TECHNICAL MANUAL

OPERATOR, UNIT, DIRECT AND GENERAL SUPPORT MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS)

POWER PLANT AN/MJQ-25 (NSN 6115-01-153-7742) (2) MEP-112A 10 KW 400 HZ GENERATOR SETS M103A3 2-WHEEL, 2-TIRE, MODIFIED TRAILER

Approved for public release. Distribution is unlimited.

*This manual supersedes Chapter 16 of TM 5-6115-594-14&P dated 25 September 1984.

HEADQUARTERS, DEPARTMENT OF THE ARMY

15 FEBRUARY 1990

CHANGE

NO. 1

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 15 October 1996

Operator, Unit, Direct and General Support Maintenance Manual
(Including Repair Parts and Special Tools Lists)

POWER PLANT, AN/MJQ-25
(NSN 6115-01-153-7742)
(2) MEP-112A 10 KW 400 HZ GENERATOR SETS
M103A3 2-WHEEL, 2-TIRE, MODIFIED TRAILER

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

TM 9-6115-650-14&P, 15 February 1990, is changed as follows:

1. Remove and insert pages as indicated below. New or changed text material is indicated by a vertical bar in the margin. An illustration change is indicated by a miniature pointing hand.

Remove pages	Insert Pages
Ii and ii	i and ii
1-1 and 1-2	1-1 and 1-2
D-13 through D-18	D-13 through D-18
D-35 through D-38	D-35 through D-38

2. Retain this sheet in front of manual for reference purposes.

By Order of the Secretary of the Army:

DISTRIBUTION:
To be distributed in accordance with DA Form 12-25-E, block no. 5327, requirements for TM 9-6115-650-14&P.

SAFETY STEPS TO FOLLOW IF SOMEONE IS THE VICTIM OF ELECTRICAL SHOCK

DO NOT TRY TO PULL OR GRAB THE INDIVIDUAL

IF POSSIBLE, TURN OFF THE ELECTRICAL POWER

IF YOU CANNOT TURN OFF THE ELECTRICAL POWER, PULL, PUSH, OR LIFT THE PERSON TO SAFETY USING A DRY WOODEN POLE OR A DRY ROPE OR SOME OTHER INSULATING MATERIAL

SEND FOR HELP AS SOON AS POSSIBLE

AFTER THE INJURED PERSON IS FREE OF CONTACT WITH THE SOURCE OF ELECTRICAL SHOCK, MOVE THE PERSON A SHORT DISTANCE AWAY AND IMMEDIATELY START ARTIFICIAL RESUSCITATION

WARNING

All specific cautions and warnings contained in this manual shall be strictly adhered to. Otherwise, severe injury, death and/or damage to the equipment may result.

HIGH VOLTAGE

is produced when this power unit is in operation.

DEATH

or severe burns may result if personnel fail to observe safety precautions. Do not operate this power unit until the ground terminal stud has been connected to a suitable ground. Disconnect the battery ground cable on the generator set before removing and installing components on the engine or in the electrical control panel system. Remove all rings, watches, and other jewelry when performing maintenance on this equipment. Loose fitting clothing should be secured to prevent it catching moving parts. Do not attempt to service or otherwise make any adjustments, connections or reconnection of wires or cables until generator set is shut down and completely de-energized.

DANGEROUS GASES

Batteries generate explosive gas during charging: therefore, utilize extreme caution. Do not smoke, or use open flame in the vicinity of the generator set when servicing batteries.

Exhaust discharge contains noxious and deadly fumes. Do not operate power unit generator sets in enclosed areas unless exhaust discharge is properly vented to the outside.

To avoid sparking between filler nozzle and fuel tank, always maintain metal to metal contact between filler nozzle and fuel tank when filling generator set fuel tank.

Do not smoke or use open flame in the vicinity of the power unit while refueling generator sets.

LIQUIDS UNDER HIGH PRESSURE

are generated as a result of operation of the power unit generator set. Do not expose any part of the body to a high pressure leak in the fuel injection system.

NOISE

Operating noise level of the generator set can cause hearing damage. Ear protectors, as recommended by the medical or safety officer, must be worn when working near this power unit.

