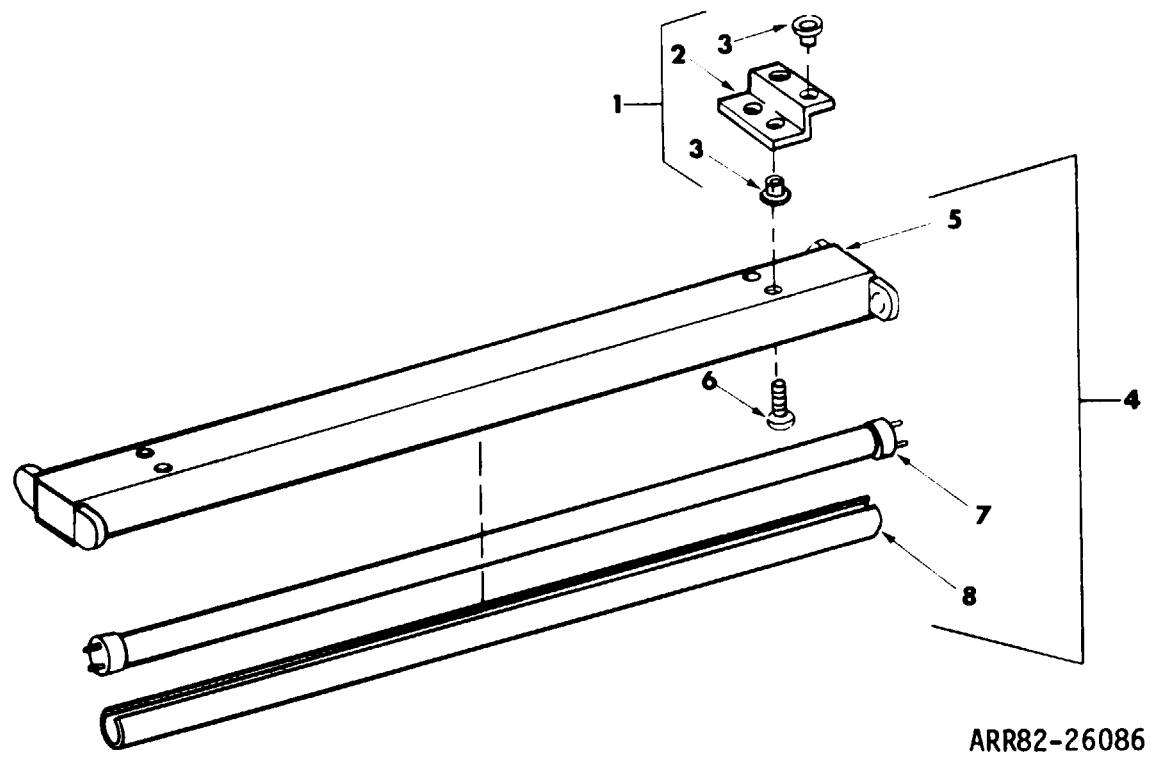
ARR82-26085

Figure 12. Cover assembly, blackout, fan 7551733.

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 04 COVER ASSEMBLY, BLACKOUT. FAN 7551733		
12	1	MFFZZ		19204	7551733-2	COVER, BLACKOUT,FAN, INNER (MFR FROM 9515-00-153-3217)	EA	1
12	2	MFFZZ		19204	7551732	SPACER, SLEEVE (MFR FROM 9510-00-541-9655).....	EA	6
12	3	PFFZZ		19204	7551733-3	BAFFLE (MFR FROM 9515-00-153-3217).....	EA	1
12	4	MFFZZ		19204	7551733-1	COVER, BLACKCUT,FAN,OUTER (MFR FROM 9515-00-153-3217)	EA	1
12	5	PBFZZ	5310-00-045-3296	96906	MS35338-43	WASHER, LOCK.....	EA	6
12	6	PBFZZ	5310-01-077-1016	96906	MS35426-25	NUT, PLAIN,WING	EA	6



REPAIR PARTS LIST (cont)

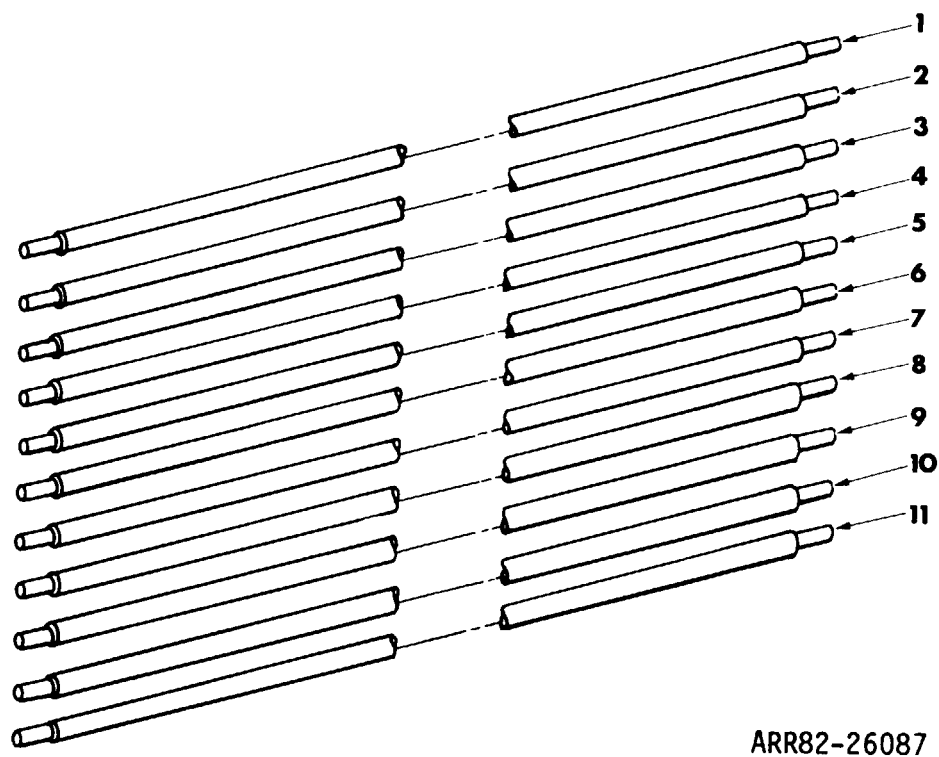


ARR82-26086

Figure 13. Lamp, fluorescent 7551089 and bracket assembly, lamp 12011693.

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USUABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 06 LAMP,FLUORESCENT 7551089 AND GROUP 07 BRACKET ASSEMBLY,LAMP 12011693		
13	1	XBFFF		19204	12011693	BRACKET ASSEMBLY, LAMP.....	EA	2
13	2	XBFZZ		19204	12011693-1	.RACKET, DOUBLE ANGLE	EA	1
13	3	PBFZZ	5310-00-184-1539	19204	12011679-1	.NUT,PLAIN,BLIND RIVET.....	EA	4
13	4	PBFFF	6240-01-111-7717	19204	7551089	LAMP, FLUORESCENT	EA	1
13	5	XAFZZ		19204	7551089-1	.LAMPHOLDER.....	EA	1
13	6	PBFZZ	5305-00-988-1727	96906	MS35206-283	.SCREW, MACHINE.....	EA	4
13	7	PAFZZ	6240-00-152-2987	08108	F40CW	.LAMP, FLUORESCENT	EA	2
13	8	PAFZZ	6210-01-114-7991	19204	7551090	.SHIELD, LIGHT	EA	2

REPAIR PARTS LIST (cont)

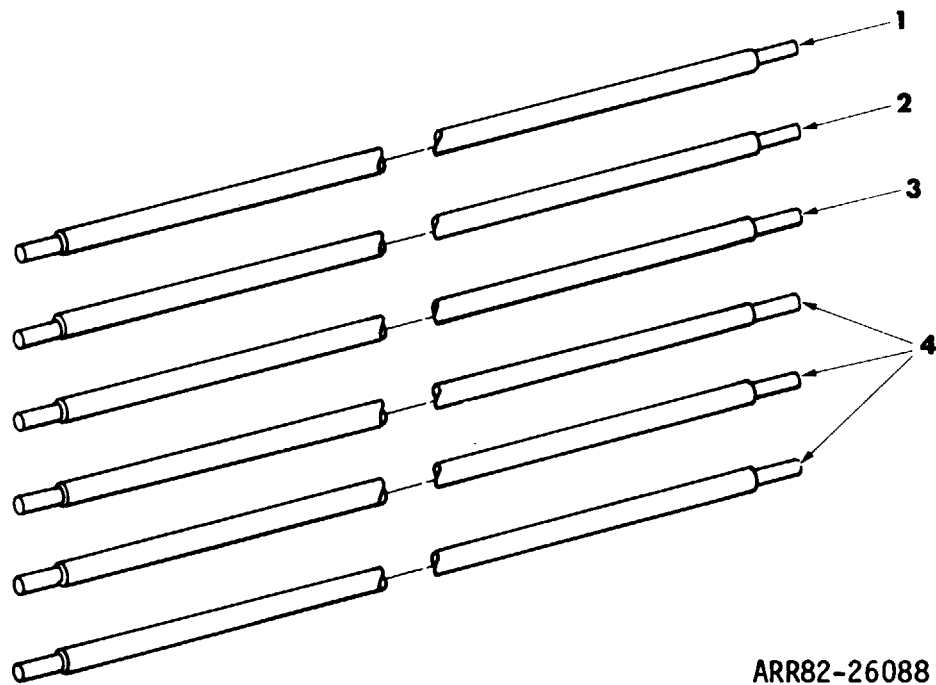


ARR82-26087

Figure 14. Harness assembly, wiring 7551097-4, bench.

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USUABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 08 HARNESS ASSEMBLY,WIRING 7551097-4, BENCH		
14	1	MFFZZ		19204	12011690-10	LEAD, ELECTRICAL,BLACK (MFR FROM 6145-00-990-3002)	EA	1
14	2	MFFZZ		19204	12011690-11	LEAD, ELECTRICAL,WHITE (MFR FROM 6145-00-990-3003).....	EA	1
14	3	MFFZZ		19204	12011690-12	LEAD, ELECTRICAL, GREEN (MFR FROM 6145-00-904-3811).....	EA	1
14	4	MFFZZ		19204	12011690-13	LEAD, ELECTRICAL.BLACK (MFR FROM 6145-00-990-3002)	EA	1
14	5	MFFZZ		19204	12011690-14	LEAD, ELECTRICAL.WHITE (MFR FROM 6145-00-990-3003).....	EA	1
14	6	MFFZZ		19204	2011690-16	LEAD, ELECTRICAL, GREEN (MFR FROM 6145-00-904-3811).....	EA	1
14	7	MFFZZ		19204	12011690-18	LEAD, ELECTRICAL, RED (MFR FROM 6145-00-990-3001).....	EA	1
14	8	MFFZZ		19204	12011690-20	LEAD, ELECTRICAL,WHITE (MFR FROM 6145-00-990-3003).....	EA	1
14	9	MFFZZ		19204	12011690-21	LEAD, ELECTRICAL, BLUE (MFR FROM 6145-00-959-0871).....	EA	1
14	10	MFFZZ		19204	12011690-22	LEAD, ELECTRICAL, WHITE (MFR FROM 6145-00-990-3003).....	EA	1
14	11	MFFZZ		19204	12011690-23	LEAD, ELECTRICAL, GREEN (MFR FROM 6145-00-904-3811).....	EA	1

REPAIR PARTS LIST (cont)

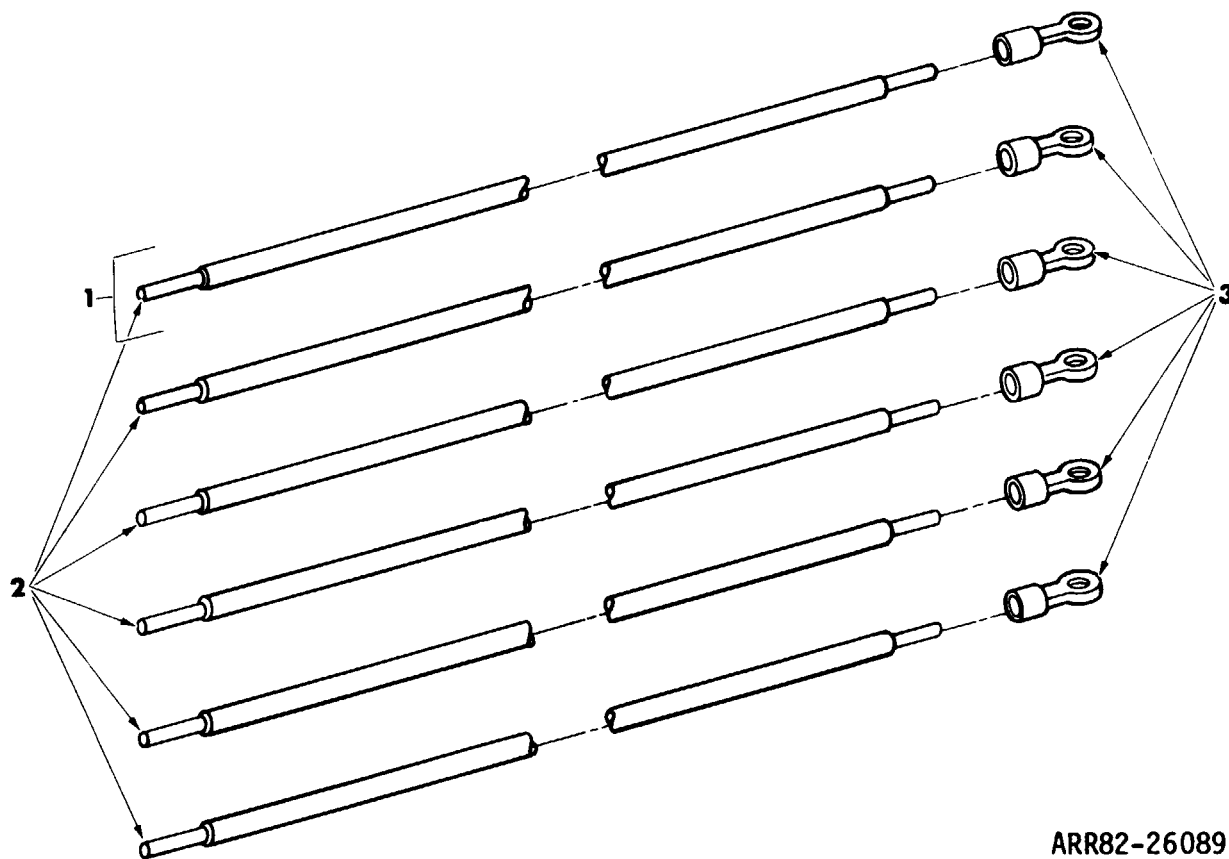


ARR82-26088

Figure 15. Harness assembly, wiring 7551097-2, ceiling.

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 09 HARNESS ASSEMBLY,WIRING 7551097-2, CEILING		
15	1	MFFZZ		19204	12011690-6	LEAD, ELECTRICAL, BLACK (MFR FROM 6145-00-990-3002)	EA	1
15	2	MFFZZ		19204	12011690-7	LEAD, ELECTRICAL,WHITE (MFR FROM 6145-00-990-3003).....	EA	1
15	3	MFFZZ		19204	12011690-8	LEAD, ELECTRICAL,GREEN (MFR FROM 6145-00-904-3811).....	EA	1
15	4	MFFZZ		19204	12011690-5	LEAD, ELECTRICAL, BLUE (MFR FROM 6145-00-959-0871).....	EA	3

REPAIR PARTS LIST (cont)



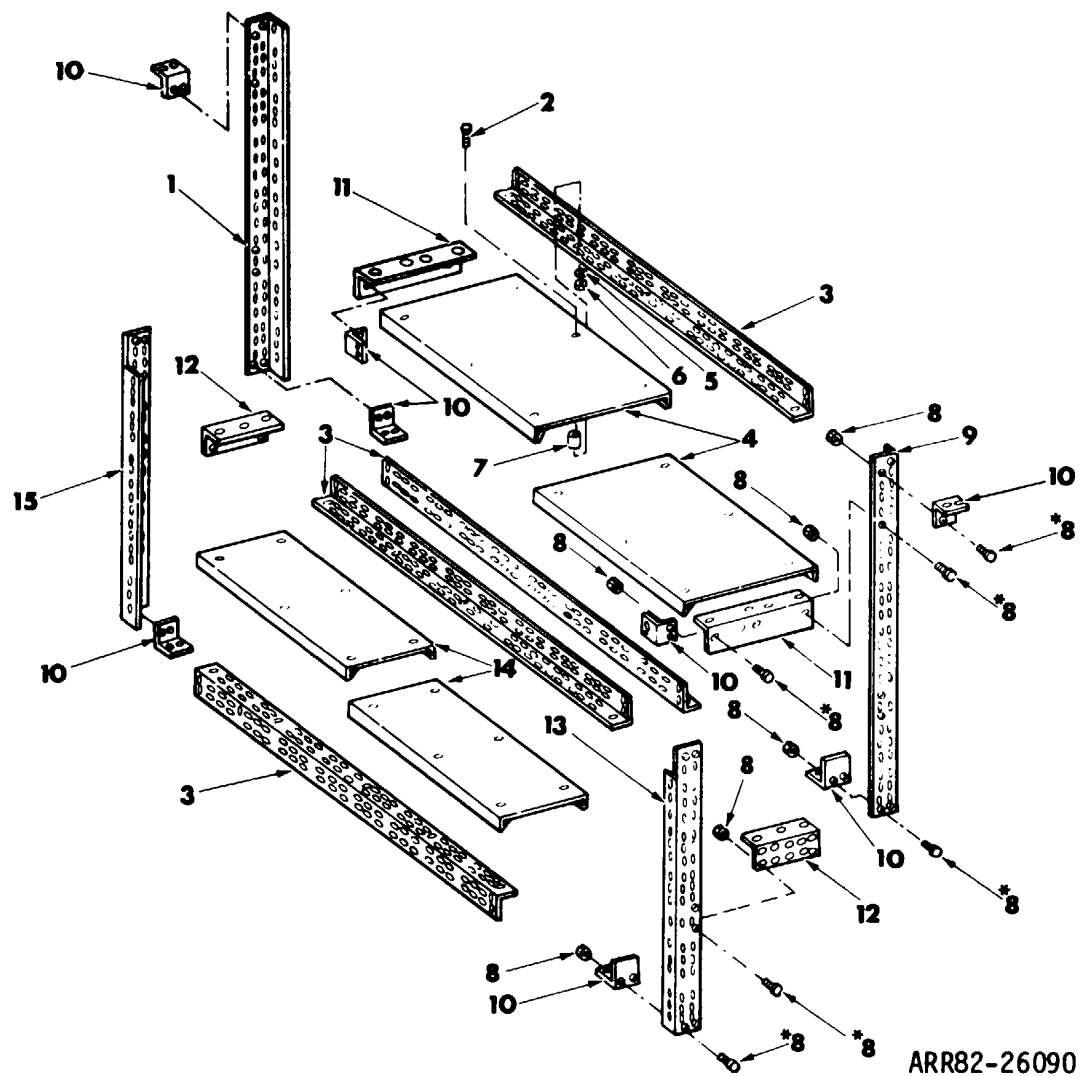
ARR82-26089

Figure 16. Harness assembly, wiring 7551097-1, switchbox to distribution panel, and wire assembly 12011690-1.

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USABLE ON CODE</i>	U/M	QTY INC IN UNIT
16	1	AFFFF		19204	12011690-1	GROUP 11 HARNESS ASSEMBLY,WIRING 7551097-1 SWITCHBOX TO DISTRIBUTION PANEL; AND GROUP 1101 WIRE ASSEMBLY 12011690-1 WIRE ASSEMBLY	EA	6
16	2	MFFZZ		19204	12011690	.WIRE, ELECTRICAL,BLACK (MFR FROM 6145-00-239-1245)	EA	1
16	3	PBFZZ	5940-00-204-8990	96906	M525036-111	.TERMINAL, LUG	EA	1



REPAIR PARTS LIST (cont)



NOTE: *SUPPLIED WITH IDENTICALLY NUMBERED PART.

Figure 17. Shelving assembly 12011654.

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USUABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 13 SHELVING ASSEMBLY 12011654		
17	1	MFFZZ		19204	7551743-1	BRACE, CORNER, LH (MFR FROM 7125-00-197-9050).....	EA	1
17	2	PBFZZ	5305-00-984-5681	96906	MS35206-301	SCREW, MACHINE.....	EA	24
17	3	M--FZZ		19204	12011661-1	BRACKET, ANGLE (MFR FROM 7125-00-197-9050).....	EA	4
17	4	XBFZZ		19204	12011680-1	SHELF SECTION.....	EA	2
17	5	POFZZ	5310-00-407-9566	96906	MS35338-45	WASHER, LOCK.....	EA	24
17	6	PBFZZ	5310-00-880-7744	96906	MS51967-5	NUT, PLAIN, HEXAGON.....	EA	24
17	7	MFFZZ		19204	12011660	SPACER, SLEE'VE (MFR FROM 4710-00-277-9874).....	EA	24
17	8	PBFZZ		37296	6578	BOLT ASSEMBLY, WITH NUT.....	EA	38
17	9	MFFZZ		19204	7551743-2	BRACE, CORNER, RH (MFR FROM 7125-00-197-9050).....	EA	1
17	10	MIFFZZ		19204	12011661-4	BRACKET, ANGLE (MFR FROM 7125-00-197-9050)	EA	8
17	11	MFFZZ		19204	12011661-2	BRACKET, ANGLE (MFR FROM 7125-00-197-9050)	EA	2
17	12	MFFZZ		19204	12011661-3	BRACKET, ANGLE (MFR FROM 7125-00-197-9050)	EA	2
17	13	MFFZZ		19204	7551744-1	BRACE, COPNER, RH (MFR FROM 7125-00-197-9050)	EA	1
17	14	XBFZZ		19204	12011680-2	SHELF SECTION.....	EA	2
17	15	MFFZZ		19204	7551744-2	BRACE, CORNER LH (MFR FROM 7125-00-197-9050).....	EA	1



REPAIR PARTS LIST (cont)

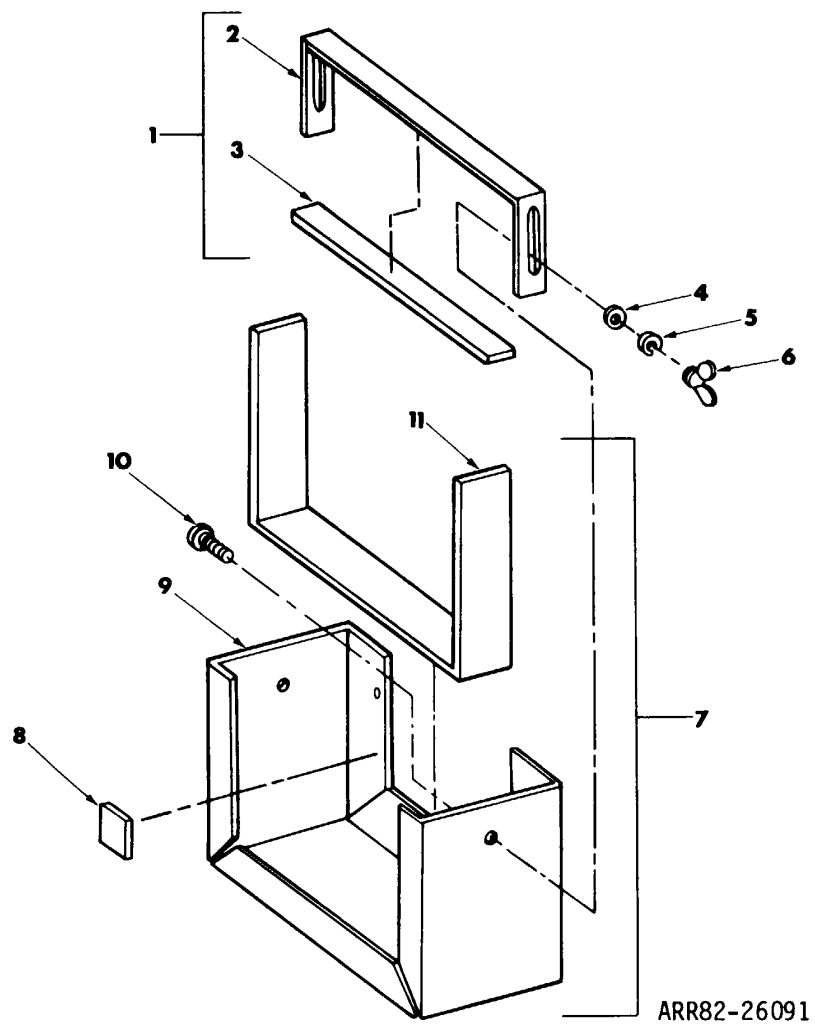
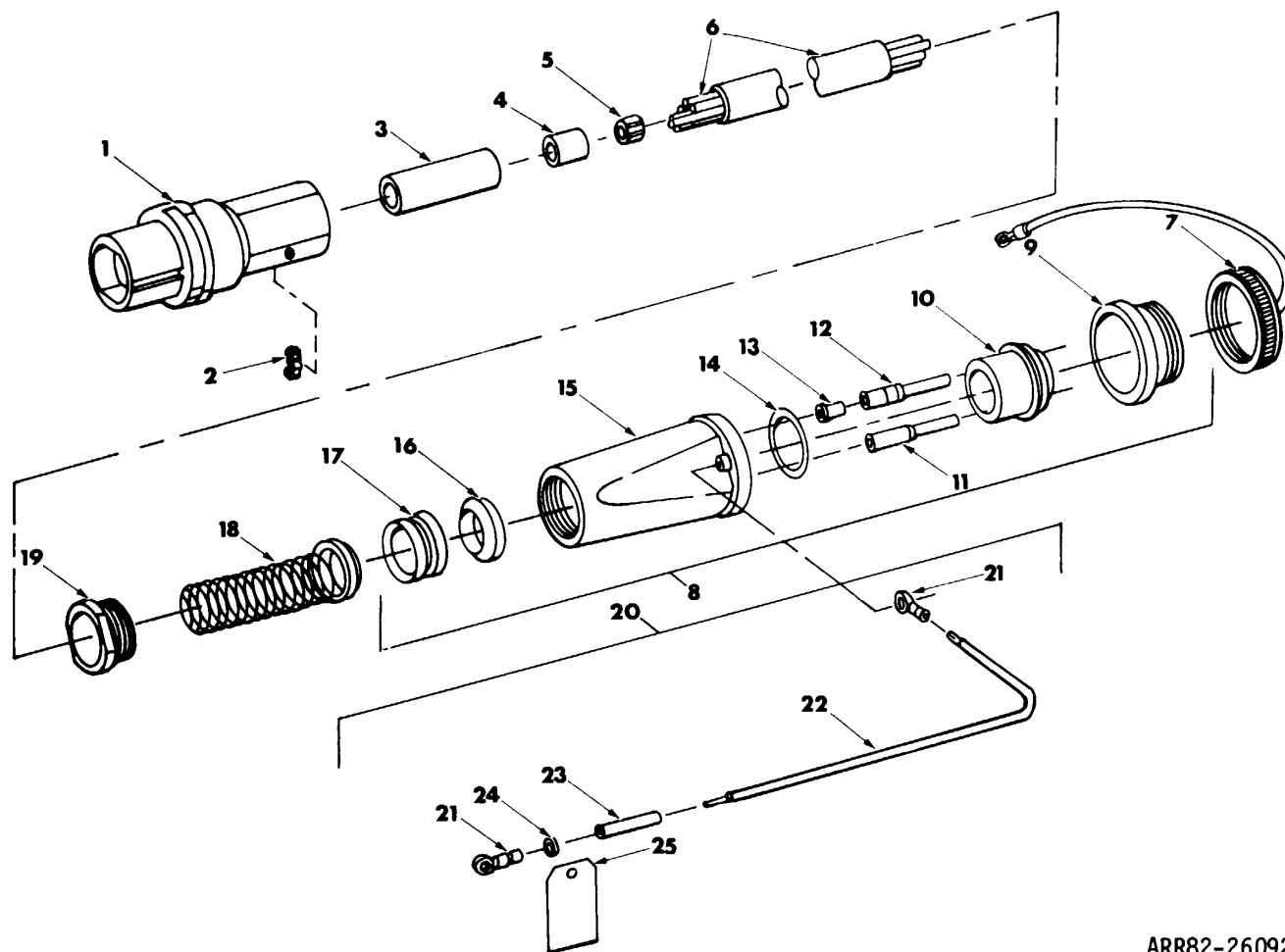


FIGURE 18. Holder assembly, first aid kit 7551436: holder assembly 7551434: and bracket assembly 7551435.

