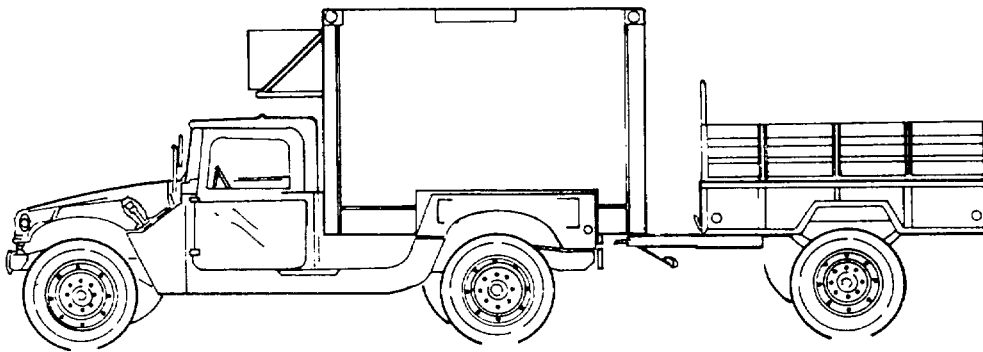


**TECHNICAL MANUAL**  
**Operator's, Unit, Direct and General Support**  
**Maintenance Manual Including Repair Parts &**  
**Special Tools List**  
**For**

**TOPOGRAPHIC SUPPORT SYSTEM**  
**(TSS)**

**DOWNSIZED DIRECT SUPPORT SECTION**  
**(DDSS)**

NSN 6675-01-300-9465



**DISTRIBUTION STATEMENT A: Approved for public release;**  
**distribution is unlimited. Material List E- 1**

**HEADQUARTERS, DEPARTMENT OF THE ARMY**  
**15 SEPTEMBER 1993**

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**WARNING**  
CHEMICAL HAZARD

Avoid contact with ammonia. Failure to do so may result in serious injury to skin. Fumes can cause irritation and damage to lungs.

**WARNING**  
HEAVY EQUIPMENT

Use proper lifting equipment to remove or install heavy equipment. Failure to do so may result in death or serious injury.

**WARNING**  
ELECTRICAL SHOCK

Use extreme caution when performing checks, services, or maintenance at or near power entrance panel and power distribution panel. Failure to do so may result in death or serious injury. Main power cable must be disconnected before servicing power entrance panel connections. Failure to do so may result in death or serious injury.

Do not use wet or damp cloth to clean equipment, power cords, or power cables that are plugged in. Death or serious injury may result.

Turn off main power switch before replacing fuse. Failure to do so may result in death or serious injury.

Do not service main power cable if it is connected to power source. Failure to do so may result in death or serious injury.

Do not service electrical connection, switches, or circuit breakers when main power switch is on. Failure to do so may result in death or serious injury.

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TECHNICAL MANUAL  
NO. 5-6675-331-14&P

HEADQUARTERS  
DEPARTMENT OF THE ARMY  
WASHINGTON D.C. 15 September 1993

Operator's, Unit, Direct and General Support Maintenance Manual  
Including Repair Parts and Special Tools List For

Topographic Support System  
(TSS)  
Downsized Direct Support Section  
(DDSS)  
NSN 6675-01-300-9465

Current As Of 3 September 1993

**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, U.S. Army Aviation and Troop Command, ATTN: AMSAT-I-MP, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. A reply will be furnished directly to you.

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

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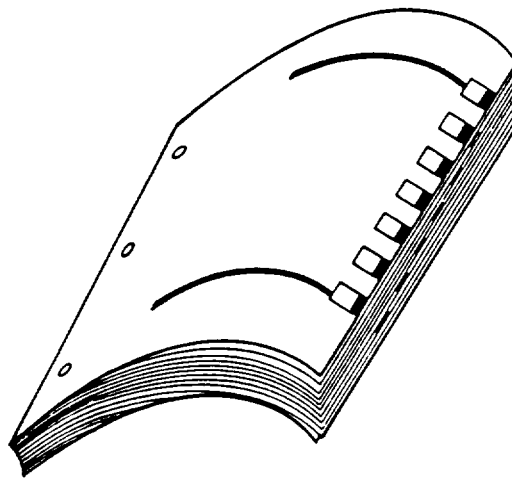
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## HOW TO USE THIS MANUAL

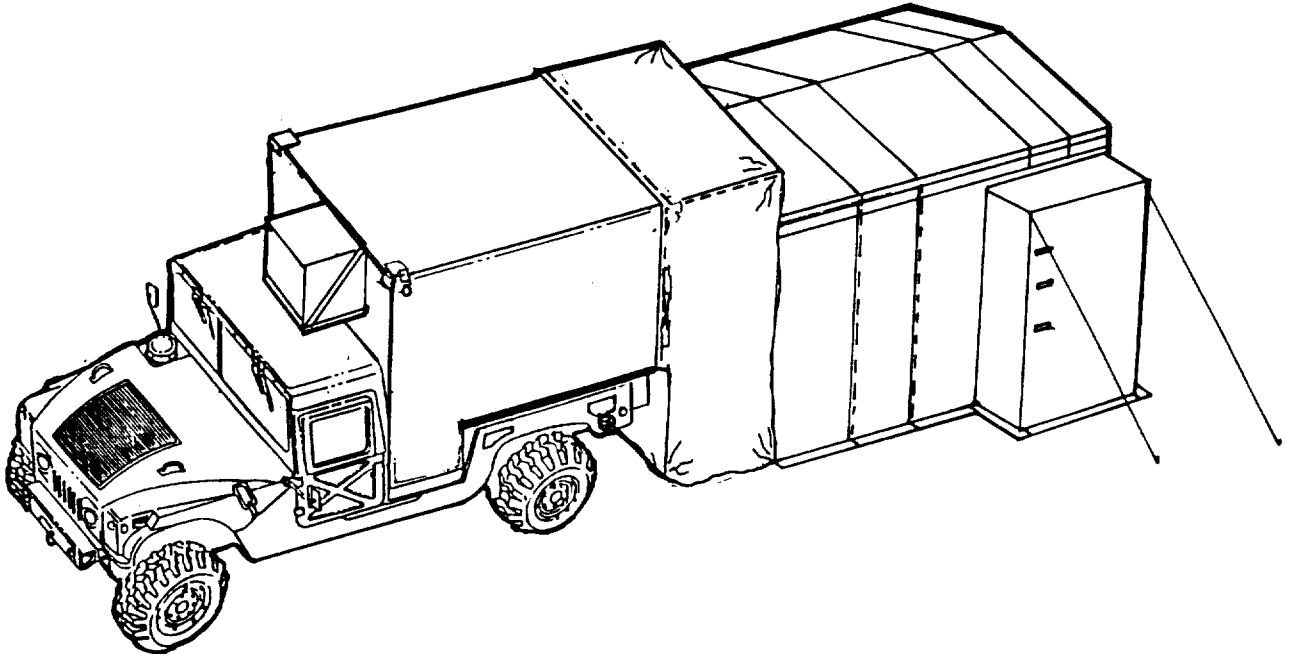
This manual (TM 5-6675-331-14&P) is used by the Army for operation and maintenance of the Downsized Direct Support Section (DDSS). Along the right hand edge of the front cover is a list of the chapters and appendices contained in the manual (each item has a black tab next to it). Use the front cover index when you need to find information quickly. Just bend the manual in half and follow the margin index to the page with the black edge marker.



The first page of each chapter and appendix contains a chapter or appendix index which shows the paragraph numbers of the sections contained within that chapter or appendix. Additionally, each section contains a section index which shows the paragraph of the information contained within that section.

If you are not sure which chapter contains the information you are looking for, use the Table of Contents. As you can see in the Table of Contents, each chapter is divided into sections, and each section can be found by turning to the page number shown for that section. Page numbers are composed of two parts: the first part is the chapter number, and the second part is the sequential page number within that chapter. For example, page 1-3 refers to the third page of chapter 1.

If you need further assistance in finding certain information, the index at the back of the manual contains an alphabetical listing of the contents of the manual by topic.



*FIGURE 1-1. Downsized Direct Support Section (DDSS)*



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**INTRODUCTION**

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- 1-1. **SCOPE.** This manual describes set up, operation, maintenance and tear down of the Downsized Direct Support Section (DDSS) of the Topographic Support System (TSS) for the crew/operator, unit, direct support, and general support maintenance levels. The purpose of the DDSS is to provide military geographic information to the unit to which it is assigned. This information includes databases consisting of organization names and the location, equipment, personnel, and other related information for that unit. The unit positions are plotted on video maps displayed on the color monitor, providing the Order of Battle Analyst with a visual representation of enemy unit movement activities in a specified geographic area. The M1037 High Mobility Multipurpose Wheeled Vehicle (HMMWV) is covered in TM 9-2320-280-10. The MIOIA2 Trailer covered in TM 9-2320-202-14 will transport the components of the DDSS.
  
- 1-2. **MAINTENANCE FORMS AND RECORDS.** Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA PAM 738-750, The Army Maintenance Management System (TAMMS).

1-3. **DESTRUCTION OF ARMY MATERIAL TO PREVENT ENEMY USE.** The DDSS must be destroyed in accordance with TM 750-244-3 to prevent enemy use.

1-4. **PREPARATION FOR STORAGE OR SHIPMENT.** Perform preparation for movement procedures (paragraph 2-8). Refer to paragraph 4-12 for administrative storage instructions.

1-5 **NOMENCLATURE CROSS-REFERENCE LIST.**

<b>Common Name</b>	<b><u>Official Nomenclature</u></b>
<b>BOOT</b>	Boot-SICPS Wall
<b>DDSS</b>	Downsized Direct Support Section of the Topographic Support Section (TSS)
<b>HEATER</b>	Heater, Space, Multifuel with Blower, 60,000 BTU/HR, 120V, UH-68G
<b>HMMWV</b>	High Mobility Multipurpose Wheeled Vehicle, M1037
<b>SICPS TENT</b>	Standardized Integrated Command Post System Tent Command Post
<b>TRAILER</b>	Trailer Utility, M1O1A2

1-6. **REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIRs).** If your DDSS 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 (Product Quality Deficiency Report). Mail it to us at Commander, U.S. Aviation and Troop Command, ATTN: AMSAT-I-MDO, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. We'll send you a reply.

1-7. **CORROSION PREVENTION AND CONTROL (CPC).** Corrosion Prevention and Control (CPC) of Army material is a continuing concern. It is important that any corrosion problems with this item be reported so that the problem can be corrected and improvements can be made to prevent the problem in future items.

While corrosion is typically associated with rusting of metals, it can also include deterioration of other materials, such as rubber and plastic. Unusual cracking, softening, swelling, or breaking of these materials may be a corrosion problem.

If a corrosion problem is identified, it can be reported using Standard Form 368, Product Quality Deficiency Report. Use of key words such as "corrosion", "rust", "deterioration", or "cracking", will assure that the information is identified as a CPC problem.

This form should be submitted to: Commander, U.S. Army Aviation and Troop Command, ATTN: AMSAT-I-MDO, 4300 Goodfellow Blvd., St. Louis, MO 631207-1798.

1-8. **WARRANTY INFORMATION.** Refer to the appropriate manufacturer's equipment manual supplied with the equipment for warranty/guarantee information on commercial equipment used in the DDSS.

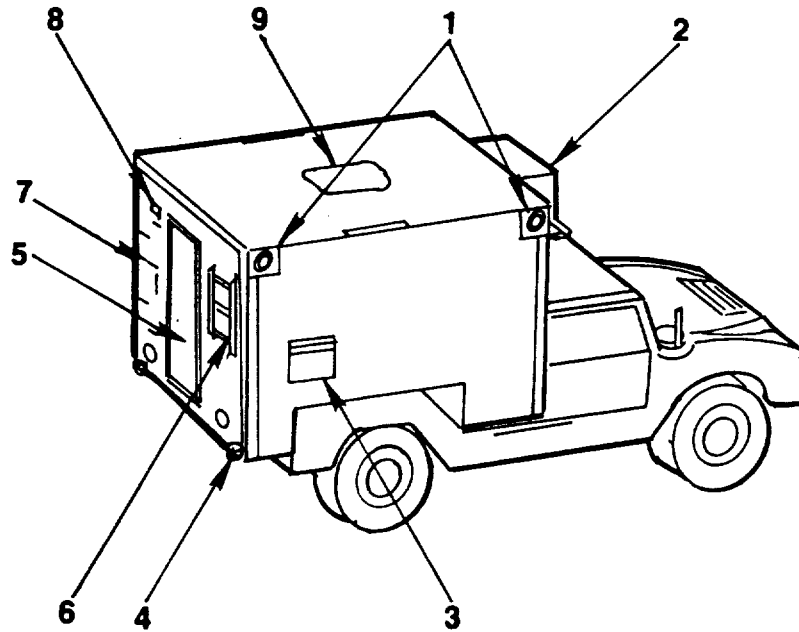
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EQUIPMENT DATA.....	1-11

- 1-9. **EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES.** The DDSS is a mobile facility for collecting, analyzing, cataloging, displaying, and retrieving topographic information. The system provides required military geographic support to the command to which it is assigned. The system is Land, Sea and Air Transportable.
- a. **Highway.** The DDSS is transportable by a dedicated M1037 HMMWV and MIOIA2 3/4-ton trailer.
  - b. **Rail.** The DDSS is transportable by rail.
  - c. **Ocean and Waterways.** The DDSS is shipped overseas in volume (unit) movements. On deck stowage of the DDSS is permissible. The DDSS is shipped by breakbulk (general cargo), container, roll-on/roll-off, and barge-carrying ships.
  - d. **Lighterage.** In the Logistics-Over-The-Shore (LOTS) environment, the smallest lighter used to ship the DDSS is the Lighter Air-Cushioned Vehicle 30-ton (LACV-30).
  - e. **Intermodal Containers.** Not applicable.
  - f. **Helicopters.** The shelter and trailer is air transported externally by CH-47D.
  - g. **Fixed Wing Aircraft.** The DDSS is air transported by Air Force C-130, C-141, and C-5. The DDSS may also be air transported on the CRAF B747 side-door model in palletized configuration.
  - h. **Auxiliary Receptacles.** Orange microfix shelter receptacles are usable as auxiliary receptacles. The microfix shelter receptacles are controlled by a uninterruptable power supply (UPS). In the absence of a UPS, the power cord can be plugged into the dedicated microfix receptacle located on the left wall of the shelter. This enables all microfix receptacles to function as auxiliary receptacles.
- 1-10. **LOCATION AND DESCRIPTION OF MAJOR COMPONENTS.** Major DDSS components are found on the exterior and interior of the shelter, and in the interior of the trailer (during transit).

1-10. LOCATION AND DESCRIPTION OF MUJOR COMPONNTS. (Cont'd)

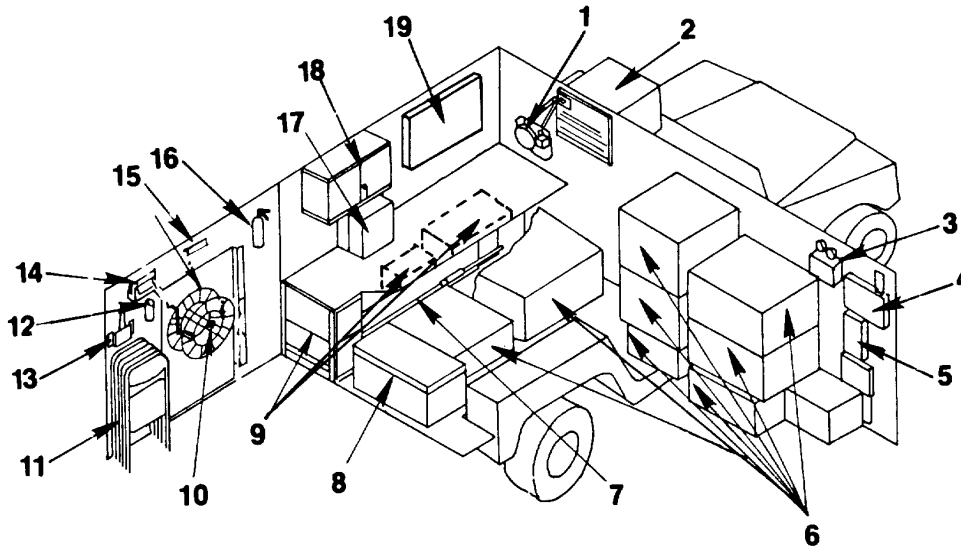
a. Shelter Exterior Components.



	<b>COMPONENT FUNCTION</b>
<b>LIFT RING (1)</b>	Attachment points for lifting shelter from truck chassis.
<b>ENVIRONMENTAL CONTROL UNIT (2)</b>	Controls internal shelter temperature.
<b>POWER ENTRANCE BOX (3)</b>	Connections for grounding cable, power cables, and telephone lines.
<b>BOOT SUPPORT BRACKET (4)</b>	Support for boot frame.
<b>DOOR (5)</b>	Access to interior of shelter.
<b>LADDER (6)</b>	Provides access to shelter.
<b>RETRACTABLE STEPS (7)</b>	Pull out for access to roof. Stored in retracted positions.
<b>TENT LIGHT RECEPTACLE (8)</b>	Power to tent lights.
<b>ESCAPE-HATCH (9)</b>	Emergency access to roof.

1-10. **LOCATION AND DESCRIPTION OF MAJOR COMPONENTS.** (Cont'd)

b. Shelter Interior Components.

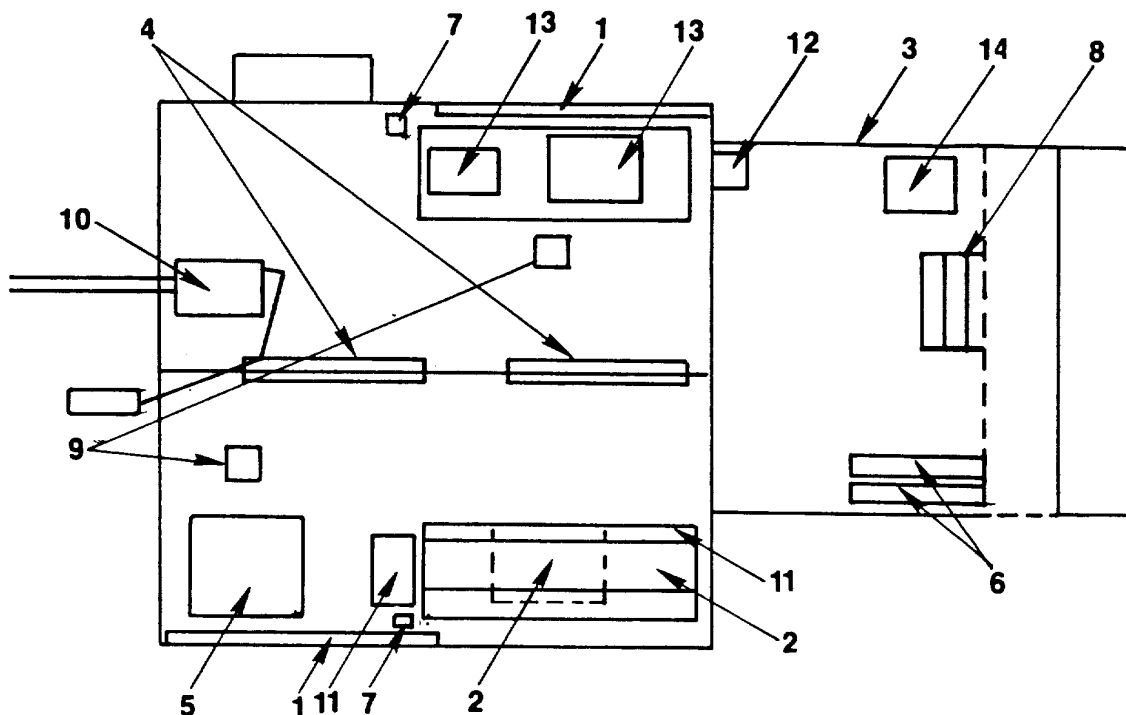


**COMPONENT FUNCTION**

MAGNIFIER LAMP (1)	Used when creating detailed mapping materials.
ENVIRONMENTAL CONTROL UNIT (2)	Provides heating and cooling inside shelter.
EMERGENCY LIGHT (3)	Provides light to shelter during primary power failure.
POWER DISTRIBUTION BOX (4)	Monitors and controls distribution of power to DDSS.
MAIN SWITCH (5)	Controls 120/240VAC, 60Hz power to DDSS.
REUSABLE CONTAINERS (6)	Contents of containers determined by gaining unit.
GROUND ROD (7)	Provides system ground.
ZOOM TRANSFER SCOPE (8)	Provides optically superimposed photographic images on maps or charts.
FIELD FILES (9)	Store supplies and documents.
CABLE REEL (10)	Stowage for main power cable.
FOLDING CHAIRS (11)	Shelter and tent seating.
FLASHLIGHT (12)	Portable light source.
CRASH AXE (13)	Provides means of escaping shelter in an emergency.
FIRST AID KIT (14)	First aid supplies.
SAFETY LIGHT (15)	Internal light source, battery operated.
FIRE EXTINGUISHER (16)	Extinguish fires.
QUANTITY PROCESSING SYSTEM (17)	Provides electronic estimation of area, distance, perimeter, and volume of geographic shapes found on maps, drawings, aerial photographs.
STORAGE CABINET (18)	For storage.
PORTABLE DRAFTING LIGHT TABLE (19)	Provides working surface for preparing map overlays.

1-10. **LOCATION AND DESCRIPTION OF MAJOR COMPONENTS. (Cont'd)**

c. SICPS Tent Components - Overhead View.



**COMPONENT FUNCTION**

MAP BOARD (1)	Displays mapping materials.
TABLE/DIAZO PROCESS REPRODUCTION SET (2)	Table and ammonia process copier.
TENT BOOT (3)	Passageway which connects shelter and tent.
TENT LIGHTS (4)	Provides fluorescent lighting for the tent.
DRAFTING TABLE/ EQUIPMENT (5)	Table for creating map overlays and storage of drafting supplies.
MAP CASES (6)	Storage for maps and flat paper.
ELECTRICAL RECEPTACLES (7)	Provides power to operate electrical components.
LADDER (8)	Provides access to shelter.
FOLDING CHAIRS (9)	
HEATER ASSEMBLY(10)	Provides heat to tent.
FIELD FILES (11)	Storage for field data.
TOOL BOX (12)	Contains operator's tools.
TABLES (13)	Work table for ZTS or QPS
EYE WASH (14)	Flush foreign materials/fluids from the eye.

1-11 **EQUIPMENT DATA.** Refer to applicable technical manual for individual component data (see Appendix A).

DDSS configuration weights.

	<b>Shelter</b>	<b>Trailer Assy</b>	<b>Trailer Equip</b>	<b>Shelter/HMMWV</b>	<b>Gross System Wt</b>
Operational, empty	1,300 lbs (590.2 kg)	1,515 lbs (687.8 kg)	175 lbs (79.5 kg)	6,605 lbs (2,998.7 kg)	8,120 lbs (3,686.5 kg)
Operational, loaded	2,400 lbs (1,089.6 kg)	2,690 lbs (1,221.3 kg)	1,350 lbs (612.9 kg)	8,540 lbs (3,877.2 kg)	11,230 lbs (5,098.4 kg)
Shipping, empty	1,300 lbs (590.2 kg)	1,515 lbs (687.8 kg)	175 lbs (79.5 kg)	6,930 lbs (3,146.2 kg)	8,445 lbs (3,834 kg)
Shipping, loaded	2,400 lbs (1,089.6 kg)	2,690 lbs (1,221.3 kg)	1,350 lbs (612.9 kg)	8,010 lbs (3,636.5 kg)	10,720 lbs (4,866.9 kg)

	<b>Length</b>	<b>Width</b>	<b>Height</b>
Shelter	203 in. (5.16 cm)	85 in. (2.17 cm)	100 in. (2.54 cm)
Trailer	147 in. (3.74 cm)	73.5 in. (1.87 cm)	83 in. (2.11 cm)
Total Length	350 in. (8.90 cm)		

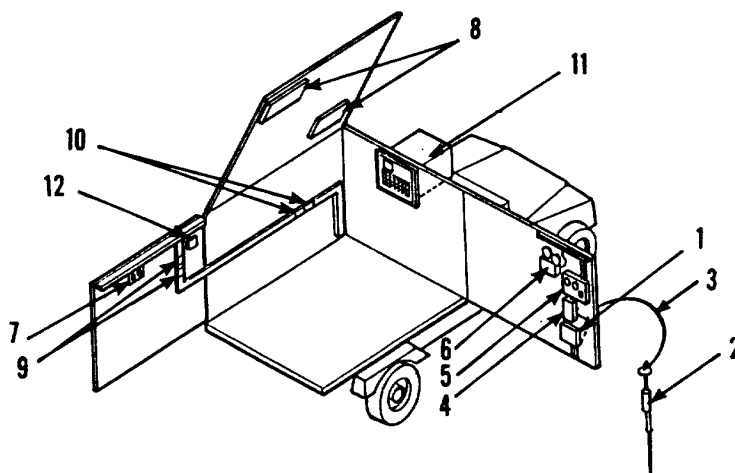
Section III. TECHNICAL PRINCIPLES OF OPERATION

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VENTILATION SYSTEM .....	1-14

1-12. **GENERAL.** Refer to TM 5-6675-326-14, Topographic Support System, Direct Support Section or applicable component technical manual for operation of individual components.

1-13. **ELECTRICAL SYSTEM.**

- a. Power Entrance Box (1). Connections for grounding cable, power cable, tent and heater power, and telephone lines.
- b. Ground Rod (2). Provides system ground.
- c. Ground Cable (3). Used with ground rod.



- d. Main Switch (4). Controls 110/240VAC, 60Hz power to DDSS.
- e. Power Distribution Box (5). Monitors and controls distribution of power to DDSS.
- f. Emergency Light (6). Battery-powered. Activated by external power failure.
- g. Safety Light (7). Internal light source, battery operated.
- h. Fluorescent Lights (8). Provide light to shelter during normal operation.
- i. Wall Switches (9). Used to control power to fluorescent and safety lights.



1-13. **ELECTRICAL SYSTEM.** (Cont'd)

- j. Wall Receptacles (10). Provide grounded outlets for plug-in equipment.
- k. Environmental Control Unit (11). Provides means of heating and cooling inside shelter.
- l. Tent Light Receptacles (12). Provides means of hook-up for tent lights.

1-14. **VENTILATION SYSTEM.** Air from the environmental control unit is controlled by movable louvers located on the main panel. Return air is filtered before entry into the environmental control unit. In vent mode, outside air is drawn into the system for distribution. Detailed description of the environmental control unit is contained in Operator's Organizational, Direct Support and General Support Maintenance Manual, Air Conditioner, Horizontal Compact, 9,000 BTU/HR TM 5-4120-370-14.

**CHAPTER 2**  
**OPERATING INSTRUCTIONS**

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**Section I. DESCRIPTION AND USE OF OPERATOR'S CONTROLS AND INDICATORS**

<b>CONTENTS</b>	<b>PARA</b>
OPERATOR CONTROLS AND INDICATORS .....	2-1

2-1. **OPERATOR CONTROLS AND INDICATORS.** Locations of operator controls and indicators are shown in Figure 2-1.

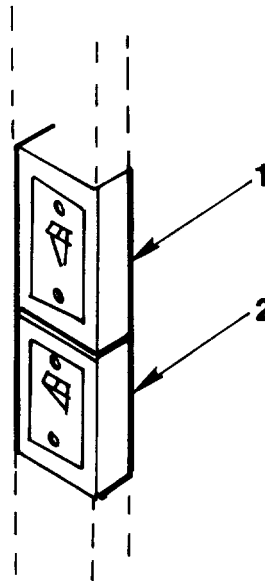
Internal Shelter Controls and Indicators. Internal Controls and Indicators consist of Switches, Circuit Breakers and Meters listed below:

	<b>Control or Indicator</b>	<b>Function</b>
1	Phase Switch, 3 position	Controls phase voltage and frequency displayed on meters
2	Voltage Meter	Measures three phase AC voltages.
3	Frequency Meter	Monitors three phase frequencies.
4	Tent Power Circuit Breaker	Provides power supply to tent.
5	Roadside Power CB	Provides power to roadside receptacles.
6	Shelter Fluorescent Lights Circuit Breaker	Provides power for ceiling lights.
7	Emergency Light Circuit Breaker	Provides power for emergency light.



2-1. **OPERATOR CONTROLS AND INDICATORS.** (Cont'd)

Internal Shelter Controls and Indicators (Cont'd)



	<b>Control or Indicator</b>	<b>Function</b>
1	Fluorescent Light Switch	Controls power to shelter fluorescent lights.
2	Incandescent Light Switch	Controls power to incandescent shelter lights.

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

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**2-2. GENERAL.**

- a. Before You Operate. Always keep in mind the WARNINGS and CAUTIONS. Perform your BEFORE PMCS prior to using your equipment.
- b. While You Operate. Always keep in mind the CAUTIONS and WARNINGS. Perform your DURING PMCS when the equipment is being used in its intended mission.
- c. After You Operate. Be sure to perform your AFTER PMCS after you have finished using your equipment for its intended mission.
- d. If Your Equipment Fails To Operate. Troubleshoot with the proper equipment. Report any deficiencies using the proper forms. See DA PAM 738-750.

**2-3. PMCS PROCEDURES.** Your Preventive Maintenance Checks and Services table (Table 2-1) lists inspections and care of your equipment required to keep it in good operating condition. The table is structured as follows: a. Item Number Column. This column shows the order in which to perform checks and services.

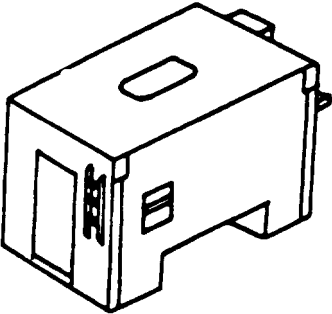
- b. Interval Column. This column shows when to perform each check or service.
- c. Item to Check/Service Column. This column identifies the item on which check or service is to be performed.
- d. Procedures Column. This column shows how to perform required checks and services. Carefully follow these instructions. If you do not have the tools, or if the procedure shows you to, have unit maintenance do the work.
- e. Not Fully Mission Capable if: Column. This column contains criteria used to decide whether or not equipment is ready and available for use. An entry in this column identifies conditions that make equipment not ready/available for readiness reporting.
- f. Instructions for Reporting and Correcting Deficiencies. If equipment does not perform as required, refer to Chapter 3 under troubleshooting for possible problems. Report any malfunctions or failures on DA Form 2404, or refer to DA PAM 738-750.

2-3. **PMCS PROCEDURES.** (Cont'd)

**Table 2-1. OPERATOR'S PREVENTIVE MAINTENANCE CHECKS AND SERVICES**

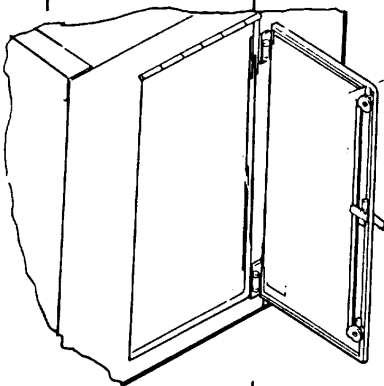
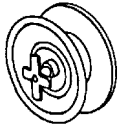
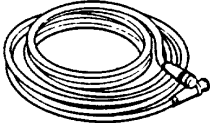
**NOTE**

Within the designated interval, these checks are to be performed in order listed. If equipment must be kept in continuous operation, check and service only those items that can be checked and serviced without disturbing operation. Make complete checks and services when equipment can be shut down.

Preventive Maintenance Checks and Services for DDSS				
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
1	Before	HMMWV	Refer to TM 9-2320-280-10	Punctures, cracks or open seams are present.
2		Shelter Assembly	Check exterior of shelter for missing components, exterior damage, or leaks. Clean and remove debris.	
3	Tail Lights		Refer to TM 9-2320-280-10.	

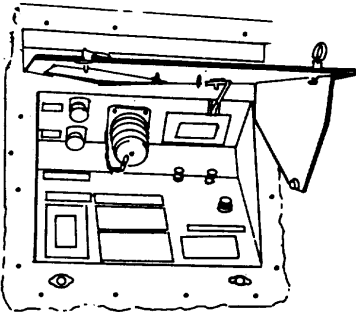
2-3. PMCS PROCEDURES. (Cont'd)

**Table 2-1. OPERATOR'S PREVENTIVE MAINTENANCE CHECKS AND SERVICES (Cont'd)**

Preventive Maintenance Checks and Services for DDSS				
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
4	Before	Door	<p>Check door hinges and latch assembly for missing or damaged items. Check for proper operation of latch assembly.</p> 	Door hinges or latch components missing or broken.
5	Before	<p>Cable Reel</p> 	<p>Check cable reel for missing or damaged knob assembly.</p>	
6	Before	<p>Cable Assembly</p> 	<p>Check cables for cuts, corrosion, and proper mating to receptacles on power</p>	Broken/cut or corroded cables will not connect to mating entrance panel receptacles.

2-3 **PMCS PROCEDURES.** (Cont'd)

**Table 2-1. OPERATOR'S PREVENTIVE MAINTENANCE CHECKS AND SERVICES (Cont'd)**

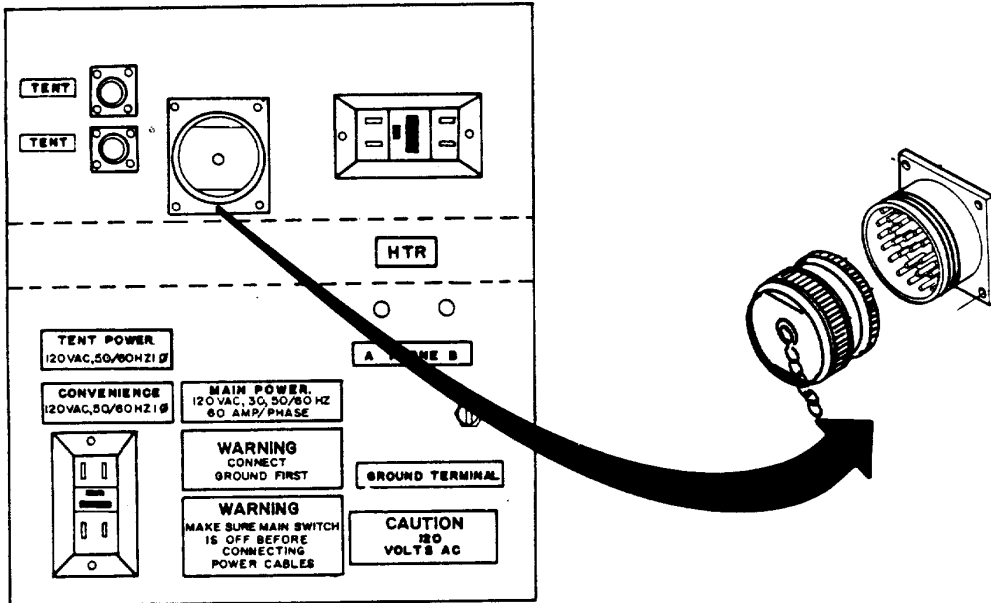
Operator Preventive Maintenance Checks and Services -for DDSS				
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
7	Before	Power Hookup Box	<p><b>WARNING</b> ELECTRICAL SHOCK</p> <p>Ensure that all circuit breakers and "Main Switch" are off before applying power to the DDSS. Failure to do so may result in death or serious injury.</p>	
		a. Cover Assembly	 <p>Check ball stud, cover prop rod, and stud assemblies for missing, bent, or broken hardware.</p> <p style="text-align: center;"><b>2-7</b></p>	Cover can not be secured to shelter.



2-3. **PMCS PROCEDURE.** (Cont'd)

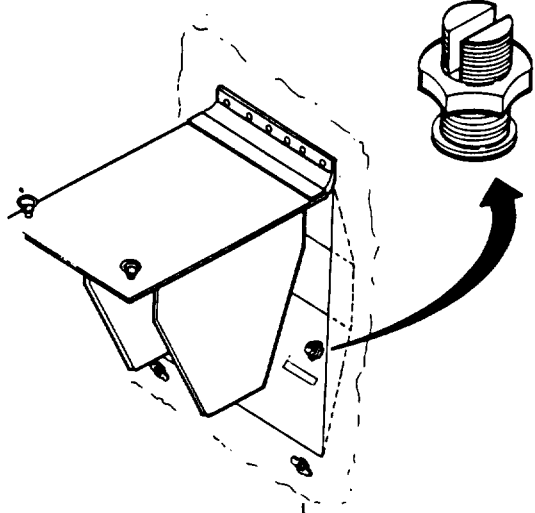
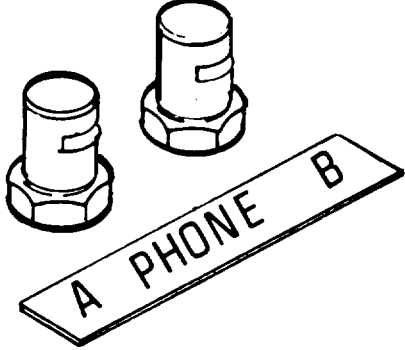
**Table 2-1. Operator Preventive Maintenance Checks and Services - (Continued)**

Operator Preventive Maintenance Checks and Services -for DDSS				
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
7 (Cont)	Before	b. Main Power Hook Up	<p><b>WARNING</b> ELECTRICAL SHOCK</p> <p>Ensure that all circuit breakers and "Main Switch" are off before applying power to the DDSS. Failure to do so may result in death or serious injury.</p> <p>Check hook up cover, threads, and connector pins.</p>	Threads damaged, pins bent, broken or corroded.



2-3. PMCS PROCEDURES. (Cont'd)

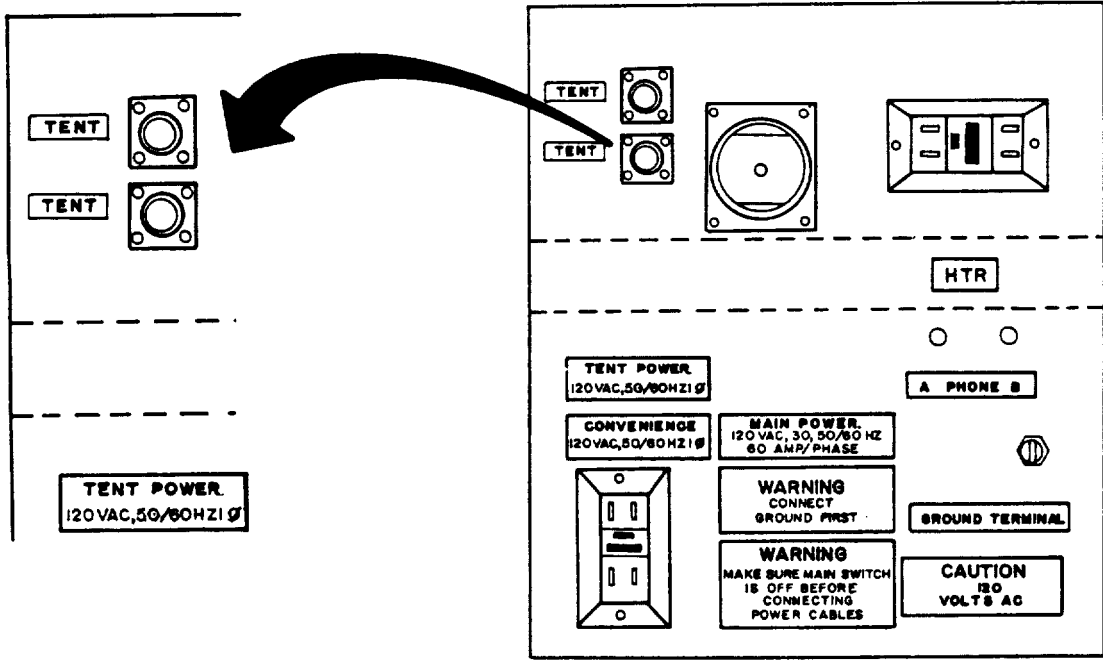
Table 2-1. OPERATOR'S PREVENTIVE MAINTENANCE CHECKS AND SERVICES  
(Cont'd)

Preventive Maintenance Checks and Services for DDSS				
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
7 (Cont)	Before	c. Ground Terminal	<p>Check threads, clamp and nut for damaged or missing parts. Check terminal for tightness.</p> 	<p>Threads damaged clamp or nut missing. Ground terminal can not be tightened.</p>
		d. Telephone Binding Post	<p>Check for binding post covers, and insecure mountings. Check for proper operation by pressing binding posts down.</p> 	

2-3. PMCS PROCEDURES. (Cont'd)

Table 2-1. OPERATOR'S PREVENTIVE MAINTENANCE CHECKS AND SERVICES (Cont'd)

Preventive Maintenance Checks and Services for DDSS				
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
7 (Cont)	Before	e. Tent Power Receptacles	<p><b>WARNING HIGH VOLTAGE</b></p> <p>Use extreme caution when performing checks, services or, maintenance at or near power entrance box and power distribution box. Failure to do so may result in death or serious injury.</p> <p>Check hook-up threads, and connector pins for damage.</p>	Threads damaged or pins bent, broken, or corroded.

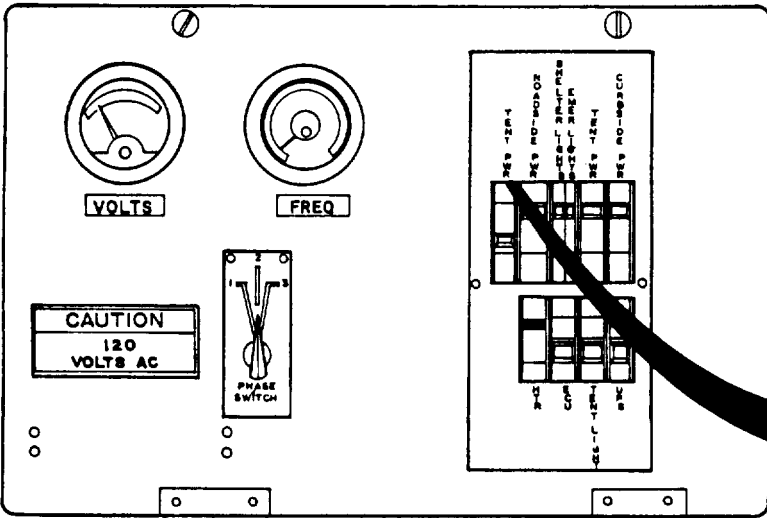
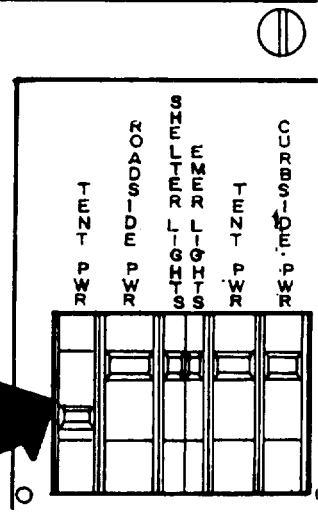


2-3. PMCS PROCEDURES. (Cont'd)

Table 2-1. OPERATOR'S PREVENTIVE MAINTENANCE CHECKS AND SERVICES  
(Cont'd)

Preventive Maintenance Checks and Services for DDSS				
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
			<p>Apply power to shelter and test tent power circuit breaker (located on power distribution box) for proper operation. Turn on "Tent Power" circuit breaker. Press yellow "PUSH TO TEST" button, breaker will trip. Reset breaker to "ON" position.</p>	

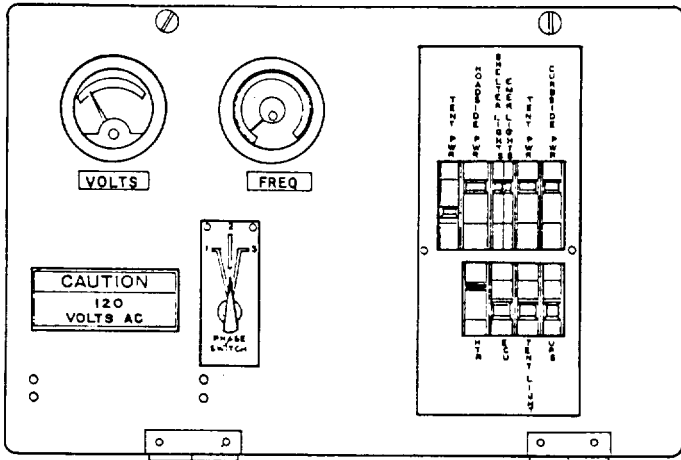
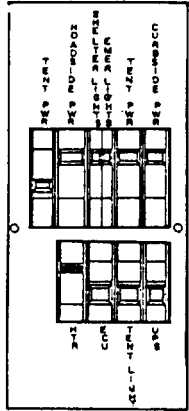
2-3. PMCS PROCEDURES. (Cont'd)

Table 2-1. OPERATOR'S PREVENTIVE MAINTENANCE CHECKS AND SERVICES (Cont'd)

Preventive Maintenance Checks and Services for DDSS				
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
7 (Cont)	Before	f. Convenience and Heater GFI Receptacles	Check for missing, or broken components.	Receptacle is broken, or cover plate missing.
			<p>With power applied to shelter, proper operation of Ground Fault Circuit Interrupter receptacle. Press the black "TEST" button, power should instantly be interrupted. Press the black "RESET" button to resume power.</p>	<p>Power fails to be test for interrupted. Power fails to return.</p>

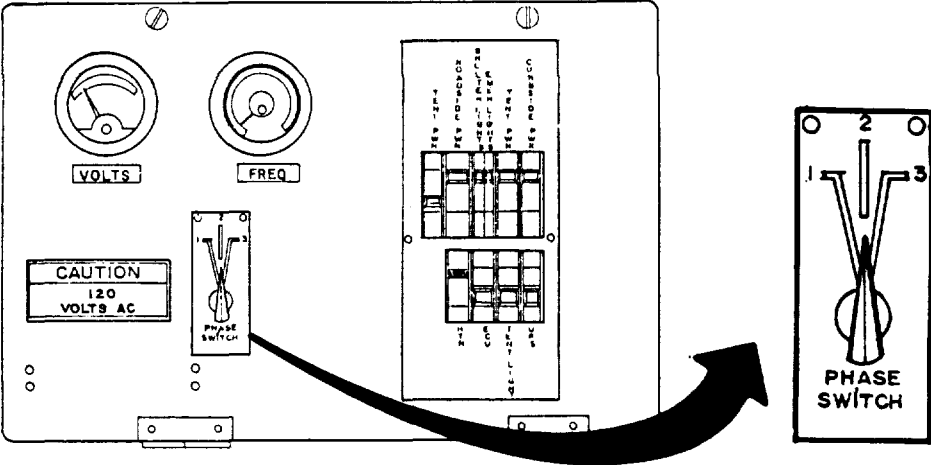
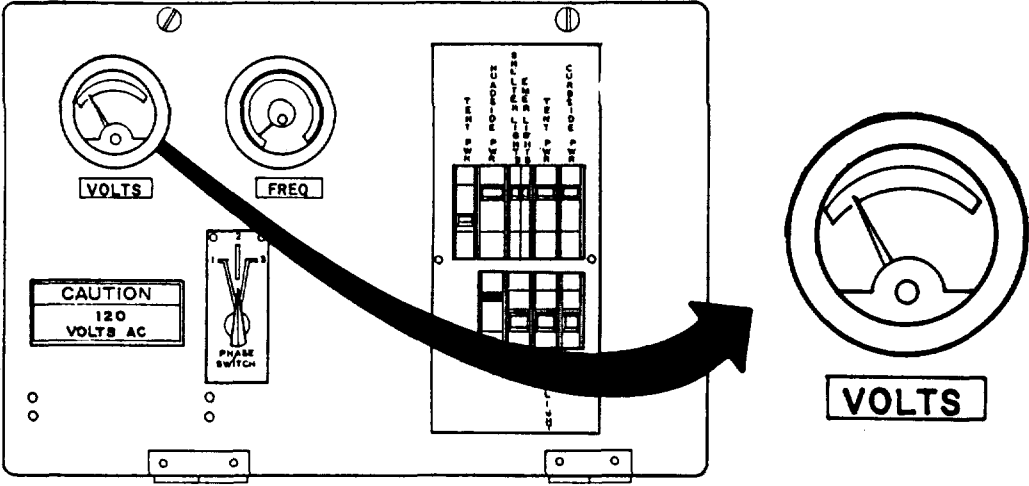
2-3. PMCS PROCEDURES. (Cont'd)

Table 2-1. OPERATOR'S PREVENTIVE MAINTENANCE CHECKS AND SERVICES (Cont'd)

Preventive Maintenance Checks and Services for DDSS				
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
8	Before	Electrical		
		a. Power Distribution Box	Check cover for missing, broken or loose screws or hinges.	Cover screws or hinges broken or missing.
				
		b. Circuit Breakers	Visually check circuit breakers for damage. Turn all breakers to the off position.	Circuit breaker damaged or will not stay in off position.
				

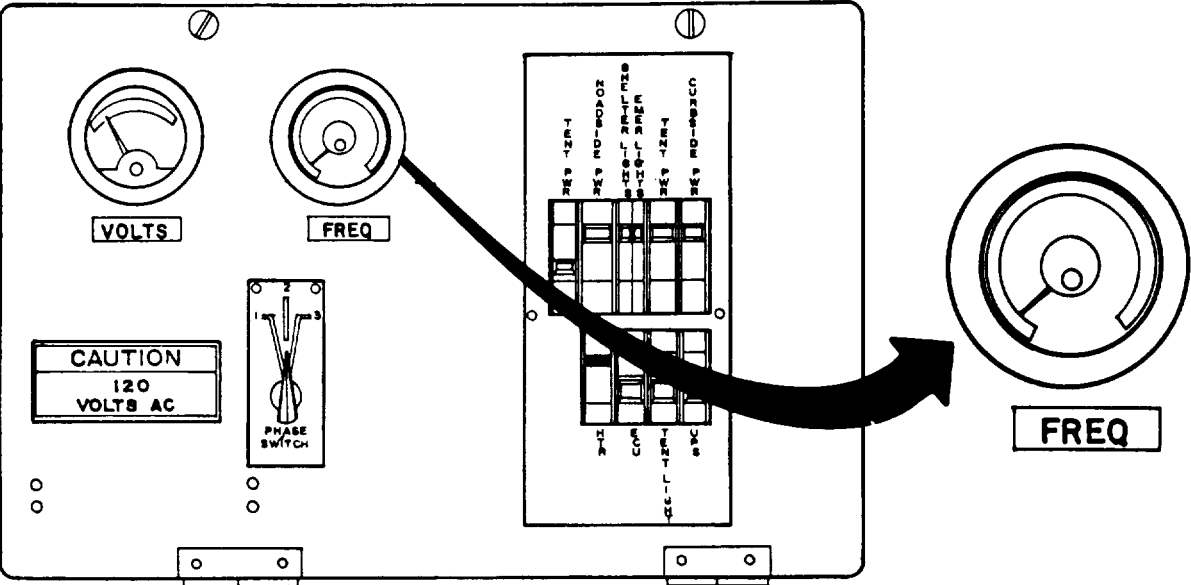
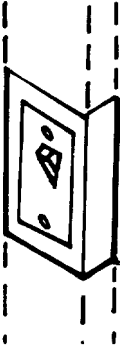
2-3. PMCS PROCEDURES. (Cont'd)

Table 2-1. OPERATOR'S PREVENTIVE MAINTENANCE CHECKS AND SERVICES  
(Cont'd)

Preventive Maintenance Checks and Services for DDSS				
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
8 (Cont)		c. Phase Switch	Check that knob is in place and check that switch functions properly.	Knob missing. Switch does not function properly.
				
		d. Voltmeter	Check for damage to voltmeter. Check voltmeter reading. Observe voltage phases 1, 2, and 3. Voltage should read $120v \pm 5v$ .	Broken glass cover. Voltmeter does not read 120 for volts in all three phases.
				

2-3. PMCS PROCEDURES. (Cont'd)

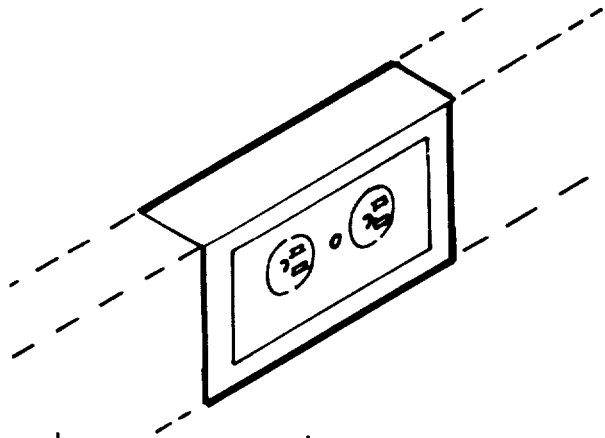
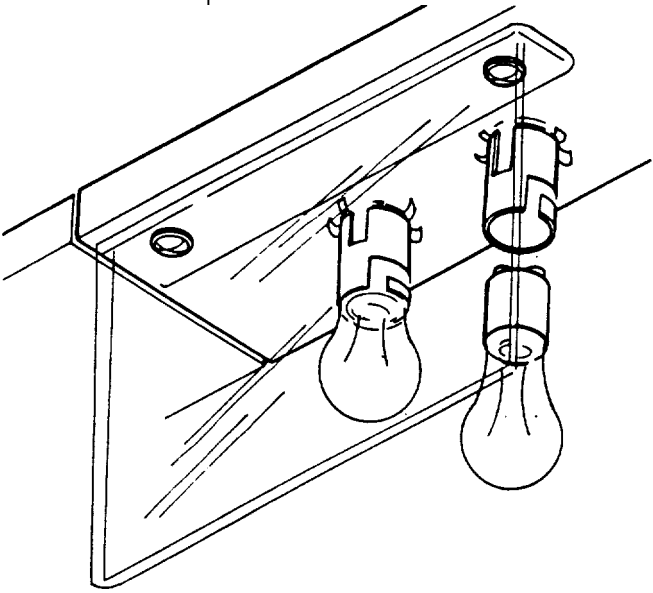
Table 2-1. OPERATOR'S PREVENTIVE MAINTENANCE CHECKS AND SERVICES  
(Cont'd)

Preventive Maintenance Checks and Services for DDSS				
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
8 (Cont)	Before	e. Frequency Meter	Check for damage to frequency meter. Check frequency meter reading. Observe frequency for phases 1, 2, and 3. Frequency should be 60Hz $\pm$ 1Hz.	Broken glass cover. Frequency does not read 60 Hz in all three phases.
				
9	Before	Wall Switches	Check wall switches for missing or broken components and that switches function properly.	Cover plates missing or switches do not function properly.
				



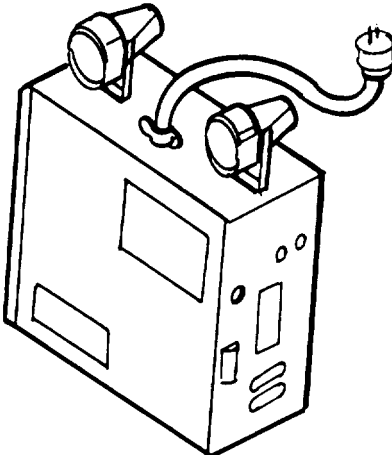
2-3. PMCS PROCEDURES. (Cont'd)

Table 2-1. OPERATOR'S PREVENTIVE MAINTENANCE CHECKS AND SERVICES  
(Cont'd)

Preventive Maintenance Checks and Services for DDSS				
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
10	Before	Receptacles	Check receptacles for missing or broken components.	Cover plates are missing or Receptacles are broken.
				
11	Before	Incandescent Light	Check light cover and bulbs for damage. Set "INCANDESCENT LIGHT" switch to on (up position), check for burned out bulbs.	
				

2-3. PMCS PROCEDURES. (Cont'd)

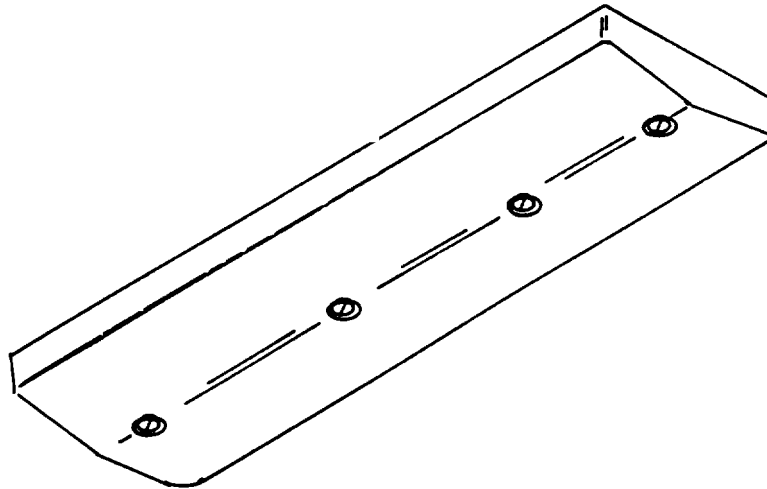
Table 2-1. OPERATOR'S PREVENTIVE MAINTENANCE CHECKS AND SERVICES  
(Cont'd)

Preventive Maintenance Checks and Services for DDSS				
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
12	Before	Emergency Light Assembly	<p>Check emergency light case, lamp housing, and power cord for damaged or missing parts.</p>  <p>Test emergency light for proper operation. Plug power cord into "EMERGENCY LIGHT" receptacle. Turn "Emergency Light" circuit breaker (located on power distribution box) to on. Check, "READY" lamp should be lit. Turn emergency light toggle switch to on (up position).</p> <p>Test No. 1 Press red "TEST" button, emergency light should light.</p> <p>Test No. 2 Disconnect emergency light power cord from receptacle, "READY" lamp should go off and emergency lights should be on.</p>	

2-3. PMCS PROCEDURES. (Cont'd)

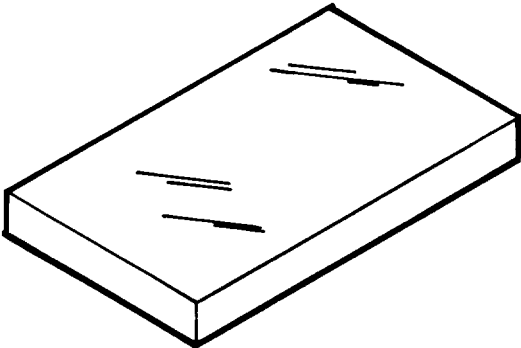
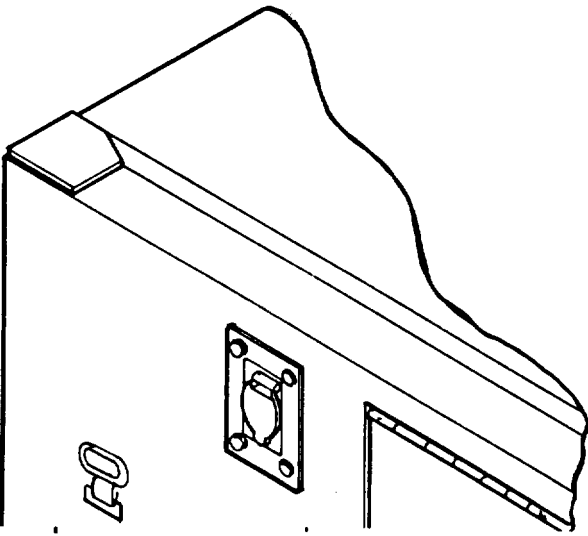
Table 2-1. OPERATOR'S PREVENTIVE MAINTENANCE CHECKS AND SERVICES  
(Cont'd)

Preventive Maintenance Checks and Services for DDSS				
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
13	Before	Fluorescent Ceiling Lights	Check light fixtures for missing screws, and damaged light diffuser. Set "SHEL-TER LIGHT" circuit breaker to on. Set fluorescent light switch to on (up position), check for burned out lamps.	



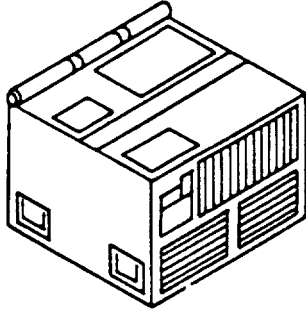
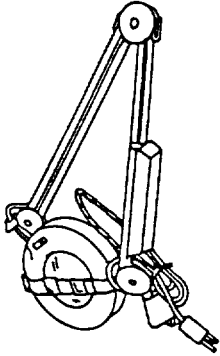
2-3. PMCS PROCEDURES. (Cont'd)

Table 2-1. OPERATOR'S PREVENTIVE MAINTENANCE CHECKS AND SERVICES  
(Cont'd)

Preventive Maintenance Checks and Services for DDSS				
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
14	Before	Portable Drafting Light Table	<p>Check for damage to light diffuser. Turn on "ROADSIDE POWER" circuit breaker. Plug light table into "AUX" receptacle and set light table switch to on, check for burned out lamps.</p> 	Light diffuser damaged. Lamps do not operate.
15	Before	Tent Light Receptacle	<p>Check for damage to cover, return spring, and weather proof seal.</p> 	Cover is missing or broken. Weather proof seal is torn or missing.

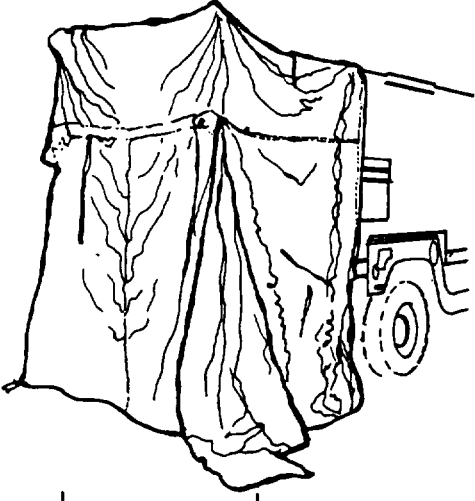
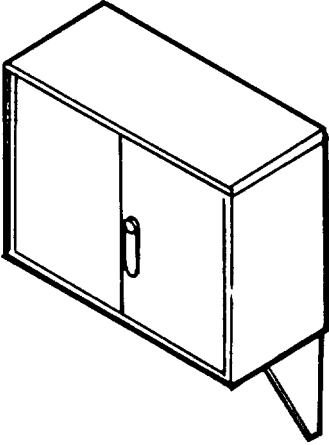
2-3. PMCS PROCEDURES. (Cont'd)

Table 2-1. OPERATOR'S PREVENTIVE MAINTENANCE CHECKS AND SERVICES  
(Cont'd)

Preventive Maintenance Checks and Services for DDSS				
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
16	Before	Environmental Control Unit  ECU Cable	Refer to TM 5-4120-378-14  Check cable and plug assembly for frays or damaged parts.	Cable frayed, plug pins bent or broken.
				
17	Before	Magnifier Lamp	Check light tube, lamp cord, lamp shade, and mounting bracket for damaged or missing parts. Plug lamp into "AUX" receptacle and turn on lamp switch. Check for burned out lamp tube.	
				

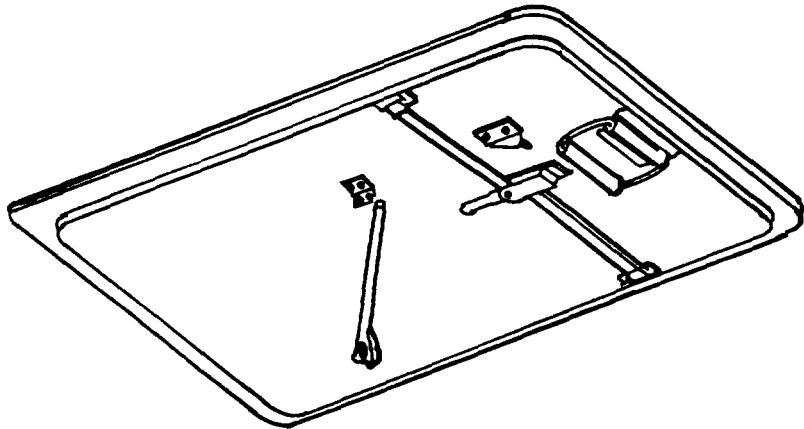
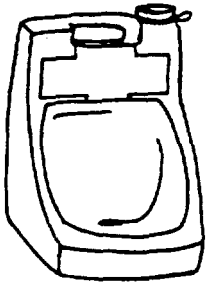
2-3. PMCS PROCEDURES. (Cont'd)

Table 2-1. OPERATOR'S PREVENTIVE MAINTENANCE CHECKS AND SERVICES  
(Cont'd)

Preventive Maintenance Checks and Services for DDSS				
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
18	Before	Boot	<p>Check boot and boot support poles for cleanliness, damaged, or missing parts. Check fabric for rips or tears. Refer to FM 10-16 for repair procedures.</p> 	Punctures, tears or open seams. Missing or broken Support pole components.
19	Before	Wall Cabinet	<p>Check mounting screws, door latch components, and cabinet exterior. Check latch assembly for proper function.</p> 	

2-3. PMCS PROCEDURES. (Cont'd)

Table 2-1. OPERATOR'S PREVENTIVE MAINTENANCE CHECKS AND SERVICES  
(Cont'd)

Preventive Maintenance Checks and Services for DDSS				
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
20	Before	Escape Hatch	<p>Check for damaged or missing latching components. Check for proper operation of latching mechanism.</p> 	Screws missing, latch mechanism damaged or does not function properly.
21	Before	Eye Wash Kit	<p>Check for damage to plastic housing and wash solution reservoir is full.</p> 	Housing is cracked or broken, eye wash covers missing. Reservoir is not full.

2-3. PMCS PROCEDURES. (Cont'd)

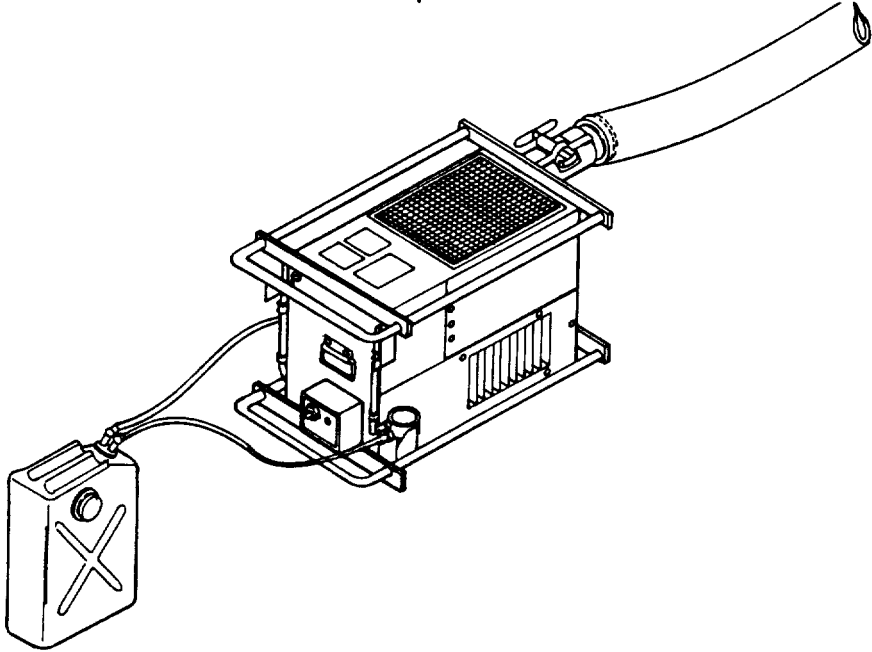
Table 2-1. OPERATOR'S PREVENTIVE MAINTENANCE CHECKS AND SERVICES  
(Cont'd)

Preventive Maintenance Checks and Services for DDSS				
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
22	Before	Trailer	Refer to TM 9-2330-202-14&P	
23	Before	Trailer Frame	Check for damage and security of trailer frame to trailer. Check curbside and roadside boxes for damage and security.	Trailer frame is not secure to trailer.



2-3. PMCS PROCEDURES. (Cont'd)

Table 2-1. OPERATOR'S PREVENTIVE MAINTENANCE CHECKS AND SERVICES  
(Cont'd)

Preventive Maintenance Checks and Services for DDSS				
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
24	Before	MULTIFUEL Space Heater	Refer to TM 5-4520- 253-13	
25	Before	Heater Adapter Assembly	Check for missing, damaged, or loose components. Check fuel lines for leaks, cracks or tears. Check exhaust hose for breaks or constrictions.	Fuel lines leak, has cracks or tears or exhaust hose is constricted.
				
26	Before	Zoom Transfer Scope	Refer to TM 5-6675- 326-14	
27	Before	Quantity Processing System	Refer to TM 5-6675- 326-14	

2-3. PMCS PROCEDURES. (Cont'd)

Table 2-1. OPERATOR'S PREVENTIVE MAINTENANCE CHECKS AND SERVICES  
(Cont'd)

Preventive Maintenance Checks and Services for DDSS				
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
28	Before	Fire Extinguisher	Check nozzle and adapter for damage. Check to see if seal is broken, replace as required.	
29	Before	Diazo Reproduction Set	Refer to TM 5-3610-256-14	
30	Before	SICPS Tent	Refer to TM 10-8340-225-10	

Section III.

OPERATION UNDER USUAL CONDITIONS

CONTENTS	PARA
PREPARATION FOR USE .....	2-4
INITIAL ADJUSTMENTS AND DAILY CHECKS .....	2-5
OPERATING PROCEDURE .....	2-6
OPERATION OF AUXILIARY EQUIPMENT .....	2-7
PREPARATION FOR MOVEMENT .....	2-8
OPERATING INSTRUCTIONS ON DECALS AND INSTRUCTION PLATES .....	2-9

**2-4. PREPARATION FOR USE.** Preparing the DDSS for use consists of:

- site selection
- removing tent from trailer
- setting up tent
- unloading trailer and shelter
- installing boot
- setting up mission equipment
- connecting components
- applying power

a. Site selection.

Select a site having the following features:

- (1) level area - 20 ft x 50 ft minimum
- (2) clear of rocks and underbrush
- (3) sheltered from high winds
- (4) good drainage

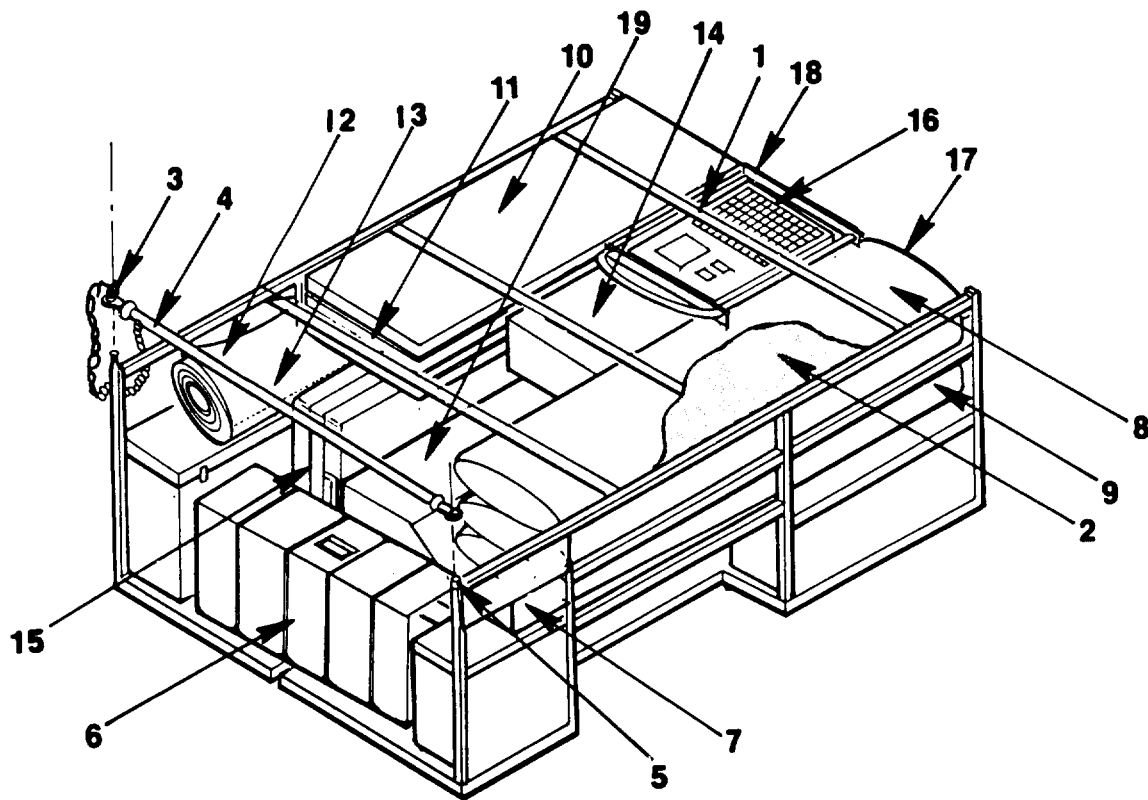
b. Pull trailer into position.

c. Lock trailer brakes (refer to TM 9-2330-202-14).

**2-4. PREPARATION FOR USE.** (Cont'd)**WARNING**

Tongue weight of the trailer is in excess of 80 pounds and hitch is in an awkward position. Two soldiers are required to lift the hitch when disconnecting the trailer. Exercise care when disconnecting. Failure to do so may result in personal injury or damage to equipment.

- d. Disconnect trailer from HMMWV (refer to TM 9-2330-202-14).
- e. Move HMMWV to a position next to roadside of trailer.



- f. Unloading trailer.
  - (1) Remove tarpaulin straps (1) and tarpaulin (2) from trailer (refer to TM 9-2330-202-14).
  - (2) Remove pull pins (3) from trailer frame stay bar (4).
  - (3) Remove stay bar (4) from supports (5). Lay stay bar outside trailer. Stay bar remains attached to trailer by chain.

**2-4. PREPARATION FOR USE.** (Cont'd)

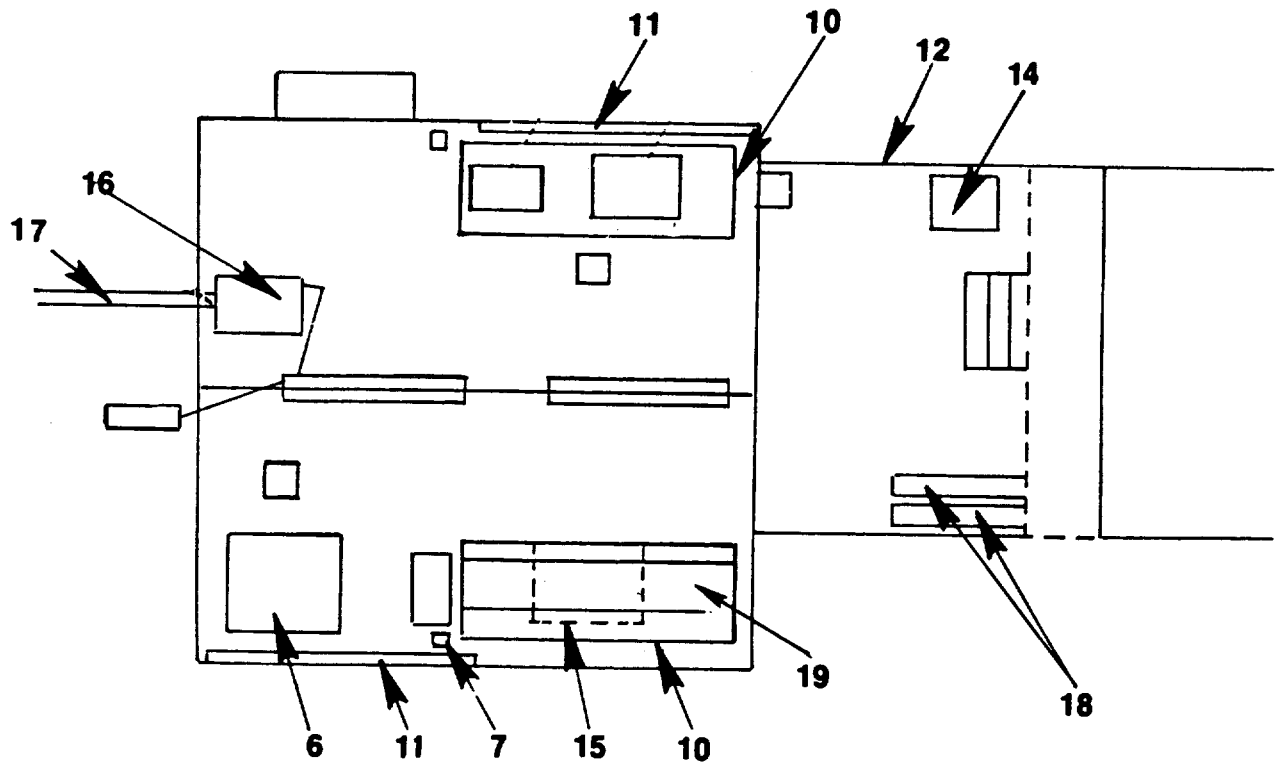
f. Unloading trailer. (Cont'd)

- (4) Lower trailer tailgate and release tie down straps.

**WARNING**

Ensure two or more persons are available to lift heavy equipment. Failure to do so may result in serious injury or damage to equipment.

- (5) Remove drafting equipment set (6) and place on ground on roadside of HMMWV.
- (6) Remove tool box (7).
- (7) Remove three tent bags (8) and place on ground.
- (8) Remove tent light canister (9) and place on ground near tent bags.
- (9) Setup tent approximately 8 to 10 feet behind HMMWV (refer to TM 10-8340-225-10).



**2-4. PREPARATION FOR USE.** (Cont'd)

f. Unloading trailer. (Cont'd)

(10) Remove two folding tables (10) and set up in tent.

(11) Remove two map boards (11) and hang from tent frame in assigned location.

(12) Remove shelter boot (12) and place on ground.

(13) Remove boot frame (13) and place on ground.

**WARNING**

Ensure two or more persons are available to lift heavy equipment. Failure to do so may result in serious injury or damage to equipment.

(14) Place drafting equipment set (6) on floor inside tent near position where it is to be used.

(15) Remove eye wash kit (14) and place inside tent.

**WARNING**

Ensure two or more persons are available to lift heavy equipment. Failure to do so may result in serious injury or damage to equipment.

(16) Remove diazo expendable set (15) and place on floor inside tent under diazo reproduction table.

**2-4. PREPARATION FOR USE.** (Cont'd)

## f. Unloading trailer. (Cont'd)

**WARNING**

Ensure two or more persons are available to lift heavy equipment. Failure to do so may result in serious injury or damage to equipment.

- (17) Remove multifuel space heater (16) and place inside tent.
- (18) Remove heater exhaust hose (17) and place near multifuel space heater (16).
- (19) Remove map cases (18) and place in assigned location.

**WARNING**

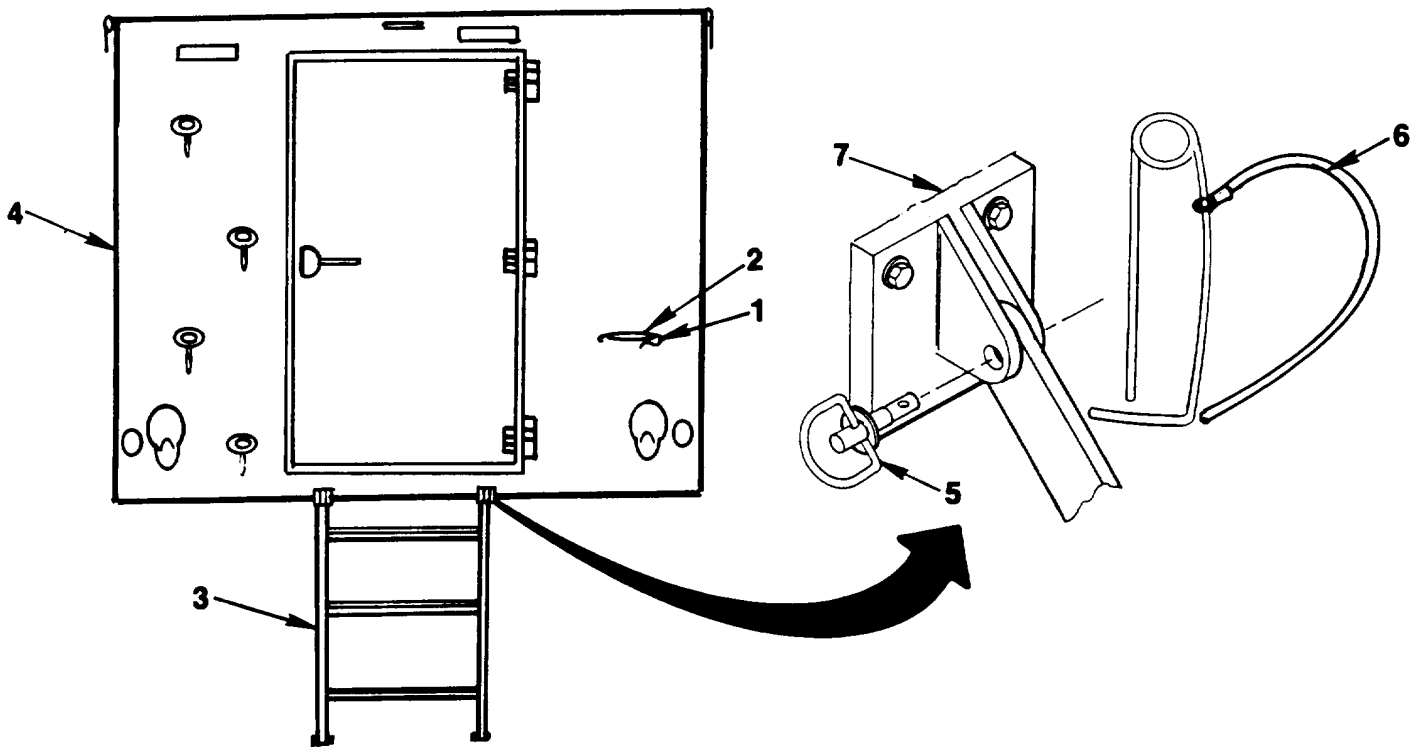
Ensure two or more persons are available to lift heavy equipment. Failure to do so may result in serious injury or damage to equipment.