WARNING

Clean parts in a well-ventilated area. Avoid inhalation of solvent fumes and prolonged exposure of skin to cleaning solvent. Wash exposed skin thoroughly. Dry cleaning solvent (PD-680) used to clean parts is potentially dangerous to personnel and property. Do not use near open flame or excessive heat. Flash point of solvent is 100°F to 138°F (38°C to 59°C).

TECHNICAL MANUAL

NO. 9-6115-650-14&P

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D C., 15 February 1990

Operator, Unit, Direct and General Support Maintenance Manual
(Including Repair Parts and Special Tools Lists)

POWER PLANT, AN/MJO-25
(NSN 6115-01-153-7742)
(2) MEP-112A 10 KW 400 HZ GENERATOR SETS
M103A3 2-WHEEL, 2-TIRE, MODIFIED TRAILER

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 these procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual directly to: Commander, US Army Aviation and Troop Command, ATTN: AMSAT-I-MP, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. You may also submit your recommended changes by E-mail directly to <mpmP/oavma28@st-louis-emh7.army.mil>. A reply will be furnished directly to you. Instructions for sending an electronic 2028 may be found at the back of this manual immediately preceding the hard copy 2028.

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This manual supersedes Chapter 16 of TM 5-6115-594-14&P dated 25 September 1984.

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LIST OF ILLUSTRATIONS

LIST OF TABLES

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Scope. This manual is for your use in operating and maintaining the Power Plant, AN/MJQ-25. The AN/MJQ-25 is a mobile power plant used to supply 10 KW of 400 Hz input operating power for FIREFINDER. In addition to operating instructions and operator, unit, and intermediate direct support and general support maintenance procedures, this manual contains a Repair Parts and Special Tools List for the power plant.

1-2. Maintenance Forms and Records. Maintenance forms and records used by Army personnel are prescribed by DA Pam 738-750.

1-3. Reporting of Errors. Reporting of errors and omissions and recommendations for improvement of this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications, and Blank Forms), or DA Form 2028-2 located in the back of this manual directly to: Commander, U.S. Army Aviation and Troop Command, ATTN: AMSAT-I-MP, 4300 Goodfellow Boulevard, St. Louis, MO 63120-1798.

1 -4. Reporting Equipment Improvement Recommendations (EIR). EIRs will be prepared using SF 368 Product Quality Deficiency Report. Instructions for preparing EIR's are provided in DA PAM 738-750, The Army Maintenance Management System. EIR's should be mailed directly to: Commander, US Army Aviation and Troop Command, ATTN: AMSAT-I-MDO, 4300 Goodfellow Boulevard, St. Louis, MO 63120-1798.

1-.5 Levels of Maintenance Accomplishment. Army users shall refer to the Maintenance Allocation Chart (MAC) for tasks and levels of maintenance to be performed.

1-6. Destruction of Army Materiel. Destruction of Army materiel to prevent enemy use shall be in accordance with TM 750-244-3.

1-7. Administrative Storage.

a. 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 the storage period appropriate maintenance records will be kept.

b. 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 (MWO's) should be applied.

c. Storage sight 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.

1-8. Preparation for Shipment and Storage. Refer to TB 740-97-2.

Section II. DESCRIPTION AND DATA

1-9. **Description.** Power Plant AN/MJQ-25 is made up of two Tactical Utility Generator Sets, DOD Model MEP-112A, mounted on a single modified M103A3 trailer. These generator sets are air-cooled, diesel engine-driven units, each with a load capacity of 10 KW at 400 Hz. The trailer is a two-wheeled unit with a 1-1/2-ton carrying capacity. The modifications to the basic trailer provide stowage for the accessories and all equipment necessary for mobile operation as well as a work platform for the operator and maintenance personnel. Output from the power plant is applied to the FIREFINDER system through a 5-wire configuration switch box. Figures 1-1 and 1-2 illustrate the power plant with the fitted cover removed to show the generator sets.