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USUABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 15 HOLDER ASSEMBLY, FIRST AID KIT 7551436 GROUP 1501 HOLDER ASSEMBLY 7551434 AND GROUP 1502 BRACKET ASSEMBLY 7551435		
18	1	PBFFF	4933-01-111-1787	19204	7551435	BRACKET ASSEMBLY	EA	1
18	2	XAFZZ		19204	7551435-1	.BRACKET	EA	1
18	3	MFFZZ		19204	7551435-2	.PAD, CUSHIONING (MFR FROM 9320-00-527-6861)	EA	1
18	4	PAFZZ	5310-00-809-3078	96906	MS27183-11	WASHER, FLAT	EA	2
18	5	PAFZZ	5310-00-582-5965	96906	MS35338-44	WASHIER, LOCK	EA	2
18	6	PAFZZ	5310-00-080-8495	96906	MS35425-39	NUT, PLAIN, WING	EA	2
18	7	PBFFF	4933-01-111-1786	19204	7551434	HOLDER ASSEMBLY	EA	1
18	8	MFFZZ		19204	7551434-1	.PAD, CUSHIONING (MFR FROM 9320-00-527-6861)	EA	4
18	9	XAFZZ		19204	7551434-3	.HOLDER	EA	1
18	10	XAFZZ		96906	MS51934-22	.BOLT	EA	2
18	11	KFFZZ		19204	7551434-2	.PAD, CUSHIONING (MFR FROM 9320-00-527-6861)	EA	1



REPAIR PARTS LIST (cont)



ARR82-26092

Figure 19. Cable assembly, special purpose, electrical 12011687; connector, plug, electrical MS90557C32412S; connector, plug 12011688; and cable assembly 12011638.

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 16 CABLE ASSEMBLY,SPECIAL PURPOSE. ELECTRICAL 120116871 GROUP 1601 CONNECTOR, PLUG, ELECTRICAL MS90557C32412S; GROUP 1602 CONNECTOR, PLUG 12011688; AND GROUP 1603 CABLE ASSEMBLY 12011638		
19	1	PBFZZ	5935-00-686-9287	19204	12011688	CONNECTOR, PLUG,ELECTRICAL	EA	1
19	2	MFFZZ		19204	12011689	TERMINAL, LUG (MFR FROM 5940-00-549-1984)EA	1
19	3	MFFZZ		81349	MIL-I-23053/5	INSULATION SLEEVING MARKER (MFR FROM 5970-00-810-6118).....	EA	1
19	4	MFFZZ		81349	MIL-I-23053/5	INSULATION SLEEVING,ELECTRICAL (MFR FROM 5970-00-..... 926-2571)	EA	1
19	5	XBFZZ		19204	12011667	CONNECTOR, COMPRESSION.....	EA	1
19	6	MFFZZ		81349	C0-04 HDF 4/6 4/12R 1090	CABLE, POWER,ELECTRICAL (MFR FROM 6145-00-191-3606)	EA	1
19	7	PAFZZ	5935-00-114-7285	96906	MS90563-4C	COVER, ELECTRICAL CONNECTOR	EA	1
19	8	PBFFF	5935-00-114-8768	96906	MS90557C32412S	CONNECTOR, PLUG.,ELECTRICAL	EA	1
19	9	XAFZZ				.CONNECTOR, HOUSING,FORWARD.....	EA	1
19	10	XAFZZ				.SOCKET, INSERT	EA	1
19	11	PAFZZ	5999-00-014-0952	96906	MS90560-7	.CONTACT, ELECTRICAL	EA	1
19	12	PAFZZ	5999-01-091-3187	96906	MS90560-5	.SOCKET, CONTACT	EA	4
19	13	PAFZZ		96906	MS3348-4-6L	.BUSHING	EA	4
19	14	PAFZZ	5330-00-265-1085	96906	MS29513-132	.PACKING, PREFORMED.....	EA	1
19	15	XAFZZ				.CONNECTOR. HOUSING, REAR	EA	1

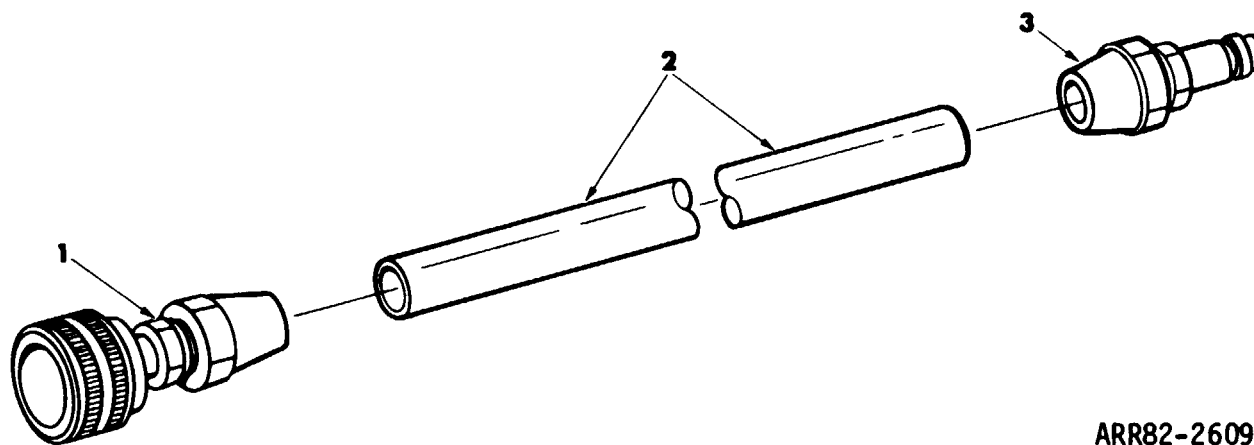
C-55(C-56 blank)



(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USUABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 16 CABLE ASSEMBLY,SPECIAL PURPOSE, ELECTRICAL 12011687; GROUP 1601 CONNECTOR, PLUG, ELECTRICAL MS90557C324125; GROUP 1602 CONNECTOR, PLUG 12011688; AND GROUP 1603 CABLE ASSEMBLY 12011638 CONT.		
19	16	XAFZZ				.SPACER, GLAND	EA	1
19	17	PBFZZ	4933-01-112-3939	96906	MS23747-2	.GLAND, CABLE SEALING	EA	1
19	18	PBFZZ		96906	MS90561-2	GRIP, CABLE,WOVEN	EA	1
19	19	XAFZZ				PACKING NUT, STUFFING TUBE	EA	1
19	20	AFFFF		19204	12011638	CABLE ASSEMBLY	EA	1
19	21	PBFZZ	5940-00-143-4794	96906	MS25036-112	.TERMINAL, LUG	EA	2
19	22	MFFZZ		99862	MIL-W-83420	.LEAD, ELECTRICAL (MFR FROM 4010-01-051-8331).....	EA	1
19	23	MFFZZ		06090	MIL-I-23053/5	.BAND, MARKER (MFR FROM 5970-01-065-4825).....	EA	1
19	24	PBFZZ	5975-00-903-2284	96906	MS3367-4-0	.STRAP, TIEDOWN.ELECTRICAL COMPONENT	EA	1
19	25	PBFZZ	9905-01-107-2177	19204	12011692	.TAG, INSTRUCTION	EA	1



REPAIR PARTS LIST (cont)



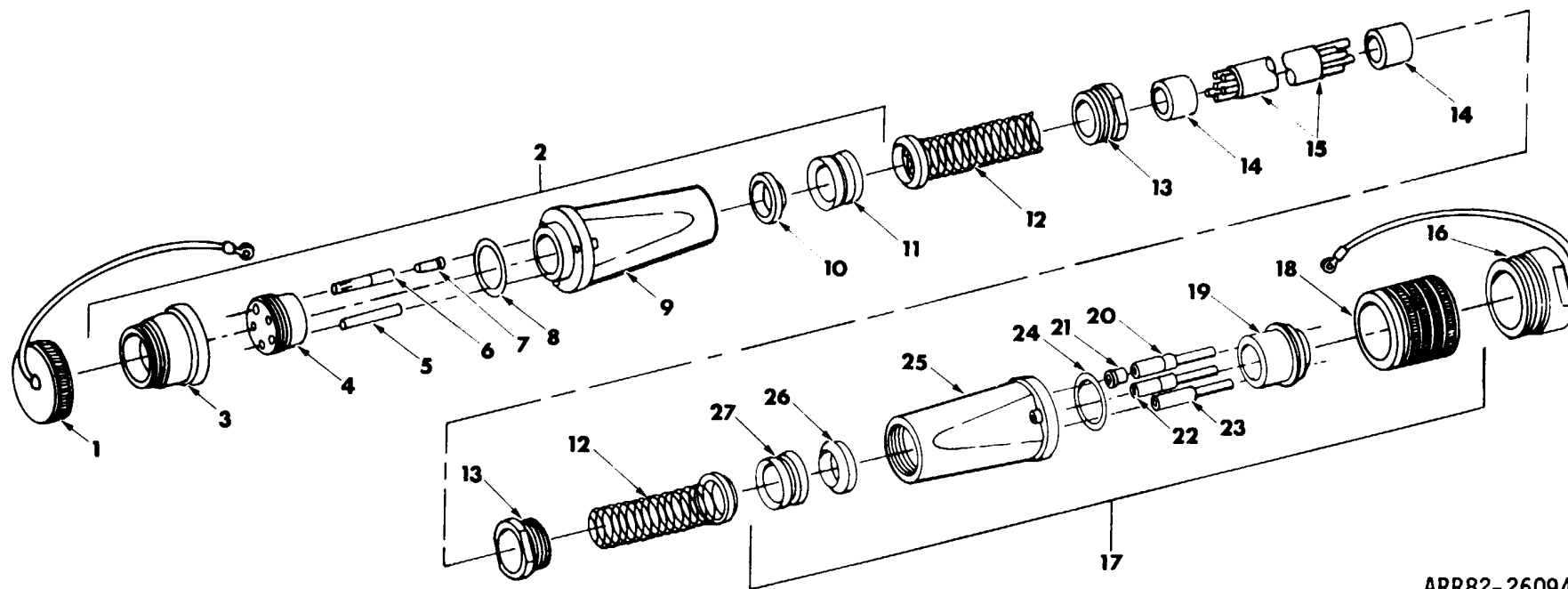
ARR82-26093

FIGURE 20. Air hose assembly 7551086.

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 17 AIR HOSE ASSEMBLY 7551086		
20	1	PAFZZ	4730-01-094-5169	81349	M4109-04-12-28-3	COUPLING HALF, QUICK DISCONNECT (FEMALE).....	EA	1
20	2	XAFZZ		81348	ZZ-H-500A	HOSE, NONMETALLIC.....	EA	1
20	3	PAFZZ	4730-01-094-5170	81349	M4109-12-12-28-B	COUPLING HALF, QUICK DISCONNECT (MALE)	EA	1



REPAIR PARTS LIST (cont)



ARR82-26094

Figure 21. Cable assembly, power, electrical 72289-100; connector, plug, electrical MS90557C32412S, female; and connector, plug, electrical MS90556C32412P, male.

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USUABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 19 CABLE ASSEMBLY, POWER, ELECTRICAL 72289-100; GROUP 1901 CONNECTOR, PLUG, ELECTRICAL MS90557C32412S, FEMALE; AND GROUP 1902 CONNECTOR PLUG, ELECTRICAL MS90556C32412P MALE		
21	1	PAFZZ	5935-00-114-7285	96906	MS90563-4C	COVER, ELECTRICAL.....	EA	1
21	2	PBFFF	5935-00-114-8768	96906	MS90557C32412S	.CONNECTOR, PLUG.ELECTRICAL (FEMALE).....	EA	1
21	3	XAFZZ				.CONNECTOR, HOUSING, FORWARD	EA	1
21	4	XAFZZ				.SOCKET, INSERT.....	EA	1
21	5	PAFZZ	5999-00-014-0952	96906	MS90560-7	.CONTACT, ELECTRICAL	EA	1
21	6	PAFZZ	5999-01-091-3187	96906	MS90560-5	.CONTACT.....	EA	4
21	7	PAFZZ		96906	MS3348-4-6L	.BUSHING.....	EA	4
21	8	PAFZZ	5330-00-265-1085	96906	MS29513-132	.PACKING, PREFORMED.....	EA	1
21	9	XAFZZ				CONNECTOR, HOUSING.REAR.....	EA	1
21	10	XAFZZ				.SPACER, GLAND	EA	1
21	11	PBFZZ	4933-01-112-3939	96906	MS23747-2	.GLAND,CABLE SEALING	EA	1
21	12	PBFZZ		96906	MS90561-2	GRIP, CABLE.WOVEN	EA	2
21	13	XAFZZ				PACKING NUT. STUFFING TUBE.....	EA	2
21	14	MFFZZ		81349	MIL-I-23053/5	BAND, IDENTIFICATION (MFR FROM 5970-00-926-2571).....	EA	2
21	15	MFFZZ		81349	C0-04 HDF 4/6 4/12R 1090	CABLE, POWER,ELECTRICAL (MFR FROM 6145-00-191-3606).....	EA	1

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(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USUABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 19 CABLE ASSEMBLY,POWER,ELECTRICAL 72289-100; GROUP 1901 CONNECTOR,PLUG, ELECTRICAL M590557C32412S,FEMALEiAND GROUP 1902 CONNECTOR.PLUG,ELECTRICAL M590556C32412P. MALE CONT.		
21	16	PAFZZ	5935-00-114-8707	96906	MS90564-4C	COVER, ELECTRICAL CONNECTOR	EA	1
21	17	PBFFF	5935-00-114-8833	96906	MS90556C32412P	CONNECTOR, PLUG,ELECTRICAL (MALE)	EA	1
21	18	XAFZZ				.CONNECTOR, PLUG.FORWARD	EA	1
21	19	XAFZZ				.SOCKET, PIN,INSERT	EA	1
21	20	PAFZZ	5999-00-014-0941	96906	MS90559-8	.CONTACT, ELECTRICAL (A.B.C).....	EA	3
21	21	PAFZZ		96906	MS3348-4-6L	.BUSHING	EA	4
21	22	PAFZZ	5999-00-014-0943	96906	MS90559-9	.CONTACT, ELECTRICAL (N)	EA	1
21	23	PAFZZ	5999-00-014-0939	96906	MS90559-12	.CONTACT, ELECTRICAL (G)	EA	1
21	24	PAFZZ	5330-00-265-1085	96906	MS29513-132	.PACKING, PREFORMED.....	EA	1
21	25	XAFZZ				.CONNECTOR, PLUG,REAR.....	EA	1
21	26	XAFZZ				.SPACER. GLAND	EA	1
21	27	PBFZZ	4933-01-112-3939	96906	MS23747-2	GLAND, CABLE SEALING	EA	1

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 9999 BULK MATERIAL		
BULK		PAFZZ	5970-00-008-3295	81349	M23053/10-004-0	INSULATION SLEEVING ELECTRICAL	FT	
BULK		PAFZZ	6145-00-027-5955	81349	MIL-W-16878/4	WIRE,ELECTRICAL NO. 10 AWG,RE	FT	
BULK		PAFZZ	9515-00-066-1015	81348	QQS0698	METAL STRIP, STEEL.....	FT	
BULK		PAFZZ	9515-00-153-3217	81349	MIL522698	METAL SHEET STEEL ALLOY	FT	
BULK		PAFZZ	5975-00-178-1217	81348	WWC563	CONDUIT,METAL,RIGID	FT	
BULK		PAFZZ	6145-00-191-3606	81349	C004HDF4-6-4-12R-1100	CABLE, POWER,ELECTRICAL	FT	
BULK		PAFZZ	7125-00-197-9050	81349	MILS21041	ANGLE,STORAOE RACK	FT	
BULK		PAFZZ	9515-00-204-3977	81348	QQS698	METAL STRIP, STEEL.....	FT	
BULK		PAFZZ	9515-00-204-3991	81348	QQS698	METAL SHEET, STEEL.....	FT	
BULK		PAFZZ	9535-00-232-7599	81348	QQA250-8	METAL SHEET, ALUMINUM.....	FT	
BULK		PAFZZ	9530-00-236-7671	81348	QQA200-3	METAL BAR ALUMINUM	FT	
BULK		PAFZZ	6145-00-239-1245	81348	J-C-30THHN/THWN06CE1/12TPJ0	WIRE,ELECTRICAL NO.12 AWG,TYPE THWN.BLACK	FT	
BULK		PAFZZ	8305-00-267-3009	81349	MILW4088	WEBBING,TEXTILE NYLON,WOVEN	FT	
BULK		PAFZZ	9520-00-277-4902	81348	QQS741	STRUCTURAL ANOLE STEEL	FT	
BULK		PAFZZ	9520-00-277-4912	81349	MILS20166	STRUCTURAL ANGLE	FT	
BULK		PAFZZ	9520-00-277-5987	81348	QQS741	STRUCTURAL ANGLE, STEEL	FT	
BULK		PAFZZ	4710-00-277-9874	81349	MIL-T-6736	TUBE, METALLIC	FT	
BULK		PAFZZ	9320-00-527-6861	81349	MILC3133	RUBBER SHEET, CELLULAR	SH	
BULK		PAFZZ	9510-00-541-9655	81348	QQ5634	METAL BAR, STEEL.....	FT	
BULK		PAFZZ	5940-00-549-1984	82168	Q35-1	TERMINAL, LUG.....	EA	

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(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USUABLE ON CODE</i>	U/M	QTY INC IN UNIT
						GROUP 9999 BULK MATERIAL CONT.		
BULK		PAFZZ	5970-00-810-6118	81349	M23053/5-112-4	INSULATION SLEEVING,ELECTRICA	FT	
BULK		PAFZZ	6415-00-894-1000	81349	MIL-W-16878/4	WIRE, ELECTRICAL NO. 10 AWG.STRANDED.BLACK	FT	
BULK		PAFZZ	6145-00-904-3811	81348	J-C-30THWO6CE1/1 2TUJ5	WIRE, ELECTRICAL NO.12 AWG,TYPE THWN.STYLE 1,GREEN	FT	
BULK		PAFZZ	5970-00-926-2571	81349	M23053/5-111-4	INSULATION SLEEVING,.ELECTRICAL	FT	
BULK		PAFZZ	6145-00-959-0871	81348	J-C-30THWO6CE1/1 2TUJ6	WIRE,ELECTRICAL NO.12 AWG-TYPE THWN,STYLF 1-BLUE	FT	
BULK		PAFZZ	4720-00-965-9318	70510	EFSEALTITE3-41N	HOSE, METALLIC.....	FT	
BULK		PAFZZ	4720-00-965-9319	70510	EFSEALTITE1-2IN	HOSE, METALLIC.....	FT	
BULK		PAFZZ	6145-00-990-3001	81348	J-C-30THWO6CE1/1 2TUJ2	WIRE. ELECTRICAL NO.12 AWG.TYPE THWN,STYLE 1,RE	FT	
BULK		PAFZZ	6145-00-990-3002	81348	J-C-30THWO6CE1/1 2TUJ0	WIRE, ELECTRICAL NO.12 AWG,TYPE THWN,STYLE 1,BLACK	FT	
BULK		PAFZZ	6145-00-990-3003	81348	J-C-30THWO6CE1/1 2TUJ9	WIRE. ELECTRICAL NO.12 AWG,TYPE THWN.STYLE 1.WHITE	FT	
BULK		PAFZZ	4010-01-051-8331	99862	CL-63-KA-12	WIRE ROPE.....	FT	
BULK		PAFZZ	5970-01-065-4825	06090	M563-2365 1/4 IN YELLOW	INSULATION SLEEVING,ELECTRICAL	FT	



Section III. SPECIAL TOOLS LIST

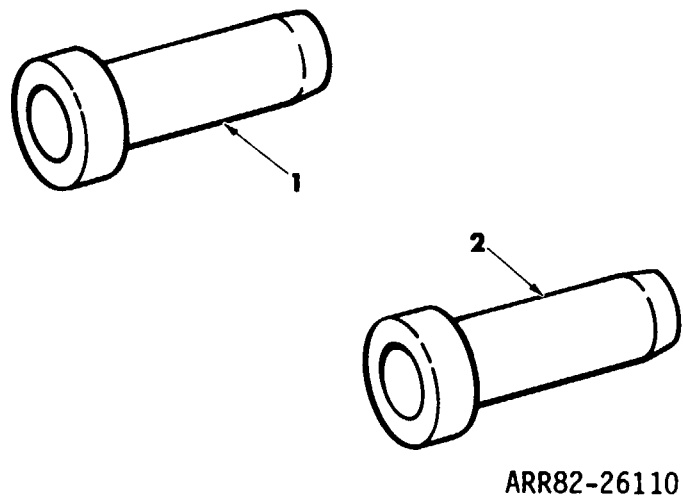


Figure 22. Special Tools.