- (20) Remove diazo reproduction set (19) and place on table inside tent.
- (21) Stow tent light canister (9) and empty tent bags (8) in trailer.

## 2-4. PREPARATION FOR USE. (Cont'd)

### g. Removing and setting up ladder.

- (1) Remove retaining clip (1) from pin (2) to remove ladder (3) from shelter (4).
- (2) Remove retaining clips (5) and pins (6) from brackets (7).



- (3) Position ladder (3) in brackets (7) below shelter door.

### NOTE

Ladder must be positioned so that steps are level. If ladder is reversed, steps are incorrectly positioned, and bottom of ladder does not properly contact ground.

- (4) Install pins (5) through inside of ladder brackets (7) and ladder (3).
- (5) Install retaining clips (6) through pins (5).



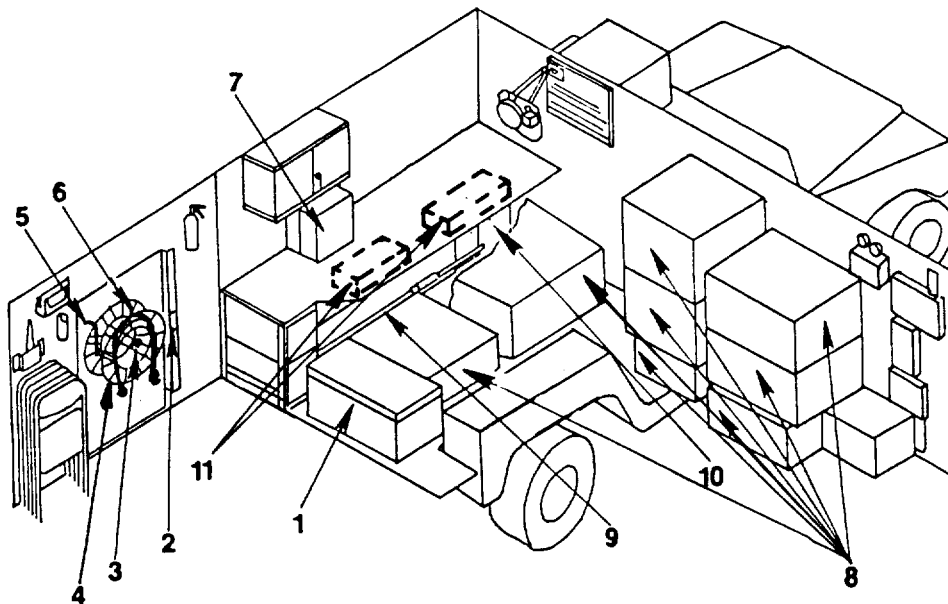
**2-4. PREPARATION FOR USE. (Cont'd)**

- h. Unloading shelter.

**WARNING**

Ensure two or more persons are available to lift heavy equipment. Failure to do so may result in serious injury or damage to equipment.

- (1) Remove Zoom Transfer Scope (1) and place on table inside tent.
- (2) Enter shelter and turn on shelter incandescent lights (2).
- (3) Close door securely.
- (4) Remove cable reel retaining nut (3).

**WARNING**

Cable reel weighs in excess of 80 pounds. Ensure that two soldiers lift the reel together. Failure to do so may result in personal injury or damage to equipment.

- (5) Remove cable reel (4) from bracket (5) and set reel (4) on its side on floor of shelter.
- (6) Open door; one soldier exit shelter.
- (7) Unwind cable (6) from reel (4) and form coil on ground.

**2-4. PREPARATION FOR USE. (Cont'd)**

## h. Unloading Shelter. (Cont'd)

- (8) Move coiled power cable to curb side of shelter and place on ground.
- (9) Stow empty cable reel (4) in trailer.
- (10) Remove Quantity Processing Set (7) and place inside tent.

**WARNING**

Ensure two or more persons are available to lift heavy equipment. Failure to do so may result in serious injury or damage to equipment.

- (11) Remove equipment from reusable containers (8) and place equipment into designated position.
- (12) Place empty containers inside trailer.
- (13) Remove Ground Rod (9) and place on ground on curb side of shelter near Main Power Cable.
- (14) Photo Interpretation Kit (10) remains in shelter.

**WARNING**

Ensure two or more persons are available to lift heavy equipment. Failure to do so may result in serious injury or damage to equipment.

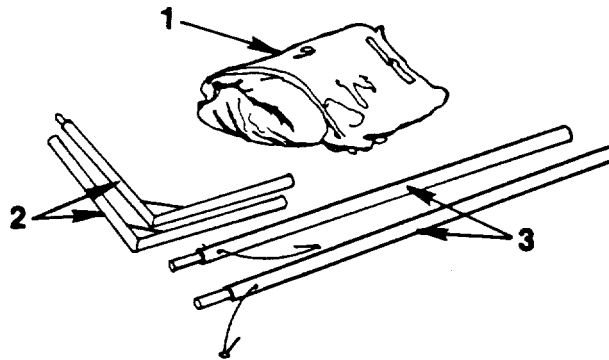
- (15) Remove two of the Field File Cabinets (11) from shelter and place in assigned locations in tent.

2-4. PREPARATION FOR USE. (Cont'd)

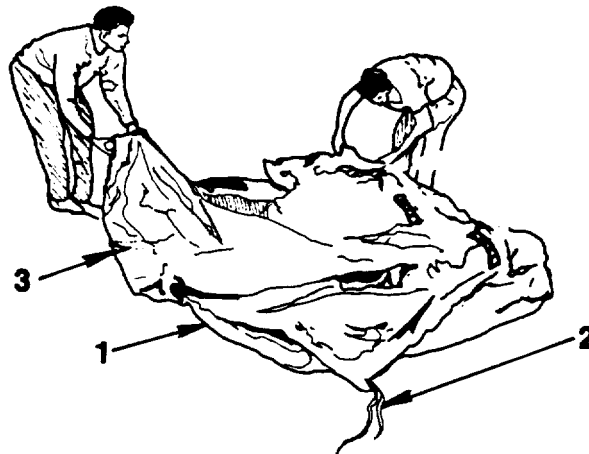
- i. Installing boot.

**NOTE**

Boot installation requires three soldiers.



- (1) Place boot (1) cross bars (2) and support poles (3) on ground between shelter and tent.



- (2) Unfold boot (1) and locate end of boot with belly strap (2).
- (3) Place boot (1) on ground with buckle strap (3) on roadside of shelter.

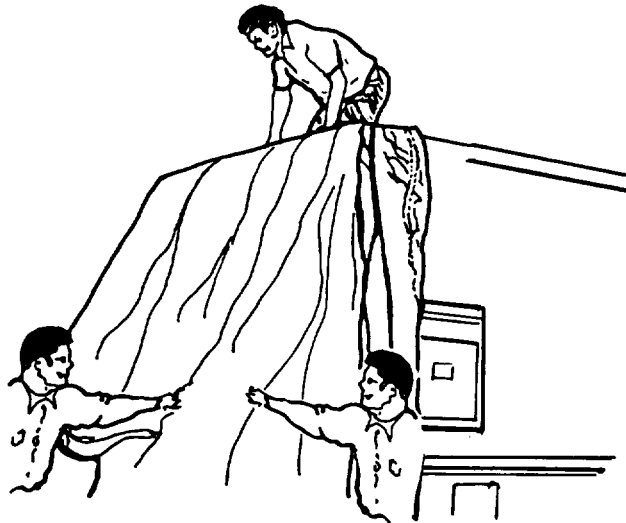
**2-4. PREPARATION FOR USE. (Cont'd)**

## i. Installing boot. (Cont'd)

**WARNING**

Exercise extreme care when working on shelter roof. A fall may result in injury or death.

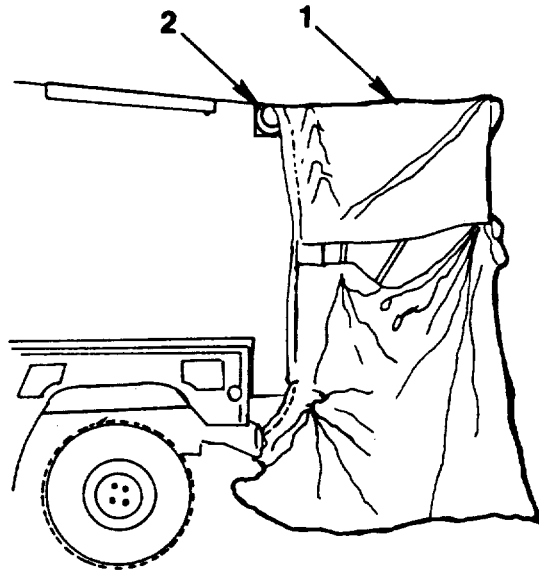
- (4) Soldier enters shelter and climbs through open escape hatch.
- (5) Close escape hatch and take prone position near rear edge of roof.
- (6) Remove ladder, place it in shelter, and close shelter door.
- (7) Two soldiers lift top of belly strap end of boot to soldier on roof.



**2-4. PREPARATION FOR USE. (Cont'd)**

i. Installing boot. (Cont'd)

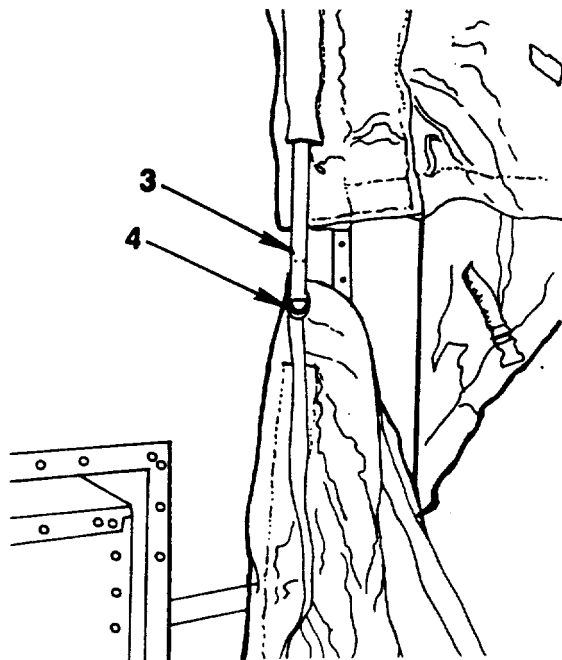
(8) Soldier on roof pulls end of boot (1) over rear lift ring bracket (2) of shelter.



(9) Two soldiers on ground position boot belly strap (3) under bottom of shelter.

(10) Align boot corner pockets with bottom of shelter.

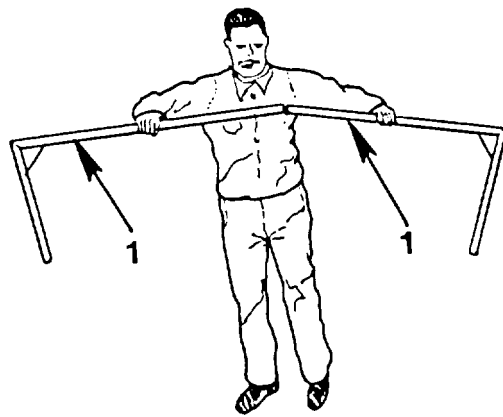
(11) On roadside of shelter secure and tighten belly strap (3) with ring buckle (4).



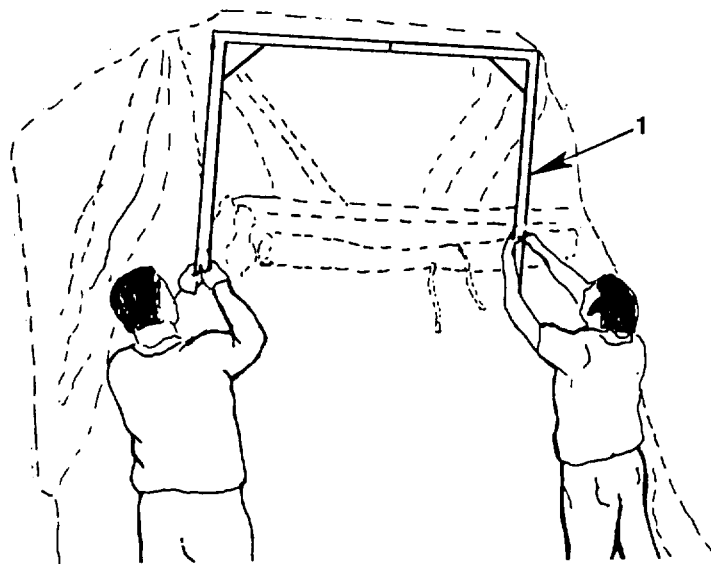
2-4. **PREPARATION FOR USE.** (Cont'd)

i. Installing boot. (Cont'd)

(12) Assemble boot support crossbars (1).

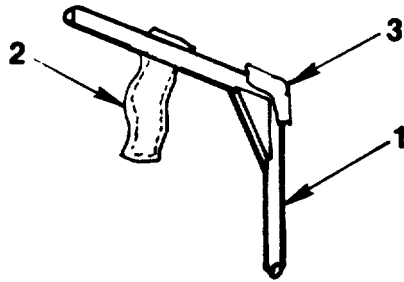


(13) Two soldiers enter open end of boot with assembled cross bar (1).

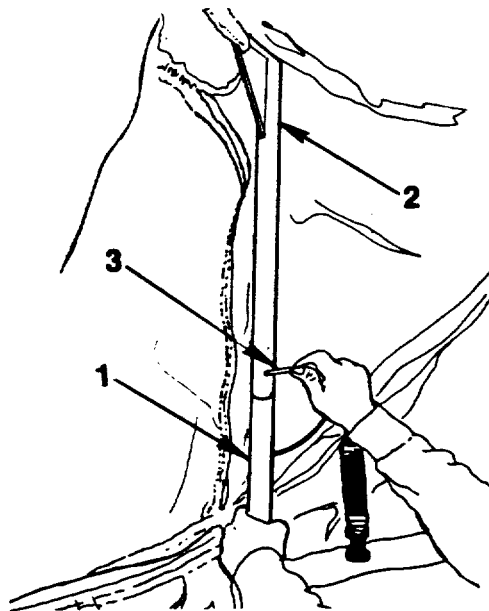


2-4. **PREPARATION FOR USE.** (Cont'd)

i. Installing boot. (Cont'd)



- (14) Center cross bar (1) against velcro fasteners (2).
- (15) Check ends of cross bar for fit in corner pockets (3) of boot.
- (16) Secure cross bar (1) with velcro fasteners (2).

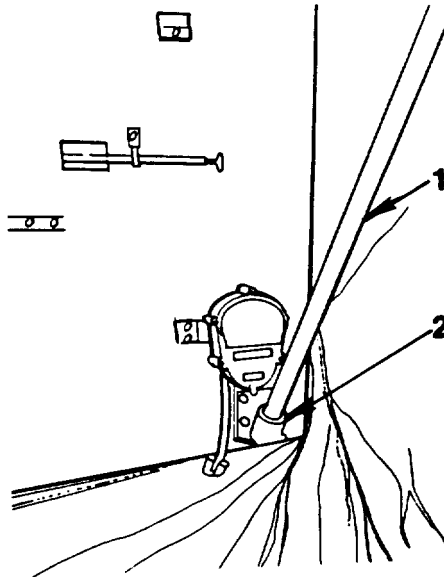


- (17) Two soldiers enter boot with boot support poles (1) and insert support poles (1) into cross bar (2).
- (18) Secure cross bar (2) to support poles (1) with attached pins (3) by inserting attached pins (3) through holes on assembled support poles (1).

2-4. **PREPARATION FOR USE.** (Cont'd)

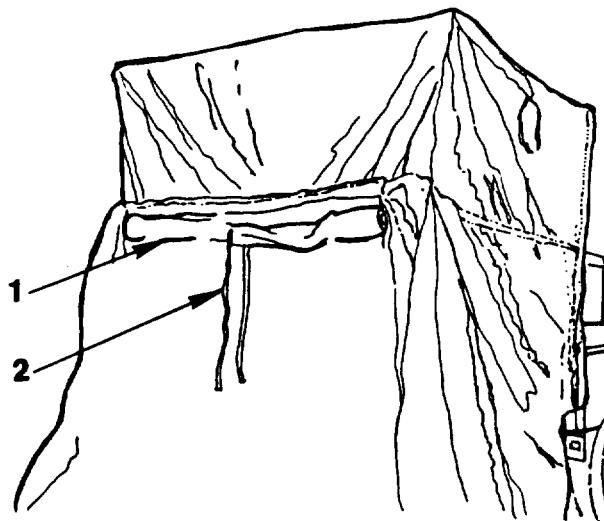
i. Installing boot. (Cont'd)

- (19) Two soldiers simultaneously raise boot support (1) and insert bottom ends of support into bracket (2) located below tail lights.



- (20) Roll up rear flap (1) of boot and secure with straps (2).

- (21) Reattach ladder to brackets below door.





**2-4. PREPARATION FOR USE. (Cont'd)**

- i. Installing boot. (Cont'd)

**NOTE**

Ladder must be positioned so that steps are level. If ladder is reversed, steps are incorrectly positioned, and bottom of ladder does not properly contact ground.

When boot is properly positioned, boot support cross bar fits into sewn pockets in corners of boot, and ladder rests on a rectangular section of canvas.

(22) Check boot for even overlap and good fit on shelter corners. Tighten roadside ring buckle.

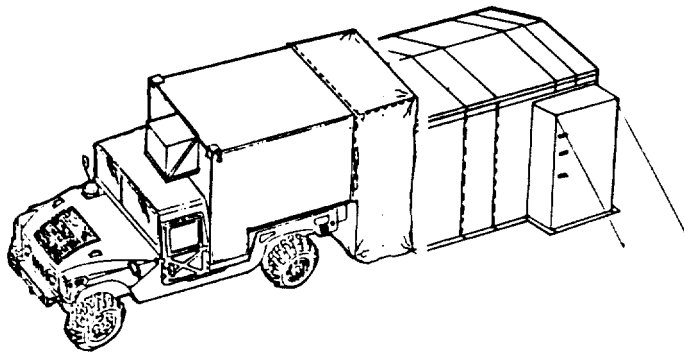
(23) Soldier on roof can now exit shelter.

(24) Temporarily remove ladder.

**CAUTION**

Ensure that boot does NOT get caught underneath HMMWV tires while HMMWV is backing up. Failure to do so may result in damage to the boot.

(25) Back HMMWV to a position where rear of shelter is approximately six feet from tent. Shelter is parallel with the tent.



**2-4. PREPARATION FOR USE. (Cont'd)**

i. Installing boot. (Cont'd)

- (26) Shut down the HMMWV and set parking brake.
- (27) Attach boot to tent using velcro strips and straps located on boot and around tent door.
- (28) Reinstall ladder.

**NOTE**

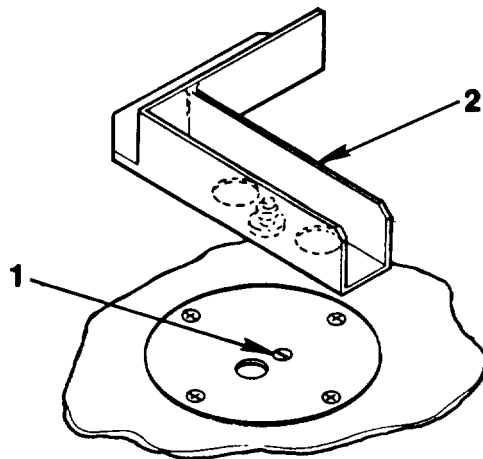
Bottom of ladder should rest on reinforced area of boot.

j. Preparing shelter for use.

**NOTE**

Floor bracket has three positions: OPEN-for removal or installation of floor bracket; LOCK-for locking floor bracket and PLUG-in this position, installation holes are covered.

- (1) Turn screw (1) until floor bracket lock (2) is in open position. Remove floor brackets (2) and stow in trailer. Turn screw until floor bracket lock (2) is in the plug position.



- (2) Press tang at rear of each buckle to loosen straps around chairs. Set chairs in tent and in shelter as needed.
- (3) Reach under shelf and pull writing surface forward until it stops. Pull down on rear of writing surface to flip surface up.
- (4) Ensure that main switch, environmental control unit, and all circuit breakers are OFF.

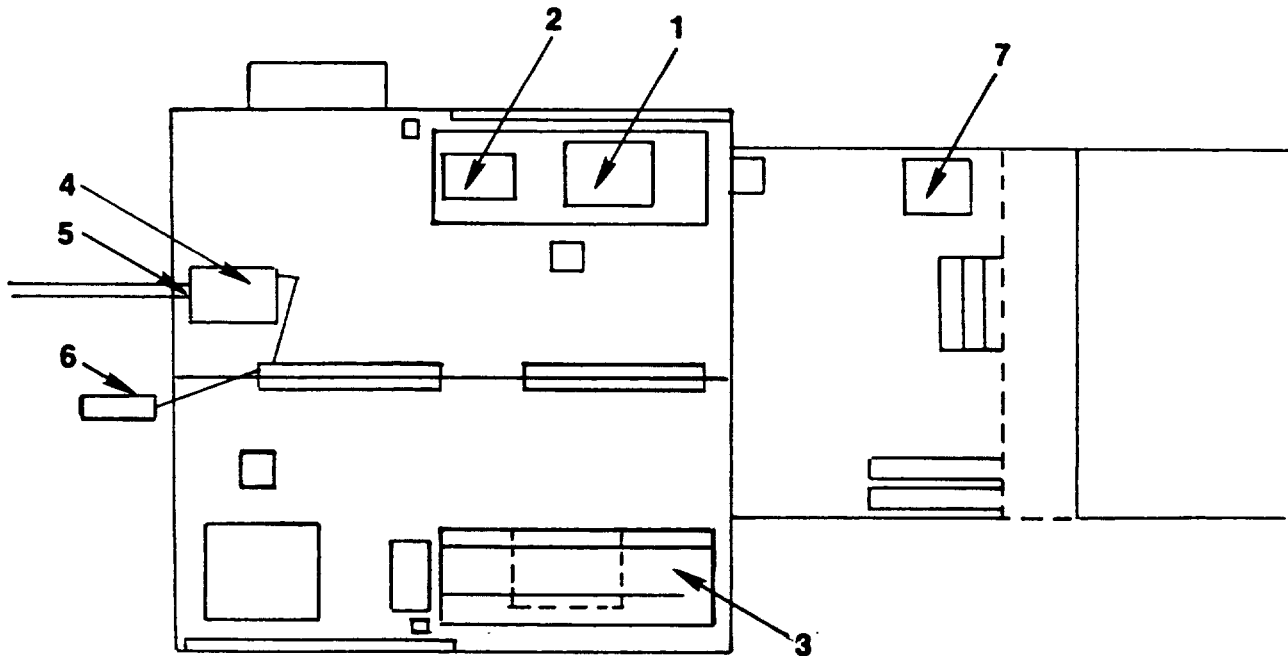
2-4. PREPARATION FOR USE. (Cont'd)

- k. Preparing SICPS tent for use.

**WARNING**

Two persons are required to lift the zoom transfer scope (ZTS) due to weight. Failure to adhere to this warning may result in serious injury or damage to equipment.

- (1) Remove Zoom Transfer Scope (1) from case and place it in its assigned position.



- (2) Store empty case in trailer.
- (3) Remove Quantity Processing System (2) from case and place it in its assigned position. Store empty case.

**2-4. PREPARATION FOR USE. (Cont'd)**

- k. Preparing SICPS tent for use. (Cont'd)

**WARNING**

Ammonia vapor may cause blindness, skin burns, or death.

Ensure adequate ventilation prior to servicing or operating Diazo Reproduction Set.

Wear eye protection before servicing ammonia system.

Do not breathe vapor.

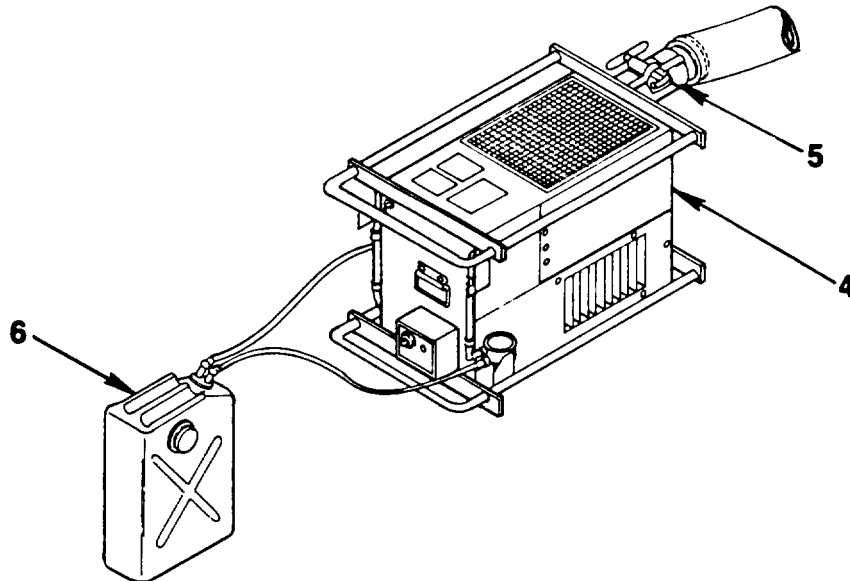
Do not let ammonia contact skin or clothing.

- (4) Remove cover from Diazo Reproduction Set (3) and store cover.

**WARNING**

Ensure two or more persons are available to lift heavy equipment. Failure to do so may result in serious injury or damage to equipment.

- (5) Set up Multifuel Space Heater (4) in assigned location (Refer to TM5-4520-253-13).



- (6) Secure Heater Exhaust Hose to Multifuel Space Heater with coupling (5).
- (7) Connect fuel can (6) to heater (4).

**2-4. PREPARATION FOR USE. (Cont'd)**

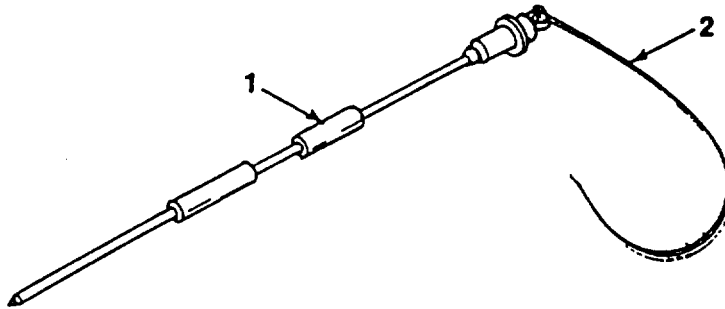
## k. Preparing SICPS tent for use. (Cont'd)

- (8) Remove heater power cable from auxiliary box on trailer and connect to Multifuel Space Heater.
- (9) Route heater exhaust hose and heater power cable under nearest wall of tent.
- (10) Open power entrance panel and connect heater cable.
- (11) Remove drawstring bag from auxiliary storage box in trailer.
- (12) Remove gas mask and ammonia spill kit from drawstring bag, and place in tent near Diazo Reproduction Set (3).
- (13) Fill Eyewash Station (7), and place it in assigned location.

## l. Connecting power.

**NOTE**

Locate ground rod near power entrance box.



- (1) Drive Ground Rod (1) into ground until firmly planted.
- (2) Attach Ground Cable (2) to Ground Rod (1).

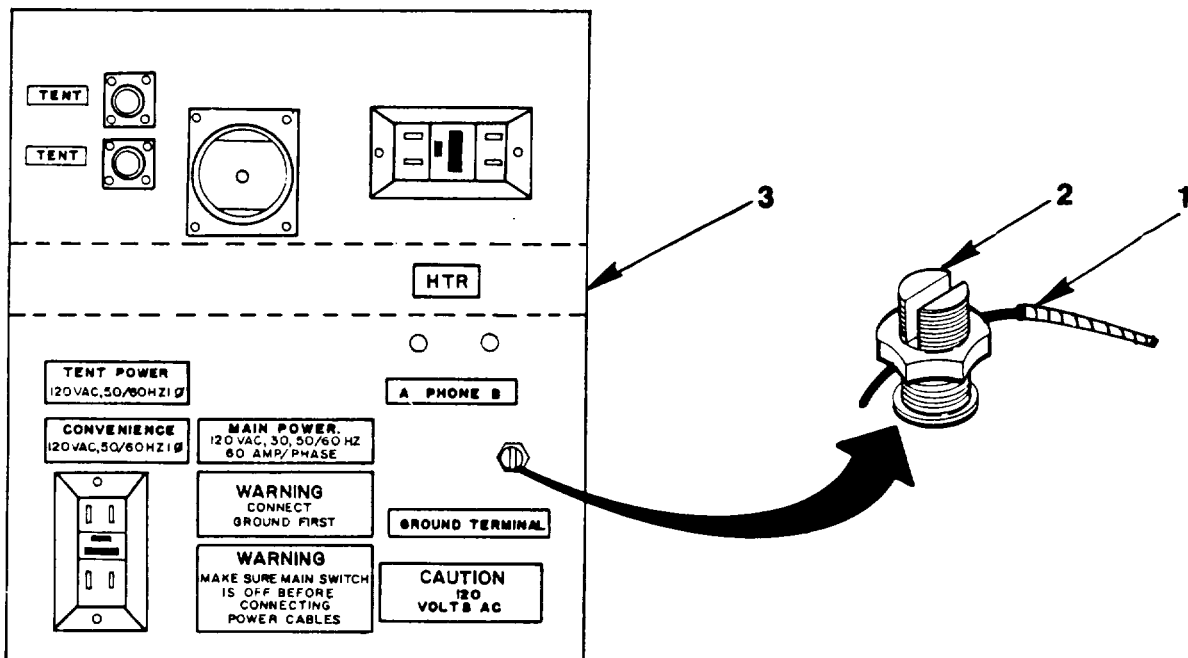
2-4. **PREPARATION FOR USE.** (Cont'd)

I. Connecting power. (Cont'd)

**WARNING**

Use extreme caution when performing checks, services, or maintenance at or near power entrance box. Failure to do so may result in death or serious injury.

- (3) Attach ground cable (1) to ground post assembly (2) on power entrance panel (3).
- (4) Remove two power cables with outlet boxes from auxiliary storage box in trailer.
- (5) Position power cables with outlet boxes in tent.
- (6) Route cables under tent wall, and connect to shelter power entrance panel.
- (7) Remove tent lighting extension cord from auxiliary storage box in trailer.
- (8) Connect tent light plug and extension cable to tent light receptacle.

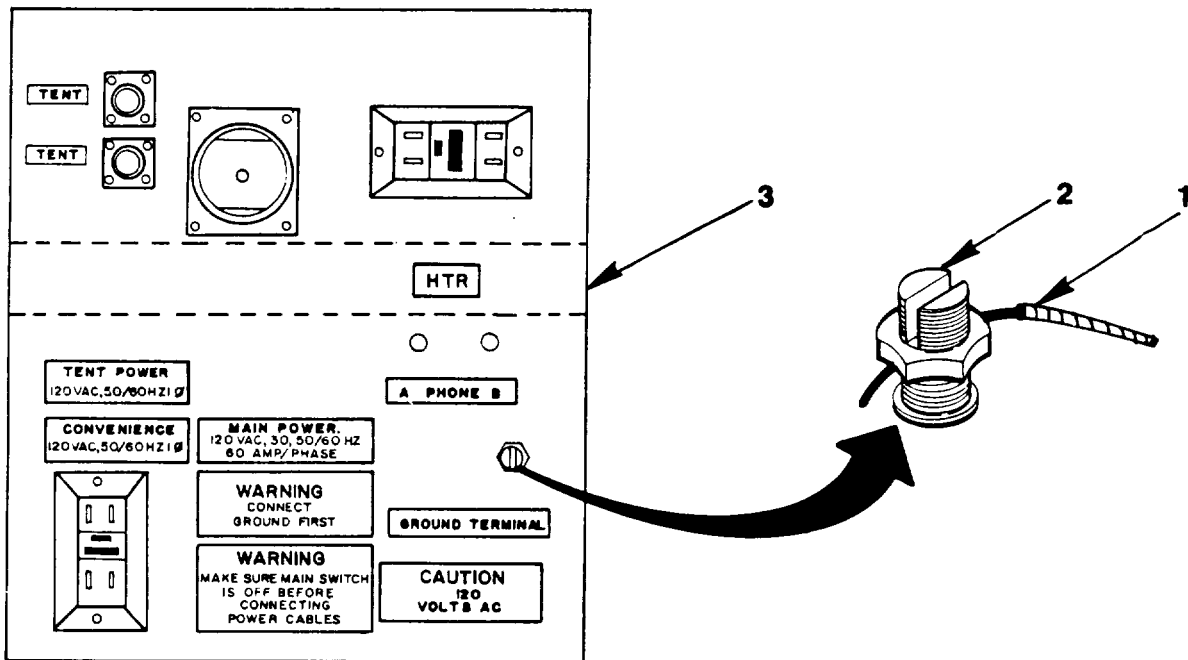


2-4. **PREPARATION FOR USE.** (Cont'd)

I. Connecting power. (Cont'd)

**WARNING**

Ensure that all individual circuit breakers and Main Switch inside shelter are OFF before applying power to the DDSS. Failure to do so may result in death or serious injury.



- (9) Connect Main Power Cable (1) to Main Power Connector (2) on Power Entrance Panel (3).
- (10) Set circuit breakers and Main Switch inside shelter to OFF.
- (11) Have generator operator connect Main Power Cable to generator output and apply power.

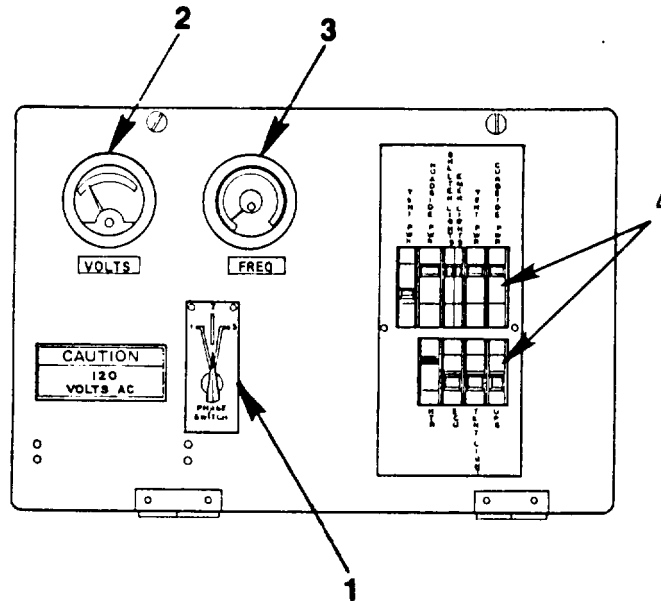
**NOTE**

Normal readings for procedures 12, 13, and 14 are:

- Voltage -- 120 Volts
- Frequency -- 60 Hz

**2-4. PREPARATION FOR USE. (Cont'd)**

I. Connecting power. (Cont'd)



- (12) Using Three Position Switch (1), check Voltmeter (2) and Frequency Meter (3) to ensure that readings are normal for each phase.
- (13) Turn on Main Switch and recheck meters (2) and (3) for normal readings. (Normal voltage equals 120v  $\pm$ 5 volts and normal frequency equals 60 Hz  $\pm$ 1 Hz)
- (14) Turn on individual circuit breakers (4) one at a time while monitoring meters for normal readings.
- (15) Turn on and operate individual equipment as required in accordance with each equipment's technical manual.
- (16) Turn on fluorescent lights.
- (17) Turn off incandescent light switch.

**2-5 INITIAL ADJUSTMENTS AND DAILY CHECKS.** Refer to the technical manuals for the mission equipment used in the DDSS for initial adjustments and daily checks. See Appendix A, References, for TM numbers. Initial adjustments for the shelter and boot are covered in Section 2-4. DDSS daily checks are listed in the Operator Preventive Maintenance Checks and Services, Table 2-1.

**2-6 OPERATING PROCEDURE.** Operating procedures for the mission equipment used in the DDSS are contained in the technical manuals for each equipment. See Appendix A, References, for applicable TM numbers.



**2-7 OPERATION OF AUXILIARY EQUIPMENT.** The DDSS requires an external 120V AC three-phase power source such as that provided by a generator. Refer to the technical manual pertinent to the generator being used for operating instructions.

**2-8 PREPARATION FOR MOVEMENT.** Striking the DDSS in preparation for movement consists of:

- disconnecting power
- striking mission equipment
- striking boot
- loading shelter and trailer
- striking the SICPS
- loading SICPS onto the trailer
- hitching trailer to HMMWV

a. Disconnecting Power.

#### **WARNING**

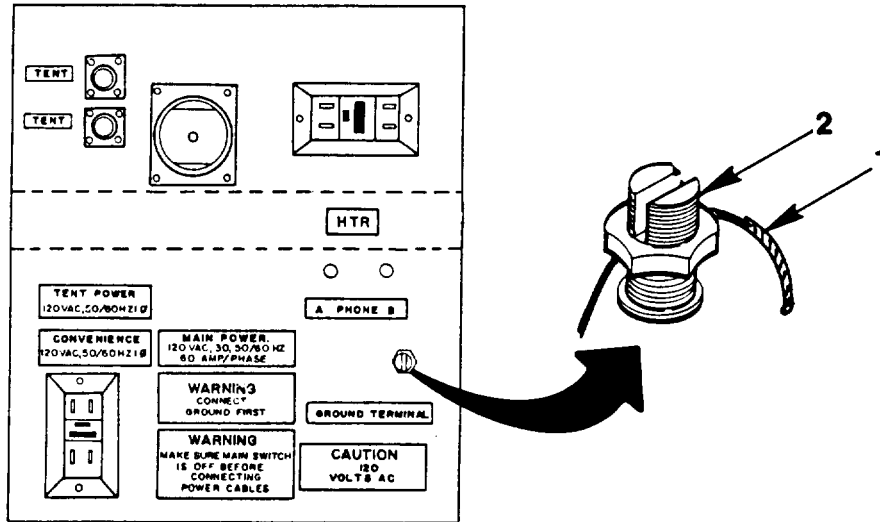
Use extreme caution when performing checks, services, or maintenance at or near power entrance box and power distribution box. Failure to do so may result in death or serious injury.

- (1) Turn off all equipment in accordance with each equipment's technical manual.
- (2) Turn off all circuit breakers.
- (3) Turn off Main Switch.
- (4) Disconnect Main Power Cable from power entrance panel.
- (5) Have generator operator disconnect Main Power Cable from generator.
- (6) Wind Main Power Cable on cable reel.

2-8 **PREPARATION FOR MOVEMENT.** (Cont'd)

a. Disconnecting Power. (Cont'd)

(7) Disconnect tent power cables and stow in trailer auxiliary storage box.



**WARNING**

Use extreme caution when performing checks, services, or maintenance at or near power entrance box and power distribution box. Failure to do so may result in death or serious injury.

- (8) Detach Ground Cable (2) from Ground Post (4) in Power Entrance Panel and stow in shelter.
- (9) Disconnect heater power cable and stow in trailer auxiliary storage box.
- (10) Disconnect tent lighting cable and tent lights from tent light receptacle and stow in trailer auxiliary storage box.
- (11) Turn on incandescent light switch.

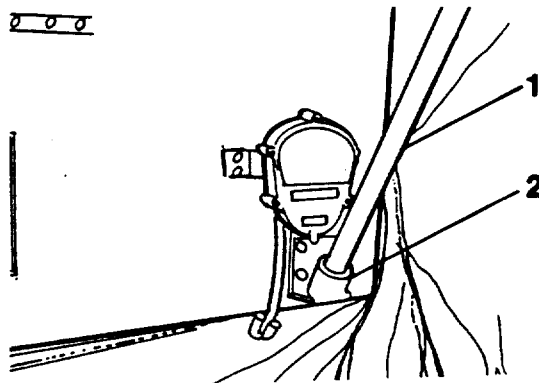
2-8 **PREPARATION FOR MOVEMENT.** (Cont'd)

b. Striking Boot.

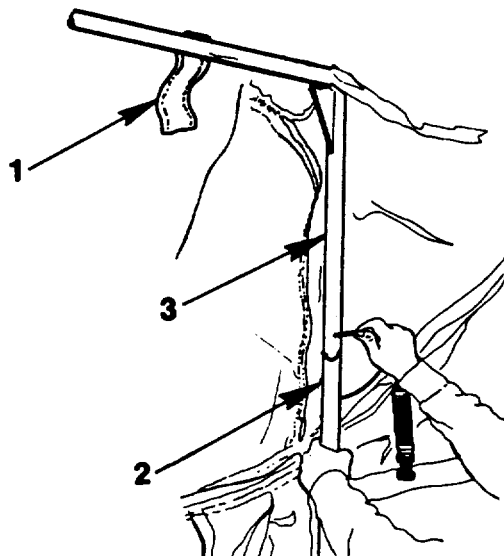
**NOTE**

Three soldiers are required to strike boot.

- (1) Remove ladder, place in shelter and close door.
- (2) Disconnect boot velcro fasteners and straps from tent.
- (3) Enter boot and remove boot support (1) from boot support brackets (2).



- (4) Disconnect three velcro fasteners (1) from boot support cross bar and remove boot support (3) from boot.
- (5) Disassemble boot support (3) and (2) and lay aside.
- (6) Unroll flap.



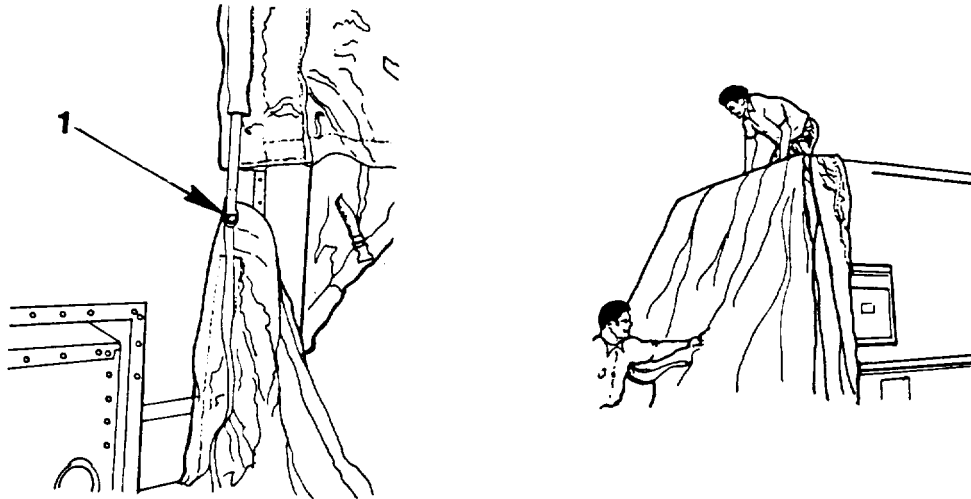
2-8 **PREPARATION FOR MOVEMENT.** (Cont'd)

b. Striking Boot. (Cont'd)

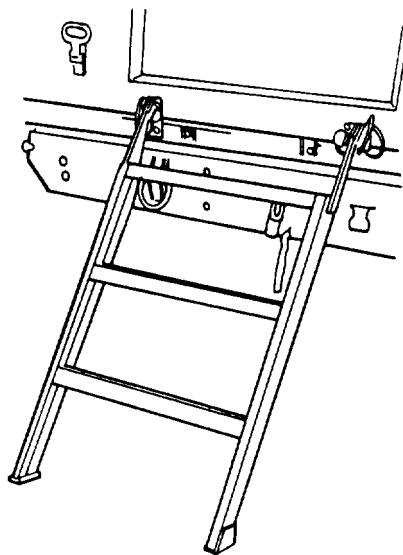
- (7) Loosen and separate plain end and double ring end of belly strap (1) on roadside of boot.

**CAUTION**

Be careful when removing boot from shelter. Boot fabric can be torn.



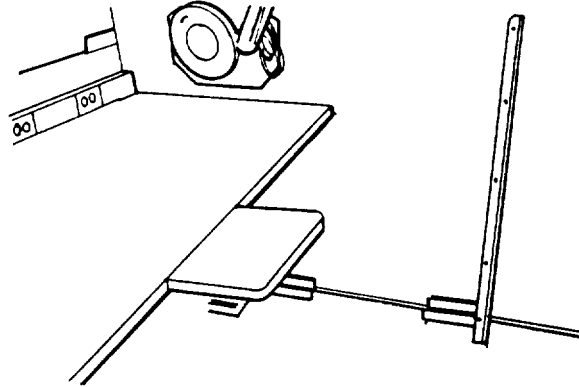
- (8) Grasp outside edges of boot and carefully slide boot from shelter.
- (9) Fold boot and lay aside.
- (10) Install ladder.



2-8 **PREPARATION FOR MOVEMENT.** (Cont'd)

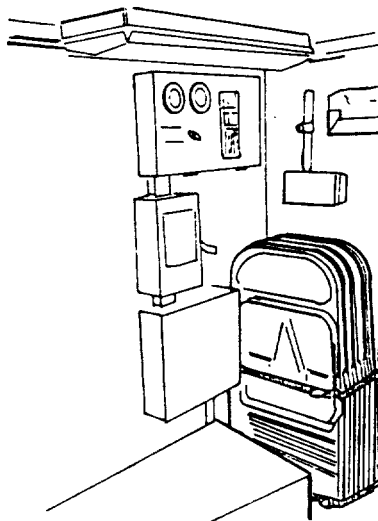
c. Preparing Shelter for Movement.

- (1) Prepare Environmental Control Unit for movement (refer to TM 5-4120-378-14).



- (2) Stow Writing Surface.

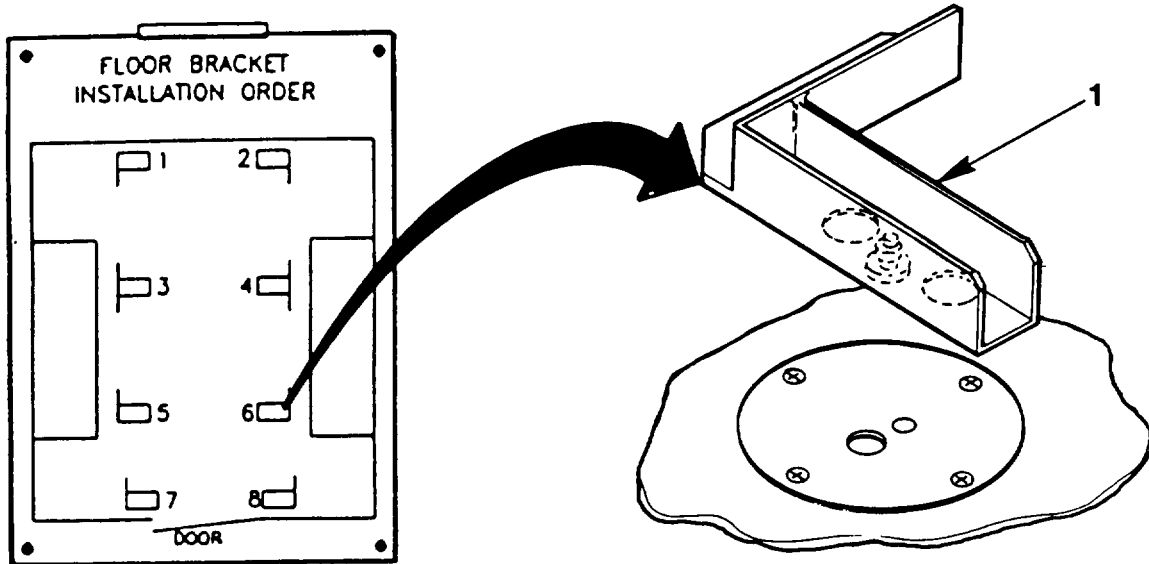
- (3) Stow all chairs in shelter and secure with straps provided.



2-8 **PREPARATION FOR MOVEMENT.** (Cont'd)

c. Preparing Shelter for Movement. (Cont'd)

- (4) Install 8 floor brackets (1).



**NOTE**

Floor bracket has 3 positions: OPEN - for removal or installation of floor bracket; LOCK - for locking floor bracket and PLUG - in this position installation holes are covered.

- (5) Stow photo interpretation kit in assigned position in shelter.
- (6) Stow quantity processing set in assigned position in shelter.

**WARNING**

Cable reel weighs in excess of 80 pounds. Ensure that two soldiers lift the reel together. Failure to do so may result in personal injury or damage to equipment.

- (7) Install cable reel with main power cable on shelter door.

**2-8 PREPARATION FOR MOVEMENT. (Cont'd)**

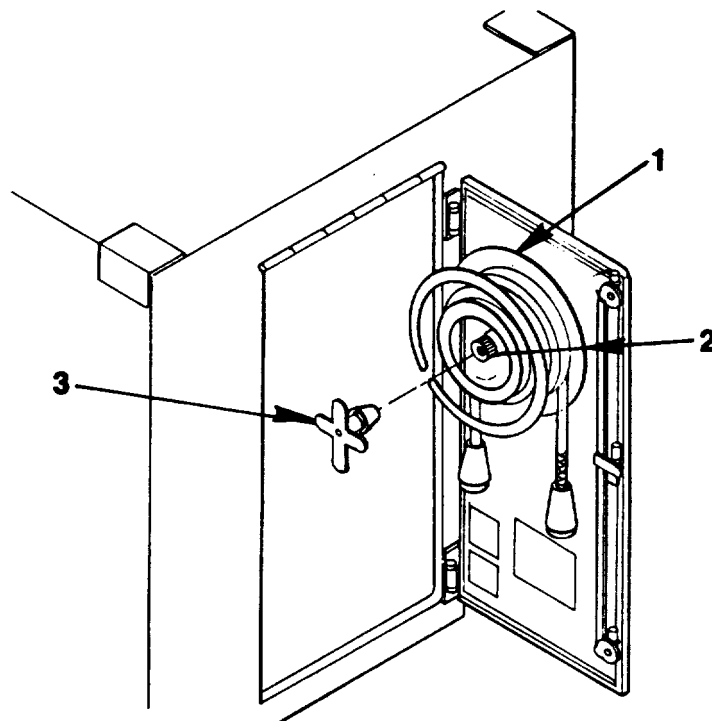
## c. Preparing Shelter for Movement. (Cont'd)

**WARNING**

Cable reel weighs in excess of 80 pounds. Ensure that two soldiers lift the reel together. Failure to do so may result in personal injury or damage to equipment.

**CAUTION**

Ensure that cable reel retaining rod is properly positioned when installing cable reel. Failure to do so may cause damage to equipment.

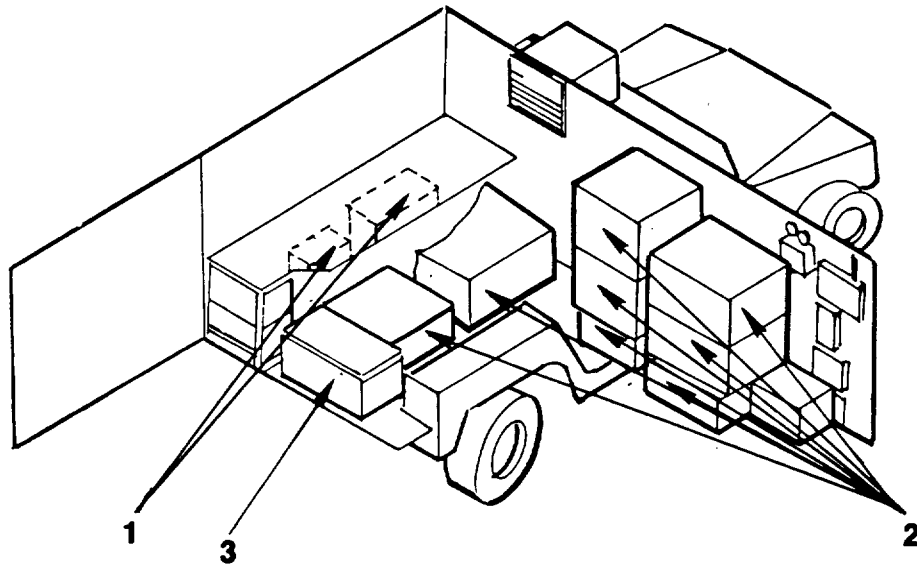


(8) Position cable reel (1) so that cable reel retaining rod (2) extends through hub of cable reel, and install cable reel into cable reel bracket.

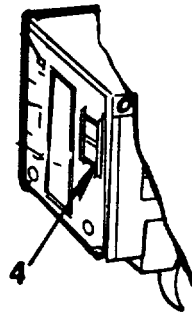
(9) Install cable reel retaining nut (3) onto cable reel retaining rod (2) and tighten securely.

**2-8 PREPARATION FOR MOVEMENT. (Cont'd)**

c. Preparing Shelter for Movement. (Cont'd)



- (10) Place field filing cabinets (1) into assigned locations in shelter and secure with straps.
- (11) Place reusable containers (2) into assigned locations in shelter and secure with straps.
- (12) Place zoom transfer scope (3) into assigned location in shelter and secure with straps.
- (13) Stow ladder (4).





**2-8 PREPARATION FOR MOVEMENT. (Cont'd)**

- d. Stowing Equipment from the Tent.

**WARNING**

Ammonia vapor may cause blindness, skin burns, or death.

Ensure adequate ventilation prior to servicing or operating Diazo Reproduction Set.

Wear eye protection before servicing ammonia system.

Do not breathe vapor.

Do not let ammonia contact skin or clothing.

- (1) Stow ammonia canister and ammonia in trailer storage boxes.

**WARNING**

Ensure two or more persons are available to lift heavy equipment. Failure to do so may result in serious injury or damage to equipment.

- (2) Install cover on Diazo Reproduction Set, prepare set for movement (refer to TM 5-3610-256-14), and stow in trailer.
- (3) Stow map cases in an assigned location in trailer.

**WARNING**

Ensure two or more persons are available to lift heavy equipment. Failure to do so may result in serious injury or damage to equipment.

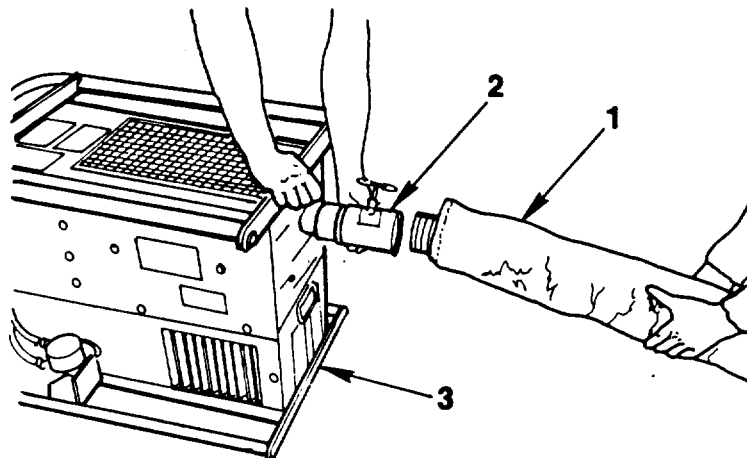
- (4) Stow Diazo expendable supplies in assigned location in trailer.

2-8 **PREPARATION FOR MOVEMENT.** (Cont'd)

## d. Stowing Equipment from the Tent. (Cont'd)

**WARNING**

Heater components may be hot; use care when handling.  
Failure to do so may result in personal injury.



- (5) Disconnect Exhaust Hose (1) and coupling (2) from heater (3). Stow coupling (2) in trailer auxiliary storage box.

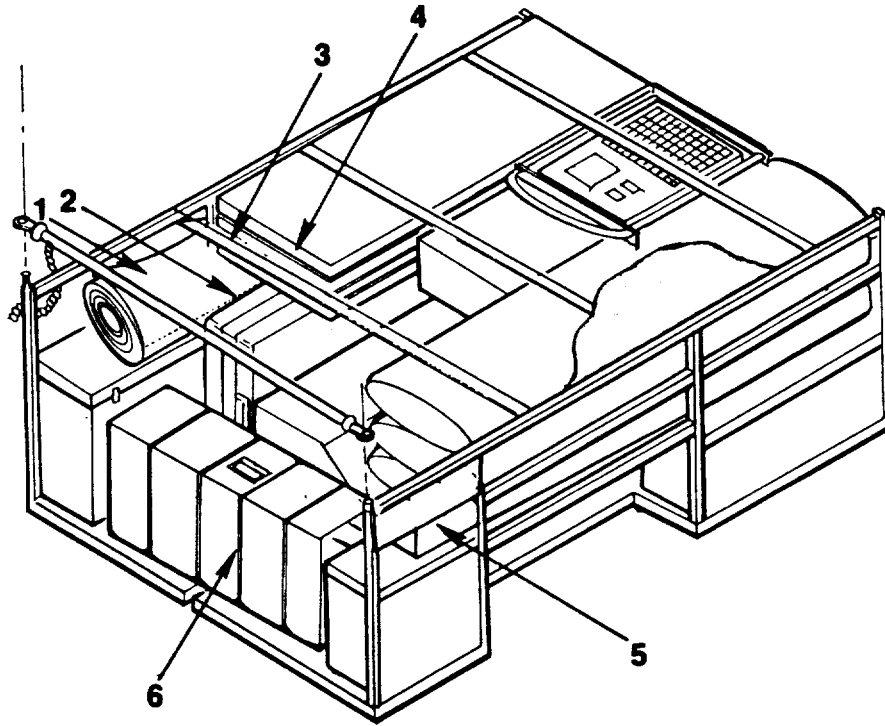
**WARNING**

Ensure two or more persons are available to lift heavy equipment.  
Failure to do so may result in serious injury or damage to Equipment.

- (6) Prepare Heater for movement (refer to TM 5-4520-253-13) and stow in trailer.
- (7) Empty Eyewash Station and stow in assigned location in trailer.
- (8) Place gas mask and ammonia spill kit in drawstring bag, and stow bag in auxiliary storage box in trailer.
- (9) Place Quantity Processing system into case, prepare for movement (refer to TM 5-6675-326-14).

2-8 **PREPARATION FOR MOVEMENT.** (Cont'd)

## d. Stowing Equipment from the Tent. (Cont'd)



- (10) Stow boot (1) and boot support (2) in trailer.
- (11) Stow map boards (3) in trailer.
- (12) Stow folding tables (4) in trailer.
- (13) Stow toolbox (5) in trailer.
- (14) Remove drafting equipment from tent and set aside.
- (15) Strike tent (refer to TM 10-8340-225-10) and stow in trailer.

**WARNING**

Ensure two or more persons are available to lift heavy equipment. Failure to do so may result in serious injury or damage to equipment.

- (16) Stow drafting equipment set (5) in trailer.

**2-8** **PREPARATION FOR MOVEMENT.** (Cont'd)

## e. Preparing Trailer for Movement.

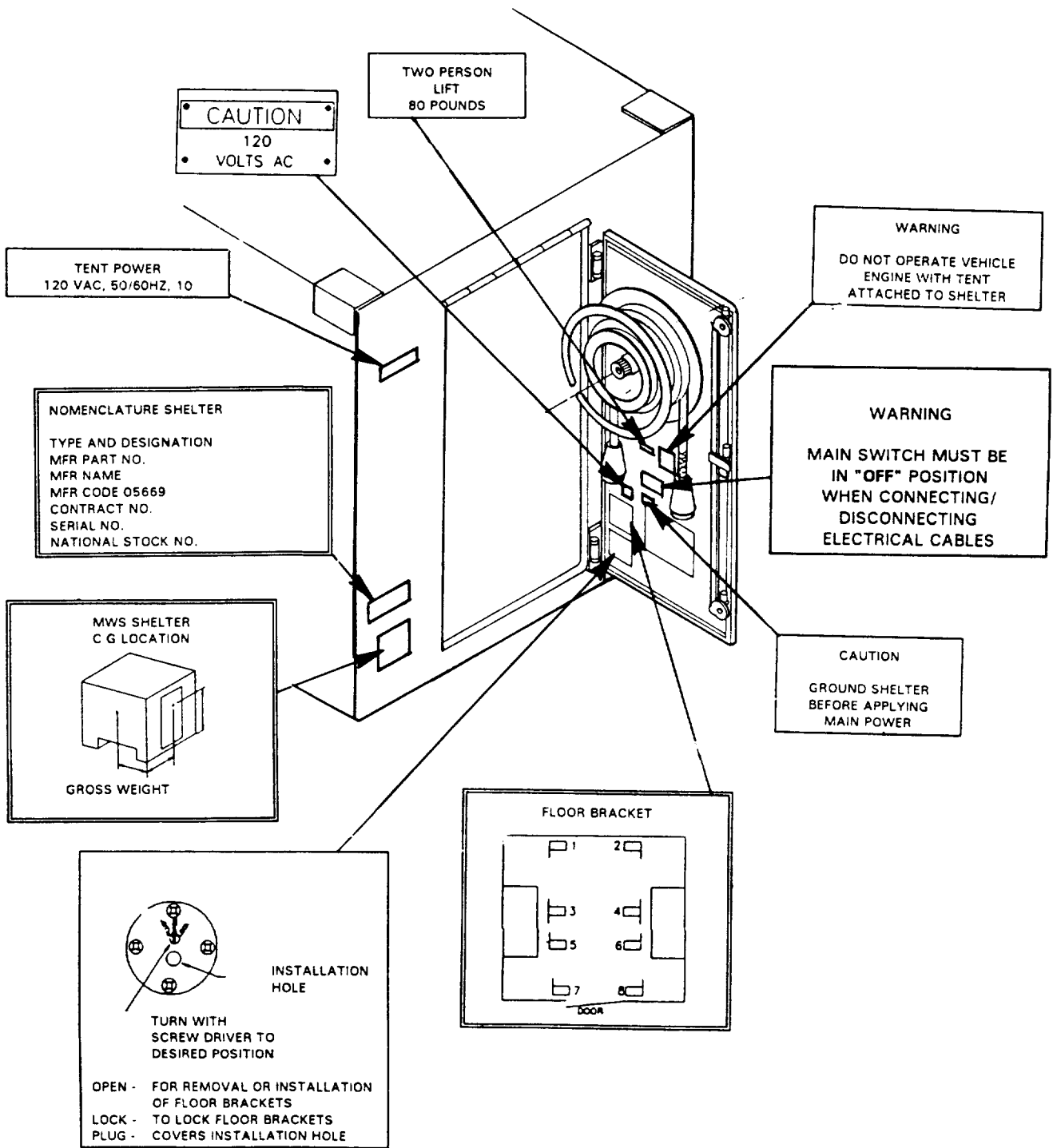
- (1) Close trailer tailgate (refer to TM 9-2330-202-14).
- (2) Close trailer frame and insert pins in stay bars.
- (3) Install stay bar on trailer frame.
- (4) Install tarpaulin supports and cover trailer with tarpaulin (refer to TM 9-2330-202-14).

**WARNING**

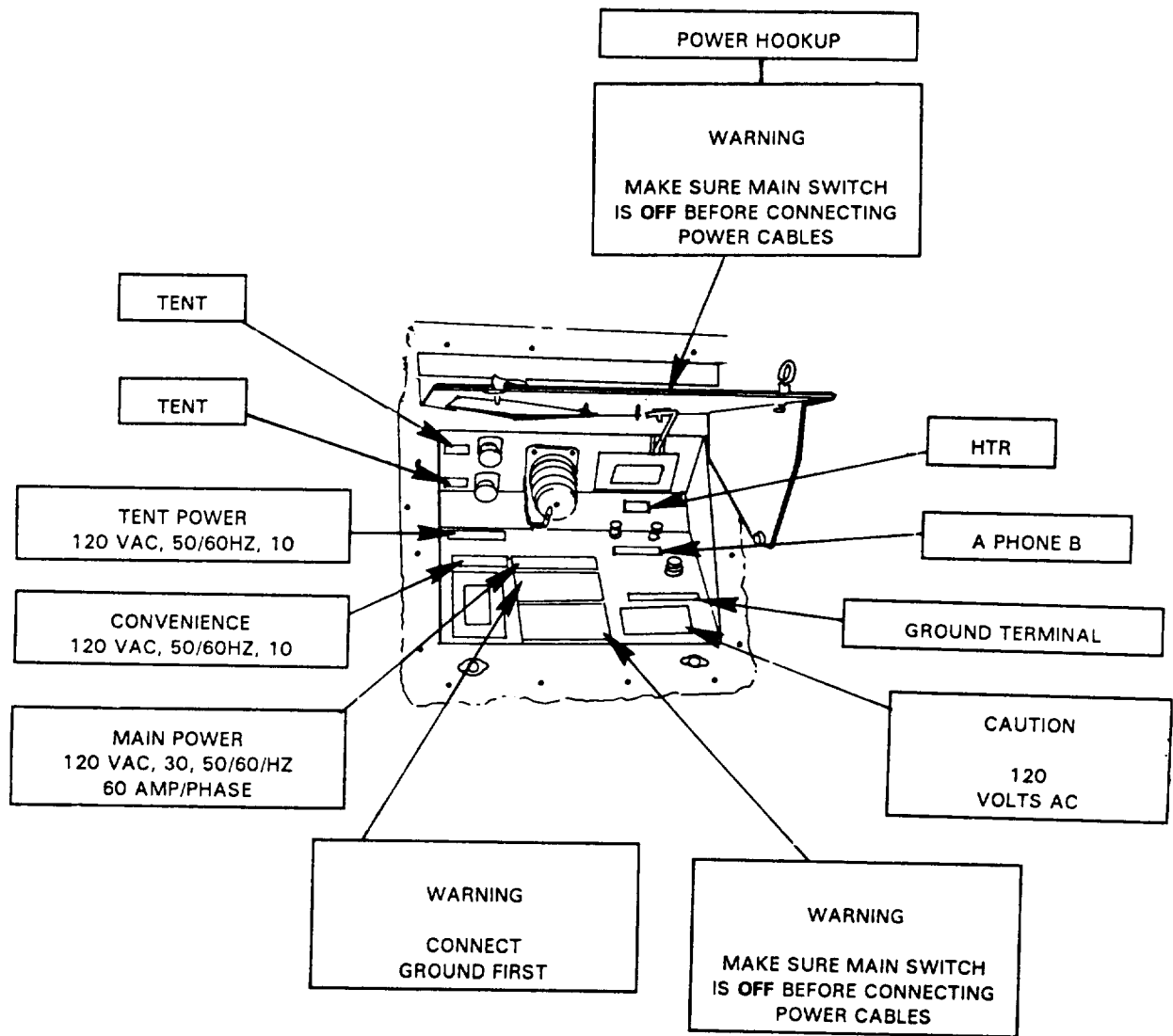
Tongue weight of the trailer is in excess of 80 pounds and hitch is in an awkward position. Two soldiers are required to lift the hitch when connecting the trailer. Exercise care when connecting. Failure to do so may result in personal injury or damage to equipment.

- (5) Connect HMMWV and trailer (refer to TM 9-2330-202-14).
- (6) Disengage trailer parking brakes (refer to TM 9-2330-202-14).

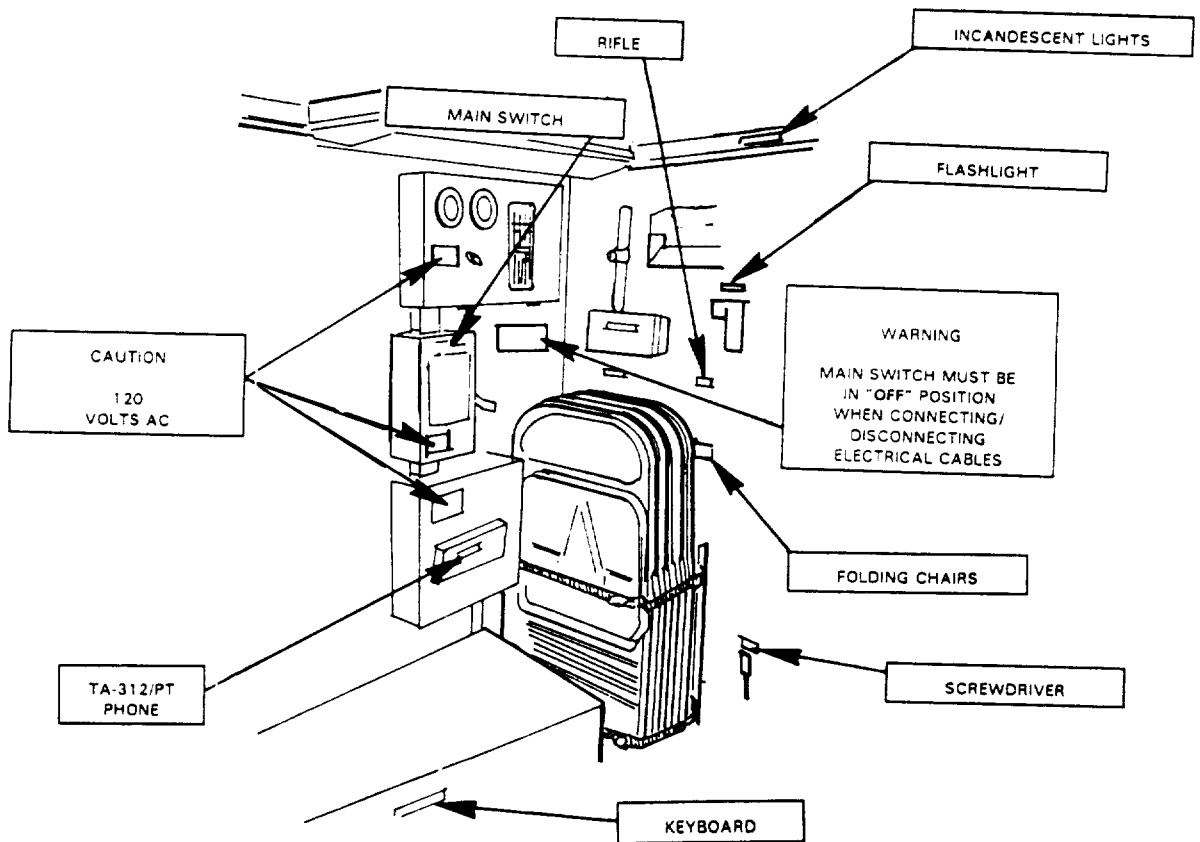
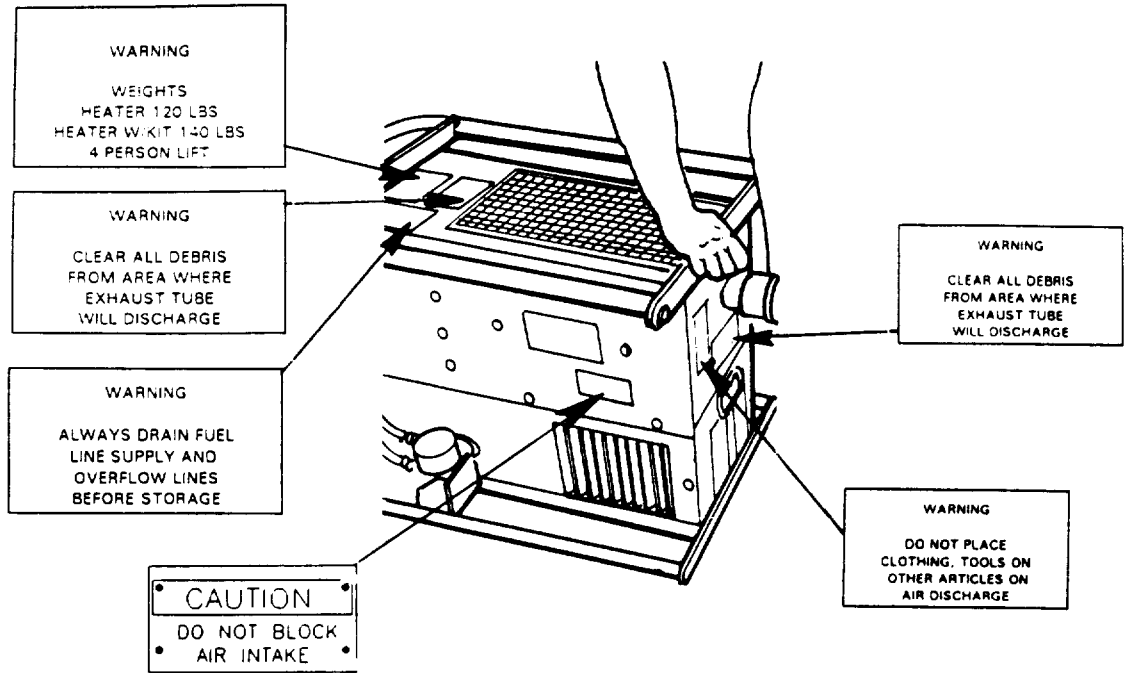
2-9. OPERATING INSTRUCTIONS ON DECALS AND INSTRUCTION PLATES.