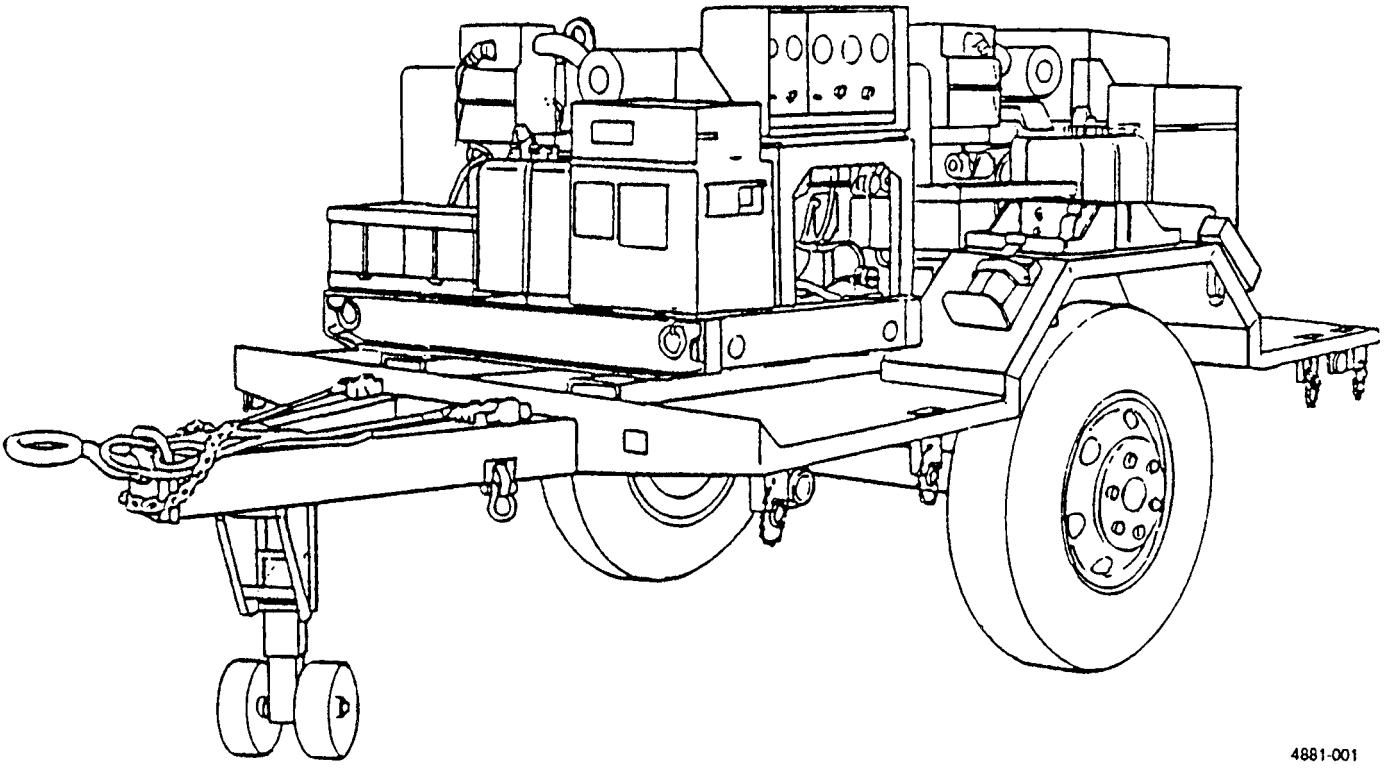


Figure 1-1. Power Plant, Roadside Front, Three Quarter View.