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIGURE NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION <i>USABLE ON CODE</i>	U/M	QTY INC IN UNIT
22	1	PBFZZ		96906	MS90562-5	GROUP 9500 SPECIAL TOOLS TOOL, CONNJECTOR, ELECTRICAL CONTACT REMOVAL.....	EA	
22		2 PBFZZ		96906	MS90562-6	TOOL, CONNECTOR, ELECTRICAL CONTACT REMOVAL.....	EA	

Section IV. NATIONAL STOCK NUMBER AND PART NUMBER INDEX

STOCK NUMBER	FIGURE NO.	ITEM NO.	STOCK NUMBER	FIGURE NO.	ITEM NO.
5970-00-008-3295	BULK		7125-00-197-9050	BULK	
5599-00-014-0939	21	23	4730-00-203-0178	4	31
5999-00-014-0941	21	20	9515-00-204-3977	BULK	
5999-00-014-0943	21	22	9515-00-204-3991	BULK	
5999-00-014-0952	19	11	5940-00-204-8990	2	4
5999-00-014-0952	21	5	5940-00-204-8990	3	34
5310-00-014-5850	4	34	5940-00-204-8990	16	3
6145-00-027-5955	BULK		5306-00-225-8499	5	5
5310-00-043-0520	5	8	9535-00-232-7599	BULK	
5310-00-043-0520	8	10	9530-00-236-7671	BULK	
5310-00-045-3296	4	2	6145-00-239-1245	BULK	
5310-00-045-3296	4	35	5975-00-243-5447	1	17
5310-00-045-3296	6	10	6150-00-255-8332	4	12
5310-00-045-3296	12	5	5330-00-265-1085	19	14
5310-00-045-3299	1	2	5330-00-265-1095	21	8
5310-00-045-5211	2	18	5330-00-265-1085	21	24
9515-00-066-1015	BULK		8305-00-267-3009	BULK	
5305-00-068-0500	10	1	5305-00-267-8961	3	19
5305-00-068-0500	11	1	5305-00-267-8961	5	18
5305-00-068-0505	4	22	5305-00-267-8974	1	12
5305-00-068-0505	7	5	5305-00-267-8974	2	9
5305-00-068-0506	3	4	5305-00-267-8974	5	11
5305-00-068-0506	8	5	5305-00-269-2803	7	3
5305-00-071-2077	4	15	5305-00-269-2805	5	17
5340-00-078-7029	6	5	5305-00-269-3214	6	14
5310-00-080-6004	5	16	9520-00-277-4902	BULK	
5310-00-080-6004	6	15	9520-00-277-4912	BULK	
5310-00-080-8495	18	6	9520-00-277-5987	BULK	
5310-00-081-4219	5	3	4710-00-277-9874	BULK	
5935-00-114-7283	19	7	5975-00-284-6655	3	11
5935-00-114-7285	21	1	5310-00-407-9566	5	4
5935-00-114-8707	21	16	5310-00-407-9566	17	5
5935-00-114-8768	19	8	5340-00-431-6949	4	11
5935-00-114-8768	21	2	5340-00-431-8853	4	8
5935-00-114-8833	21	17	5340-00-431-8853	4	38
5310-00-141-1795	1	11	5340-00-450-4031	4	9
5310-00-141-1795	2	10	5340-00-457-1043	4	10
5310-00-141-1795	8	6	5310-00-457-1043	4	20
5940-00-143-4775	1	4	9320-00-527-6861	BULK	
5940-00-143-4775	1	6	9510-00-541-9655	BULK	
5940-00-143-4793	9	1	5305-00-543-2419	5	13
5940-00-143-4794	19	21	5305-00-543-2419	6	1
6240-00-152-2987	13	7	5940-00-549-1984	BULK	
9515-00-153-3217	BULK		7110-00-567-1901	8	4
5310-00-167-0765	4	33	5310-00-582-5965	3	6
5310-00-167-0770	4	17	5310-00-582-5965	4	23
5975-00-178-1217	BULK		5310-00-582-5965	5	9
5310-00-184-1539	13	3	5310-00-502-5965	5	19
6145-00-191-3606	BULK		5310-00-582-5965	7	11

STOCK NUMBER	FIGURE NO.	ITEM NO.
5310-00-582-5965	8	9
5310-00-582-5965	18	5
5310-00-584-5272	4	18
5310-00-637-9541	5	12
5310-00-637-9541	6	2
5310-00-637-9541	7	2
5930-00-683-2703	10	8
5930-00-683-2703	11	7
5935-00-696-9287	19	1
5930-00-702-6431	10	5
5310-00-732-0559	7	1
5340-00-764-2334	4	4
5340-00-764-2334	6	11
5310-00-768-0318	4	19
5310-00-768-0319	3	5
5310-00-768-0319	5	20
5310-00-768-0319	7	10
5935-00-807-0050	9	5
5310-00-809-3078	18	4
5310-00-809-4058	3	10
5310-00-809-5998	4	16
5970-00-810-6118	BULK	
5310-00-823-8804	10	2
5310-00-823-8804	11	2
5310-00-842-1699	2	20
5310-00-880-7744	17	6
5310-00-889-2528	2	19
6145-00-894-1000	BULK	
5340-00-900-4218	3	31
5975-00-903-2284	19	24
6145-00-904-3811	BULK	
4730-00-908-6294	4	26
5970-00-926-2571	BULK	
5310-00-934-9751	4	32
5310-00-934-9751	6	9
5310-00-934-9757	1	1
5310-00-934-9758	4	3
5310-00-939-2653	2	22
5305-00-942-2196	5	21
5305-00-957-6273	4	
6145-00-959-0871	BULK	
4720-00-965-9318	BULK	
4720-00-965-9319	BULK	
5310-00-982-6827	2	17
5305-00-984-4983	3	25
5305-00-984-4992	10	7
5305-00-984-4992	11	6
5305-00-984-5681	17	2
5305-00-984-6194	1	10
5305-00-984-7341	6	12
5305-00-984-7364	4	36

STOCK NUMBER	FIGURE NO.	ITEM NO.
5305-00-197-1727	3	14
5305-00-988-1727	13	6
6145-00-990-3001	BULK	
6145-00-990-3002	BULK	
6145-00-990-3003	BULK	
5935-01-012-3080	1	13
5939-01-012-3080	3	23
5320-01-032-3030	1	20
5320-01-032-3030	2	1
5320-01-032-3030	3	1
5320-01-032-3030	4	21
5340-01-036-7664	3	3
4010-01-051-8331	BULK	
4931-01-064-2821	4	14
5970-01-065-4825	BULK	
5320-01-075-8245	5	15
5310-01-077-1016	12	6
5975-01-077-7944	3	8
4933-01-085-1582	4	27
4933-01-085-7258	4	7
4933-01-085-8018	6	8
5340-01-089-5523	1	19
5999-01-089-8138	4	5
4933-01-090-5677	8	3
5999-01-091-3187	19	12
5999-01-091-3187	21	6
4730-01-092-6575	2	11
6210-01-094-0711	4	24
5975-01-094-1586	1	8
4720-01-094-1893	4	13
4730-01-094-1902	4	30
5940-01-094-2173	2	23
5940-01-094-2173	3	17
4730-01-094-5169	20	1
4730-01-094-5170	20	3
5975-01-094-6250	10	4
5975-01-094-6250	11	4
5307-01-098-3847	2	21
4931-01-101-5696	5	14
6493-01-101-5893	4	37
9905-01-107-2177	19	25
7125-01-107-2183	8	8
5975-01-110-4381	3	33
5975-01-110-4428	3	24
4933-01-111-1786	18	7
4933-01-111-1787	18	1
6240-01-111-7717	3	16
6240-01-111-7717	13	4
4933-01-112-3939	19	17
4933-01-112-3939	21	11
4933-01-112-3939	21	27

NATIONAL STOCK NUMBER AND PART NUMBER INDEX (cont)

STOCK NUMBER NO.	FIGURE NO.	ITEM FSCM	PART NUMBER	NO.	FIGURE NO.	ITEM
6210-01-114-7991	13	8	81349	MIL-T-6736		BULK
5975-01-114-9345	3	21	81349	MIL-W-16878/4		BULK
5975-01-115-9740	3	9	81349	MIL-W-16878/4		BULK
5975-01-115-9741	3	30	81349	MIL-W-16878/4	9	2
5975-01-123-4612	2	6	81349	MIL-W-16878/4	9	3
5975-01-123-4612	3	12	81349	MIL-W-4088	6	6
			81349	MIL-W-83420	19	22
			81349	MILC3133		BULK
			81349	MILS20166		BULK
			81349	MILS21041		BULK
			81349	MILS22698		BULK
			81349	MILW4088		BULK
			96906	MS15795-911	2	18
			96906	MS18154-60	5	21
			96906	MS23747-2	19	17
			96906	MS23747-2	21	11
			96906	MS23747-2	21	27
			96906	MS25036-110	9	1
			96906	MS25036-111	2	4
			96906	MS25036-111	3	34
			96906	MS25036-111	16	3
			96906	MS25036-112	19	21
			96906	MS25036-156	1	4
			96906	MS25036-156	1	6
			96906	MS25307-212	10	5
			96906	MS27183-10	3	10
			96906	MS27183-11	18	4
			96906	MS27183-12	5	3
			96906	MS27183-14	5	16
			96906	MS27183-14	6	15
			96906	MS27183-18	4	16
			96906	MS27183-42	4	34
			96906	MS27183-9	10	2
			96906	MS27183-9	11	2
			96906	MS29513-132	19	14
			96906	MS29513-132	21	8
			96906	MS29513-132	21	24
			96906	MS3106R20-8S	9	5
			96906	MS3348-4-6L	19	13
			96906	MS3348-4-6L	21	21
			96906	MS3348-4-6L	21	7
			96906	MS3367-4-0	19	24
			96906	MS535190-270	4	6
			96906	MS35191-273	6	12
			96906	MS35206-226	3	25
			96906	MS35206-232	10	7
			96906	MS35206-232	11	6
			96906	M535206-246	1	10

FSCM	PART NUMBER	FIGURE NO.	ITEM NO.	FSCM	PART NUMBER	FIGURE NO.	ITEM NO.
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96906	M5S35206-273	4	36
96906	MS35206-283	3	14
96906	MS35206-283	13	6
96906	MS35206-301	17	2
96906	MS35338-42	1	2
96906	MS35338-43	4	2
96906	MS35338-43	4	35
96906	MS35338-43	6	10
96906	M535338-43	12	5
96906	MS35338-44	3	6
96906	MS35338-44	4	23
96906	MS35338-44	5	9
96906	MS35338-44	5	19
96906	MS35338-44	7	11
96906	MS35338-44	8	9
96906	MS35338-44	18	5
96906	MS35338-45	5	4
96906	MS35338-45	17	5
96906	MS35338-46	5	12
96906	MS35338-46	6	2
96906	MS35338-46	7	2
96906	M635338-48	4	18
96906	MS35425-39	18	6
96906	MS35425-	2	17
96906	MS35426-	12	6
96906	MS35649-202	4	3
96906	MS35649-282	1	1
96906	MS35650-302	4	32
96906	MS35650-302	6	9
96906	MS35650-3252	5	8
96906	MS35650-3252	8	10
96906	MS35691-4	2	20
96906	MS35842-16	4	26
96906	MN45904-68	2	19
96906	MS51926-3	6	5
96906	MS51934-22	18	10
96906	MS51939-1	4	4
96906	M551939-1	6	11
96906	MS51940-4S	6	7
96906	MS51952-3	4	28
96906	MS51967-14	4	19
96906	M551967-5	17	6
96906	MS51968-2	3	5
96906	MS51968-2	5	20
96906	MS51968-2	7	10
96906	MS51968-8	7	1
96906	MS51969-1	2	22
96906	MS63-236S 1/4 INYELLOW	BULK	
96906	MS90556C32412P	21	17
96906	MS90557C32412S	19	8
96906	M5S90557C32412S	21	2

96906	MS90559-12	21	23
96906	MS90559-8	21	20
96906	MS90559-9	21	22
96906	MS90560-5	19	12
96906	MS90560-5	21	6
96906	MS90560-7	19	11
96906	MS90560-7	21	5
96906	MS90561-2	19	18
96906	MS90561-2	21	12
96906	MS90562-5	22	1
96906	MS90562-6	22	2
96906	MS90563-4C	19	7
96906	MS90563-4C	21	1
96906	MS90564-4C	21	16
96906	MS90725-3	10	1
96906	MS90725-3	11	1
96906	MS90725-34	5	5
96906	MS90725-64	6	14
96906	MS90726-5	4	22
96906	MS90726-5	7	5
96906	MS90726-6	3	4
96906	MS90726-6	8	5
96906	MS90726-60	7	3
96906	MS90726-62	5	17
96906	MS90726-8	1	12
96906	MS90726-8	2	9
96906	MS90726-8	5	11
96906	MS90727-17	3	19
96906	MS90727-17	5	18
96906	MS90728-121	4	15
96906	MS90728-61	5	13
96906	MS90728-61	6	1
81349	M23053/10-004-0	BULK	
81349	M23053/5-111-4	BULK	
81349	M23053/5-112-4	BULK	
81349	M4109-01-12-00-B	4	31
81349	M4109-04-12-28-B	20	1
81349	M4109-09-12-00-B	4	30
81349	M4109-12-12-28-B	20	3
81348	QQA200-3	BULK	
81348	QQA250-8	BULK	
81348	QQS634	BULK	
81348	QQS698	BULK	
81348	QQS698	BULK	
81348	QQS698	BULK	
81348	QQS698	BULK	
81348	QQS741	BULK	
81348	QQS741	BULK	
03743	TWCL-75M	1	19
81348	W-F-408	1	9
81348	W-F-408	2	13
81348	WC596-12-4	1	13

NATIONAL STOCK NUMBER AND PART NUMBER INDEX (cont)

FSCM	PART NUMBER	FIGURE NO.	ITEM NO.	FSCM	PART NUMBER	FIGURE NO.	ITEM NO.
81348	WC596/12-4	3	23	19204	12011690-16	14	6
81348	WF408	3	11	19204	12011690-17	3	27
81348	WWWC563	BULK		19204	12011690-18	14	7
81348	ZZ-H-500A	20	2	19204	12011690-19	3	28
19204	11020138	5	10	19204	12011690-2	2	15
19204	11020141	5	7	19204	12011690-20	14	8
19204	12011638	19	20	19204	12011690-21	14	9
19204	12011654	5	14	19204	12011690-22	14	10
19204	12011660	17	7	19204	12011690-23	14	11
19204	12011661-1	17	3	19204	12011690-3	2	16
19204	12011661-2	17	11	19204	12011690-3	3	29
19204	12011661-3	17	12	19204	12011690-4	2	3
19204	12011661-4	17	10	19204	12011690-5	15	4
19204	12011661-5	5	6	19204	12011690-6	15	1
19204	12011662	7	7	19204	12011690-7	15	2
19204	12011663	7	6	19204	12011690-8	15	3
19204	12011664	7	8	19204	12011690-9	1	3
19204	12011665	7	4	19204	12011692	19	25
19204	12011666	7	9	19204	12011693	3	15
19204	12011667	19	5	19204	12011693	13	1
19204	12011668	6	13	19204	12011693-1	13	2
19204	12011669	6	3	76038	1300	8	4
19204	12011670	6	8	76038	1310	8	3
19204	12011671	6	4	75037	212	2	23
19204	12011675	5	1	75037	212	3	17
19204	12011676	5	22	96160	5863-2	2	11
19204	12011679-1	13	3	37296	6578	17	8
19204	12011679-2	5	2	07878	72289-100	4	12
19204	12011680-1	17	4	19204	7540635	4	37
19204	12011680-2	17	14	19204	7550588-10	4	10
19204	12011684	5	15	19204	7550588-10	4	20
19204	12011685	1	20	19204	7550588-3	4	11
19204	12011685	2	1	19204	7550588-6	4	7
19204	12011685	3	1	19204	7550588-8	4	8
19204	12011685	4	21	19204	7550588-8	4	38
19204	12011686	4	25	19204	7550588-9	4	9
19204	12011687	4	14	19204	7550795-2	2	21
19204	12011688	19	1	19204	7550826-2	3	24
19204	12011689	19	2	19204	7550877	3	30
19204	12011690	1	5	19204	7550878	3	21
19204	12011690	2	5	19204	7551084	1	14
19204	12011690	16	2	19204	7551085-1	2	14
19204	12011690-1	16	1	19204	7551085-2	1	18
19204	12011690-10	14	1	19204	7551085-3	1	15
19204	12011690-11	14	2	19204	7551086	4	13
19204	12011690-12	14	3	19204	7551087	8	8
19204	12011690-13	14	4	19204	7551088	4	24
19204	12011690-14	14	5	19204	7551089	3	16
19204	12011690-15	3	26	19204	7551089	13	4

FSCM	PART NUMBER	FIGURE NO.	ITEM NO.	FSCM	PART NUMBER	FIGURE NO.	ITEM NO.
19204	7551089-1	13	5	19204	7551434-3	18	9
19204	7551090	13	8	19204	7551435	18	1
19204	7551093-1	1	7	19204	7551435-1	18	2
19204	7551093-2	1	16	19204	7551435-2	18	3
19204	7551094	8	2	19204	7551436	4	27
19204	7551096	3	9	19204	7551731	8	7
19204	7551097-1	2	8	19204	7551732	12	2
19204	7551097-2	2	12	19204	7551733	8	1
19204	7551097-4	3	18	19204	7551733-1	12	4
19204	7551098-5	2	6	19204	7551733-2	12	1
19204	7551098-5	3	12	19204	7551733-3	12	3
19204	7551098-6	3	7	19204	7551734	10	3
19204	7551098-7	3	33	19204	7551734	11	3
19204	7551099	3	22	19204	7551735-1	2	2
19204	7551429-3	3	13	19204	7551735-2	1	21
19204	7551429-4	3	32	19204	7551739	1	8
19204	7551429-5	3	20	19204	7551740	10	4
19204	7551429-6	3	2	19204	7551740	11	4
19204	7551429-7	2	7	19204	7551741	4	29
19204	7551432	4	1	19204	7551743-1	17	1
19204	7551434	18	7	19204	7551743-2	17	9
19204	7551434-1	18	8	19204	7551744-1	17	13
19204	7551434-2	18	11	19204	7551744-2	17	15

C-75 (C-76 blank)



APPENDIX D

EXPENDABLE SUPPLIES AND MATERIALS LIST

Section I. INTRODUCTION

D-1. SCOPE

This appendix lists expendable supplies and materials you will need to operate and maintain the fire control repair shop set. These items are authorized to you by CTA 50-970, Expendable Items (Except Medical, Class V, Repair Parts, and Heraldic Items).

D-2. EXPLANATION OF COLUMNS

a. Column 1--Item Number. This number is assigned to the entry in the listing and is referenced in the narrative instructions to identify the material (e.g., "Use cleaning compound, item 5, app D.").

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

FAviation Intermediate

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 part number followed by the Federal Supply Code for Manufacturer (FSCM) in parentheses, if applicable.

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

Section II. EXPENDABLE SUPPLIES AND MATERIALS LIST

(1) Item Number	(2) Level	(3) National Stock Number	(4) Description	(5) U/M
1	F	8040-00-165-8614	ADHESIVE MMM-A-121 (81348)	..

EXPENDABLE SUPPLIES AND MATERIALS LIST (cont)

(1) Item Number	(2) Level	(3) National Stock Number	(4) Description	(5) U/M
2	F	...	ADHESIVE: (part A, resin 8470 and part B, hardener 8470)	..
3	F	...	ADHESIVE, TYPE III MIL-A-5092 (81349)	..
4	F	5350-00-192-5049	CLOTH, ABRASIVE P-C-451 (81349)	EA
5	F	7220-00-985-6849	CLOTH, POLISHING DDD-C-450	EA
6	F	6850-00-264-9037	DRY CLEANING SOLVENT P-D-680 (81348)	GL
7	F	8010-00-111-7937	ENAMEL, GREEN, LUSTERLESS FED-STD-595 (34079)	GL
8	F	8010-00-081-0809	ENAMEL, On, SEMIGLOSS FED-STD-595 (24087)	QT
9	F	8415-00-634-5027	GLOVE, CLOTH, 10-oz (283.50-gram)	PR
10	F	8010-00-166-3147	LACQUER, BLACK, FLAT FED-STD-595 (37038)	QT
11	F	8010-00-166-1667	LACQUER, WHITE FED-STD-595 (17875)	GL

12	F	9150-00-949-0323	LUBRICATING OIL, SEMIFLUID MIL-L-46150 (81349)	OZ
13	F	7510-00-112-0234	MARKING INK, BLACK FED-STD-595 (37038)	OZ
14	F	6640-00-559-1385	PAPER, LENS: 34 x 36 in. (86.36 x 91.44 cm) NNN-P-40 (81348)	HD
15	F	8010-00-161-5718	PRIMER COATING	GL
16	F	8010-00-899-0931	PRIMER COATING, ZINC CHROMATE	QT
17	F	7920-00-205-1711	RAG, WIPING DDD-R-30 (81348)	BE
18	F	3439-00-006-7764	SOLDER, TIN ALLOY QQ-S-571 (81348)	LB
19	F	5970-00-644-3167	TAPE, INSULATION, ELECTRICAL: 3/4-in. (1.91-cm), 1/2-lb (226.80-g) roll FED-SPEC-H.H.-I-510	FT
20	F	6810-00-551-1487	TRICHLOROETHANE, TYPE 1.1.1 55-GAL. (208-1) DRUM INHIBISOL (86440)	DR

D-3 (D-4 blank)

APPENDIX E

ILLUSTRATED LIST OF MANUFACTURED ITEMS

E-1. INTRODUCTION

This appendix includes complete instructions for making items authorized to be manufactured or fabricated at aviation intermediate maintenance.

a. A part number index in alphanumeric order is provided for cross-referencing the part number of the item to be manufactured to the figure which covers fabrication criteria.

b. All bulk materials needed for manufacture of an item are listed by part number or specification number in a tabular list on the illustration.

E-2. MANUFACTURED ITEMS PART NUMBER INDEX

Part No.	Figure No.
MIL-I-23053/5	30
MIL-I-23053/5	31
MIL-I-23053/5	33
MIL-I-23053/10	16
MIL-W-4088	25
MIL-W-16878/4	14
MIL-W-16878/4	15
MIL-W-83420	32
Type C00-04 HDF 4/6-4/12R 1090	29
11020138	34
12011660	21

Part No.	Figure No.
12011661	24
12011662	8
12011663	9
12011664	11
12011665	10
12011666	12
12011668	26
12011675	13
12011676	2
12011689	35
12011690	3
7551084	5
7551085	6
7551093	7
7551429	4
7551434	27
7551435-2	28
7551731	1
7551732	17
7551733-1	19
7551733-2	20
7551733-3	18
7551743-1	22
7551743-2	22
7551744-1	23
7551/44-2	23



E-3. MANUFACTURED ITEMS INSTRUCTIONS

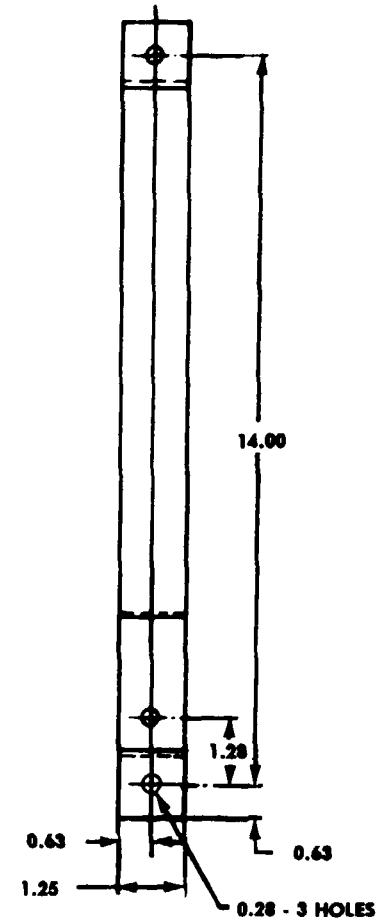
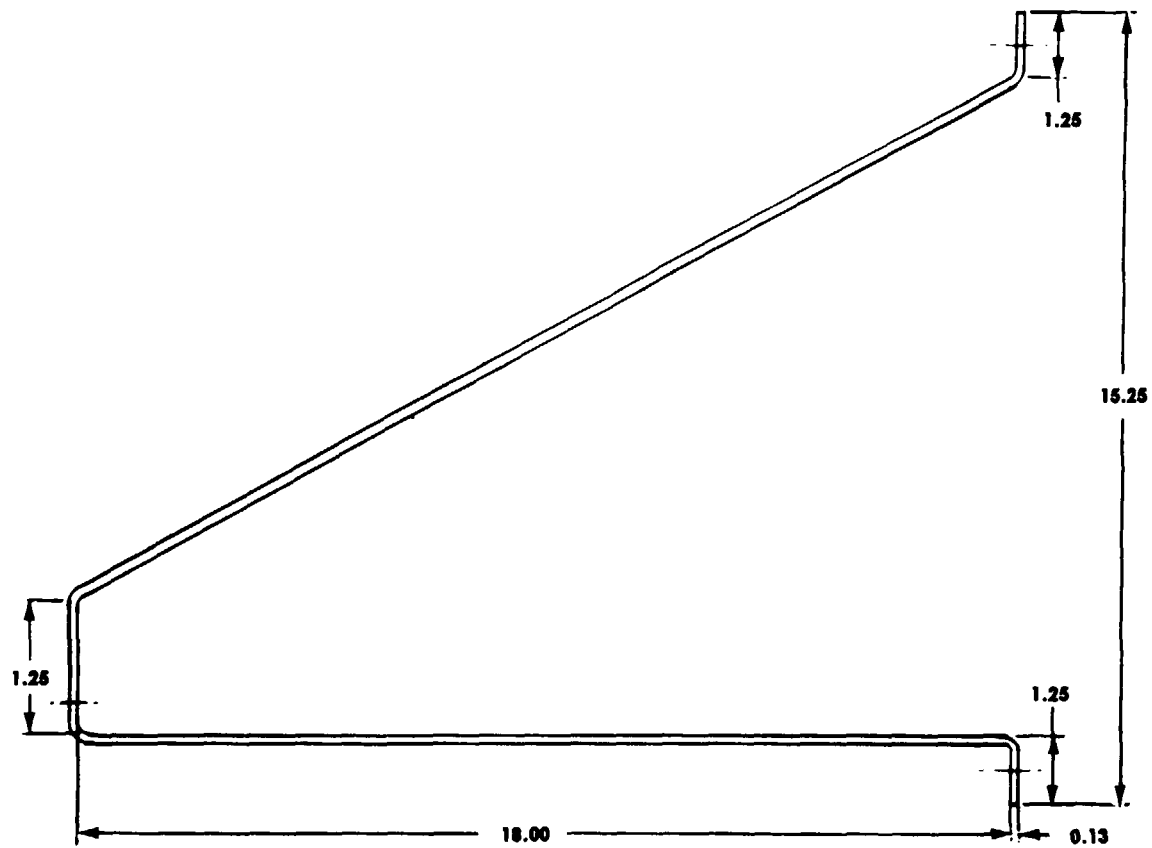