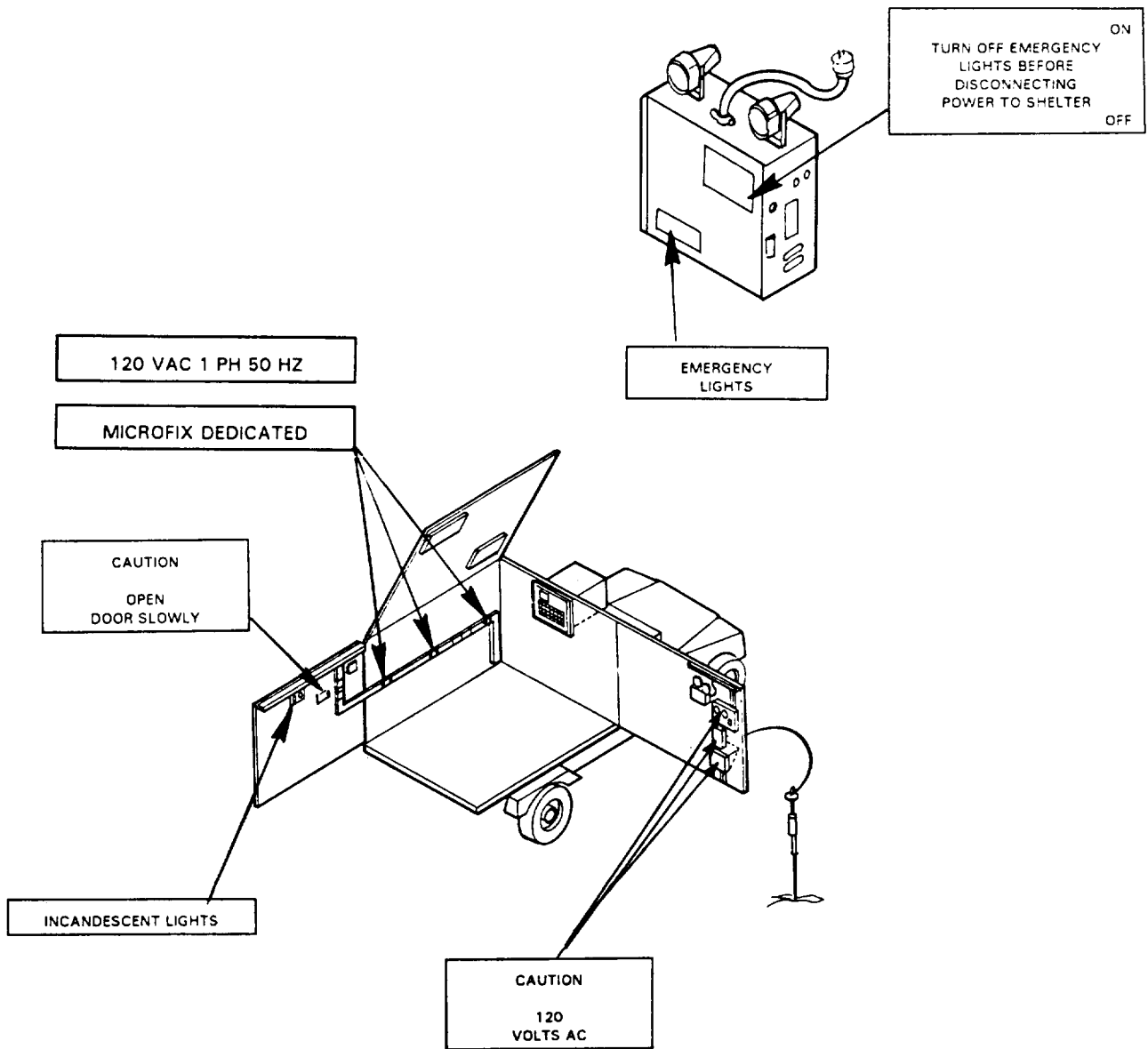
2-9. OPERATING INSTRUCTIONS ON DECALS AND INSTRUCTION PLATES. (Cont'd)



2-9. OPERATING INSTRUCTIONS ON DECALS AND INSTRUCTION PLATES. (Cont'd)



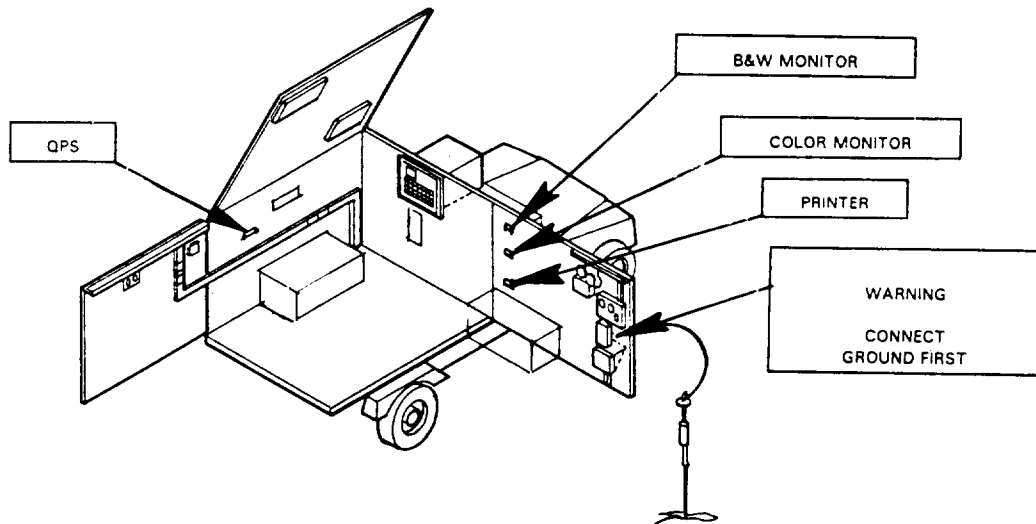
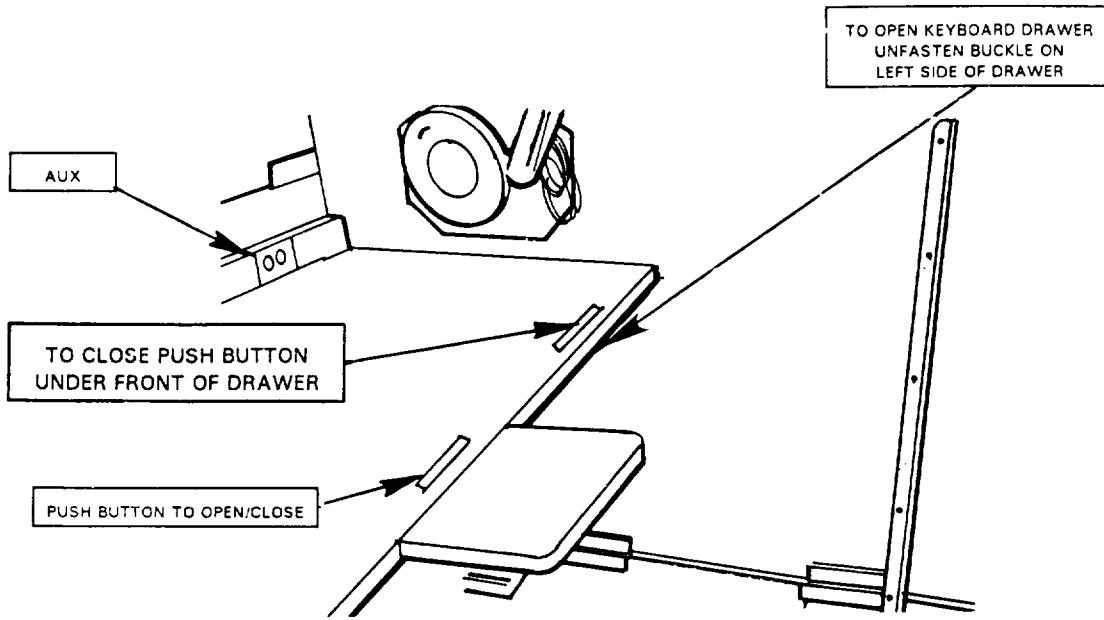
2-9. OPERATING INSTRUCTIONS ON DECALS AND INSTRUCTIONS PLATES. (Cont'd)



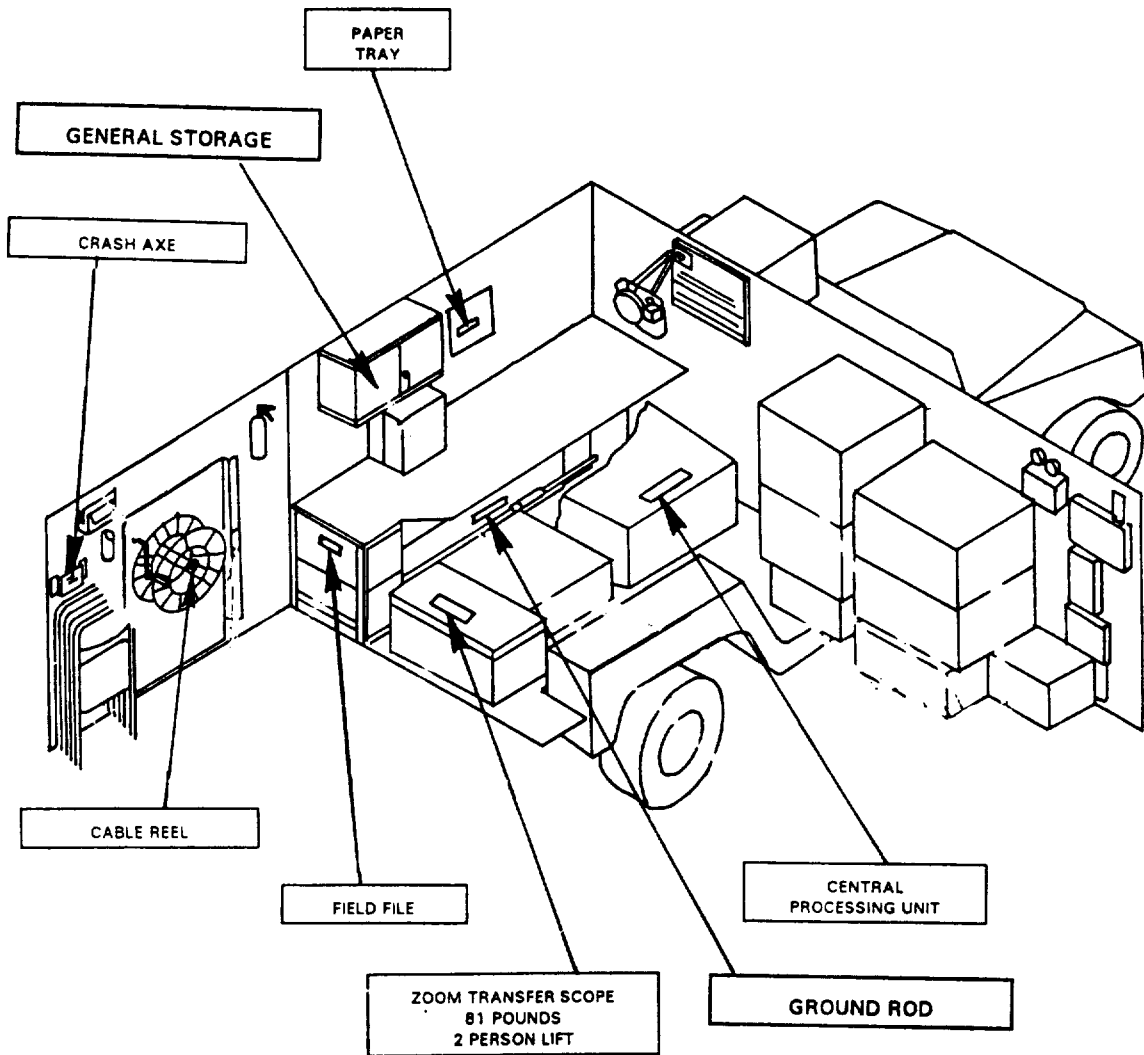




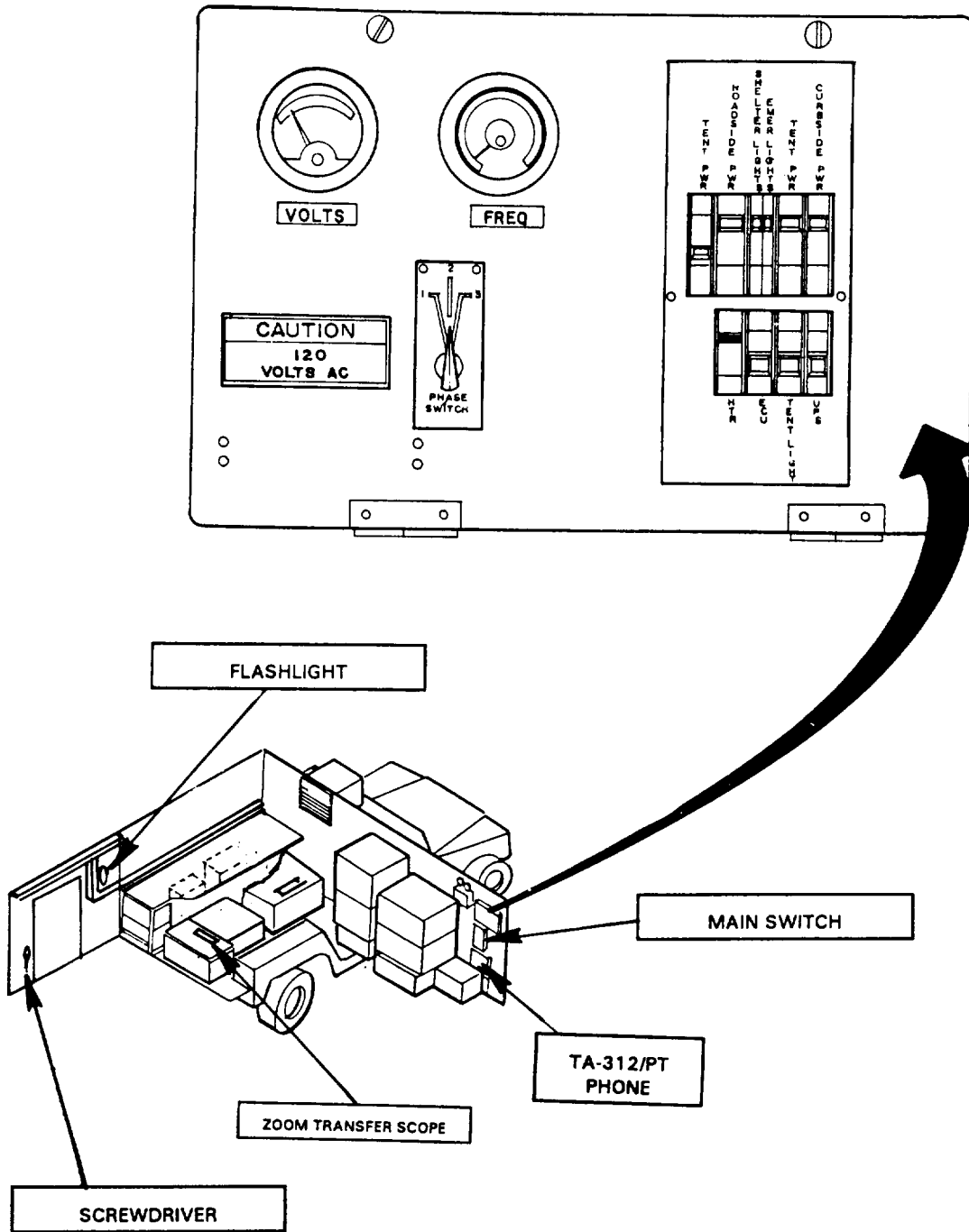
2-9. OPERATING INSTRUCTIONS ON DECALS AND INSTRUCTION PLATES. (Cont'd)



2-9. OPERATING INSTRUCTIONS ON DECALS AND INSTRUCTION PLATES. (Cont'd)



2-9. OPERATING INSTRUCTIONS ON DECALS AND INSTRUCTION PLATES. (Cont'd)



**Section IV. OPERATION UNDER UNUSUAL CONDITIONS**

<b>CONTENTS</b>	<b>PARA</b>
OPERATION IN UNUSUAL WEATHER .....	2-10
FORDING AND SWIMMING .....	2-11

Detailed instructions for operation of the three major sections of the DDSS are provided in the following technical manuals:

HMMWV	TM 9-2330-280-10
SICPS	TM 10-8340-225-10
Utility Trailer (MIOIA2)	TM 9-2330-202-14

**2-10. OPERATION IN UNUSUAL WEATHER.**

- a. Operation in High Wind or Storm Conditions.
  - (1) Secure all loose objects in the area.
  - (2) Secure shelter body by connecting ropes to lift rings, pulling ropes tight, and connecting ropes to buried deadman.
  - (3) Tighten all boot connections to shelter and tent and add additional tiedowns as required.
  - (4) Follow special instructions in technical manuals for HMMWV, Utility Trailer, and SICPS.
  
- b. Operation in Cold Weather.

**CAUTION**

When transporting the DDSS, or when heaters are not operating, and temperature is below 32°F (0°C), protect liquid supplies from freezing. Failure to do so may result in container breakage and damage to equipment.

**2-10. OPERATION IN UNUSUAL WEATHER.** (Cont'd)

## b. Operation in Cold Weather. (Cont'd)

- (1) Ensure liquid supplies are stored in a warm place.

**CAUTION**

Extreme cold can cause external power cables and ground cable to become hard and brittle. Avoid kinks or tight loops in cables. Failure to do so may result in permanent damage to cables.

**NOTE**

During normal DDSS operation, shelter and tent interiors are kept environmentally controlled, and internal equipment is not affected by outside temperature.

- (2) Ensure all external power and ground cables are free from tight loops and kinks.

## c. Operation in Extreme Heat or Tropical Conditions.

**CAUTION**

When transporting the DDSS, or when the shelter environmental control unit is not operating, and the weather is extremely humid, mold or mildew can form on equipment, supplies, and documents causing damage.

**NOTE**

During normal DDSS operation, shelter and tent interiors are kept environmentally controlled, and internal equipment is not affected by outside temperature.

Store consumable supplies, documents and normally exposed equipment in protective containers to keep dry and free from condensation.

**2-10. OPERATION IN UNUSUAL WEATHER.** (Cont'd)

- d. Operation in Desert Conditions.

**CAUTION**

Do not let sand or dust accumulate on or around DDSS equipment. Such accumulation can clog filters and cause damage to equipment.

**NOTE**

During normal DDSS operation, shelter and tent interiors are kept environmentally controlled, and internal equipment is not affected by outside conditions.

- (1) Change air filters frequently as required.
- (2) Clean interior of shelter and tent frequently.

**2-11 FORDING AND SWIMMING.** Fording and swimming procedures and depth limits are defined in the HMMWV technical manual (TM 9-2330-280-10) and Utility Trailer technical manual (TM 9-2330-202-14).

**CHAPTER 3**

**OPERATOR'S MAINTENANCE INSTRUCTIONS**

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Section I Lubrication Instructions.....	3-1
Section II Operator Troubleshooting Procedures .....	3-1
Section III Operator Maintenance Procedures .....	3-6

**Section I. LUBRICATION INSTRUCTIONS**

**3-1. LUBRICATION.** Operator lubrication of the DDSS is not required.

**Section II. OPERATOR TROUBLESHOOTING PROCEDURES**

<b>CONTENTS</b>	<b>PARA</b>
INTRODUCTION	3-2
TROUBLESHOOTING SYMPTOM INDEX	3-3

**3-2. INTRODUCTION.**

- a. Table 3-1 lists the common malfunctions which you may find during the operation or maintenance of the DDSS or its components. You should perform the tests/inspections and corrective actions in the order listed.
- b. 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 listed corrective actions, notify your supervisor.

**3-3. TROUBLESHOOTING SYMPTOM INDEX.**

	<b>PARA</b>
NO POWER TO DDSS SHELTER .....	3-4
FLUORESCENT LIGHTS DO NOT WORK .....	3-5
INCANDESCENT LIGHTS DO NOT WORK.....	3-6
EMERGENCY LIGHTS DO NOT WORK .....	3-7
NO POWER TO ROADSIDE OR CURBSIDE RECEPTACLES .....	3-8
NO POWER TO ECU .....	3-9
NO TENT LIGHTS.....	3-10
NO POWER TO TENT EQUIPMENT .....	3-11



Table 3-1. OPERATOR TROUBLESHOOTING

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
-------------	--------------------	-------------------

**NOTE**

If malfunction is not corrected by listed corrective actions, notify your supervisor.

**3-4. 10 POWER TO DDSS SHELTER.**

**WARNING**

Use extreme caution when performing checks or maintenance at or near power entrance box and power distribution box. Failure to do so may result in death or serious injury.

Step 1. Check to see if cable is properly connected at DDSS power entrance box and generator. Reconnect cable connectors.

Step 2. Check to see if there are loose, broken, or corroded cable connectors/cable. Report loose, broken, or corroded cable connectors/cable to Unit Maintenance.

**CAUTION**

Do not energize DDSS power if voltage or frequency are incorrect. Damage to equipment may result.

Step 3. Observe voltage/frequency meter on power distribution box. Frequency must be in range between 50Hz and 70Hz. Voltage must be in range between 110V and 125V.

Notify Unit Maintenance for service to the power source.

Step 4. Check position of main switch.

Reset main switch to on (up) position.

Notify Unit Maintenance if malfunction persists.

Table 3-1. OPERATOR TROUBLESHOOTING - Continued

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
-------------	--------------------	-------------------

**3-5. FLUORESCENT LIGHTS DO NOT WORK.**

**WARNING**

**HIGH VOLTAGE**

Use extreme caution when performing checks or maintenance at or near power distribution box. Failure to do so may result in death or serious injury.

Step 1. Check that fluorescent light switch is on.

Reset light switch on.

Step 2. Check that shelter light circuit breaker is on.

Reset circuit breaker to on. If malfunction persists, replace fluorescent light. Refer to paragraph 3-14.

**3-6. INCANDESCENT LIGHTS DO NOT WORK.**

Check to see if incandescent light switch is on. Reset light switch to on, if malfunction persists, replace incandescent light. Refer to paragraph 3-15.

Call the Unit Maintenance if malfunction persists.

**3-7. EMERGENCY LIGHTS DO NOT WORK.**

Test by pressing test button.

If light still does not work, notify Unit Maintenance.

Table 3-1. OPERATOR TROUBLESHOOTING - Continued

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
-------------	--------------------	-------------------

**3-8. NO POWER TO ROADSIDE OR CURBSIDE RECEPTACLES.**

**WARNING**

Use extreme caution when performing checks or maintenance at or near power distribution box. Failure to do so may result in death or serious injury.

Step 1. Check that ROADSIDE POWER CIRCUIT BREAKER is on.  
Reset circuit breaker to on.

Step 2. Check that CURBSIDE POWER CIRCUIT BREAKER is on.  
Reset circuit breaker to on.

Call Unit Maintenance if malfunction persists.

**3-9. NO POWER TO ECU.**

Check that ECU CIRCUIT BREAKER is on.

Reset circuit breaker to on.

Call Unit Maintenance if malfunction persists.

**3-10. NO TENT LIGHTS.**

Step 1. Check that cable is properly connected at DDSS tent power feed through connector. Reconnect cable connector.

Step 2. Check that SICPS LIGHTS CIRCUIT BREAKER is on. Reset circuit breaker to on.

Call Unit Maintenance if malfunction persists.

Table 3-1. OPERATOR TROUBLESHOOTING - Continued

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
-------------	--------------------	-------------------

**3-11. NO POWER TO TENT EQUIPMENT.**

**WARNING**

**HIGH VOLTAGE**

Use extreme caution when performing checks or maintenance at or near power distribution box. Failure to do so may result in death or serious injury.

Step 1. Check that tent power cables are properly connected at DDSS power entrance box.

Reconnect cable connectors.

Step 2. Check that TENT POWER CIRCUIT BREAKERS are on.

Reset tent circuit breakers to on.

Call Unit Maintenance if malfunction persists.

Refer to TM 10-8340-225-10 Troubleshooting.

**Section III. OPERATOR MAINTENANCE PROCEDURES**

<b>CONTENTS</b>	<b>PARA</b>
INTRODUCTION.....	3-12
INDEX OF OPERATOR MAINTENANCE PROCEDURES.....	3-13

**3-12. INTRODUCTION.** The following procedures are for use of operator maintenance personnel in repairing the DDSS components.

- a. Personnel required are listed only if the task requires two or more persons.
- b. The normal standard equipment condition to start a maintenance task is power off. EQUIPMENT CONDITION is not listed unless some other condition is required besides power being off.

**3-13. INDEX OF OPERATOR MAINTENANCE PROCEDURES.**

	<b>PARA</b>
FLUORESCENT CEILING LAMPS, REMOVE/REPLACE.....	3-14
INCANDESCENT LIGHTS, REMOVE/REPLACE .....	3-15

**3-14. FLUORESCENT CEILING LAMPS.**

---

**This task covers:**

- a. Remove
  - b. Replace
- 

**INITIAL SETUP:**

Tools:

Screwdriver (Appendix C, Item 27)

Screwdriver (Appendix C, Item 28)

Equipment Conditions:

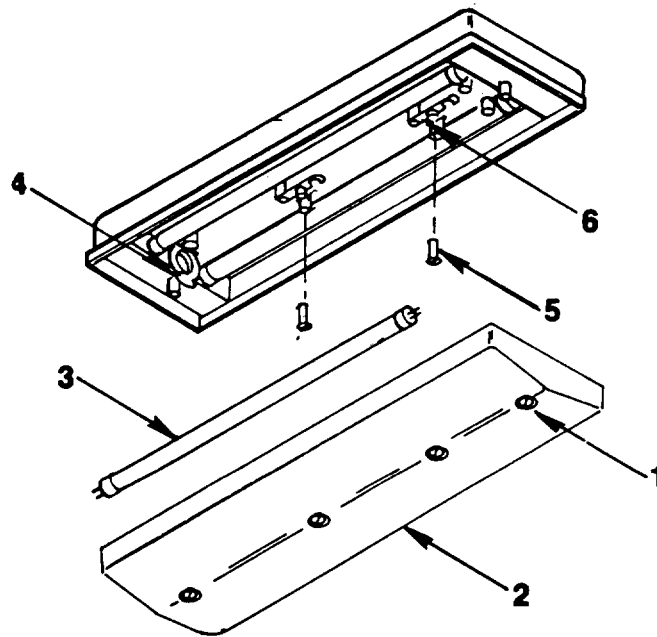
Incandescent Light on

---

- a. Remove.

**WARNING**

Ensure shelter light circuit breaker is off. Failure to do so may result in death or serious injury.



1. Turn off shelter light circuit breaker.
2. Loosen 4 screws (1) and remove diffuser panel (2).
3. If outer light tubes (3) are not lighting, disengage safety clamps (4) and remove defective tube by rotating.
4. If center tube is not working, loosen 4 screws (5) securing diffuser panel mounting brackets (6).
5. Rotate brackets (6) away from light tube.
6. Disengage safety clamps (4).
7. Remove defective tube by rotating.

**3-14. FLUORESCENT CEILING LAMPS (Cont'd)**

b. Replace.

1. Install light tube (3) by rotating until seated.
2. Engage safety clamps (4).
3. Rotate diffuser mounting bracket (6) into position and tighten screws (5)
4. Install diffuser panel (2) and secure with 4 screws (1).
5. Turn on shelter light circuit breaker.
6. Turn off incandescent light.

---

**3-15. INCANDESCENT LAMPS.**

---

This task covers:

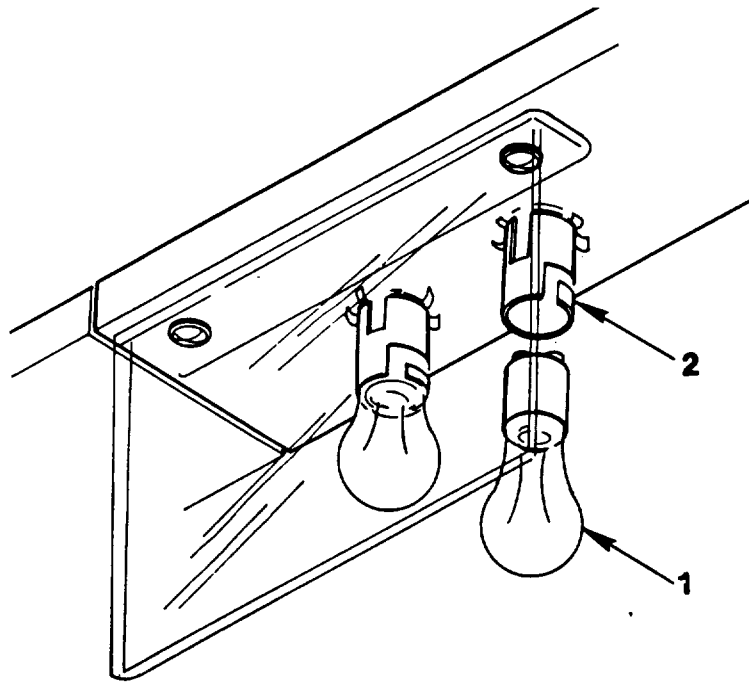
- a. Replace
  - b. Replace
- 

a. Remove.

**WARNING**

Incandescent light switch must be in OFF position. Failure to do so may result in death or serious injury.

1. Set incandescent light switch to OFF.
2. Push bulb (1) into socket (2) and turn bulb (1) to left.
3. Pull bulb (1) from socket.



b. Replace.

1. Push bulb (1) into socket (2) and turn bulb (1) to right.
2. Set incandescent light switch to ON.



CHAPTER 4

UNIT MAINTENANCE INSTRUCTIONS

	<b>PAGE</b>
Section I Repair Parts, Special Tools, Test, Measurement, and Diagnostic Equipment (TMDE), and Support Equipment .....	4-1
Section II Service Upon Receipt .....	4-2
Section III Lubrication .....	4-3
Section IV Unit Preventive Maintenance Checks and Services .....	4-3
Section V Unit Troubleshooting .....	4-7
Section VI Unit Maintenance Procedures .....	4-12
Section VII Preparation for Storage or Shipment .....	4-36

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

<b>CONTENTS</b>	<b>PARA</b>
COMMON TOOLS AND EQUIPMENT .....	4-1
SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT .....	4-2
REPAIR PARTS .....	4-3

**4-1. COMMON TOOLS AND EQUIPMENT.** For authorized common tools and equipment refer to the Modified Table of Organization and Equipment (MTOE) applicable to your unit.

**4-2. SPECIAL TOOLS, TMDE. AND SUPPORT EQUIPMENT.** There are no unit special tools, test, measurement, diagnostic equipment (TMDE), or items of support equipment required.

**4-3. REPAIR PARTS.** Repair parts covering unit maintenance of the DDSS are listed and illustrated in Appendix F, Repair Parts and Special Tools List, of this manual.

**Section II. SERVICE UPON RECEIPT**

<b>CONTENTS</b>	<b>PARA</b>
UNPACKING .....	4-4
INSPECTION .....	4-5
SITE, SHELTER AND SICPS REQUIREMENTS.....	4-6

**4-4. UNPACKING.** Avoid damaging transit cases, reusable containers, and tent bags and retain for storage and transit.

**4-5. INSPECTION.** Inspect DDSS as follows:

- a. Inspect equipment for damage incurred during shipment. If equipment has been damaged, report damage on SF Form 364, Report of Discrepancy.
- b. Check equipment against packing slip to see if shipment is complete. Report all discrepancies in accordance with instructions of DA PAM 738-750.
- c. Check the following individual operational items for damage and completeness:
  - (1) Reusable Containers
  - (2) Photointerpretation (PI) Kit
  - (3) Quantity Processing System
  - (4) Field Diazo Print Machine (Including Expendables)
  - (5) Zoom Transfer Scope
  - (6) Drafting Equipment Set
  - (7) Gas Mask
  - (8) Ammonia Spill Kit
  - (9) Eye Wash

**4-6. SITE, SHELTER AND SICPS REQUIREMENTS.** Refer to Chapter 2, Section III, Operation Under Usual Conditions.

**Section III. LUBRICATION**

CONTENTS	PARA
LUBRICATION REQUIREMENTS .....	4-7

**4-7. LUBRICATION REQUIREMENTS.** Refer to other equipment technical manuals for lubrication requirements.

**Section IV. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES**

CONTENTS	PARA
UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PCMS) .....	4-8

**4-8. PMCS.** Refer to Table 4-1, Unit Preventive Maintenance Checks and Services.

- a. General. The DDSS must be regularly inspected to find and correct defects.
  - (1) Monthly. Always keep in mind WARNINGS and CAUTIONS. Perform your MONTHLY (M) PMCS.
  - (2) Semiannually. Always keep in mind the WARNINGS and CAUTIONS. Perform your SEMIANNUAL (S) PMCS.
  - (3) If Your Equipment Fails to Operate. Troubleshoot with proper equipment. Report any deficiencies using proper forms. See DA PAM 738-750.
- b. PMCS Procedures.
  - (1) PMCS procedures are designed to keep equipment in good working condition by performing periodic service tasks.
  - (2) Service intervals provide you with time schedules that determine when to perform specified service tasks.
  - (3) If your equipment fails to operate after PMCS is performed immediately report this condition to your supervisor.
- c. PMCS Columnar Entries.
  - (1) Item Number Column. Item numbers are assigned in chronological, ascending sequence regardless of interval designation. These numbers are used for "TM number" Column on DA Form 2404, Equipment Inspection and Maintenance Worksheet in recording results of PMCS.

**4-8. PMCS. (Cont'd)**

- (2) Interval Column. This column determines the time period designated to perform your PMCS.
- (3) Item to Check/Service Column. This column lists functional groups and respective assemblies and subassemblies as shown in Appendix B, Maintenance Allocation Chart.
- (4) Procedures Column. This column describes procedures necessary to perform check.
- (5) Not Fully Mission Capable if: Column. This column contains criteria used to decide whether or not equipment is ready and available for use. An entry in this column identifies conditions that make equipment not ready/available for readiness reporting.

Table 4-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES

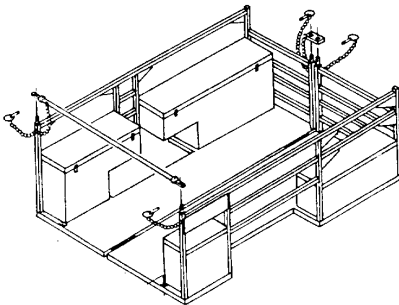
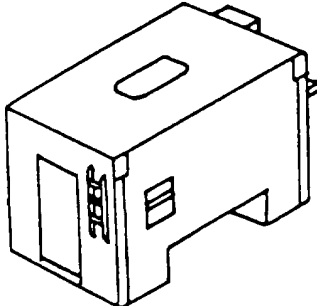
ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
1	Monthly	Trailer Pallet	<p>Check exterior for blistered or flaking paint, bare metal spots, dents or corrosion. Repair or repaint in accordance with TM 43-0139.</p> <p>Check for broken or missing hardware.</p>	
				
2	Monthly	Shelter Exterior	<p>Check exterior for blistered or flaking paint, bare metal spots, dents or corrosion. Repaint in accordance with TM 43-0139. Repair in accordance with FM 43-2</p>	
				

Table 4-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES

ITEM NO	INTERVAL	LOCATION ITEM TO BE CHECK/SERVICE	PROCEDURES	NOT FULLY MISSION CAPABLE IF:
3	Semimonthly	Shelter Exterior Cont'd	<p style="text-align: center;"><b>WARNING</b></p> <p>Do not service power cable if it is connected to power source or to shelter. Failure to do so may result in death or serious injury.</p> <p>Check mounting flanges, lift rings, sling angles, retractable steps, escape hatch, door, boot support brackets, ECU support bracket and ladder for damage and corrosion. Inspect all exterior hardware for loose or missing bolts or screws.</p>	

Section V. UNIT TROUBLESHOOTING

CONTENTS	PARA
UNIT TROUBLESHOOTING .....	4-9
MALFUNCTION INDEX .....	4-10

**4-9. UNIT TROUBLESHOOTING.**

- a. Table 4-2 lists common malfunctions which you may find during operation or maintenance of DDSS or its components. You should perform tests/inspections and corrective actions in order listed.
- b. 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 listed corrective actions, notify next level of maintenance for assistance.

**4-10. MALFUNCTION INDEX.**

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ECU DOES NOT WORK .....	4-16
TENT LIGHTS DO NOT WORK.....	4-17
NO POWER TO TENT EQUIPMENT .....	4-18
NO POWER TO MICROFIX RECEPTACLES.....	4-19

Table 4-2. UNIT TROUBLESHOOTING

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
-------------	--------------------	-------------------

**4-11. NO POWER TO DDSS SHELTER.**

**WARNING**

Use extreme caution when performing checks or maintenance at or near power entrance box and power distribution box. Failure to do so may result in death or serious injury.

Turn off main switch, before checking or replacing fuses. Failure to do so may result in death or serious injury.

Check fuse for continuity.

Replace defective fuse. (Refer to paragraph 4-28).

**4-12. FLUORESCENT LIGHTS DO NOT WORK.**

**WARNING**

Use extreme caution when performing checks or maintenance at or near electrical power. Failure to do so may result in death or serious injury.

Step 1. Test fluorescent light switch for continuity. Replace fluorescent light switch. (Refer to paragraph 4-25).

Step 2. Test fluorescent light circuit breaker for continuity. Replace fluorescent light circuit breaker. (Refer to paragraph 4-24).

If continuity exists at circuit breaker, replace starter (refer to paragraph 4-31) or ballast (refer to paragraph 4-30).



Table 4-2. UNIT TROUBLESHOOTING

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
-------------	--------------------	-------------------

**4-13. INCANDESCENT LIGHTS DO NOT WORK.**

Test incandescent light switch for continuity.

Replace incandescent light switch. (Refer to paragraph 4-25).

**4-14. EMERGENCY LIGHTS DO NOT WORK.**

Step 1. Check battery red charge indicator light. Full charge indicated by pulsating red light.

Replace batteries. (Refer to paragraph 4-29).

Step 2. If light still does not operate, replace emergency light. (Refer to paragraph 4-29).

**4-15. NO POWER TO ROADSIDE OR CURBSIDE AUXILIARY RECEPTACLES.**

**WARNING**

Use extreme caution when performing checks or maintenance at or near power distribution box. Failure to do so may result in death or serious injury.

Check voltage at receptacle with multimeter.

If 120v does not exist, check circuit breaker for continuity.

If continuity exists, replace receptacle (refer to paragraph 4-26).

If no continuity at circuit breaker, replace circuit breaker (refer to paragraph 4-24).

Table 4-2. UNIT TROUBLESHOOTING

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
-------------	--------------------	-------------------

**4-16. ECU DOES NOT WORK.**

Check for 120v of voltage at ECU circuit breakers. Using a multimeter insert probe in terminals A and B.

If 120v is not present, check ECU circuit breaker for continuity. If no continuity, replace circuit breaker (refer to paragraph 4-24). If 120v exists, refer to TM 5-4120-378-14.

**4-17. TENT LIGHTS DO NOT WORK.**

Check tent power receptacle for 120v.

If no voltage, check continuity of tent light circuit breaker. If continuity exists, replace receptacle (refer to paragraph 4-26). If no continuity, replace circuit breaker (refer to paragraph 4-24).

**4-18. NO POWER TO TENT EQUIPMENT.**

**WARNING**

Use extreme caution when performing checks or maintenance at or near power entrance box and power distribution box. Failure to do so may result in death or serious injury.

Check for 120v at tent receptacle.

If voltage does not exist, check continuity of appropriate circuit breaker. If 120v is present at circuit breaker, replace tent power receptacle (refer to paragraph 4-26). If 120v is not present at circuit breaker, replace circuit breaker (refer to paragraph 4-24).

Table 4-2. UNIT TROUBLESHOOTING

MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

**4-19. NO POWER TO MICROFIX RECEPTACLE.**

**WARNING**

Use extreme caution when performing checks or maintenance at or near power entrance box and power distribution box. Failure to do so may result in death or serious injury.

Check voltage at receptacle with multimeter.

If 120v does not exist, check circuit breaker for continuity. If continuity exists, replace receptacle (refer to paragraph 4-26). If no continuity at circuit breaker, replace circuit breaker (refer to paragraph 4-24).

Section VI. UNIT MAINTENANCE PROCEDURES

CONTENTS	PARA
INTRODUCTION .....	4-20
INDEX OF UNIT MAINTENANCE PROCEDURES.....	4-21

**4-20. INTRODUCTION.** The following procedures are for use of unit maintenance personnel in repairing the DDSS components.

- a. Resources required are not listed unless they apply to the procedure.
- b. Personnel required are listed only if the task requires more than one. If PERSONNEL are not listed, it means one person can do the task.
- c. The normal standard equipment condition to start a maintenance task is power off. EQUIPMENT CONDITION is not listed unless some other condition is required besides power being off.

**4-21. INDEX OF UNIT MAINTENANCE PROCEDURES.**

COMPONENT/ASSEMBLY	PARA
SHELTER BODY SKIN.....	4-22
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CIRCUIT BREAKER.....	4-24
LIGHT SWITCHES.....	4-25
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HEATER/CONVENIENCE RECEPTACLES .....	4-27
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EMERGENCY LIGHT ASSEMBLY .....	4-29
FLUORESCENT CEILING LIGHT BALLAST .....	4-30
FLUORESCENT CEILING LIGHT STARTER .....	4-31
TENT LIGHT RECEPTACLE.....	4-32
PORTABLE LIGHT TABLE.....	4-33
SHELTER BOOT.....	4-34
TRAILER FRAME BOX LATCH.....	4-35

**4-22. SHELTER BODY SKIN.**

This task covers: Repair (Temporary)

**INITIAL SETUP****Tools:**

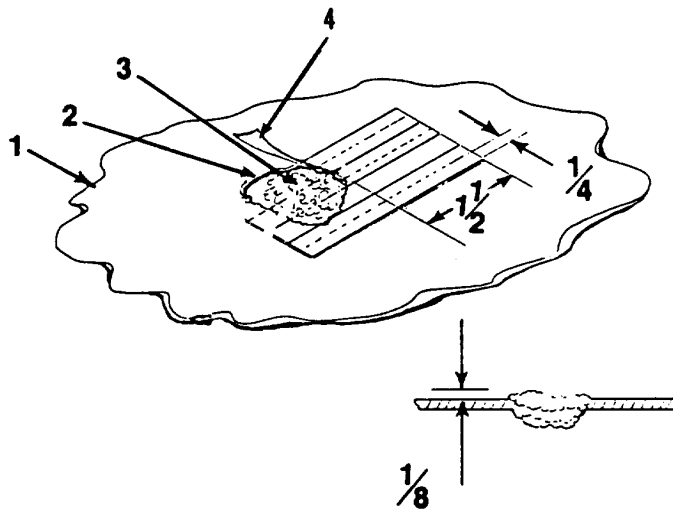
Tool Kit, General Mechanics,  
Automotive  
(Appendix B, Sec III)

**Materials/Parts:**

Cloth (Appendix E, Item 7)  
Silicone Sealant (Appendix E, Item 16)  
Sealing Tape (Appendix E, Item 17)

**NOTE**

This procedure is limited to temporary repair of small punctures and breaks in the skin. Refer to FM 43-2 for permanent repairs.

**Repair.****CAUTION**

Do not attempt to remove fragments of skin by bending or pulling outward.

1. Push broken edges of skin (1) into puncture (2).
2. Remove loose fragments of foam (3).
3. Clean area around puncture with dampened cloth (Appendix E, item 7).
4. Inject silicone sealant into puncture until it has filled hole and is 1/8 in. (3.2mm) above surface of skin.
5. Apply sealant to cracks leading to puncture.
6. Cut strips of tape (4) (Appendix E, Item 17) and apply lightly. For a good repair, overlap tape strips 1/4 in. (6.4mm), Extend tape strips 1-1/2 in. (38.1mm) beyond sealant.
7. Rub tape (4) into place.
8. Clean repaired area of excess sealant.

**4-23. DOOR LATCH ASSEMBLY.**

This task covers: a. Remove  
b. Replace

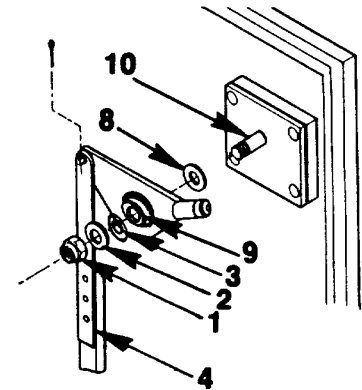
**INITIAL SETUP**

Tools:

Tool Kit, General Mechanics, Automotive  
(Appendix B, Sec III)

a. Remove.

1. Remove nuts (1) and flatwashers (2) and (3) from arm assembly (4).
2. Remove roll pin (5), handle (6) and flatwasher (7).
3. Remove arm assembly (4) and flatwasher (7).
4. Remove flatwashers (8) and bearing (9) from door studs (10).

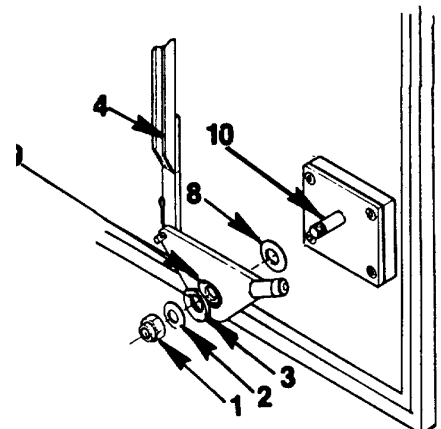
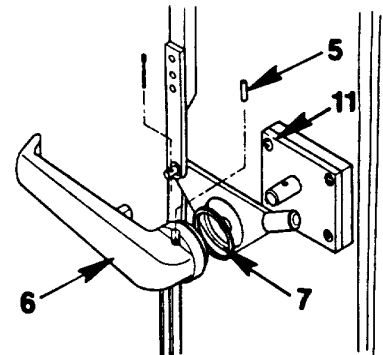


b. Replace.

**NOTE**

Ensure flatwasher are over bearings before installation.

1. Install bearings (9) flatwashers (3) and (8) onto arm assembly (4).
2. Secure arm assembly (4) with flatwashers (2) and nuts (1).
3. Install flatwasher (7), arm assembly (4) onto door handle stud (10).
4. Install door handle (6) and roll pin (5).



---

**4-24. CIRCUIT BREAKER.**

---

This task covers:   a.   Remove  
                          b.   Replace

---

**INITIAL SETUP**

Tools:

Tool Kit, General Mechanics, Automotive  
(Appendix B, Sec III)

---

a. Remove.

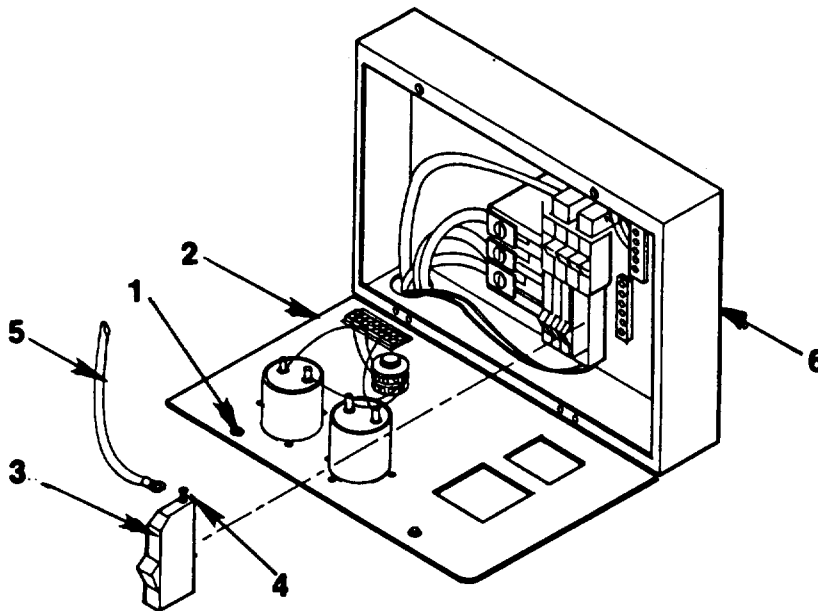
**WARNING**

Use extreme caution when performing checks, services, or maintenance at or near Power Distribution Box and Main Switch. Failure to do so may result in death or serious injury.

**NOTE**

This is a general procedure to replace any defective circuit breaker in the power distribution box.

1. Turn off Main Switch.
2. Loosen cover panel screws (1) and open panel (2).
3. Grasp circuit breaker (3) near top and pull out far enough to gain access to terminal screw (4).
4. Loosen terminal screw (4) and disconnect wire (5).



---

**4-24. CIRCUIT BREAKER. (Cont'd)**

---

b. Replace.

1. Loosen screw (4) on circuit breaker (3).
2. Install wire (5) and tighten screw (4).
3. Align top of circuit breaker (3) with top mount in Power Distribution Box (6).
4. Press circuit breaker (3) into place until it is firmly seated.
5. Close cover panel (2) and tighten screws (1).
6. Ensure that circuit breaker is turned OFF.
7. Turn Main Switch ON.
8. Turn circuit breaker ON.



---

**4-25. LIGHT SWITCHES.**

---

- This task covers:
- a. Remove
  - b. Replace
- 

**INITIAL SETUP**

Tools:

Tool Kit, General Mechanics, Automotive  
(Appendix B, Sec III)

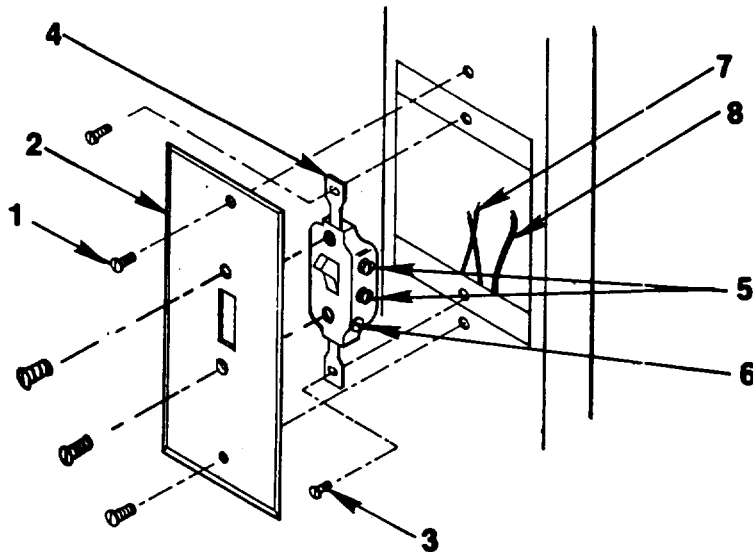
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- a. Remove.

**WARNING**

Set Main Switch and light circuit breaker to OFF. Failure to do so may result in death or serious injury.

1. Set Main Switch to OFF.
2. Set circuit breaker to OFF.
3. If replacing incandescent light switch, disconnect 24v coupling located under curbside of shelter.



---

**4-25. LIGHT SWITCHES8. (Cont'd)**

---

**a. Remove.** (Cont'd)

4. Remove cover plate screws (1) and cover plate (2).
5. Loosen two screws (3) and pull switch (4) out far enough to gain access to power terminal screws (5) and ground screw (6).

**NOTE**

Tag all wires before disconnecting. Incandescent light switch has two terminals. Fluorescent light switch has three terminals.

6. Loosen power terminal screws (5) and ground screw (6), and disconnect power wires (7) and ground wire (8).
6. Remove switch (4).

**b. Replace.**

1. Loosen power terminal screws (5) and ground terminal screw (6).

**CAUTION**

Ensure that wires are securely wrapped clockwise around power terminal screws and ground screw and that ends of wires do not stick out. Failure to do so may result in damage to equipment.

2. Install power wires (7) and tighten screws (5).
3. Install ground wire (8) and tighten screw (6).
4. Install switch (4) and tighten screws (3)
5. Install cover plate (2) with four screws (1) and tighten.
6. If incandescent light switch was replaced, connect 24v coupling under curbside of shelter.
7. Set Main Switch to ON.
8. Set circuit breaker to ON.
9. Test operate light switch.

---

**4-26. ELECTRICAL RECEPTACLES.**

---

This task covers:     a. Remove  
                              b. Replace

---

**INITIAL SETUP**

Tools:

Tool Kit, General Mechanics, Automotive  
(Appendix B, Sec III)

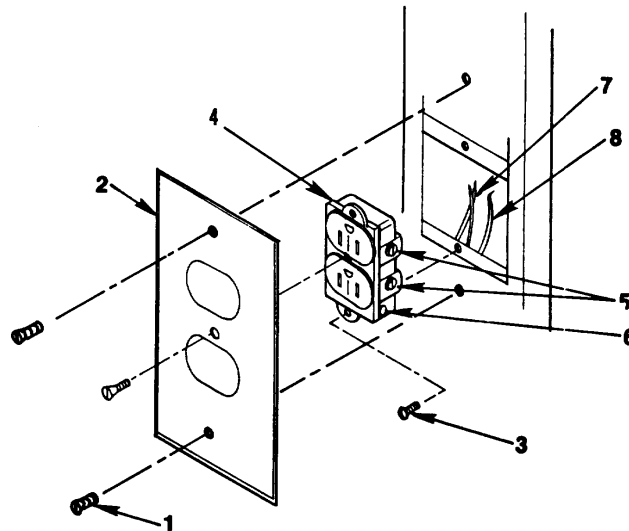
---

a. Remove.

**WARNING**

Turn OFF Power circuit breaker and Main Switch. Failure to do so may result in death or serious injury.

1. Set circuit breaker to OFF.
2. Set Main Switch to OFF.
3. Remove cover plate screws (1) and cover plate (2).



---

**4-26. ELECTRICAL RECEPTACLES. (Cont'd)**

---

**a. Remove. (Cont'd)**

4. Loosen two screws (3) and pull receptacle (4) out far enough to gain access to terminal screws (5) and (6).

**NOTE**

Tag all wires before disconnecting.

5. Loosen power terminal screws (5) and ground terminal screw (6) and disconnect wires (7) and (8).
6. Remove receptacle (4).

**b. Replace.**

1. Loosen power terminal screws (5) and ground terminal screw (6).

**CAUTION**

Ensure that wires are securely wrapped clockwise around power terminal screws and ground screw, and that ends of wires do not stick out. Failure to do so may result in damage to equipment.

2. Install power wires (7) and tighten screws (5).
3. Install ground wire (8) and tighten screw (6).
4. Install receptacle (4) and tighten screws (3).
5. Install cover plate (2) and screw (1).
6. Turn on Main Switch.
7. Turn on receptacle circuit breaker.
8. Test receptacle for power.

---

**4-27. HEATER/CONVENIENCE RECEPTACLES.**

---

This task covers:     a. Remove  
                              b. Replace

---

**INITIAL SETUP**

Tools:

Tool Kit, General Mechanics, Automotive  
(Appendix B, Sec III)

---

a. Remove.

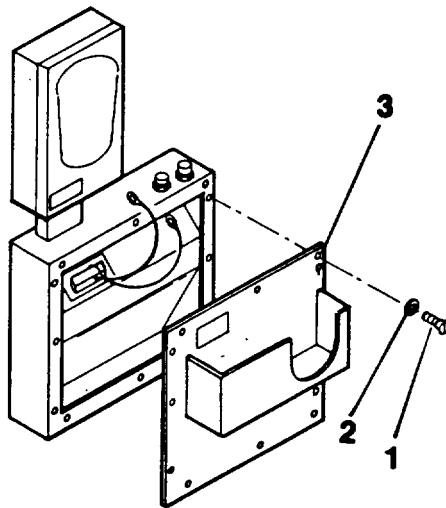
**WARNING**

Use extreme caution when performing checks or maintenance at or near power entrance box and power distribution box. Failure to do so may result in death or serious injury.

**NOTE**

This procedure covers replacement of GFI receptacles for the heater and convenience outlets.

1. Turn off main switch.



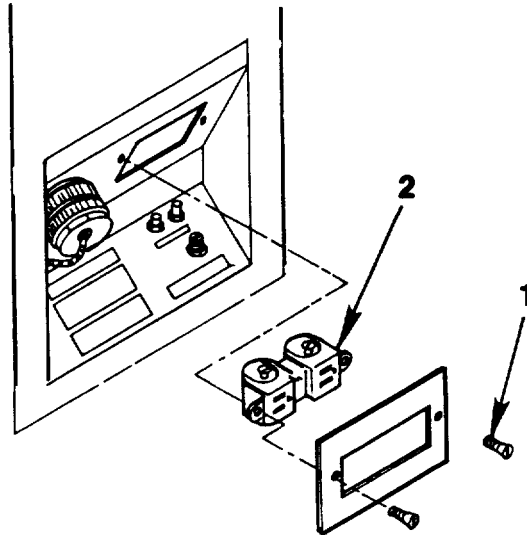
2. Remove twelve screws (1) and twelve lock washers (2) and inside power entrance panel cover (3).
3. Tag and disconnect receptacle wires.

---

**4-27. HEATER/CONVENIENCE RECEPTACLES. (Cont'd)**

---

4. On outside of shelter, remove screws (1) and receptacle (2).

**b. Replace.**

1. On outside of shelter, install receptacle (2) and secure with screws (1).
2. Connect wires and remove tags.
3. Install inside power entrance panel cover (3) and secure with twelve lock washers (2) and twelve screws (1).
4. Turn on circuit breaker.
5. Test operate receptacles.

---

**4-28. FUSE.**

---

This task covers:     a. Remove  
                              b. Replace

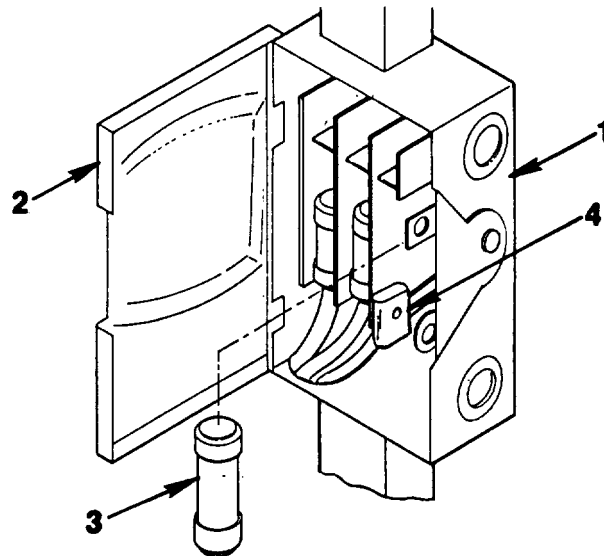
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a. Remove.

**WARNING**

Disconnect power cable at power entrance panel. Set Main Switch to OFF before replacing fuse. Failure to do so may result in death or serious injury.

1. Set Main Switch to OFF and disconnect power cables at power entrance panel.
2. Press tab and open switch box (1).
3. Remove fuse (3) by pulling straight out from fuse holder (4).



b. Replace.

1. Align fuse (3) with fuse holder (4) and push straight in until fuse (3) is firmly seated.
2. Close switch box cover (2).
3. Connect power cable at power entrance panel.
4. Turn on main switch.

---

**4-29. EMERGENCY LIGHT ASSEMBLY.**

---

This task covers:

- a. Remove
- b. Replace
- c. Repair

---

**INITIAL SETUP**

Tools:

Tool Kit, General Mechanics, Automotive  
(Appendix B, Sec III)

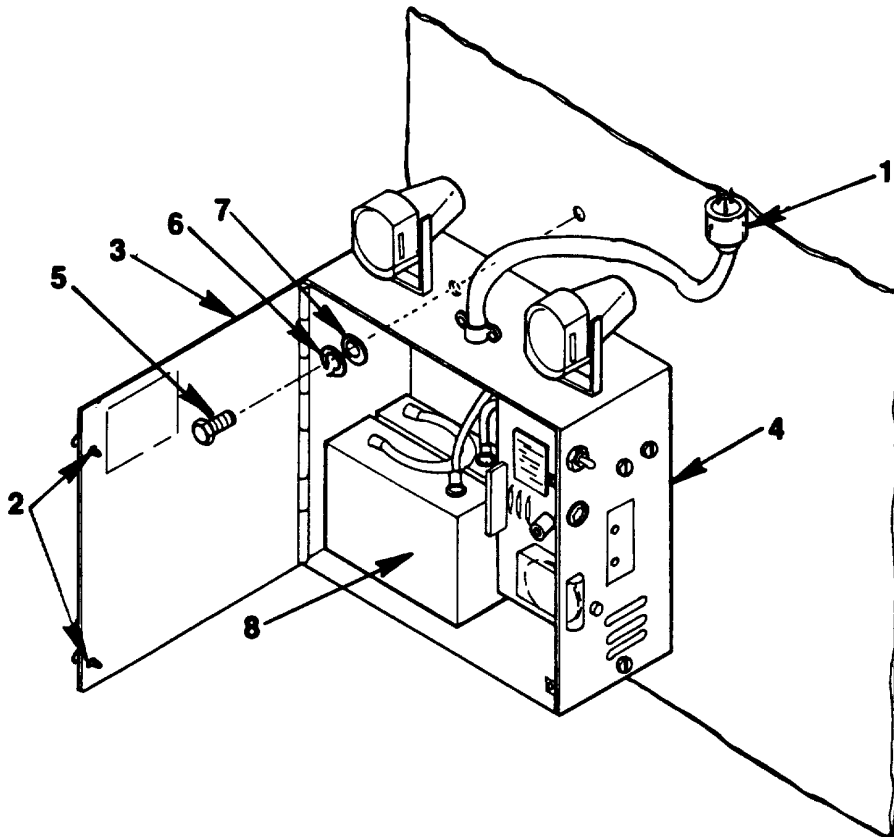
---

**WARNING**

Unplug emergency light power cord before removing emergency light assembly. Failure to do so may result in death or serious injury.

a. Remove.

1. Unplug power cord (1).
2. Remove two screws (2) securing cover (5) to box (6) and open cover (3) of box (4).





---

**4-29. EMERGENCY LIGHT ASSEMBLY. (Cont'd)**

---

a. Remove. (Cont'd)**CAUTION**

Support emergency light assembly when removing from wall. Failure to do so may result in damage to equipment.

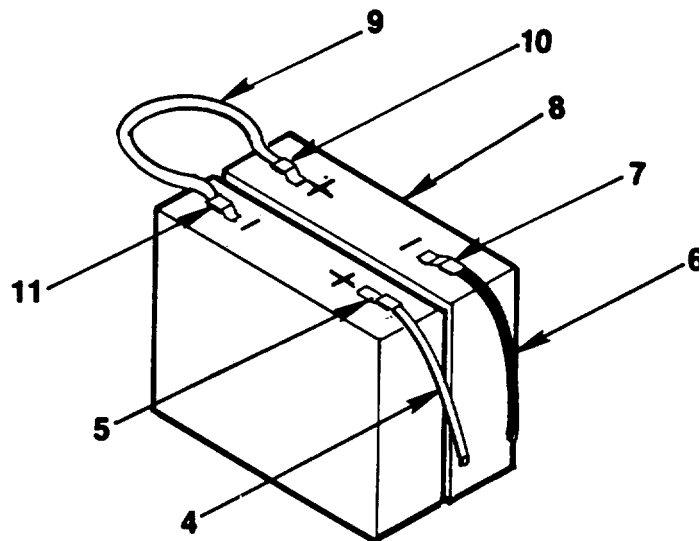
3. Remove two mounting screws (5), two lock washers (6), and two flat washers (7) securing light assembly to wall and remove emergency light assembly (4).

b. Replace.

1. Align emergency light assembly (4) with holes in shelter wall.
2. Secure with two mounting screws (5), lock washers (6) and flat washers (7).
3. Close cover (3) and tighten screws (2).
4. Connect power cord (1).
5. Test operate emergency light assembly.

c. Repair. Repair of the emergency light is limited to replacement of batteries.

1. Unplug power cord (1).
2. Remove screws (2) and open cover (3).



3. Disconnect red wire (4) from positive terminal (5) and black wire (6) from negative terminal (7).
4. Remove batteries (8).

---

**4-29. EMERGENCY LIGHT ASSEMBLY. (Cont'd)**

---

c. Repair. (Cont'd)

5. Remove jumper wire (9) from battery positive terminal (10) and negative terminal (11).
6. Install jumper wire (9) on battery to positive terminal (10) and negative terminal (11).
7. Install batteries (8) in emergency light.
8. Install black wire (6) to negative terminal (7) and red wire (4) on positive terminal (5).
9. Close cover (3) and secure with screws (2).
10. Plug in power cord (1).
11. Test operate emergency light.

**4-30. FLUORESCENT CEILING LIGHT BALLAST.**

This task covers:      a. Remove  
                                  b. Replace

**INITIAL SETUP**

Tools:

Tool Kit, General Mechanics, Automotive  
 (Appendix B, Sec III)

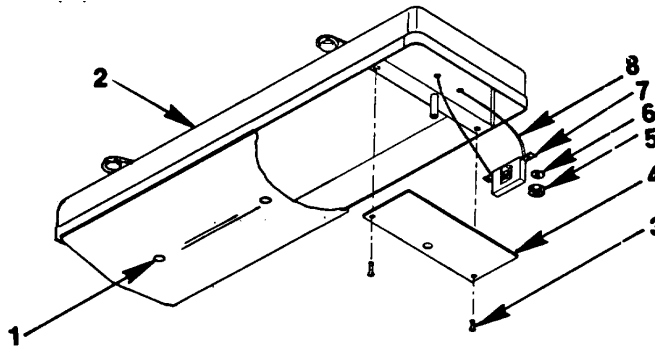
a. Remove.

1. Turn off fluorescent light switch.

**WARNING**

Turn off shelter light circuit breaker. Failure to do so may result in death or serious injury.

2. Turn off shelter light circuit breaker.
3. Loosen 4 screws (1) and remove diffuser panel (2).
4. Remove 2 screws (3) and ballast cover (4).
5. Remove 2 nuts (5) and starwasher (6).
7. Disconnect ballast leads (8).
8. Remove ballast (7).

b. Replace.**WARNING**

Turn off shelter light circuit breaker. Failure to do so may result in death or serious injury.

1. Turn off shelter light circuit breaker.
2. Install ballast (7) and secure with starwasher (6) and nut (5).
3. Connect leads (8).
4. Install ballast cover (4) and secure with 2 screws (3).
5. Install diffuser panel (2) and secure with 4 screws (1).

---

**4-31. FLUORESCENT CEILING LIGHT STARTER.**

---

This task covers:     a. Remove  
                              b. Replace

---

**INITIAL SETUP**

Tools:

Tool Kit, General Mechanics  
Automotive (Appendix B, Sec III)

---

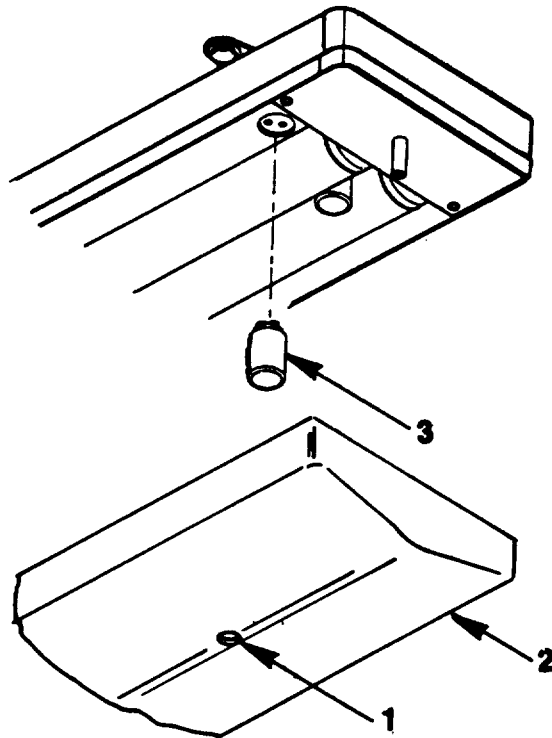
a. Remove.

1. Turn off fluorescent light switch.

**WARNING**

Turn off shelter light circuit breaker. Failure to do so may result in death or serious injury.

2. Turn off shelter light circuit breaker.
3. Loosen 4 screws (1) and remove diffuser panel (2).
4. Remove starter (3) by pushing in and rotating counter clockwise.



---

**4-31. FLUORESCENT CEILING LIGHT STARTER. (Cont'd)**

---

b. Replace.

**WARNING**

Turn off shelter light circuit breaker. Failure to do so may result in death or serious injury.

1. Install starter (3) by pushing in and rotating clockwise.
2. Install diffuser panel (2) and secure with 4 screws (1).

---

**4-32. TENT LIGHT RECEPTACLE.**

---

This task covers:     a. Remove  
                              b. Replace

---

**INITIAL SETUP**

Tools:

Tool Kit, General Mechanics, Automotive  
(Appendix B, Sec III)

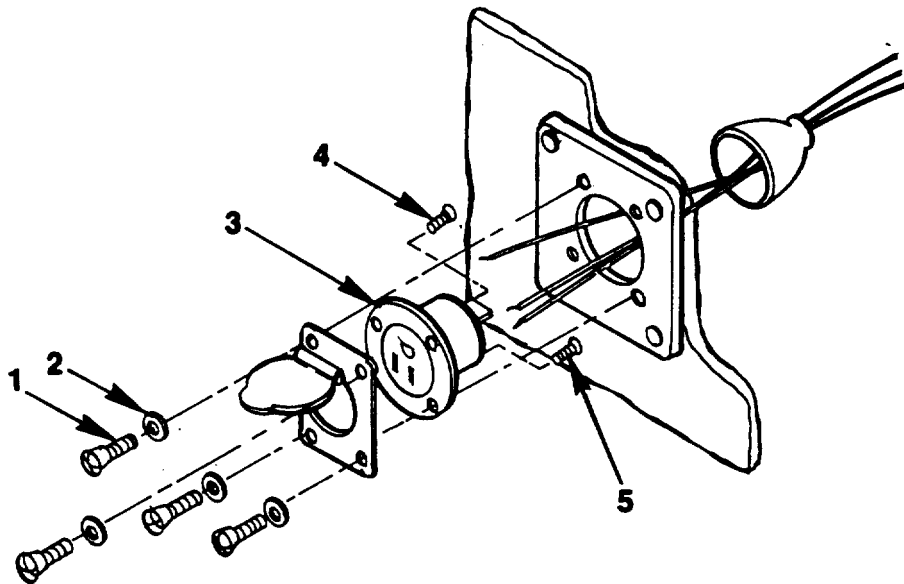
---

a. Remove.

**WARNING**

Turn off tent light circuit breaker. Failure to do so may result in serious injury or death.

1. Turn off tent light circuit breaker.



2. Remove 4 screws (1) and flat washers (2).
3. Pull receptacle (3) out far enough to gain access to power terminal screws (4) and ground screws (5).
4. Tag and disconnect wires.
5. Remove receptacle.

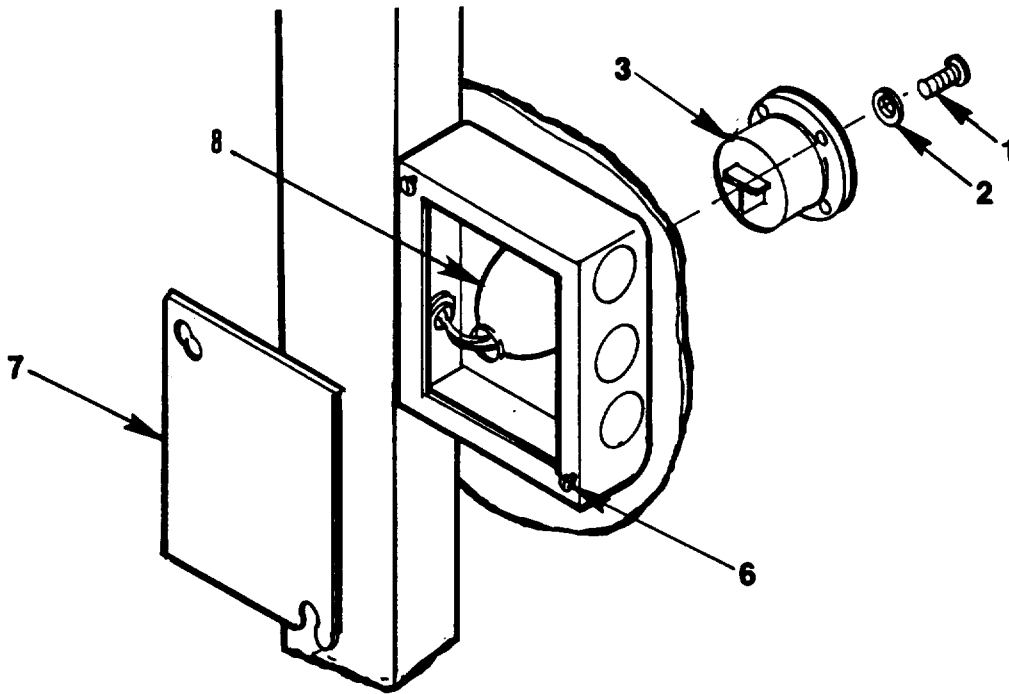
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**4-32. TENT LIGHT RECEPTACLE. (Cont'd)**

---

**b. Replace.**

1. Loosen power terminal screws (4) and ground screws (5) and connect wires. Remove tags.
2. On inside shelter wall, loosen screw (6) and light cover (7).
3. Pull wires through receptacle boot (8) until receptacle is secure.
4. Secure receptacle (3) on outside of shelter with flat washer (2) and screws (1).
5. On inside of shelter install cover (7) and secure with screw (6).



---

**4-33. PORTABLE LIGHT TABLE.**

---

This task covers:     a. Remove  
                              b. Replace

---

**INITIAL SETUP**

Tools:

Tool Kit, General Mechanics, Automotive  
(Appendix B, Sec III)

---

**WARNING**

Turn off tent light circuit breaker. Failure to do so may result in serious injury or death.

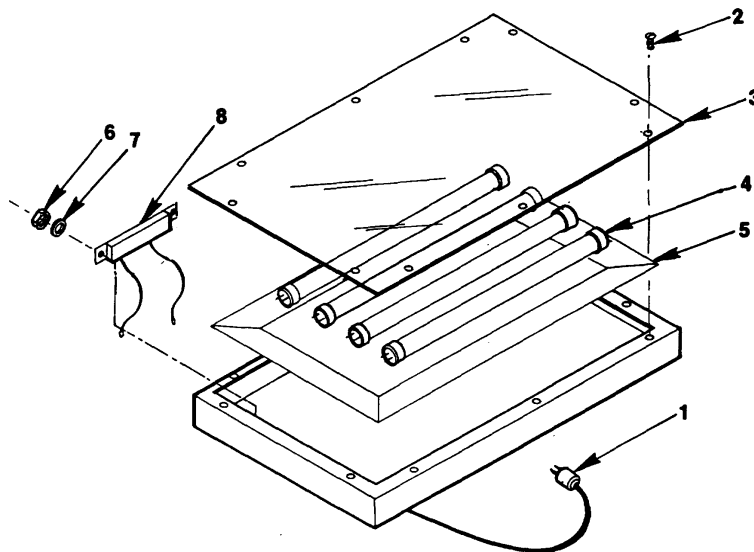
a. Remove.

1. Unplug light table power cord (1).
2. Remove 10 screws (2) and diffuser (3).
3. Grasp fluorescent tube (4) and rotate to remove.

**NOTE**

To remove ballast, all light tubes must be removed.

4. Remove reflective light panel (5).
5. Remove 2 nuts (6), 2 star washers (7) and ballast (8).
6. Tag and disconnect wires.



4-32



---

**4-33. PORTABLE LIGHT TABLE. (Cont'd)**

---

b. Replace.

1. Connect wires and remove tags.
2. Install ballast (8) and secure with star washers (7) and nuts (6).
3. Install reflective light panel (5).
4. Install 4 fluorescent tubes (4).
5. Install diffuser (3) and secure with 10 screws (2).
6. Connect light table power cord (1).
7. Test operate light table.

---

**4-34. SHELTER BOOT.**

---

This task covers: Repair

---

Refer to FM 10-16, Fabric Repair, for repair of rips and tears on the shelter boot.

---

**4-35. TRAILER FRAME BOX LATCH.**

---

This task covers:           a. Remove  
                                      b. Replace

---

Tools:                        **INITIAL SETUP**

Tool Kit, General Mechanics, Automotive  
(Appendix B, Sec III)

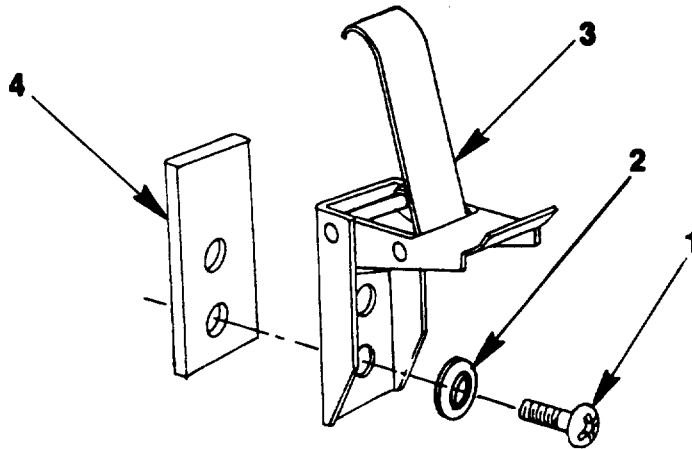
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**NOTE**

For latch remove/replace procedures all boxes on trailer frame can be considered identical.

a. Remove.

Remove 2 screws (1), 2 lock washers (2), latch (3) and spacer (4).



b. Replace.

1. Position spacer (4) on box.
2. Position latch (3) in place on spacer.
3. Secure latch (3) and spacer (4) to box with lock washer (2) and screws (1).

**Section VII. PREPARATION FOR STORAGE OR SHIPMENT**

- 4-36. **SPECIAL INSTRUCTIONS FOR ADMINISTRATIVE STORAGE**. Placement of equipment in administrative storage should be for short periods of time when a shortage of maintenance effort exists. Items should be in mission readiness with 24 hours or within the time factors as determined by the directing authority. During storage period, appropriate maintenance records will be kept.

Before placing equipment in administrative storage, current maintenance services and Equipment Serviceable Criteria (ESC) evaluations should be completed, shortcomings and deficiencies should be corrected, and all Modification Work Orders (MWOs) should be applied.

Storage Site Selection. Inside storage is preferred for items selected for administrative storage. If inside storage is not available, trucks vans, conex containers and other containers may be used.

**4-35/(4-36 blank)**

**CHAPTER 5**

**DIRECT SUPPORT AND GENERAL SUPPORT  
MAINTENANCE INSTRUCTIONS**

There are no Direct Support or General Support Maintenance Instructions.

**APPENDIX A**

**REFERENCES**

- A-1. **SCOPE.** This appendix lists all forms, technical manuals, and miscellaneous publications referenced in this manual.
  
- A-2. **TECHNICAL MANUALS.**
  - Operator's Manual Truck, Utility,  
1-1/4 Ton, 4x4, M1037 ..... TM 9-2320-280-10
  
  - Operator's, Unit, and Direct Support  
Maintenance Manual Topographic  
Support System, Direct Support Section..... TM 5-6675-326-14
  
  - Organizational, Direct Support, and  
General Support Maintenance Repair  
Parts and Special Tools List (Including  
Depot Repair Parts and Special Tools),  
Topographic Support System, Direct Support  
Section..... TM 5-6675-326-24P
  
  - Operator's, Unit, and Direct Support  
Maintenance Manual Distribution  
Illumination System, (DISE) ..... TM 9-6150-226-13
  
  - Organizational, Direct Support, and  
General Support Repair Parts and Special  
Tools List, Distribution Illumination  
System, (DISE) ..... TM 9-6150-226-23P
  
  - Operator's, Organizational, Direct  
Support and General Support Manual  
Air Conditioner Horizontal, Compact,  
9,000 BTU/HR..... TM 5-4120-378-14
  
  - Organizational, Direct Support, and  
General Support Maintenance Repair  
Parts and Special Tools List, Air  
Conditioner Horizontal, Compact,  
9,000 BTU/HR..... TM 5-4120-378-24P
  
  - Operator's, Unit, and Direct Support  
Maintenance Manual Trailer, Cargo,  
3/4 Ton, MIOIA2 ..... TM 9-2330-202-14&P
  
  - Operator's, Unit, and Intermediate  
Maintenance Manual Heater, Space,  
Multifuel with Blower, 60,000 BTU/HR..... TM 5-4520-253-13
  
  - Unit and Intermediate Maintenance  
Repair Parts and Special Tools List,  
Heater, Space, Multifuel with Blower ..... TM 5-4520-253-23P

Operator's, Unit, and Direct Support Maintenance Manual Reproduction Set, Diazo Process .....	TM 5-3610-256-14
Organizational, Direct Support, and General Support Repair Parts and Special Tools List, Reproduction Set, Diazo Process .....	TM 5-3610-256-24P
Operator's Manual Standard Integrated Command Post System Tent Command Post .....	TM 10-8340-225-10
Procedures for Destruction of Equipment to Prevent Enemy Use.....	TM 750-244-3

A-3. **MISCELLANEOUS PUBLICATIONS** .

Army Maintenance Management System (TAMMS).....	DA PAM 738-750
Metal Body Repair and Related Operations .....	FM 43-2
Fabric Repair .....	FM 10-15

A-4. **FORMS** .

Recommended Changes to Publications and Blank Forms.....	DA FORM 2028
Equipment Inspection and Maintenance Worksheet.....	DA FORM 2404

## APPENDIX B

## MAINTENANCE ALLOCATION CHART

## Section I. INTRODUCTION

**B-1. GENERAL.**

- a. This section provides a general explanation of all maintenance and repair functions authorized at various maintenance levels.
- b. The Maintenance Allocation Chart (MAC) in Section II designates overall responsibility for the performance of maintenance functions on the identified end item or component. The implementation of the maintenance functions upon the end item or component will be consistent with the assigned maintenance functions.
- c. Section III lists the special tools and test equipment required for each maintenance function as referenced from Section II.
- d. Section IV contains supplemental instructions and explanatory notes for a particular maintenance function.

**B-2. MAINTENANCE FUNCTIONS.**

- a. Inspect. To determine the serviceability of an item by comparing its physical, mechanical and/or electrical characteristics with established standards through examination.
- b. Test. To verify serviceability and detect incipient failure by measuring the mechanical or electrical characteristics of an item and comparing those characteristics with prescribed standards.
- c. Service. Operations required periodically to keep an item in proper operating condition, i.e., to clean (decontaminate), to preserve, to drain, to paint, or to replenish fuel, lubricants, hydraulic fluid, or compressed air supplies.
- d. Adjust. To maintain, within prescribed limits, by bringing into proper or exact position, or by setting the operating characteristics to specified parameters.
- e. 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.
- f. Replace. The act of substituting a serviceable part, subassembly, or module (component or assembly) for an unserviceable counterpart.
- g. Repair. The application of maintenance services or other maintenance actions to restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module (component or assembly), and item, or system.

**B-2. MAINTENANCE FUNCTIONS. (Cont'd)**

- h. Overhaul. That maintenance effort (services/actions) necessary to restore an item to a completely serviceable/operational condition as prescribed by maintenance standards (i.e., DMWR) in appropriate technical publications. Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to new condition.
- i. Rebuild. Consists of those services/actions necessary for the restoration of unserviceable equipment to 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-3. EXPLANATION OF COLUMNS IN THE MAC, SECTION II.**

- a. Column 1, Group Number. Column 1 lists group numbers, the purpose of which is to identify components, assemblies, subassemblies, and modules with 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.
- c. Column 3, Maintenance Functions. Column 3 lists the functions to be performed on the item listed in column 2. (For detailed explanation of these functions, see para. B-2.)
- d. Column 4, Maintenance Category. Column 4 specifies, by the listing of a "work time" figure in the appropriate subcolumn(s), the lowest level of maintenance authorized to perform the function listed in column 3. This figure represents the active time required to perform the maintenance function at the indicated level of maintenance. If the number or complexity of the tasks within the listed maintenance function vary at different maintenance levels, appropriate "work time" figures will be shown for each level. The number of manhours specified by the "work time" figure represents the average time required to restore an item (assembly, subassembly, component, module, end item, or system) to a serviceable condition under typical field operating conditions. This time includes preparation time, troubleshooting time, and quality assurance/quality control time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the maintenance allocation chart. The symbol designations for the various maintenance levels are as follows:

C - Operator/crew  
 O - Unit maintenance  
 F - Direct support maintenance  
 H - General support maintenance  
 D - Depot maintenance

- e. Column 5, Tools and Equipment. Column 5 specifies, by code, those common tool sets (not individual tools) and special tools, TMDE, and support equipment required to perform the designated function.
- f. Column 6, Remarks. This column shall, when applicable, contain a letter code, in alphabetic order, which shall be keyed to the remarks contained in Section IV.



**B-4. EXPLANATION OF COLUMNS IN TOOL AND TEST EQUIPMENT REQUIREMENTS, SECTION III.**

- a. Column 1, Reference Code. The numbers in this column coincide with the numbers used in the tools and equipment column of the MAC. The numbers indicate the applicable tool(s) or test equipment for maintenance functions.
- b. Column 2, Maintenance Category. The codes in this column indicate the maintenance category allocated the tool or test equipment.
- c. Column 3, Nomenclature. Name or identification of the tool or test equipment required to perform the maintenance functions.
- d. Column 4, National/NATO Stock Number. This column lists the National/NATO stock number of the specific tool or test equipment.
- e. Column 5, Tool Part Number. This column lists the manufacturer's part number of the tool followed by the Federal Supply Code for Manufacturers (5-digit) in parenthesis.

**B-5. EXPLANATION OF COLUMNS IN REMARKS, SECTION IV.**

- a. Reference Code. The code recorded in Column 6, Section II.
- b. Remarks. This column lists information pertinent to the maintenance function being performed as indicated in the MAC, Section II.