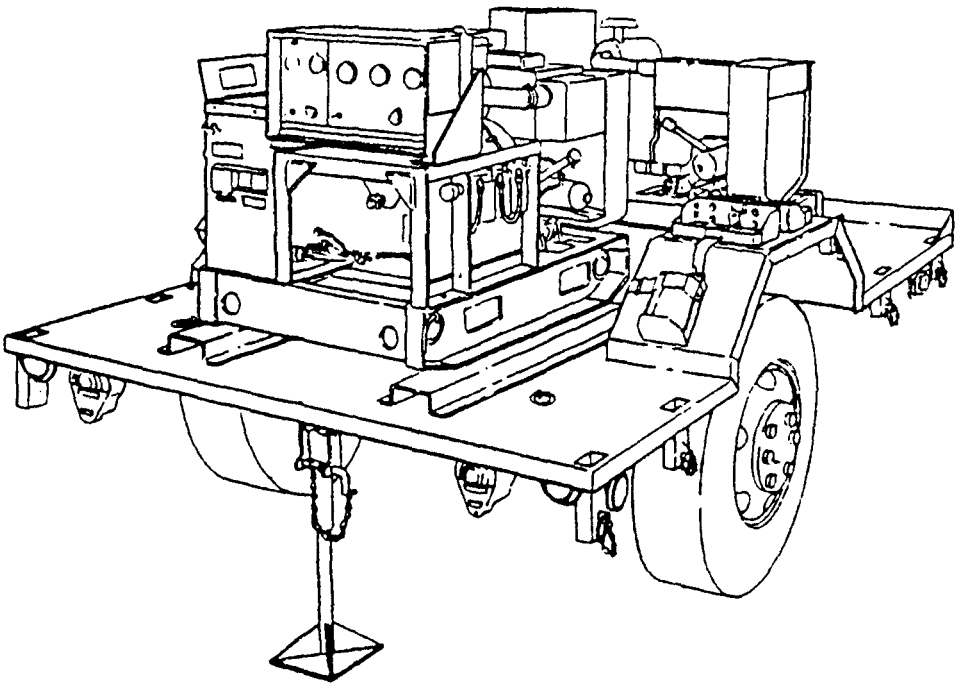


Figure 1-2. Power Plant, Curbside Rear, Three-Quarter View.

1-10. **Tabulated Data.** The tabulated data provides operator and unit level personnel with the dimensions and weights for Power Plant AN/MJQ-25. These specifications are computed from the combined dimensions and weights of the generator sets and trailer as modified for use with the power plant. Specifications of the individual components can be found in their respective technical publications. For additional information concerning Generator Set, DOD Model MEP-112A, refer to TM 5-6115-585-12 and -34. For additional information on the M103A3 trailer, refer to TM 9-2330-213-14&P. The tabulated data also includes the location and content of all data plates unique to the power plant.

a. *Identification and Instruction Plates.*

(1) *Identification plate.*

(a) Location. This plate is located on the front roadside frame between the trailer body and the drawbar ring.

(b) Content.

US
POWER PLANT, ELECTRIC
AN/MJQ-25
KW 10
HERTZ 400
NSN 6115-00-465-1027

(2) *Identification plate.*

(a) Location. This plate is located near the ground stud on the rear, roadside corner of the trailer bed.

(b) Content.

GROUND TERMINAL

(3) Wiring diagram information plate.

(a) Location. This plate is mounted inside the switch box.

(b) Content. (See figure 4-7).

(4) *Warning plate.*

(a) Location. This plate is located on the switch box terminal board cover.

(b) Content.

DANGER
HIGH VOLTAGE

(5) *Information plate.*

(a) Location. This plate is located on the outboard side of the switch box next to ground terminal E2.

(b) Content.

AC GROUND

(6) Information plate.

(a) Location. This plate is located next to ground terminal E1 on the rear of the switch box.

(b) Content.

EQUIPMENT
(FRAME)
GROUND

b. Tabulated Data for Power Plant.

Overall Length	171.5 inches (435.6 centimeters)
Overall Width	83 inches (210.8 centimeters)
Overall Height	95 inches (241.3 centimeters)
Net Weight (empty)	5150 pounds (2340.9 kilograms)
Net Weight (filled)	5320 pounds (2418.1 kilograms)
Shipping Weight	5,700 pounds (2590.9 kilograms)
Cubage	799 cubic feet (22.69 cubic meters)

1-11. **Differences Between Models.** There are no differences between models, serial numbers, or serial number groups applicable to this equipment.

CHAPTER 2

OPERATING INSTRUCTIONS

Section I. OPERATING PROCEDURES

2-1. **Operating Procedures.** Before the power plant generators are started and operated, the power plant is towed to a worksite and installed. Installation instructions are provided in paragraph 4-2. Instructions for dismantling the power plant for movement are given in paragraph 4-3.

a. *Generator Set Operating Procedures.* Detailed prestarting, startup, operating and shutdown procedures for the generator sets can be found on the Operating Instructions data plate located on the right hand side of each generator set control cubicle, and in the generator set technical manual, TM 5-6115-585-12.