FIGURE 1. WALL SHELF BRACKET (PART NO. 7551731)

E-2



CONVERSION TABLE		NOTES
IN.	CM	
1.25	3.18	1. All dimensions shown are in inches and have a tolerance of +0.03 in. (+0.08 cm). 2. Fabricate from steel strip, NSN 9515-00-204-3977. 3. Break all sharp edges. <p style="text-align: center;">WARNING</p> <p style="text-align: center;">Use only type 1.1.1 trichloroethane solvent. Never use solvent unless ventilation is provided. Breathing solvent vapors will cause unconsciousness, prolonged skin contact with solvent will cause irritation, and taking solvent internally will cause vomiting.</p> 4. Degrease with type 1.1.1 trichloroethane (item 20, app D). 5. Apply one coat primer coating (item 15, app D), followed by two coats white lacquer (item 11, app D).
0.13	0.33	
15.25	38.74	
0.63	1.60	
0.28	0.71	
1.28	3.25	
14.00	35.56	
18.00	45.72	



E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)

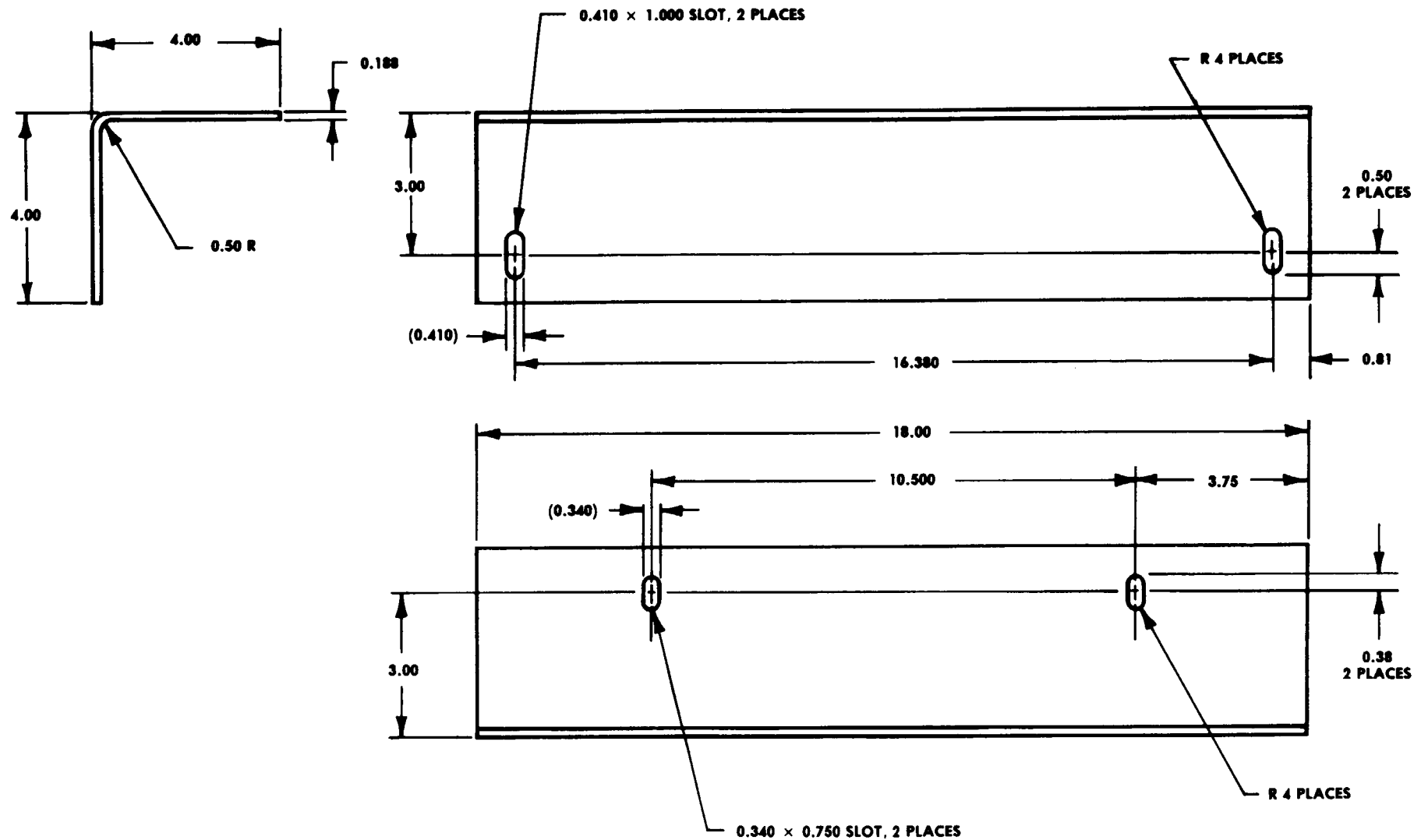


Figure 2. TOOL CABINET BRACE (PART NO. 12011676)
E-4

CONVERSION TABLE		NOTES
IN.	CM	
4.00	10.16	1. All dimensions shown are in inches. A dimension with a two-digit decimal has a tolerance of +0.06 (+0.15 cm) and a three-digit decimal has a tolerance of +0.010 (+0.025 cm). 2. Fabricate from metal sheet, aluminum, NSN 9536-00-232-7599. 3. Break all sharp edges and deburr all holes. <p style="text-align: center;">WARNING Use only type 1.1.1 trichloroethane solvent. Never use solvent unless ventilation is provided. Breathing solvent vapors will cause unconsciousness, prolonged skin contact with solvent will cause irritation, and taking solvent internally will cause vomiting.</p>
0.50	1.27	
0.188	0.477	
0.410	1.041	
1.000	2.540	
18.00	45.72	
10.500	26.670	
3.00	7.62	
0.340	0.860	
0.750	1.905	
16.380	41.605	4. Degrease with type 1.1.1 trichloroethane (item 20, app D). 5. Apply one coat zinc chromate primer coating (item 16, app D), followed by two coats semigloss OD enamel (item 8, app D). 6. Mark with black stencil marking ink (item 13, app D) as follows.
3.75	9.53	
0.38	0.97	
0.81	2.06	

P/N 12011676

E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)

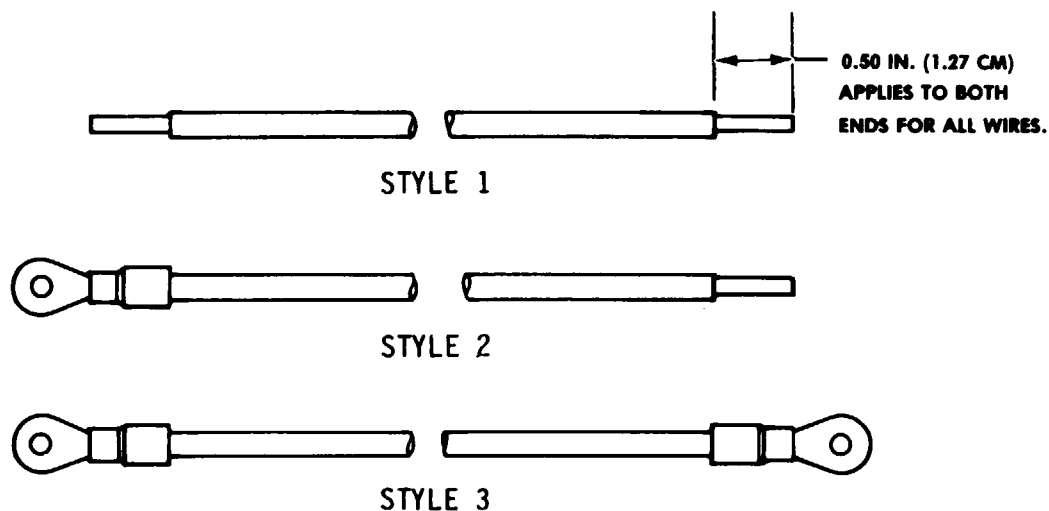


FIGURE 3. WIRE ASSEMBLY (PART NO. 12011690)

PART NO.	TAG NO.	FABRICATE FROM NSN	STYLE	COLOR	LENGTH		LUG TERMINAL
					IN.	CM	
12011690-1	1, 2, 3, 4A, 6A or 7	6145-00-239-1245	2	Black	30.00	76.20	MS25036-111
12011690-2	1A	6145-00-239-1245	1	Black	10.00	25.40	
12011690-3	2A or 2B	6145-00-239-1245	1	Black	6.00	15.24	
12011690-4	4B or 8	6145-00-239-1245	3	Black	4.00	10.16	MS25036-111
12011690-5	4, 5, or 6	6145-00-959-0871	1	Blue	264.00	670.00	
12011690-6	9	6145-00-990-3002	1	Black	192.00	487.68	
12011690-7	10	6145-00-990-3003	1	White	192.00	487.68	
12011690-8	11	6145-00-904-3811	1	Green	264.00	670.00	
12011690-9	11A or 11B	6145-00-904-3811	2	Green	4.00	10.16	MS25036-156
12011690-10	12	6145-00-990-3002	1	Black	108.00	274.32	
12011690-11	13	6145-00-990-3003	1	White	108.00	274.32	
12011690-12	14	6145-00-904-3811	1	Green	108.00	274.32	

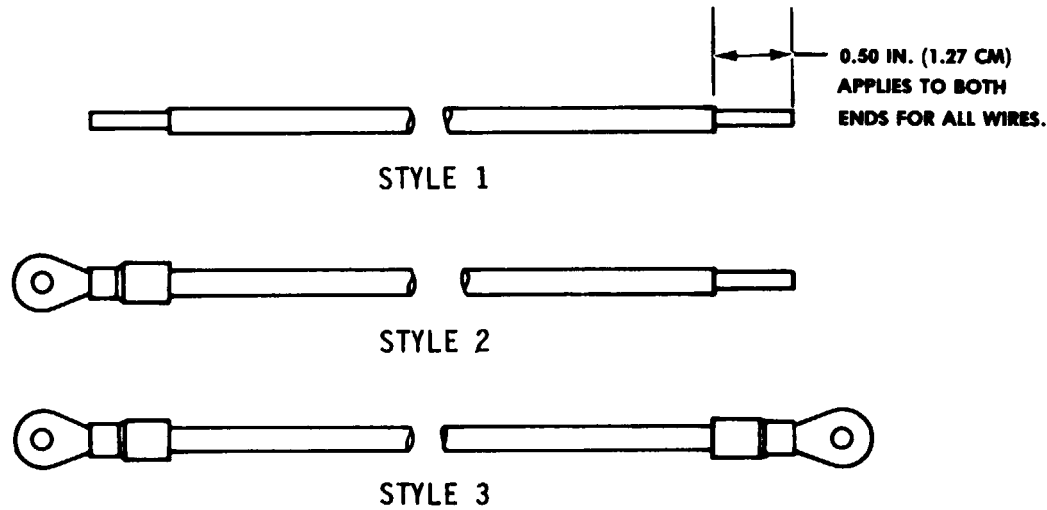


FIGURE 3. WIRE ASSEMBLY (PART NO. 12011690) (cont).

PART NO.	TAG NO.	FABRICATE FROM NSN	STYLE	COLOR	LENGTH		LUG TERMINAL
					IN.	CM	
12011690-13	15	6145-00-990-3002	1	Black	144.00	365.76	
12011690-14	16	6145-00-990-3003	1	White	144.00	365.76	
12011690-15	16A, 16B, 19A, or 19B	6145-00-990-3003	1	White	6.00	15.24	
12011690-16	17	6145-00-904-3811	1	Green	144.00	365.76	
12011690-17	17A, 17B, 17C, 17D or 17E	6145-00-904-3811	1	Green	6.00	15.24	
12011690-18	18	6145-00-990-3001	1	Red	156.00	396.24	
12011690-19	18A or 18B	6145-00-990-3001	1	Red	6.00	15.24	
12011690-20	19	6145-00-990-3003	1	White	156.00	396.24	
12011690-21	20	6145-00-959-0871	1	Blue	216.00	548.64	
12011690-22	21	6145-00-990-3003	1	White	216.00	548.64	
12011690-23	22	6145-00-904-3811	1	Green	216.00	548.64	

E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)

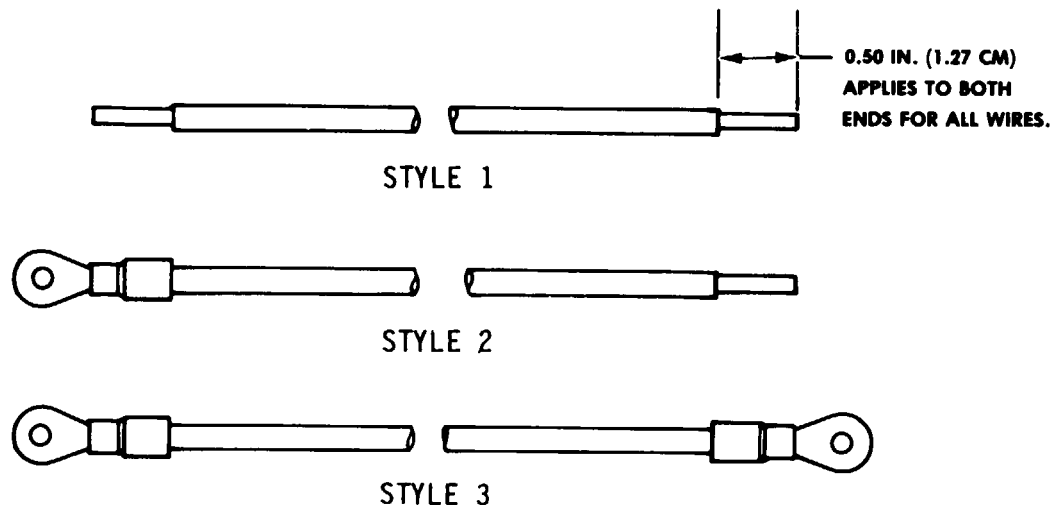


FIGURE 3. WIRE ASSEMBLY (PART NO. 12011690) (cont).

NOTE

The following seven wires 12011690-5, 12011690-6, 12011690-7, 12011690-8, 12011690-21, 12011690-22, and 12011690-23 have been altered at initial installation by either cutting wire or adding lug terminal, or both.

PART NO.	TAG NO.	FABRICATE FROM NSN	STYLE	COLOR	LENGTH		LUG TERMINAL
					IN.	CM	
12011690-5	4, 5, 6	6145-00-959-0871	2	Blue	264.00	670.00	MS25036-111
12011690-6	Section 9	6145-00-990-3002	1	Black	130.00	330.20	
12011690-6	Section 9	6145-00-990-3002	1	Black	62.00	157.48	
12011690-7	Section 10	6145-00-990-3003	1	White	130.00	330.20	
12011690-7	Section 10	6145-00-990-3003	1	White	62.00	157.48	
12011690-8	Section 11	6145-00-904-3811	2	Green	112.00	284.48	
12011690-8	Section 11	6145-00-904-3811	3	Green	62.00	157.48	
12011690-8	Section 11	6145-00-904-3811	3	Green	90.00	228.60	
12011690-21	20	6145-00-959-0871	2	Blue	216.00	548.64	MS25036-111
12011690-22	21	6145-00-990-3003	2	White	216.00	548.64	MS25036-111
12-11690-23	22	6145-00-904-3811	2	Green	216.00	548.64	MS25036-156

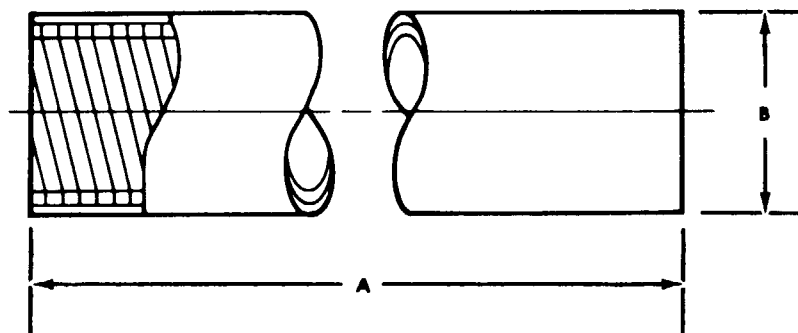


FIGURE 4. FLEXIBLE CONDUIT (PART NO. 7551429).

CONVERSION TABLE		NOTES																											
IN.	CM																												
12.75	32.39	<p>All dimensions are in inches and have a tolerance of +0.13 in. (0.33 cm).</p> <table border="1"> <thead> <tr> <th><u>PART NO.</u></th> <th><u>DIM A</u></th> <th>FABRICATE FROM <u>DIM B</u></th> <th><u>NSN</u></th> </tr> </thead> <tbody> <tr> <td>7551429-3</td> <td>12.75</td> <td>0.50</td> <td>4720-00-965-9319</td> </tr> <tr> <td>7551429-4</td> <td>47.00</td> <td>0.50</td> <td>4720-00-965-9319</td> </tr> <tr> <td>7551429-5</td> <td>29.12</td> <td>0.75</td> <td>4720-00-965-9318</td> </tr> <tr> <td>7551429-6</td> <td>54.15</td> <td>0.75</td> <td>4720-00-965-9318</td> </tr> <tr> <td>7551429-7</td> <td>16.00</td> <td>0.50</td> <td>4720-00-965-9319</td> </tr> </tbody> </table>				<u>PART NO.</u>	<u>DIM A</u>	FABRICATE FROM <u>DIM B</u>	<u>NSN</u>	7551429-3	12.75	0.50	4720-00-965-9319	7551429-4	47.00	0.50	4720-00-965-9319	7551429-5	29.12	0.75	4720-00-965-9318	7551429-6	54.15	0.75	4720-00-965-9318	7551429-7	16.00	0.50	4720-00-965-9319
<u>PART NO.</u>	<u>DIM A</u>					FABRICATE FROM <u>DIM B</u>	<u>NSN</u>																						
7551429-3	12.75					0.50	4720-00-965-9319																						
7551429-4	47.00					0.50	4720-00-965-9319																						
7551429-5	29.12					0.75	4720-00-965-9318																						
7551429-6	54.15					0.75	4720-00-965-9318																						
7551429-7	16.00					0.50	4720-00-965-9319																						
47.00	119.38																												
29.12	73.96																												
54.25	137.80																												
16.00	40.64																												
0.75	1.91																												
0.50	1.27																												

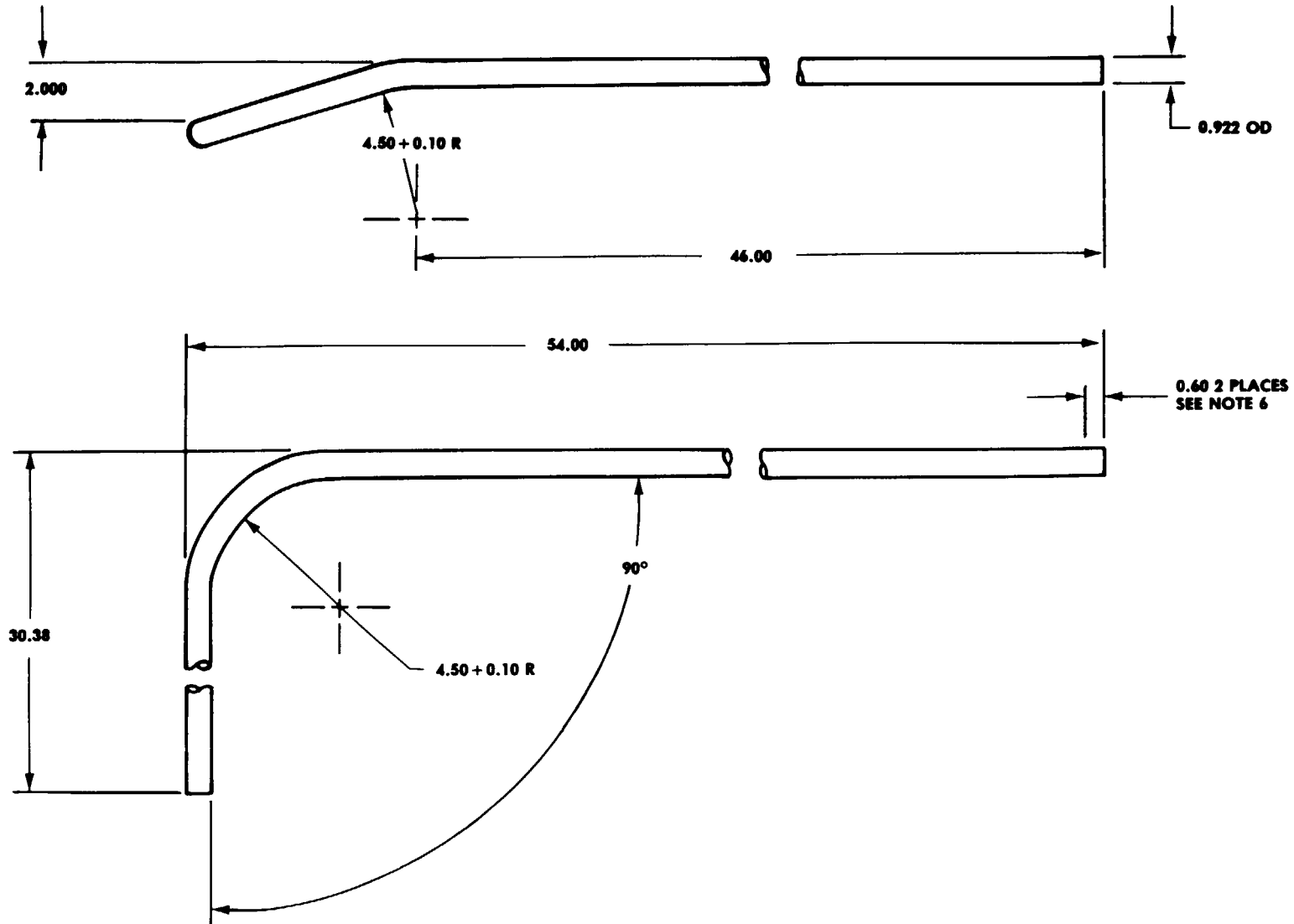
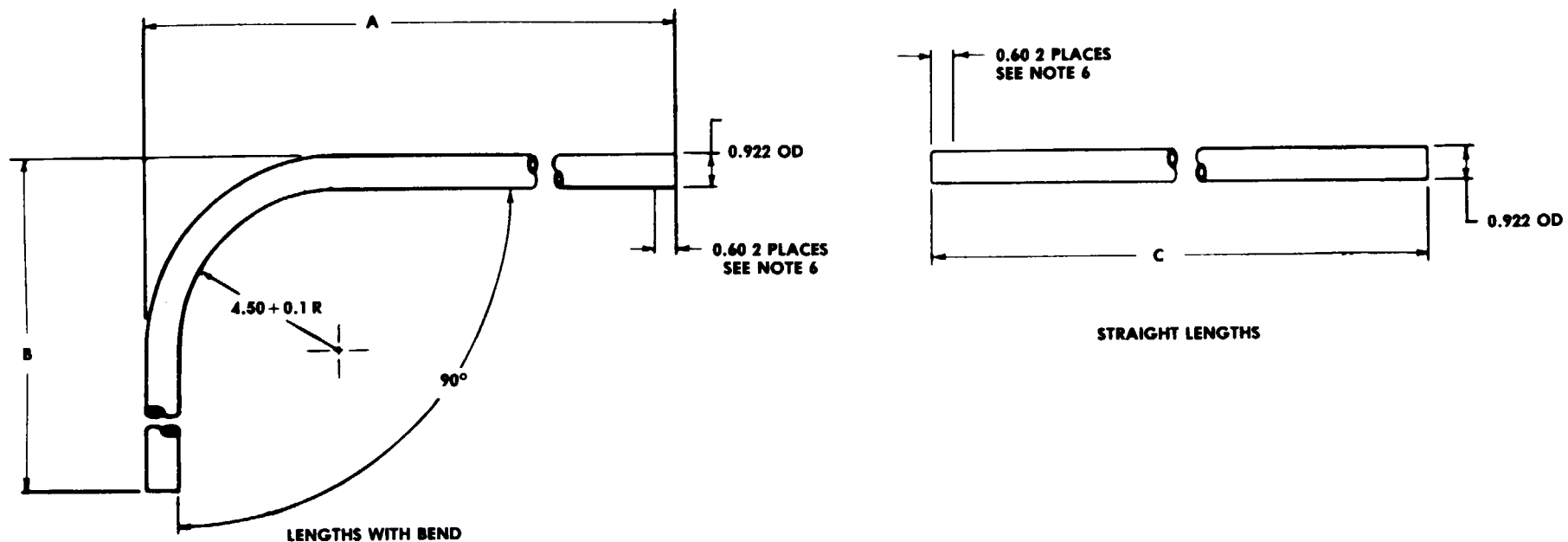


FIGURE 5. CONDUIT (PART NO. 7551084).