Section II. MAINTENANCE ALLOCATION CHART

NONMENCLATURE OF END ITEMS									
(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT	(6) REMARKS
			UNIT		DIR GEN SUPPORT		DEPOT		
			C	O	F	H			
00	Downsized Direct Support Station								
01	HMMWV							A	
02	Shelter Assembly	Inspect Service	0.4 0.5	0.5					
0201	Tail Lights							A	
0202	Door	Inspect Repair	0.3	0.5					
0203	Cable Reel	Inspect	0.1						
0204	Cable Assembly							G	
0205	Power Entrance Panel	Inspect Test Repair	0.3	0.5 1.0					
0206	Electrical								
020601	Power Distri- bution Box	Inspect Test Repair	0.1	0.2 0.3					
0207	Wall Switches	Inspect Test Replace	0.1	0.3 0.5					
0208	Receptacles	Inspect Test Replace	0.1	0.3 0.6					
0209	Incan- descent Lights	Inspect Test Repair	0.1	0.2 0.5					
0210	Emergency Light Assembly	Inspect Test Repair	0.2	0.3 0.5					
0211	Fluorescent Ceiling Lights	Inspect Test Repair	0.1 0.3	0.3 0.7					
0212	Portable Light Table	Inspect	0.1						

Section II. MAINTENANCE ALLOCATION CHART

NONMENCLATURE OF END ITEMS									
(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT	(6) REMARKS
			UNIT		DIR GEN SUPPORT		DEPOT		
			C	O	F	H	D		
0213	Tent Light Receptacle	Inspect Test Replace	0.1	0.2 0.6					
0215	Magnifier Lamp	Inspect Replace	0.1	0.6				B	
0216	Boot	Inspect Replace	0.2	0.6					
0217	Wall, Cabinet	Inspect	0.1						
0218	Escape Hatch	Inspect	0.2						
0219	Eye Wash Kit	Service Replace	0.1	0.6					
03	Trailer							C	
0301	Trailer Frame								
030101	Trailer Frame Curbside	Inspect Replace	0.2	1.0					
030102	Trailer Frame Roadside	Inspect Replace	0.2	1.0					
04	Multifuel Space Heater							D	
0401	Heater Adapter Assembly	Inspect Replace	0.2	1.0					
05	Zoom Transfer Scope							B	
06	Quantity Processing System							B	
07	Diazo Process Reproduc- tion Set							E	
08	SICPS Tent							F	

## Section III. TOOLS AND TEST EQUIPMENT

REFERENCE CODE	MAINTENANCE CATEGORY	NOMENCLATURE	NSN	TOOL NUMBER
1	0	Tool Kit, General Mechanics, Automotive	5180-00-177-7033	
2	0	Multimeter	6625-01-132-2512	

## Section IV. REMARKS

REFERENCE CODE	REMARKS/DESCRIPTION	
A	TM 9-2320-280-10	Operator's Manual Truck, Utility, 1-1/4 Ton, 4x4, M1037
B	TM 5-6675-326-14	Operator's, Unit, and Direct Support Maintenance Manual Topographic Support System, Direct Support Section
C	TM 9-2330-202-14&P	Operator's, Unit, and Direct Support Maintenance Manual Trailer, Cargo, 3/4 Ton, M10IA2
D	TM 5-4520-253-13	Operator's, Unit, and Intermediate Maintenance Manual Heater, Space, Multifuel with Blower, 60,000 BTU/HR
E	TM 5-3610-256-14	Operator's, Unit, and Direct Support Maintenance Manual Reproduction Set, Diazo Process
F	TM 10-8340-225-10	Operator's Manual Standard Integrated Command Post System Tent Command Post
G	TM 9-6150-226-13	Operator's Unit, Direct Support Maintenance Manual, Distribution, Illumination, System (DISE)

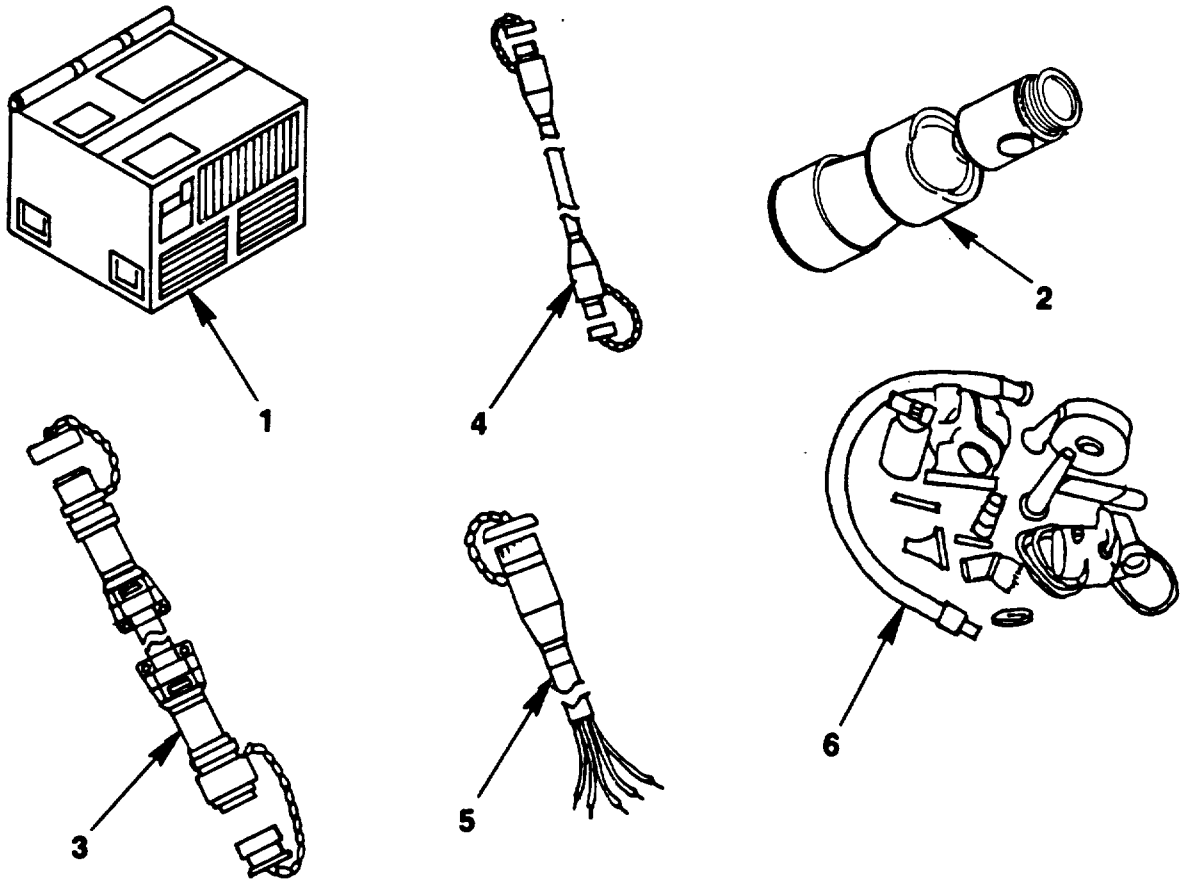
## APPENDIX C

COMPONENTS OF END ITEM  
AND BASIC ISSUE ITEMS LISTS

## Section I. INTRODUCTION

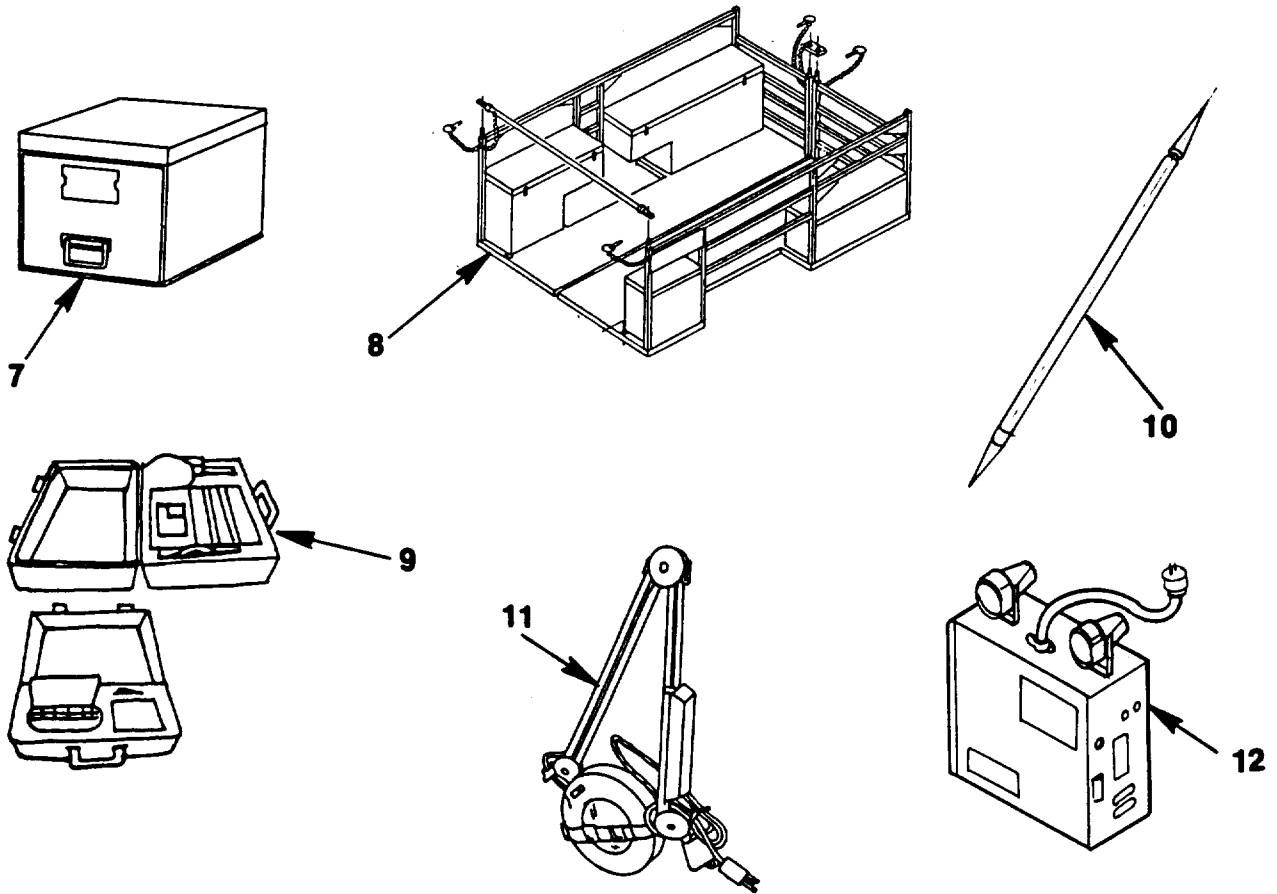
- C-1. **SCOPE.** This appendix lists components of end item and basic issue items for the Direct Support Section to help you inventory items required for safe and efficient operation.
- C-2. **INTRODUCTION.** The Components of End Item and Basic Issue Item lists are divided into the following sections:
- a. **Section II. Components of End Item.** This is for informational purposes only and is not authority to requisition replacements. These items are part of the end item, but are removed and separately packaged for transportation or shipment. As part of the end item, these items must be with the end item whenever it is issued or transferred between property accounts. Illustrations are furnished to assist you in identifying the items.
  - b. **Section III. Basic Issue.** These are the minimum essential items required to place the Downsized Direct Support Section in operation, to operate it, and to perform emergency repairs. Although shipped separately packaged, BII must be with the Downsized Direct Support Section during operation and whenever it is transferred between property accounts. The illustrations will assist you with hard-to-identify items. This manual is your authority to request/requisition replacement BII, based on TOE/MTOE authorization of the end item.
- C-3. **EXPLANATION OF COLUMNS.** The following provides an explanation of columns found in the tabular listings.
- a. **Column (1) - Illustration Number (Illus Number).** This column indicates the number of the illustration in which the item is shown.
  - b. **Column (2) - National Stock Number.** Indicates the National Stock Number assigned to the item and will be used for requisitioning purposes.
  - c. **Column (3) - Description.** Indicates the Federal Item Name and, if required, a minimum description to identify and locate the item. The last line for each item indicates Contractor and Government Entity Code (CAGEC) (in parentheses) followed by the part number.
  - d. **Column (4) - Unit of Measure (U/M).** Indicates the measure used in performing the actual operational/maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in., pr).
  - e. **Column (5) - Quantity Required (QTY RQR).** Indicates the quantity of the item authorized to be used with/on the equipment.

Section II. COMPONENTS OF END ITEM



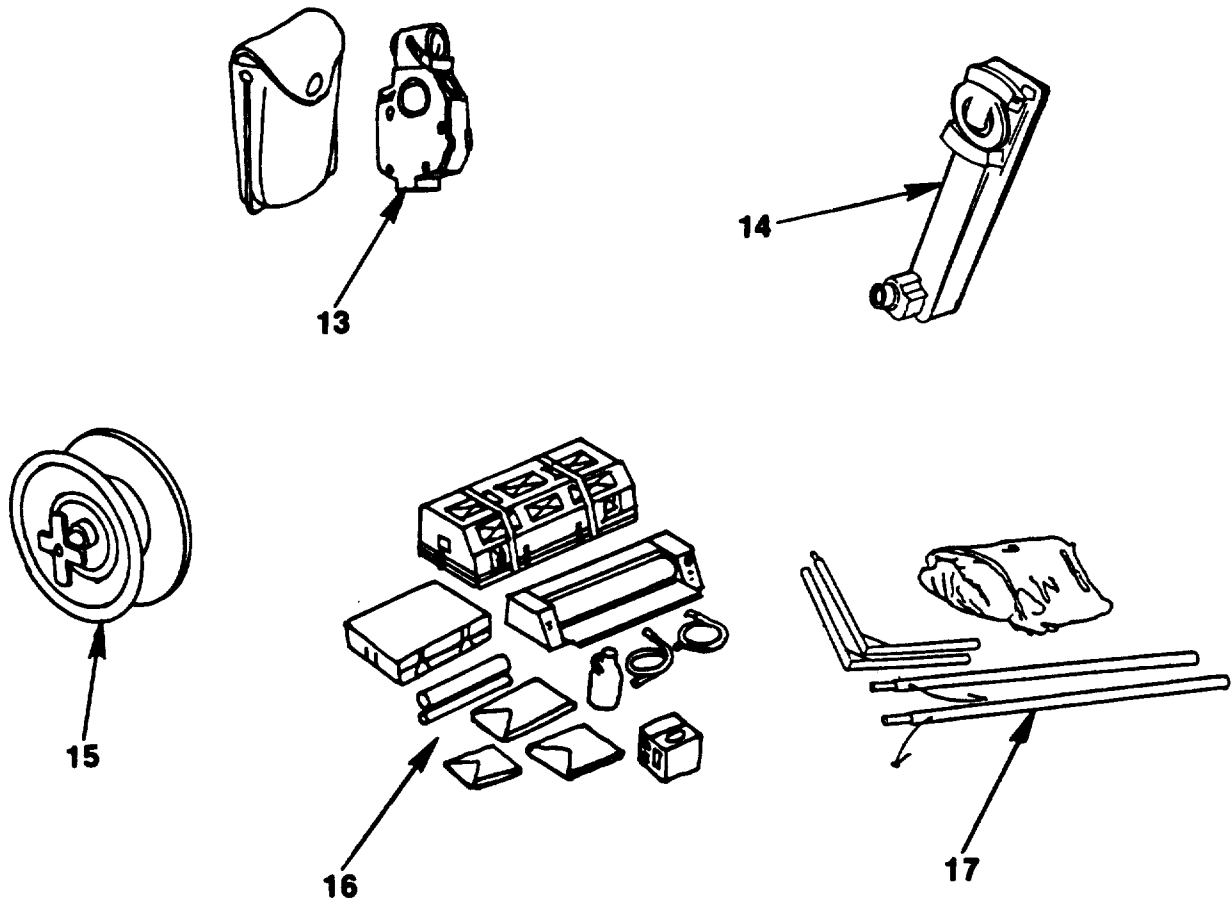
(1) Illus Number	(2) National Stock Number	(3) Description CAGEC and Part Number	(4) U/M	(5) QTY RQR
1	4120-01-136-2214	Air Conditioner (57107) A9KH-115P	EA	1
2		Ball Joint Adapter (51985) 102155	EA	1
3	6150-01-250-0044	Cable Assy, Pwr Elect (97403) 13226E7032-2	EA	2
4	6150-01-247-4781	Cable Assy, Pwr Elect (97403) 13226E7023-2	EA	2
5	6150-01-256-6301	Cable Assy, Spec Purpose (97403) 13226E7019	EA	1
6	7910-00-205-3400	Cleaner, Vacuum, Electric (12835) MVU	EA	1

Section II. COMPONENTS OF END ITEM - Continued



(1) Illus Number	(2) National Stock Number	(3) Description CAGEC and Part Number	(4) U/M	(5) QTY RQR
7	7110-00-823-7218	Filing Cabinet (81349) MILF43101	EA	4
8		Frame, Trailer Assy mtd in MIO1A2 (31902) 10624	EA	1
9	6675-01-266-0700	Graphic Quantity Processor (36970) L-2800AM	EA	1
10	6675-00-171-5159	Jacobs Staff (58536) A-A-52024	EA	1
11	6650-01-124-0832	Lamp, Magnifier (15607) LFM1BX5	EA	1
12	6220-01-197-7387	Light, Emergency (72914) 11-0283-3	EA	1

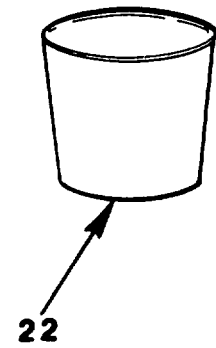
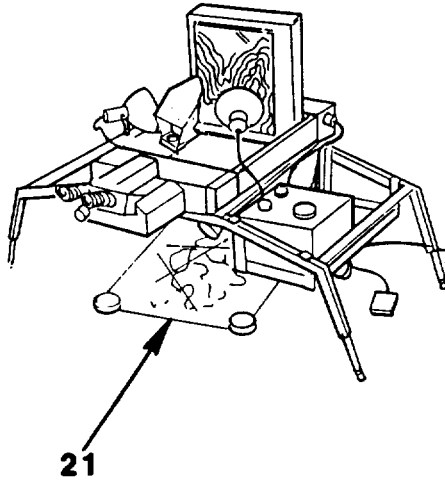
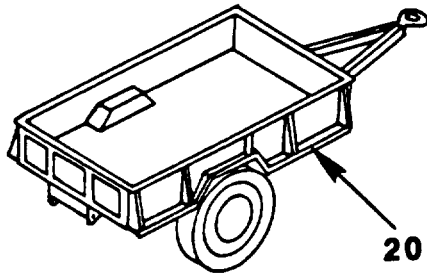
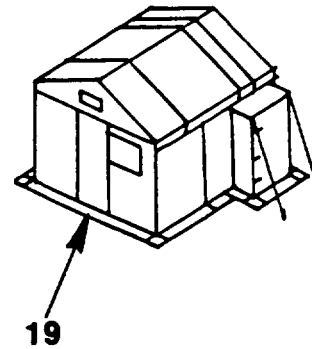
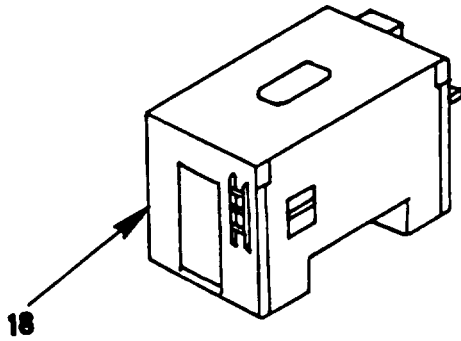
Section II. COMPONENTS OF END ITEM - Continued



(1) Illus Number	(2) National Stock Number	(3) Description CAGEC and Part Number	(4) U/M	(5) QTY RQR
13	6675-01-168-4229	Measurer, Optical Tree (04024) 43865	EA	1
14		Range Finder, Optical (35763) 8031-31	EA	1
15	8130-00-656-1090	Reel, Cable (06076) RC-435/u	EA	1
16	3610-01-123-7782	Reproduction Set, Diazo (60887) 185.FL-M	EA	1
17		Tent, Boot/Support System (97403) 13229E7461	EA	1

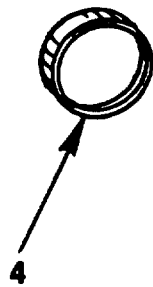
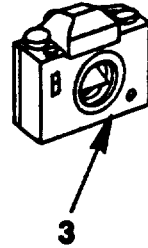
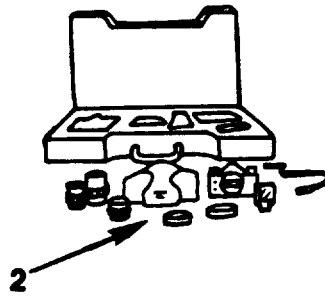
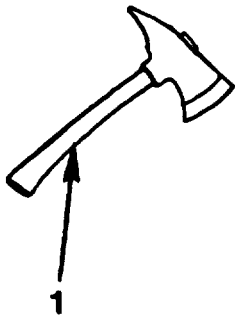


Section II. COMPONENTS OF END ITEM - Continued



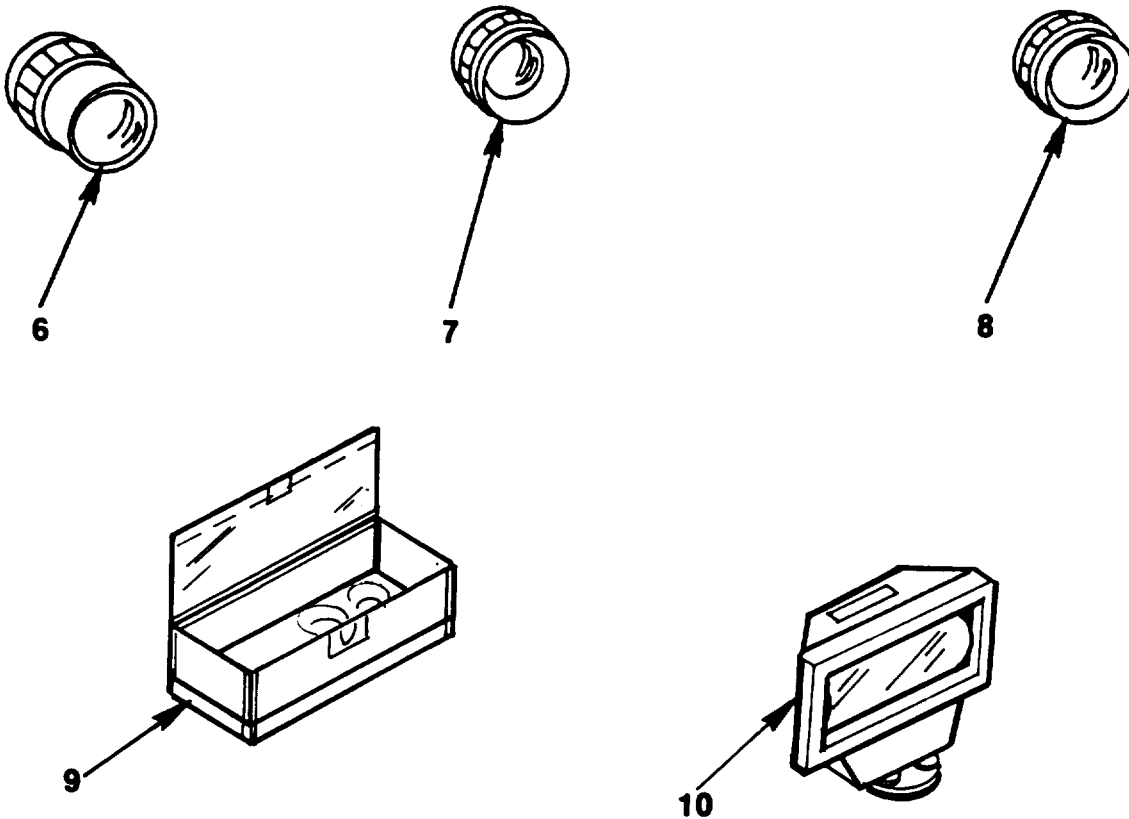
(1) Illus Number	(2) National Stock Number	(3) Description CAGEC and Part Number	(4) U/M	(5) QTY RQR
18		Shelter, Nonexpander (31902) 10480	EA	1
19		Standardized Integrated Command Post	EA	1
20	2330-01-102-4697	System Tent Command Post Trailer, Cargo	EA	1
21	6675-01-043-6139	(19207) 8750050 Transfer, Scope, Zoom	EA	1
22	7520-00-281-5911	(06175) 53-05-04-20 Wastepaper Basket	EA	2
		(58536) A-A-182		

Section III. BASIC ISSUE ITEMS



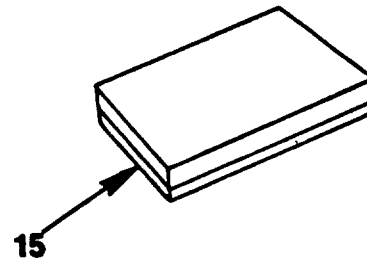
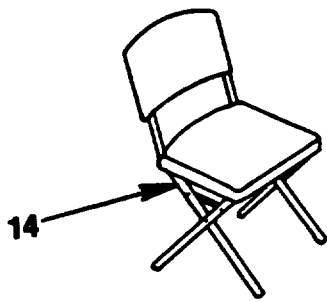
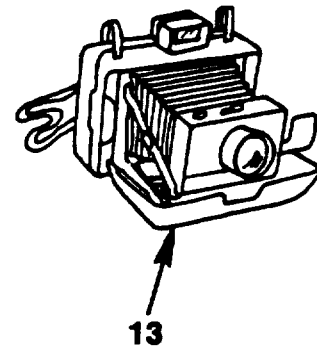
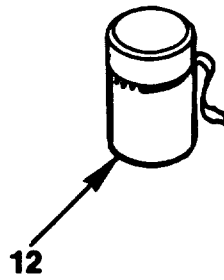
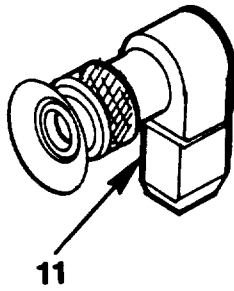
(1) Illus Number	(2) National Stock Number	(3) Description CAGEC and Part Number	(4) U/M	(5) QTY RQR
1	4210-00-137-1970	Ax, Pick Head (76109) 1-1/2 # PKHD	EA	1
2	6720-01-122-3366	Camera, Still Picture (80058) KS-99C1	EA	1
3	6720-01-018-1682	Camera, Body, Still (53374) C12-0751-211	EA	1
4	6720-01-022-6333	Cap, Dust, Rear u/w camera (53374) 43-1473	EA	1
5	6720-01-024-3872	Cover, Camera Lens (2G118) C45-2031	EA	1

Section III. BASIC ISSUE ITEMS - Continued



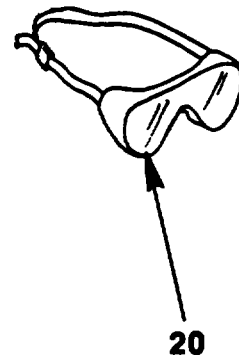
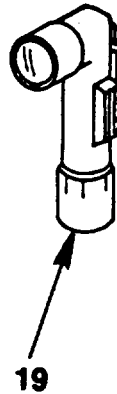
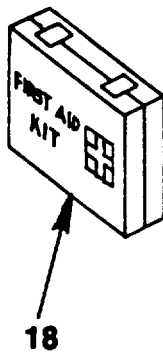
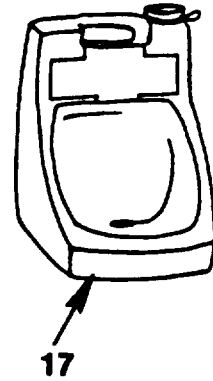
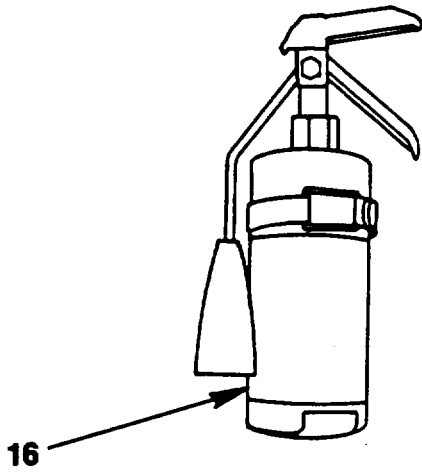
(1) Illus Number	(2) National Stock Number	(3) Description CAGEC and Part Number	(4) U/M	(5) QTY RQR
6	6760-00-614-9224	Lens 135 mm lg F/2.8 u/w Camera (2G118) C21-7221-201	EA	1
7	6760-00-614-9223	Lens 35 mm lg F/2.8 u/w Camera (2G118) C21-5241-201	EA	1
8	6760-01-024-3867	Lens 50 mm lg F/1.8 u/w Camera (G118) C21-6107-201	EA	1
9	6760-00-602-5107	Case, Photographic Equipment (2G118) 4-800151	EA	1
10	6720-01-149-2259	Flash, Electric Unit	EA	1

Section III. BASIC ISSUE ITEMS - Continued



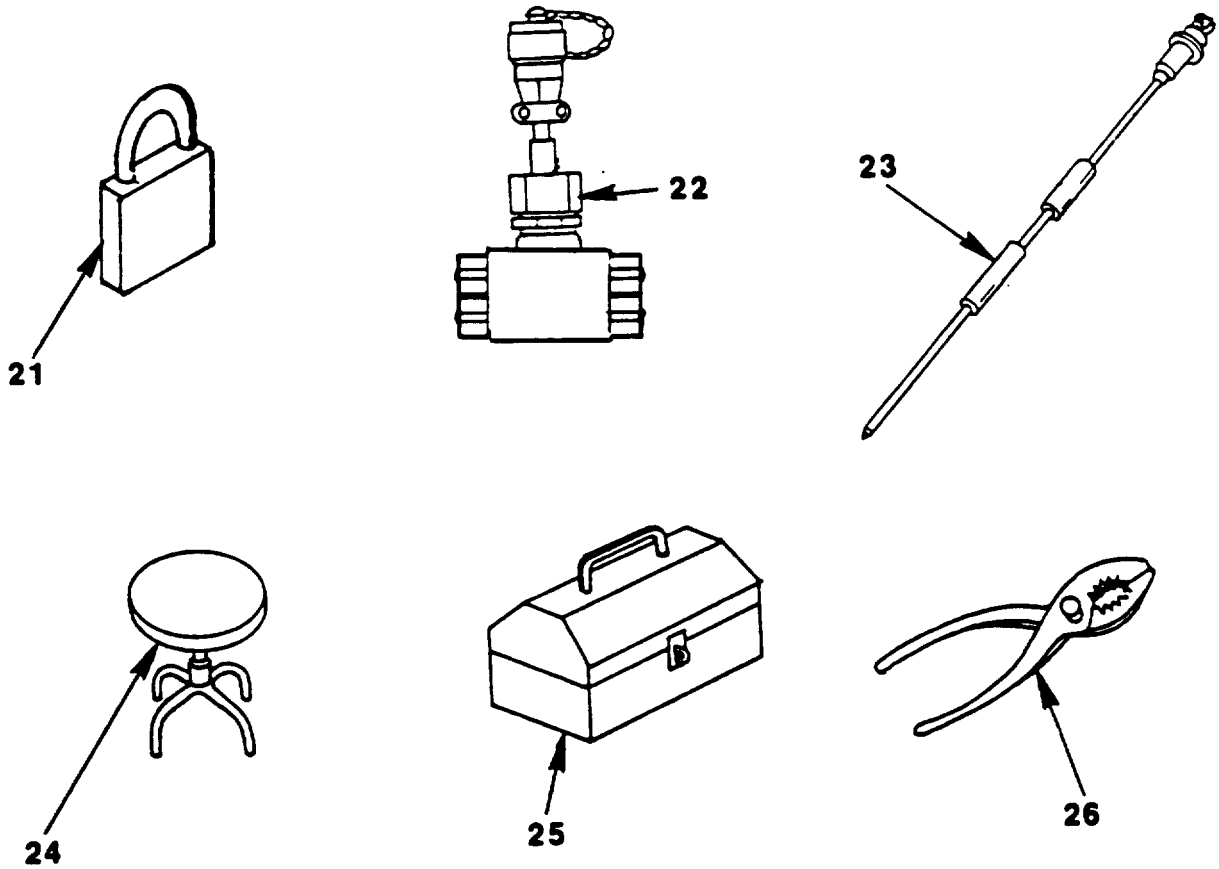
(1) Illus Number	(2) National Stock Number	(3) Description CAGEC and Part Number	(4) U/M	(5) QTY RQR
11	6760-00-614-9257	Viewer 90° Angle	EA	1
12	6720-01-024-3872	Lens Bag	EA	1
13	6720-01-064-8071	Camera Set, Still Picture (29556) EE-100	EA	2
14	7105-00-269-8463	Chair, Folding (80063) SCD539471	EA	5
15	8460-21-593-3018	Case, Map Container (MET-R-00381)	EA	5

Section III. BASIC ISSUE ITEMS - Continued



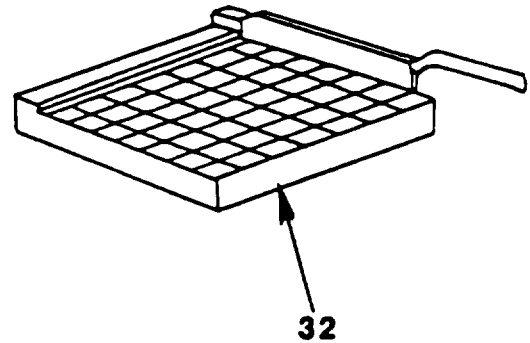
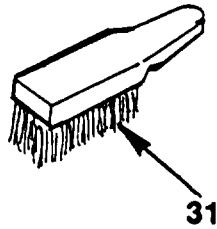
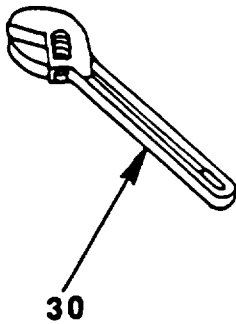
(1) Illus Number	(2) National Stock Number	(3) Description CAGEC and Part Number	(4) U/M	(5) QTY RQR
16	4212-00-555-8837	Extinguisher, Fire (06535) FH900-2	EA	2
17	4240-01-241-2431	Eye Wash Station, Laboratory (95632) Lab Line 99	EA	1
18	6545-00-922-1200	First Aid Kit (19207) 11677011	EA	1
19	6230-00-161-6422	Flashlight (80063) TL122D	EA	1
20	4240-00-816-3819	Goggles, Industrial (74936) WA60SH07460315	EA	1

Section III. BASIC ISSUE ITEMS - Continued



(1) Illus Number	(2) National Stock Number	(3) Description CAGEC and Part Number	(4) U/M	(5) QTY RQR
21	5340-00-682-1501	Padlock Set (81349) MIL-P-17802	SE	1
22	9150-01-251-3125	Receptacle Group 2 Duplex (97403) 13226E7040	EA	2
23	5975-01-050-5707	Rod, Ground (97403) 13219E0462	EA	1
24	7110-00-634-8596	Stool, Revolving (81349) AA-8A700	EA	1
25	5140-00-315-2747	Tool Box Portable (81348) GGG-T-558	EA	1
26	5100-00-223-7396	Pliers, Slip Joint (93389) 376	EA	1

Section III. BASIC ISSUE ITEMS - Continued



(1) Illus Number	(2) National Stock Number	(3) Description CAGEC and Part Number	(4) U/M	(5) QTY RQR
27	5120-00-764-8080	Screwdriver, Cross Tip Size 1 (84040) G-801DR	EA	1
28	5120-00-764-8120	Screwdriver, Cross Tip Size 3 (84040) G-803DR	EA	1
29	5120-00-234-8910	Screwdriver, Flat Tip (77873) FT1-1	EA	2
30	5120-00-240-5328	Wrench, Adjustable (39428) 5385A13	EA	1
31	7920-00-291-5815	Brush Wire, Scratch (81348) H-B-178/1	EA	1
32	7520-00-224-7621	Trimmer, Paper, Drop Knife (79819) 08-2-24	EA	1

C-11/(C-12 blank)

**APPENDIX D**

**ADDITIONAL AUTHORIZATION LIST**

**SECTION I. INTRODUCTION**

- D-1. **SCOPE.** This appendix lists additional items you are authorized for the support of the Downsized Direct Support Section.
- D-2. **GENERAL.** This list identifies items that do not have to accompany the Downsized Direct Support Section and that do not have to be turned in with it. These items are all authorized to you by CTA, MTOE, TDA, or JTA.
- D-3. **EXPLANATION OF LISTING.** National stock numbers, descriptions, and quantities are provided to help you identify and request the additional items you require to support this equipment. The items are listed in alphabetical sequence by item name under the type document (i.e., CTA, MTOE, TDA, or JTA) which authorizes the item(s) to you.

**Section II. ADDITIONAL AUTHORIZATION LIST**

(1) National Stock Number	(2) Description FSCM and Part Number	(3) U/M	(4) QTY AUTH
4520-01-203-4410	Heater, Space	EA	1
6675-00-202-8542	Interpretation Kit, Photographic	EA	1
5805-00-543-0012	Telephone TA-312/PT	EA	1

**D-1 /(D-2 blank)**



## APPENDIX E

EXPENDABLE/DURABLE SUPPLIES  
AND MATERIALS LIST

## Section I. INTRODUCTION

- E-1. **SCOPE.** This appendix lists expendable and durable items that you will need to operate and maintain the Downsized Direct Support Section. This listing is for informational purposes only and is not authority to requisition the listed items. These items are authorized to you by CTA 50-970, Expendable/Durable Items (Except Medical, Class V, Repair Parts, and Heraldic Items), or CTA 8-100, Army Medical Department Expendable/Durable Items.
- E-2. **EXPLANATION OF COLUMNS**.
- a. Column (1)-Item Number. This number is assigned to the entry in the listing and is referenced in the narrative instructions to identify the material (e.g., "Use cleaning compound, item 5, appendix E").
  - b. Column (2)-Level. This column identifies the lowest level of maintenance that requires the listed item.  
  
C - Operator/Crew  
O - Unit Maintenance  
F - Direct Support Maintenance  
H - General Support Maintenance
  - c. Column (3)-National Stock Number. This is the National Stock Number assigned to the item; use it to request or requisition the item.
  - d. Column (4)-Description. Indicates the Federal item name and, if required, a description to identify the item. The last line for each item indicates the Commercial and Government Entity Code (CAGE) in parentheses followed by the part number.
  - e. Column (5)-Unit of Measure (U/M). Indicates the measure used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in., pr). If the unit of measure differs from the unit of issue, requisition the lowest unit of issue that will satisfy your requirements.

**SECTION II. EXPENDABLE/DURABLE SUPPLIES AND MATERIALS LIST**

(1) Item Number	(2) Level	(3) National Stock Number	(4) Description	(5) UM
1	C	8040-00-266-0849	Adhesive	Jr
2	C	6135-00-643-1309	Battery, Nonrechargeable u/w electronic flash	Pg
3	C	7510-00-616-7471	Binder & Filler Loose Leaf	Ea
4	C	8125-01-088-3553	Bottle, Applicator	Bt
5	C	7510-00-223-6706	Chalk, Marking	Bx
6	C	7920-01-215-6568	Cloth, Chamois, Artificial	Ea
7	0		Cloth	Ea
8	C	8320-00-299-8625	Cotton, Nonsterile	Bg
9	C	6750-01-053-2029	Film u/w Still Camera KS-9901	Bx
10	C	9150-00-273-2389	Lubricating Oil, General Purpose	Cn
11	C	6640-00-559-1384	Paper, Lens	Bx
12	C	7530-01-006-4496	Paper, Tracing	Rm
13	C	6750-00-868-7901	Picture Pack, Rapid PRC., Photo	Pg
14	C	9330-01-126-0009	Plastic Sheet 24x30 in. X .0075	Ro
15	C	9330-01-125-4587	Plastic Sheet, Matte One Side	Ro
16	0	8040-00-828-7385	Silicone Sealant	EA
17	0	5040-00-103-2254	Tape, Cloth, Duct Sealing	EA

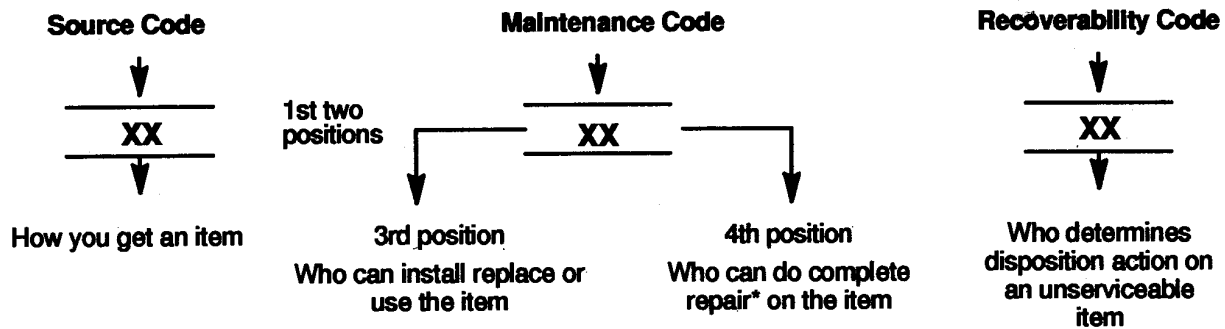
## APPENDIX F

## REPAIR PARTS &amp; SPECIAL TOOLS LIST

## SECTION I. INTRODUCTION

- F-1. **SCOPE.** This RPSTL lists and authorizes spares and repair parts, special test, measurement, and diagnostic equipment (TMDE); and other special support equipment required for performance of operator, unit, direct support, and general support maintenance. It authorizes the requisitioning, issue, and disposition of spares, repair parts and special tools as indicated by the source, maintenance and recoverability (SMR) codes.
- F-2. **GENERAL.** In addition to this section, Introduction, this Repair Parts and Special Tools List is divided into the following sections.
- a. **Section II. Repair Parts List.** A list of spares and repair parts authorized by the RPSTL for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts Lists are composed of functional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Bulk materials are listed in item name sequence. Repair parts kits are listed separately in their own functional group within Section II. Repair parts for repairable special tools are also listed in this section. Items are shown on the associated illustration(s)/ figure(s).
  - b. **Section III. Special Tools List.** A list of special tools, special TMDE, and other special support equipment authorized by the RPSTL (as indicated by Basis of Issue (BOI) information in DESCRIPTION AND USABLE ON CODE column) for the performance of maintenance.
  - c. **Section IV. National Stock Number and Part Number Index.** A list, in National item identification number (NIN) sequence, of all National stock numbered items appearing in the listing, followed by a list in alphanumeric sequence of all part numbers appearing in the listings. National stock numbers and part numbers are cross-referenced to each illustration figure and item number appearance.
    - a. **Column 1, Item No.** Indicates the number used to identify items called out in the illustration.
    - b. **Column 2. SMR Code.** The Source, Maintenance, and Recoverability (SMR) code is a 5-position code containing supply/requisitioning information, maintenance category authorization criteria, and disposition instruction, as shown in the following breakout:
- F-3. **EXPLANATION OF COLUMNS. SECTIONS II AND III.**
- a. **Column 1. Item No.** Indicates the number used to identify items called out in the illustration.

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



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

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

Source Code	Explanation
PA PB PC** PD PE PF PG	<p>Stocked items; use the applicable NSN to request/requisition items with these source codes. They are authorized to the category indicated by the code entered in the 3rd position of the SMR code.</p> <p>**NOTE : Items coded PC are subject to deterioration.</p>
KD KF KB	<p>Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance category indicated in the 3rd position of the SMR code. The complete kit must be requisitioned and applied.</p>
MO MF MH ML MD	<p>(Made at org/AVUWM Level) (Made at DS/AVUM Level) (Made at GS Level) (Made at Specialized Repair Act (SRA)) (Made at Depot)</p> <p>Items with these codes are not to be requested/requisitioned individually. They must be made from bulk material which is identified by the part number in the DESCRIPTION and USABLE ON CODE (UOC) column and listed in the Bulk Material group of the repair parts list in the RPSTL. If the item is authorized by you by the 3d position code of the SMR code, but the source code indicated it is made at a higher level, order the item from the higher level of maintenance.</p>

SOURCE  
CODE

EXPLANATION

<p>AO AF AH AL AD</p>		<p>(Assembled by org AVUM Level) (Assembled by DS/AVUM Level) (Assembled by GS Category) (Assembled by SRA) (Assembled by Depot)</p>	<p>Items with these codes are not to be requested/requisitioned individually. The parts that make up the assembled item must be requisitioned or fabricated and assembled at the level of maintenance indicated by the source code. If the 3rd position code of the SMR code, authorizes you to replace the item, but the source code indicates the items are assembled at a higher level, order the item from the higher level of maintenance.</p>
---------------------------------------	--	--	---

- XA - - Do not requisition an "XA"-coded item. Order its next higher assembly. (Also, refer to the NOTE below.)
- XB - - If an "XB" item is not available from salvage, order it using the CAGE Code and part number given.
- XC - - Installation drawing, diagram, instruction sheet, field service drawing, that is identified by manufacturer's part number.
- XD - - Item is not stocked. Order an "XD"-coded item through normal supply channels using the CAGE Code and part number given, if no NSN is available.

**NOTE**

Cannibalization or controlled exchange, when authorized, may be used as a source of supply for items with the above source codes, except for those source coded "XA" or those aircraft support items restricted by requirements of AR 700-42

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

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

**Maintenance  
Code**

**Explanation**

C - Crew or operator maintenance done within unit/AVUM maintenance.

O - Unit level VAVUM maintenance can remove, replace, and use the item.

F - Direct support/AVIM maintenance can remove, replace, and use the item.

H - General support maintenance can remove, replace, and use the item.

L - Specialized repair activity can remove, replace, and use the item.

D - Depot can remove, replace, and use the item.

The maintenance code entered in the fourth position tells whether or not the item is to be repaired and identifies the lowest maintenance level with the capability to do complete repair (i.e., perform all authorized repair functions). This position will contain one of the following maintenance codes.

**NOTE**

Some limited repair may be done on an item at a lower level of maintenance, if authorized by the Maintenance Allocation Chart (MAC) and SMR codes. This position will contain one of the following maintenance codes.

**Maintenance  
Code**

**Explanation**

O - Organizational or (aviation unit) is the lowest level that can do complete repair of the item.

F - Direct support or aviation intermediate is the lowest level that can do complete repair of the item.

H - General Support is the lowest level that can do complete repair of the item.

L - Specialized repair activity (designate the specialized repair activity) is the lowest level that can do complete repair of the item.

D - Depot is the lowest level that can do complete repair of the item.

Z - Nonrepairable. No repair is authorized.

H - No repair is authorized. (No parts or special tools are authorized for the maintenance of a "B" coded item.) However, the item may be reconditioned by adjusting, lubricating, etc., at the user level.

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

**Recoverability Codes**

**Explanation**

- Z - Nonrepairable item. When unserviceable, condemn and dispose of the item at the level of maintenance shown in 3rd position of SMR Code.
  - O - Repairable item. When not economically repairable, condemn and dispose of the item at unit or AVUM level.
  - F - Repairable item. When uneconomically repairable, condemn and dispose of the item at the direct support or AVIM level.
  - H - Repairable item. When uneconomically repairable, condemn and dispose of the item at the general support level.
  - D - Repairable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item not authorized below depot level.
  - L - Repairable item. Condemnation and disposal not authorized below specialized repair activity (SRA).
  - A - Item requires special handling or condemnation procedures because of specific reasons (e.g., precious metal content, high dollar value, critical material, or hazardous material). Refer to appropriate manuals/directives for specific instructions.
- c. Column 3. CAGEC. The Commercial and Government Entity Code (CAGEC) is a 5-digit numeric code which is used to identify the manufacturer, distributor, or Government agency, etc., that supplies the item.
- d. Column 4. 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 you use an NSN to requisition an item, the item you receive may have a different part number from the part ordered.

- e. Column 5. Description and Usable on Code (UOC). This column includes the following information:

- (1) The Federal item name and, when required, a minimum description to identify the item.
- (2) The physical security classification of the item is indicated by the parenthetical entry, e.g., Phy Sec C1-Confidential, Phy Sec CI (S)-Secret, Phy Sec CI (T)-Top Secret.

- (3) Items that are included in kits and sets are listed below the name of the kit or set.
  - (4) Spare/repair parts that make up an assembled item are listed immediately following the assembled item line entry.
  - (5) Part numbers for bulk materials are referenced in this column in the line item entry for the item to be manufactured/ fabricated.
  - (6) When the item is not used with all serial numbers of the same model, the effective serial numbers are shown on the description (before UOC).
  - (7) The usable on code, when applicable (see paragraph 5, Special Information).
  - (8) In the Special Tools List section, the basis of issue (BOI) appears as the last line(s) in the entry for each special tool, special TMDE, and other special support equipment, When density of equipments supported exceed density spread indicated in the basis of issue, the total authorization is increased proportionately.
  - (9) The statement "END OF FIGURE" appears just below the last item description in Column 5 for a given figure in both Section II and Section III.
- f. Column 6. QTY. The QTY quantity per figure column indicates the quantity of the item used in the breakout shown on the illustration figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column in lieu of a quantity indicates that the quantity is variable and the quantity may vary from application to application.

**F-4. EXPLANATION OF COLUMNS. SECTION IV.**

a. National Stock Number (NSN) Index.

- (1) Stock number column. This column lists the NSN by National item identification number (NIIN) sequence. The NIIN consists

of the last nine digits of the NSN i.e.,

NSN
5305-01-574-1467
NIIN

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

- (2) FIG column. This column lists the number of the figure where the item is identified/located. The figures are in numerical order in Section II and Section III.
- (3) Item column. The item number identifies the item associated with the figure listed in the adjacent FIG column. This item is also identified by the NSN listed on the same line.



- b. Part Number Index. Part numbers in this index are listed by part number in ascending alphanumeric sequence (i.e., vertical arrangement of letter and number combination which places the first letter.
  - (1) Stock number column. This column lists the NSN for the associated part number and manufacturer identified in the Part Number and FSCM columns to the left.
  - (2) FIG column. This column lists the number of the figure where the item is identified/located in Sections I and III.
  - (3) Item column. The item number is that number assigned to the item as it appears in the figure referenced in adjacent figure number column.

**F-5. SPECIAL INFORMATION.** Use the following subparagraphs as applicable:

- a. Usable on Code. The usable on code appears in the lower left corner of the Description column heading. Usable on codes are shown as "UOC:.." in the Description Column (justified left) on the first line applicable item description/nomenclature. Uncoded items are applicable to all models.
- b. Associated Publications. Refer to Appendix A, References.

**F-6. HOW TO LOCATE REPAIR PARTS.**

- a. When National Stock Number or Part Number is NOT Known.
  - (1) Use the table of contents, determine the assembly group or subassembly group to which the item belongs. This is necessary since figures are prepared for assembly groups and subassembly groups, and listings, are divided into the same groups.
  - (2) Find the figure covering the assembly group or subassembly group to which the item belongs.
  - (3) Identify the item on the figure and note the item number.
  - (4) Refer to the Repair Parts List for the figure to find the part number for the item number noted on the figure.
  - (5) Refer to the Part Number Index to find the NSN, if assigned.

b. When National Stock Number or Part Number is Known

- (1) Use the Index of National Stock Numbers and Part Numbers, find the pertinent National Stock Number or Part Number. The NSN index is in National Item Identification Number (NIIN) sequence (see 4a(1)). The part numbers in the Part Number index are listed in ascending alphanumeric sequence (see paragraph 4(b)). Both indexes cross-reference you to the illustration figure and item number of the item you are looking for.
- (2) After finding the figure and item number, verify that the item is the one you are looking for, then locate the item number in the repair parts list for the figure.

**F-7. ABBREVIATIONS.** Abbreviation used in the manual are listed in MIL-STD-12.

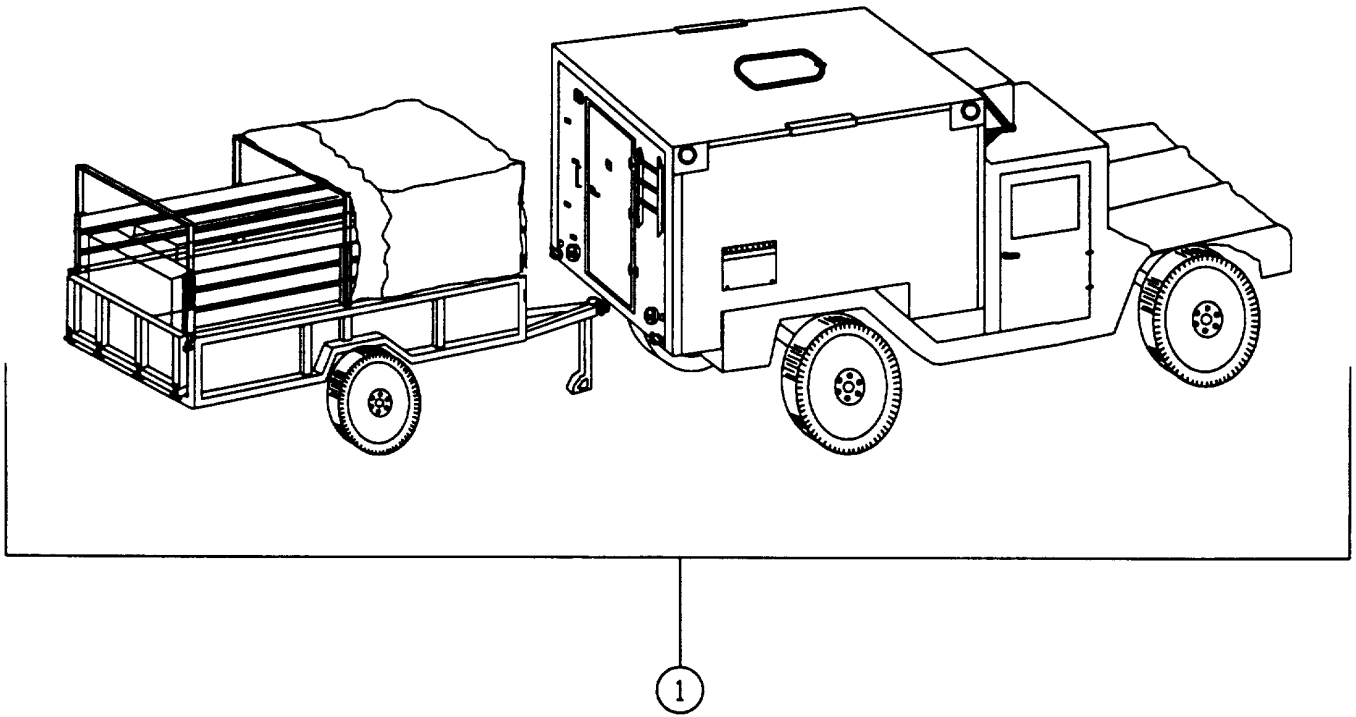


FIGURE 1. DDSS UNIT

F-9 Blank/F-10

SECTION II

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(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
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GROUP 00 DOWNSIZED DIRECT SUPPORT SYSTEM

FIG. 1 DDSS UNIT

1	XDOOD	97403	13229E7370	TOPOGRAPHIC SUPPORT .....	1
				END OF FIGURE	

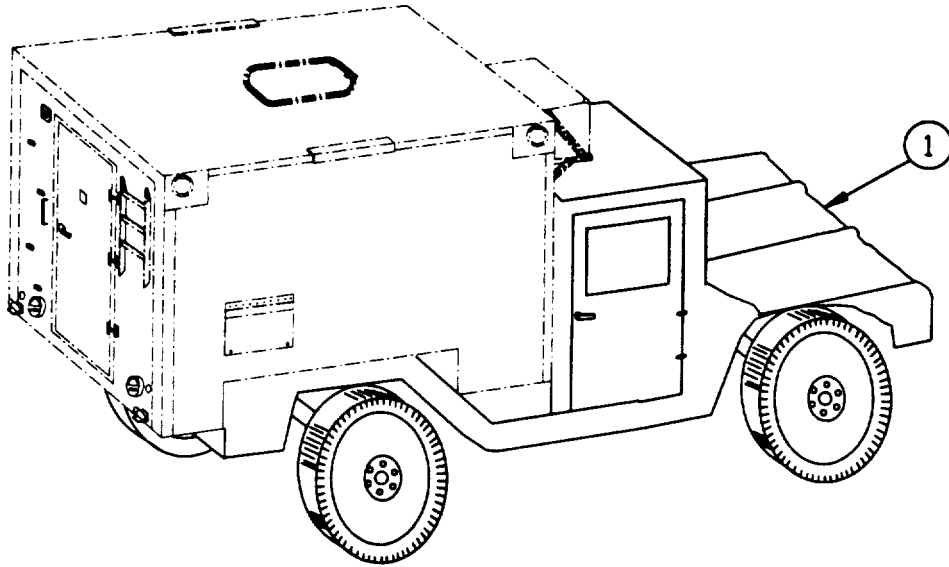


FIGURE 2. TRUCK, (HMMWV)

F-12

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC) GROUP 01 HMMWV FIG. 2 TRUCK (HMMWV)	(6) QTY
1	PDODD	19207	8750117	TRUCK, (HMMWV) SEE TM9-2330-202..... 14&P FOR PARTS BREAKDOWN .....	1
END OF FIGURE					

1  
|  
[ 2 THRU 23 ]

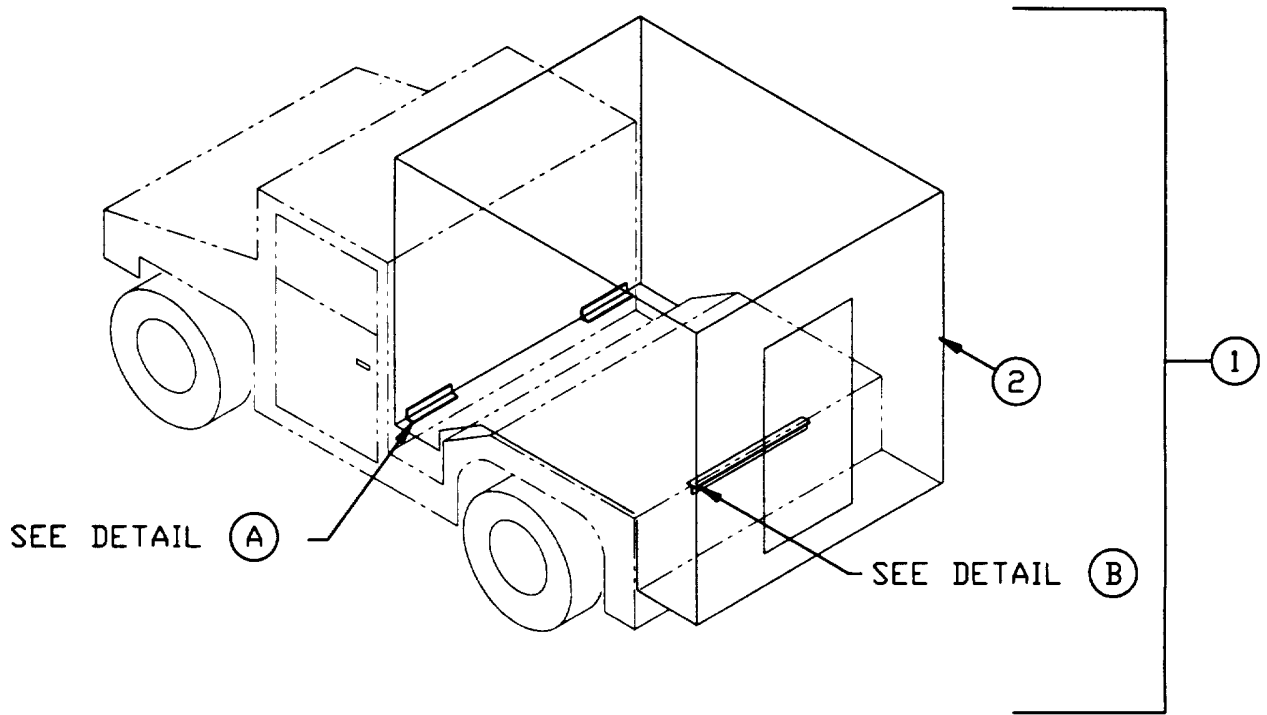
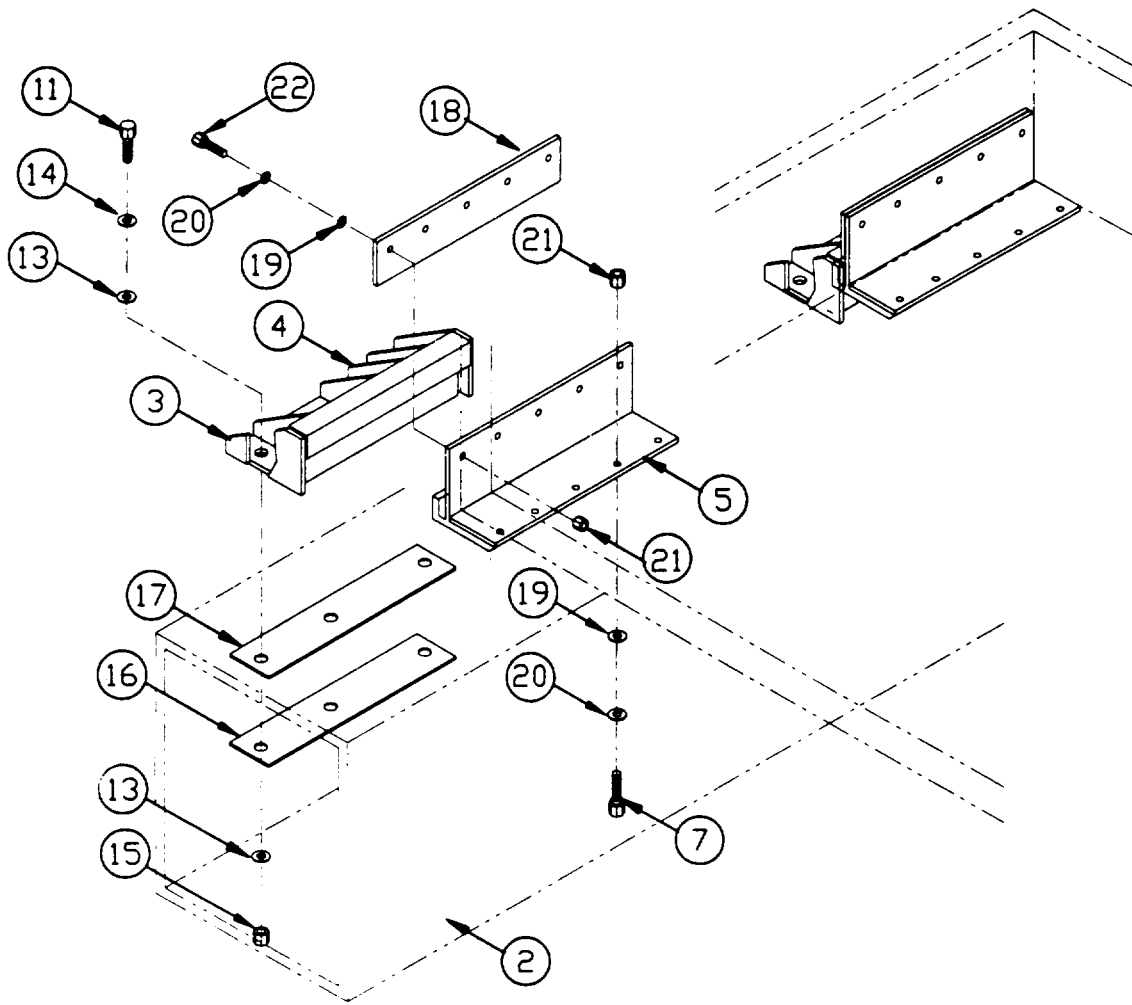


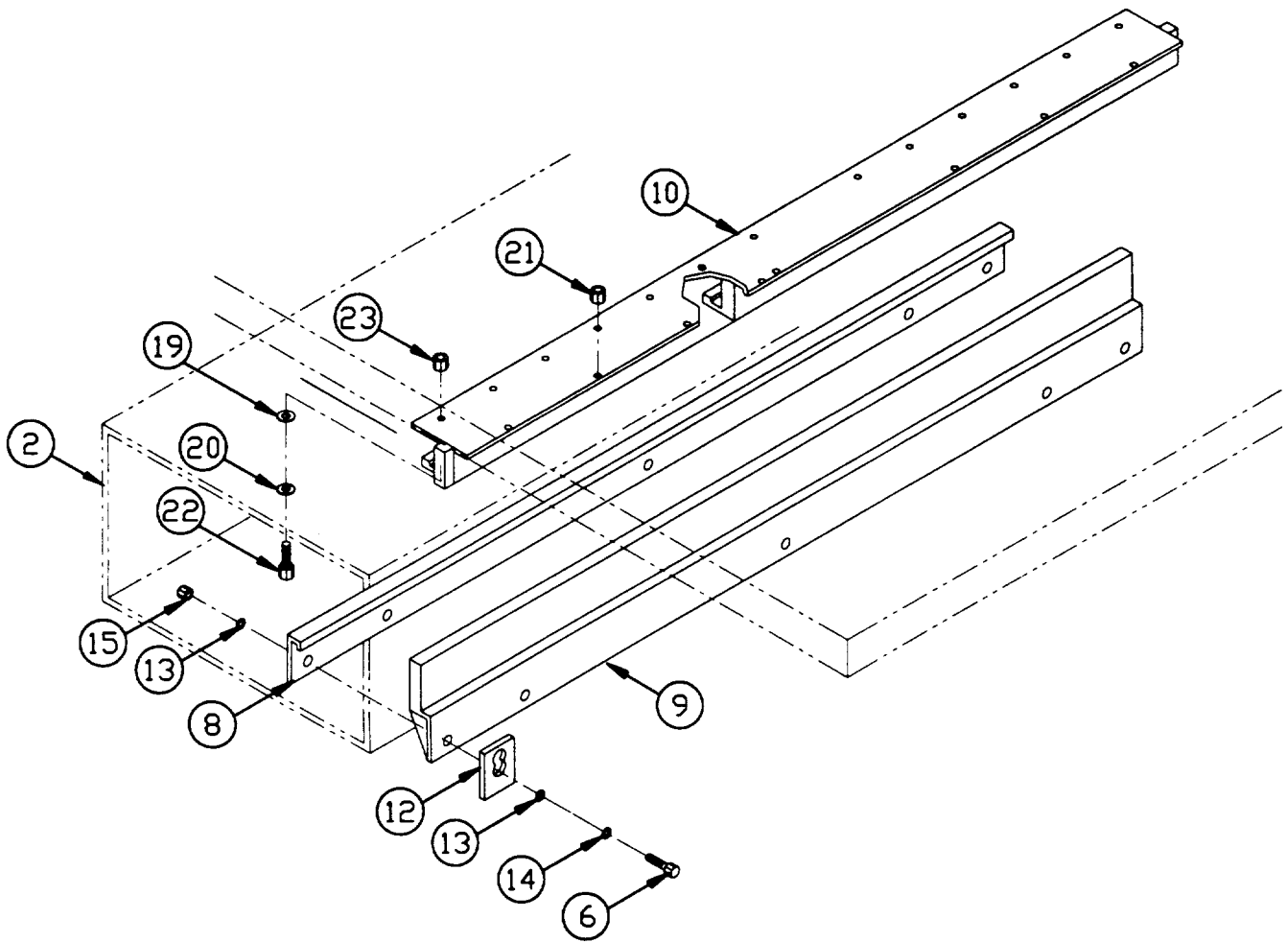
FIGURE 3. SHELTER AND MOUNTINGS (SHEET 1 OF 3)



DETAIL (A)

FIGURE 3. SHELTER AND MOUNTINGS (SHEET 2 OF 3)





DETAIL (B)

FIGURE 3. SHELTER AND MOUNTINGS (SHEET 3 OF 3)

## SECTION II

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(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC) GROUP 02 SHELTER ASSEMBLY  FIG. 3 SHELTER AND MOUNTINGS	(6) QTY
1	XDOOO	97403	13229E7371	SHELTER & MOUNTING .....	1
2	XDOOO	05699	707500-010	SHELTER SEE DETAIL A,B.....	1
3	XDOZZ	97403	13229E7479-1	MOUNTING ELEMENT SEE DETAIL A.....	1
4	XDOZZ	97403	13229E7479-2	MOUNTING ELEMENT SEE DETAIL A.....	1
5	XDOZZ	97403	13229E7480-1	MOUNTING ELEMENT SEE DETAIL A.....	2
6	XDOZZ	88044	AN8C20A	BOLT,MACHINE SEE DETAIL B.....	5
7	XDOZZ	88044	AN5C5A	BOLT,MACHINE SEE DETAIL A.....	14
8	XDOZZ	97403	13229E7478-1	MOUNTING ELEMENT SEE DETAIL B.....	1
9	XDOZZ	97403	13229E7478-2	MOUNTING ELEMENT SEE DETAIL B.....	1
10	XDOZZ	97403	13229E7481	MOUNTING ELEMENT SEE DETAIL B.....	1
11	XDOZZ	88044	AN8C16A	BOLT,MACHINE SEE DETAIL A.....	6
12	XDOZZ	97403	13229E7479-5	BACKPLATE SEE DETAIL B.....	5
13	XDOZZ	88044	AN960C816L	WASHER,FLAT SEE DETAIL A,B.....	22
14	XDOZZ	96906	MS35338-143	WASHER,LOCK SEE DETAIL A B.....	11
15	XDOZZ	96906	MS21044C8	NUT,SELF-LOCKING,HE SEE DETAIL A, B.....	11
16	XDOZZ	97403	13229E7479-3	SHIM SEE DETAIL A .....	2
17	XDOZZ	97403	13229E7479-4	SHIM SEE DETAIL A .....	4
18	XDOZZ	97403	13229E7480-2	PLATE SEE DETAIL A .....	2
19	XDOZZ	96906	MS27183-10	WASHER,FLAT SEE DETAIL AB.....	42
20	XDOZZ	96906	MS35337-83	WASHER SEE DETAIL AB .....	42
21	XDOZZ	84256	AP520-524	INSERT SEE DETAIL A,B.....	42
22	XDOZZ	88044	AN5C7A	BOLT,MACHINE SEE DETAIL A,B.....	20
23	XDOZZ	84256	AP515-524	INSERT,POTTED,5/16 SEE DETAIL B .....	22

END OF FIGURE

F-17

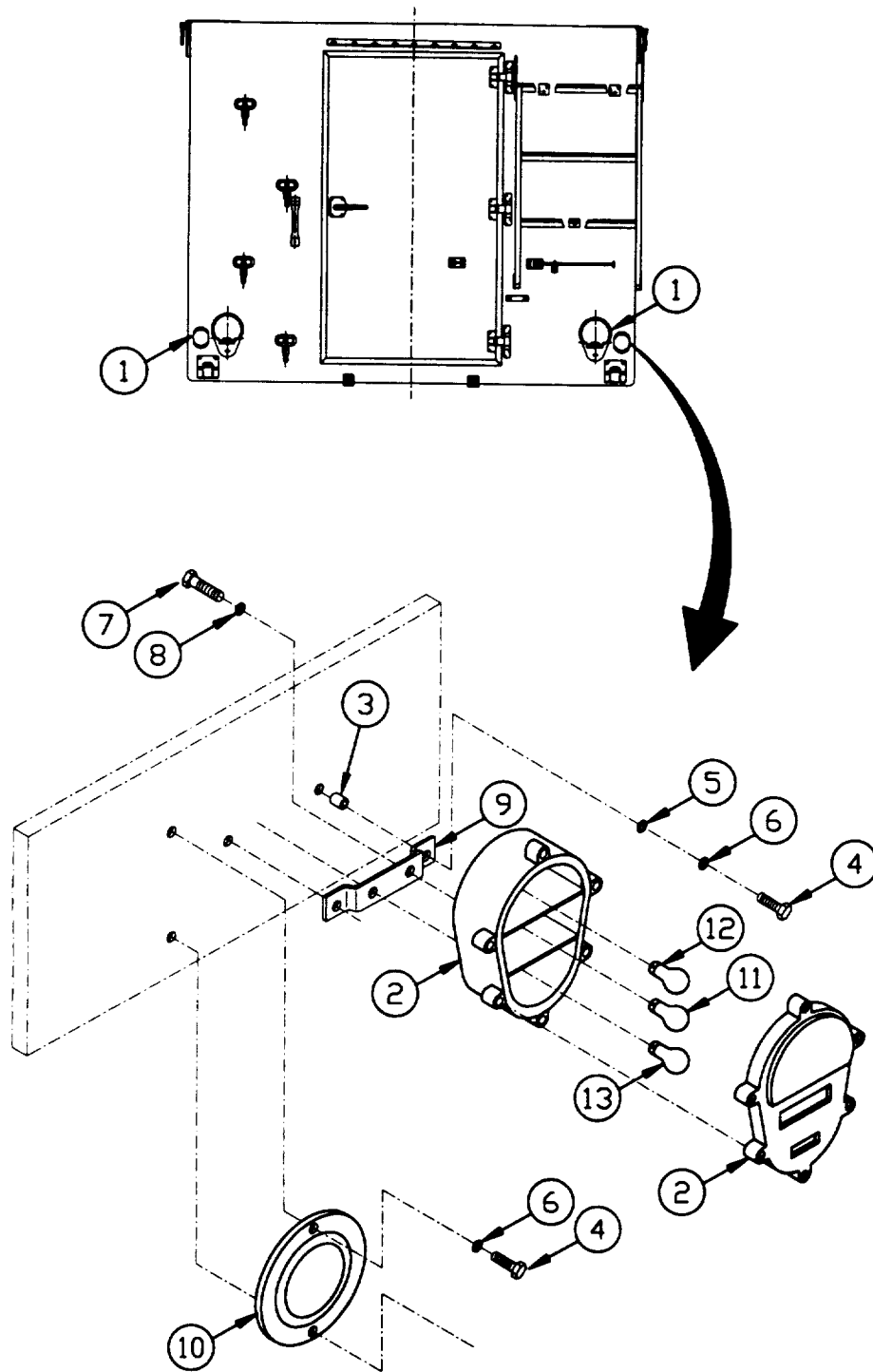


FIGURE 4. TAILLIGHT ASSEMBLY

SECTION II

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(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC) GROUP 02 SHELTER ASSEMBLY  FIG. 4 TAILLIGHT ASSEMBLY	(6) QTY
1	XDOOO	97403	13229E7376	TAILLIGHT ASSY.....	1
2	PAOZZ	96906	MS52125-2	STOP LIGHT-TAILLIGH.....	2
3	XDOZZ	84256	AP515-428	INSERT, 1/4.....	8
4	XDOZZ	96906	MS35308-305	SCREW,CAP,HEXAGON H.....	8
5	XDOZZ	88044	AN960C416L	WASHER,FLAT.....	8
6	XDOZZ	96906	MS35338-139	WASHER,LOCK.....	8
7	XDOZZ	96906	MS35307-357	SCREW,CAP,HEXAGON H.....	4
8	XDOZZ	96906	MS35338-141	WASHER,LOCK.....	4
9	XDOZZ	97403	13229E7482	BRACKET, TAILLIGHT.....	2
10	PAOZZ	05699	A-A-2129 TYPE 1	REFLECTOR.....	2
11	PAOZZ	81349	ML-1683	BULB,STOP.....	1
12	PAOZZ	81349	MI-623	BULB,PARKING.....	1
13	PAOZZ	81349	ML-1251	BULB,BLACKOUT.....	1

END OF FIGURE

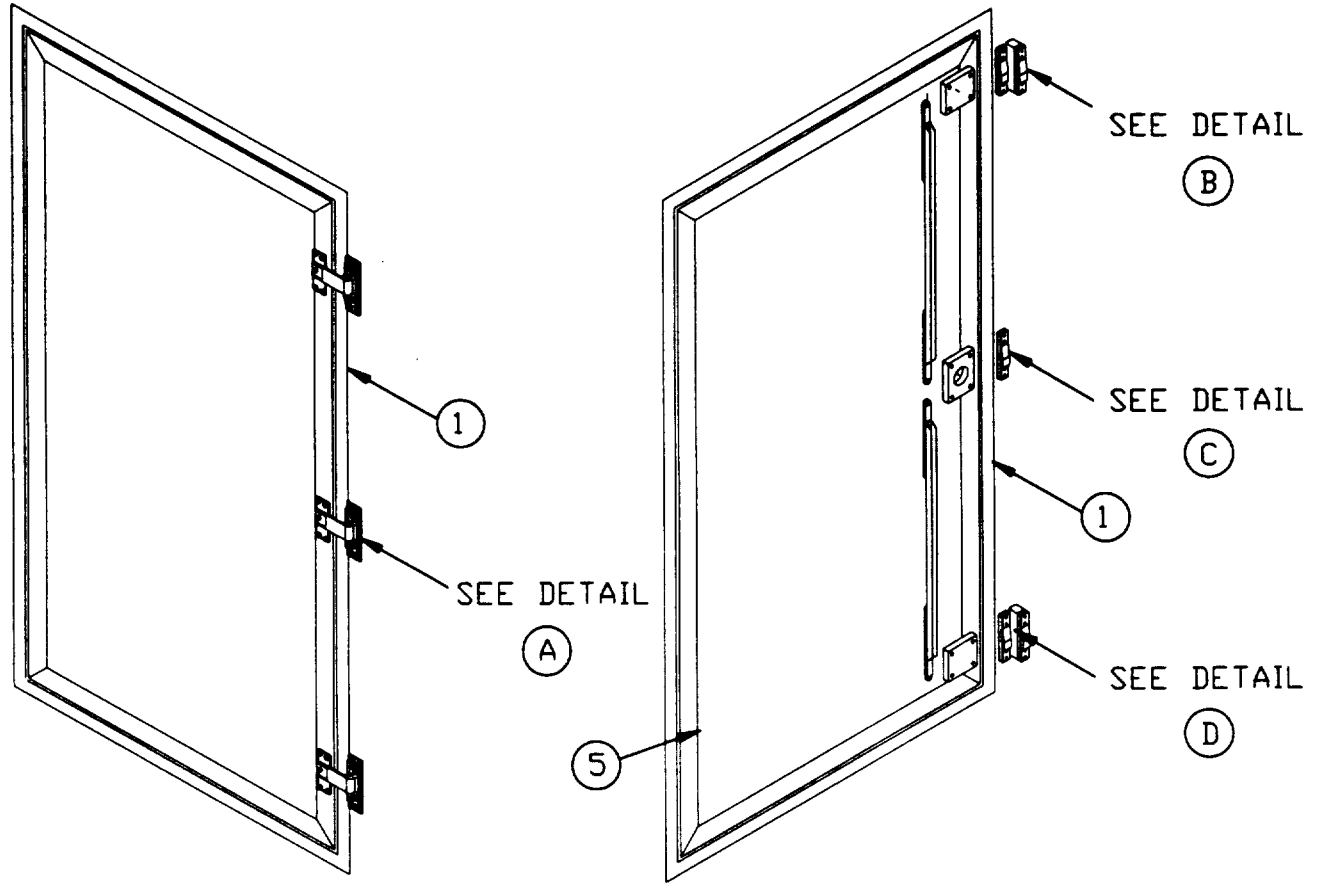
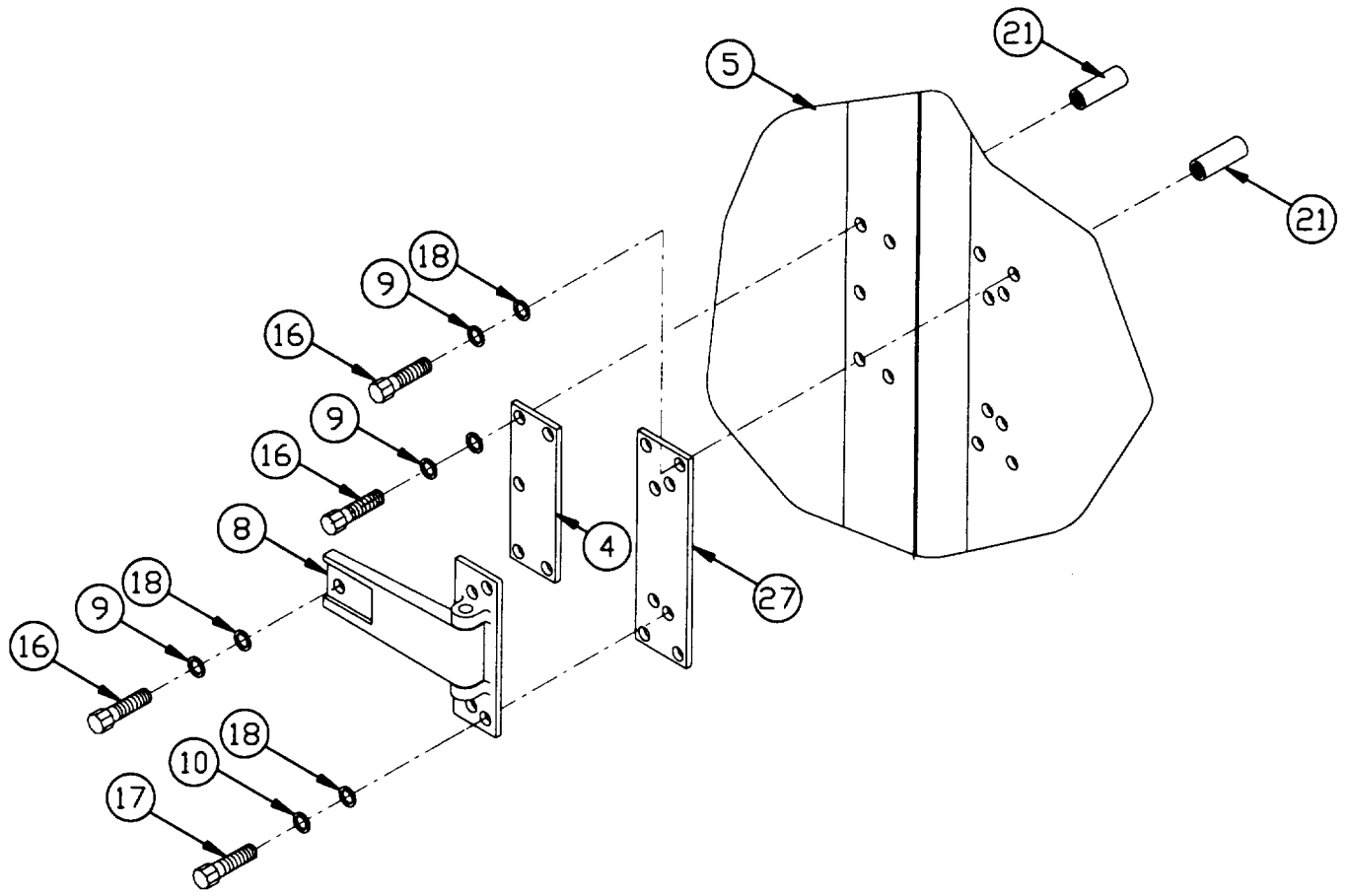
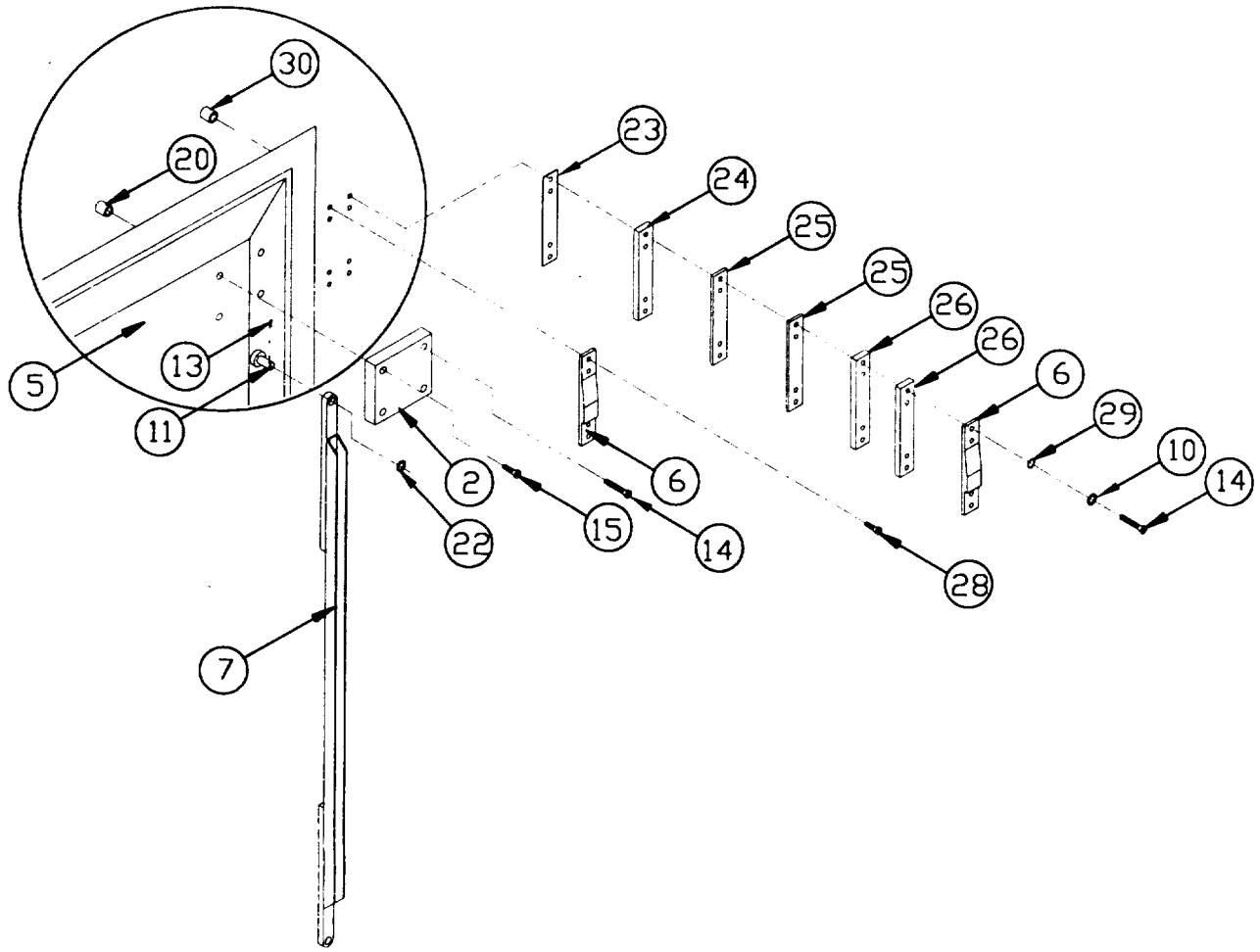