WARNING

Do not operate power plant until it is properly grounded (paragraph 4-2, b). Serious injury or death by electrocution can result from operating an ungrounded generator set.

Operating noise level of generator sets can cause hearing damage. Ear protectors, as recommended by medical or safety officer, must be worn when working near power plant.

CAUTION

To avoid damage to equipment, make certain of voltage, frequency, and phase requirements of load connected to generator sets.

NOTE

Make sure generator set circuit breakers and switch box rotary switch are in OFF position before proceeding.

Before starting generator set, do your Before PMCS as described in table 3-2.

b. *Switch Box Operating Procedures.*

(1) *Single generator set operation.* Use the switch box to operate only one generator set as follows:

(a) Make sure power and ground cables are connected to generator set and switch box.

(b) Turn generator set on and bring it up to rated speed, voltage and frequency. (Refer to TM 5-6115-585-12.)

(c) Close generator set circuit breaker (move to ON position).

(d) Turn rotary switch on switch box to GEN 1 or GEN 2 position, as applicable.

(e) To stop operation, move rotary switch and generator set circuit breaker to OFF position. Turn generator set off. (Refer to TM 5-6115-585-12).

(2) *Dual generator set operation.* Use the switch box to alternately operate both generator sets as follows:

(a) Make sure power and ground cables are connected to switch box and both generator sets.

(b) Select first generator set to be used and bring it into operation in accordance with paragraph 2-1, b(1), steps (b) through (d).

(c) Turn second generator set on and bring it up to rated speed, voltage and frequency. (Refer to TM 5-6115-585-12.) Close circuit breaker (move to ON position).

(d) Move switch box rotary switch to GEN position corresponding to second generator set.

(e) Open circuit breaker on first generator set (move to OFF position) and turn generator set off. (Refer to TM 5-6115-585-12.)

(f) To stop operation, move rotary switch to OFF position and open circuit breaker on generator set still running. Turn generator set off. (Refer to TM 5-6115-585-12.)

c. *Trailer Operating Procedures.* Refer to TM 9-2330-213-14&P for specific operating procedures for the M103A3 trailer.

Section II. OPERATION OF AUXILIARY EQUIPMENT

2-2. **Operation Of Auxiliary Equipment.** There is no auxiliary equipment supplied with the power plant.

Section III. OPERATION UNDER UNUSUAL CONDITIONS

2-3. **Operation Under Unusual Conditions.** When operating the power plant under unusual conditions such as extremes in temperature or difficult terrain, there are steps that must be taken to protect the equipment.

a. Refer to TM 5-6115-585-12 for special procedures when operating the generator sets under unusual conditions.

b. Refer to TM 9-2330-213-14&P for special procedures when operating the trailer under unusual conditions.

CHAPTER 3

OPERATOR/CREW MAINTENANCE INSTRUCTIONS

Section I. CONSUMABLE OPERATING AND MAINTENANCE SUPPLIES

3-1. **Consumable Supplies.** Consumable supplies used in the maintenance and operation of the power plant are listed in Table 3-1.

Table 3-1. Consumable Operating and Maintenance Supplies.

(1) Component application	(2) National stock number	(3) Description	(4) Qty required for initial operation	(5) Qty required 8 hours operation	(6) Notes
General Cleaning	6850-00-664-5685	Solvent, Drycleaning, PD-680	1 quart	As required	
Leg Prop Assembly	9150-00-190-0904	Grease, Automotive and Artillery, GAA	1 pound	As required	
Leg Prop Assembly	9150-00-186-6681	Oil, Lubricating, OE/HDO-30	1 quart	As required	
	9150-00-402-4478	Oil, Lubricating, OEA	1 quart	As required	

Section II. LUBRICATION INSTRUCTIONS

3-2. **General.** Detailed instructions for the lubrication of the major components of the power plant are contained in the applicable Lubrication Orders (LO's). Refer to DA Pam 25-30 to ensure the latest editions of the LO's are used.