CONVERSION TABLE		NOTES
IN.	CM	
2.000	5.080	<p>1. All dimensions shown are in inches. A dimension with a two-digit decimal has a tolerance of ± 0.13 in. (± 0.33 cm) and a three-digit decimal has a tolerance of ± 0.060 in. (± 0.152 cm). All angles have a tolerance of +5 degrees.</p> <p>2. Fabricate from rigid metal conduit, NSN 5975-00-178-1217.</p> <p>3. Ream ends to remove rough edge and break all sharp edges.</p> <p style="text-align: center;">WARNING</p> <p>Use only type 1.1.1 trichloroethane solvent. Never use solvent unless ventilation is provided. Breathing solvent vapors will cause unconsciousness, prolonged skin contact with solvent will cause irritation, and taking solvent internally will cause vomiting.</p> <p>4. Degrease with type 1.1.1 trichloroethane (item 20, app D).</p> <p>5. Apply one coat primer coating (item 15, app D), followed by two coats white lacquer (item 11, app D).</p> <p>6. Do not apply primer or lacquer within 0.60 in. (1.52 cm) of either end.</p>
4.50+0.10	11.433+0.25	
46.00	116.84	
0.922	2.341	
0.60	1.52	
54.00	137.16	
30.38	77.17	
0.75	1.91	

E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)



PART NO.	DIM A.	DIM B.	DIM C.
7551005-1	7.19
7551085-2	51.75	23.00	...
75510L5-3	5.381

FIGURE 6. CONDUIT (PART NO. 7551085).

CONVERSION TABLE		NOTES
IN.	CM	
4.50±0.10	11.43±0.25	<p>1. All dimensions shown are in inches. A dimension with a two-digit decimal has a tolerance of ±0.13 in. (±0.33 cm) and a three-digit decimal has a tolerance of ±0.060 in. (±0.152 cm). All angles have a tolerance of ±5 degrees.</p> <p>2. Fabricate from rigid metal conduit, NSN 5975-00-178-1217.</p> <p>3. Ream ends to remove rough edge and break all sharp edges.</p> <p style="text-align: center;">WARNING</p> <p style="text-align: center;">Use only type 1.1.1 trichloroethane solvent. Never use solvent unless ventilation is provided. Breathing solvent vapors will cause unconsciousness, prolonged skin contact with solvent will cause irritation, and taking solvent internally will cause vomiting.</p> <p>4. Degrease with type 1.1.1 trichloroethane (item 20, app D).</p> <p>5. Apply one coat primer coating (item 15, app D), followed by two coats white lacquer (item 11, app D).</p> <p>6. Do not apply primer or lacquer within 0.60 in. (1.52 cm) of either end.</p>
0.60	1.52	
0.922	2.342	
51.75	131.45	
23.00	58.42	
7.19	18.26	
56.38	143.21	

E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)

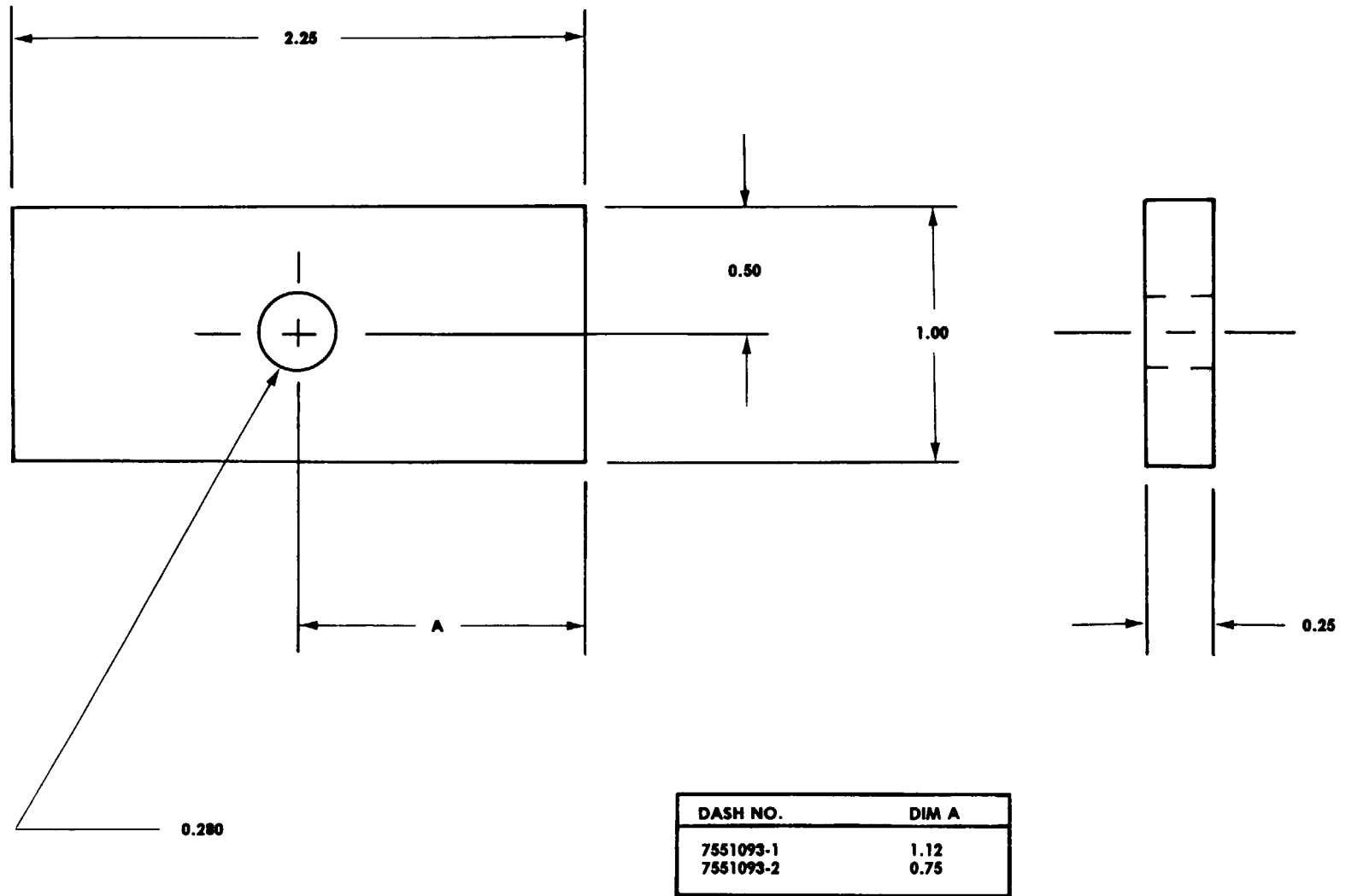


FIGURE 7. SPACER (PART NO. 7551093).

CONVERSION TABLE		NOTES
IN.	CM	
1.5		<p>1. All dimensions shown are in inches. A dimension with a two-digit decimal has a tolerance of ± 0.03 in. (± 0.08 cm) and a three-digit decimal has a tolerance of ± 0.010 in. (± 0.025 cm).</p> <p>2. Fabricate from aluminum metal plate, NSN 9530-00-236-7671.</p> <p>3. Break all sharp edges and deburr hole.</p>
2.25	5.72	
0.50	1.27	
1.00	2.54	
0.25	0.64	
0.280	0.711	
0.75	1.91	
1.12	2.84	

E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)

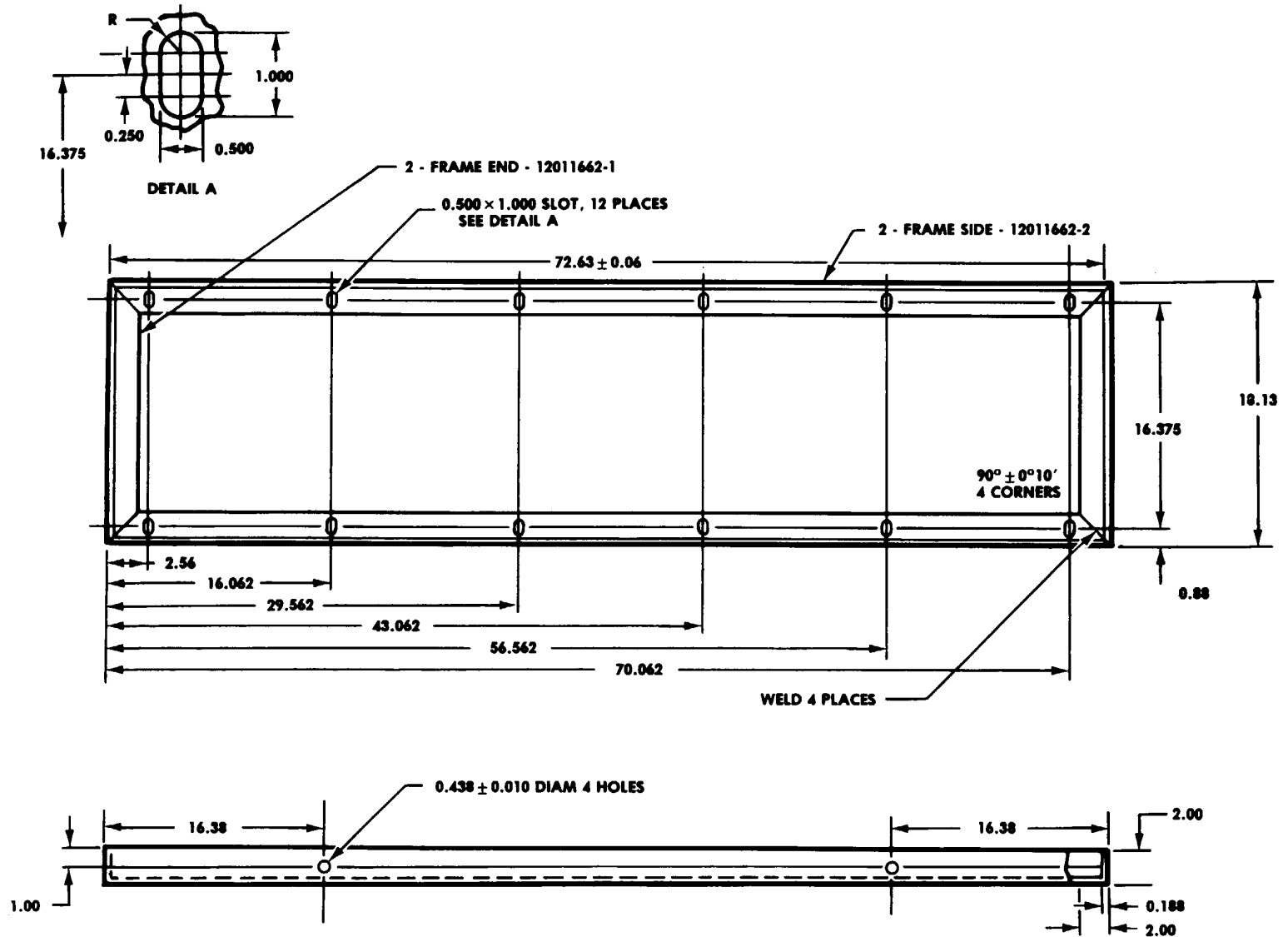


FIGURE 8. TABLE BASE FRAME (PART NO. 12011662).

CONVERSION TABLE		NOTES
IN.	CM	
16.375	41.592	<p>1. All dimensions shown are in inches. A dimension with a two-digit decimal has a tolerance of +0.03 in. (0.08 cm) and a three-digit decimal has a tolerance of +0.015 in. (+0.38 cm).</p> <p>2. Fabricate from steel structural angle, NSN 9520-00-277-4912.</p> <p>3. Break all sharp edges and deburr all holes.</p> <p style="text-align: center;">WARNING</p> <p style="text-align: center;">Use only type 1.1.1 trichloroethane solvent. Never use solvent unless ventilation is provided. Breathing solvent vapors will cause unconsciousness, prolonged skin contact with solvent will cause irritation, and taking solvent internally will cause vomiting.</p> <p>4. Degrease with type 1.1.1 trichloroethane (item 20, app D).</p> <p>5. Apply one coat primer coating (item 15, app D), followed by two coats semigloss OD enamel (item 8, app D).</p> <p>6. Mark with black stencil marking ink (item 13, app D) as follows.</p> <p style="text-align: center;">P/N 12011662</p>
0.500	1.27	
1.000	2.54	
0.250 0.635		
72.63±0.06	184.48±0.15	
18.13 46.05		
0.88 2.24		
2.56 6.50		
16.062	40.797	
29.562	75.087	
43.062	109.377	
56.562	143.667	
70.062	77.957	
16.380	41.605	
0.438±0.010	1.113±0.025	
2.00	5.08	
0.188	0.478	
1.00	2.54	

E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)

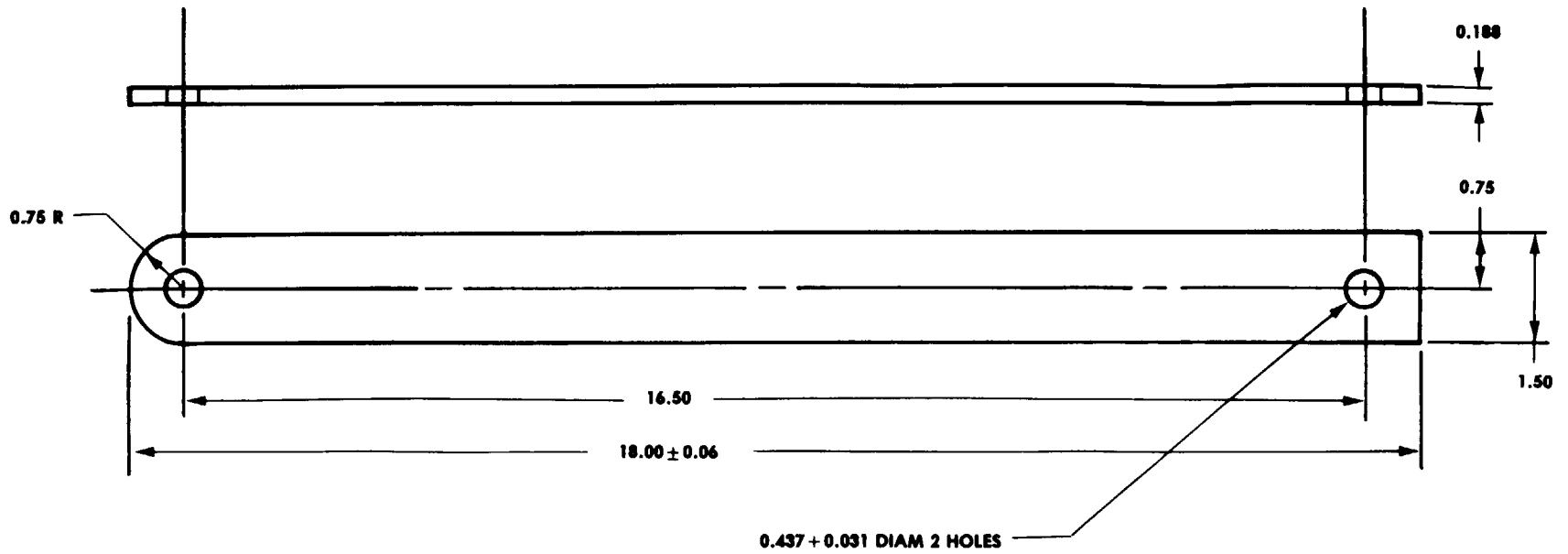


FIGURE 9. SHORT TABLE BRACE (PART NO. 12011663).

CONVERSION TABLE		NOTES
IN.	CM	
0.75	1.91	<p>1. All dimensions shown are in inches. A dimension with a two-digit decimal has a tolerance of ± 0.03 in. (± 0.08 cm) and a three-digit decimal has a tolerance of ± 0.005 in. (± 0.013 cm).</p> <p>2. Fabricate from steel metal strip, NSN 9515-00-204-3991.</p> <p>3. Break all sharp edges and deburr all holes.</p> <p style="text-align: center;">WARNING</p> <p style="text-align: center;">Use only type 1.1.1 trichloroethane solvent. Never use solvent unless ventilation is provided. Breathing solvent cause unconsciousness, prolonged skin contact with solvent will cause irritation, and taking solvent internally will cause vomiting.</p> <p>4. Degrease with type 1.1.1 trichloroethane (item 20, app D).</p> <p>5. Apply one coat primer coating (item 15, app D), followed by two coats semigloss OD enamel (item 8, app D).</p> <p>6. Mark with black stencil marking ink (item 13, app D) as follows.</p> <p style="text-align: center;">P/N 12011663</p>
0.188	0.478	
1.50	3.81	
16.50 41.91		
18.00 \pm 0.06	45.72 \pm 0.15	
0.437 \pm 0.31	1.110 \pm 0.79	



E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)

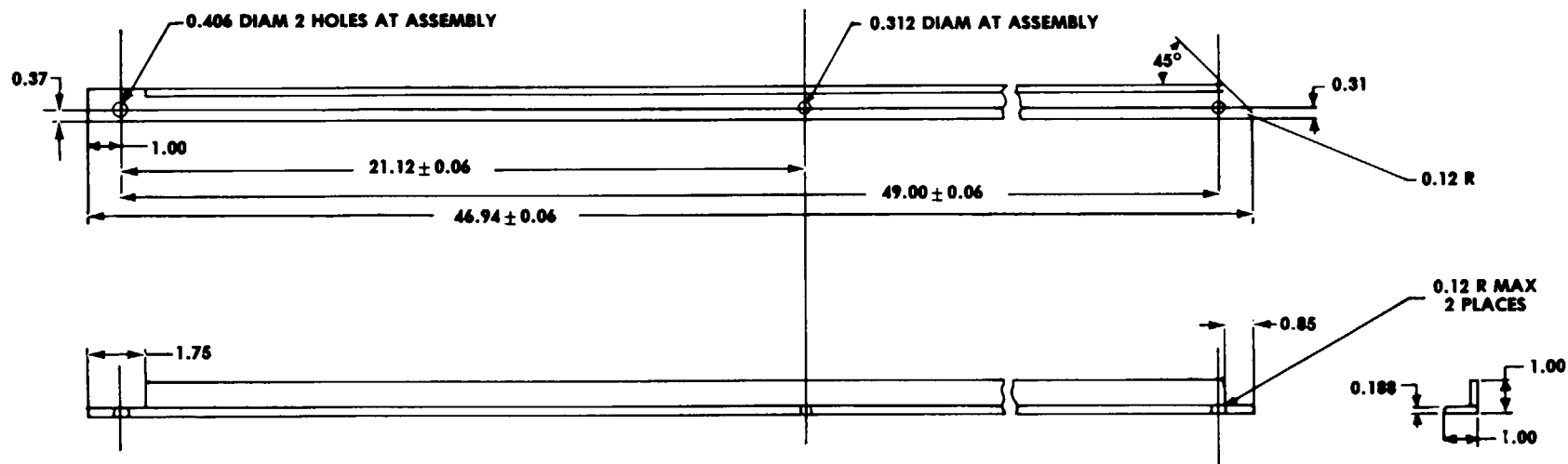


FIGURE 10. LEFT-HAND LONG TABLE BRACE (PART NO. 12011665).

CONVERSION TABLE		NOTES
IN.	CM	
0.37	0.94	<p>1. All dimensions shown are in inches. A dimension with a two-digit decimal has a tolerance of ± 0.03 in. (± 0.08 cm) and a three-digit decimal has a tolerance of ± 0.010 in. (± 0.025 cm). All angles have a tolerance of ± 5 degrees.</p> <p>2. Fabricate from steel structural angle, NSN 9520-00-277-5987.</p> <p>3. Break all sharp edges and deburr all holes.</p> <p style="text-align: center;">WARNING</p> <p>Use only type 1.1.1 trichloroethane solvent. Never use solvent unless ventilation is provided. Breathing solvent vapors will cause unconsciousness, prolonged skin contact with solvent will cause irritation, and taking solvent internally will cause vomiting.</p> <p>4. Degrease with type 1.1.1 trichloroethane (item 20, app D).</p> <p>5. Apply one coat primer coating (item 15, app D), followed by two coats semigloss OD enamel (item 8, app D).</p> <p>6. Mark with black stencil marking ink (item 13, app D) as follows. P/N 12011665</p>
1.00	2.540	
21.12 ± 0.06	53.64 ± 0.15	
49.00 ± 0.06	124.460 ± 15	
1.75	4.45	
0.406	1.03	
0.312 0.79		
46.94 ± 0.06	119.23 ± 0.15	
0.31 0.79		
0.12	0.30	
0.85	2.16	
0.188	0.48	



E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)

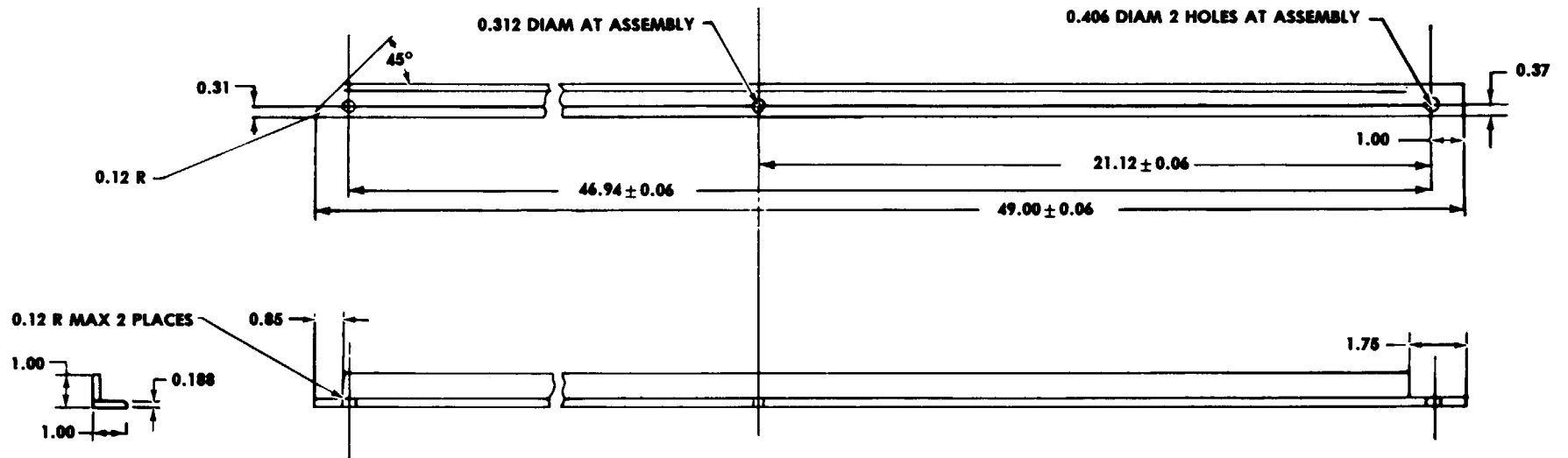


FIGURE 11. LONG TABLE BRACE (PART NO. 12011664).