FIGURE 5. DOOR ASSEMBLY (SHEET 1 OF 5)



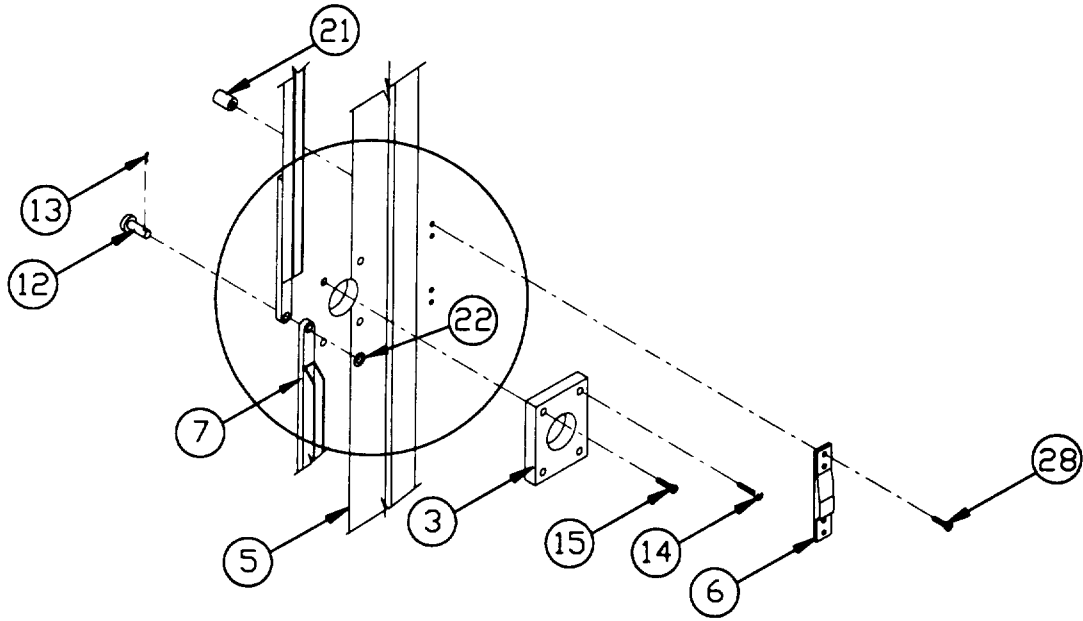
DETAIL (A)

FIGURE 5. DOOR ASSEMBLY (SHEET 2 OF 5)



DETAIL (B)

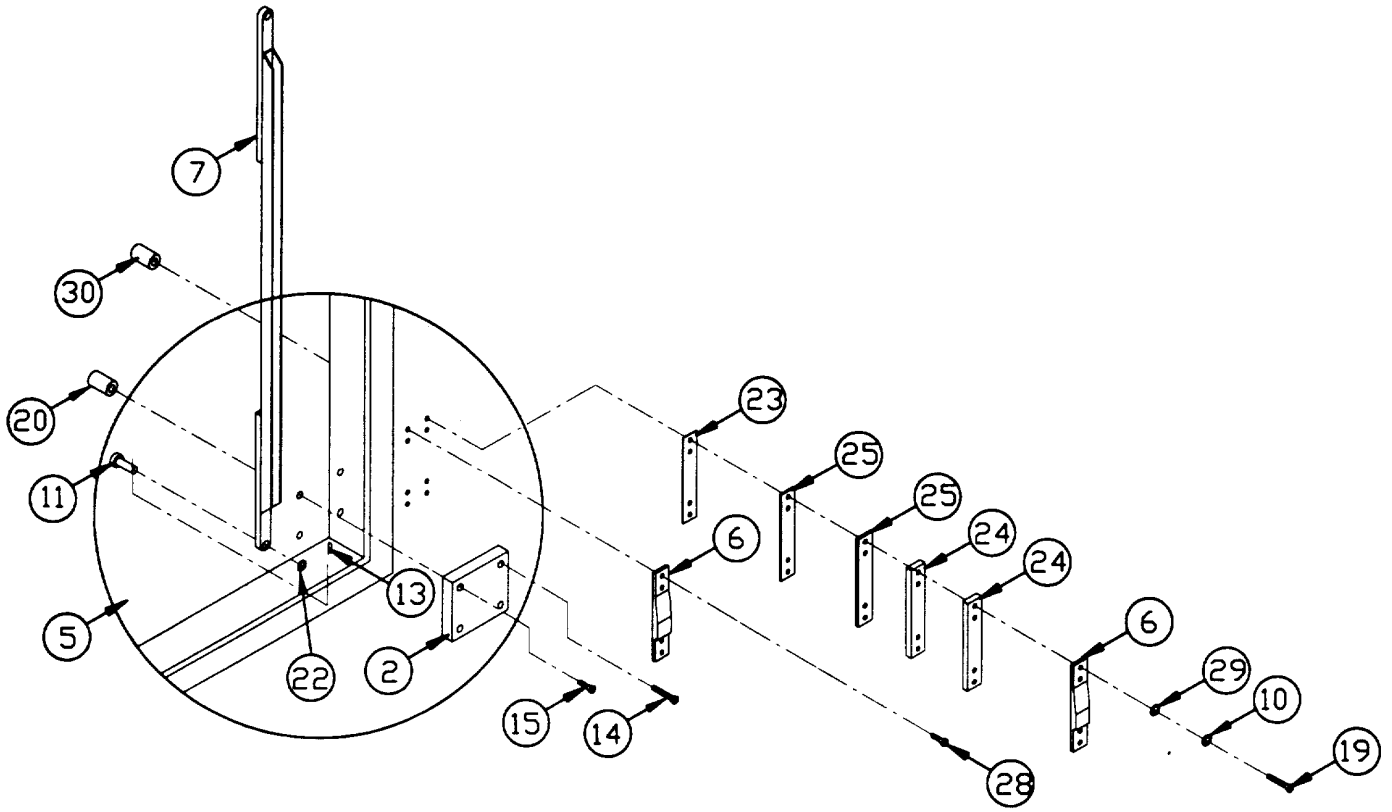
FIGURE 5. DOOR ASSEMBLY (SHEET 3 OF 5)



DETAIL (C)

FIGURE 5. DOOR ASSEMBLY (SHEET 4 OF 5)





DETAIL (D)

FIGURE 5. DOOR ASSEMBLY (SHEET 5 OF 5)

## SECTION II

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(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
<b>GROUP 02 SHELTER ASSEMBLY</b>					
<b>FIG. 5 DOOR ASSEMBLY</b>					
1	XDOOO	97403	13229E7377	DOOR ASSY .....	1
2	XDOZZ	97403	13229E7494-2	SPACER, LATCH ASSY SEE DETAIL B, D.....	2
3	XDOZZ	97403	13229E7484-1	SPACER, HANDLE DOOR SEE DETAIL C .....	1
4	XDOZZ	97403	13229E7485-1	SHIM SEE DETAIL A .....	3
5	XDOZZ	97403	13229E7486	DOOR PANEL SEE DETAIL A, B, C, D. ....	1
6	XDOZZ	97403	13229E7489	STRIKE SEE DETAIL B, C D .....	6
7	XDOZZ	97403	13229E7487	LINK ASSY, DOOR SEE DETAIL B, C, D.....	2
8	XDOZZ	80063	SM-C-563520	HINGE, DOOR SEE DETAIL A .....	3
9	XDOZZ	88044	AN960C416	WASHER, FLAT SEE DETAIL A .....	33
10	XDOZZ	88044	AN960C416L	WASHER, FLAT SEE DETAIL A, B, C, D.....	6
11	XDOZZ	96906	MS20392-3C19	PIN, STRAIGHT, HEADED SEE DETAIL B, .....	2
				D .....	
12	XDOZZ	96906	MS20392-3C27	PIN, STRAIGHT, HEADED SEE DETAIL C.....	1
13	XDOZZ	96906	MS24665-151	PIN, COTTER SEE DETAIL B, C, D .....	3
14	XDOZZ	96906	MS51960-81	SCREW, MACHINE SEE DETAIL B, C, D.....	4
15	XDOZZ	96906	MS2469C102	SCREW, MACHINE SEE DETAIL B, C, D.....	8
16	XDOZZ	88044	AN4C6A	BOLT, MACHINE SEE DETAIL A .....	24
17	XDOZZ	88044	AN4C10A	BOLT, MACHINE SEE DETAIL A .....	12
18	XDOZZ	96906	MS35338-139	WASHER, LOCK SEE DETAIL A .....	33
19	XDOZZ	96906	MS51960-68	SCREW, MACHINE SEE DETAIL D .....	6
20	XDOZZ	84256	AP428-260	INSERT SEE DETAIL B, D .....	6
21	XDOZZ	84256	AP515-428	INSERT, POTTED, 1/4 SEE DETAIL A .....	43
22	XDOZZ	05699	4L4-F	BEARING, SLEEVE SEE DETAIL C, D .....	4
23	XDOZZ	97403	13229E7485-2	SHIM SEE DETAIL B, C, D .....	3
24	XDOZZ	97403	13229E7485-3	SHIM SEE DETAIL B, D .....	3
25	XDOZZ	97403	13229E7485-4	SHIM SEE DETAIL B, C, D .....	6
26	XDOZZ	97403	13229E7485-5	SHIM SEE DETAIL B, D .....	6
27	XDOZZ	97403	13229E7485-6	SHIM SEE DETAIL B, D .....	3
28	XDOZZ	96906	MS51960-66	SCREW, MACHINE SEE DETAIL B .....	6
29	XDOZZ	96906	MS35337-81	WASHER SEE DETAIL A .....	6
30	XDOZZ	84256	AP515-1032	INSERT SEE DETAIL B, C, D .....	12

END OF FIGURE

1  
2 THRU 9

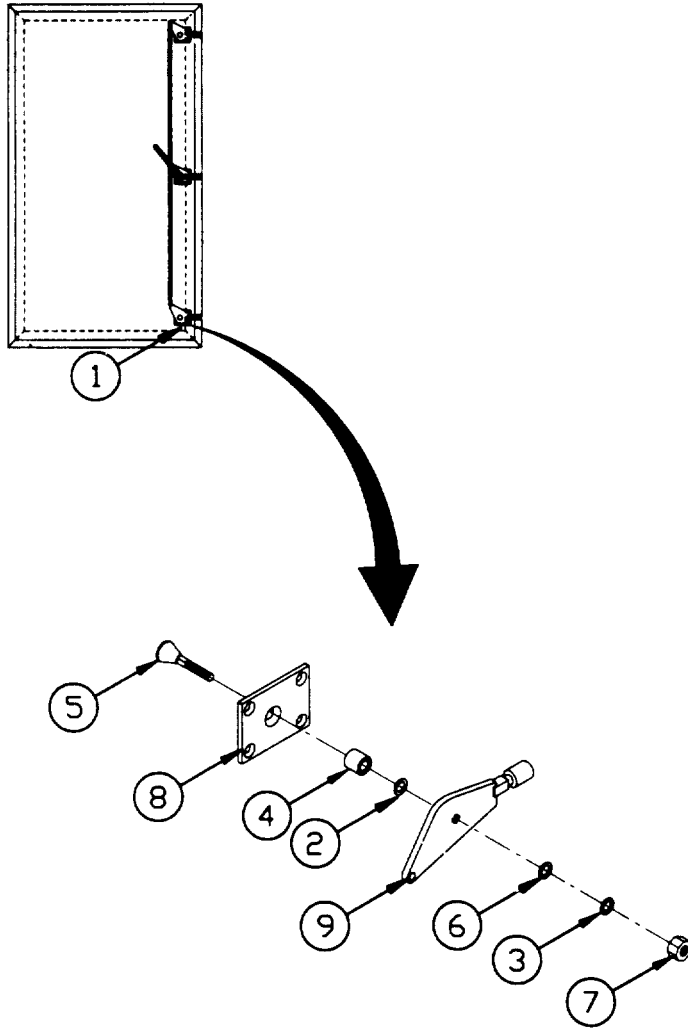


FIGURE 6. LATCH ASSEMBLY, DOOR

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
<b>GROUP 02 SHELTER ASSEMBLY</b>					
<b>FIG. 6 LATCH ASSEMBLY DOOR</b>					
1	XDOOO	97403	13229E7488-1	LATCH ASSY, DOOR .....	2
2	XDOZZ	05699	600591-002	WASHER .....	1
3	XDOZZ	05699	707559-3	WASHER .....	1
4	XDOOO	97403	13229E7483	BEARING, LATCH .....	2
5	XDOZZ	96906	MS24694-0198	SCREW .....	2
6	XDOZZ	96906	MS15793-813	WASHER .....	2
7	XDOZZ	96906	MS6104466	NUT .....	2
8	XDOZZ	97403	13229E7494-1	PLATE, LATCH ASSEMBL .....	2
9	XDOOO	97403	13229E7495-1	PIVOT ARMS, DOOR SEE FIGURE 7 FOR PARTS BREAKDOWN.....	
END OF FIGURE					

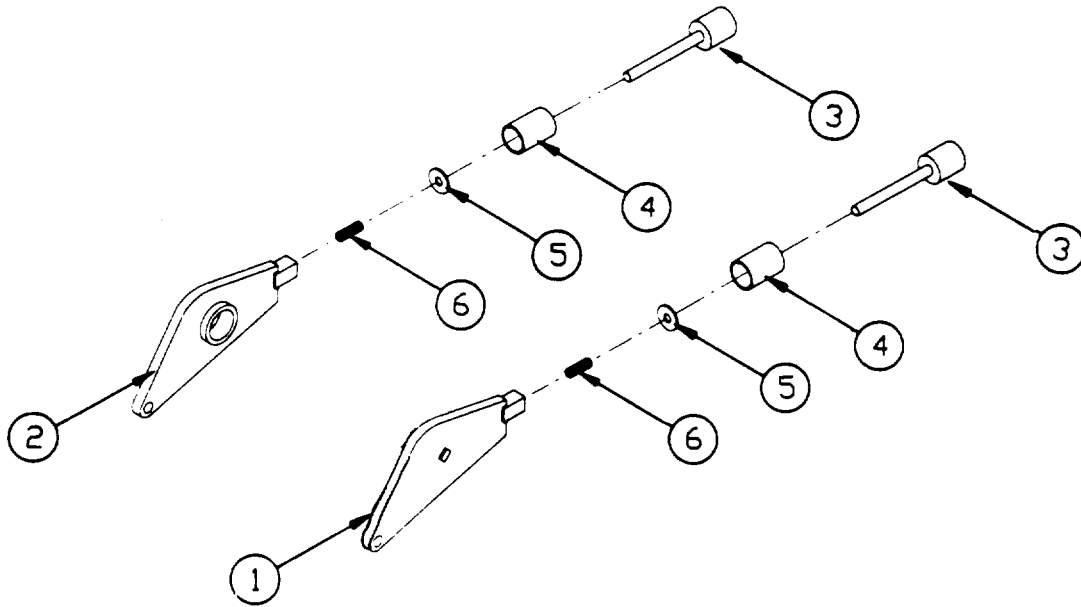


FIGURE 7. PIVOT ARMS, DOOR

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UO C)	(6) QTY
<b>GROUP 02 SHELTER ASSEMBLY</b>					
<b>FIG. 7 PIVOT ARMS, DOOR</b>					
1	XDOZZ	05699	708130-1	PIVOT ARM, CENTER .....	1
2	XDOZZ	05699	708139-1	PIVOT ARM, END .....	2
3	XDOZZ	05699	708125-1	PIN .....	3
4	XDOZZ	05699	708123-1	ROLLER .....	3
5	XDOZZ	88044	AN960C016	WASHER .....	3
6	XDOZZ	96906	MS16562-213	PIN, SPRING .....	3
				END OF FIGURE .....	

1  
2 THRU 8

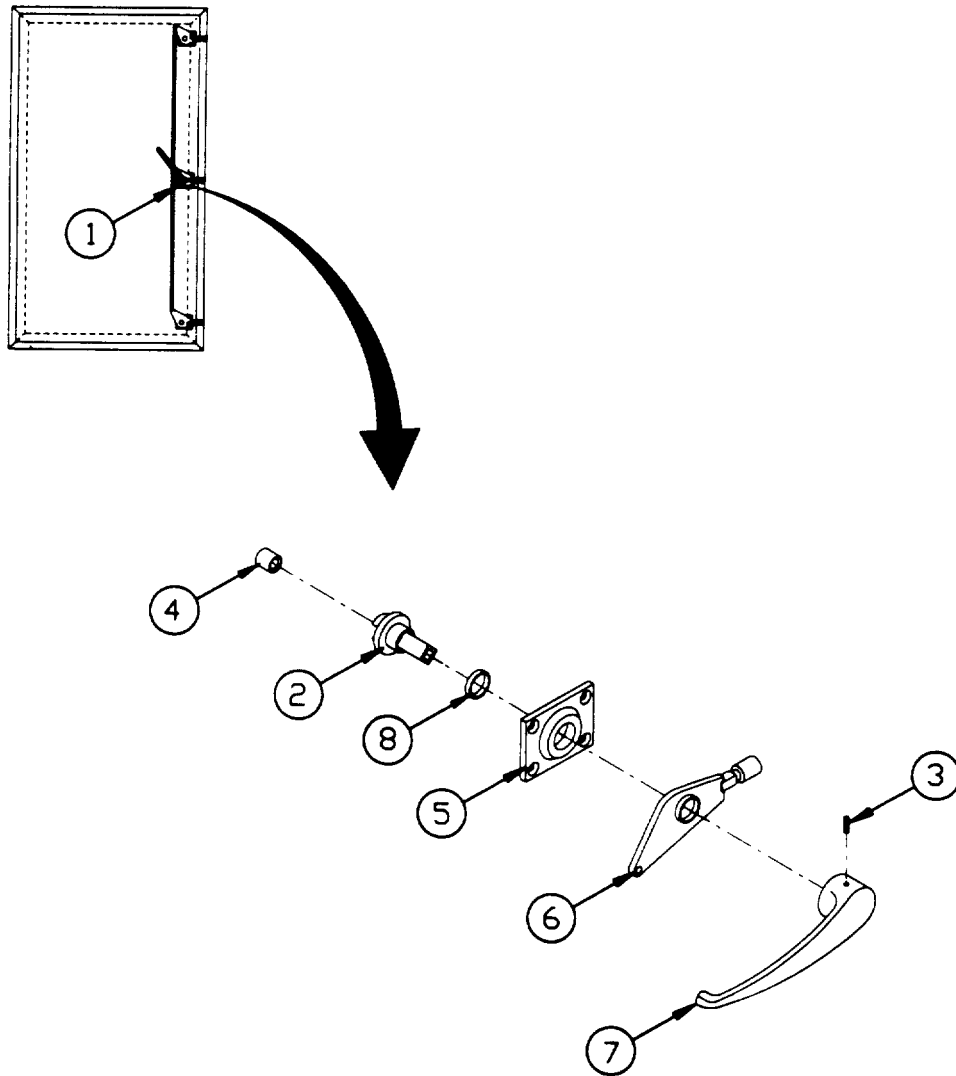


FIGURE 8. HANDLE ASSEMBLY, DOOR INSIDE

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
<b>GROUP 02 SHELTER ASSEMBLY</b>					
<b>FIG. 8 HANDLE ASSEMBLY, DOOR INSIDE</b>					
1	XDOOO	97403	13229E7488-3	HANDLE ASSY, DOOR IN .....	1
2	XDOZZ	97403	13229E7492	SHAFT, DOOR HANDLE .....	1
3	XDOZZ	80205	NAS561SF-8-20	PIN .....	2
4	XDOZZ	05669	6L6-F	BEARING .....	1
5	XDOZZ	97403	13229E7490	PLATE, DOOR HANDLE .....	1
6	XDOZZ	97403	13229E7495-2	PIVOT ARM .....	1
7	XDOZZ	97403	13229E7496-2	HANDLE, INSIDE .....	1
8	XDOZZ	05469	BSF-2832-8	BEARING .....	2

END OF FIGURE



1  
| 2 THRU 10 |

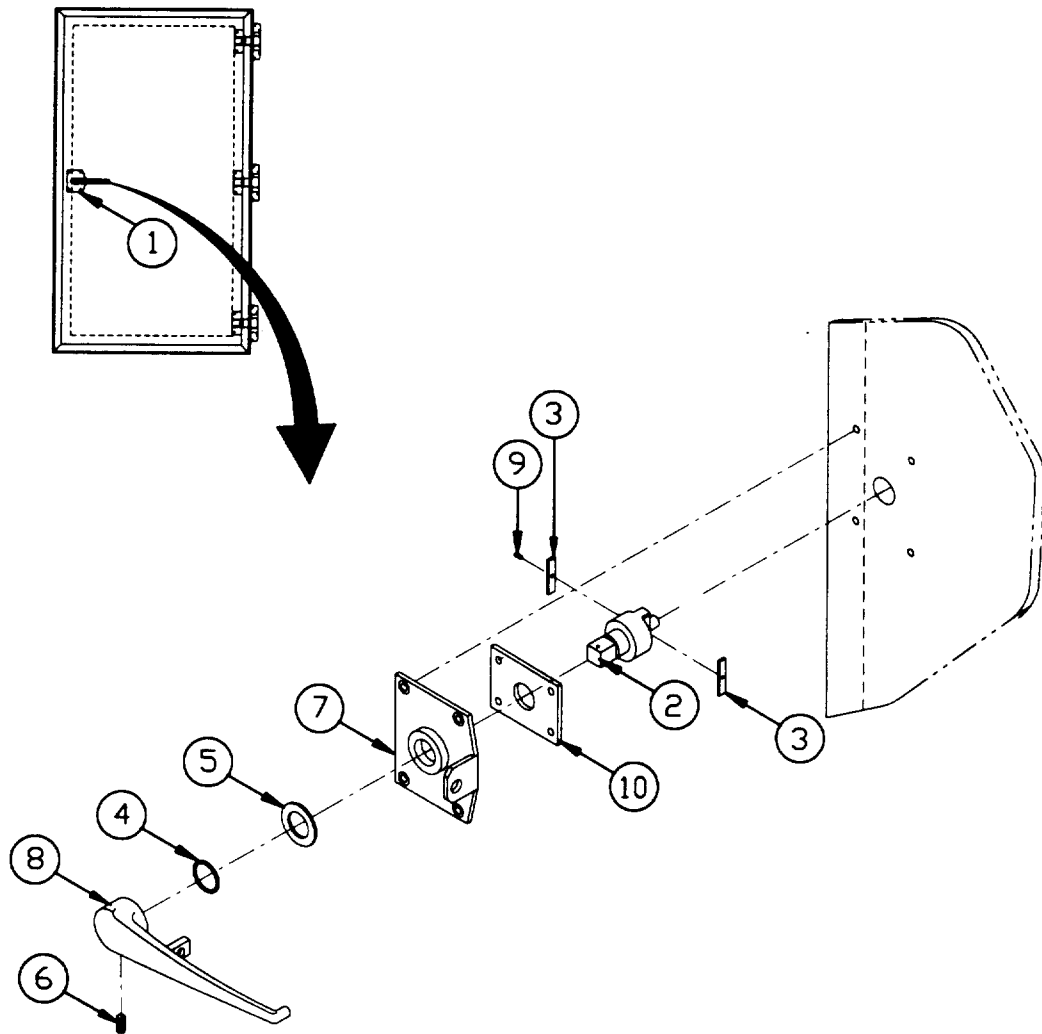


FIGURE 9. HANDLE ASSEMBLY, DOOR OUTSIDE

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
<b>GROUP 02 SHELTER ASSEMBLY</b>					
<b>FIG. 9 HANDLE ASSEMBLY, DOOR OUTSIDE</b>					
1	XDOOO	97403	13229E7488-2	HANDLE ASSY, DOOR OU .....	1
2	XDOZZ	97403	13229E7491	SHAFT, DOOR HANDLE .....	1
3	XDOZZ	97403	13229E7484-2	SPACER, SHAFT DOOR .....	2
4	XDOZZ	05669	600597-001	GASKET .....	1
5	XDOZZ	05699	600596-001	WASHER .....	1
6	XDOZZ	80205	NAS561SF-8-20	PIN .....	2
7	XDOZZ	97403	13229E7493	PLATE, DOOR HANDLE .....	1
8	XDOZZ	97403	13229E7496-1	HANDLE, OUTSIDE .....	1
9	XDOZZ	96906	MS20470-AC4-14	RIVET .....	1
10	XDOZZ	96906	13229E7494-1	PLATE, LATCH ASSY .....	2

END OF FIGURE

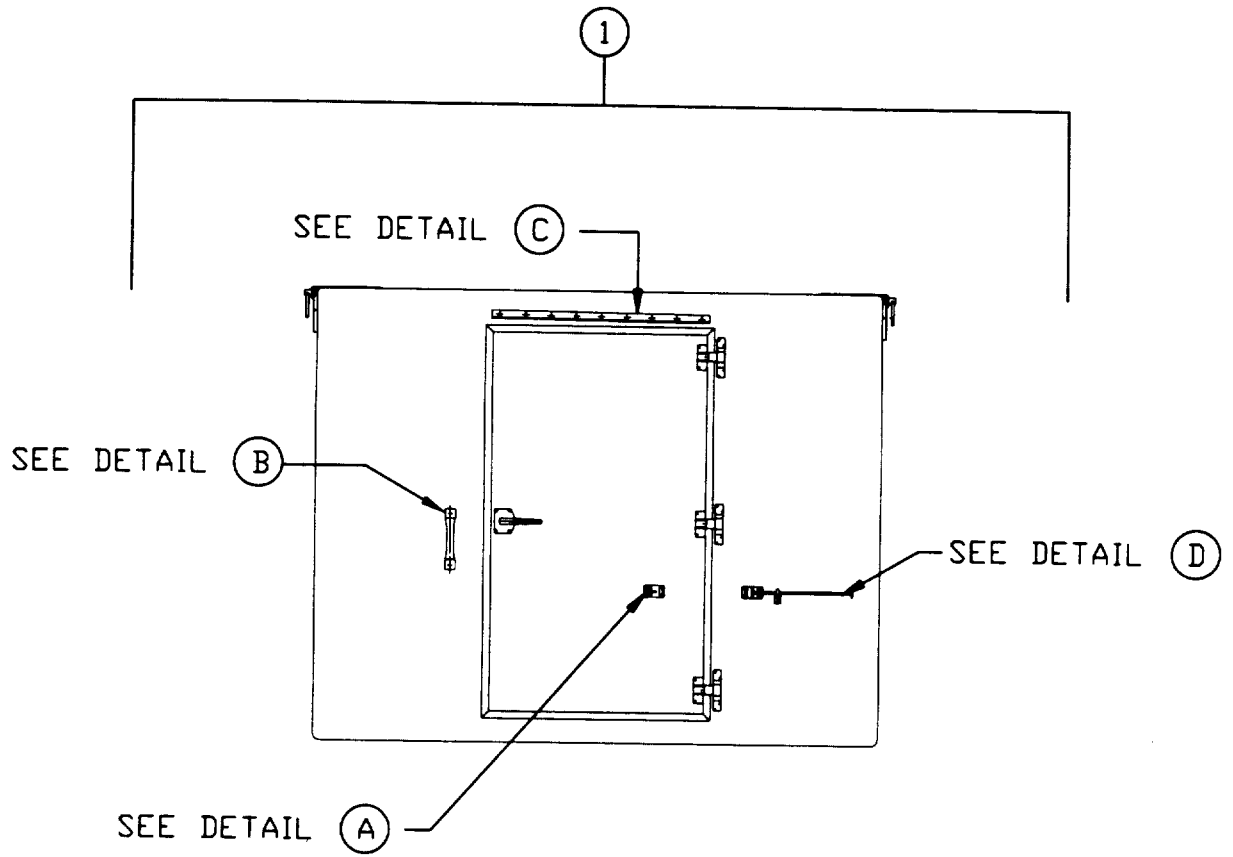
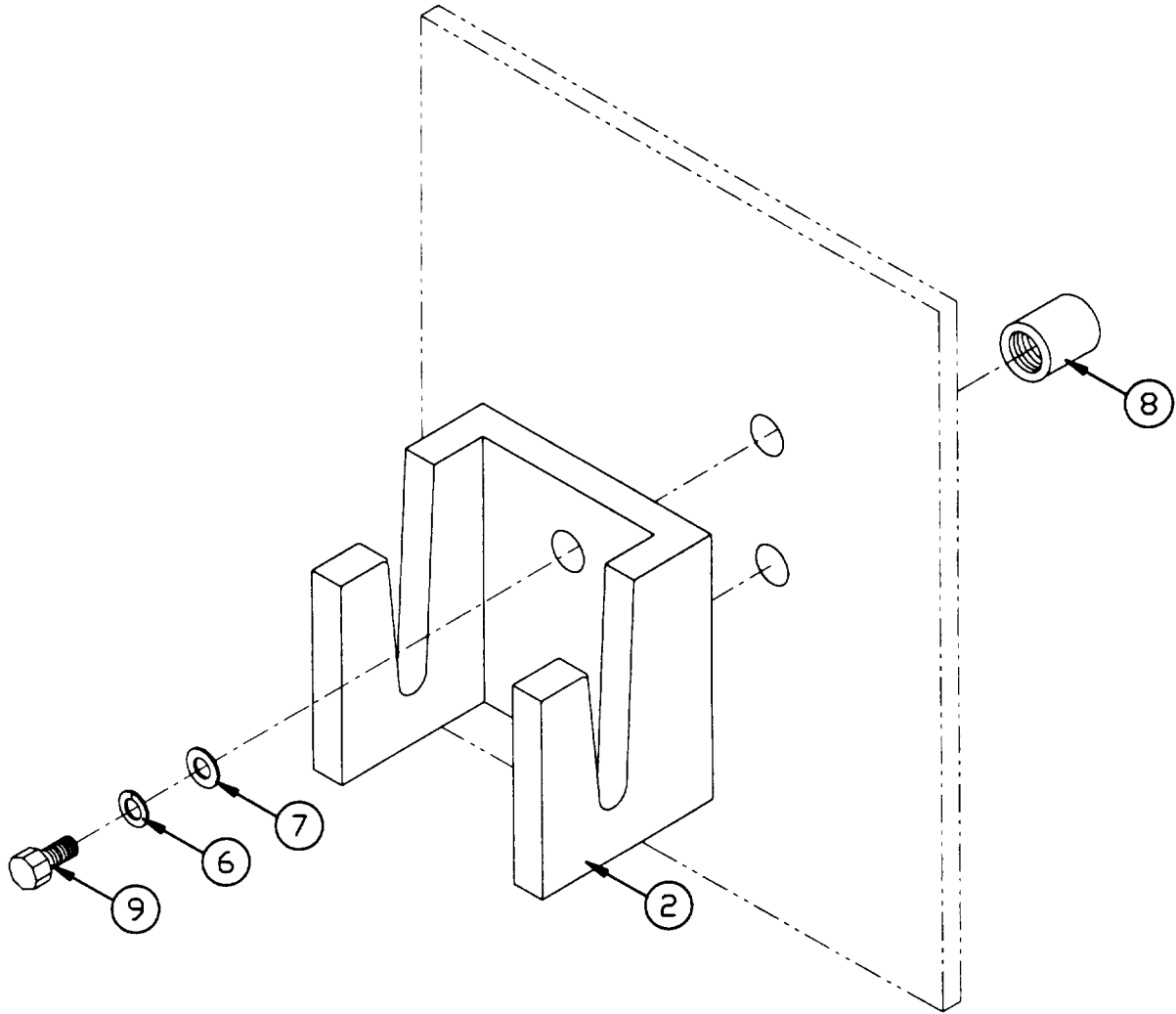
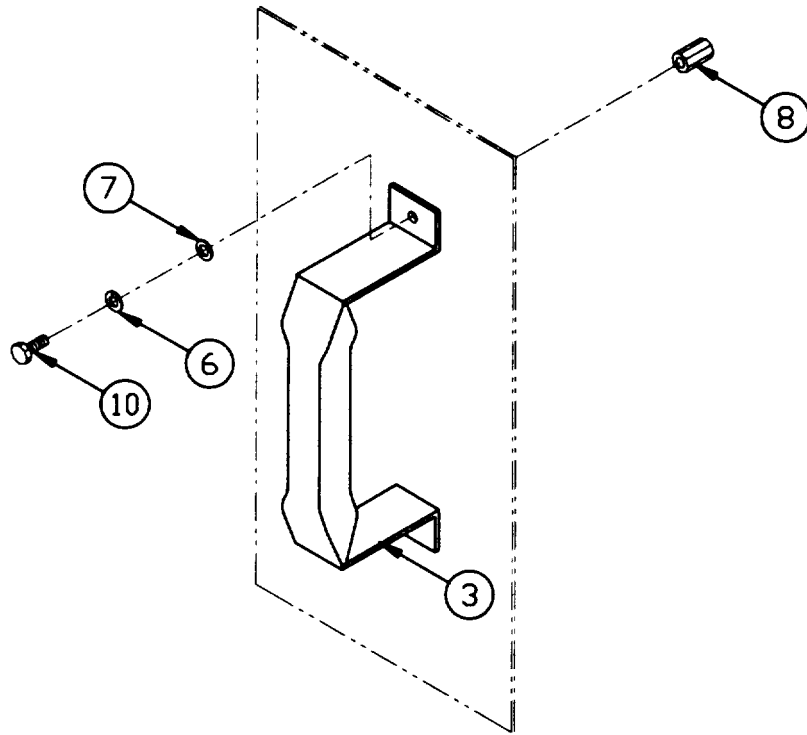


FIGURE 10. AFT END ASSEMBLY (SHEET 1 OF 5)



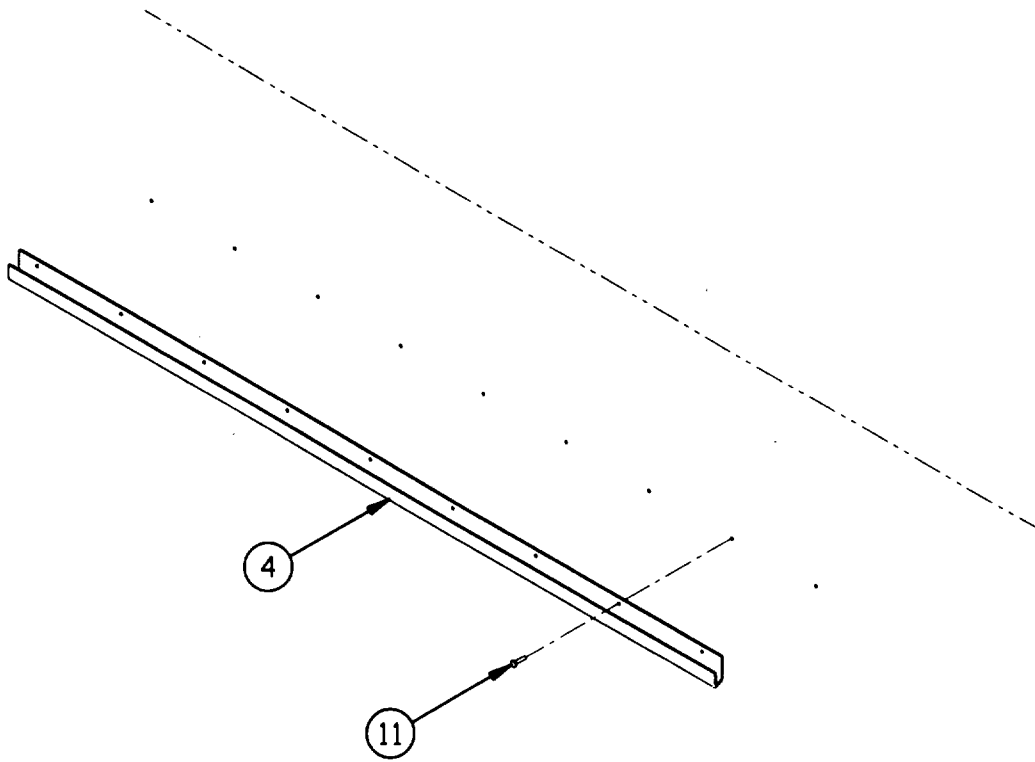
DETAIL (A)

FIGURE 10. AFT END ASSEMBLY (SHEET 2 OF 5)



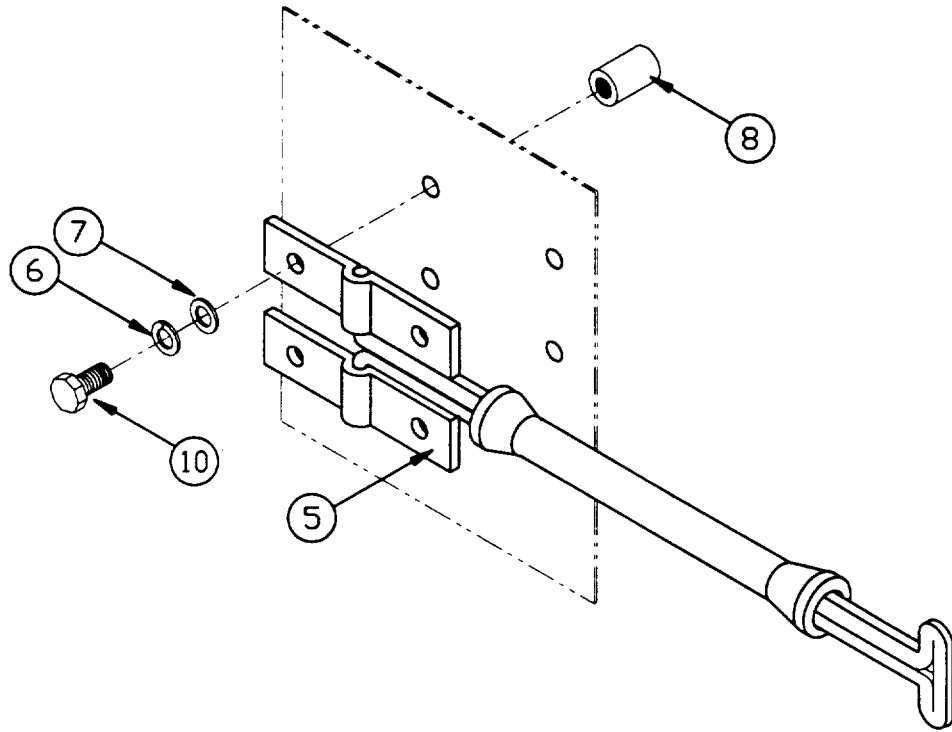
DETAIL (B)

FIGURE 10. AFT END ASSEMBLY (SHEET 3 OF 5)



DETAIL (C)

FIGURE 10. AFT END ASSEMBLY (SHEET 4 OF 5)



DETAIL (D)

FIGURE 10. AFT END ASSEMBLY (SHEET 5 OF 5)

## SECTION II

TM 5-6675-331-14&amp;P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
<b>GROUP 02 SHELTER ASSEMBLY</b>					
<b>FIG. 10 AFT END ASSEMBLY</b>					
1	XDOOO	97403	13229E7378	AFT END ASSY .....	1
2	XDOZZ	05699	5-4-4943	HOOK, DOOR KEEPER SEE DETAIL A .....	1
3	XDOOO	97403	13229E7497	HANDLE, AFT END SEE DETAIL B .....	1
4	XDOZZ	97403	13229E7500	DRIP CAP SEE DETAIL C .....	1
5	XDOZZ	97403	13229E7501	KEEPER, DOOR SEE DETAIL D .....	1
6	XDOZZ	96906	MS35338-139	WASHER, LOCK SEE DETAIL A, B, D .....	12
7	XDOZZ	88044	AN960C416L	WASHER, FLAT SEE DETAIL A, B D .....	12
8	XDOZZ	84256	AP515-428	INSERT, 1/4 SEE DETAIL A, B D .....	12
9	XDOZZ	96906	MS35308-333	BOLT, MACHINE SEE DETAIL A .....	2
10	XDOZZ	88044	AN4C6A	BOLT, MACHINE SEE DETAIL B, D .....	6
11	XDOZZ	19738	4871-0508	RIVET SEE DETAIL C .....	9

END OF FIGURE



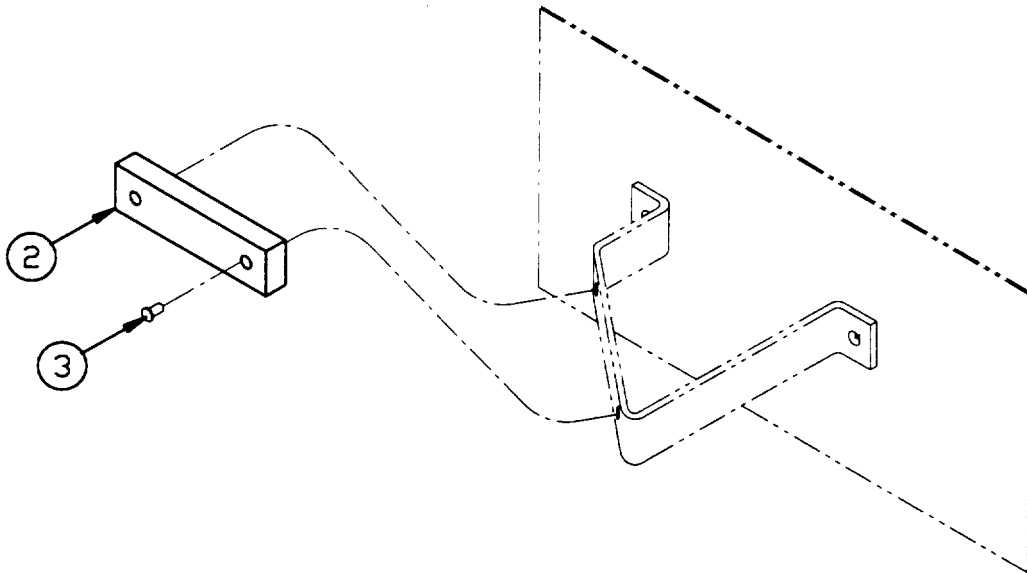
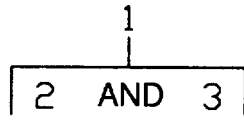


FIGURE 11. DOOR STOP

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
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GROUP 02 SHELTER ASSEMBLY

FIG. 11 DOOR STOP

1	XDOOO	97403	13229E7502	DOOR STOP .....	1
2	XDOZZ	39428	8635K567	BUMPER .....	1
3	XDOZZ	39428	9752A025	RIVET .....	2

END OF FIGURE

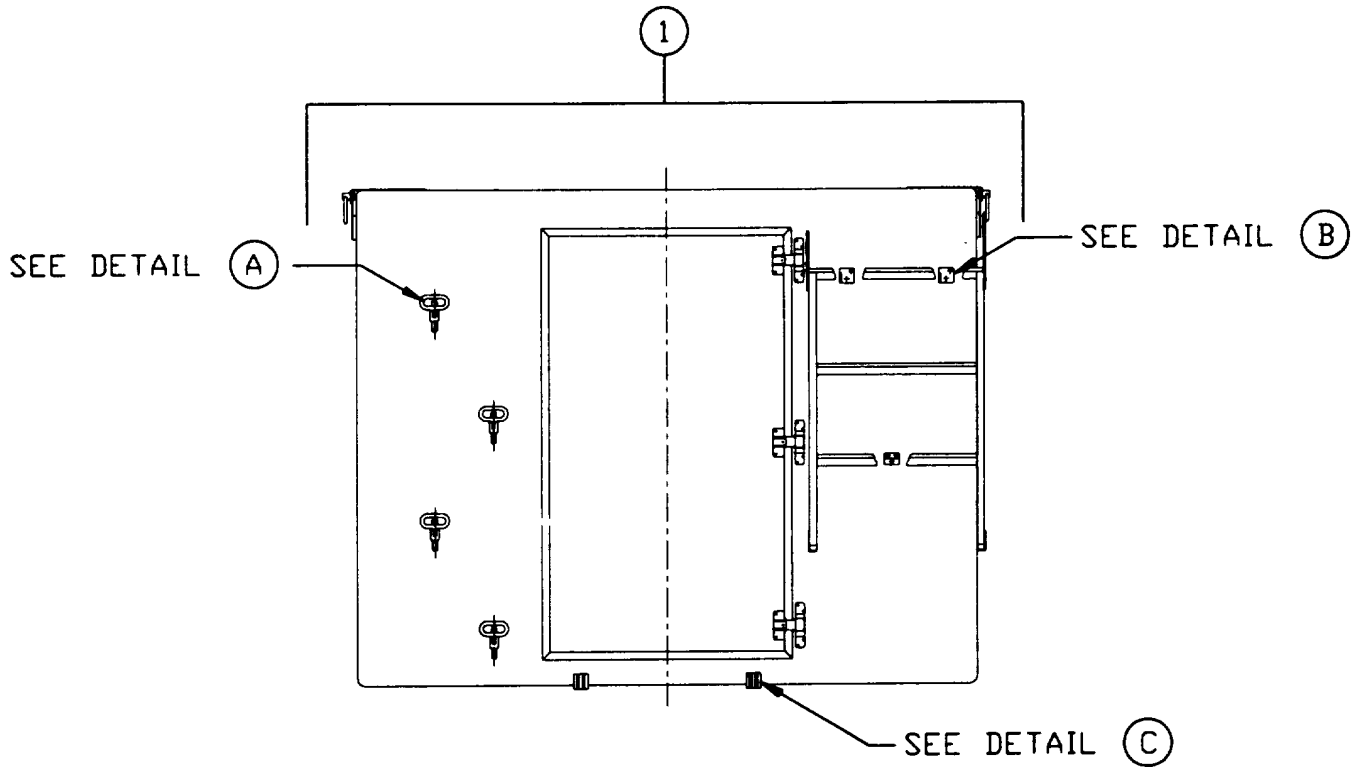


FIGURE 12. STEP AND LADDER ASSEMBLY (SHEET 1 OF 4)

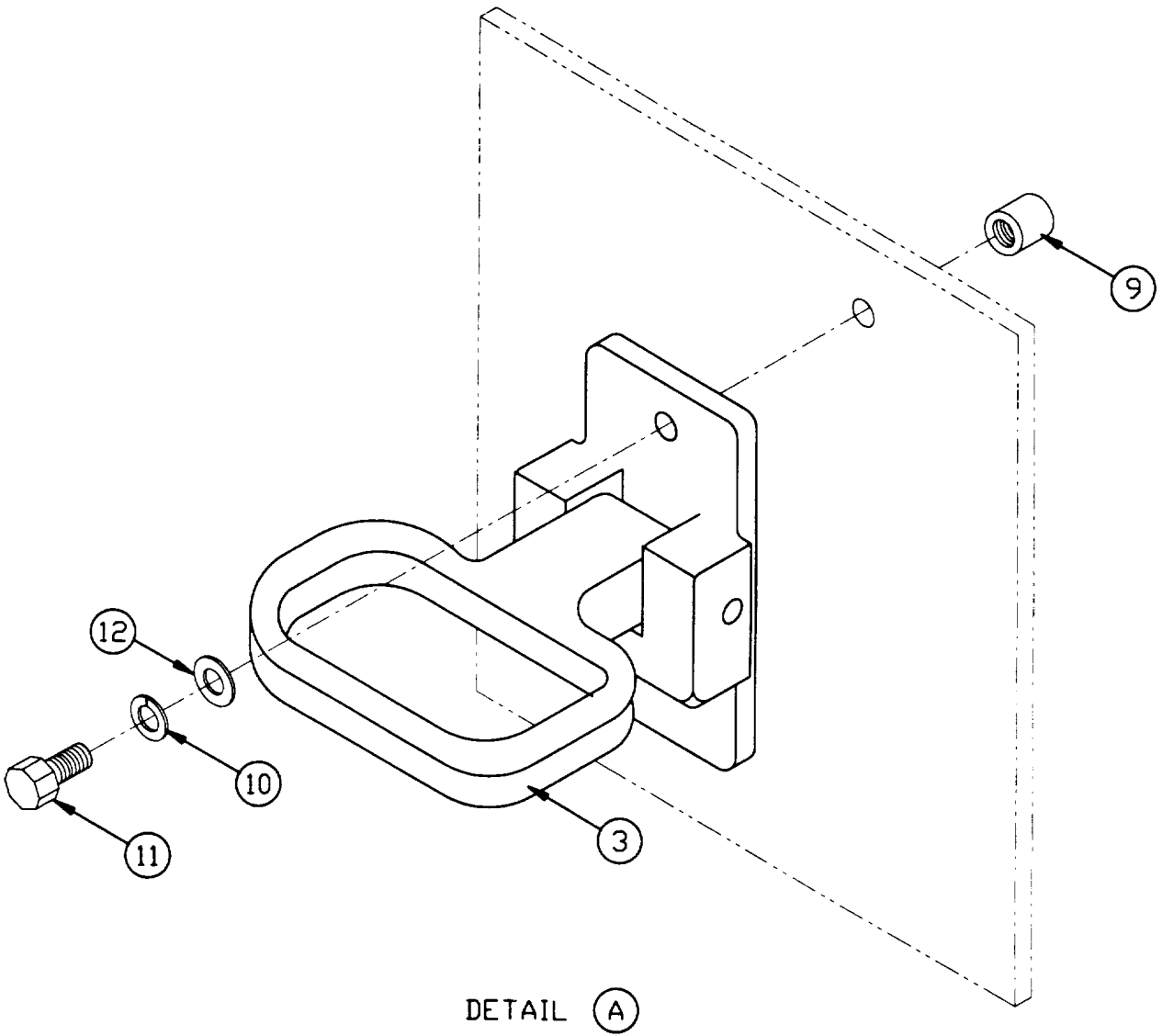
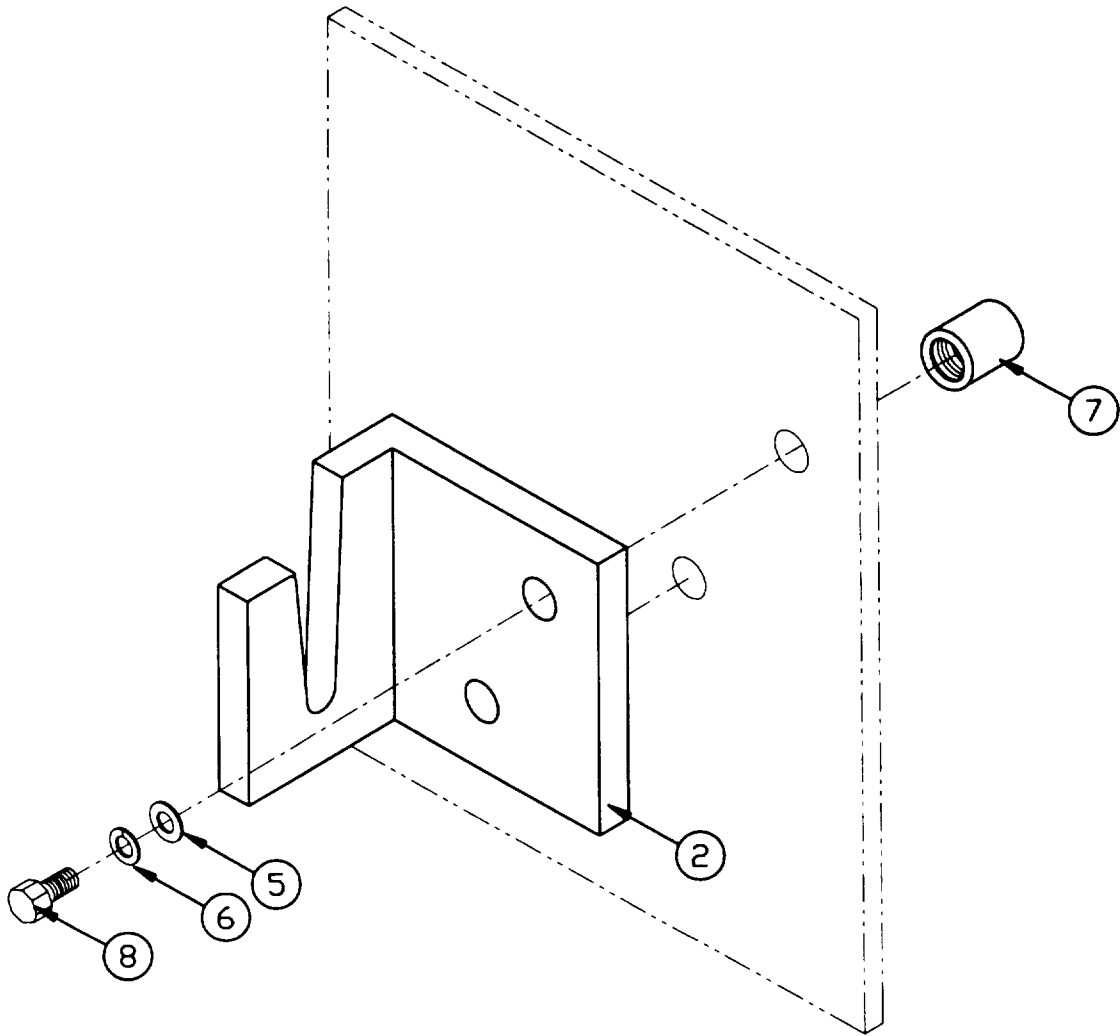
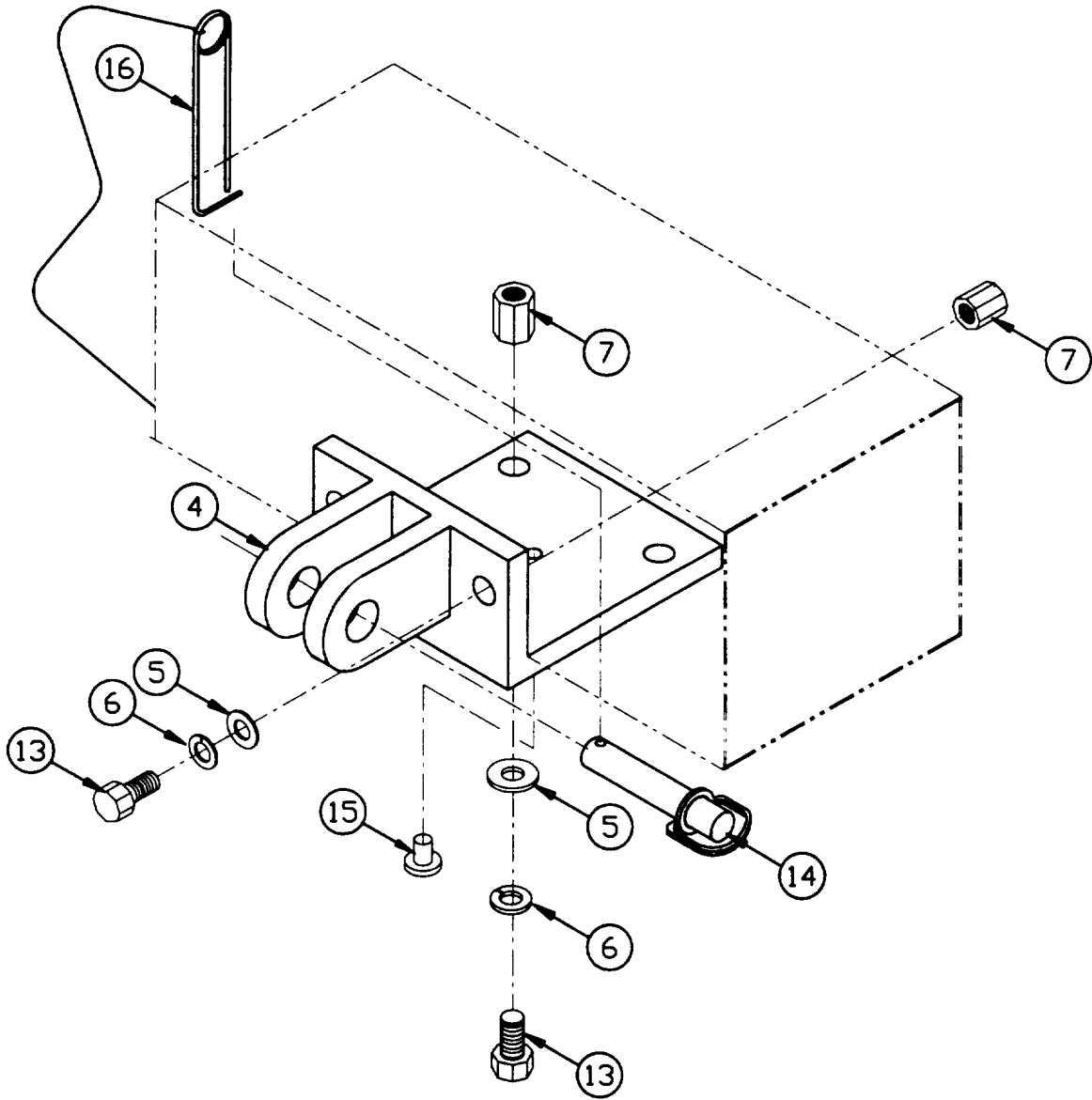


FIGURE 12. STEP AND LADDER ASSEMBLY (SHEET 2 OF 4)



DETAIL (B)

FIGURE 12. STEP AND LADDER ASSEMBLY (SHEET 3 OF 4)



DETAIL C

FIGURE 12. STEP AND LADDER ASSEMBLY (SHEET 4 OF 4)

## SECTION II

TM 5-6675-331-14&amp;P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
<b>GROUP 02 SHELTER ASSEMBLY</b>					
<b>FIG. 12 STEP AND LADDER ASSEMBLY</b>					
1	XDOOO	97403	13229E7379	STEPS & LADDER ASSY .....	1
2	XDOZZ	97403	13229E7533	BRACKET SEE DETAIL B .....	2
3	XDOZZ	05699	5-4-4964	STEPS SEE DETAIL A .....	4
4	XDOZZ	97403	13229E7534	BRACKET, LADDER SEE DETAIL C .....	2
5	XDOZZ	88044	AN960C416L	WASHER, FLAT SEE DETAIL B, C .....	14
6	XDOZZ	96906	MS35338-139	WASHER, LOCK SEE DETAIL B, C .....	14
7	XDOZZ	84256	AP515-428	INSERT, 1/4 SEE DETAIL B, C .....	14
8	XDOZZ	88044	AN4C7A	BOLT, MACHINE SEE DETAIL B .....	10
9	XDOZZ	84256	AP515-524	INSERT, POTTED, 5/16 SEE DETAIL A .....	8
10	XDOZZ	96906	MS35338-140	WASHER, LOCK SEE DETAIL A .....	8
11	XDOZZ	96906	MS35308-333	BOLT, MACHINE SEE DETAIL A .....	8
12	XDOZZ	88044	AN960C10L	WASHER, FLAT SEE DETAIL A .....	4
13	XDOZZ	88044	AN4C5A	BOLT, MACHINE SEE DETAIL C .....	8
14	XDOZZ	96652	S1100-1	HITCH PIN ASSY SEE DETAIL C .....	2
15	XDOZZ	19738	1604-0514	RIVET, BLIND SEE DETAIL C .....	8
16	XDOZZ	96652	S1600-1	HAIR PIN ASSY SEE DETAIL C .....	3

END OF FIGURE

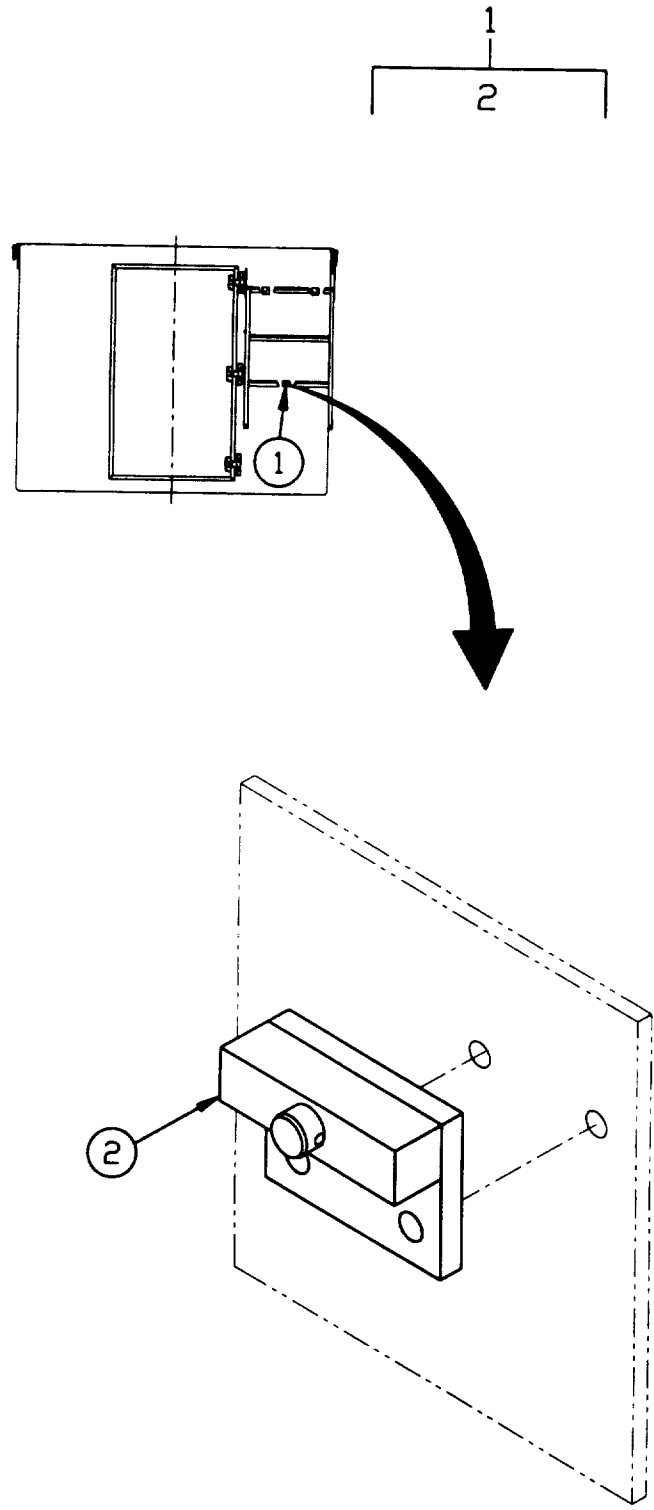


FIGURE 13. BRACKET, PIN



SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
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GROUP 02 SHELTER ASSEMBLY

FIG. 13 BRACKET, PIN

1	XDOZZ	97403	13229E7532	BRACKET, PIN .....	1
2	XDOZZ	05699	312100	BUMPER.....	1

END OF FIGURE

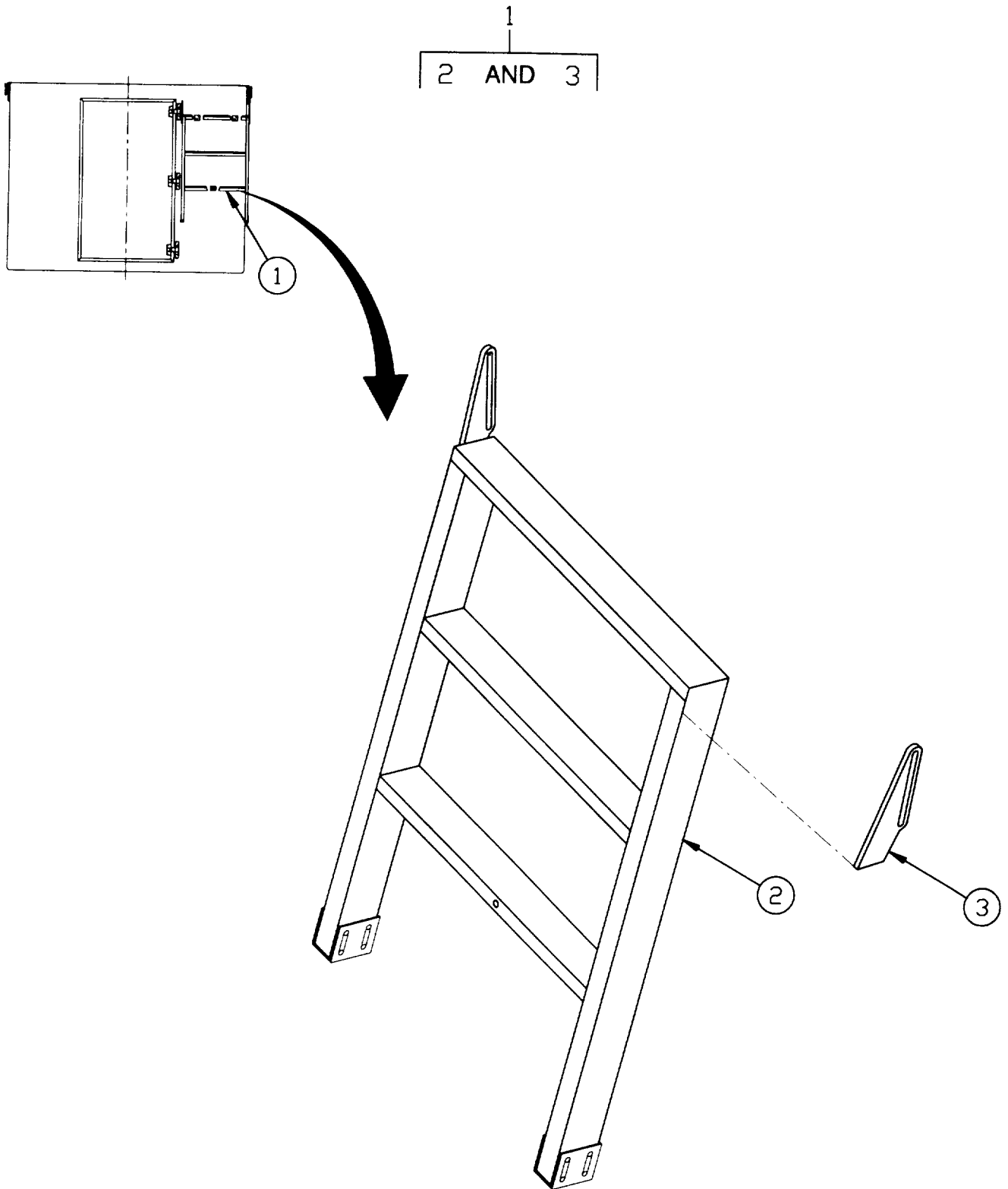


FIGURE 14. LADDER ASSEMBLY

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
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GROUP 02                      SHELTER ASSEMBLY

FIG. 14                        LADDER ASSEMBLY

1	XDOOO	97403	13229E7503	LADDER ASSY .....	1
2	XDOZZ	97403	13229E7504	LADDER.....	1
3	XDOZZ	97403	13229E7535	CONNECTOR .....	1

END OF FIGURE

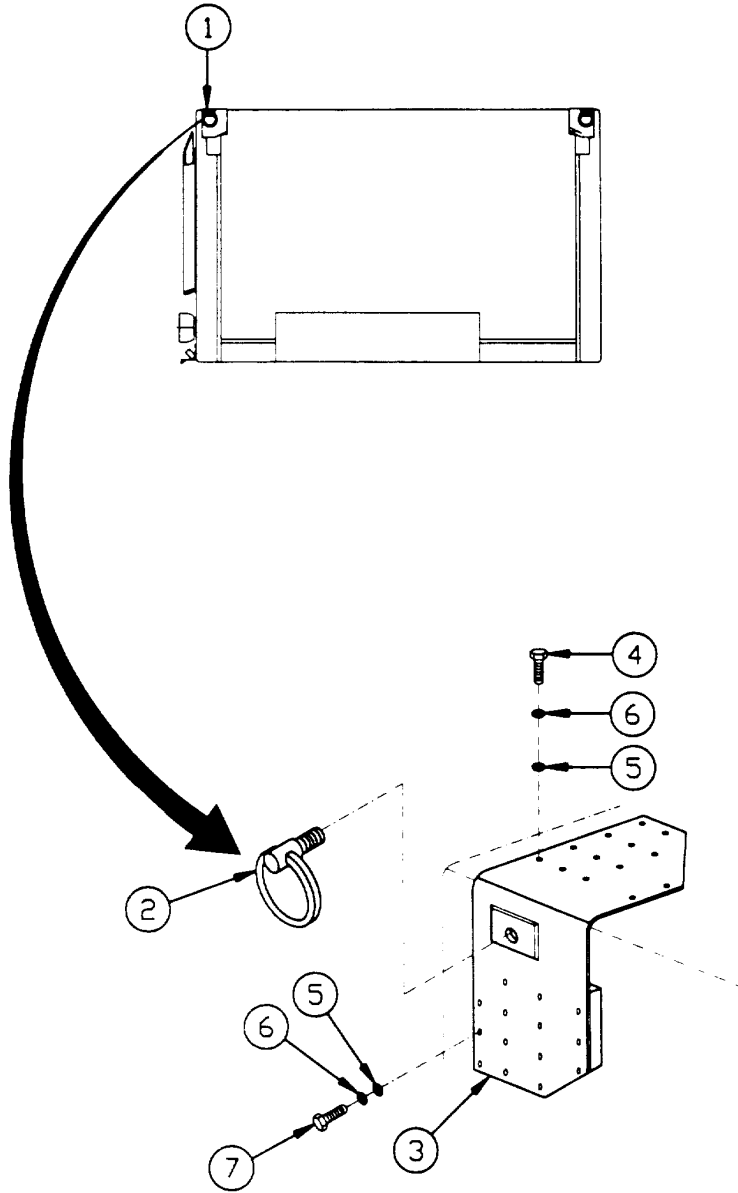


FIGURE 15. LIFT RING

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
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GROUP 02                      SHELTER ASSEMBLY

FIG. 15                      LIFT RING

1	XDOOO	97403	13229E7380	LIFT RING.....	4
2	XDOZZ	97403	13229E7505-1	LIFT RING, LEFT HAND SHOWN.....	2
2	XDOZZ	97403	13229E7505-2	LIFT RING, RIGHT HAND OPPOSITE SIDE.....	2
3	XDOZZ	97403	13229E7506-1	DOUBLER, LIFT RING L SHOWN .....	2
3	XDOZZ	97403	13229E7506-2	DOUBLER, LIFT RING R OPPOSITE SIDE .....	2
4	XDOZZ	88044	AN4C7A	BOLT, MACHINE.....	26
5	XDOZZ	88044	AN960C416L	WASHER, FLAT.....	56
6	XDOZZ	96906	MS35337-82	WASHER .....	56
7	XDOZZ	88044	AN4C12A	BOLT, MACHINE.....	30

END OF FIGURE

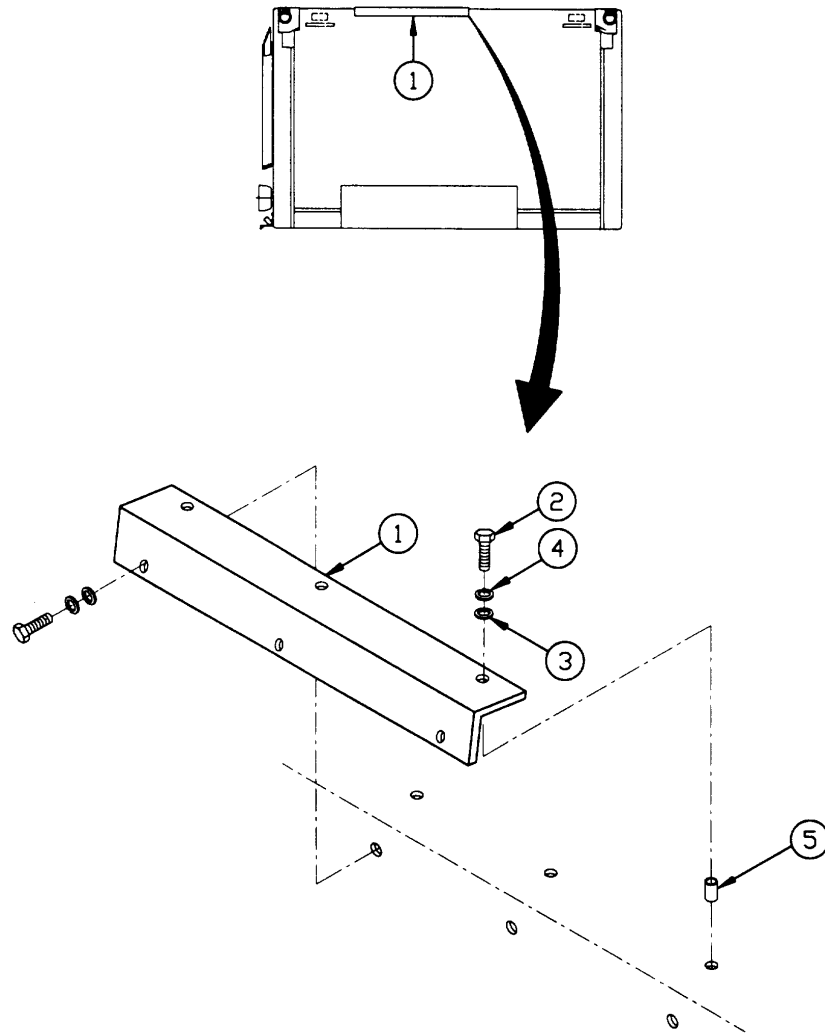


FIGURE 16. SLING ANGLE

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
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GROUP 02                      SHELTER ASSEMBLY

FIG. 16                        SLING ANGLE

1	XDOOO	97403	13229E7381	SLING ANGLE CURBSIDE OF SHELTER .....	2
2	XDOZZ	88044	AN4C6A	BOLT, MACHINE CURBSIDE OF SHELTER.....	12
3	XDOZZ	88044	AN960C416L	WASHER, FLAT CURBSIDE OF SHELTER.....	12
4	XDOZZ	96906	MS35338-139	WASHER, LOCK CURBSIDE OF SHELTER.....	12
5	XDOZZ	84256	AP515-428	INSERT, ¼ CURBSIDE OF SHELTER.....	12

END OF FIGURE

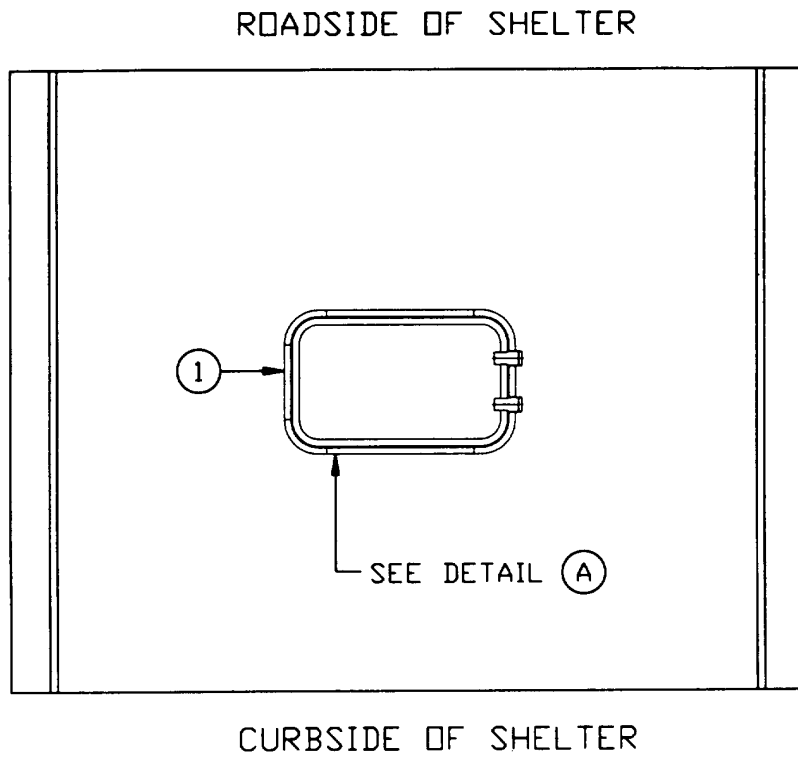


FIGURE 17. ESCAPE HATCH ASSEMBLY (SHEET 1 OF 2)