3-3. **Generator Lubrication.** Refer to TM 5-6115-585-12 for generator set Lubrication Order.

3-4. **Trailer Lubrication.** There are no operator/crew lubrication requirements for the power plant trailer. However, the operator shall assist unit maintenance

Section III. PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

NOTE

The PMCS chart in this section contains all necessary Operator/Crew preventive maintenance checks and services for this equipment.

3-5. **General.** The preventive maintenance checks and services listed in Table 3-2 are grouped according to stages of equipment operation or time intervals. Using the following as a guide, do the checks and services at the intervals shown.

a. Before you operate, perform your before (B) PMCS. Observe all CAUTIONS and WARNINGS.

b. While you operate, perform your during (D) PMCS. Observe all CAUTIONS and WARNINGS.

c. After you operate, be sure to perform your after (A) PMCS.

d. Do (W) PMCS weekly.

e. Do (M) PMCS monthly.

f. If equipment fails to operate, refer to Section IV Troubleshooting. If the problem cannot be corrected, see paragraph 3-8, Reporting Deficiencies.

3-6. **Purpose of PMCS Table.** The purpose of the PMCS table is to provide a systematic method of inspecting and servicing the equipment. In this way, small defects can be detected early before they become a major problem causing the equipment to fail to complete its mission. The PMCS table is arranged with the individual PMCS procedures listed in sequence under assigned intervals. The most logical time (before, during, or after operation) to perform each procedure determines the interval to which it is assigned. Make a habit of doing the checks and services in the same order each time and anything wrong will be seen quickly. See paragraph 3-7 for an explanation of the columns in table 3-2.

3-7. **Explanation Of Columns.** The following is a list of the PMCS table column headings with a description of the information found in each column.

a. Item No. This column shows the sequence in which the checks and services are to be performed, and is used to identify the equipment area on the Equipment Inspection and Maintenance Worksheet, DA Form 2404.

b. Interval. This column shows when each check is to be done.

c. Item to be Inspected. This column identifies the general area or specific part where the check or service is to be done.

d. Procedures. This column lists the checks or services to be done and explains how to do them.

e. Equipment is Not Ready/Available If. This column lists conditions that make the equipment unavailable for use because it is unable to perform its mission or because it would represent a safety hazard. Do not accept or operate equipment with a condition in the “Equipment is Not Ready/Available If” column.

3-8. **Reporting Deficiencies.** If you discover any problem with the equipment during PMCS or while operating it that you are unable to correct, it must be reported. Refer to DA Pam 738-750 and report the deficiency using the proper forms.

3-9. **Special Instructions.** Preventive maintenance is not limited to performing the checks and services listed in the PMCS table. Covering unused receptacles, stowing unused equipment and other routine procedures such as equipment inventory, cleaning components, and touch-up painting are not listed in the PMCS table. These are things you should do any time you see they need to be done. If a routine check is listed in the PMCS table it is because other operators have reported problems with this item. Take along tools and cleaning cloths needed to perform the required checks and services. Use the information in the following paragraphs to help you identify problems at any time.

a. Routine Inspections. Use the following information to help identify potential problems before and during checks and services.

WARNING

Drycleaning solvent PD-680 is both toxic and flammable. Wear safety goggles and gloves and use in a well-ventilated area. Avoid prolonged breathing of vapors and avoid skin contact. Do not use near open flame or excessive heat. Flash point of solvent is 100°F to 138°F (38°C to 59°C). If you become dizzy while using PD-680, get fresh air immediately and get medical aid. If PD-680 contacts eyes, flush with water and get medical aid immediately.

(1) Keep it clean. Dirt, grease, and oil get in the way and may cover up a serious problem. Use drycleaning solvent PD-680, to clean metal surfaces. Use soap and water to clean rubber or plastic parts and material.

(2) Bolts, nuts, and screws. Check them all to make sure they're not loose, missing, bent, or broken. Don't try to check them all with a tool, but look for chipped paint, bare metal, or rust around bolt heads. If you find one loose, tighten it or report it to unit maintenance.

(3) Welds. Look for loose or chipped paint, rust, or gaps where parts are welded together. If a broken weld is found, report it to higher level of maintenance.