CONVERSION TABLE		NOTES
IN.	CM	
0.31	0.79	<p>1. All dimensions shown are in inches. A dimension with a two-digit decimal has a tolerance of ± 0.03 in. (± 0.08 cm) and a three-digit decimal has a tolerance of $+0.005$ in. ($+0.013$ cm). All angles have a tolerance of $+1$ degree.</p> <p>2. Fabricate from steel structural angle, NSN 9520-00-277-5987.</p> <p>3. Break all sharp edges and deburr all holes.</p> <p style="text-align: center;">WARNING</p> <p style="text-align: center;">Use only type 1.1.1 trichloroethane solvent. Never use solvent unless ventilation is provided. Breathing solvent vapors will cause unconsciousness, prolonged skin contact with solvent will cause irritation, and taking solvent internally will cause vomiting.</p> <p>4. Degrease with type 1.1.1 trichloroethane (item 20, app D).</p> <p>5. Apply one coat primer coating (item 15, app D), followed by two coats semigloss OD enamel (item 8, app D).</p> <p>6. Mark with black stencil marking ink (item 13, app D) as follows.</p> <p style="text-align: center;">P/N 12011664</p>
0.12	0.30	
0.312	0.792	
0.406	1.031	
46.94 \pm 0.06	119.23 \pm 0.15	
21.00 \pm 0.06	53.34 \pm 0.15	
49.00 \pm 0.06	124.46 \pm 0.15	
1.00	2.54	
0.37	0.94	
1.75	4.45	
0.85	2.16	
0.188	0.478	

E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)

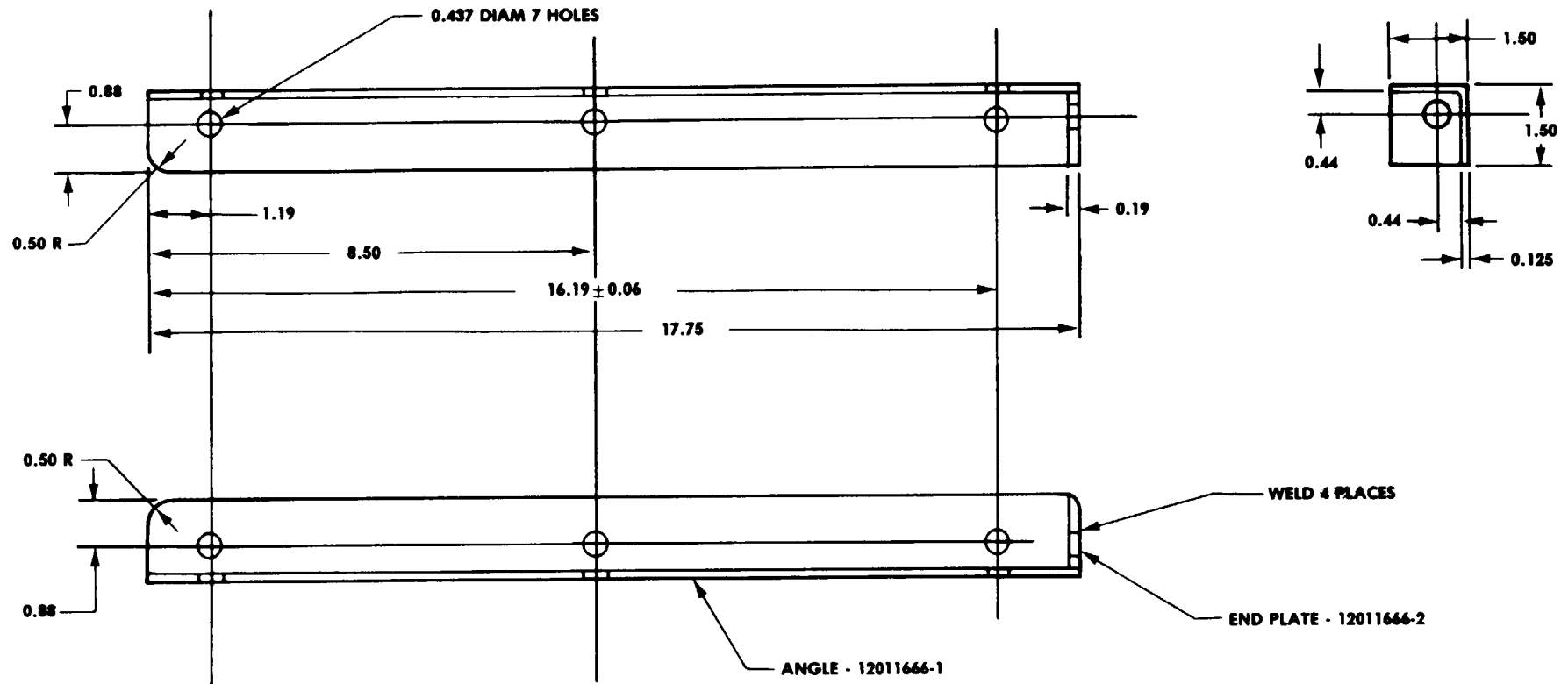


FIGURE 12. TABLE BRACE SUPPORT (PART NO. 12011666).

CONVERSION TABLE		NOTES
IN.	CM	
0.88	2.24	<p>1. All dimensions shown are in inches. A dimension with a two-digit decimal has a tolerance of ± 0.03 in. (± 0.08 cm) and a three-digit decimal has a tolerance of ± 0.010 in. (± 0.03 cm).</p> <p>2. Fabricate from steel structural angle, NSN 9520-00-277-4902 and steel metal strip, NSN 9515-00-204-3991.</p> <p>3. Break all sharp edges and deburr all holes.</p> <p style="text-align: center;">WARNING</p> <p style="text-align: center;">Use only type 1.1.1 trichloroethane solvent. Never use solvent unless ventilation is provided. Breathing solvent vapors will cause unconsciousness, prolonged skin contact with solvent will cause irritation, and taking solvent internally will cause vomiting.</p> <p>4. Degrease with type 1.1.1 trichloroethane (item 20, app D).</p> <p>5. Apply one coat primer coating (item 15, app D), followed by two coats semigloss OD enamel (item 8, app D).</p> <p>6. Mark with black stencil marking ink (item 13, app D) as follows.</p> <p style="text-align: center;">P/N 12011666</p>
0.50	1.27	
1.19	3.02	
8.50	21.59	
0.437	1.11	
16.19 \pm 0.06	41.12 \pm 0.15	
17.75	45.09	
0.19	0.48	
0.125 0.32		
1.50 3.81		
0.44	1.12	

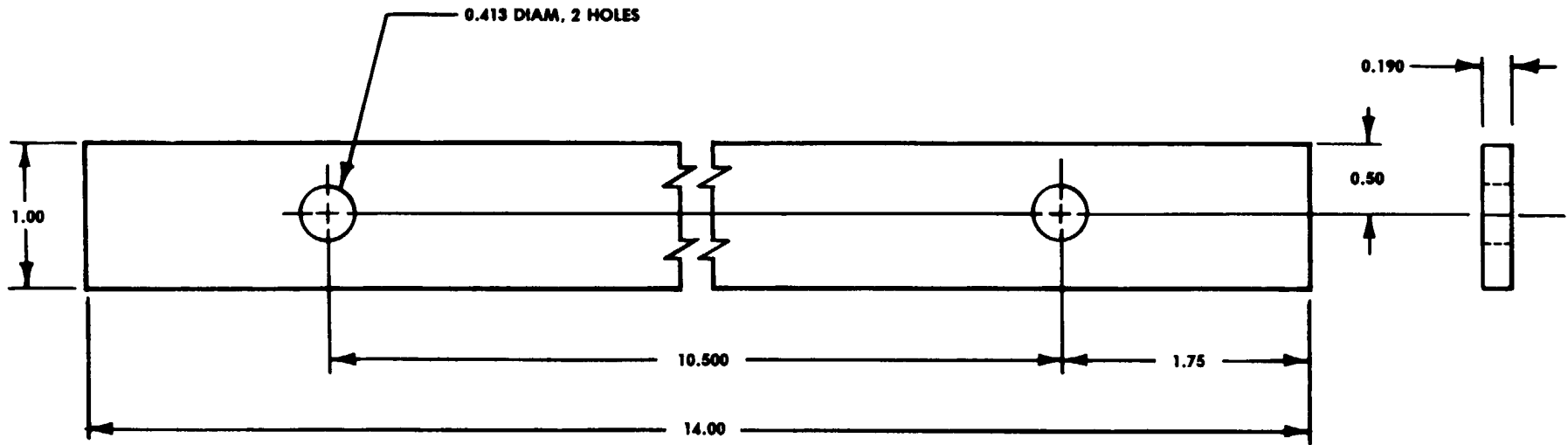


FIGURE 13. REINFORCING STRIP (PART NO. 12011675).

CONVERSION TABLE		NOTES
IN.	CM	
1.00	2.54	<p>1 All dimensions shown are in inches. A dimension with a two-digit decimal has a tolerance of ± 0.06 (± 0.15 cm) and a three-digit decimal has a tolerance of ± 0.010 (± 0.025 cm).</p> <p>2. Fabricate from steel metal strip, NSN 9515-00-066-1015.</p> <p>3. Break all sharp edges and deburr all holes.</p> <p style="text-align: center;">WARNING</p> <p style="text-align: center;">Use only type 1.1.1 trichloroethane solvent. Never use solvent unless ventilation is provided. Breathing solvent vapors will cause unconsciousness, prolonged skin contact with solvent will cause irritation, and taking solvent internally will cause vomiting.</p> <p>4. Degrease with trichloroethane, type 1.1.1 (item 20, app D).</p> <p>5. Apply one coat primer coating (item 15, app D), followed by two coats semigloss OD enamel (item 8, app D).</p> <p>6. Mark part number with black stencil marking ink (item 13, app D).</p>
0.413	1.049	
10.500	26.67	
14.00	35.56	
1.75	4.45	
0.190 0.483		
0.50	1.27	

E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)

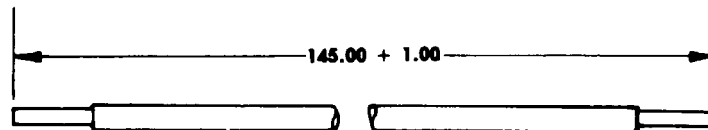


FIGURE 14. WIRE (PART NO. MIL-W-16878/4).

CONVERSION TABLE		NOTES
IN.	CM	
145.00+1.00	368.30+2.54	1. All dimensions are in inches. 2. Fabricate from red electrical wire, NSN 6145-00-027-5955.

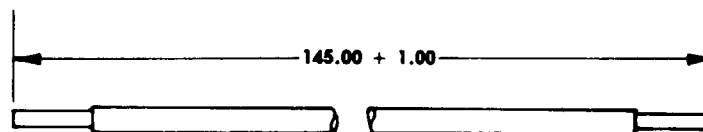


FIGURE 15. WIRE (PART NO. MIL-W-16878/4).

CONVERSION TABLE		NOTES
IN.	CM	
145.00+1.00	368.30+2.54	1. All dimensions are in inches. 2. Fabricate from black electrical wire, NSN 6145-00-894-1000.

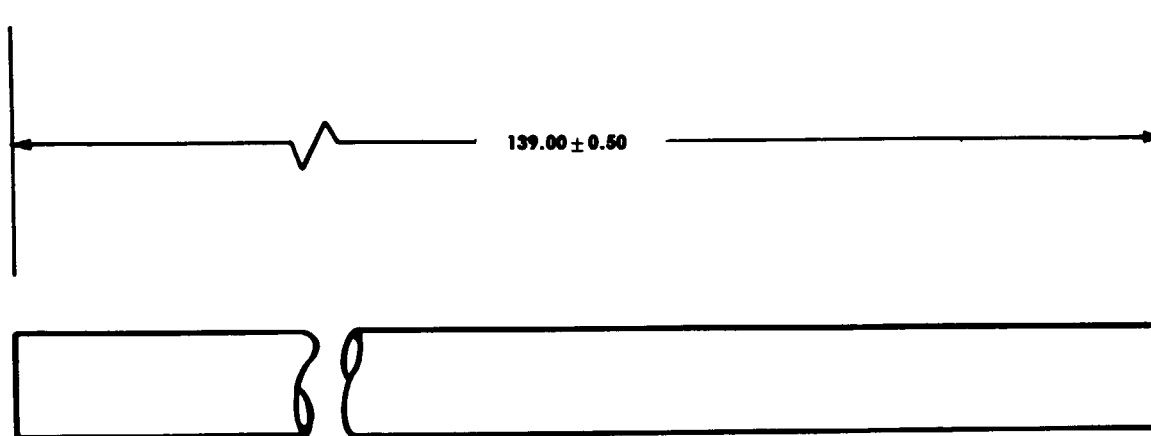


FIGURE 16. INSULATION (PART NO. MIL-I-23053/10).

CONVERSION TABLE		NOTES
IN.	CM	
139.00±0.50	353.06±1.27	1. All dimensions are in inches. 2. Fabricate from insulation sleeving, NSN 5970-00-08-3295.

E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)

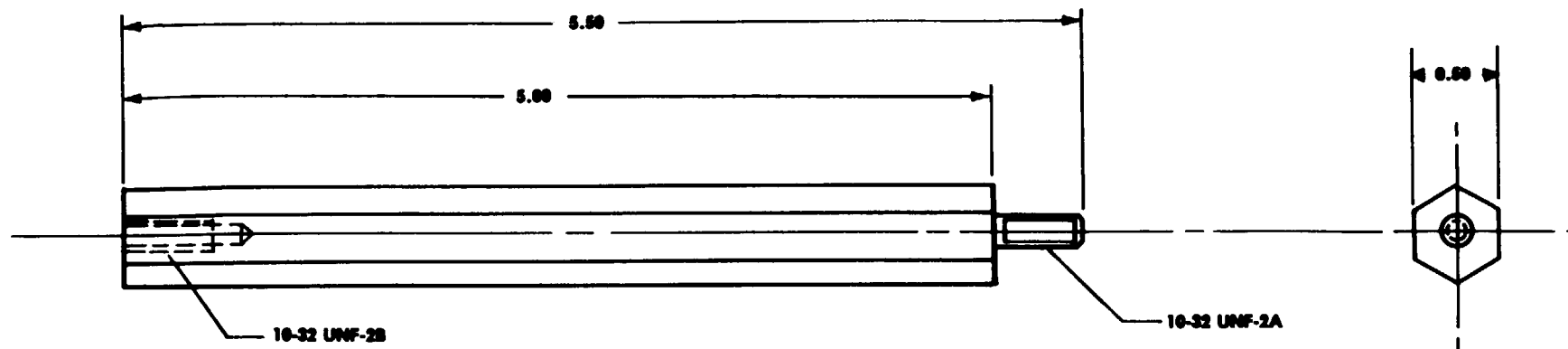


FIGURE 17. SPACER (PART NO. 7551732).

CONVERSION TABLE		NOTES
IN.	CM	
5.50	13.97	<p>1. All dimensions shown are in inches and have a tolerance of ± 0.03 in. (± 0.08 cm).</p> <p>2. Fabricate from steel metal bar, NSN 9510-00-541-9655.</p> <p>3. Deburr edges.</p> <p style="text-align: center;">WARNING</p> <p style="text-align: center;">Use only type 1.1.1 trichloroethane solvent. Never use solvent unless ventilation is provided. Breathing solvent vapors will cause unconsciousness, prolonged skin contact with solvent will cause irritation, and taking solvent internally will cause vomiting.</p> <p>4. Degrease with type 1.1.1 trichloroethane (item 20, app D).</p> <p>5. Apply one coat primer coating (item 15, app D), followed by two coats black lacquer (item 10, app D).</p> <p>6. Mark with black stencil marking ink (item 13, app D) as follows.</p> <p style="text-align: center;">P/N 7551732</p>
5.00	12.70	
0.50 1.27		

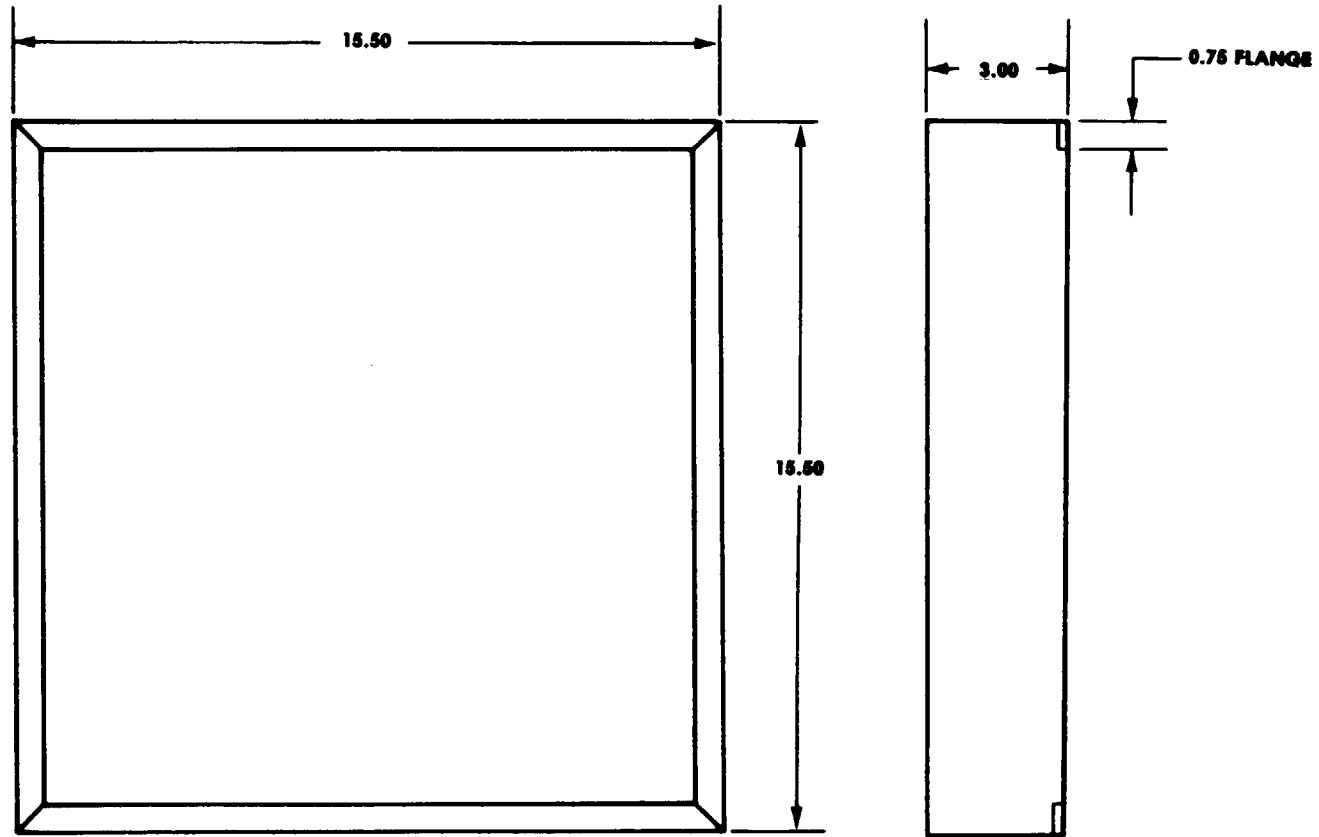
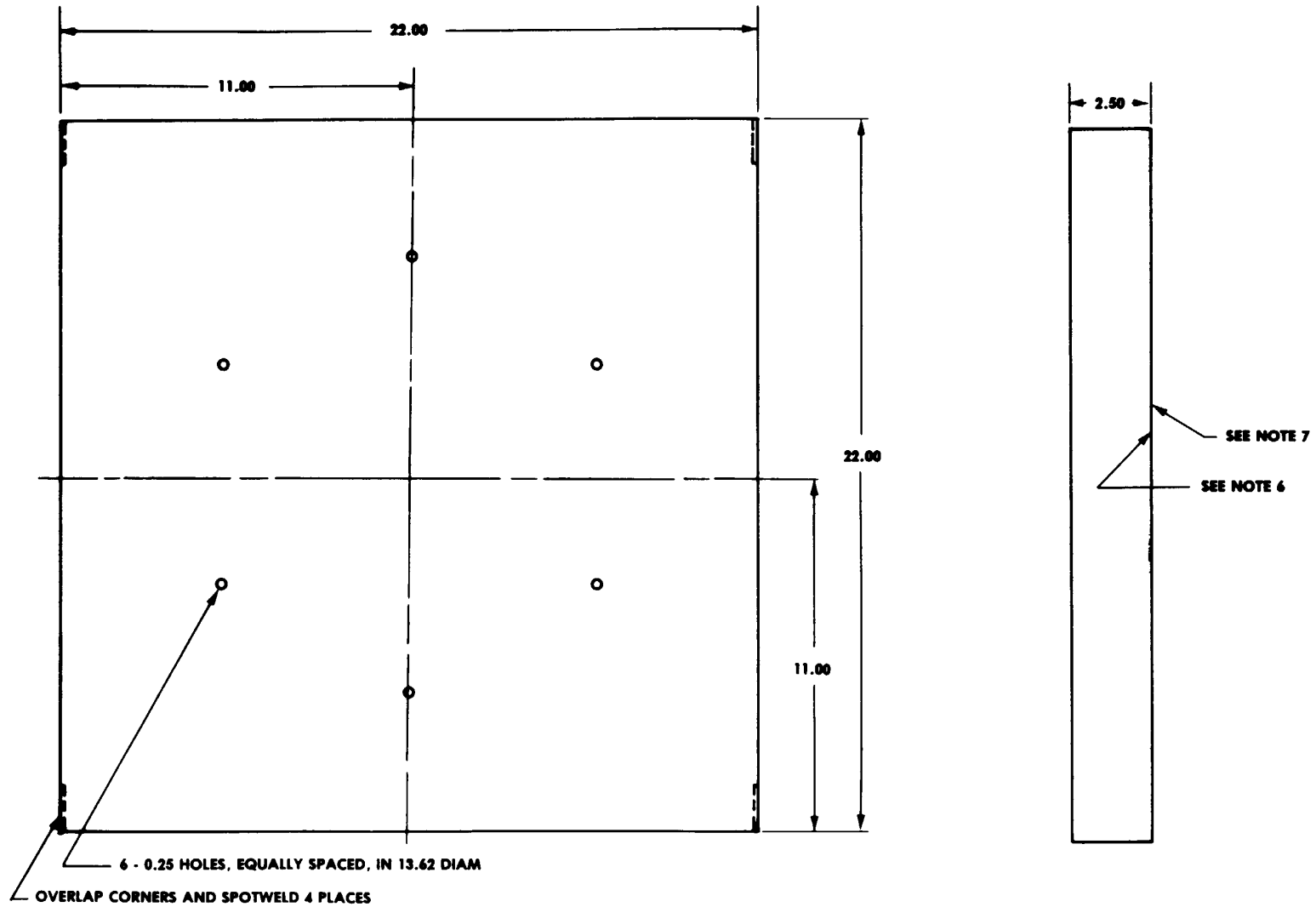


FIGURE 18. BAFFLE (PART NO. 7551733-3).

CONVERSION TABLE		NOTES
IN.	CM	
15.50 3.00 0.75 1.91	39.37 7.62	<p>1. All dimensions shown are in inches and have a tolerance of +0.03 in. (± 0.08 cm).</p> <p>2. Fabricate from steel metal plate, NSN 9515-00-153-3217.</p> <p>3. Break all sharp edges.</p> <p style="text-align: center;">WARNING</p> <p style="text-align: center;">Use only type 1.1.1 trichloroethane solvent. Never use solvent unless ventilation is provided. Breathing solvent vapors will cause unconsciousness, prolonged skin contact with solvent will cause irritation, and taking solvent internally will cause vomiting.</p> <p>4. Degrease with type 1.1.1 trichloroethane (item 20, app D).</p> <p>5. Apply one coat primer coating (item 15, app D), followed by two coats black lacquer (item 10, app D).</p>



E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)



OUTER COVER (PART NO. 7551733-1).

FIGURE 19.

CONVERSION TABLE		NOTES
IN.	CM	
22.00	55.88	<p>1. All dimensions shown are in inches and have a tolerance of ± 0.03 in. (± 0.08 cm).</p> <p>2. Fabricate from steel metal plate, NSN 9515-00-153-3217.</p> <p>3. Break all sharp edges.</p> <p style="text-align: center;">WARNING</p> <p style="text-align: center;">Use only type 1.1.1 trichloroethane solvent. Never use solvent unless ventilation is provided. Breathing solvent vapors will cause unconsciousness, prolonged skin contact with solvent will cause irritation, and taking solvent internally will cause vomiting.</p> <p>4. Degrease with type 1.1.1 trichloroethane (item 20, app D).</p> <p>5. Apply one coat primer coating (item 15, app D).</p> <p>6. Apply two coats black lacquer (item 10, app D) to all interior surfaces.</p> <p>7. Apply two coats lusterless green enamel (item 7, app D) to all exterior surfaces.</p>
2.50	6.35	
0.25	0.64	
13.62	34.59	
11.00	27.94	

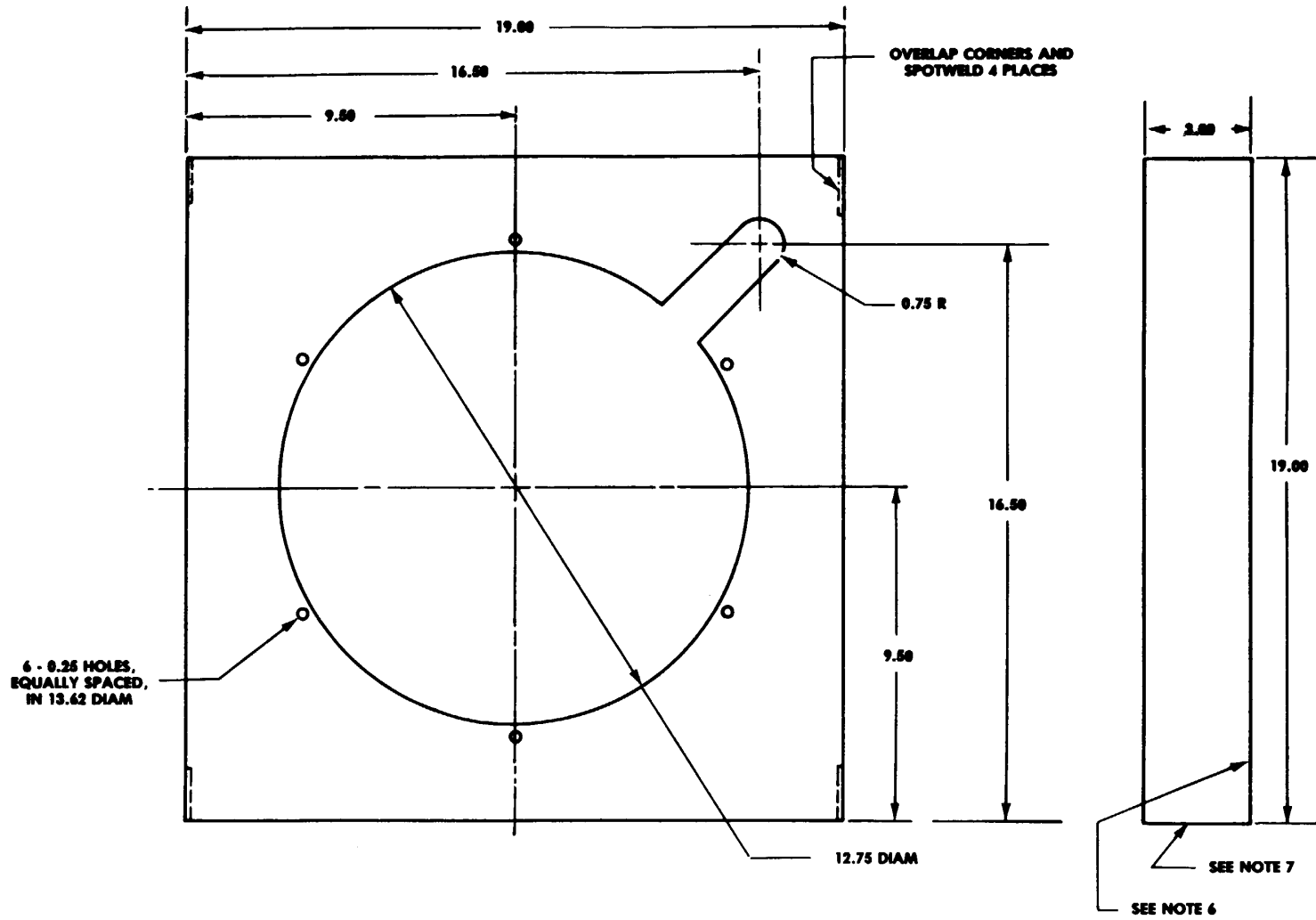


FIGURE 20. INNER COVER (PART NO. 7551733-2).