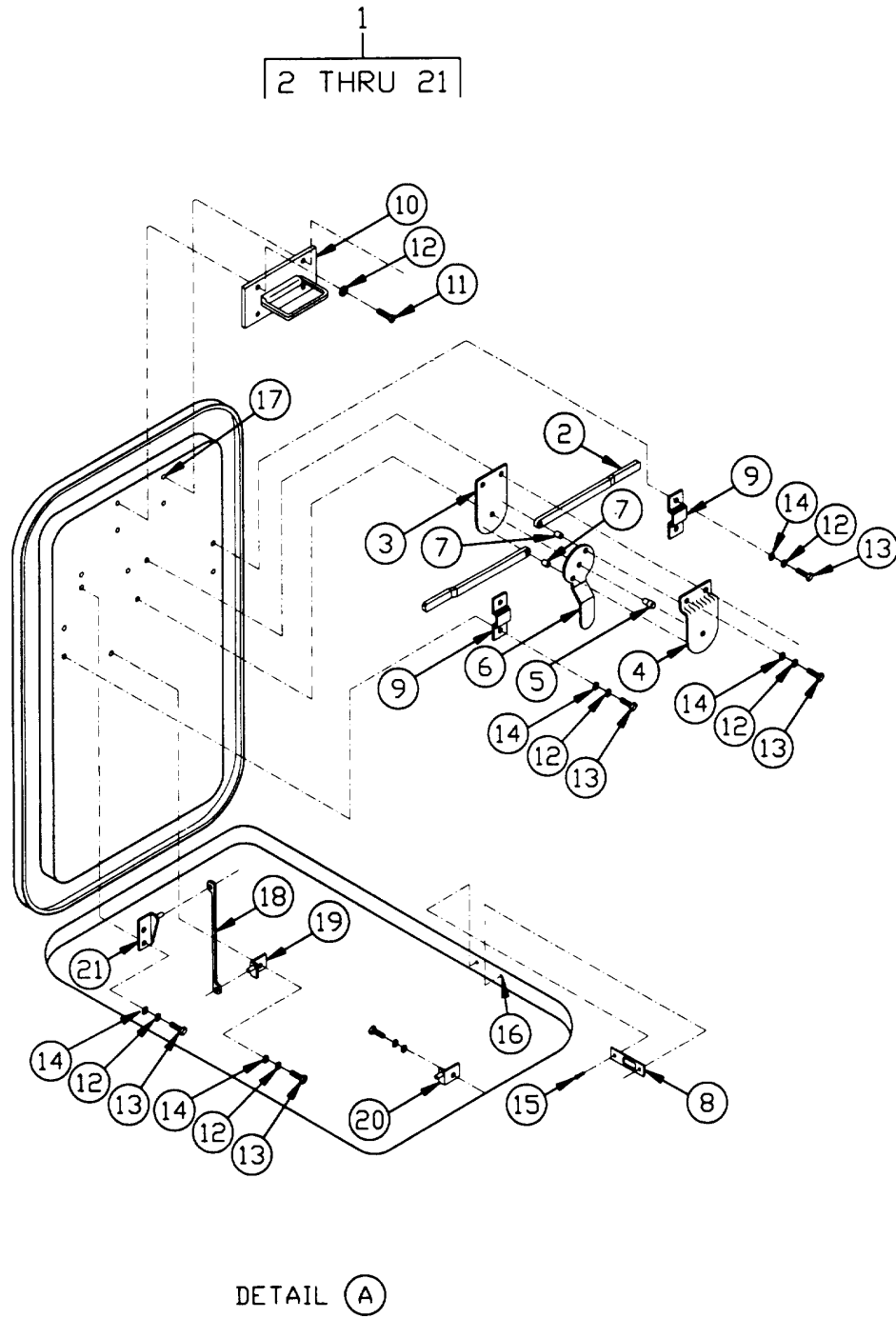


FIGURE 17. ESCAPE HATCH ASSEMBLY (SHEET 2 OF 2)

## SECTION II

TM 5-6675-331-14&amp;P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
				<b>GROUP 02</b>	<b>SHELTER ASSEMBLY</b>
				<b>FIG. 17</b>	<b>ESCAPE HATCH ASSEMBLY</b>
1	XDOOO	97403	13229E7382	ESCAPE HATCH ASSY TOP VIEW OF .....	1
2	XDOZZ	97403	13229E7507-8	SHELTER, DETAIL A .....	2
3	XDOZZ	97403	13229E7507-3	ARM, ESCAPE HATCH TOP VIEW OF.....	1
4	XDOZZ	97403	13229E7507-2	SHELTER, DETAIL A .....	1
5	XDOZZ	97403	13229E7507-4	RETAINER, UPPER TOP VIEW OF .....	1
6	XDOZZ	97403	13229E7507-1	SHELTER, DETAIL A .....	1
7	XDOZZ	97403	13229E7507-7	RETAINER, LOWER TOP VIEW OF .....	2
8	XDOZZ	97403	13229E7507-5	SHELTER, DETAIL A .....	2
9	XDOZZ	97403	13229E7507-6	PIVOT TOP VIEW OF SHELTER,.....	2
10	XDOZZ	84256	5-4-4966	DETAIL A .....	1
11	XDOZZ	96906	MS35207-280	HANDLE, CLOSURE ASSY TOP VIEW OF .....	4
12	XDOZZ	96906	MS35338-139	SHELTER, DETAIL A .....	18
13	XDOZZ	88044	AN4C5A	PIN TOP VIEW OF SHELTER, DETAIL A .....	18
14	XDOZZ	88044	AN960C416L	KEEPER, ARM TOP VIEW OF SHELTER, .....	18
15	XDOZZ	96906	MS51960-65	DETAIL A .....	4
16	XDOZZ	84256	APS-1032-130	SIDE BRACKET, ARM TOP VIEW OF .....	4
17	XDOZZ	84256	APS-515-428	SHELTER, DETAIL A .....	4
18	XDOZZ	97403	13229E7540-1	HANDLE, BAIL TOP VIEW OF SHELTER,.....	18
19	XDOZZ	97403	13229E7540-2	DETAIL A .....	1
20	XDOZZ	97403	13229E7540-3	SCREW, MACHINE TOP VIEW OF .....	1
21	XDOZZ	97403	13229E7540-4	SHELTER, DETAIL A .....	1
				WASHER, LOCK TOP VIEW OF SHELTER, .....	1
				DETAIL A .....	1
				BOLT, MACHINE TOP VIEW OF SHELTER, .....	1
				DETAIL A .....	1
				WASHER, FLAT TOP VIEW OF SHELTER, .....	1
				DETAIL A .....	1
				SCREW, MACHINE TOP VIEW OF .....	1
				SHELTER, DETAIL A .....	1
				INSERT TOP VIEW OF SHELTER,.....	1
				DETAIL A .....	1
				INSERT TOP VIEW OF SHELTER,.....	1
				DETAIL A .....	1
				PROP ROD TOP VIEW OF SHELTER,.....	1
				DETAIL A .....	1
				RETAINER, LOWER TOP VIEW OF .....	1
				SHELTER, DETAIL A .....	1
				RETAINER, UPPER TOP VIEW OF .....	1
				SHELTER, DETAIL A .....	1
				RETAINER, PROP ROD TOP VIEW OF .....	1
				SHELTER, DETAIL A .....	1

END OF FIGURE

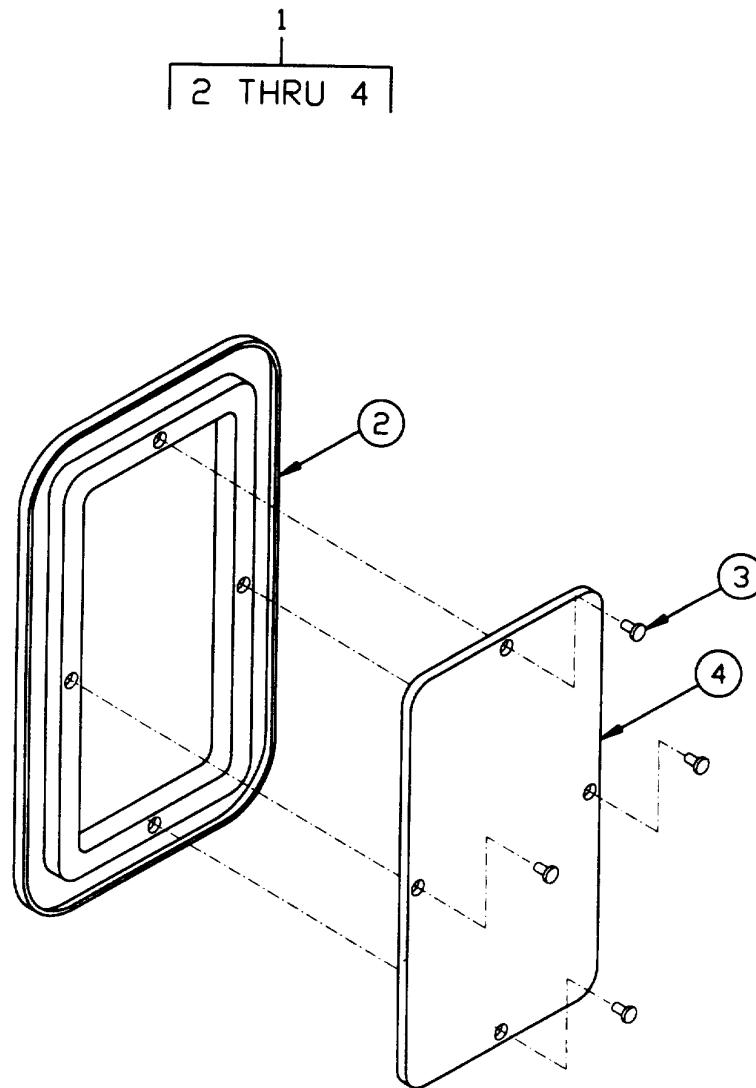


FIGURE 18. PANEL ASSEMBLY, ESCAPE HATCH

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
				<b>GROUP 02</b>	<b>SHELTER ASSEMBLY</b>
				<b>FIG.18</b>	<b>PANEL ASSEMBLY, ESCAPE HATCH</b>
1	XDOOO	97403	13229E7509	PANEL ASSY, ESCAPE H .....	1
2	XDOZZ	05699	708115-1	FRAME ASSY .....	1
3	XDOZZ	19738	1604-0615	RIVET, BLIND .....	26
4	XDOZZ	07542	FM41	CORE, SPLC FOAM .....	1
END OF FIGURE					

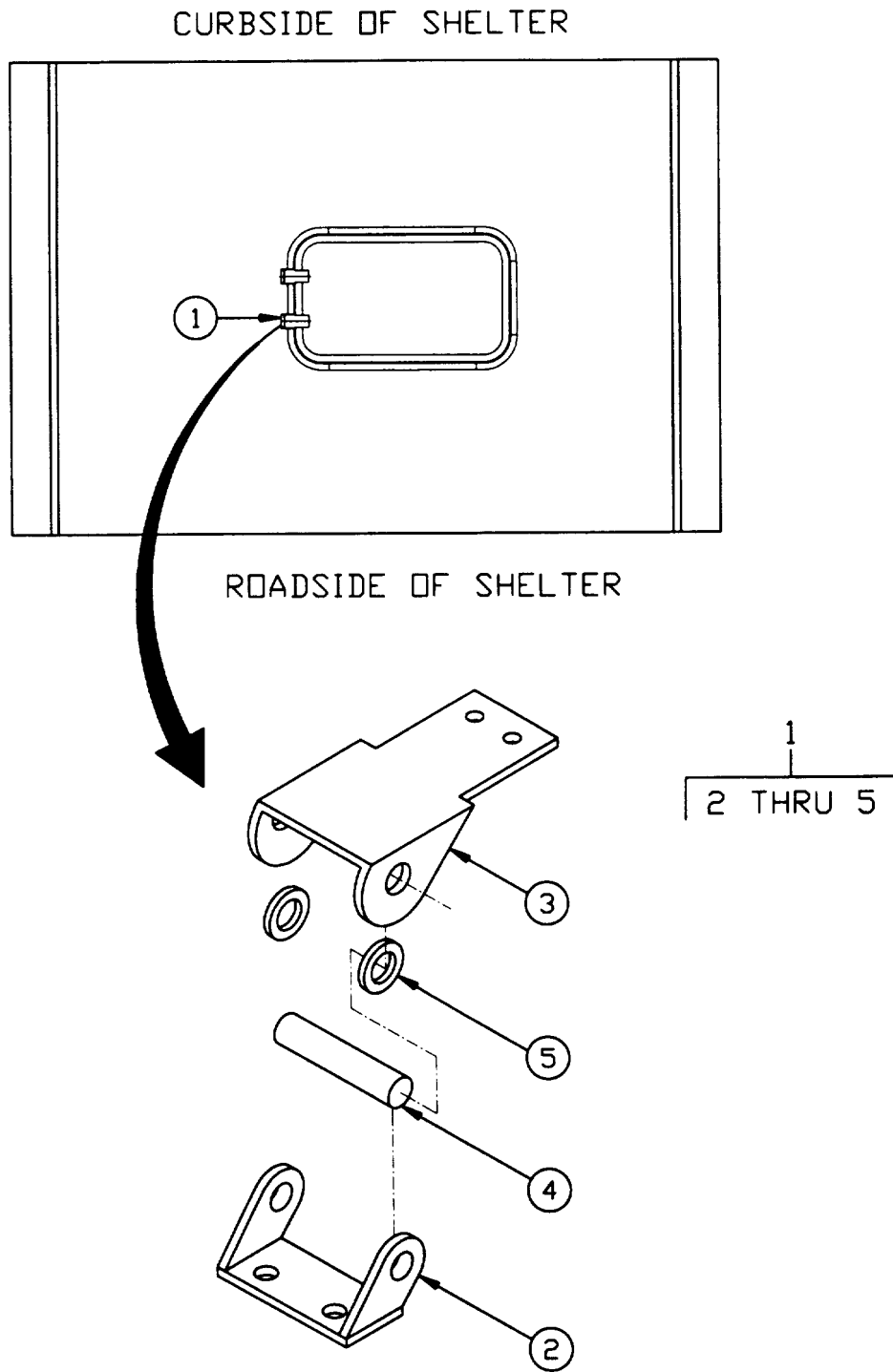


FIGURE 19. HINGE ASSEMBLY, HATCH

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
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GROUP 02                      SHELTER ASSEMBLY

FIG. 19                      HINGE ASSEMBLY, HATCH

1	XDOOO	97403	13229E7508	HINGE ASSY, HATCH .....	2
2	XDOZZ	97403	13229E7538-1	PLATE .....	2
3	XDOZZ	97403	13229E7538-2	PLATE .....	2
4	XDOZZ	05699	CRS4130	PIN .....	2
5	XDOZZ	88044	AN960C1OL	WASHER, FLAT .....	4

END OF FIGURE

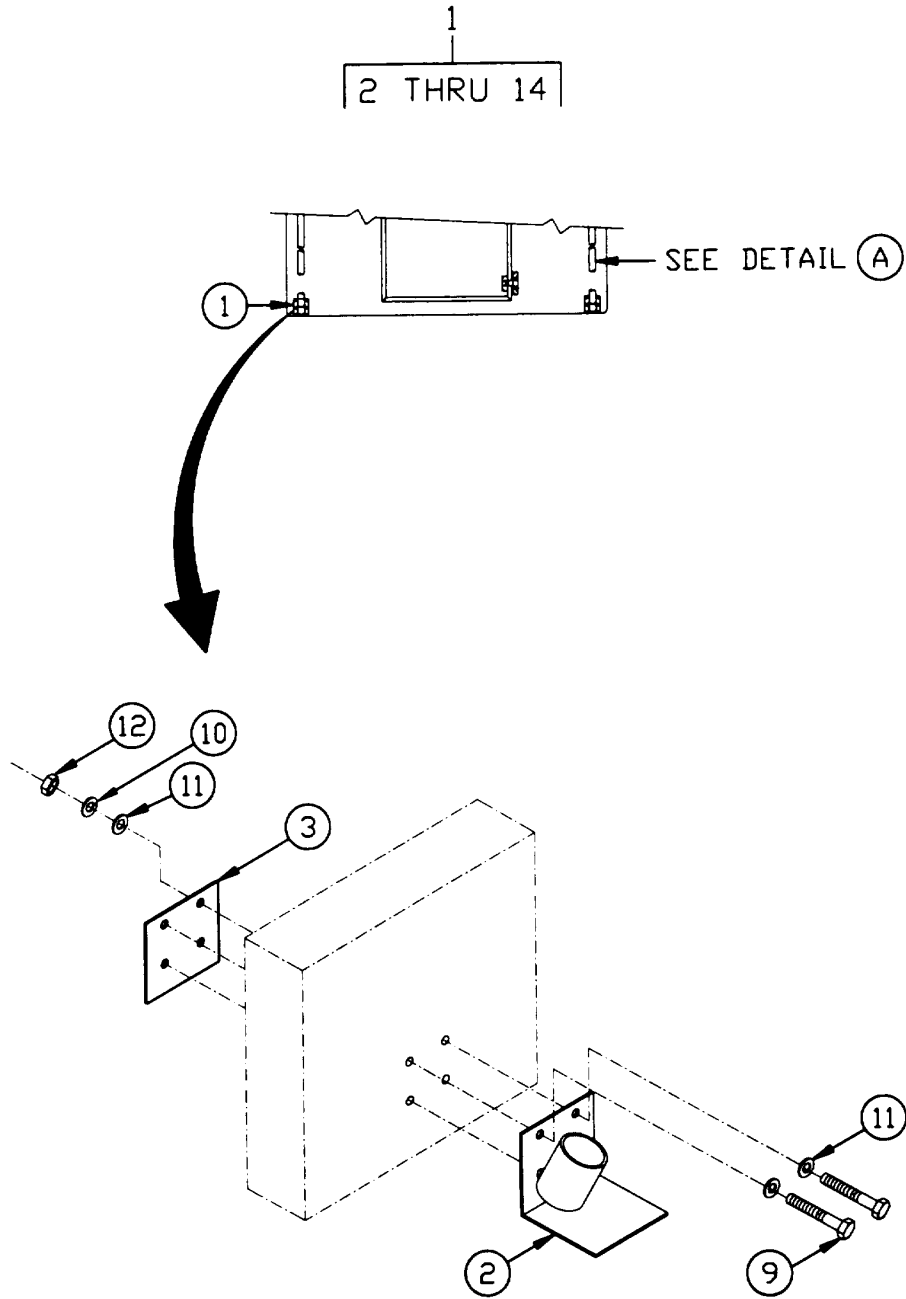


FIGURE 20. BOOT SUPPORT (SHEET 1 OF 2)

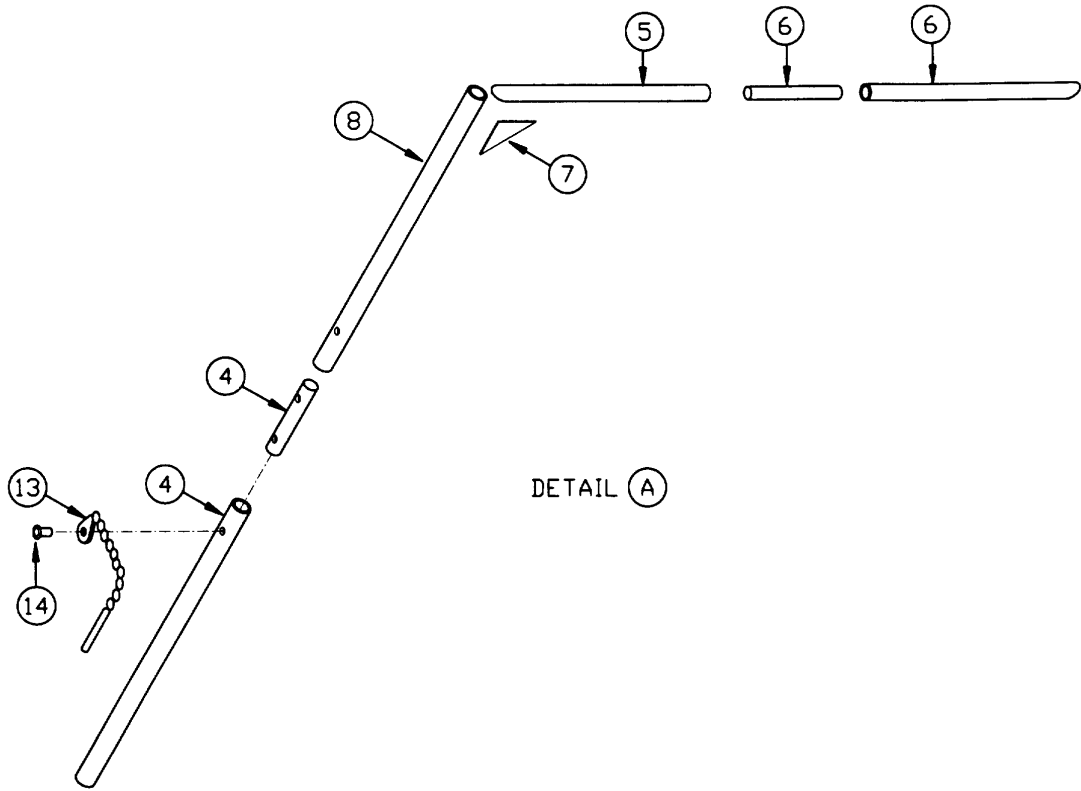


FIGURE 20. BOOT SUPPORT (SHEET 2 OF 2)



SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(U OC)	(6) QTY
				<b>GROUP 02</b>	<b>SHELTER ASSEMBLY</b>
				<b>FIG. 20</b>	<b>BOOT SUPPORT</b>
1	XDOOO	97403	13229E7385	BOOT SUPPORT.....	1
2	XDOZZ	97403	13229E7385-1	BRACKET, BOOT SPPRT.....	2
3	XDOZZ	97403	13229E7385-2	BACKING PLATE, BOOT.....	2
4	XDOZZ	97403	13229E7385-4	FRAME, UPRIGHTS & PI SEE DETAIL A.....	2
5	XDOZZ	97403	13229E7385-5	HEADER, TOP LEFT SEE DETAIL A.....	1
6	XDOZZ	97403	13229E7385-6	HEADER, TOP RIGHT SEE DETAIL A.....	1
7	XDOZZ	97403	13229E7385-7	GUSSET, TOP HEADERS SEE DETAIL A.....	2
8	XDOZZ	97403	13229E7385-8	HEADER, SIDE SEE DETAIL A.....	2
9	XDOZZ	96906	MS90726-40	BOLT, MACHINE.....	8
10	XDOZZ	96906	MS35338-45	WASHER, LOCK.....	8
11	XDOZZ	96906	MS27183-12	WASHER, FLAT.....	8
12	XDOZZ	39428	96480A030	NUT, HEX.....	8
13	XDOZZ	39428	98306A173	PIN, W/LANYARD & TAB SEE DETAIL A.....	2
14	XDOZZ	96906	MS20613-6C24	RIVET, SOLID SEE DETAIL A.....	3

END OF FIGURE

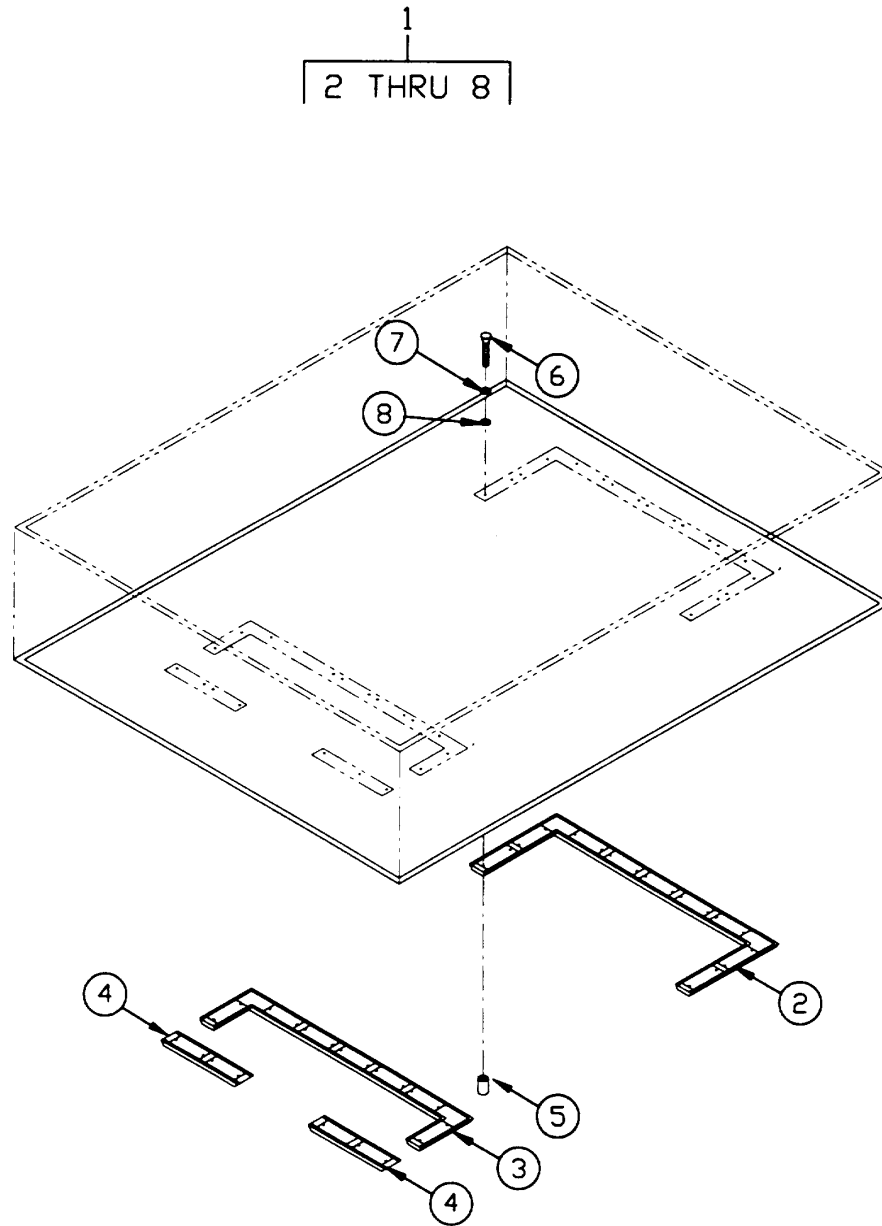


FIGURE 21. SKIDS, HMMWV

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
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GROUP 02                      SHELTER ASSEMBLY

FIG. 21                      SKIDS, HMMWV

1	XDOOO	97403	13229E7386	SKIDS, HMMWV .....	1
2	XDOZZ	97403	13229E7514-1	SKID ASSEMBLY .....	1
3	XDOZZ	97403	13229E7514-2	SKID ASSEMBLY .....	1
4	XDOZZ	97403	13229E7514-3	SKID ASSEMBLY .....	2
5	XDOZZ	84256	AP515-524	INSERT .....	36
6	XDOZZ	88044	ANSC6A	BOLT, MACHINE.....	36
7	XDOZZ	88044	AN960C-5164	WASHER, FLAT.....	36
8	XDOZZ	88044	AN935-5166	WASHER, FLAT.....	36

END OF FIGURE

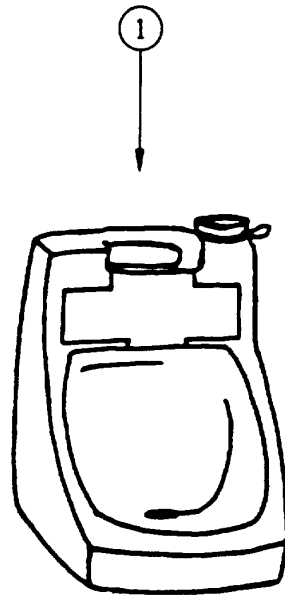


FIGURE 22. EYEWASH, PORTABLE

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
				GROUP 02	
				FIG. 22	
				SHELTER ASSEMBLY	
				EYEWASH, PORTABLE	
1	PAOZZ	05178	C1219	EYEWASH, PORTABLE .....	1
				END OF FIGURE	

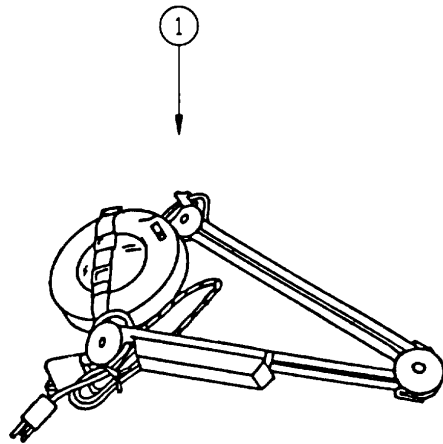


FIGURE 23. MAGNIFIER LAMP

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
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GROUP 02                      SHELTER ASSEMBLY

FIG. 23                        MAGNIFIER LAMP

1	PBOOZ	63547	175/150/140	MAGNIFIER LAMP.....	1
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END OF FIGURE

1  
2 THRU 7

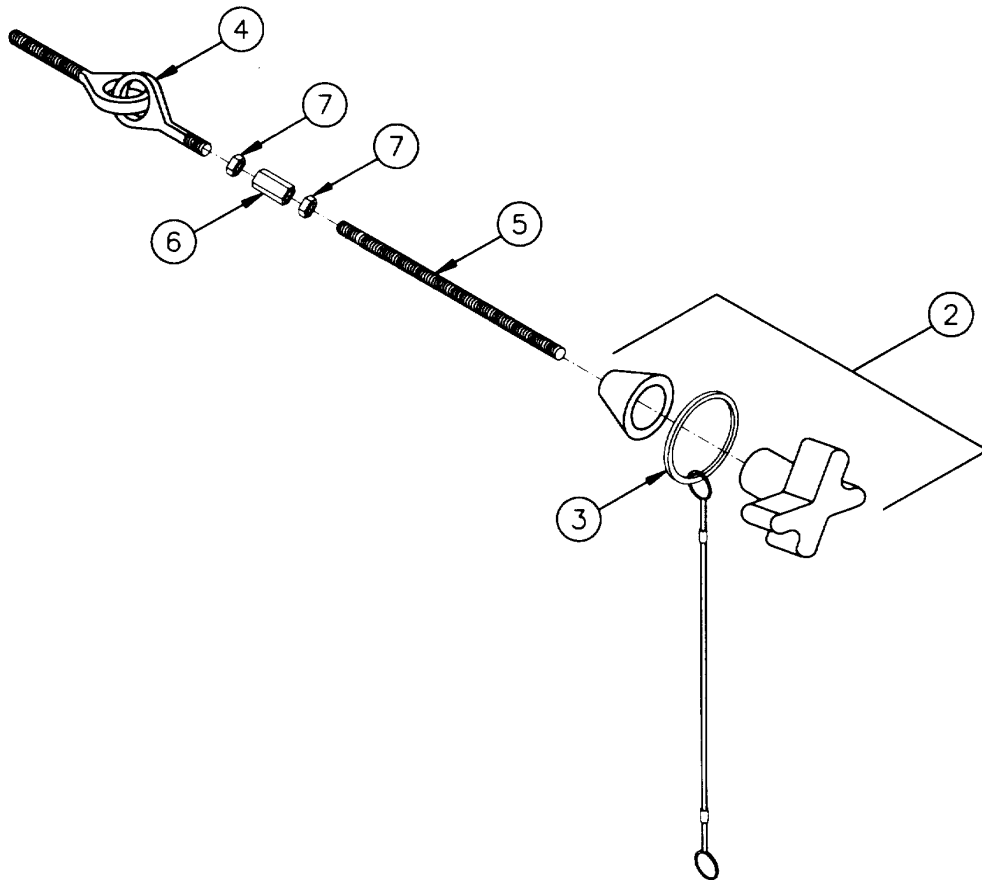


FIGURE 24. KNOB ASSEMBLY, CABLE REEL



SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
-------------------	--------------------	--------------	-----------------------	---	------------

GROUP 02

SHELTER ASSEMBLY

FIG. 24

KNOB ASSEMBLY, CABLE REEL

1	XDOOO	97403	13229E7398	KNOB ASSY, CABLE REE .....	1
2	XDOZZ	97403	13229E7399	KNOB ASSY.....	1
3	XDOZZ	99862	CL-21-KA-20.0	CABLE ASSY .....	1
4	XAOZZ	39428	9489T19	BOLT, EYE 1/4-20 UNC .....	2
5	XAOZZ	39428	98804A029	ROD, TH READ ED, 250-2 .....	1
6	XAOZZ	39428	90268A029	NUT, COUPLING 1/4-20 .....	1
7	XAOZZ	96906	MS35469-2254	NUT, PLAIN, WING.....	2

END OF FIGURE

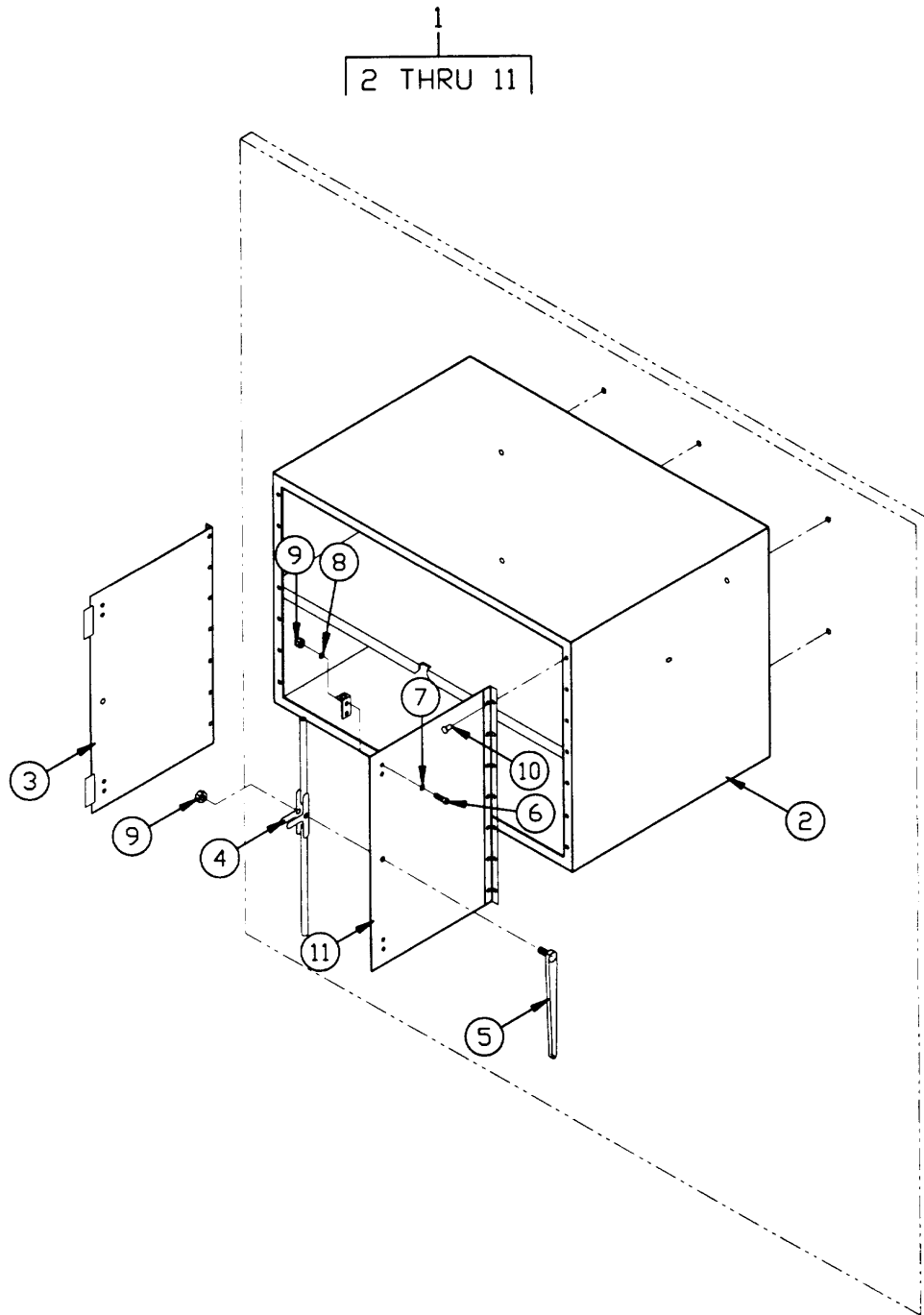


FIGURE 25. CABINET, WALL

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
				<b>GROUP 02      SHELTER ASSEMBLY</b>	
				<b>FIG. 25          CABINET, WALL</b>	
1	XDOOO	97403	13229E7410	CABINET, WALL .....	1
2	XDOZZ	97403	13229E7411	BODY,CABINET .....	1
3	XDOZZ	97403	13229E7412-1	DOOR,CABINET (LEFT) .....	1
4	XDOZZ	94222	A5-21-120-10	ROD ASSY .....	2
5	XDOZZ	94222	92-20-305-72	HANDLE,DOOR .....	1
6	XDOZZ	96906	MS51958-63	SCREW,MACHINE .....	4
7	XDOZZ	96906	MS27183-42	WASHER,FLAT .....	4
8	XDOZZ	96906	MS35338-43	WASHER,LOCK .....	4
9	XDOZZ	96906	MS35650-302	NUT,PLAIN,HEXAGON .....	4
10	XDOZZ	19738	1601-0613	RIVET,BLIND .....	14
11	XDOZZ	97403	13229E7412-2	DOOR,CABINET(RIGHT) .....	1

END OF FIGURE

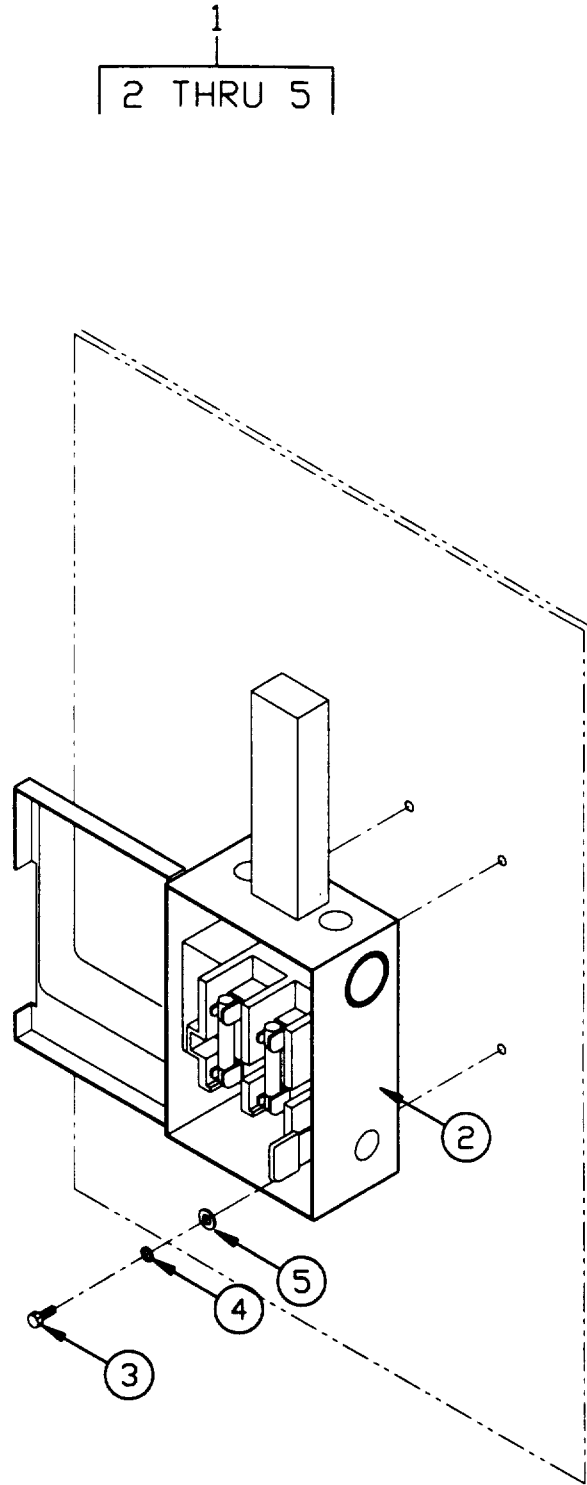


FIGURE 26. RACEWAY ASSEMBLY

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
<b>GROUP 02 SHELTER ASSEMBLY</b>					
<b>FIG. 26 RACEWAY ASSEMBLY</b>					
1	XDOOO	97403	13229E7392	RACEWAY ASSY.....	1
2	XDOZZ	1L333	D322N	SWITCH,MAIN.....	1
3	XDOZZ	96906	MS90726-30	SCREW,HEX HD.,5/16.....	4
4	XDOZZ	96906	MS35338-45	WASHER,LOCK.....	4
5	XDOZZ	96906	MS27183-12	WASHER,FLAT .....	4

END OF FIGURE

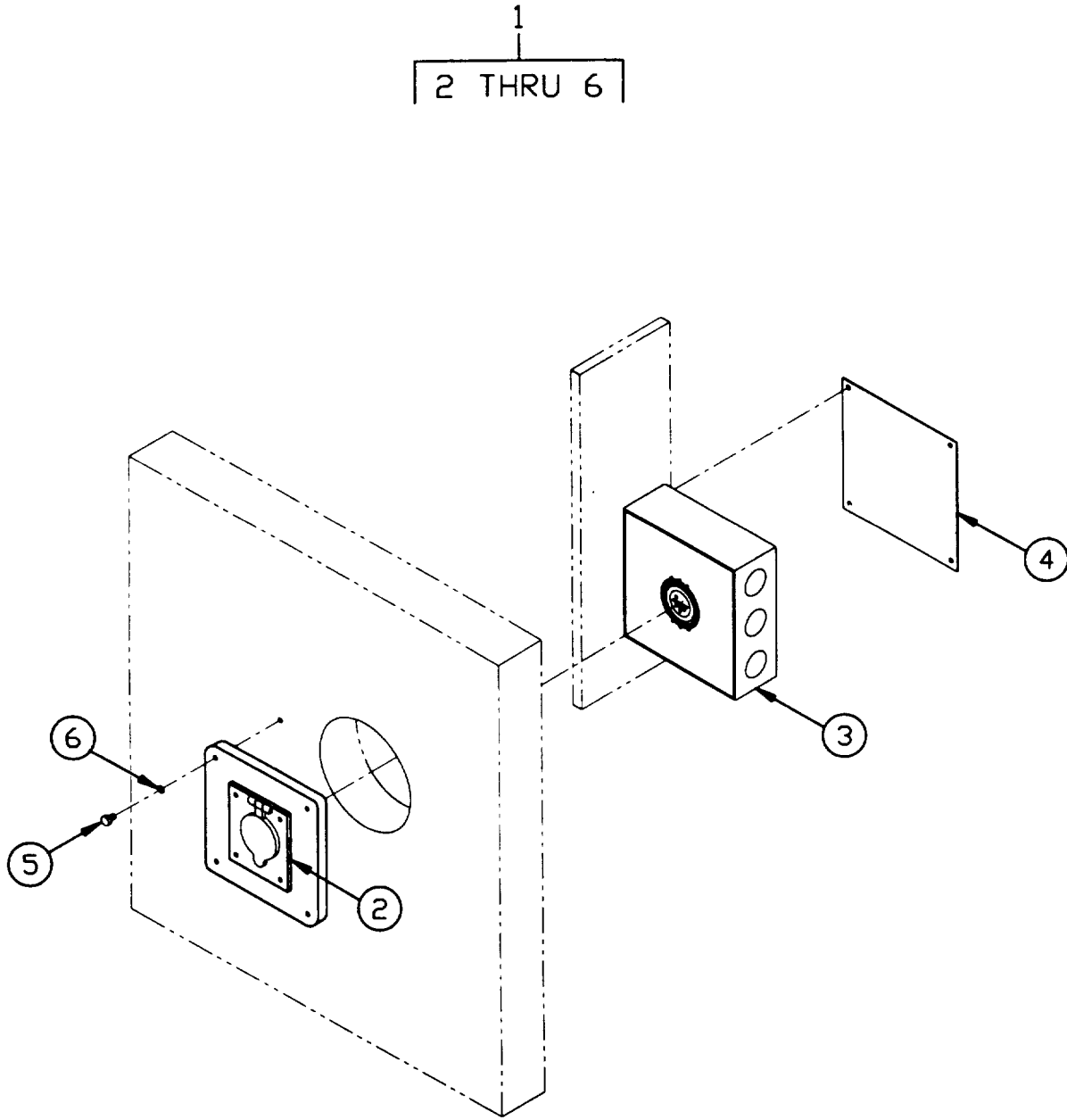


FIGURE 27. POWER FEED ASSEMBLY

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
				<b>GROUP 02 SHELTER ASSEMBLY</b>	
				<b>FIG. 27 POWER FEED ASSEMBLY</b>	
1	XDOOO	97403	13229E7396	PWR FEED ASSY .....	1
2	PAOZZ	30003	470AS-C0117-001	OUTLET,20A 125V .....	1
3	XDOZZ	28488	190	BOX,OUTLET 4 SQ .....	1
4	XDOZZ	28488	752	COVER,4 SQ BOX .....	1
5	XDOZZ	39428	92196A148	SCREW,CAP HEX SOCKE .....	4
6	XDOZZ	96906	MS15795-806	WASHER,FLAT .....	4

END OF FIGURE

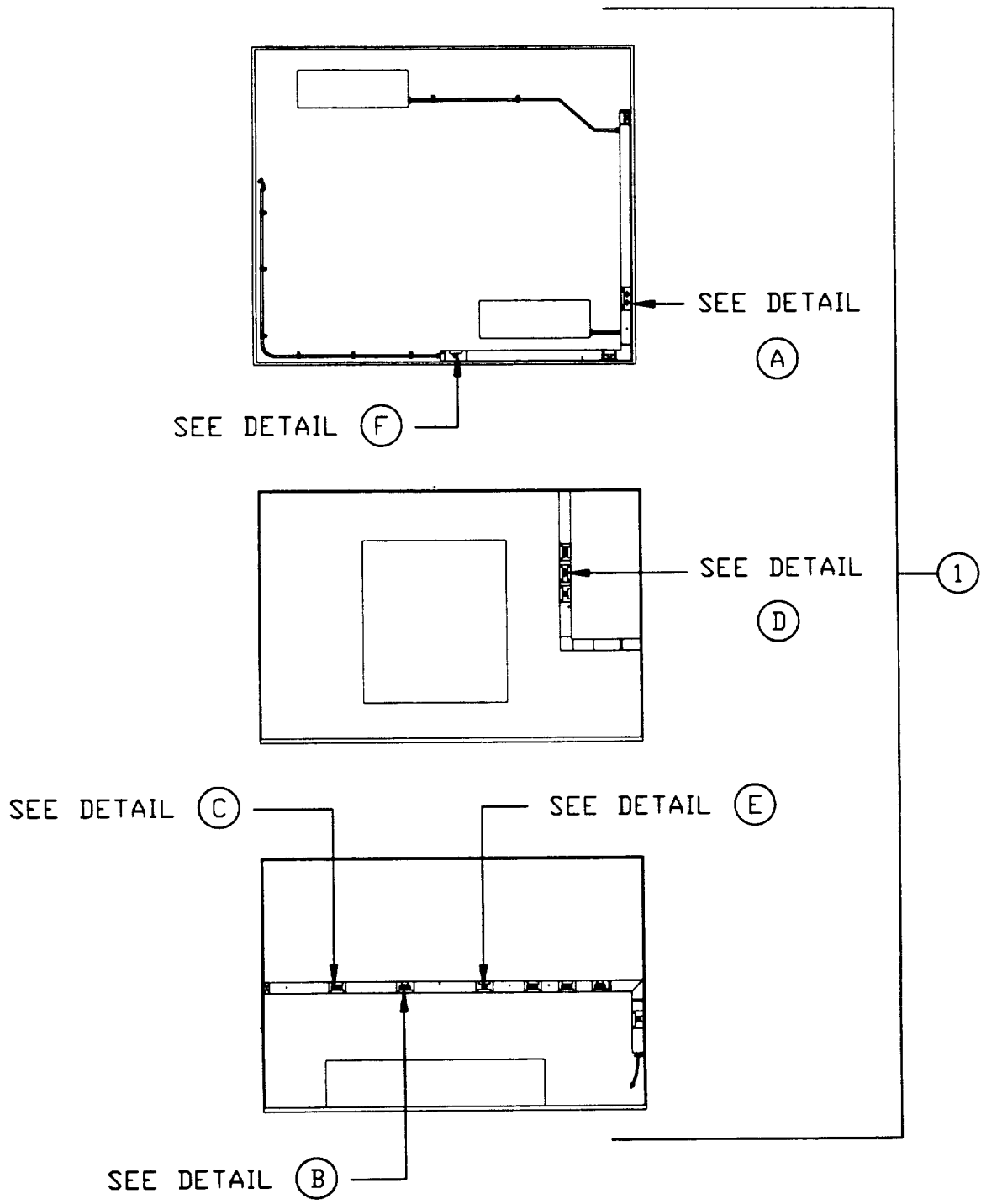
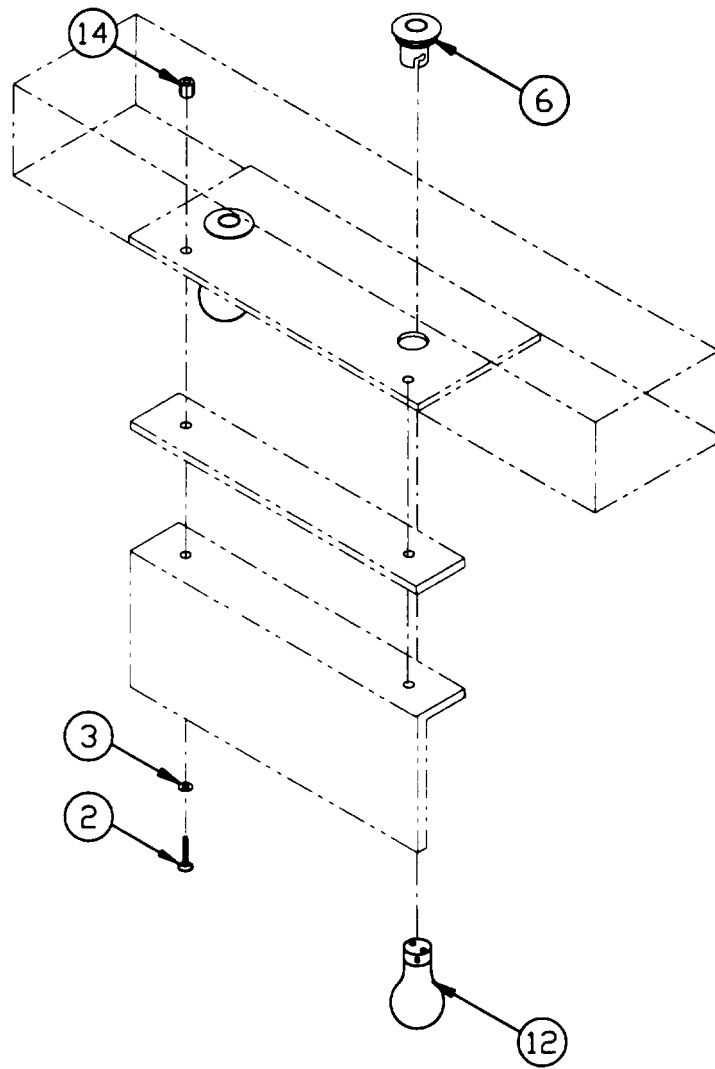


FIGURE 28. ELECTRICAL ASSEMBLY (SHEET 1 OF 7)





DETAIL (A)

FIGURE 28. ELECTRICAL ASSEMBLY (SHEET 2 OF 7)

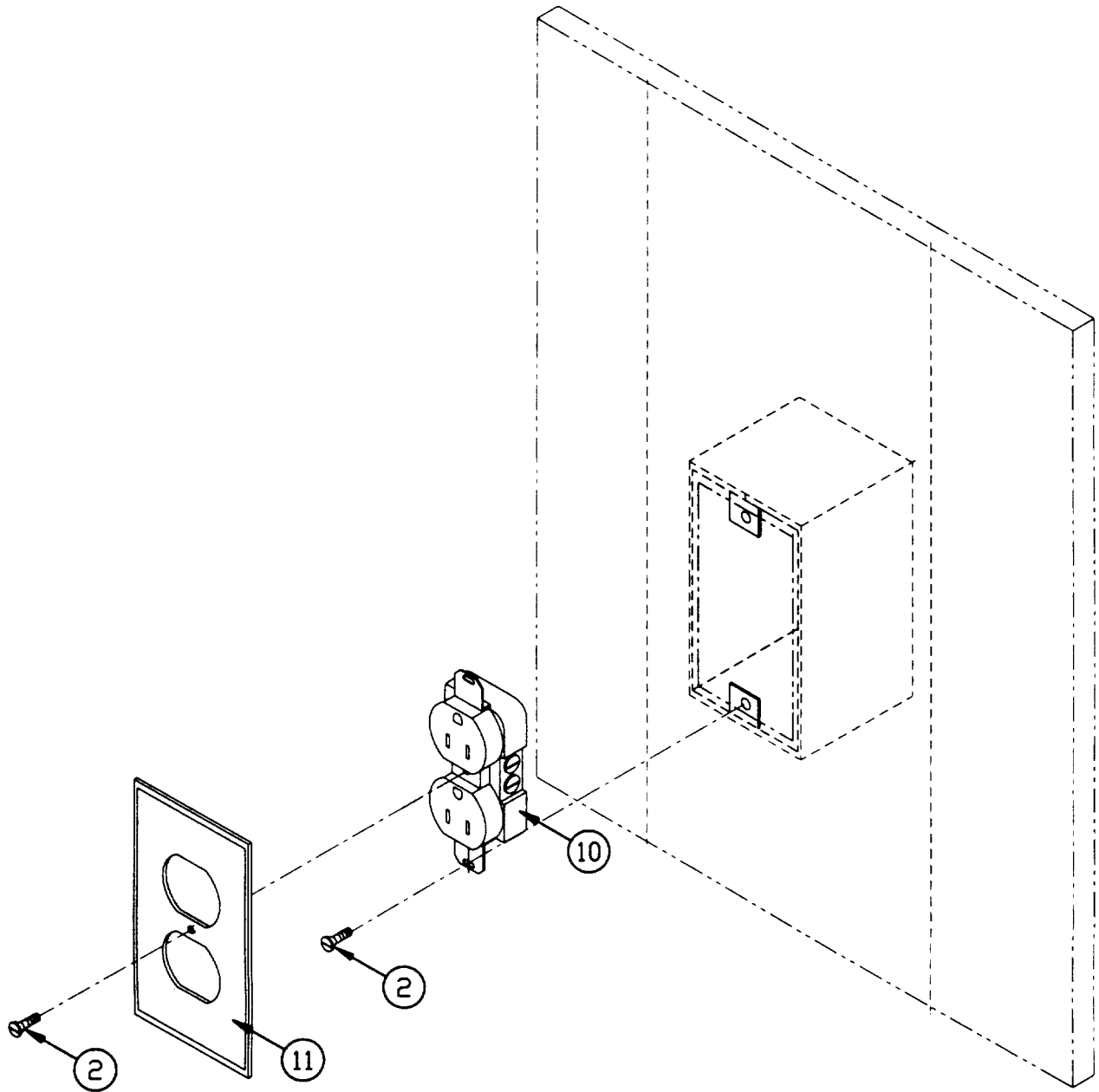


FIGURE 28. ELECTIRCAL ASSEMBLY (SHEET 3 OF 7)

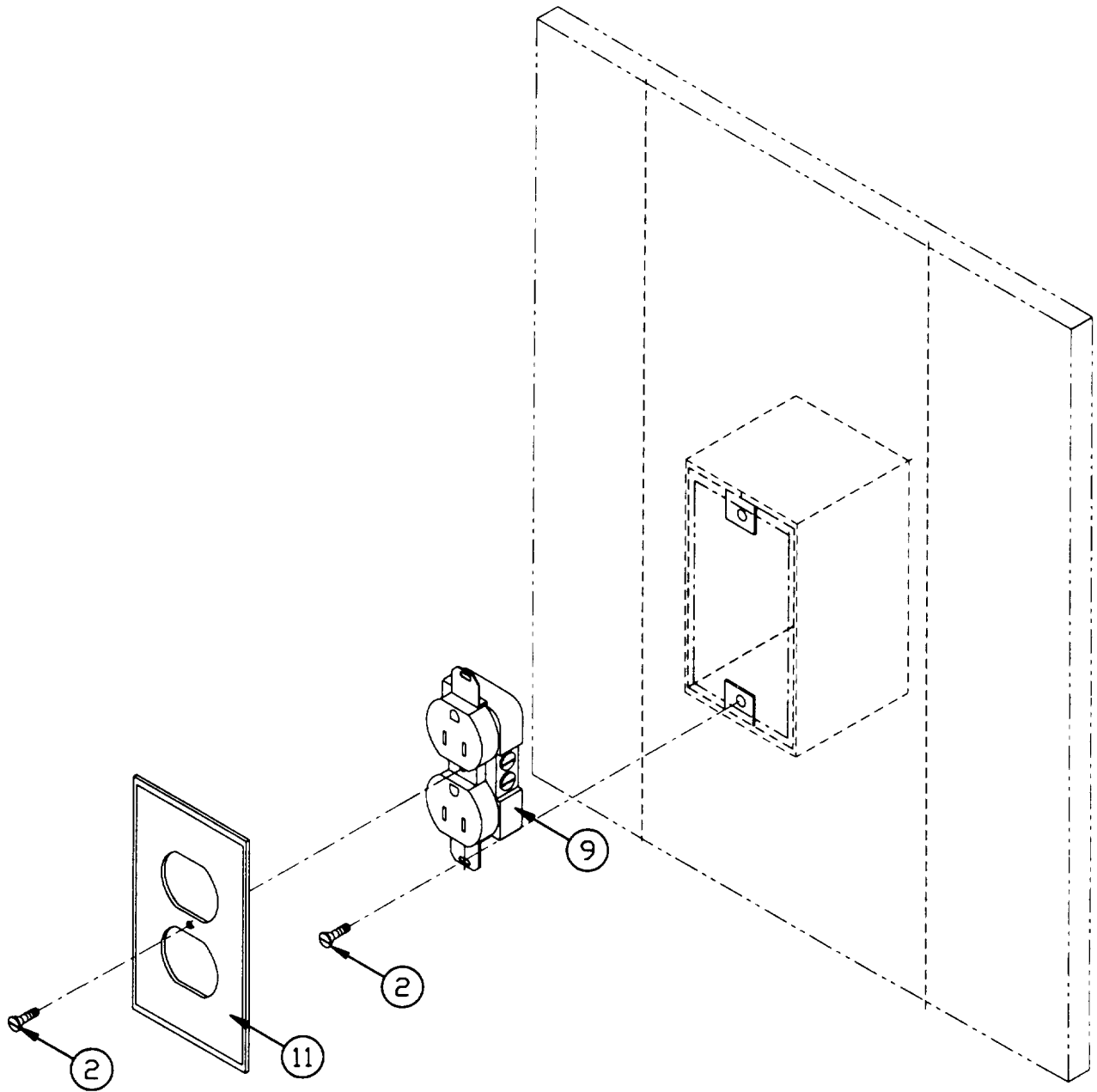
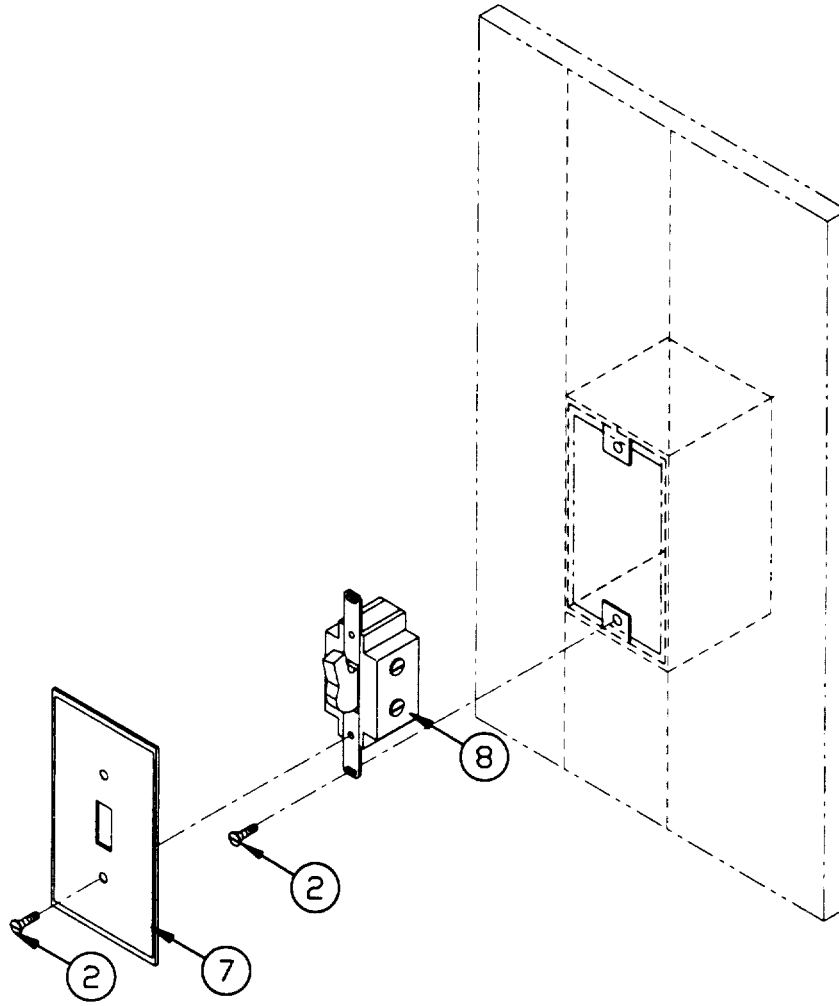


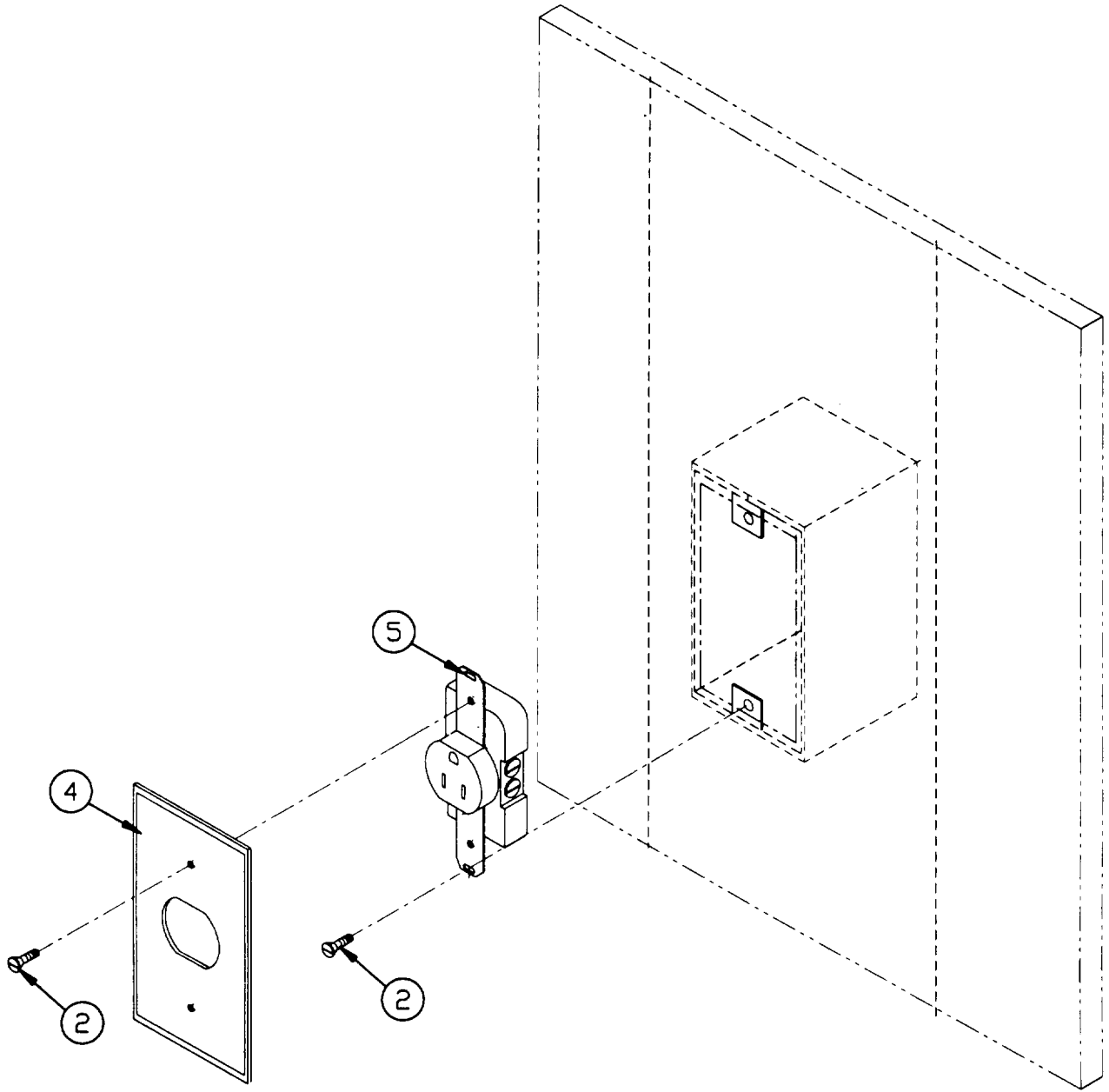
FIGURE 28. ELECTRICAL ASSEMBLY (SHEET 4 OF 7)

F-85



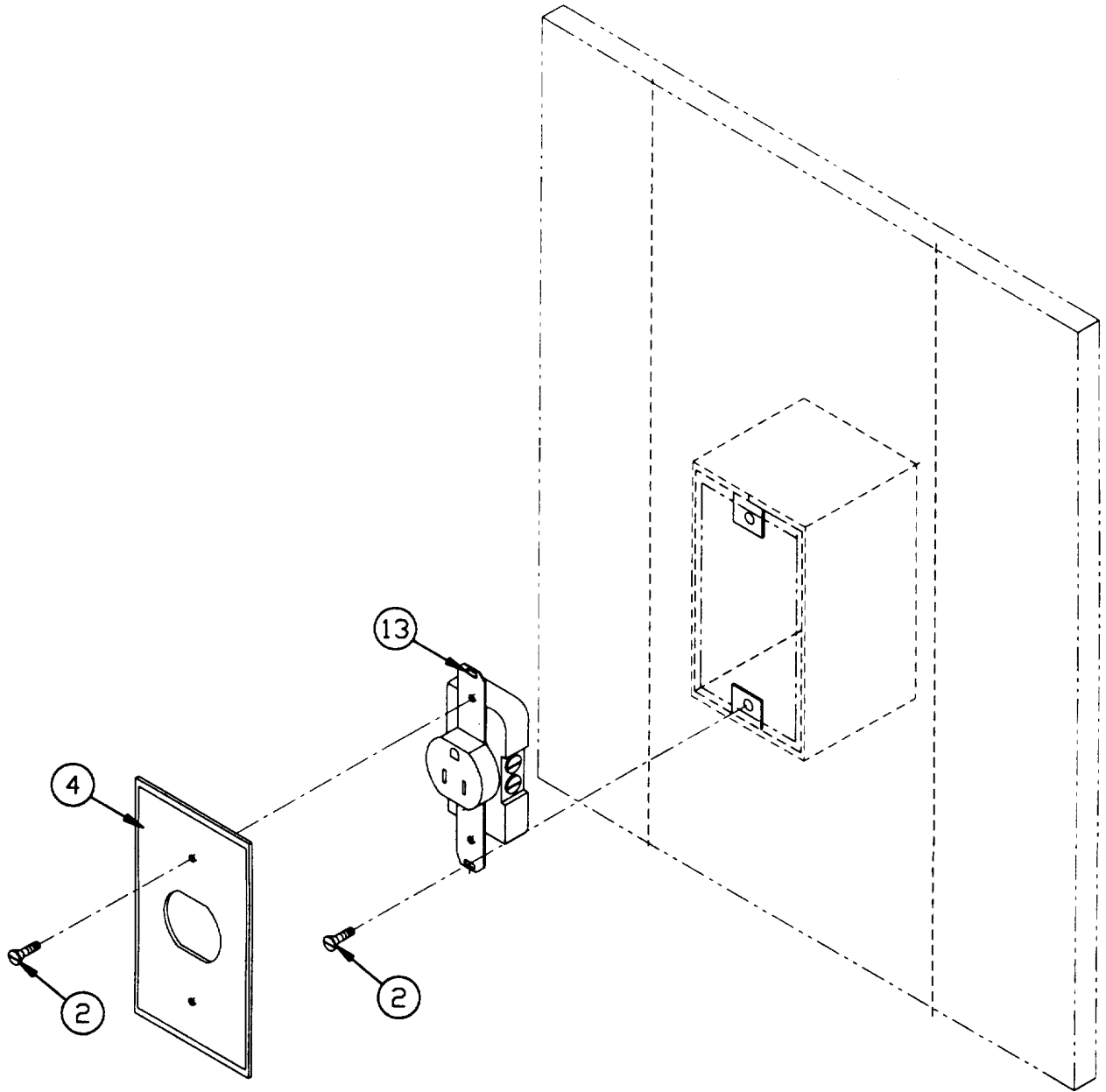
DETAIL (D)

FIGURE 28. ELECTRICAL ASSEMBLY (SHEET 5 OF 7)



DETAIL E

FIGURE 28. ELECTRICAL ASSEMBLY (SHEET 6 OF 7)



DETAIL (F)

FIGURE 28. ELECTRICAL ASSEMBLY (SHEET 7 OF 7)

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
<b>GROUP 02      SHELTER ASSEMBLY</b>					
<b>FIG. 28      ELECTRICAL ASSEMBLY</b>					
1	XDOOO	97403	13229E7391	ELECTRICAL ASSY .....	1
2	XDOZZ	96906	MS51958-65	SCREW,MACHINE SEE DETAIL A, B, C,.....	12
				D, E, F .....	
3	XDOZZ	96906	MS27183-42	WASHER,FLAT SEE DETAIL A .....	12
4	XDOZZ	79725	G-3046AE	PLATE,WALL,ELECTRIC SEE DETAIL E,.....	4
				F .....	
5	PAOZZ	80704	IF-5361	RECEPTACLE,SINGLE,1 SEE DETAIL E.....	1
6	XDOZZ	OAAR4	81N2583	RECEPTACLE,LAMP SEE DETAIL A .....	2
7	XDOZZ	79725	G-3046CE	COVER,SWITCH SEE DETAIL D .....	1
8	PAOZZ	74545	1201	SWITCH,TOGGLE,SINGL SEE DETAIL D. ....	2
9	PAOZZ	OAAR4	IF-5262	RECEPTACLE,DUPLEX SEE DETAIL C.....	3
10	PAOZZ	80704	IG-5262	RECEPTACLE,DUPLEX SEE DETAIL B.....	3
11	XDOZZ	79725	G-30468E	COVER,RECEPTACLE DU SEE DETAIL B, .....	6
				C	
12	PAOZZ	06001	21CP	BULB,24 V DC SEE DETAIL A .....	2
13	PAOZZ	OAAR4	IG-5261	RECEPTACLE,SINGLE,1 SEE DETAIL F .....	1
14	XDOZZ	96906	MS21044-C3	NUT,SELF-LOCKING,HE SEE DETAIL A. ....	2

END OF FIGURE

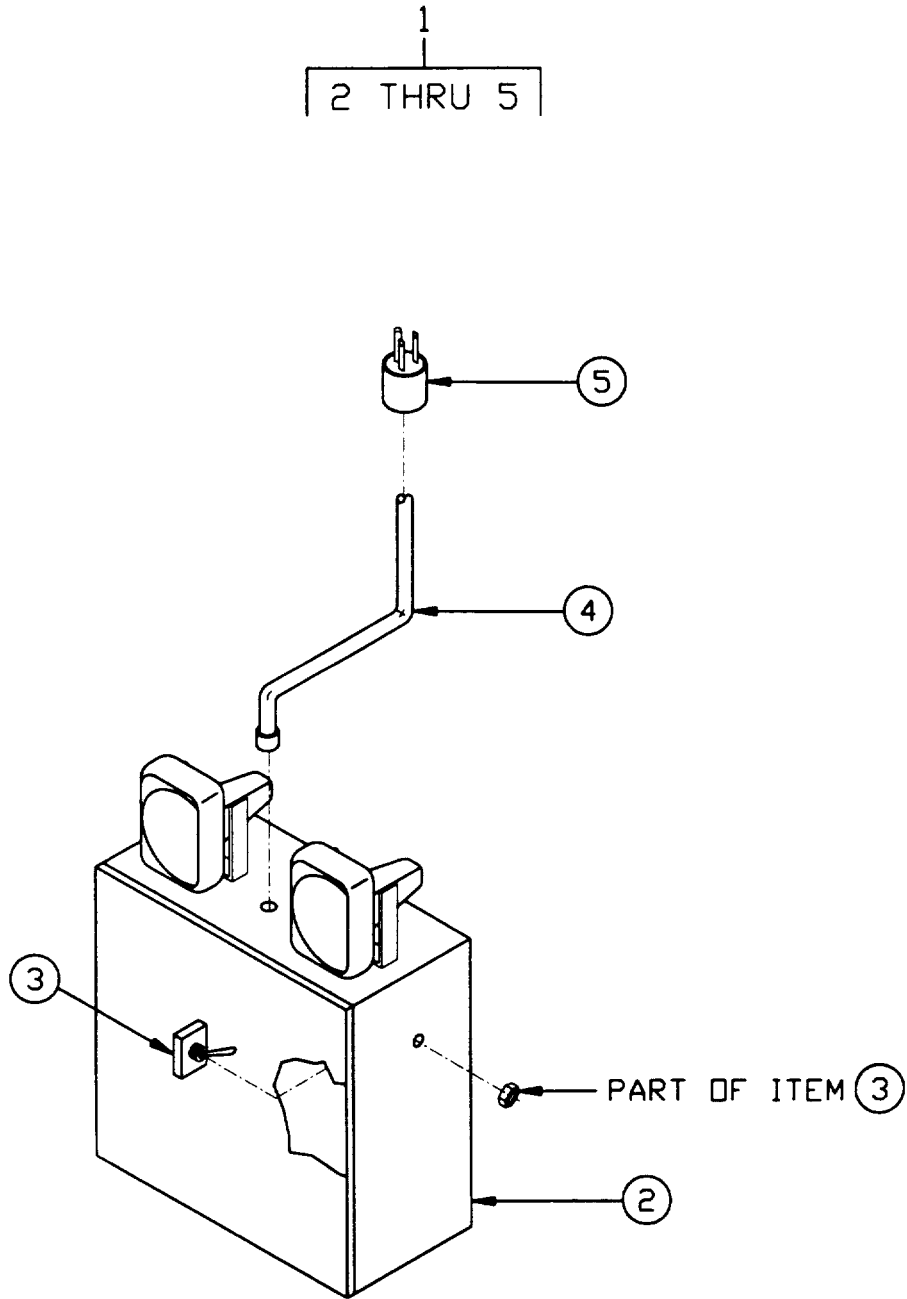


FIGURE 29. LIGHTING, EMERGENCY  
F-90



SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
<b>GROUP 02 SHELTER ASSEMBLY</b>					
<b>FIG. 29 LIGHTING, EMERGENCY</b>					
1	PBOOO	97403	13229E7395	LIGHTING,EMERGENCY .....	1
2	XDOZZ	12020	610850L-0-0-02	EMERGENCY LIGHT,CL .....	1
3	PAOZZ	96906	MS35058-22	SWITCH,TOGGLE .....	1
4	XDOZZ	39428	7080K43	CORD,PORTABLE .....	1
5	XDOZZ	74545	5266-C	PLUG,3 WIRE 15A .....	1

END OF FIGURE

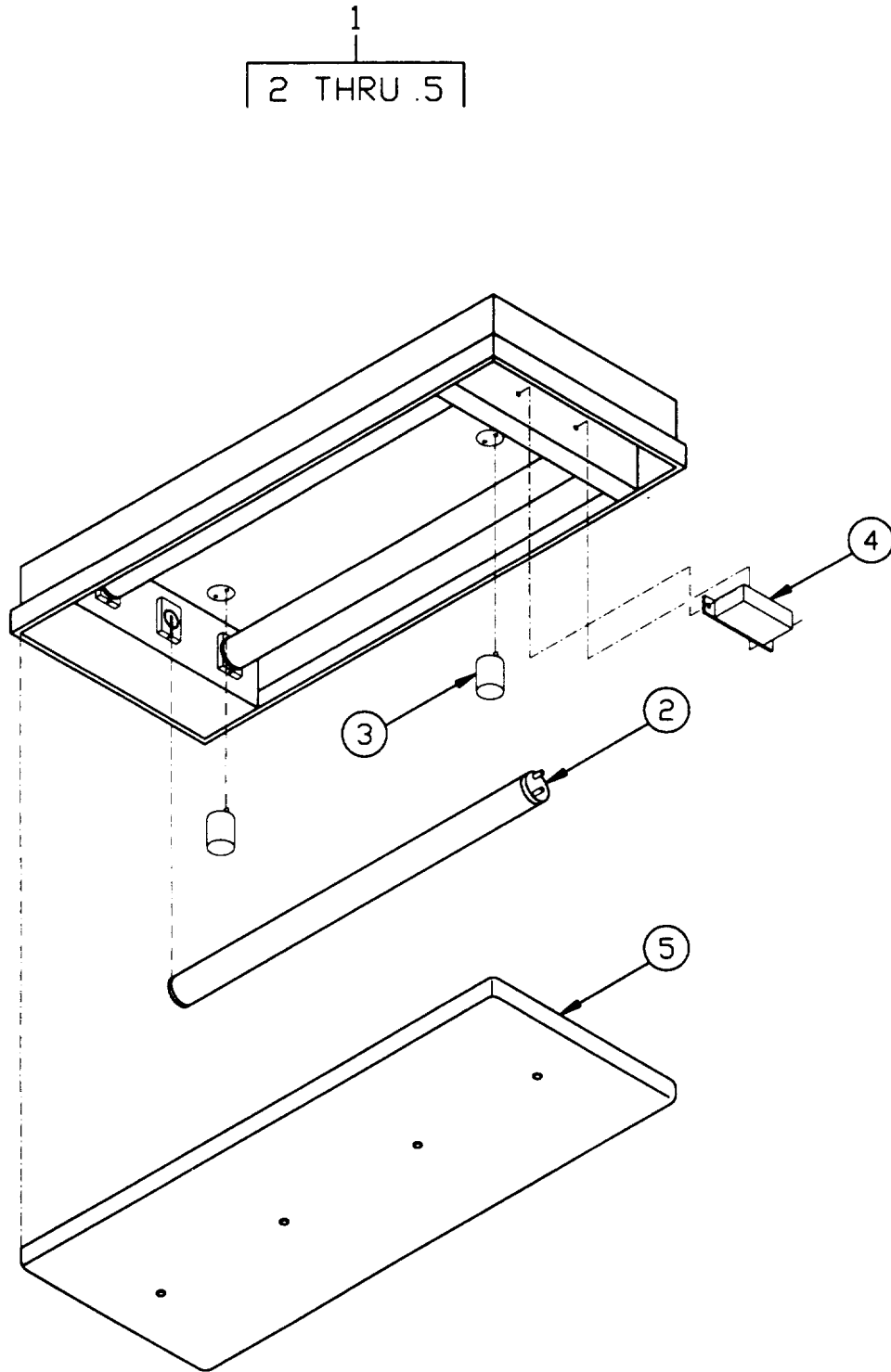


FIGURE 30. FLOURESCENT LIGHTING FIXTURE

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
				<b>GROUP 02 SHELTER ASSEMBLY</b>	
				<b>FIG. 30 FLUORESCENT LIGHTING FIXTURE</b>	
1	PAOOO	81349	M16377/12-333.1	FIXTURE,LIGHTING .....	2
2	PAOZZ	08805	F20T12/CW	LAMP,FLUORESCENT.....	6
3	PAOZZ	81770	115	STARTER,FLUORESCENT .....	6
4	PAOZZ	81349	M16377/44-001	BALLAST,LAMP .....	6
5	PAOZZ	81349	M16377/12-001	WINDOW,LIGHTING FIX .....	2