(4) Electrical wires connectors, terminals and receptacles. Look for cracked or broken insulation, bare wires, and loose or broken connectors. Tighten loose connectors and make sure the wires are in good condition. Examine terminals and receptacles for serviceability.

(5) Hoses and fluid lines. Look for wear, damage, and leaks. Make sure clamps and fittings are tight. Wet spots and stains around a fitting or connector can mean a leak. If a leak comes from a loose connector, tighten it. If something is broken or worn out, report it to unit maintenance.

b. Leakage Definitions. It is necessary for you to know how fluid leakage affects the status of your equipment. The following are definitions of the types/classes of leakage you need to know to be able to determine the status of your equipment. Learn and be familiar with them. When in doubt, NOTIFY YOUR SUPERVISOR!

Leakage Definitions:

Class I	Seepage of fluid (as indicated by wetness or discoloration) not great enough to form drops.
Class II	Leakage of fluid great enough to form drops but not enough to cause drops to drip from item being checked/inspected.
Class Ill	Leakage of fluid great enough to form drops that fall from the item being checked/inspected.

CAUTION

Equipment operation is allowable with minor leakage (Class I or II) of any fluid except fuel. Of course, consideration must be given to the fluid capacity in the item being checked/inspected. When in doubt, notify your supervisor.

When operating with Class I or II leaks, continue to check fluid level more often than required in the PMCS. Parts without fluid will stop working and/or cause equipment damage.

Class Ill leaks should be reported to your supervisor or unit maintenance.

NOTE

If the equipment must be kept in continuous operation, check and service only those items that can be checked and serviced without disturbing operation. Make the complete checks and services when the equipment can be shut down.

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

Table 3-2. Operator/Crew Preventive Maintenance Checks and Services (PMCS).

B - Before D - During A - After W - Weekly M - Monthly

Item no.	Interval B	D	A	W	M	Item to be inspected. Procedure: check for and have repaired, filled, or adjusted as needed	Equipment is not ready/available if:
						WARNING Before performing any maintenance that requires climbing on or under trailer, set trailer handbrakes, chock wheels, and lower rear leg prop. Injury to personnel could result from trailer suddenly rolling or tipping.	
						NOTE This PMCS table lists the checks and services as performed on a single generator set. These procedures must be duplicated on each of the two generator sets that make up the AN/MJQ-25. Perform weekly as well as before PMCS if you are the assigned operator but have not operated the equipment since the last weekly inspection, or if you are operating the equipment for the first time.	
1	•					GENERATOR SET EXTERIOR	
						a. Check on, around, and beneath the generator set (1) for fuel or oil leaks.	A Class III lubrication oil or any class fuel leak is detected.
						b. Check that generator set (1) grounds are properly installed, and grounding connections are tight.	Not properly grounded.

Table 3-2. Operator/Crew Preventive Maintenance Checks and Services (PMCS) (cont).

B - Before D - During A - After W - Weekly M - Monthly

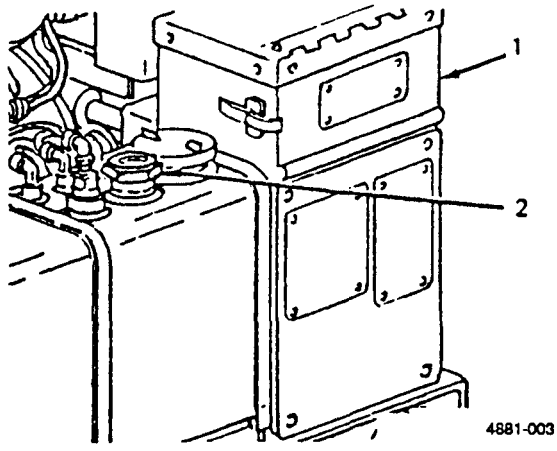
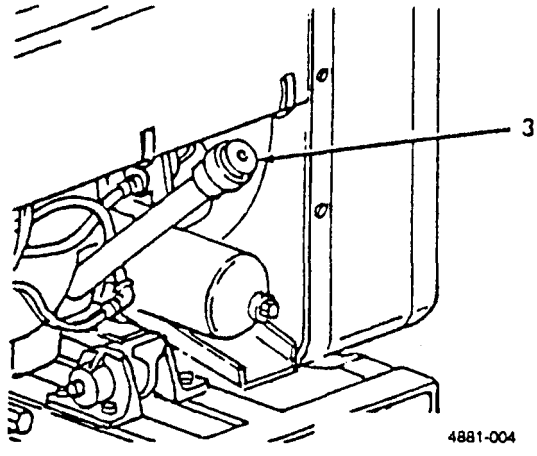
Item no.	Interval B	D	A	W	M	Item to be inspected. Procedure: check for and have repaired, filled, or adjusted as needed	Equipment is not ready/available if:
2	•					FUEL GAGE Check fuel gage (2) for sufficient fuel for continuous operation.  	
3	•					ENGINE OIL LEVEL Check oil filler dipstick (3) for proper oil level. Add oil as required.  	Engine oil is at or below ADD mark.