CONVERSION TABLE		NOTES
IN.	CM	
19.00	48.26	<p>1. All dimensions shown are in inches and have a tolerance of +0.03 in. (+0.08 cm).</p> <p>2. Fabricate from steel metal plate, NSN 9515-00-153-3217.</p> <p>3. Break all sharp edges.</p> <p style="text-align: center;">WARNING</p> <p style="text-align: center;">Use only type 1.1.1 trichloroethane solvent. Never use solvent unless ventilation is provided. Breathing solvent vapors will cause unconsciousness, prolonged skin contact with solvent will cause irritation, and taking solvent internally will cause vomiting.</p> <p>4. Degrease with type 1.1.1 trichloroethane (item 20, app D).</p> <p>5. Apply one coat primer coating (item 15, app D).</p> <p>6. Apply two coats black lacquer (item 10, app D) to all interior surfaces.</p> <p>7. Apply two coats lusterless green enamel (item 7, app D) to all exterior surfaces.</p>
16.50	41.91	
0.75	1.91	
12.75	32.39	
3.00	7.62	
9.50	24.13	
0.25	0.64	
13.62	34.59	

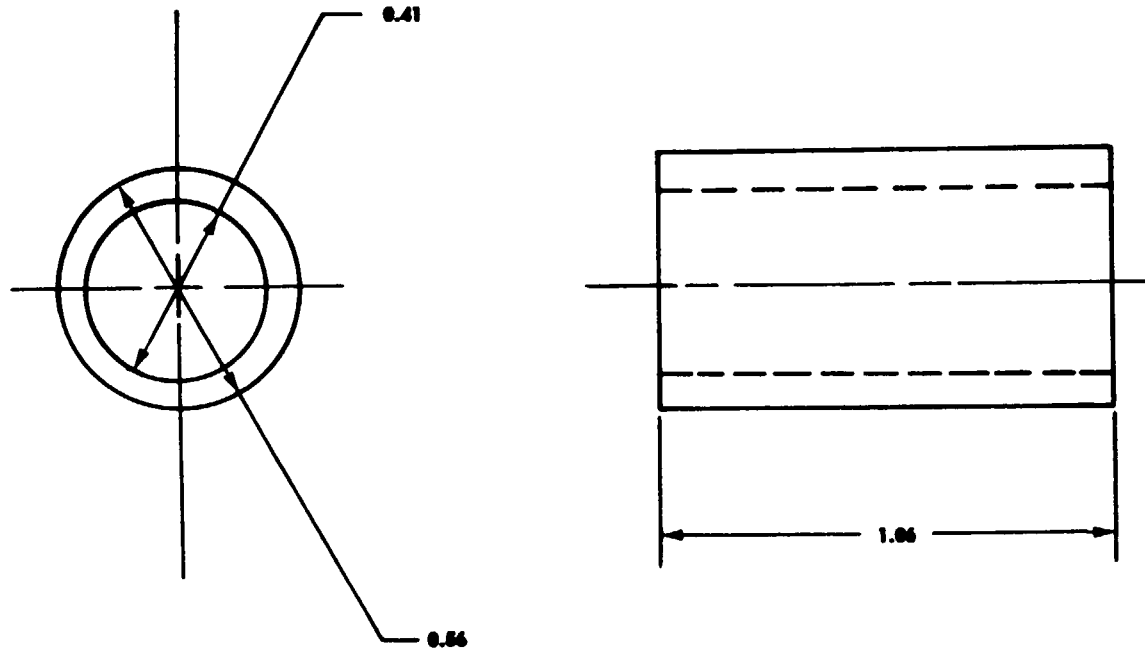


FIGURE 21. SPACER (PART NO. 12011660)

CONVERSION TABLE		NOTES
IN.	CM	
0.41	1.04	1. All dimensions shown are in inches and have a tolerance of ± 0.03 (+0.08 cm). 2. Fabricate from steel tube, NSN 4710-00-277-9874. 3. Mark with black stencil marking ink (item 13, app D), as follows. P/N 12011660 4. Break all sharp edges and deburr all holes.
0.56	1.42	
1.06	2.69	



E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)i

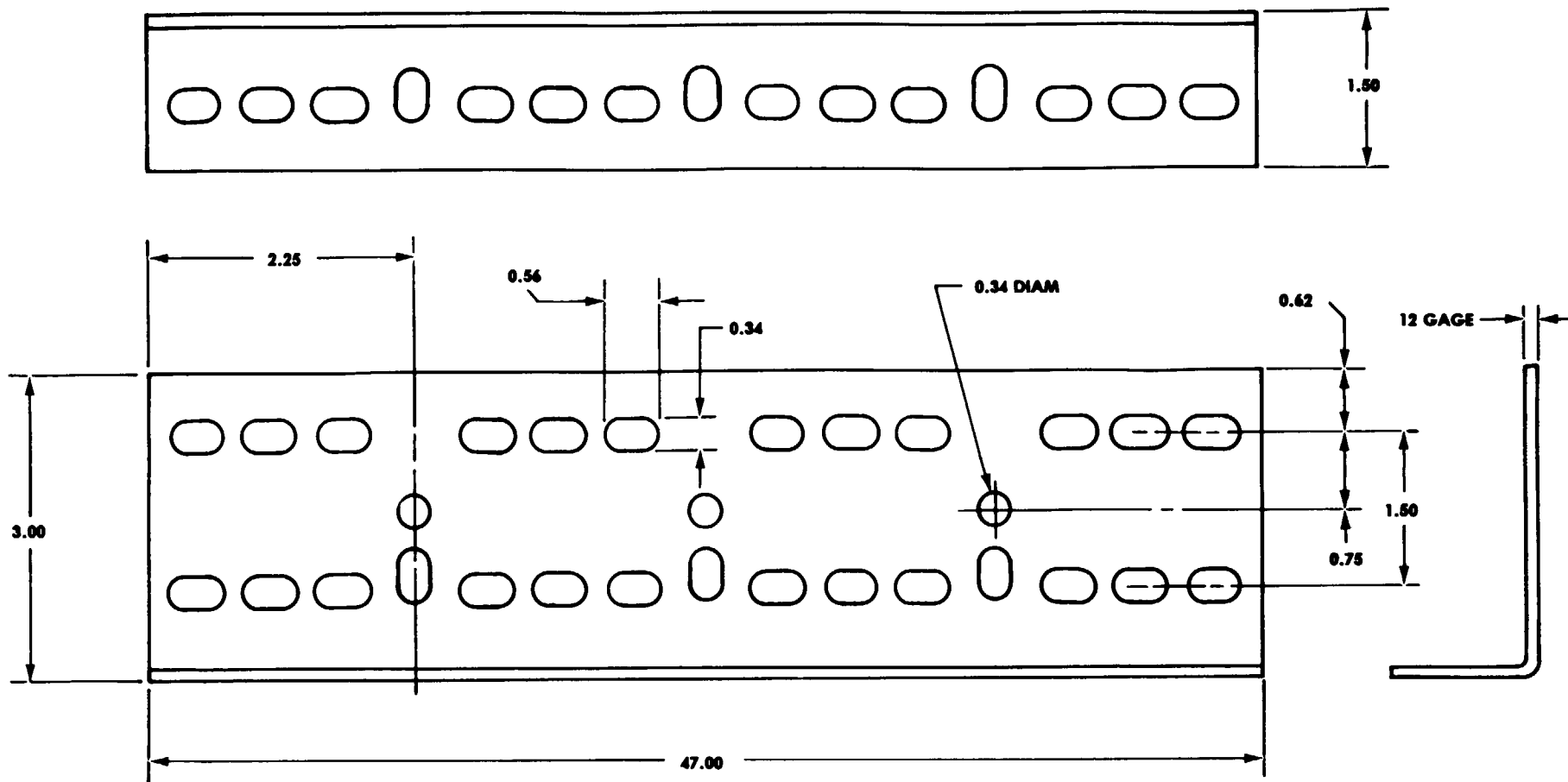


FIGURE 22. SHELVING ANGLE (PART NO. 7551743-1 (LEFT-HAND) AND PART NO. 7551743-2 (RIGHT-HAND))

CONVERSION TABLE		NOTES
IN.	CM	
1.50	3.81	<p>1. All dimensions shown are in inches and have a tolerance of +0.13 (+0.33 cm). Left-hand shelving angle is illustrated. Right-hand is opposite.</p> <p>2. Fabricate from storage rack angle, NSN 7125-00-197-9050.</p> <p>3. Break all edges and deburr all holes.</p> <p style="text-align: center;">WARNING</p> <p style="text-align: center;">Use only type 1.1.1 trichloroethane solvent. Never use solvent unless ventilation is provided. Breathing solvent vapors will cause unconsciousness, prolonged skin contact with solvent will cause irritation, and taking solvent internally will cause vomiting.</p> <p>4. Degrease with type 1.1.1 trichloroethane (item 20, app D).</p> <p>5. Apply one coat primer coating (item 15, app D), followed by two coats white lacquer (item 11, app D).</p> <p>6. Mark with black stencil marking ink (item 13, app D) as follows.</p> <p style="text-align: center;">P/N 7551743-1 or P/N 7551743-2</p>
0.62	1.57	
3.00	7.62	
2.25	5.72	
0.56	1.42	
0.34	0.86	
47.00	119.38	
0.75	1.91	



E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)

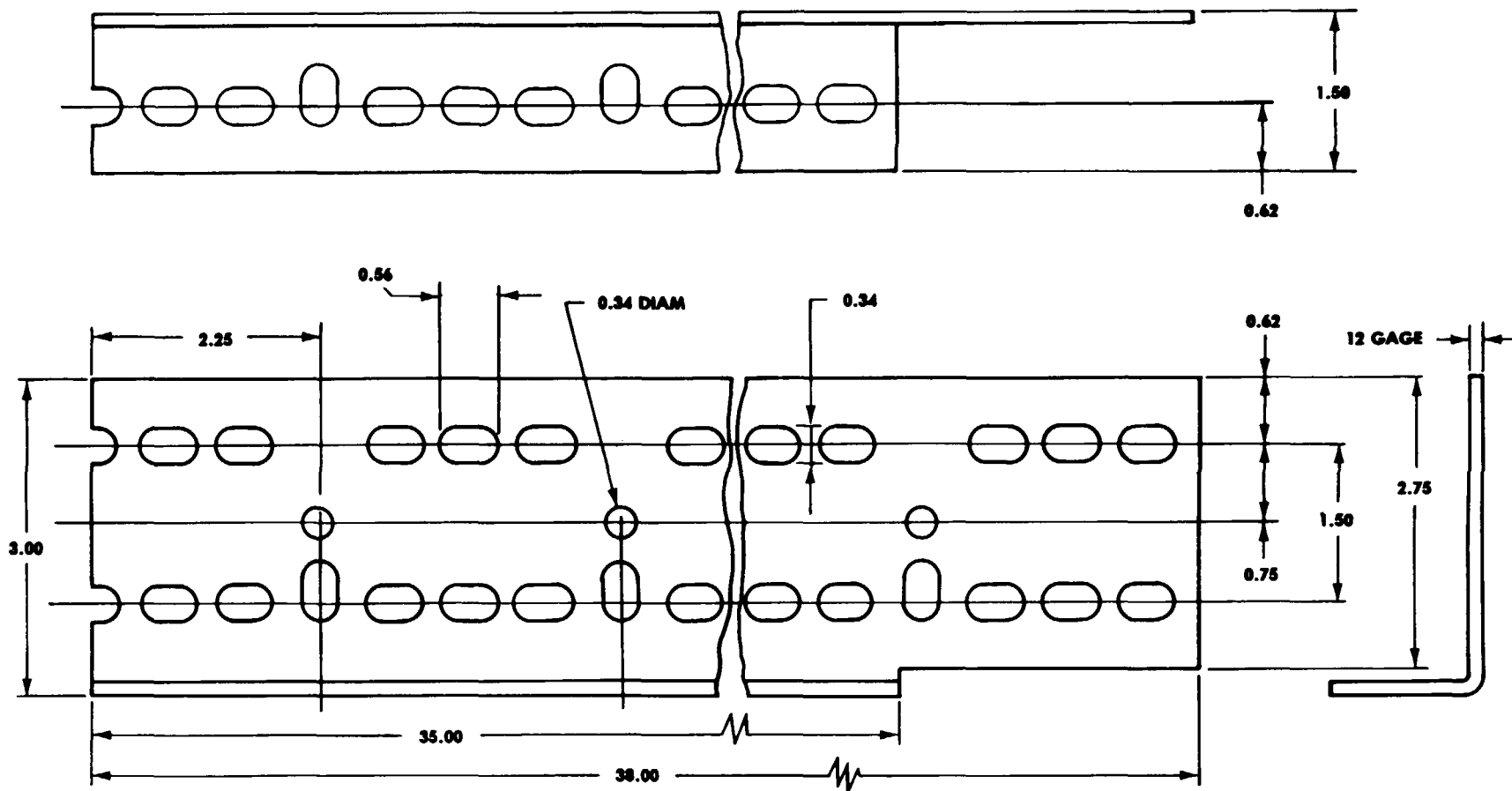


FIGURE 23. SHELVING ANGLE (PART NO. 7551744-1 (RIGHT-HAND) AND PART NO. 7551744-2 (LEFT-HAND))

CONVERSION TABLE		NOTES
IN.	CM	
3.00	7.62	1. All dimensions shown are in inches and have a tolerance of +0.06 (+0.15 cm). Right-hand shelving angle is illustrated. Left-hand is opposite. 2. Fabricate from storage rack angle, NSN 7125-00-197-9050. 3. Break all sharp edges and deburr all holes. <p style="text-align: center;">WARNING</p> <p style="text-align: center;">Use only type 1.1.1 trichloroethane solvent. Never use solvent unless ventilation is provided. Breathing solvent vapors will cause unconsciousness, prolonged skin contact with solvent will cause irritation, and taking solvent internally will cause vomiting.</p> 4. Degrease with type 1.1.1 trichloroethane (item 20, app D). 5. Apply one coat primer coating (item 15, app D), followed by two coats white lacquer (item 11, app D). 6. Mark with black stencil marking ink (item 13, app D) as follows. <p style="text-align: center;">P/N 7551744-1 or P/N 7551744-2</p>
2.25	5.72	
0.56	1.42	
0.34	0.86	
1.50	3.81	
0.62	1.57	
0.75	1.91	
2.75	6.99	
38.00	96.52	
35.00	88.90	



E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)

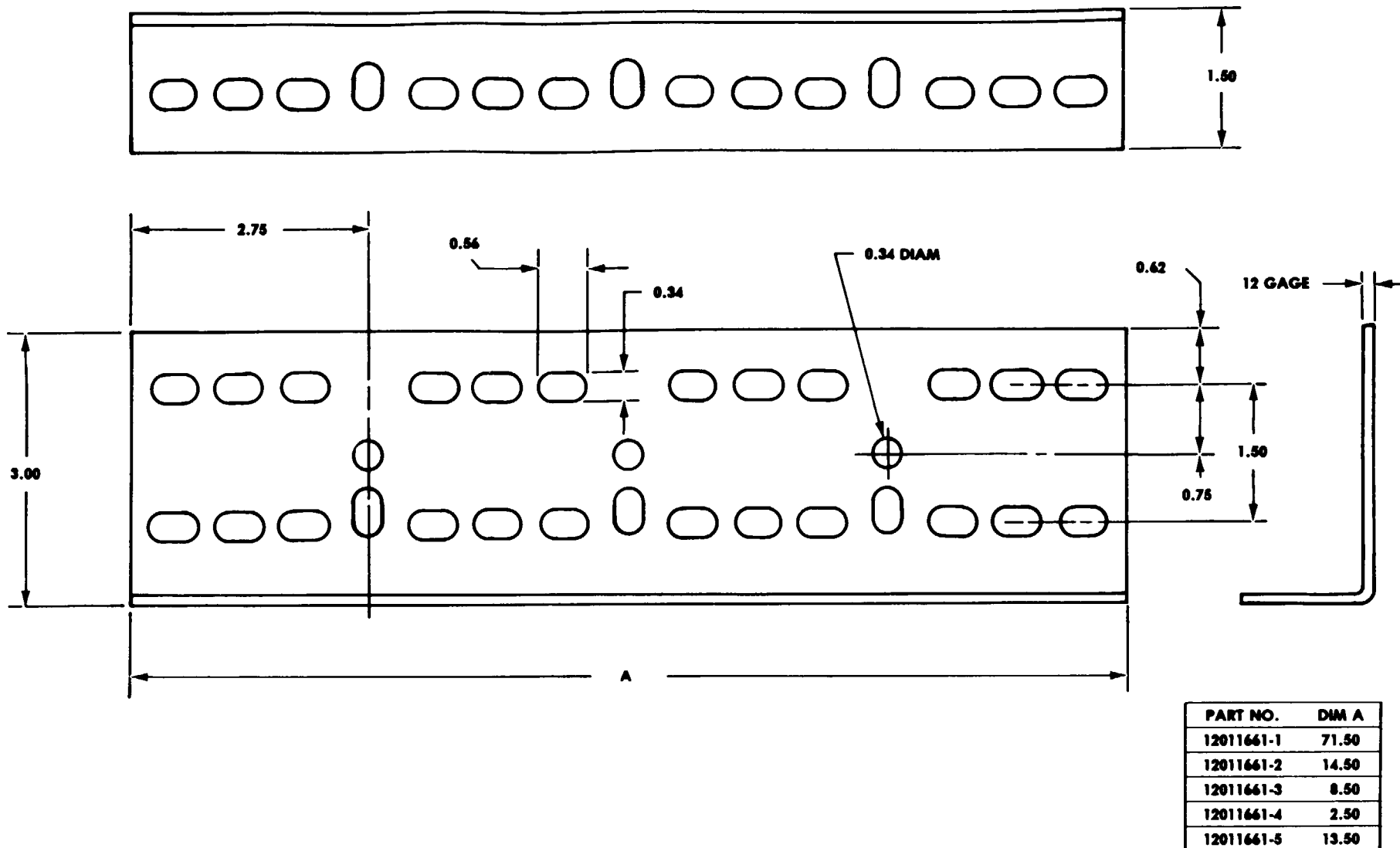


FIGURE 24. SHELVING ANGLE (PART NO. 12011661)

CONVERSION TABLE		NOTES
IN.	CM	
71.50	181.61	<p>1. All dimensions shown are in inches and have a tolerance of +0.06 (+0.15 cm).</p> <p>2. Fabricate from storage rack angle, NSN 7125-00-197-9050.</p> <p>3. Break all sharp edges and deburr all holes.</p> <p style="text-align: center;">WARNING</p> <p style="text-align: center;">Use only type 1.1.1 trichloroethane solvent. Never use solvent unless ventilation is provided. Breathing solvent vapors will cause unconsciousness, prolonged skin contact with solvent will cause irritation, and taking solvent internally will cause vomiting.</p> <p>4. Degrease with type 1.1.1 trichloroethane (item 20, app D).</p> <p>5. Apply one coat primer coating (item 15, app D), followed by two coats white lacquer (item 11, app D).</p> <p>6. Mark part number with black stencil marking ink (item 13, app D) as follows.</p> <p style="text-align: center;">P/N 12011661</p>
14.50	36.83	
8.50	21.59	
2.50	6.35	
13.50	34.29	
2.75	6.99	
0.56	1.42	
0.34	0.86	
0.62	1.57	
0.75	1.91	
1.50	3.81	
3.00	7.62	

E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont) I

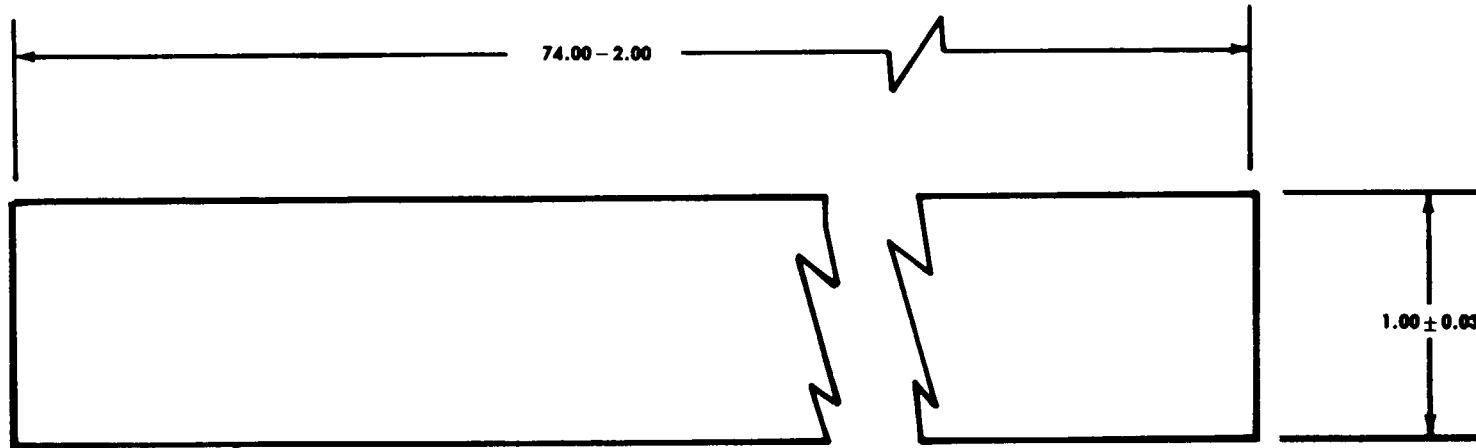


FIGURE 25. WEBBING STRAP (PART NO. MIL-W-4088)

CONVERSION TABLE		NOTES
IN.	CM	
74.00	187.96	1. All dimensions shown are in inches. 2. Fabricate from nylon webbing, NSN 8305-00-267-3009.
1.00	2.54	
2.00	5.08	
0.03	0.08	



E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)

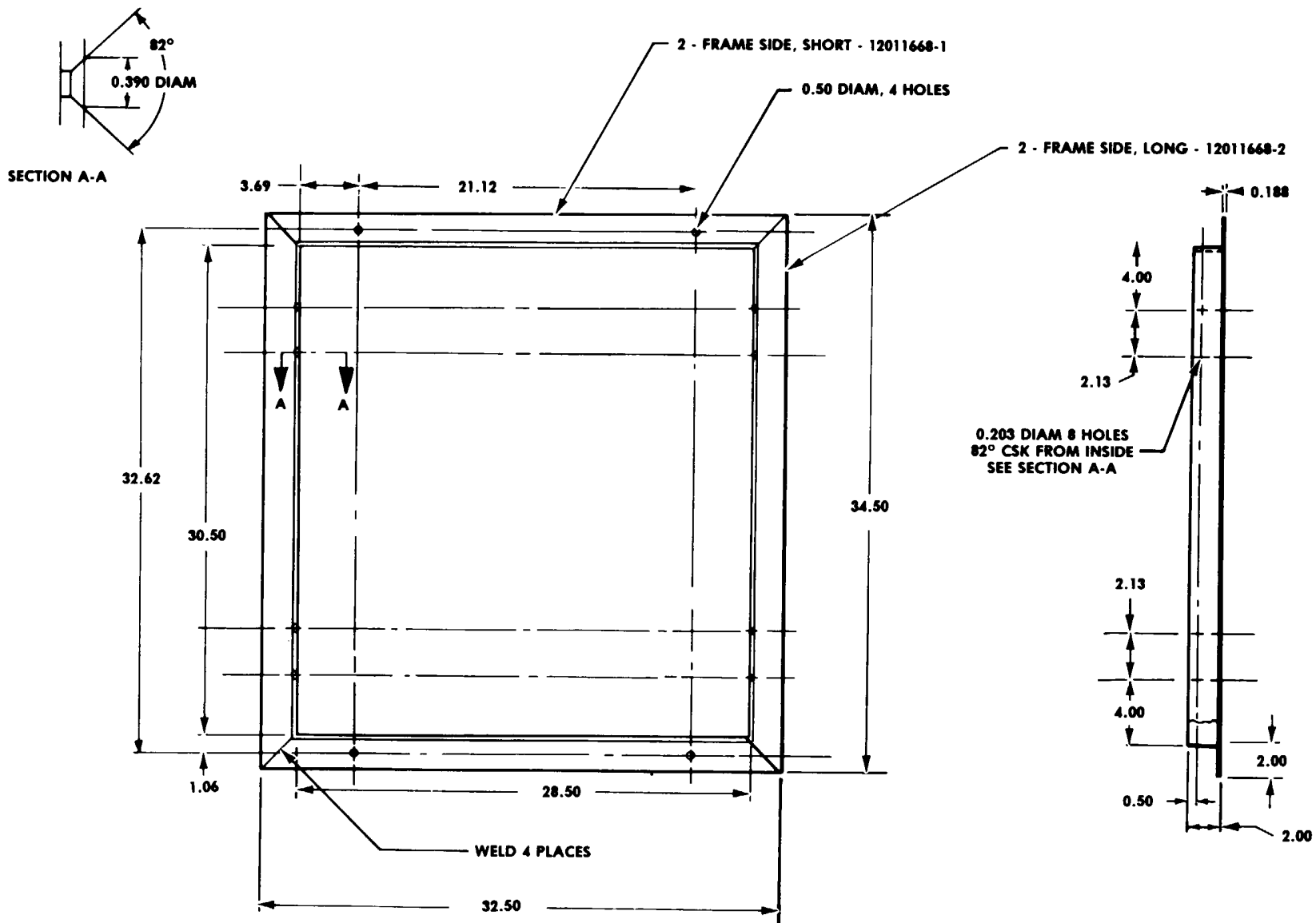


FIGURE 26. ECU STOWING FRAME (PART NO. 12011668)

CONVERSION TABLE		NOTES	
IN.	CM		
3.69	9.37	1. All dimensions shown are in inches. A dimension with a two-digit decimal has a tolerance of ± 0.02 in. (± 0.05 cm) and a three-digit decimal has a tolerance of ± 0.005 in. (± 0.013 cm).	
21.12	53.64		
32.62	82.85		
30.50	77.47		
1.06	2.69	2. Fabricate from steel structural angle, NSN 9520-00-277-4912.	
28.50	72.39		
32.50	82.55	3. Break all sharp edges and deburr all holes. WARNING Use only type 1.1.1 trichloroethane solvent. Never use solvent unless ventilation is provided. Breathing solvent vapors will cause unconsciousness, prolonged skin contact with solvent will cause irritation, and taking solvent internally will cause vomiting.	
34.50	87.63		
0.50	1.27		
0.203	0.52		
4.00	10.16		
2.13	5.41		
2.00	5.08		
0.188	0.48		
0.390	0.99		
			4. Degrease with type 1.1.1 trichloroethane (item 20, app D).
			5. Apply one coat primer coating (item 15, app D), followed by two coats semigloss OD enamel (item 8, app D).