END OF FIGURE

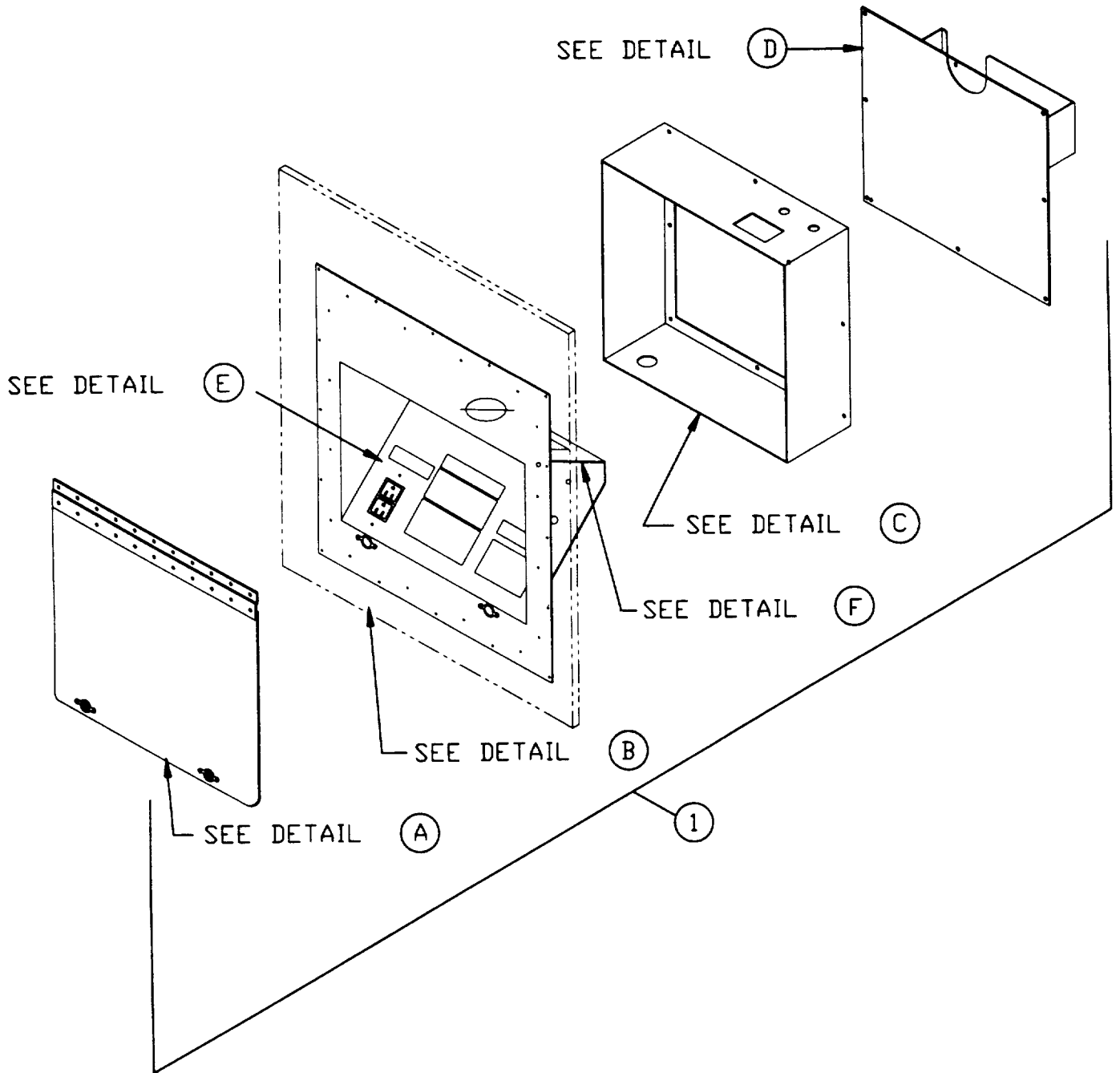
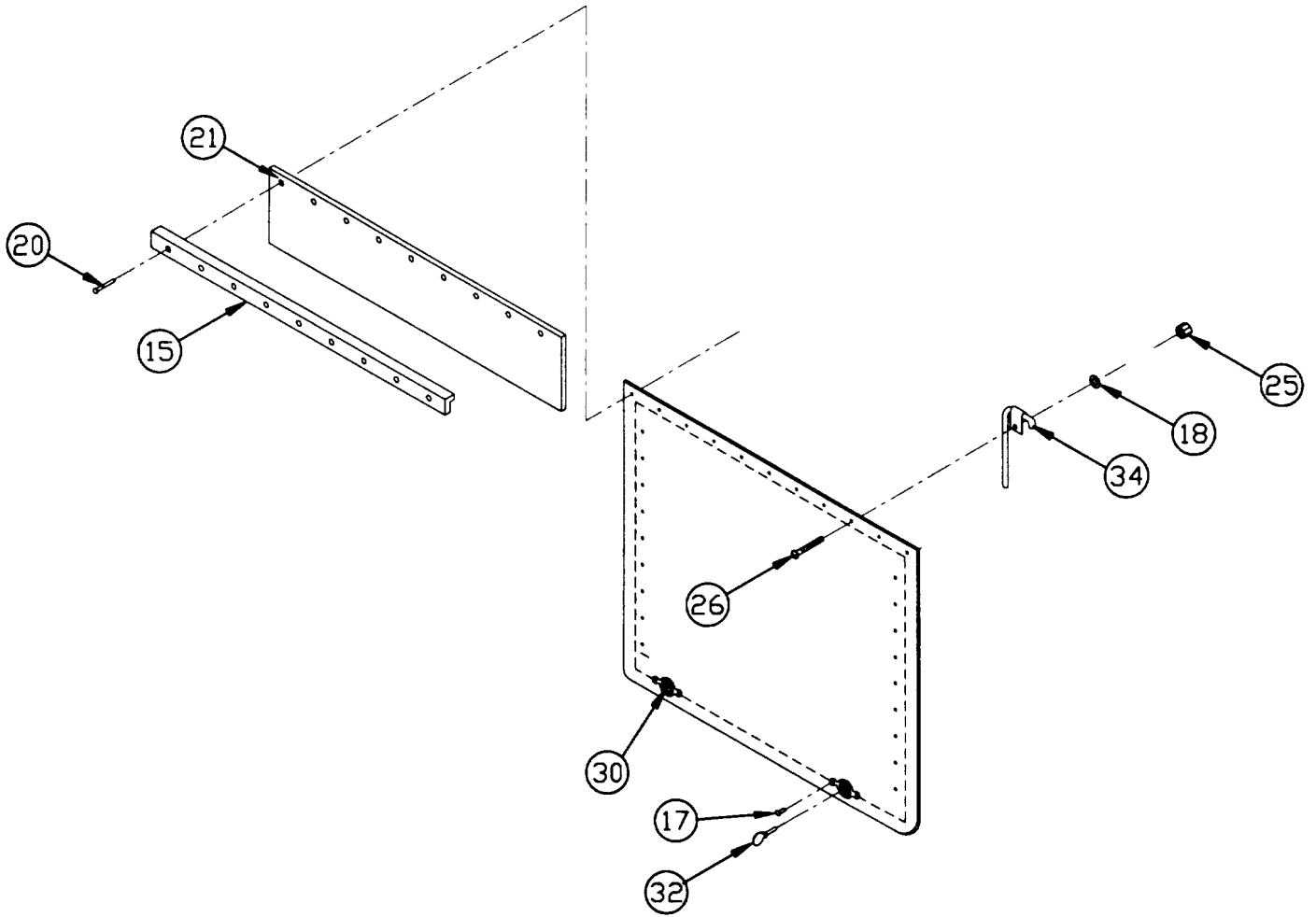
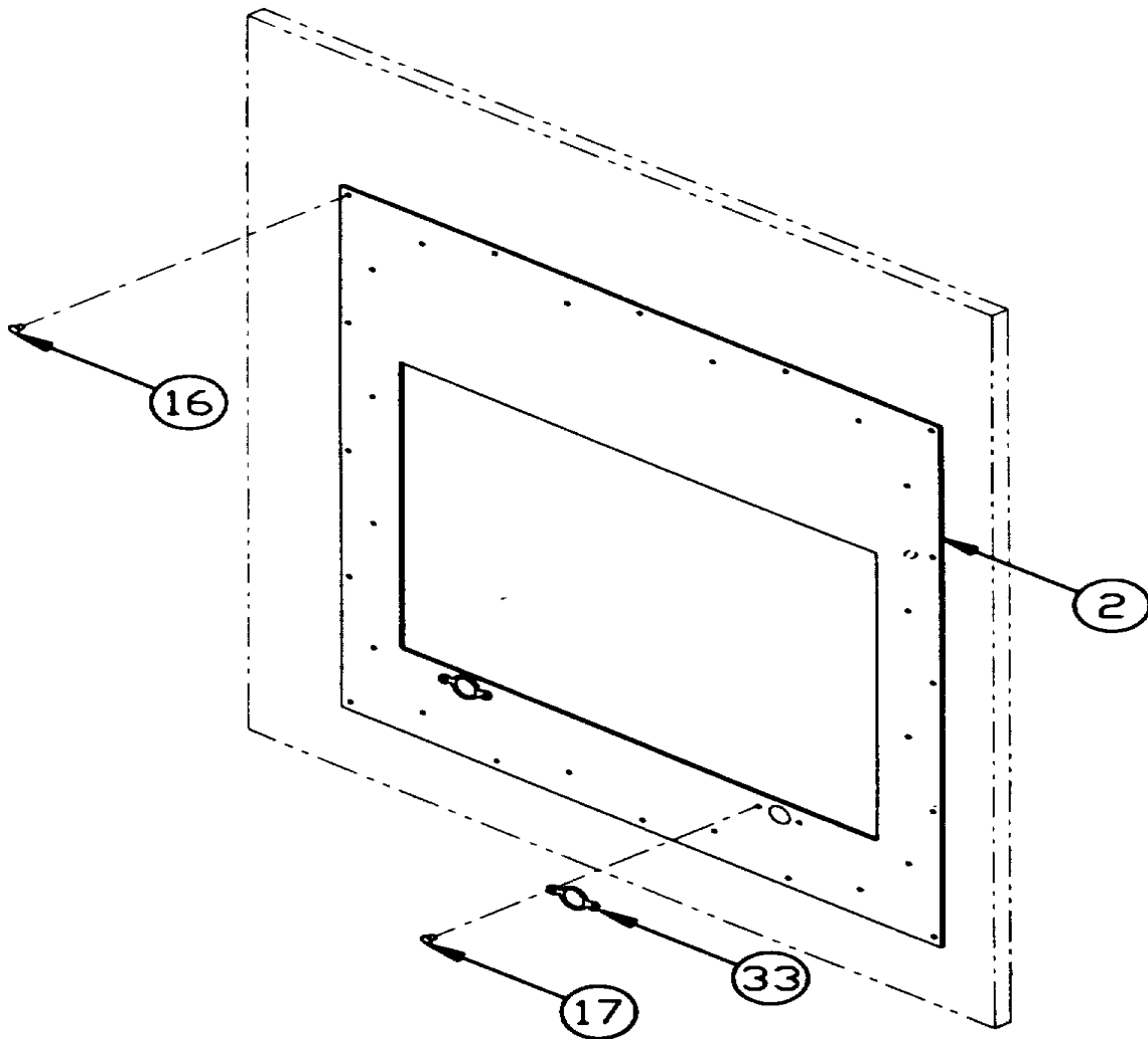


FIGURE 31. POWER ENTRANCE ASSEMBLY (SHEET 1 OF 7)  
F-94



DETAIL (A)

FIGURE 31. POWER ENTRANCE ASSEMBLY (SHEET 2 OF 7)  
F-95



DETAIL (B)

FIGURE 31. POWER ENTRANCE ASSEMBLY (SHEET 3 OF 7)  
F-96

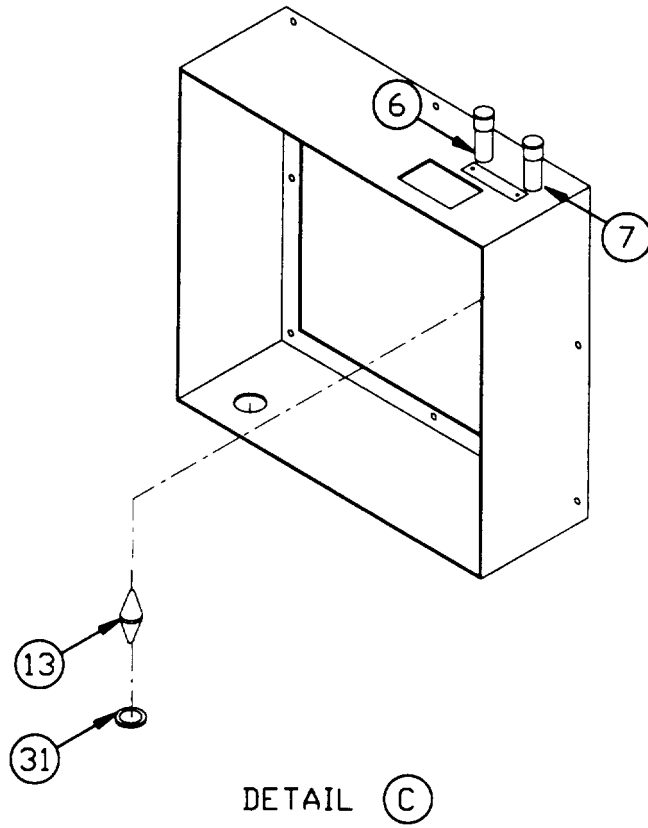
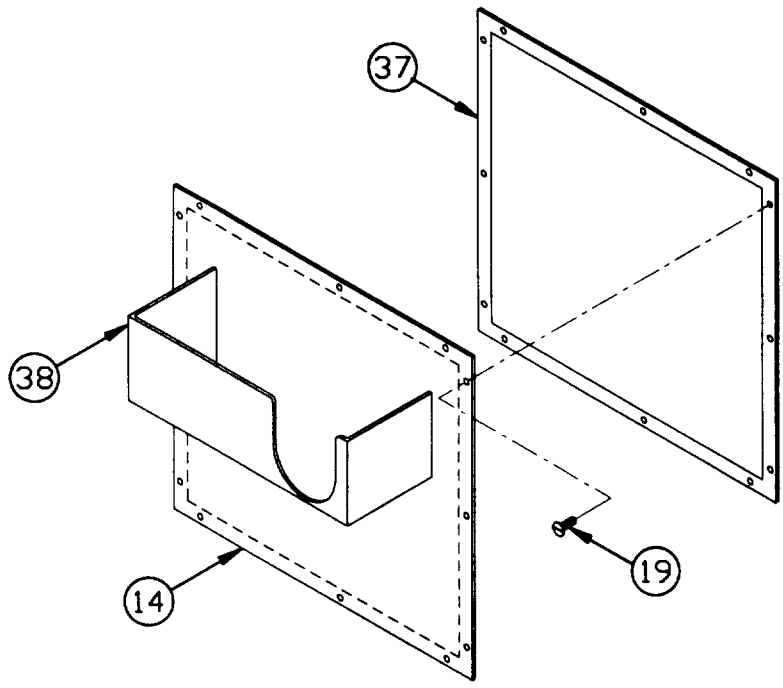


FIGURE 31. POWER ENTRANCE ASSEMBLY (SHEET 4 OF 7)  
F-97



DETAIL (D)

FIGURE 31. POWER ENTRANCE ASSEMBLY (SHEET 5 OF 7)  
F-98



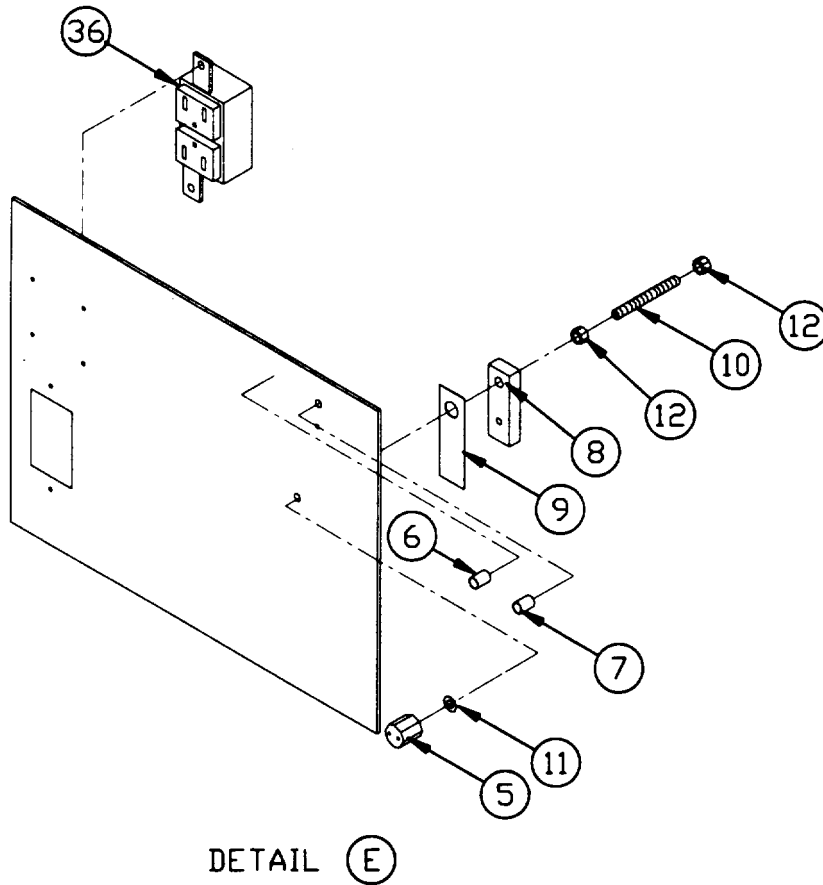
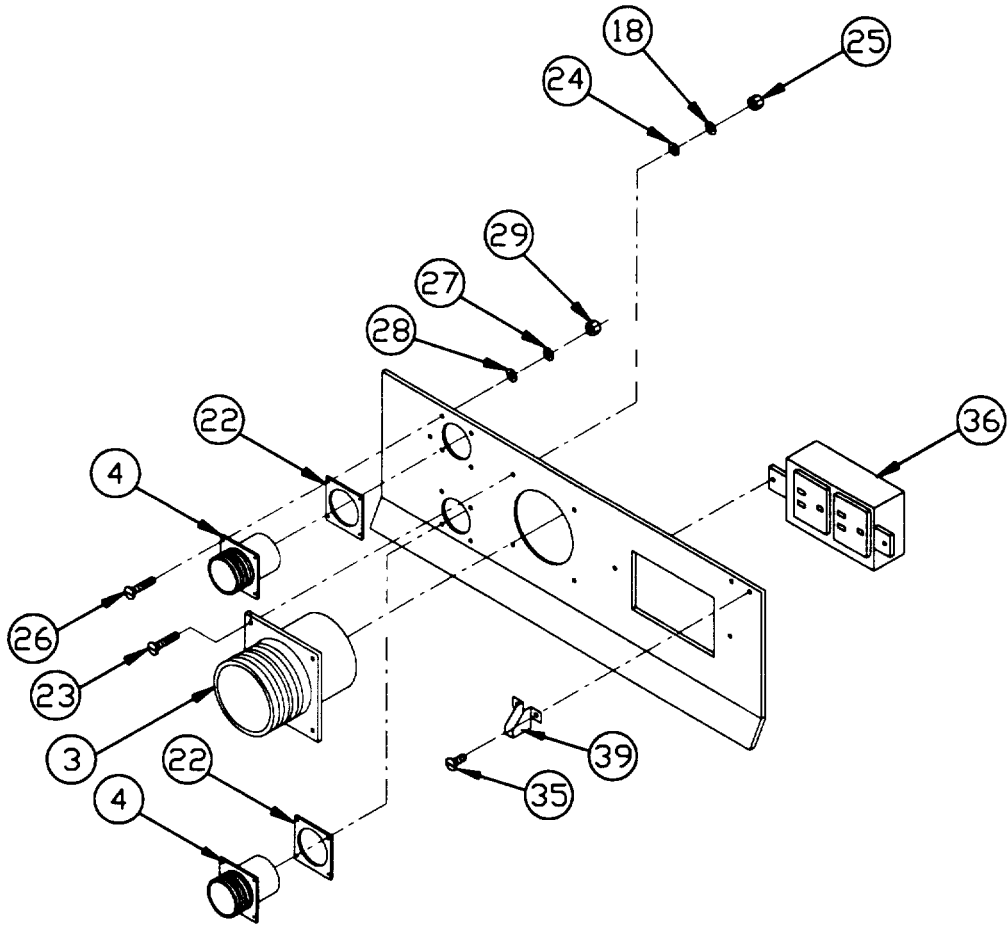


FIGURE 31. POWER ENTRANCE ASSEMBLY (SHEET 6 OF 7)  
F-99



DETAIL (F)

FIGURE 31. POWER ENTRANCE ASSEMBLY (SHEET 7 OF 7)  
F-100

## SECTION II

TM 5-6675-331-14&amp;P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
				<b>GROUP 02 SHELTER ASSEMBLY</b>	
				<b>FIG. 31 POWER ENTRANCE ASSEMBLY</b>	
1	XDOOO	97403	13229E7393	POWER ENTRANCE ASSY .....	1
2	XDOZZ	97403	13229E7435	POWER ENTRANCE BOX SEE DETAIL B .....	1
3	XDOZZ	96906	MS90558C32413P	CONNECTOR,RECEPTACL SEE DETAIL F.....	1
4	XDOZZ	96906	MS3402D16-10S	CONNECTOR,RECEPTACL SEE DETAIL F.....	2
5	XDOZZ	5R061	KC-1	CONNECTOR,GROUNDING SEE DETAIL E.....	1
6	PAOZZ	81349	PB08NA01	POST,BINDING,ELECTR SEE DETAIL C, .....	2
7	PAOZZ	81349	PB08NA02	POST,BINDING,ELECTR SEE DETAIL C, .....	2
8	XDOZZ	97403	13229E7406-1	BRACKETS,GROUNDING SEE DETAIL E .....	1
9	XDOZZ	97403	13229E7406-2	BRACKETS,GROUNDING SEE DETAIL E .....	1
10	XDOZZ	39428	98813A029	ROD,THREADED, .250-2 SEE DETAIL E.....	1
11	XDOZZ	39428	90061A017	WASHER,SHOULDER,INS SEE DETAIL E .....	1
12	XDOZZ	96906	MS25082-84	NUT,HEX,ELECTRICAL SEE DETAIL E .....	4
13	XDOZZ	78553	P116-447-5-24A	STUD,BALL SEE DETAIL C .....	2
14	XDOZZ	97403	13229E7439	COVER,REAR POWER SEE DETAIL D .....	1
15	XDOZZ	39428	1104A26	FACING,COUNTER,PLAI SEE DETAIL A.....	1
16	XDOZZ	19738	4871-0409	RIVET,BLIND,UNIV HD SEE DETAIL B.....	32
17	XDOZZ	19738	4871-0411	RIVET,BLIND,UNIV HD SEE DETAIL A, .....	15
18	XDOZZ	39428	92146A011	WASHER,LOCK HELICAL SEE DETAIL A, .....	17
19	XDOZZ	39428	91772A242	SCREW,MACHINE PAN SEE DETAIL D .....	12
20	XDOZZ	39428	92470A110	SCREW,FLAT CSK HD SEE DETAIL A.....	8
21	XDOZZ	39428	8568K24	SHEET, .250THK,FIRM SEE DETAIL A.....	1
22	XDOZZ	96906	MS51007-5	GASKET SEE DETAIL F .....	2
23	XDOZZ	39428	91772A113	SCREW,MACH PAN HD SEE DETAIL F.....	5
24	XDOZZ	39428	98019A125	WASHER,FLAT .190NOM SEE DETAIL F .....	4
25	XDOZZ	39428	90730A011	NUT,HEX .190-24 UNC SEE DETAIL A, .....	5
26	XDOZZ	39428	91772A113	SCREW,MACH PAN HD SEE DETAIL A, F .....	8
27	XDOZZ	39428	98019A109	WASHER,FLAT DIA .11 SEE DETAIL F .....	8
28	XDOZZ	39428	92146A005	WASHER,LOCK HELICAL SEE DETAIL F.....	8
29	XDOZZ	39428	90730A005	NUT,HEX .112-40 UNC SEE DETAIL F .....	8
30	XDOZZ	71286	40R12-1	RECEPTACLE,TURNLOCKSEE DETAIL A.....	2
31	XDOZZ	39428	92141A006	WASHER,FLAT .138 NO SEE DETAIL C.....	2
32	XDOZZ	97403	40547-6	STUD ASSEMBLY,1/4TU SEE DETAIL A .....	2
33	XDOZZ	71286	40G16-100S	GROMMET SEE DETAIL B .....	2
34	PADZZ	19738	1010-1020	ROD,STEEL SEE DETAIL A .....	1
35	XDOZZ	39428	92470A190	SCREW,SELF TAPPING SEE DETAIL F.....	4
36	PAOZZ	74545	GF-5362-GY	RECEPTACLE,GROUND F SEE DETAIL E, .....	2
37	XDOZZ	39428	8568K13	SHEET, RUBBER, .125 SEE DETAIL D.....	1
38	XAOZZ	39428	5052H32	SHEET METAL SEE DETAIL D .....	1
39	XAOZZ	39428	6061-76	SHEET METAL SEE DETAIL F .....	1

END OF FIGURE

1  
2 THRU 6

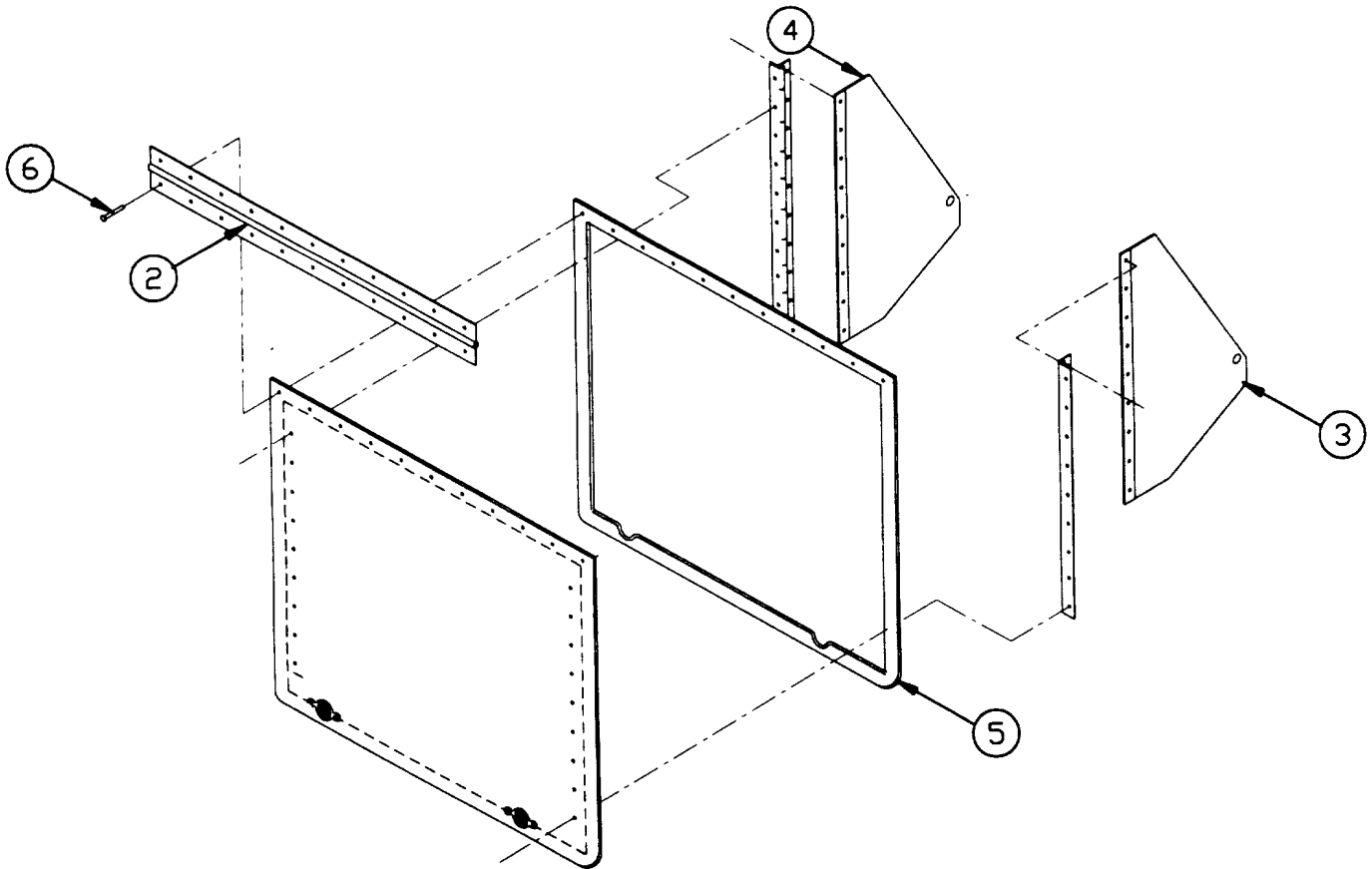


FIGURE 32. COVER, POWER ENTRANCE  
F-102

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
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GROUP 02 SHELTER ASSEMBLY

FIG. 32 COVER, POWER ENTRANCE

1	XDOOO	97403	13229E7437	COVER, PWR ENTRANCE .....	1
2	XDOZZ	96906	MS35825-11A	HINGE, BUTT .....	1
3	XDOZZ	97403	13229E7438-2	FLAP, COVER, PWR ENTR .....	1
4	XDOZZ	97403	13229E7438-1	FLAP, COVER, PWR ENTR .....	1
5	XDOZZ	39428	8568K13	SHEET, RUBBER, .125 .....	4
6	XDOZZ	96906	MS20426AD-6	RIVET, SOLID, FLATHD .....	29

END OF FIGURE

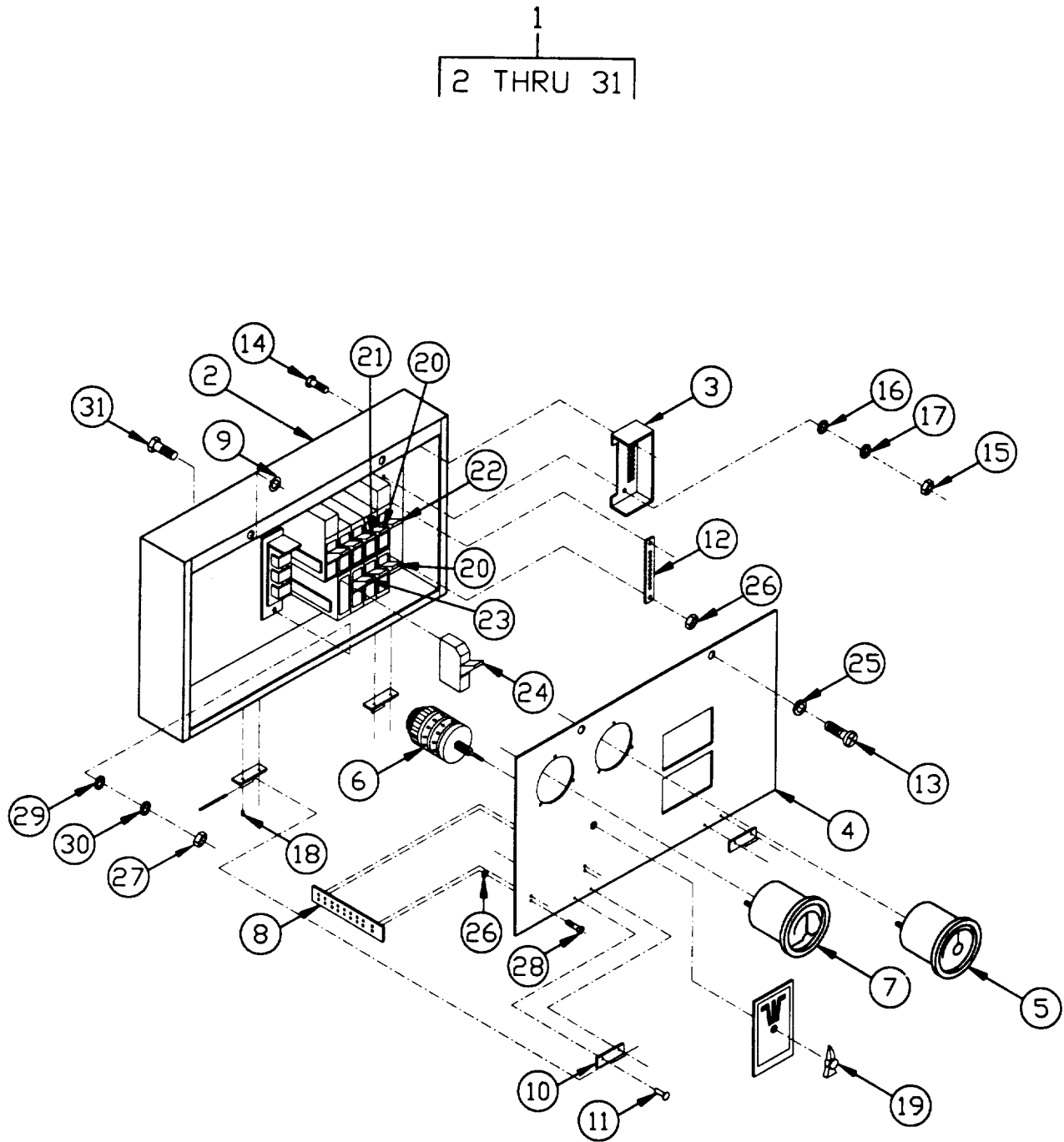


FIGURE 33. POWER DISTRIBUTION BOX

## SECTION II

TM 5-6675-331-14&amp;P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
<b>GROUP 02 SHELTER ASSEMBLY</b>					
<b>FIG. 33 POWER DISTRIBUTION BOX</b>					
1	XDOOO	97403	13229E7394	POWER DISTR BOX .....	1
2	XDOZZ	97403	13229E7442	PWR DSTRBTN BX ASSY .....	1
3	XDOZZ	05684	Q0412L125, SERIES	LOAD CENTER, 120VAC, .....	1
4	XDOZZ	97403	13229E7443	COVER, PWR DIST BOX .....	1
5	XDOZZ	25497	17993	METER, ELECTRICAL .....	1
6	XDOZZ	82121	31904LT	SWITCH, ROTARY .....	1
7	XDOZZ	25497	08470	VOLTMETER, 0-150 VAC .....	1
8	XDOZZ	81349	37TB-10	TERMINAL BOARD .....	1
9	XDOZZ	94222	12-1105-14	RECEPTACLE .....	2
10	XDOZZ	OFCK2	LJ-182432-B	HINGE, LOOSE JOINT .....	2
11	XDOZZ	96906	MS20426A4-6	RIVET, SOLID .....	4
12	XDOZZ	05684	PK9GTA	GROUND BAR .....	1
13	XDOZZ	94222	12-11-205-11	SCREW, PANEL FASTENE .....	2
14	XDOZZ	96906	MS35307-306	SCREW, CAP, HEXAGON H .....	2
15	XDOZZ	96906	MS35649-2252	NUT, PLAIN, HEXAGON .....	2
16	XDOZZ	96906	MS15795-810	WASHER, FLAT .....	2
17	XDOZZ	96906	MS35338-139	WASHER, LOCK.....	2
18	XDOZZ	19738	1601-0410	RIVET, BLIND .....	4
19	XDOZZ	82121	03029-1	KNOB .....	1
20	PAOZZ	81348	WC375/01-002	CIRCUIT BREAKER .....	4
21	PAOZZ	56303	Q0T1515	CIRCUIT BREAKER .....	2
22	PAOZZ	81487	Q0120GFI	CIRCUIT BREAKER .....	2
23	PAOZZ	81348	WC375/01-007	CIRCUIT BREAKER .....	1
24	PAOZZ	81348	WC375/01-003	CIRCUIT BREAKER .....	1
25	XDOZZ	94222	12-11014-26	RETAINER .....	2
26	XDOZZ	96906	MS21044-N06	NUT, SELF-LOCKING, .1 .....	6
27	XDOZZ	96906	MS35649-242	NUT, PLAIN, HEXAGON .....	1
28	XDOZZ	96906	MS35206-232	SCREW, MACHINE .....	4
29	XDOZZ	96906	MS27183-4	WASHER, FLAT .....	4
30	XDOZZ	96906	MS35338-40	WASHER, LOCK .....	4
31	XDOZZ	96906	MS35190-225	SCREW, MACHINE .....	4

END OF FIGURE

F-105/(106 Blank)

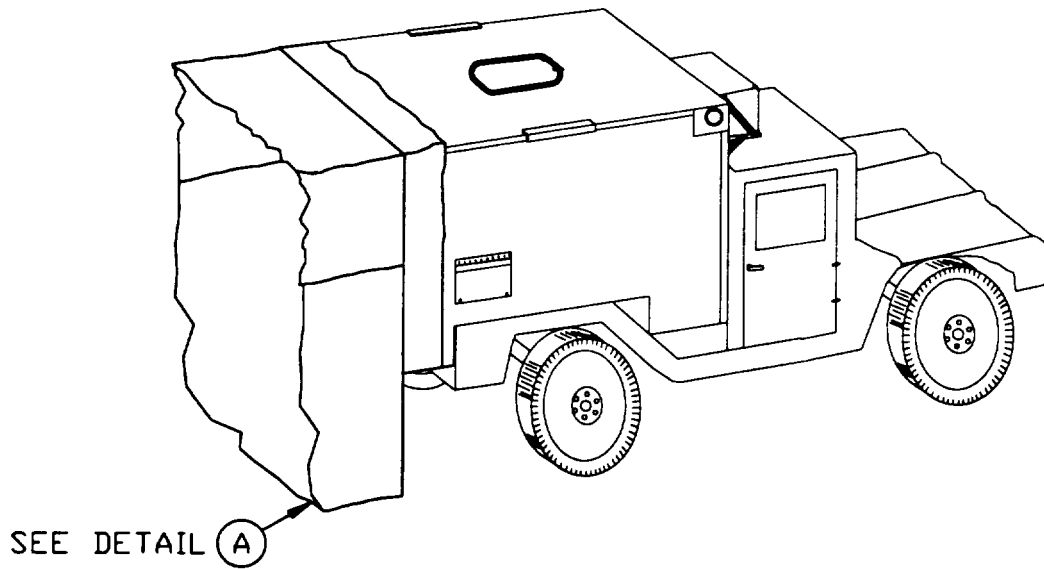
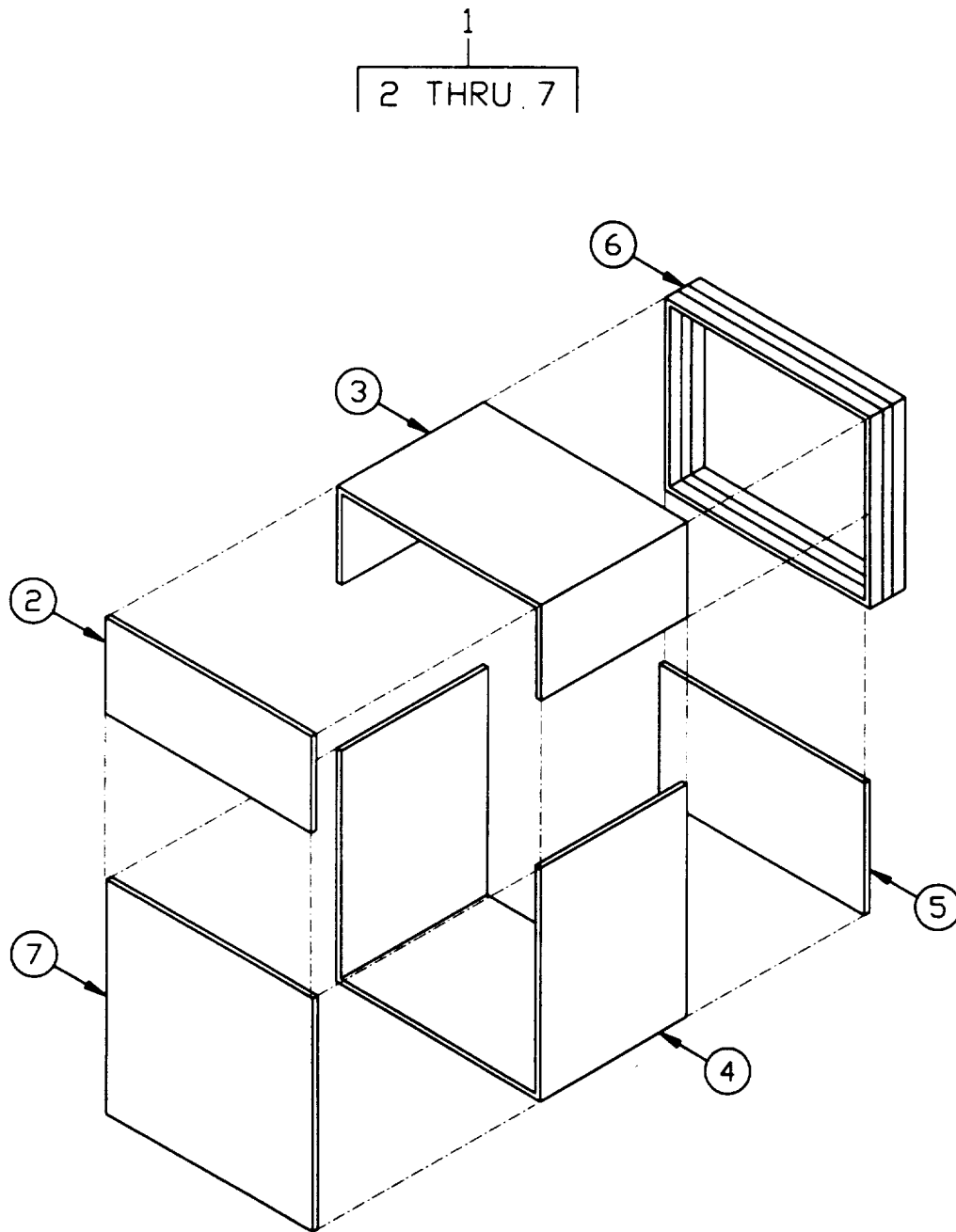


FIGURE 34. BOOT (SHEET 1 OF 2)

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DETAIL (A)

FIGURE 34. BOOT (SHEET 2 OF 2)

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
-------------------	--------------------	--------------	-----------------------	---	------------

GROUP 02 SHELTER ASSEMBLY

FIG. 34 BOOT

1	XDOOO	97403	13229E7461	BOOT .....	1
2	XDOZZ	97403	13229E7523	FACE WALL, UPPER SEE DETAIL A .....	1
3	XDOZZ	97403	13229E7524	ROOF/UPPER WALL, OUT SEE DETAIL A.....	1
4	XDOZZ	97403	13229E7526	FLOOR/LOWER WALL, IN SEE DETAIL A. ....	1
5	XDOZZ	97403	13229E7528	BACK WALL SEE DETAIL A .....	1
6	XDOZZ	97403	13229E7530	BELLY BAND, OUTSIDE SEE DETAIL A.....	1
7	XDOZZ	97403	13229E7531	SICPS WALL SEE DETAIL A .....	1

END OF FIGURE

F-109

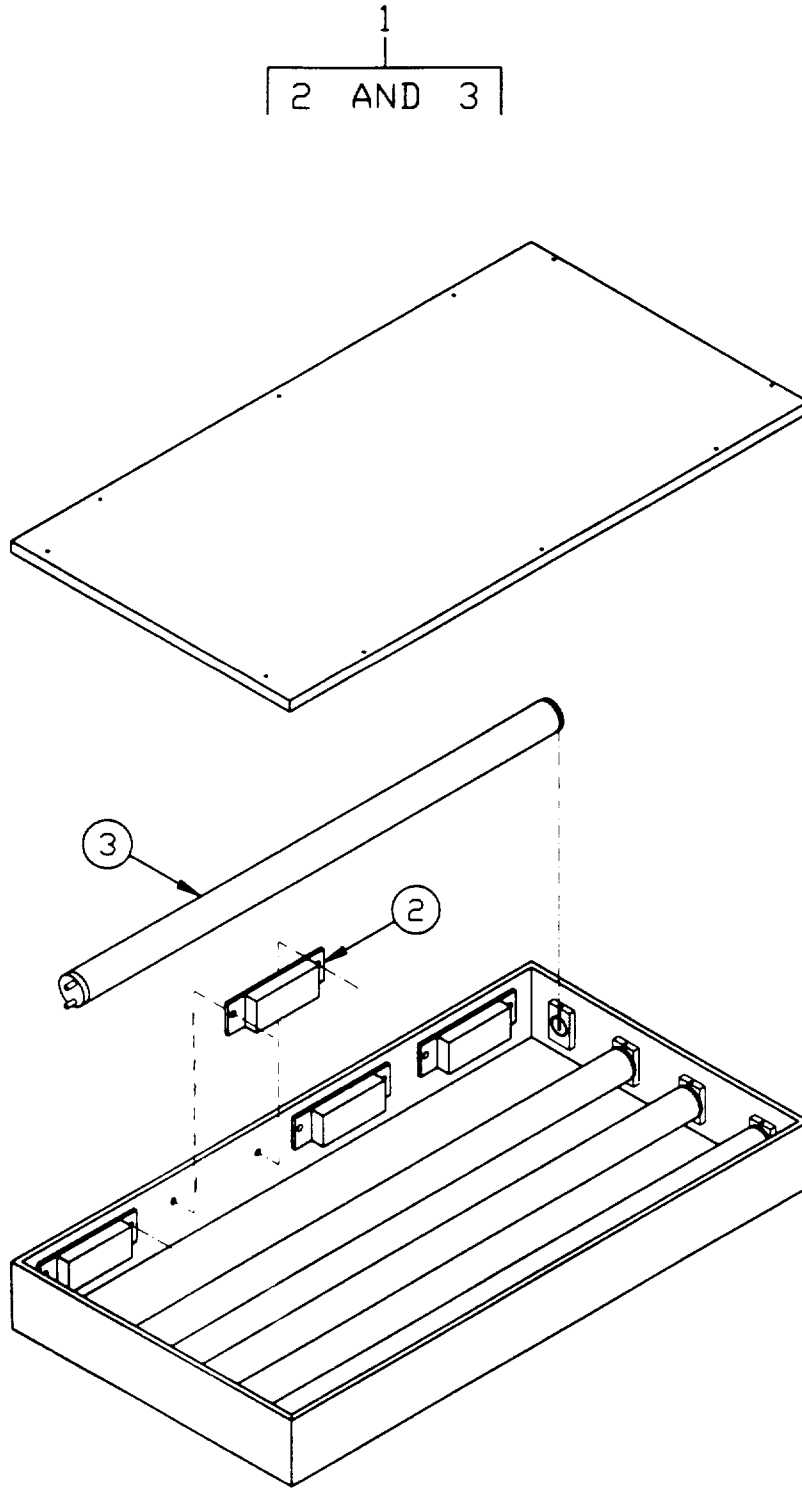


FIGURE 35. LIGHT, PORTABLE DRAFTING

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
-------------------	--------------------	--------------	-----------------------	---	------------

GROUP 02 SHELTER ASSEMBLY

FIG. 35 LIGHT, PORTABLE DRAFTING

1	PAOOO	15889	2436-46	LIGHT, PORTABLE DRFT .....	1
2	PAOZZ	15889	RSL 40P	BALLAST .....	4
3	PAOZZ	15889	F30T12/C50/RS	LIGHT TUBE .....	4

END OF FIGURE

F-111

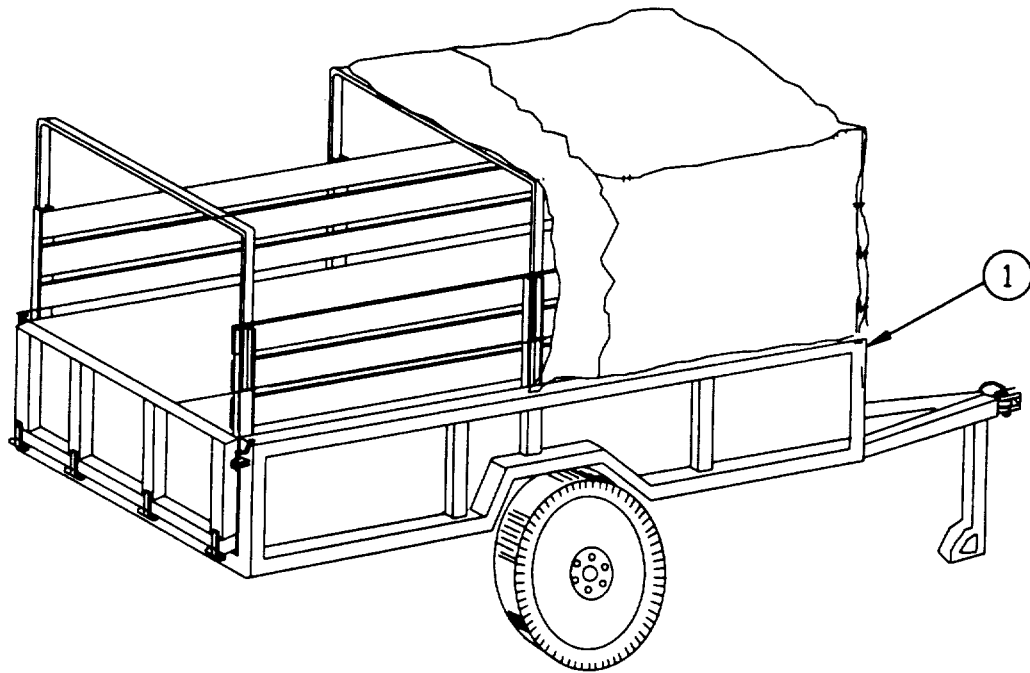


FIGURE 36. TRAILER

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SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
				GROUP 03 TRAILER	
				FIG. 36 TRAILER	
1	PDODD	19207	M101A2	TRAILER, CARGO.....	1
				END OF FIGURE	

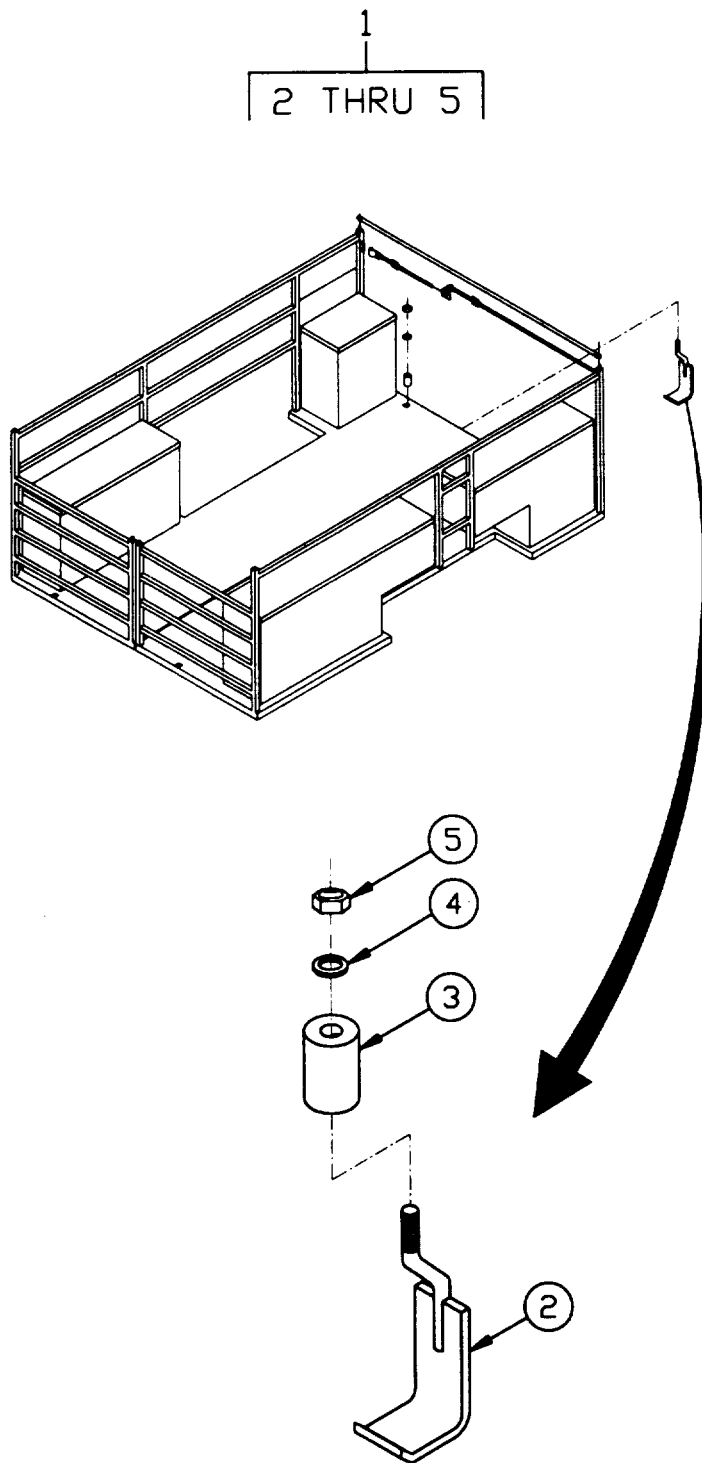


FIGURE 37. TRAILER FRAME ASSEMBLY

**SECTION II**

**TM 5-6675-331-14&P**

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
-------------------	--------------------	--------------	-----------------------	---	------------

**GROUP 03 TRAILER**

**FIG. 37 TRAILER FRAME ASSEMBLY**

1	XDOOO	97403	13229E7374	TRAILER FRAME ASSY .....	1
2	XDOZZ	97403	13229E7458	J HOOK, TRAILER .....	4
3	XDOZZ	97403	13229E7457	SPACER, "J" HOOK, TRLR .....	1
4	XDOZZ	96906	MS15795-815	WASHER, FLAT .....	4
5	XDOZZ	96906	MS51922-18	NUT, SELF-LOCKING, HE .....	4

END OF FIGURE

**F-115/(116 Blank)**



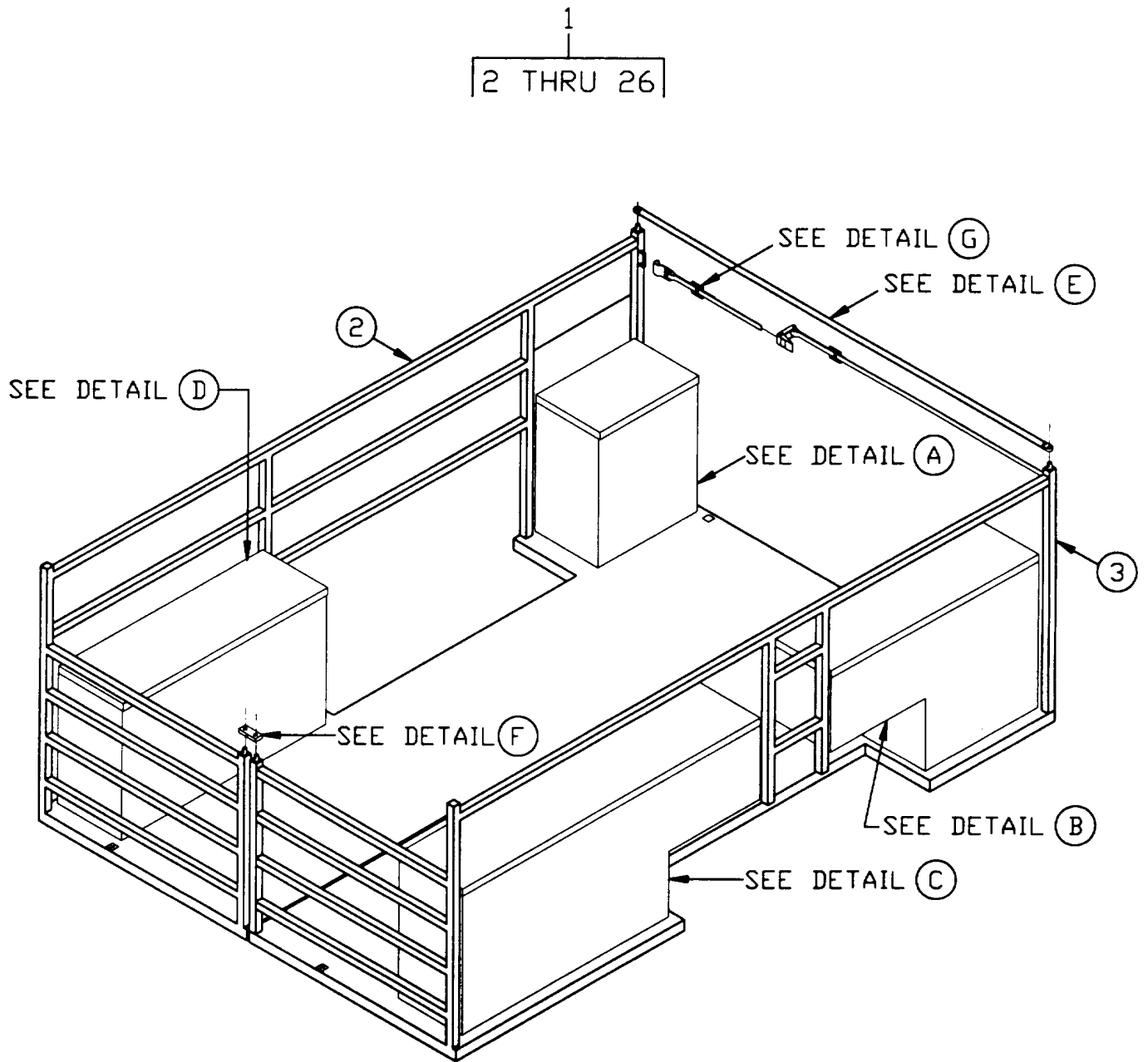
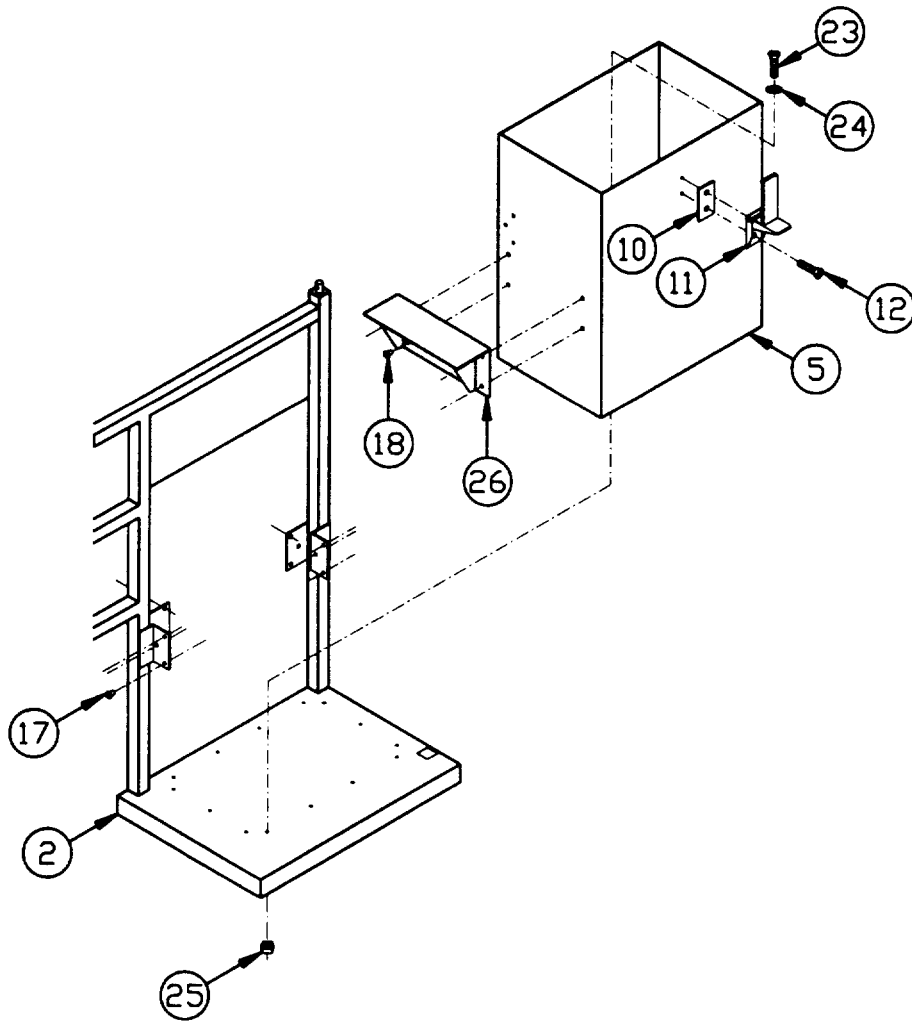
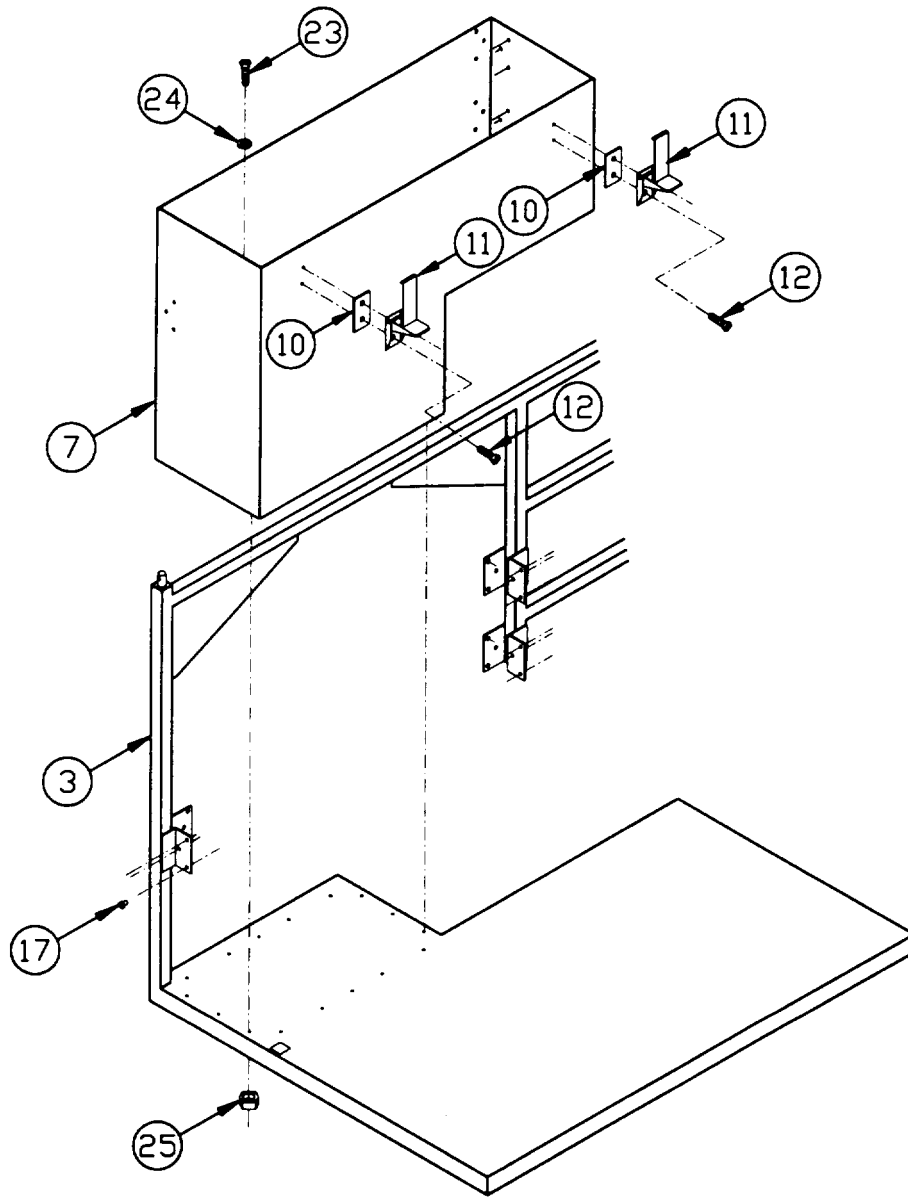


FIGURE 38. TRAILER FRAME ASSEMBLY (SHEET 1 OF 8)



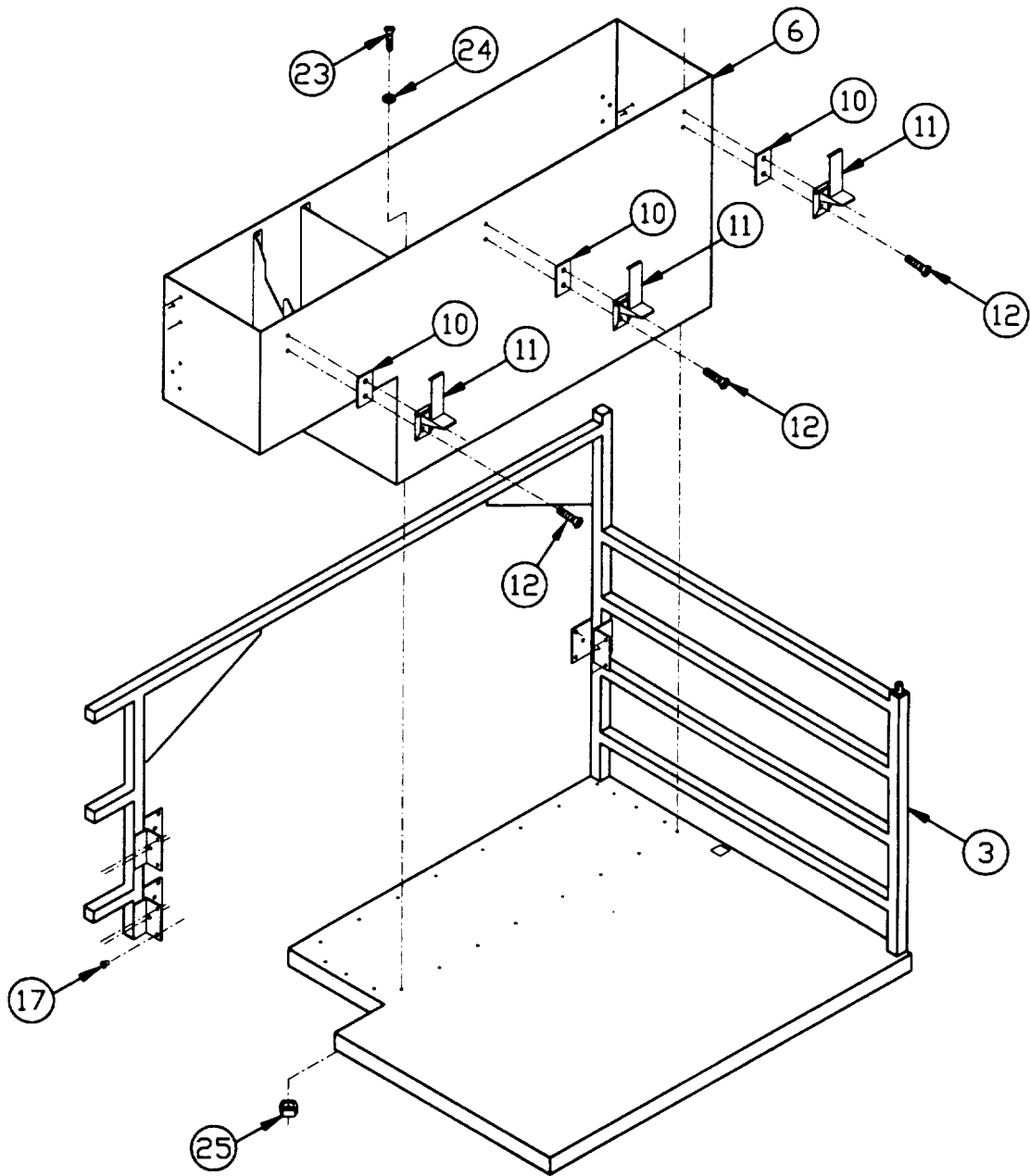
DETAIL (A)

FIGURE 38. TRAILER FRAME ASSEMBLY (SHEET 2 OF 8)



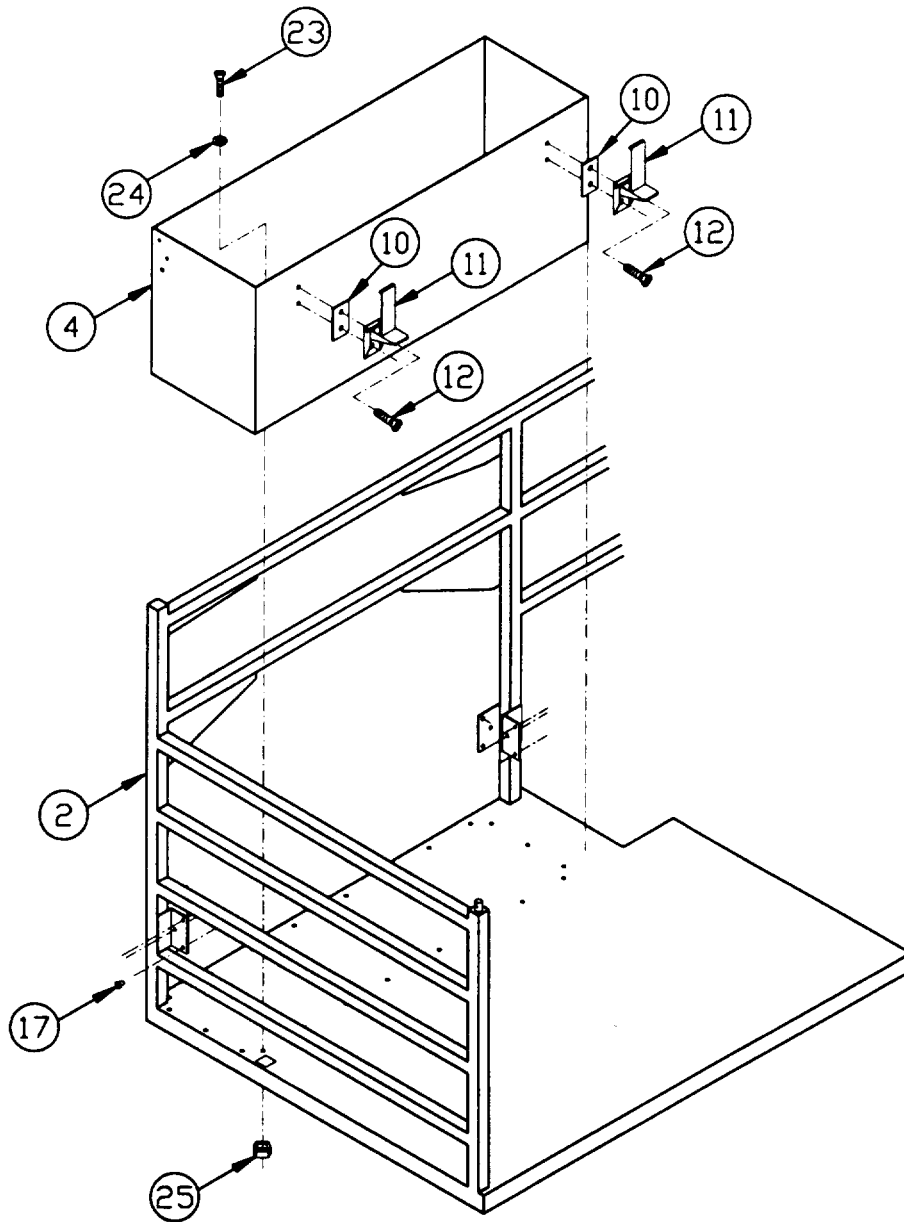
DETAIL (B)

FIGURE 38. TRAILER FRAME ASSEMBLY (SHEET 3 OF 8)



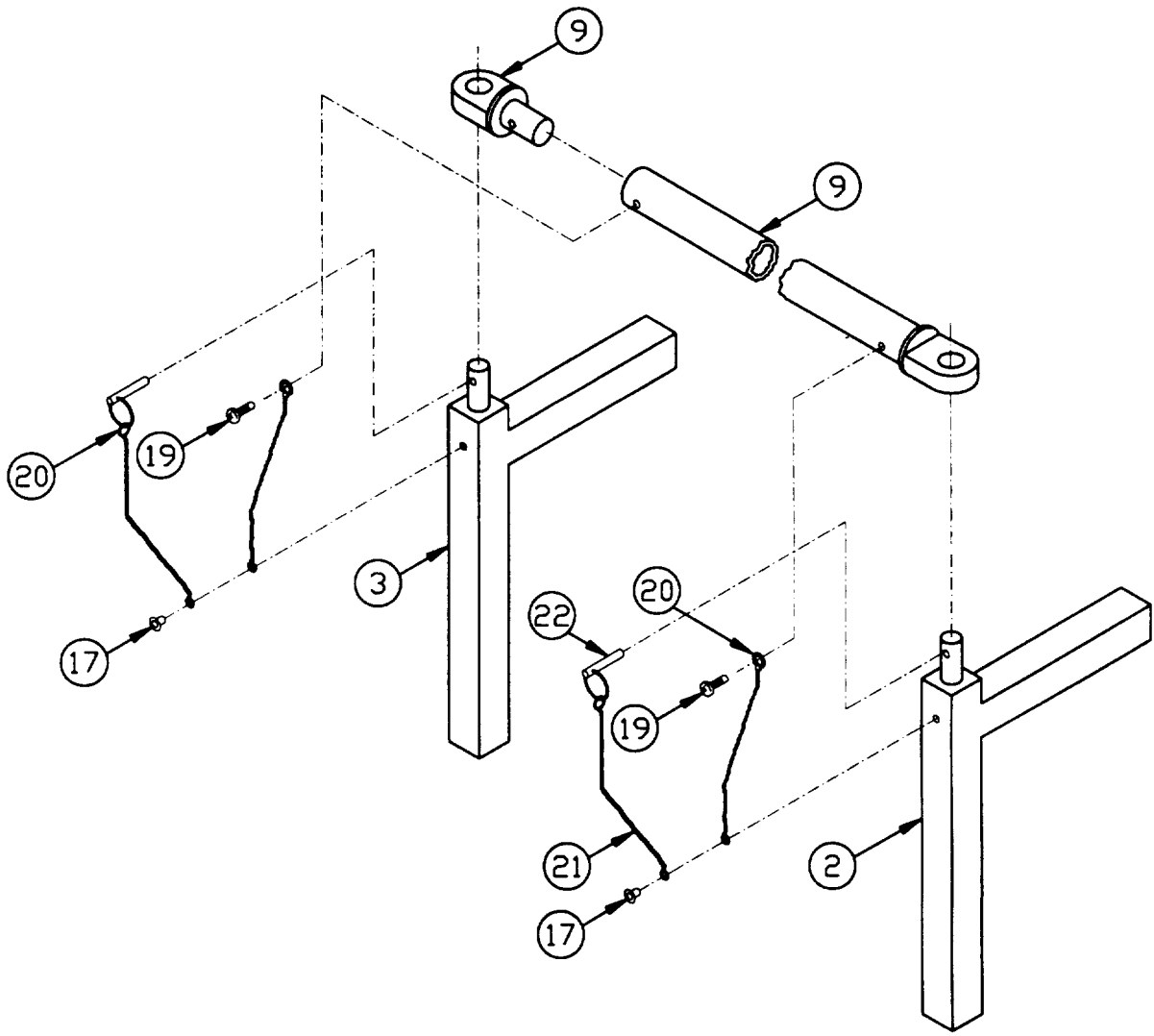
DETAIL (C)

FIGURE 38. TRAILER FRAME ASSEMBLY (SHEET 4 OF 8)



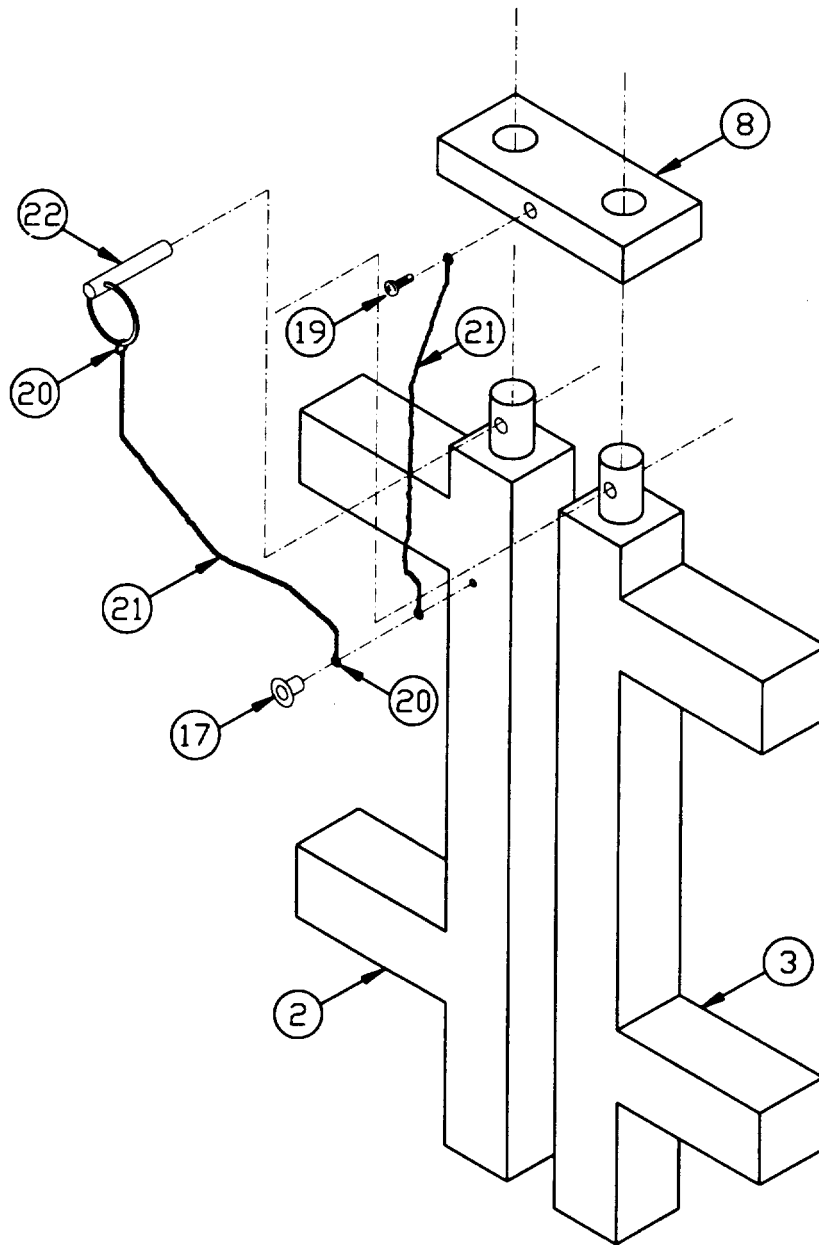
DETAIL D

FIGURE 38. TRAILER FRAME ASSEMBLY (SHEET 5 OF 8)



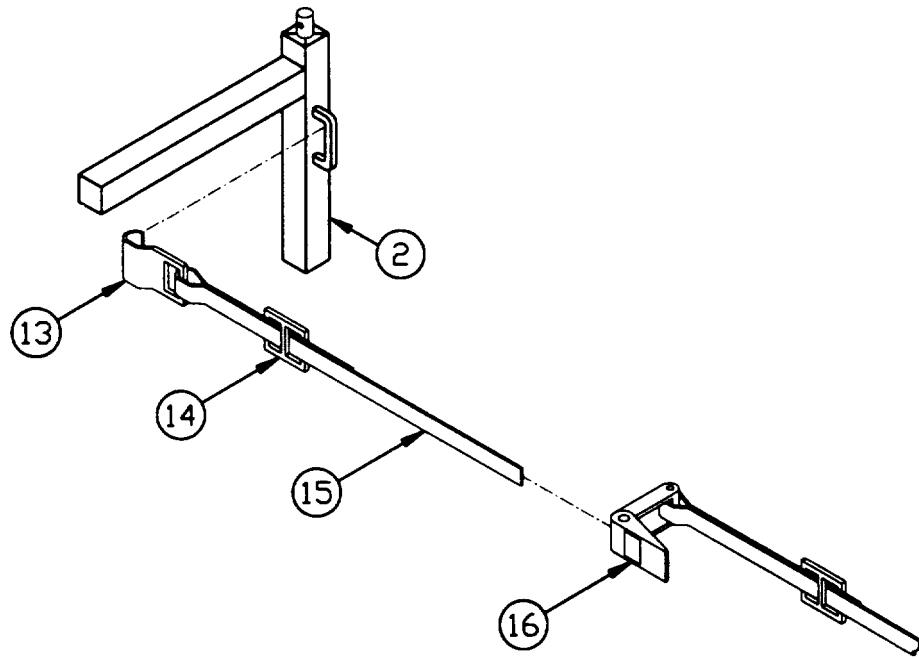
DETAIL (E)

FIGURE 38. TRAILER FRAME ASSEMBLY (SHEET 6 OF 8)



DETAIL (F)

FIGURE 38. TRAILER FRAME ASSEMBLY (SHEET 7 OF 8)



DETAIL (G)

FIGURE 38. TRAILER FRAME ASSEMBLY (SHEET 8 OF 8)

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## SECTION II

TM 5-6675-331-14&amp;P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
<b>GROUP 03 TRAILER</b>					
<b>FIG. 38 TRAILER FRAME ASSEMBLY</b>					
1	XDOOO	97403	13229E7444	TRAILER FRAME ASSY.....	1
2	XDOZZ	97403	13229E7445	FRAME, CURBSIDE SEE DETAIL A, D, E,.....	1
				F, G .....	
3	XDOZZ	97403	13229E7446	FRAME, ROADSIDE SEE DETAIL B, C, E, F.....	1
4	XDOZZ	97403	13229E7447	BOX, CANNISTER, CURB SEE DETAIL D .....	1
5	XDOZZ	97403	13229E7448	BOX, AUXILARY, CURB SEE DETAIL A .....	1
6	XDOZZ	97403	13229E7451	BOX, DEVELOPER SEE DETAIL C .....	1
7	XDOZZ	97403	13229E7453	BOX, AUXILARY, ROAD SEE DETAIL B.....	1
8	XDOZZ	97403	13229E7454	STAY, FORWARD SEE DETAIL F.....	1
9	XDOZZ	97403	13229E7455	STAY, REAR, TUBE SEE DETAIL E.....	1
10	XDOZZ	97403	13229E7456	SPACER, LATCH SEE DETAIL A, B, C, D.....	8
11	XDOZZ	94222	97-50-220-12	LATCH, OVER CENT. SEE DETAIL A, B,.....	8
				C, D .....	
12	XDOZZ	96906	MS51957-45	SCREW, MACHINE SEE DETAIL A, B, C, D .....	16
13	XDOZZ	39428	3699T14	STRAP, QUICK DISCONN SEE DETAIL G.....	6
14	XDOZZ	39428	3699T15	PLATE, THREADING SEE DETAIL G.....	18
15	XDOZZ	39428	3699T16	WEBBING, 1 WIDE SEE DETAIL G.....	1
16	XDOZZ	39428	3699TII	BUCKLE SEE DETAIL G .....	6
17	XDOZZ	19738	1601-0613	RIVET, BLIND SEE DETAIL A, B, C, D, E,.....	64
				F .....	
18	XDOZZ	96906	MS20426AD6-7	RIVET, SOLID SEE DETAIL A.....	23
19	XDOZZ	96906	MS51958-63	SCREW, MACHINE SEE DETAIL E, F .....	2
20	XDOZZ	39428	3606T33	COUPLING, END #10 (. 1 SEE DETAIL E, .....	12
				F .....	
21	XDOZZ	39428	3606T19	CHAIN, BEAD #10 (. 187 SEE DETAIL E,.....	1
				F .....	
22	XDOZZ	39428	98320AD07	PIN, QUICK RELEASE SEE DETAIL E, F.....	4
23	XDOZZ	96906	MS51958-65	SCREW, MACHINE SEE DETAIL A, B, C, D.....	74
24	XDOZZ	96906	MS15795-846	WASHER, FLAT SEE DETAIL A, B, C, D.....	74
25	XDOZZ	96906	MS21044-C3	NUT, SELF-LOCKING, HE SEE DETAIL A, .....	74
				B, C, D.....	
26	PADZZ	97403	13229E7521	BRACKET, TENT LIGHT SEE DETAIL A.....	1

END OF FIGURE

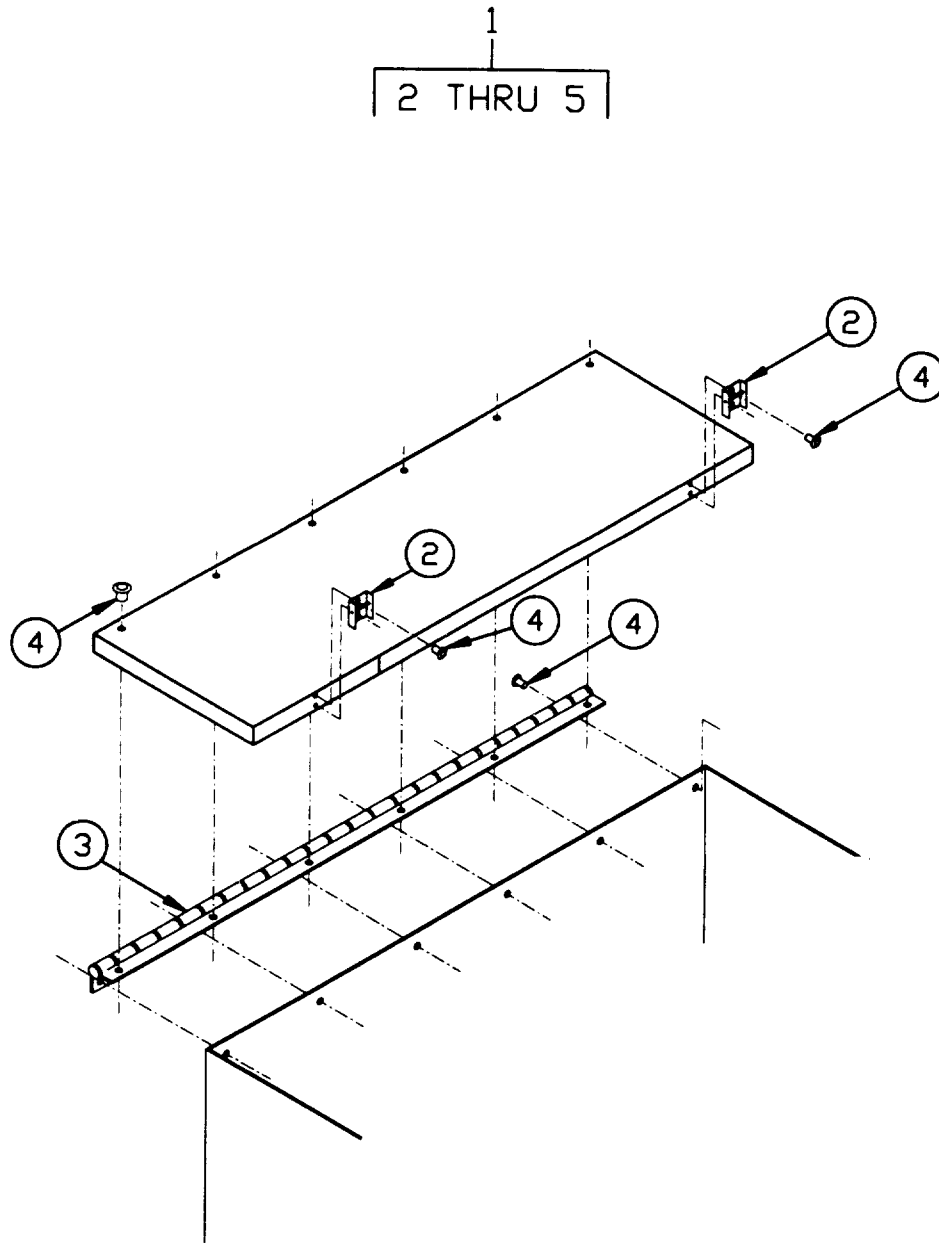


FIGURE 39. COVER, CANNISITER

**SECTION II**

**TM 5-6675-331-14&P**

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
<b>GROUP 03 TRAILER</b>					
<b>FIG. 39 COVER, CANNISTER</b>					
1XDOOO	97403	13229E7449	COVER, CANNISTER .....	2	
2XDOZZ	94222	97-50-221-12	CATCH, DRAW LATCH .....	4	
3XDOZZ	96906	MS20257-C43225	HINGE, CONT .062X1.5.....	2	
4XDOZZ	96906	MS20426AD6-7	RIVET, SOLID .....	32	

END OF FIGURE

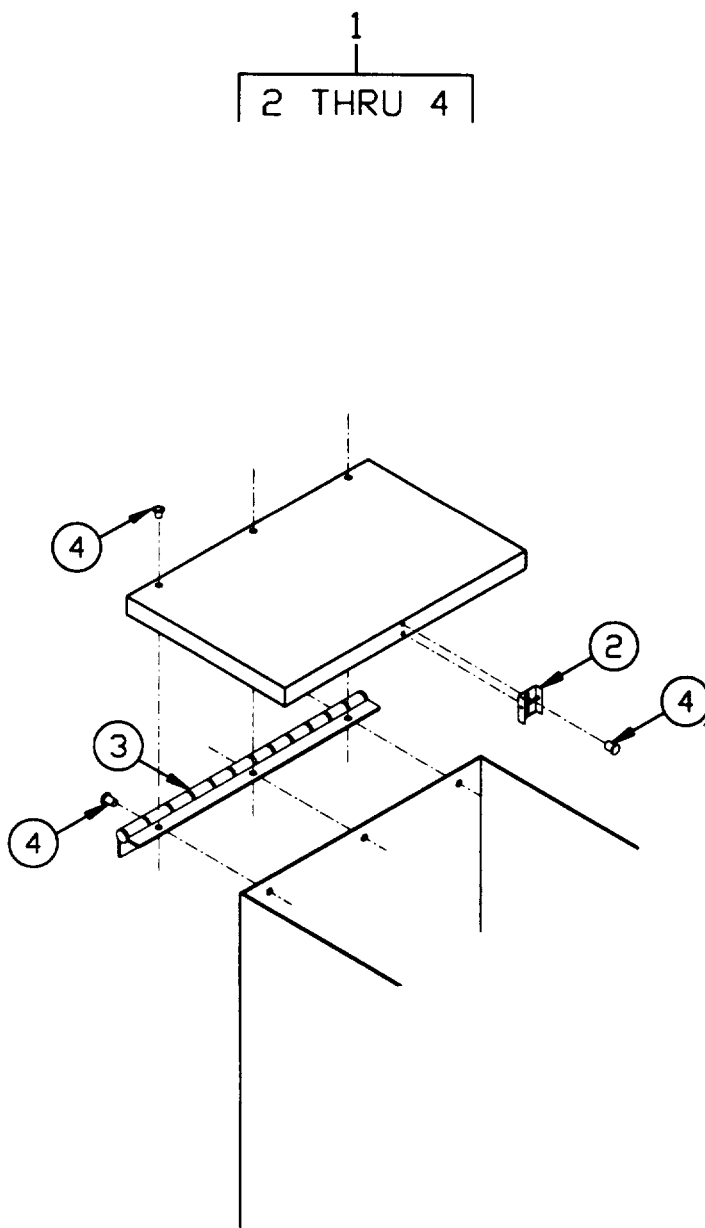


FIGURE 40. COVER, CURBSIDE AUXILIARY BOX

**SECTION II**

**TM 5-6675-331-14&P**

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6)
				<b>GROUP 03 TRAILER</b>	
				<b>FIG. 40 COVER, CURBSIDE AUXILIARY BOX</b>	
1	XDOOO	97403	13229E7450	COVER, CURBSIDE AUX .....	1
2	XDOZZ	94222	97-50-221-12	CATCH, DRAW LATCH.....	1
3	XDOZZ	96906	MS20257-C4	HINGE, CONT .062X1.5 .....	1
4	XDOZZ	96906	MS20426AD6-7	RIVET, SOLID.....	8

END OF FIGURE

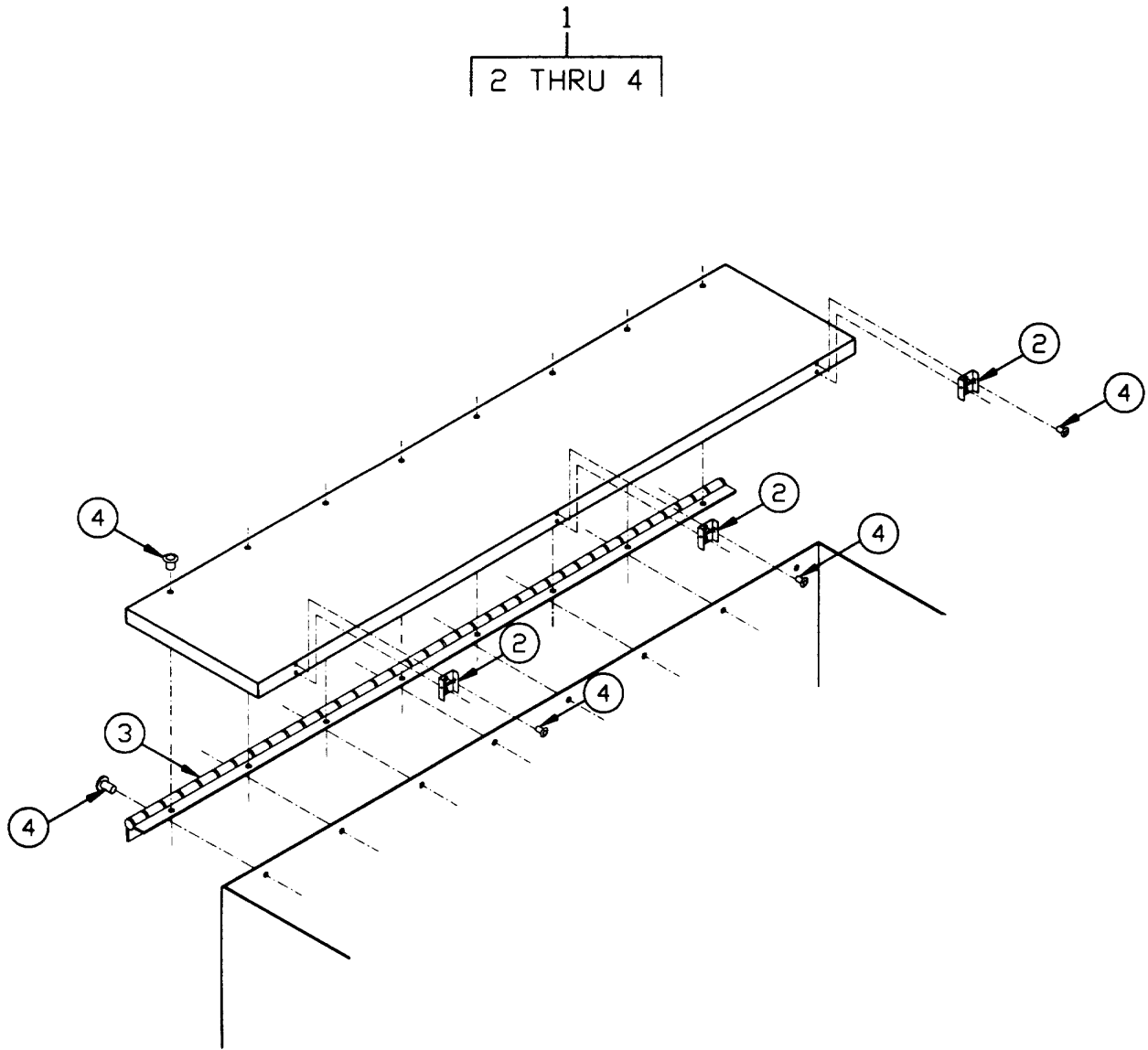


FIGURE 41. COVER, DEVELOPER BOX

**SECTION II**

**TM 5-6675-331-14&P**

(1)	(2)	(3)	(4)	(5)	(6)
ITEM	SMR	CAGEC	PART	DESCRIPTION AND USABLE ON CODES(UOC)	
NO	CODE	QTY	NUMBER		

**GROUP 3 TRAILER**

**FIG. 41 COVER, DEVELOPER BOX**

1	XDOOO	97403	13229E7452	COVER, DEVELOPER BOX.....	1
2	XDOZZ	94222	97-50-221-12	CATCH, DRAW LATCH.....	3
3	XDOZZ	96906	MS20257-C43225	HINGE, CONT .062X1.5 .....	1
4	XDOZZ	96906	MS20426AD6-7	RIVET, SOLID.....	11

END OF FIGURE

1  
2 THRU 36

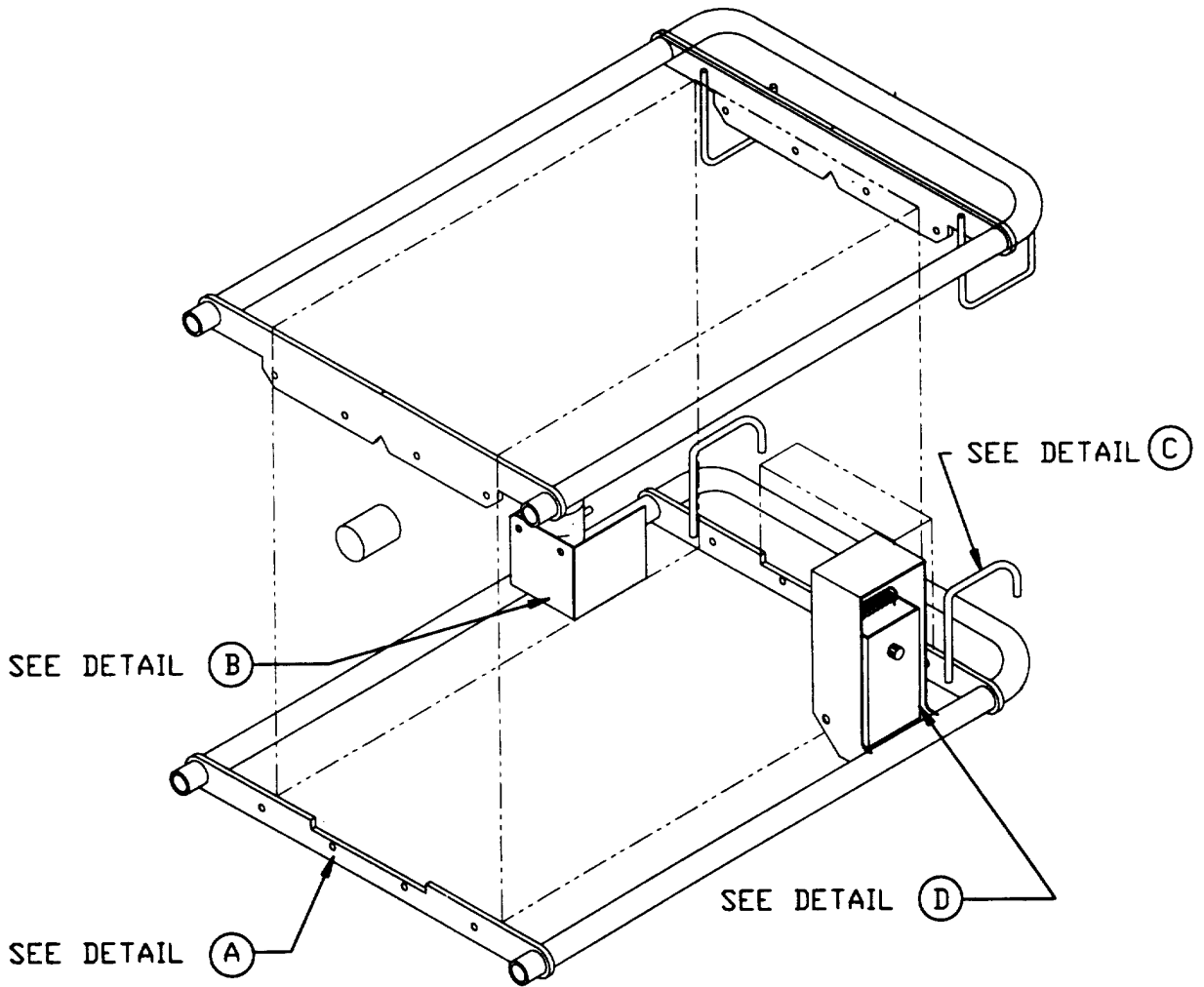
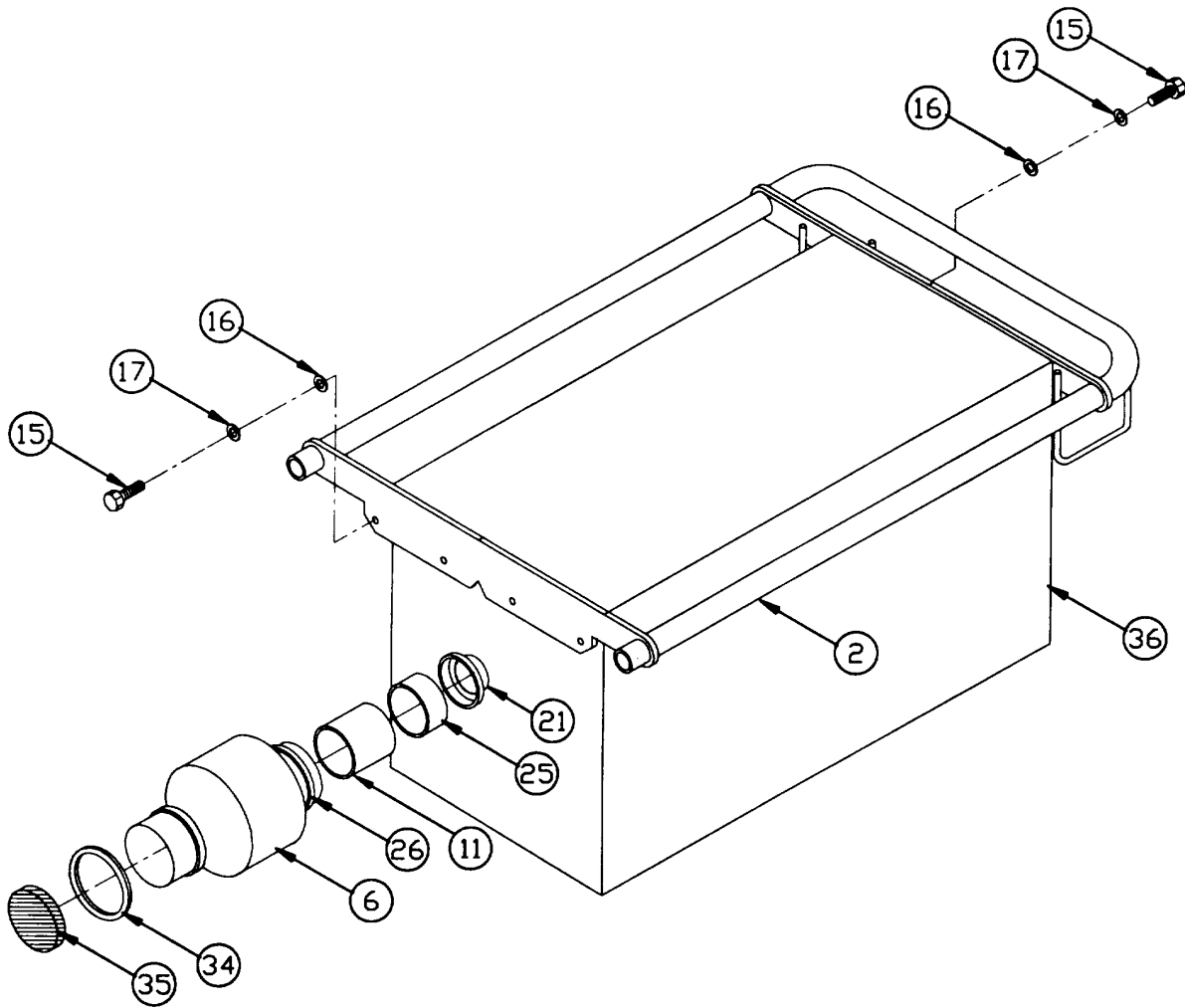


FIGURE 42. MULTIFUEL SPACE HEATER (SHEET 1 OF 5)





DETAIL (A)

FIGURE 42. MULTIFUEL SPACE HEATER (SHEET 2 OF 5)

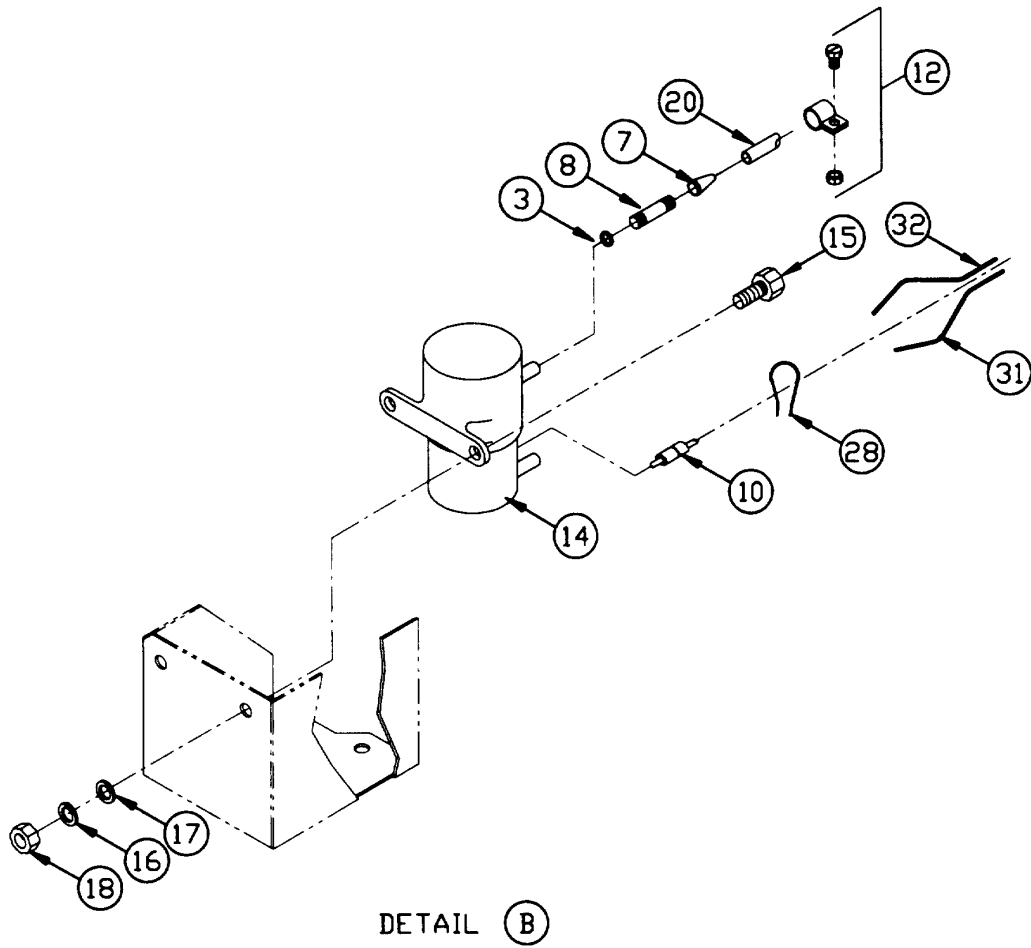


FIGURE 42. MULTIFUEL SPACE HEATER (SHEET 3 OF 5)

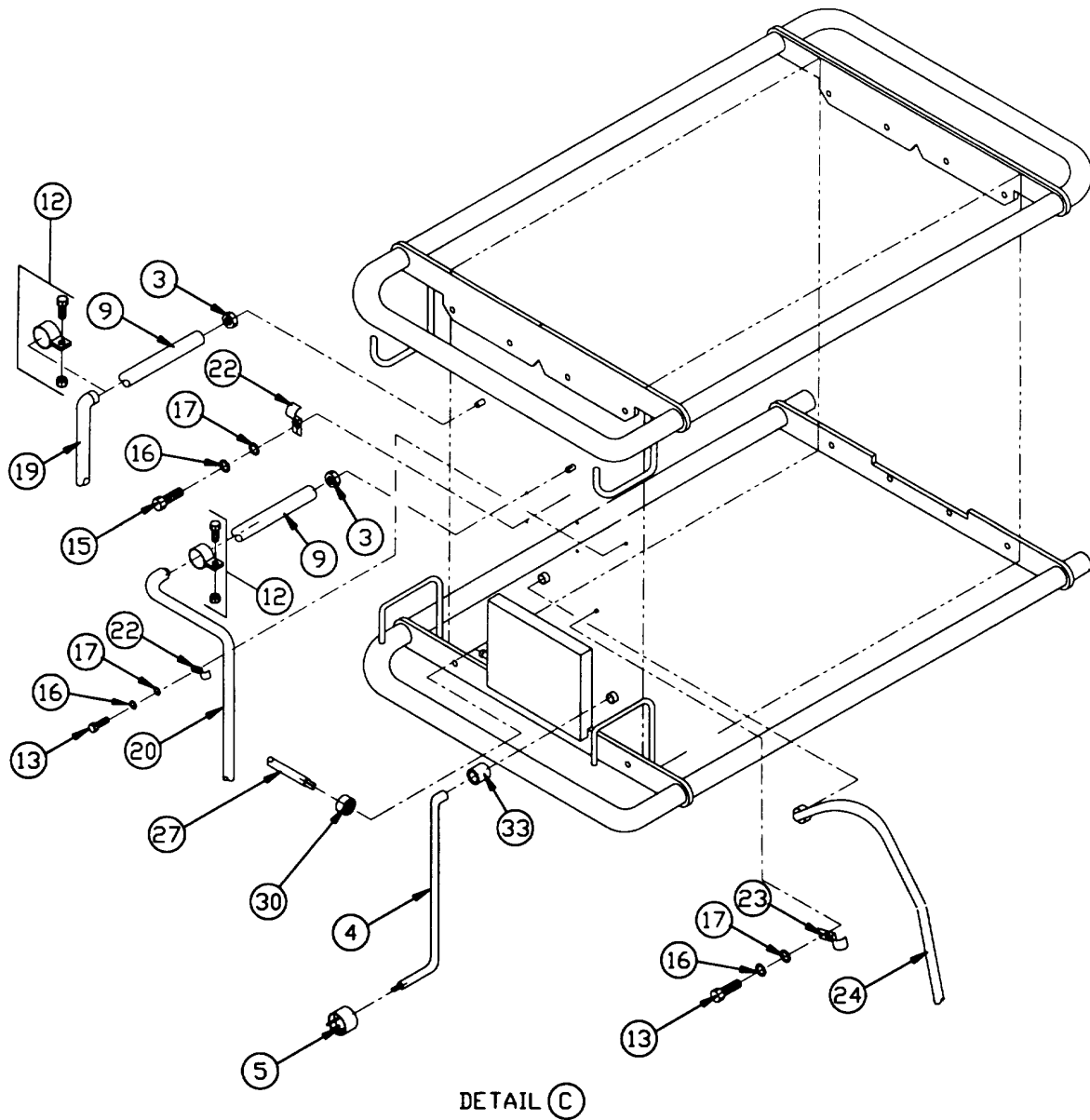
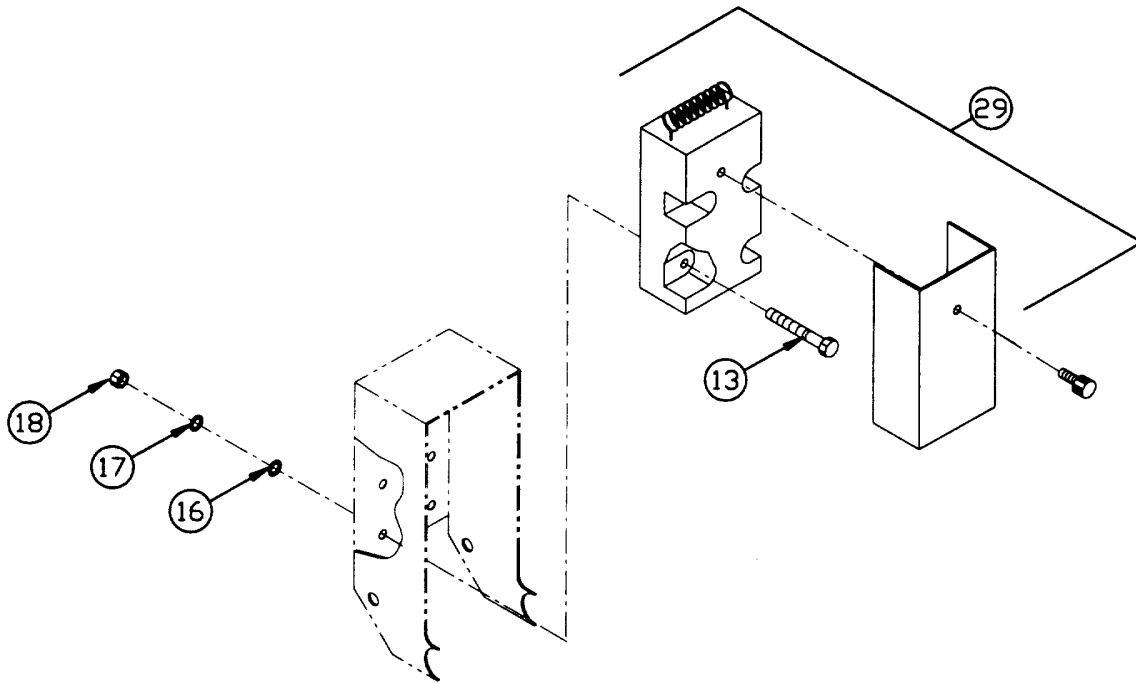


FIGURE 42. MULTIFUEL SPACE HEATER (SHEET 4 OF 5)



DETAIL (D)

FIGURE 42. MULTIFUEL SPACER HEATER (SHEET 5 OF 5)

## SECTION II

TM 5-6675-331-14&amp;P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6)
				<b>GROUP 04    MULTIFUEL SPACE HEATER</b>	
				<b>FIG. 42    MULTIFUEL SPACE HEATER</b>	
1	XDOOO	97403	13229E7459	HEATER ADAPTER ASSY SEE TM5-4520-..... 253-23P FOR PARTS BREAKDOWN.....	1
2	XDOZZ	97403	13229E7516	HANDLE ASSY, TOP SEE DETAIL A .....	1
3	XDOZZ	39428	5061K12	NUT, TUBE COUPLING SEE DETAIL B, C.....	4
4	XDOZZ	39428	7080K44	CABLE, 12-3 TYPE SO SEE DETAIL C .....	1
5	XDOZZ	39428	7462KII	PLUG, HOSPITAL TYPE SEE DETAIL C.....	1
6	XDOZZ	OJYE2	SKUX38	SLEEVE, INSULATING SEE DETAIL A .....	1
7	XDOZZ	39428	5068K15	MALE UNIONS, 1/4-1/8 SEE DETAIL B. ....	2
8	XDOZZ	39428	5174K3B	TUBING, COPPER 1/4" SEE DETAIL B.....	2
9	XDOZZ	39428	5174K3A	TUBING, COPPER 1/4" SEE DETAIL C.....	2
10	XDOZZ	39428	8338561	FM LIGHT PLUG SEE DETAIL B .....	1
11	XDOZZ	39428	5241K65	TUBE, STL 2.75 OD 8' SEE DETAIL A.....	1
12	XDOZZ	39428	5321K14	CLAMP, WORM DRIVE SEE DETAIL B, C .....	6
13	XDOZZ	96906	MS35307-303	SCREW, CAP, HEXAGON H SEE DETAIL C, .....	4
14	XDOZZ	96906	MS51321-1	D .....	
15	XDOZZ	96906	MS35307-306	PUMP, FUEL, ELECTRICAL SEE DETAIL B.....	1
				SCREW, CAP, HEXAGON H SEE DETAIL A, .....	23
				B, C.....	
16	XDOZZ	96906	MS35338-82	WASHER, LOCK SEE DETAIL A, B, C, D.....	28
17	XDOZZ	96906	MS15795-810	WASHER, FLAT SEE DETAIL A, B, C, D.....	28
18	XDOZZ	96906	MS35649-2254	NUT, PLAIN, HEXAGON SEE DETAIL B, D.....	7
19	XDOZZ	39428	5235K45	HOSE, 1/4" ID 25 FT SEE DETAIL C .....	3
20	XDOZZ	39428	5235K45	HOSE, 1/4" ID 13 FT SEE DETAIL B, C .....	1
21	XDOZZ	39428	557K64	COUPLING, 2" SEE DETAIL A .....	1
22	XDOZZ	39428	MS9352-7	CLAMP, CUSHION ALUM SEE DETAIL C .....	3
23	XDOZZ	39428	MS9352-6	CLAMP, CUSHION ALUM SEE DETAIL C .....	1
24	XDOZZ	39428	7080K27	CABLE, 2 COND 16 AWG SEE DETAIL C.....	1
25	XDOZZ	39428	6815K21	COUPLING, PIPE SEE DETAIL A .....	1
26	XDOZZ	39428	8827K44	SILICA STRIP, 16 TH SEE DETAIL A .....	1
27	XDOZZ	39428	7080K42	CABLE, 16-3 TYPE SJ SEE DETAIL C .....	1
28	XDOZZ	39428	7130K13	TIE, CABLE SEE DETAIL B .....	1
29	XDOZZ	39428	1877K21	THERMOSTAT ASSY SEE DETAIL D.....	1
30	XDOZZ	96906	MS3106E14&14S	PLUG SEE DETAIL C .....	2
31	XDOZZ	39428	8338526	CONN 1, PWR CABLE SEE DETAIL B .....	1
32	XDOZZ	39428	7982997	CONN 2, PWR CABLE SEE DETAIL B .....	1
33	XDOZZ	96906	MS3106E-18	PLUG SEE DETAIL C .....	1
34	XDOZZ	39428	35416K22	CLAMP SEE DETAIL A .....	2
35	XDOZZ	39428	9226T392	WIRE CLOTH SEE DETAIL A .....	1
36	PAOZZ	92878	UH68-G1	HEATER, SPACE SEE DETAIL A .....	1

END OF FIGURE

1  
| 2 THRU 4 |

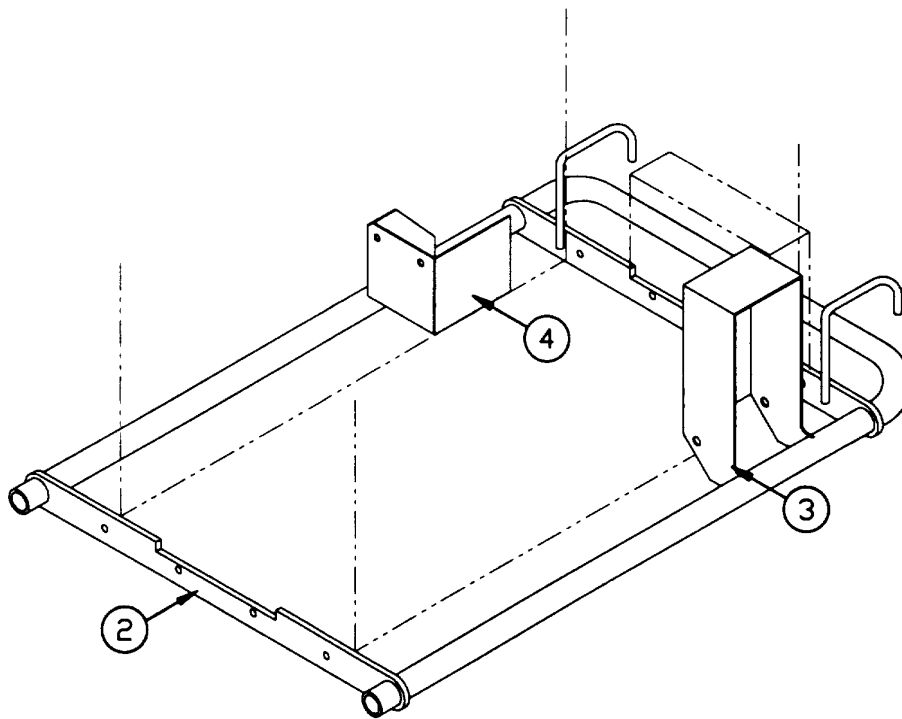


FIGURE 43. HANDLE ASSEMBLY, BOTTOM

**SECTION II**

**TM 5-6675-331-14&P**

(1)	(2)	(3)	(4)	(5)	(6)
ITEM	SMR	CAGEC	PART	DESCRIPTION AND USABLE ON CODES(UOC)	
NO	CODE	QTY	NUMBER		

**GROUP 04      MULTIFUEL SPACE HEATER**

**FIG. 43          HANDLE ASSEMBLY, BOTTOM**

1	XDOZZ	97403	13229E7517	HANDLE ASSY, BOTTOM .....	1
2	XDOZZ	97403	13229E7518	HANDLE, HEATER ADAPT .....	1
3	XDOZZ	97403	13229E7519	MOUNTING, THERMOSTAT.....	1
4	XDOZZ	97403	13229E7520	MOUNTING, FUEL PUMP.....	1

END OF FIGURE

1  
| 2 THRU 8 |

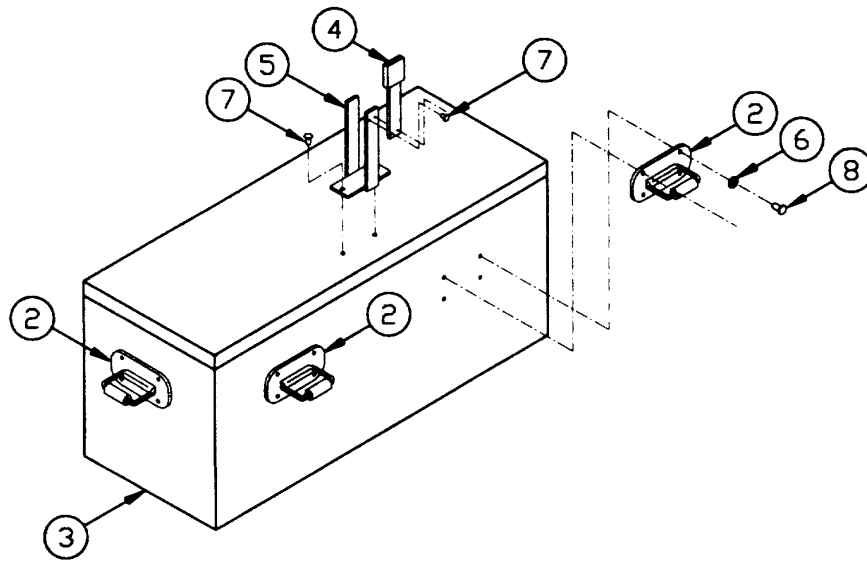


FIGURE 44. ZOOM TRANSFER SCOPE



**SECTION II**

**TM 5-6675-331-14&P**

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6)
				<b>GROUP 05 ZOOM TRANSFER SCOPE</b>	
				<b>FIG. 44 ZOOM TRANSFER SCOPE</b>	
1	XDOOO	97403	13229E7462	ZTS .....	1
2	XDOZZ	39428	1764A25	HANDLE, SPRING LOAD .....	4
3	XDOZZ	51745	ADC-136-00	CASE, ZOOM TRANSFER .....	1
4	XDOZZ	02768	101-0100	BUCKLE, SIDE RELEASE .....	1
5	XDOZZ	39428	3722T17	WEBBING, 1.00WX.07TH .....	1
6	XDOZZ	96906	MS15795-803	WASHER, FLAT .....	4
7	XDOZZ	39428	97447A105	RIVET, BLIND .....	2
8	XDOZZ	39428	97447A050	RIVET, BLIND, DOME HD .....	15

END OF FIGURE

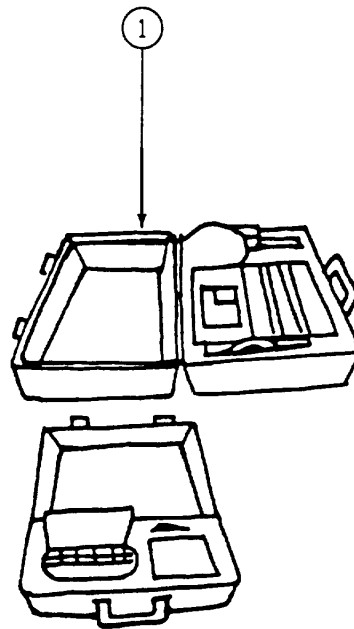


FIGURE 45. GRAPHIC QUANTITY PROCESSOR

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6)
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GROUP 06 QUANTITY PROCESSING SYSTEM

FIG. 45 GRAPHIC QUANTITY PROCESSOR

1 PFOOD 36970 L-2800AM

GRAPHIC QUANTITY PR ..... SEE TM5-6675- 1  
326-24P .....

END OF FIGURE

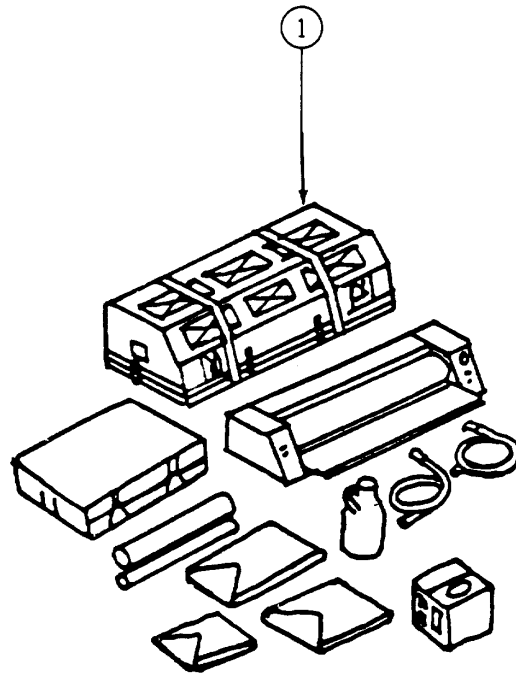


FIGURE 46. COPIER, DIAZO

SECTION II

TM 5-6675-331-14&P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6)
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GROUP 07 DIAZO PROCESS REPRODUCTION SET

FIG. 46 COPIER, DIAZO

1 PDOOH 60887 185 FL-M

COPIER, DIAZO SEE TM5-3610-256-24P..... 1  
 FOR PARTS BREAKDOWN.....

END OF FIGURE

**Section III. Special Tools List (Not Applicable)**

## CROSS-REFERENCE INDEXES

## NATIONAL STOCK NUMBER INDEX

STOCK NUMBER	FIG.	ITEM	STOCK NUMBER	FIG.	ITEM
6240-00-152-2996	30	2			
6250-00-299-2884	30	3			
5925-00-465-4021	33	21			
6650-00-477-9613	23	1			
6210-00-548-0222	30	1			
6250-00-569-9502	30	4			
5930-00-655-1514	29	3			
5940-00-937-5237	31	6			
5925-01-021-5222	33	22			
5925-01-042-0109	33	20			
6220-01-093-4439	4	2			
2330-01-102-4697	36	1			
5925-01-111-7562	33	24			
6675-01-266-0700	45	1			
4520-01-297-6803	42	36			

## CROSS-REFERENCE INDEXES

## PART NUMBER INDEX

CAGEC	PART NUMBER	STOCK NUMBER	FIG.	ITEM
05699	A-A-2129 TYPE 1		4	10
51745	ADC-136-00		44	3
88044	AN4C10A		5	17
88044	AN4C12A		15	7
88044	AN4C5A		12	13
			17	13
88044	AN4C6A		5	16
			10	10
			16	2
88044	AN4C7A		12	8
			15	4
88044	AN5C5A		3	7
88044	AN5C6A		21	6
88044	AN5C7A		3	22
88044	AN8C16A		3	11
88044	AN8C20A		3	6
88044	AN935-5166		21	8
88044	AN960C-5164		21	7
88044	AN960C016		7	5
88044	AN960C10L		12	12
			19	5
88044	AN960C416		5	9
88044	AN960C416L		4	5
			5	10
			10	7
			12	5
			15	5
			16	3
			17	14
88044	AN960C816L		3	13
84256	APS-1032-130		17	16
84256	APS-515-428		17	17
84256	AP428-260		5	20
84256	AP515-1032		5	30
84256	AP515-428		4	3
			5	21
			10	8
			12	7
			16	5
84256	AP515-524		3	23
			12	9
			21	5
84256	AP520-524		3	21
94222	A5-21-120-10		25	4
05469	BSF-2832-8		8	8
99862	CL-21-KA-20.0		24	3
05699	CRS4130		19	4
05178	C1219		22	1
1L333	D322N		26	2
07542	FM41		18	4
08805	F20T12/CW	6240-00-152-2996	30	2



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## PART NUMBER INDEX

CAGEC	PART NUMBER	STOCK NUMBER	FIG.	ITEM
15889	F30T12/C50/RS		35	3
79725	G-3046AE		28	4
79725	G-3046CE		28	7
79725	G-30468E		28	11
74545	GF-5362-GY		31	36
0AAR4	IF-5262		28	9
80704	IF-5361		28	5
0AAR4	IG-5261		28	13
80704	IG-5262		28	10
5R061	KC-1		31	5
36970	L-2800AM	6675-01-266-0700	45	1
0FCK2	LJ-182432-B		33	10
81349	MI-623		4	12
81349	ML-1251		4	13
81349	ML-1683		4	11
96906	MS15793-813		6	6
96906	MS15795-803		44	6
96906	MS15795-806		27	6
96906	MS15795-810		33	16
			42	17
96906	MS15795-815		37	4
96906	MS15795-846		38	24
96906	MS16562-213		7	6
96906	MS20257-C4		40	3
96906	MS20257-C43225		39	3
			41	3
96906	MS20392-3C19		5	11
96906	MS20392-3C27		5	12
96906	MS20426AD-6		32	6
96906	MS20426AD6-7		38	18
			39	4
			40	4
			41	4
96906	MS20426A4-6		33	11
96906	MS20470-AC4-14		9	9
96906	MS20613-6C24		20	14
96906	MS21044-C3		28	14
			38	25
96906	MS21044-N06		33	26
96906	MS21044C8		3	15
96906	MS24665-151		5	13
96906	MS2469C102		5	15
96906	MS24694-0198		6	5
96906	MS25082-84		31	12
96906	MS27183-10		3	19
96906	MS27183-12		20	11
			26	5
96906	MS27183-4		33	29
96906	MS27183-42		25	7
			28	3
96906	MS3106E-18		42	33

## CROSS-REFERENCE INDEXES

CAGEC	PART NUMBER	PART NUMBER INDEX		FIG.	ITEM
			STOCK NUMBER		
96906	MS3106E14&14S			42	30
96906	MS3402D16-10S			31	4
96906	MS35058-22		5930-00-655-1514	29	3
96906	MS35190-225			33	31
96906	MS35206-232			33	28
96906	MS35207-280			17	11
96906	MS35307-303			42	13
96906	MS35307-306			33	14
				42	15
96906	MS35307-357			4	7
96906	MS35308-305			4	4
96906	MS35308-333			10	9
				12	11
96906	MS35337-81			5	29
96906	MS35337-82			15	6
96906	MS35337-83			3	20
96906	MS35338-139			4	6
				5	18
				10	6
				12	6
				16	4
				17	12
				33	17
96906	MS35338-140			12	10
96906	MS35338-141			4	8
96906	MS35338-143			3	14
96906	MS35338-40			33	30
96906	MS35338-43			25	8
96906	MS35338-45			20	10
				26	4
96906	MS35338-82			42	16
96906	MS35469-2254			24	7
96906	MS35649-2252			33	15
96906	MS35649-2254			42	18
96906	MS35649-242			33	27
96906	MS35650-302			25	9
96906	MS35825-11A			32	2
96906	MS51007-5			31	22
96906	MS51321-1			42	14
96906	MS51922-18			37	5
96906	MS51957-45			38	12
96906	MS51958-63			25	6
				38	19
96906	MS51958-65			28	2
				38	23
96906	MS51960-65			17	15
96906	MS51960-66			5	28
96906	MS51960-68			5	19
96906	MS51960-81			5	14
96906	MS52125-2		6220-01-093-4439	4	2
96906	MS6104466			6	7

## CROSS-REFERENCE INDEXES

CAGEC	PART NUMBER	PART NUMBER INDEX		FIG.	ITEM
			STOCK NUMBER		
96906	MS90558C32413P			31	3
96906	MS90726-30			26	3
96906	MS90726-40			20	9
39428	MS9352-6			42	23
39428	MS9352-7			42	22
19207	M10LA2	2330-01-102-4697		36	1
81349	M16377/12-001			30	5
81349	M16377/12-333.1	6210-00-548-0222		30	1
81349	M16377/44-001	6250-00-569-9502		30	4
80205	NAS561SF-8-20			8	3
				9	6
81349	PB08NA01	5940-00-937-5237		31	6
81349	PB08NA02			31	7
05684	PK9GTA			33	12
78553	P116-447-5-24A			31	13
56303	Q0T1515	5925-00-465-4021		33	21
81487	Q0120GFI	5925-01-021-5222		33	22
05684	Q0412L125,SERIES			33	3
15889	RSL 40P			35	2
OJYE2	SKUX38			42	6
80063	SM-C-563520			5	8
96652	S1110-1			12	14
96652	S1600-1			12	16
92878	UH68-G1	4520-01-297-6803		42	36
81348	WC375/01-002	5925-01-042-0109		33	20
81348	WC375/01-003	5925-01-111-7562		33	24
81348	WC375/01-007			33	23
82121	03029-1			33	19
25497	08470			33	7
02768	101-0100			44	4
19738	1010-1020			31	34
39428	1104A26			31	15
81770	115	6250-00-299-2884		30	3
94222	12-11-205-11			33	13
94222	12-11014-26			33	25
94222	12-1105-14			33	9
74545	1201			28	8
97403	13229E7370			1	1
97403	13229E7371			3	1
97403	13229E7374			37	1
97403	13229E7376			4	1
97403	13229E7377			5	1
97403	13229E7378			10	1
97403	13229E7379			12	1
97403	13229E7380			15	1
97403	13229E7381			16	1
97403	13229E7382			17	1
97403	13229E7385			20	1
97403	13229E7385-1			20	2
97403	13229E7385-2			20	3
97403	13229E7385-4			20	4

## CROSS-REFERENCE INDEXES

CAGEC	PART NUMBER	PART NUMBER INDEX		FIG.	ITEM
			STOCK NUMBER		
97403	13229E7385-5			20	5
97403	13229E7385-6			20	6
97403	13229E7385-7			20	7
97403	13229E7385-8			20	8
97403	13229E7386			21	1
97403	13229E7391			28	1
97403	13229E7392			26	1
97403	13229E7393			31	1
97403	13229E7394			33	1
97403	13229E7395			29	1
97403	13229E7396			27	1
97403	13229E7398			24	1
97403	13229E7399			24	2
97403	13229E7406-1			31	8
97403	13229E7406-2			31	9
97403	13229E7410			25	1
97403	13229E7411			25	2
97403	13229E7412-1			25	3
97403	13229E7412-2			25	11
97403	13229E7435			31	2
97403	13229E7437			32	1
97403	13229E7438-1			32	4
97403	13229E7438-2			32	3
97403	13229E7439			31	14
97403	13229E7442			33	2
97403	13229E7443			33	4
97403	13229E7444			38	1
97403	13229E7445			38	2
97403	13229E7446			38	3
97403	13229E7447			38	4
97403	13229E7448			38	5
97403	13229E7449			39	1
97403	13229E7450			40	1
97403	13229E7451			38	6
97403	13229E7452			41	1
97403	13229E7453			38	7
97403	13229E7454			38	8
97403	13229E7455			38	9
97403	13229E7456			38	10
97403	13229E7457			37	3
97403	13229E7458			37	2
97403	13229E7459			42	1
97403	13229E7461			34	1
97403	13229E7462			44	1
97403	13229E7478-1			3	8
97403	13229E7478-2			3	9
97403	13229E7479-1			3	3
97403	13229E7479-2			3	4
97403	13229E7479-3			3	16
97403	13229E7479-4			3	17
97403	13229E7479-5			3	12

## CROSS-REFERENCE INDEXES

CAGEC	PART NUMBER	PART NUMBER INDEX		FIG.	ITEM
			STOCK NUMBER		
97403	13229E7480-1			3	5
97403	13229E7480-2			3	18
97403	13229E7481			3	10
97403	13229E7482			4	9
97403	13229E7483			6	4
97403	13229E7484-1			5	3
97403	13229E7484-2			9	3
97403	13229E7485-1			5	4
97403	13229E7485-2			5	23
97403	13229E7485-3			5	24
97403	13229E7485-4			5	25
97403	13229E7485-5			5	26
97403	13229E7485-6			5	27
97403	13229E7486			5	5
97403	13229E7487			5	7
97403	13229E7488-1			6	1
97403	13229E7488-2			9	1
97403	13229E7488-3			8	1
97403	13229E7489			5	6
97403	13229E7490			8	5
97403	13229E7491			9	2
97403	13229E7492			8	2
97403	13229E7493			9	7
97403	13229E7494-1			6	8
				9	10
97403	13229E7494-2			5	2
97403	13229E7495-1			6	9
97403	13229E7495-2			8	6
97403	13229E7496-1			9	8
97403	13229E7496-2			8	7
97403	13229E7497			10	3
97403	13229E7500			10	4
97403	13229E7501			10	5
97403	13229E7502			11	1
97403	13229E7503			14	1
97403	13229E7504			14	2
97403	13229E7505-1			15	2
97403	13229E7505-2			15	2
97403	13229E7506-1			15	3
97403	13229E7506-2			15	3
97403	13229E7507-1			17	6
97403	13229E7507-2			17	4
97403	13229E7507-3			17	3
97403	13229E7507-4			17	5
97403	13229E7507-5			17	8
97403	13229E7507-6			17	9
97403	13229E7507-7			17	7
97403	13229E7507-8			17	2
97403	13229E7508			19	1
97403	13229E7509			18	1
97403	13229E7514-1			21	2

## CROSS-REFERENCE INDEXES

CAGEC	PART NUMBER	PART NUMBER INDEX		FIG.	ITEM
			STOCK NUMBER		
97403	13229E7514-2			21	3
97403	13229E7514-3			21	4
97403	13229E7516			42	2
97403	13229E7517			43	1
97403	13229E7518			43	2
97403	13229E7519			43	3
97403	13229E7520			43	4
97403	13229E7521			38	26
97403	13229E7523			34	2
97403	13229E7524			34	3
97403	13229E7526			34	4
97403	13229E7528			34	5
97403	13229E7530			34	6
97403	13229E7531			34	7
97403	13229E7532			13	1
97403	13229E7533			12	2
97403	13229E7534			12	4
97403	13229E7535			14	3
97403	13229E7538-1			19	2
97403	13229E7538-2			19	3
97403	13229E7540-1			17	18
97403	13229E7540-2			17	19
97403	13229E7540-3			17	20
97403	13229E7540-4			17	21
19738	1601-0410			33	18
19738	1601-0613			25	10
				38	17
19738	1604-0514			12	15
19738	1604-0615			18	3
63547	175/150/140		6650-00-477-9613	23	1
39428	1764A25			44	2
25497	17993			33	5
60887	185 FL-M			46	1
39428	1877K21			42	29
28488	190			27	3
06001	21CP			28	12
15889	2436-46			35	1
05699	312100			13	2
82121	31904LT			33	6
39428	35416K22			42	34
39428	3606T19			38	21
39428	3606T33			38	20
39428	3699TII			38	16
39428	3699T14			38	13
39428	3699T15			38	14
39428	3699T16			38	15
81349	37TB-10			33	8
39428	3722T17			44	5
05699	4L4-F			5	22
71286	40G16-100S			31	33
71286	40R12-1			31	30

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CAGEC	PART NUMBER	PART NUMBER INDEX		FIG.	ITEM
			STOCK NUMBER		
97403	40547-6			31	32
30003	470AS-C0117-001			27	2
19738	4871-0409			31	16
19738	4871-0411			31	17
19738	4871-0508			10	11
05699	5-4-4943			10	2
05699	5-4-4964			12	3
84256	5-4-4966			17	10
39428	5052H32			31	38
39428	5061K12			42	3
39428	5068K15			42	7
39428	5174K3A			42	9
39428	5174K3B			42	8
39428	5235K45			42	19
				42	20
39428	5241K65			42	11
74545	5266-C			29	5
39428	5321K14			42	12
39428	557K64			42	21
05669	6L6-F			8	4
05699	600591-002			6	2
05699	600596-001			9	5
05669	600597-001			9	4
39428	6061-76			31	39
12020	610850L-0-0-02			29	2
39428	6815K21			42	25
05699	707500-010			3	2
05699	707559-3			6	3
39428	7080K27			42	24
39428	7080K42			42	27
39428	7080K43			29	4
39428	7080K44			42	4
05699	708115-1			18	2
05699	708123-1			7	4
05699	708125-1			7	3
05699	708130-1			7	1
05699	708139-1			7	2
39428	7130K13			42	28
39428	7462K11			42	5
28488	752			27	4
39428	7982997			42	32
OAAR4	81N2583			28	6
39428	8338526			42	31
39428	8338561			42	10
39428	8568K13			31	37
				32	5
39428	8568K24			31	21
39428	8635K567			11	2
19207	8750117			2	1
39428	8827K44			42	26
39428	90061A017			31	11

## CROSS-REFERENCE INDEXES

CAGEC	PART NUMBER	PART NUMBER INDEX		FIG.	ITEM
			STOCK NUMBER		
39428	90268A029			24	6
39428	90730A005			31	29
39428	90730A011			31	25
39428	91772A113			31	23
				31	26
39428	91772A242			31	19
94222	92-20-305-72			25	5
39428	92141A006			31	31
39428	92146A005			31	28
39428	92146A011			31	18
39428	92196A148			27	5
39428	9226T392			42	35
39428	92470A110			31	20
39428	92470A190			31	35
39428	9489T19			24	4
39428	96480A030			20	12
94222	97-50-220-12			38	11
94222	97-50-221-12			39	2
				40	2
				41	2
39428	97447A050			44	8
39428	97447A105			44	7
39428	9752A025			11	3
39428	98019A109			31	27
39428	98019A125			31	24
39428	98306A173			20	13
39428	98320AD07			38	22
39428	98804A029			24	5
39428	98813A029			31	10



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## FIGURE AND ITEM NUMBER INDEX

FIG.	ITEM	STOCK NUMBER	CAGEC	PART NUMBER
1	1		97403	13229E7370
2	1		19207	8750117
3	1		97403	13229E7371
3	2		05699	707500-010
3	3		97403	13229E7479-1
3	4		97403	13229E7479-2
3	5		97403	13229E7480-1
3	6		88044	AN8C20A
3	7		88044	AN5C5A
3	8		97403	13229E7478-1
3	9		97403	13229E7478-2
3	10		97403	13229E7481
3	11		88044	AN8C16A
3	12		97403	13229E7479-5
3	13		88044	AN960C816L
3	14		96906	MS35338-143
3	15		96906	MS21044C8
3	16		97403	13229E7479-3
3	17		97403	13229E7479-4
3	18		97403	13229E7480-2
3	19		96906	MS27183-10
3	20		96906	MS35337-83
3	21		84256	AP520-524
3	22		88044	AN5C7A
3	23		84256	AP515-524
4	1		97403	13229E7376
4	2	6220-01-093-4439	96906	MS52125-2
4	3		84256	AP515-428
4	4		96906	MS35308-305
4	5		88044	AN960C416L
4	6		96906	MS35338-139
4	7		96906	MS35307-357
4	8		96906	MS35338-141
4	9		97403	13229E7482
4	10		05699	A-A-2129 TYPE 1
4	11		81349	ML-1683
4	12		81349	MI-623
4	13		81349	ML-1251
5	1		97403	13229E7377
5	2		97403	13229E7494-2
5	3		97403	13229E7484-1
5	4		97403	13229E7485-1
5	5		97403	13229E7486
5	6		97403	13229E7489
5	7		97403	13229E7487
5	8		80063	SM-C-563520
5	9		88044	AN960C416
5	10		88044	AN960C416L
5	11		96906	MS20392-3C19
5	12		96906	MS20392-3C27
5	13		96906	MS24665-151

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## FIGURE AND ITEM NUMBER INDEX

FIG.	ITEM	STOCK NUMBER	CAGEC	PART NUMBER
5	14		96906	MS51960-81
5	15		96906	MS2469C102
5	16		88044	AN4C6A
5	17		88044	AN4C10A
5	18		96906	MS35338-139
5	19		96906	MS51960-68
5	20		84256	AP428-260
5	21		84256	AP515-428
5	22		05699	4L4-F
5	23		97403	13229E7485-2
5	24		97403	13229E7485-3
5	25		97403	13229E7485-4
5	26		97403	13229E7485-5
5	27		97403	13229E7485-6
5	28		96906	MS51960-66
5	29		96906	MS35337-81
5	30		84256	AP515-1032
6	1		97403	13229E7488-1
6	2		05699	600591-002
6	3		05699	707559-3
6	4		97403	13229E7483
6	5		96906	MS24694-0198
6	6		96906	MS15793-813
6	7		96906	MS6104466
6	8		97403	13229E7494-1
6	9		97403	13229E7495-1
7	1		05699	708130-1
7	2		05699	708139-1
7	3		05699	708125-1
7	4		05699	708123-1
7	5		88044	AN960C016
7	6		96906	MS16562-213
8	1		97403	13229E7488-3
8	2		97403	13229E7492
8	3		80205	NAS561SF-8-20
8	4		05669	6L6-F
8	5		97403	13229E7490
8	6		97403	13229E7495-2
8	7		97403	13229E7496-2
8	8		05469	BSF-2832-8
9	1		97403	13229E7488-2
9	2		97403	13229E7491
9	3		97403	13229E7484-2
9	4		05669	600597-001
9	5		05699	600596-001
9	6		80205	NAS561SF-8-20
9	7		97403	13229E7493
9	8		97403	13229E7496-1
9	9		96906	MS20470-AC4-14
9	10		96906	13229E7494-1
10	1		97403	13229E7378

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## FIGURE AND ITEM NUMBER INDEX

FIG.	ITEM	STOCK NUMBER	CAGEC	PART NUMBER
10	2		05699	5-4-4943
10	3		97403	13229E7497
10	4		97403	13229E7500
10	5		97403	13229E7501
10	6		96906	MS35338-139
10	7		88044	AN960C416L
10	8		84256	AP515-428
10	9		96906	MS35308-333
10	10		88044	AN4C6A
10	11		19738	4871-0508
11	1		97403	13229E7502
11	2		39428	8635K567
11	3		39428	9752A025
12	1		97403	13229E7379
12	2		97403	13229E7533
12	3		05699	5-4-4964
12	4		97403	13229E7534
12	5		88044	AN960C416L
12	6		96906	MS35338-139
12	7		84256	AP515-428
12	8		88044	AN4C7A
12	9		84256	AP515-524
12	10		96906	MS35338-140
12	11		96906	MS35308-333
12	12		88044	AN960C10L
12	13		88044	AN4C5A
12	14		96652	S1100-1
12	15		19738	1604-0514
12	16		96652	S1600-1
13	1		97403	13229E7532
13	2		05699	312100
14	1		97403	13229E7503
14	2		97403	13229E7504
14	3		97403	13229E7535
15	1		97403	13229E7380
15	2		97403	13229E7505-1
15	2		97403	13229E7505-2
15	3		97403	13229E7506-1
15	3		97403	13229E7506-2
15	4		88044	AN4C7A
15	5		88044	AN960C416L
15	6		96906	MS35337-82
15	7		88044	AN4C12A
16	1		97403	13229E7381
16	2		88044	AN4C6A
16	3		88044	AN960C416L
16	4		96906	MS35338-139
16	5		84256	AP515-428
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17	7		97403	13229E7507-7
17	8		97403	13229E7507-5
17	9		97403	13229E7507-6
17	10		84256	5-4-4966
17	11		96906	MS35207-280
17	12		96906	MS35338-139
17	13		88044	AN4C5A
17	14		88044	AN960C416L
17	15		96906	MS51960-65
17	16		84256	APS-1032-130
17	17		84256	APS-515-428
17	18		97403	13229E7540-1
17	19		97403	13229E7540-2
17	20		97403	13229E7540-3
17	21		97403	13229E7540-4
18	1		97403	13229E7509
18	2		05699	708115-1
18	3		19738	1604-0615
18	4		07542	FM41
19	1		97403	13229E7508
19	2		97403	13229E7538-1
19	3		97403	13229E7538-2
19	4		05699	CRS4130
19	5		88044	AN960C10L
20	1		97403	13229E7385
20	2		97403	13229E7385-1
20	3		97403	13229E7385-2
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20	5		97403	13229E7385-5
20	6		97403	13229E7385-6
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20	9		96906	MS90726-40
20	10		96906	MS35338-45
20	11		96906	MS27183-12
20	12		39428	96480A030
20	13		39428	98306A173
20	14		96906	MS20613-6C24
21	1		97403	13229E7386
21	2		97403	13229E7514-1
21	3		97403	13229E7514-2
21	4		97403	13229E7514-3
21	5		84256	AP515-524
21	6		88044	AN5C6A
21	7		88044	AN960C-5164
21	8		88044	AN935-5166
22	1		05178	C1219
23	1	6650-00-477-9613	63547	175/150/140

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24	3		99862	CL-21-KA-20.0
24	4		39428	9489T19
24	5		39428	98804A029
24	6		39428	90268A029
24	7		96906	MS35469-2254
25	1		97403	13229E7410
25	2		97403	13229E7411
25	3		97403	13229E7412-1
25	4		94222	A5-21-120-10
25	5		94222	92-20-305-72
25	6		96906	MS51958-63
25	7		96906	MS27183-42
25	8		96906	MS35338-43
25	9		96906	MS35650-302
25	10		19738	1601-0613
25	11		97403	13229E7412-2
26	1		97403	13229E7392
26	2		1L333	D322N
26	3		96906	MS90726-30
26	4		96906	MS35338-45
26	5		96906	MS27183-12
27	1		97403	13229E7396
27	2		30003	470AS-C0117-001
27	3		28488	190
27	4		28488	752
27	5		39428	92196A148
27	6		96906	MS15795-806
28	1		97403	13229E7391
28	2		96906	MS51958-65
28	3		96906	MS27183-42
28	4		79725	G-3046AE
28	5		80704	IF-5361
28	6		OAAR4	81N2583
28	7		79725	G-3046CE
28	8		74545	1201
28	9		OAAR4	IF-5262
28	10		80704	IG-5262
28	11		79725	G-30468E
28	12		06001	21CP
28	13		OAAR4	IG-5261
28	14		96906	MS21044-C3
29	1		97403	13229E7395
29	2		12020	610850L-0-0-02
29	3	5930-00-655-1514	96906	MS35058-22
29	4		39428	7080K43
29	5		74545	5266-C
30	1	6210-00-548-0222	81349	M16377/12-333.1
30	2	6240-00-152-2996	08805	F20T12/CW
30	3	6250-00-299-2884	81770	115

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31	2		97403	13229E7435
31	3		96906	MS90558C32413P
31	4		96906	MS3402D16-10S
31	5		5R061	KC-1
31	6	5940-00-937-5237	81349	PB08NA01
31	7		81349	PB08NA02
31	8		97403	13229E7406-1
31	9		97403	13229E7406-2
31	10		39428	98813A029
31	11		39428	90061A017
31	12		96906	MS25082-84
31	13		78553	P116-447-5-24A
31	14		97403	13229E7439
31	15		39428	1104A26
31	16		19738	4871-0409
31	17		19738	4871-0411
31	18		39428	92146A011
31	19		39428	91772A242
31	20		39428	92470A110
31	21		39428	8568K24
31	22		96906	MS51007-5
31	23		39428	91772A113
31	24		39428	98019A125
31	25		39428	90730A011
31	26		39428	91772A113
31	27		39428	98019A109
31	28		39428	92146A005
31	29		39428	90730A005
31	30		71286	40R12-1
31	31		39428	92141A006
31	32		97403	40547-6
31	33		71286	40G16-100S
31	34		1973R	1010-1020
31	35		39428	92470A190
31	36		74545	GF-5362-GY
31	37		39428	8568K13
31	38		39428	5052H32
31	39		39428	6061-76
32	1		97403	13229E7437
32	2		96906	MS35825-11A
32	3		97403	13229E7438-2
32	4		97403	13229E7438-1
32	5		39428	8568K13
32	6		96906	MS20426AD-6
33	1		97403	13229E7394
33	2		97403	13229E7442
33	3		05684	Q0412L125,SERIES
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33	7		25497	08470
33	8		81349	37TB-10
33	9		94222	12-1105-14
33	10		OFCK2	LJ-182432-B
33	11		96906	MS20426A4-6
33	12		05684	PK9GTA
33	13		94222	12-11-205-11
33	14		96906	MS35307-306
33	15		96906	MS35649-2252
33	16		96906	MS15795-810
33	17		96906	MS35338-139
33	18		19738	1601-0410
33	19		82121	03029-1
33	20	5925-01-042-0109	81348	WC375/01-002
33	21	5925-00-465-4021	56303	Q0T1515
33	22	5925-01-021-5222	81487	Q0120GFI
33	23		81348	WC375/01-007
33	24	5925-01-111-7562	81348	WC375/01-003
33	25		94222	12-11014-26
33	26		96906	MS21044-N06
33	27		96906	MS35649-242
33	28		96906	MS35206-232
33	29		96906	MS27183-4
33	30		96906	MS35338-40
33	31		96906	MS35190-225
34	1		97403	13229E7461
34	2		97403	13229E7523
34	3		97403	13229E7524
34	4		97403	13229E7526
34	5		97403	13229E7528
34	6		97403	13229E7530
34	7		97403	13229E7531
35	1		15889	2436-46
35	2		15889	RSL 40P
35	3		15889	F30T12/C50/RS
36	1	2330-01-102-4697	19207	M101A2
37	1		97403	13229E7374
37	2		97403	13229E7458
37	3		97403	13229E7457
37	4		96906	MS15795-815
37	5		96906	MS51922-18
38	1		97403	13229E7444
38	2		97403	13229E7445
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38	12		96906	MS51957-45
38	13		39428	3699T14
38	14		39428	3699T15
38	15		39428	3699T16
38	16		39428	3699TII
38	17		19738	1601-0613
38	18		96906	MS20426AD6-7
38	19		96906	MS51958-63
38	20		39428	3606T33
38	21		39428	3606T19
38	22		39428	98320AD07
38	23		96906	MS51958-65
38	24		96906	MS15795-846
38	25		96906	MS21044-C3
38	26		97403	13229E7521
39	1		97403	13229E7449
39	2		94222	97-50-221-12
39	3		96906	MS20257-C43225
39	4		96906	MS20426AD6-7
40	1		97403	13229E7450
40	2		94222	97-50-221-12
40	3		96906	MS20257-C4
40	4		96906	MS20426AD6-7
41	1		97403	13229E7452
41	2		94222	97-50-221-12
41	3		96906	MS20257-C43225
41	1		97403	13229E7459
42	2		97403	13229E7516
42	3		39428	5061K12
42	4		39428	7080K44
42	5		39428	7462KII
42	6		OJYE2	SKUX38
42	7		39428	5068K15
42	8		39428	5174K3B
42	9		39428	5174K3A
42	10		39428	8338561
42	11		39428	5241K65
42	12		39428	5321K14
42	13		96906	MS35307-303
42	14		96906	MS51321-1
42	15		96906	MS35307-306
42	16		96906	MS35338-82
42	17		96906	MS15795-810
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43	1		97403	13229E7517
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43	4		97403	13229E7520
44	1		97403	13229E7462
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44	3		51745	ADC-136-00
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44	6		96906	MS15795-803
44	7		39428	97447A105
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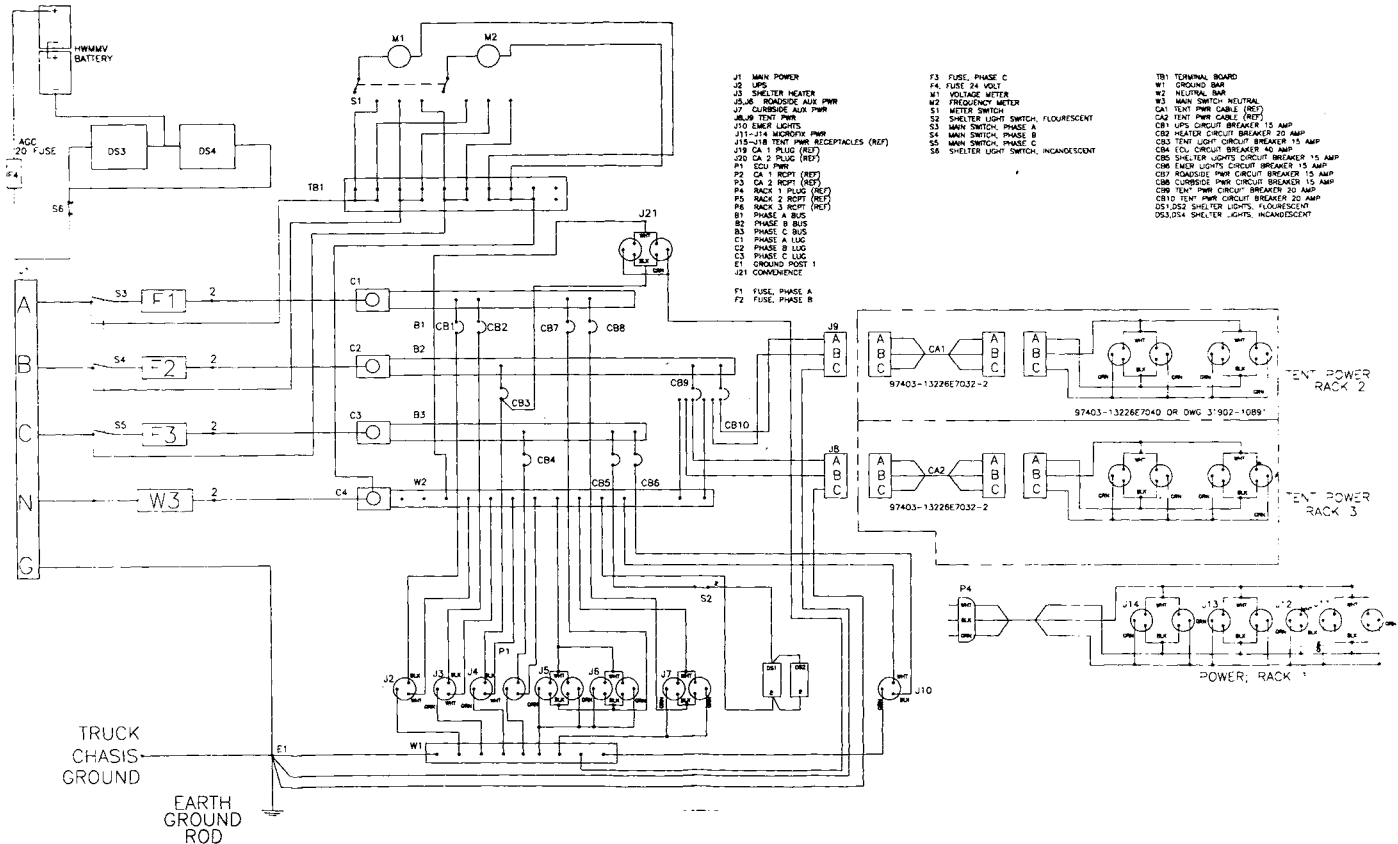
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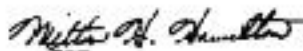
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PAGE NO.

PARA-GRAPH

FIGURE NO.

TABLE NO.

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

TEAR ALONG PERFORATED LINE

PRINTED NAME, GRADE OR TITLE AND TELEPHONE NUMBER

SIGN HERE

## THE METRIC SYSTEM AND EQUIVALENTS

### Linear Measure

1 centimeter = 10 millimeters = .39 inch  
 1 decimeter = 10 centimeters = 3.94 inches  
 1 meter = 10 decimeters = 39.37 inches  
 1 dekameter = 10 meters = 32.8 feet  
 1 hectometer = 10 dekameters = 328.08 feet  
 1 kilometer = 10 hectometers = 3,280.8 feet

### Weights

1 centigram = 10 milligrams = .15 grain  
 1 decigram = 10 centigrams = 1.54 grains  
 1 gram = 10 decigrams = .035 ounce  
 1 dekagram = 10 grams = .35 ounce  
 1 hectogram = 10 dekagrams = 3.52 ounces  
 1 kilogram = 10 hectograms = 2.2 pounds  
 1 quintal = 100 kilograms = 220.46 pounds  
 1 metric ton = 10 quintals = 1.1 short tons

### Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch  
 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. in.  
 1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

### Square measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. in.  
 1 sq. decimeter = 100 sq. centimeters = 15.5 inches  
 1 sq. meter (centare) = 100 sq. decimeters = 10.76 feet  
 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. ft.  
 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres  
 1 sq. kilometer = 100 hectometers = .386 sq. miles

### Liquid Measure

1 dekaliter = 10 liters = 2.64 gallons  
 1 hectoliter = 10 dekaliters = 26.42 gallons  
 1 kiloliter = 10 hectoliters = 264.18 gallons  
 1 liter = 10 deciliters = 33.81 fl. ounces  
 1 centiliter = 10 milliliters = .34 fl. ounce  
 1 deciliter = 10 centiliters = 3.38 fl. ounces  
 1 metric ton = 10 quintals = 1.1 short tons

### Approximate Conversion Factors

To change	To	Multiply by	To change	To	Multiply by
inches	centimeters	2.540	ounce inches	newton-meters	.0070062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
sq. inches	sq. centimeters	6.451	kilometers	miles	.621
sq. feet	sq. meters	.093	sq. centimeters	sq. inches	.155
sq. yards	sq. meters	.836	sq. meters	sq. yards	10.764
sq. miles	sq. kilometers	2.590	sq. kilometers	sq. miles	1.196
acres	sq. hectometers	.405	sq. hectometers	acres	2.471
cubic feet	cubic meters	.028	cubic meters	cubic feet	35.315
cubic yards	cubic meters	.765	milliliters	fluid ounces	.034
fluid ounces	milliliters	29.573	liters	pints	2.113
pints	liters	.472	liters	quarts	1.057
quarts	liters	.946	grams	ounces	.035
gallons	liters	3.785	kilograms	pounds	2.205
ounces	grams	28.349	metric tons	short tons	1.102
pounds	kilograms	.454	pound-feet	newton-meters	1.356
short tons	metric tons	.907			
pound inches	newton-meters	.11296			

### Temperature (Exact)

°F Fahrenheit temperature

5/9 ( after subtracting 32)

Celsius Temperature °C

**PIN: 071922-000**