E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)

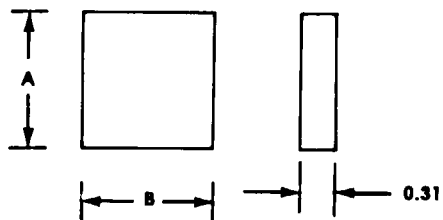


FIGURE 27. PAD (PART NO. 7551434)

CONVERSION TABLE		NOTES									
IN.	CM										
0.75	1.91	1. All dimensions shown are in inches and have a tolerance of ± 0.02 in. (± 0.05 cm). 2. Fabricate from rubber sheet, NSN 9320-00-527-6861.									
0.31	0.79										
19.00	48.26										
1.25	3.18										
		<table border="1"> <thead> <tr> <th>PART NO.</th> <th>DIM A</th> <th>DIM B</th> </tr> </thead> <tbody> <tr> <td>7551434-1</td> <td>0.75</td> <td>0.75</td> </tr> <tr> <td>7551434-2</td> <td>19.00</td> <td>1.25</td> </tr> </tbody> </table>	PART NO.	DIM A	DIM B	7551434-1	0.75	0.75	7551434-2	19.00	1.25
PART NO.	DIM A	DIM B									
7551434-1	0.75	0.75									
7551434-2	19.00	1.25									

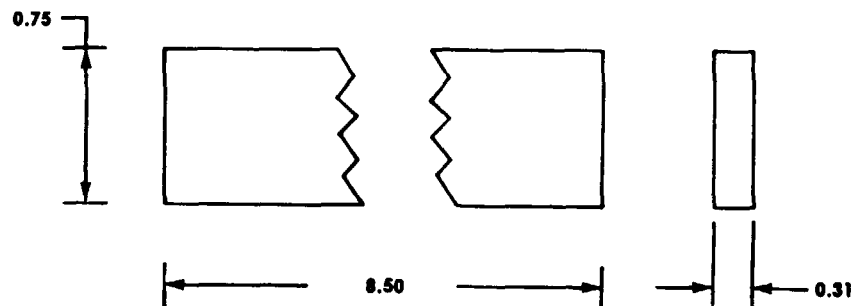


FIGURE 28. PAD (PART NO. 7551435-2)

CONVERSION TABLE		NOTES
IN.	CM	
0.75	1.91	1. All dimensions shown are in inches and have a tolerance of ± 0.03 in. (± 0.08 cm). 2. Fabricate from rubber sheet, NSN 9320-00-527-6861.
8.50	21.59	
0.31	0.79	

E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)

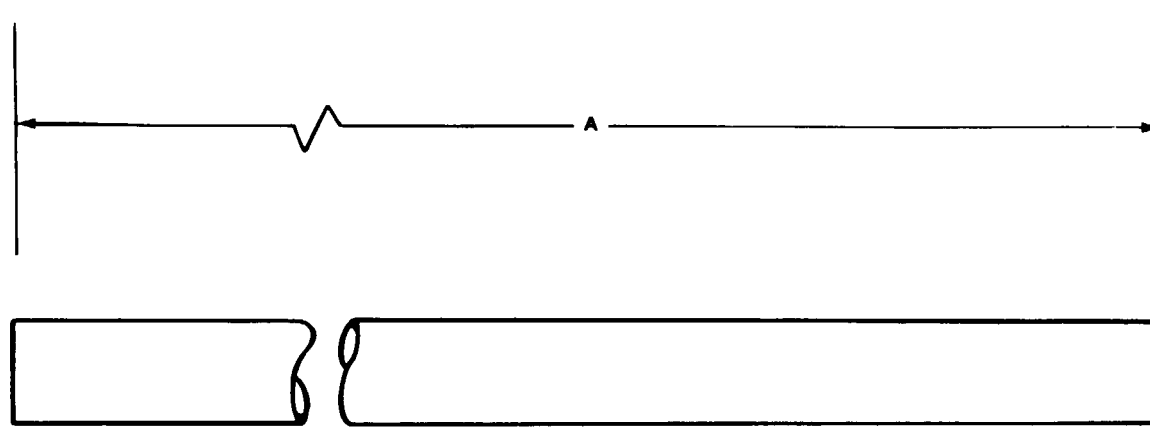


FIGURE 29. CABLE (PART NO. TYPE C00-04 HDF 4/6-4/12R 1090)

CONVERSION TABLE		NOTES
IN.	CM	
19.00 1200.00	48.26 3048.00	<p>1. All dimensions are in inches and have a tolerance of ± 0.06 in. (+0.15 cm).</p> <p>2. Fabricate from electrical power cable, NSN 6145-00-191-3606.</p> <p>USED ON DIM A</p> <p>P/N 12011687 19.00 P/N 72289-100 1200.00</p>

E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)

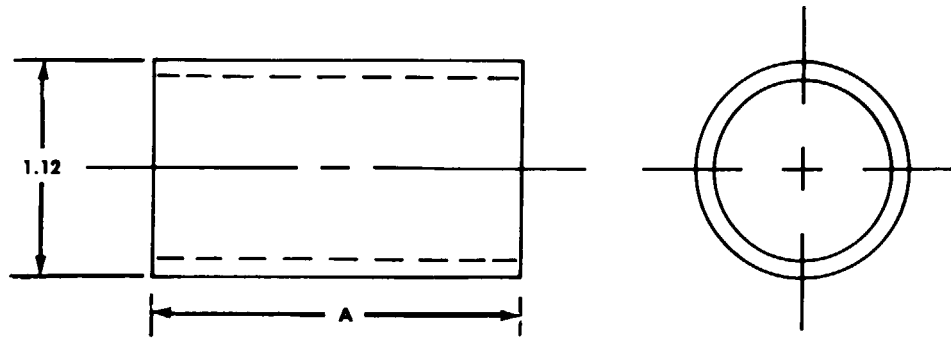


FIGURE 30. BAND (PART NO. MIL-I-23053/5)

CONVERSION TABLE		NOTES						
IN.	CM							
3.50	8.89	1. All dimensions shown are in inches and have a tolerance of +0.06 in. (+0.15 cm). 2. Used on cable adapter assembly, P/N 12011687 and cable assembly, P/N 72289-100. 3. Fabricate from insulation sleeving, NSN 5970-00-810-6118. 4. For use on cable adapter assembly, mark letters approximately 0.312-in. (0.792-cm) high with black stencil marking ink (item 13, app D) as follows. <div style="text-align: center;"> CABLE ADAPTER ASSY PART NO. 12011687 </div> 5. For use on cable assembly, mark letters approximately 0.312-in. (0.792-cm) high with black stencil marking ink (item 13, app D) as follows. <div style="text-align: center;"> CABLE ASSEMBLY (P/N 72289-100) 120/208V 3 PHASE 4 WIRE GROUNDING 60 HZ 60 AMP <table style="margin-left: auto; margin-right: auto;"> <tr> <td>USED ON</td> <td>DIM A</td> </tr> <tr> <td>P/N 12011687</td> <td>3.50</td> </tr> <tr> <td>P/N 72289-100</td> <td>3.00</td> </tr> </table> </div>	USED ON	DIM A	P/N 12011687	3.50	P/N 72289-100	3.00
USED ON	DIM A							
P/N 12011687	3.50							
P/N 72289-100	3.00							
3.00	7.62							
1.12	2.84							



E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)

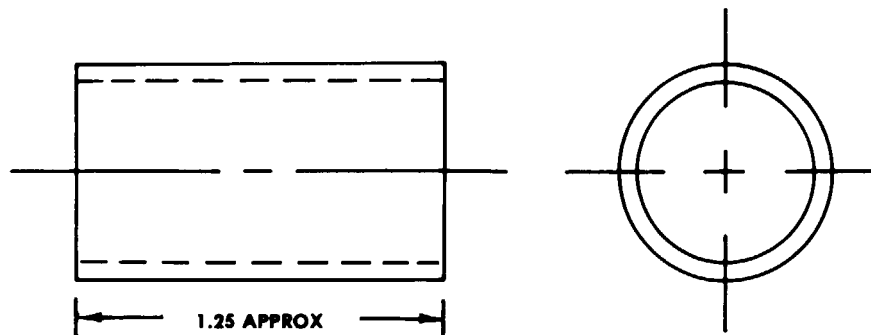


FIGURE 31. INSULATION (PART NO. MIL-I-23053/5)

CONVERSION TABLE		NOTES
IN.	CM	
1.25	3.18	1. Dimension shown is in inches and has a tolerance of ± 0.06 in. (± 0.15 cm). 2. Fabricate from insulation sleeving, NSN 5970-00-926-2571.

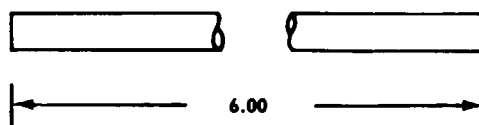


FIGURE 32. WIRE ROPE (PART NO. MIL-W-83420)

CONVERSION TABLE		NOTES
IN.	CM	
6.00	15.24	1. Dimension shown is in inches and has a tolerance of ± 0.50 in. (± 1.27 cm). 2. Fabricate from wire rope, NSN 4010-01-051-8331.

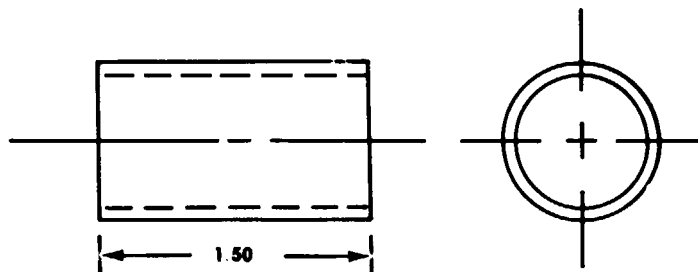


FIGURE 33. BAND MARKER (PART NO. MIL-I-23053/5)

CONVERSION TABLE		NOTES
IN.	CM	
1.50	3.81	1. Dimension shown is in inches and has a tolerance of ± 0.50 in. (± 1.27 cm). 2. Fabricate from insulation sleeving, NSN 5970-01-065-4825. 3. Mark letters approximately 0.10-in. (0.25-cm) high with black stencil marking ink (item 13, app D) as follows.
P/N 12011638		

E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont) I

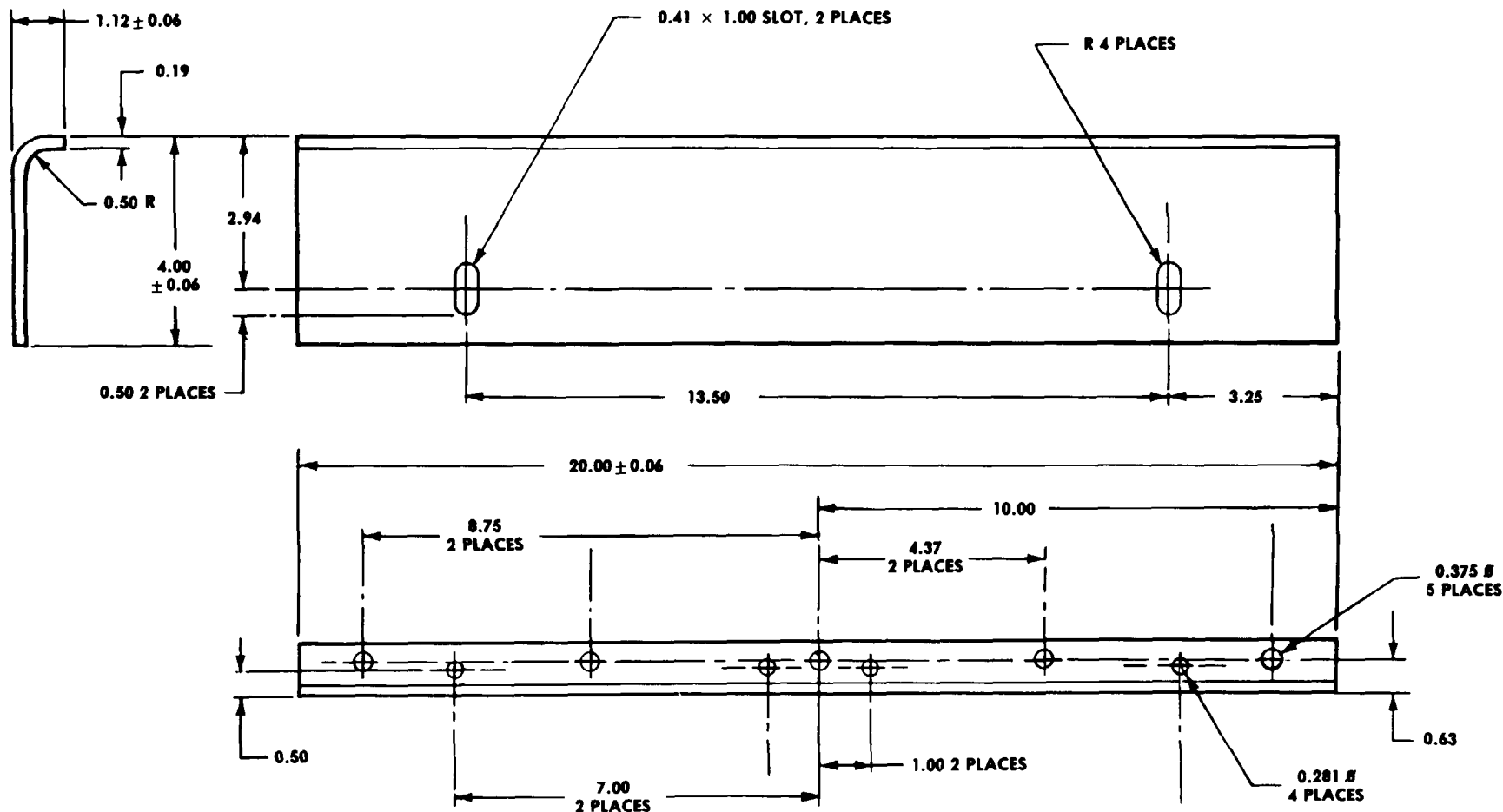


FIGURE 34. POWER SUPPLY BRACE (PART NO. 11020138)

CONVERSION TABLE		NOTES
IN.	CM	
4.00 ± 0.06	10.16 ± 0.15	<p>1. All dimensions shown are in inches. A dimension with a two-digit decimal has a tolerance of +0.01 (+0.025 cm) and a three-digit decimal has a tolerance of +0.005 (+0.012 cm).</p> <p>2. Fabricate from metal sheet, aluminum, NSN 9535-00-232-7599.</p> <p>3. Break all sharp edges and deburr all holes.</p> <p style="text-align: center;">WARNING</p> <p style="text-align: center;">Use only type 1.1.1 trichloroethane solvent. Never use solvent unless ventilation is provided. Breathing solvent vapors will cause unconsciousness, prolonged skin contact with solvent will cause irritation, and taking solvent internally will cause vomiting.</p> <p>4. Degrease with type 1.1.1 trichloroethane (item 20, app D).</p> <p>5. Apply one coat zinc chromate primer coating (item 16, app D), followed by two coats semigloss OD enamel (item 8, app D).</p> <p>6. Mark with black stencil marking ink (item 13, app D) as follows.</p> <p style="text-align: center;">P/N 11020138</p>
0.50	1.27	
0.19	0.48	
0.41	1.04	
1.00	2.54	
0.375	0.953	
20.00 ± 0.06	50.80 ± 0.15	
1.12 ± 0.06	2.84 ± 0.15	
2.94	7.47	
13.50	34.29	
3.25	8.26	
10.00	25.40	
8.75	22.22	
4.37	11.10	
0.63	1.60	
0.281	0.714	
7.00	17.78	



E-3. MANUFACTURED ITEMS INSTRUCTIONS (cont)

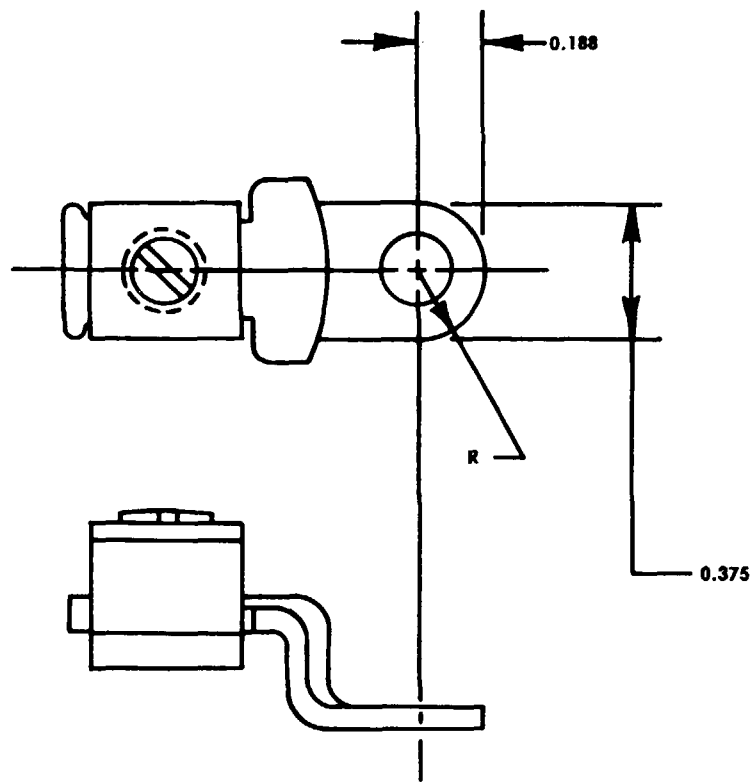


FIGURE 35. LUG TERMINAL (PART NO. 12011689)

CONVERSION TABLE		NOTES
IN.	CM	
0.031	0.078	1. All dimensions shown are in inches and have a tolerance of ± 0.031 in. (± 0.078 cm). 2. Fabricate from lug terminal, NSN 5940-00-549-1984.
0.188	0.478	
0.375	0.953	

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By Order of the Secretary of the Army:

Official:

ROBERT M. JOYCE
Major General, United States Army
The Adjutant General

E. C. MEYER
General, United States Army
Chief of Staff

Distribution:

To be distributed in accordance with DA Form 12-21A, requirements for Shop Set Aviation Maintenance Fire Control Repair Shelter Mounted.

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THE METRIC SYSTEM AND EQUIVALENTS

LINEAR MEASURE

- 1 Centimeter = 10 Millimeters = 0.01 Meters = 0.3937 Inches
- 1 Meter = 100 Centimeters = 1,000 Millimeters = 39.37 Inches
- 1 Kilometer = 1,000 Meters = 0.621 Miles

SQUARE MEASURE

- 1 Sq Centimeter = 100 Sq Millimeters = 0.155 Sq Inches
- 1 Sq Meter = 10,000 Sq Centimeters = 10.76 Sq Feet
- 1 Sq Kilometer = 1,000,000 Sq Meters = 0.386 Sq Miles

CUBIC MEASURE

- 1 Cu Centimeter = 1,000 Cu Millimeters = 0.06 Cu Inches
- 1 Cu Meter = 1,000,000 Cu Centimeters = 35.31 Cu Feet

LIQUID MEASURE

- 1 Milliliter = 0.001 Liters = 0.0338 Fluid Ounces
- 1 Liter = 1,000 Milliliters = 33.82 Fluid Ounces

TEMPERATURE

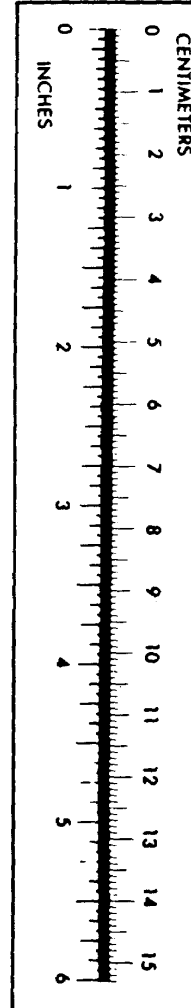
- 5/9 (°F - 32) = °C
- 212° Fahrenheit is equivalent to 100° Celsius
- 90° Fahrenheit is equivalent to 32.2° Celsius
- 32° Fahrenheit is equivalent to 0° Celsius
- 9/5 C° + 32 = F°

WEIGHTS


- 1 Gram = 0.001 Kilograms = 1,000 Milligrams = 0.035 Ounces
- 1 Kilogram = 1,000 Grams = 2.2 lb.
- 1 Metric Ton = 1,000 Kilograms = 1 Megagram = 1.1 Short Tons

APPROXIMATE CONVERSION FACTORS

TO CHANGE	TO	MULTIPLY BY
Inches	Centimeters	2.540
Feet	Meters	0.305
Yards	Meters	0.914
Miles	Kilometers	1.609
Square Inches	Square Centimeters	6.451
Square Feet	Square Meters	0.093
Square Yards	Square Meters	0.836
Square Miles	Square Kilometers	2.590
Acres	Square Hectometers	0.405
Cubic Feet	Cubic Meters	0.028
Cubic Yards	Cubic Meters	0.765
Fluid Ounces	Milliliters	29.573
Pints	Liters	0.473
Quarts	Liters	0.946
Gallons	Liters	3.785
Ounces	Grams	28.349
Pounds	Kilograms	0.454
Short Tons	Metric Tons	0.907
Pound-Feet	Newton-Meters	1.356
Pounds Per Square Inch	Kilopascals	6.895
Miles Per Gallon	Kilometers Per Liter	0.425
Miles Per Hour	Kilometers Per Hour	1.609
TO CHANGE	TO	MULTIPLY BY
Centimeters	Inches	0.394
Meters	Feet	3.280
Meters	Yards	1.094
Kilometers	Miles	0.621
Square Centimeters	Square Inches	0.155
Square Meters	Square Feet	10.764
Square Meters	Square Yards	1.196
Square Kilometers	Square Miles	0.386
Square Hectometers	Acres	2.471
Cubic Meters	Cubic Feet	35.315
Cubic Meters	Cubic Yards	1.308
Milliliters	Fluid Ounces	0.034
Liters	Pints	2.113
Liters	Quarts	1.057
Liters	Gallons	0.264
Grams	Ounces	0.035
Kilograms	Pounds	2.205
Metric Tons	Short Tons	1.102
Newton-Meters	Pound-Feet	0.738
Kilopascals	Pounds Per Square Inch	0.145
Kilometers Per Liter	Miles Per Gallon	2.354
Kilometers Per Hour	Miles Per Hour	0.621



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