Table 3-2. Operator/Crew Preventive Maintenance Checks and Services (PMCS) (cent).

B - Before D - During A - After W - Weekly M - Monthly

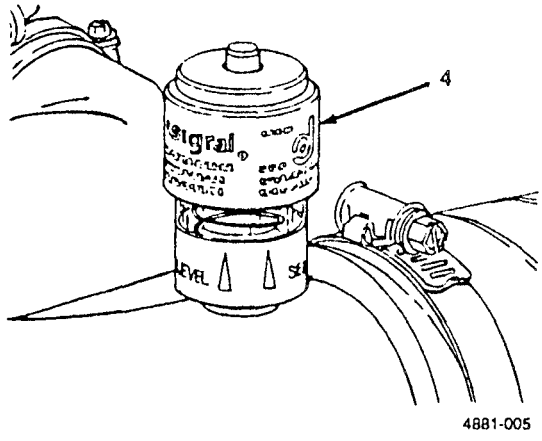
Item no.	Interval B	D	A	W	M	Item to be inspected. Procedure: check for and have repaired, filled, or adjusted as needed	Equipment is not ready/available if:
4	•	•				AIR CLEANER INDICATOR Check indicator (4) for a restricted air cleaner. If red warning indicator becomes visible, notify unit maintenance for cleaning or replacement.  	Red warning indicator is visible.
5	•					ACCESSORIES Check that the following accessories are not missing. a. Sledge hammer b. Fire extinguisher c. Slide hammer d. Ground rods.	 Fire extinguisher is missing. Ground rods are missing.
6	•					BRACKETS Check fire extinguisher and fuel can mounting brackets for loose hardware and broken fittings.	

Table 3-2. Operator/Crew Preventive Maintenance Checks and Services (PMCS) (cont).

B - Before D - During A - After W - Weekly M - Monthly

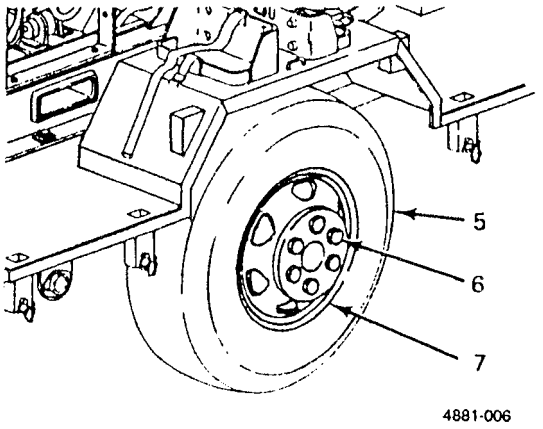
Item no.	Interval B	D	A	W	M	Item to be inspected. Procedure: check for and have repaired, filled, or adjusted as needed	Equipment is not ready/available if:
7	•					TIRES	
						a. Check tires (5) for cuts, foreign objects, or unusual tread wear. Remove any stones from between the treads.	One tire is flat, missing, or unserviceable.
						b. Check that tire pressure is 50 psi (344.74 kPa) when tires are cool.	Tire will not hold air pressure.
8	•					WHEELS	
						a. Check for wheel damage and loose or missing stud nuts (6).	One or more wheels are damaged. One or more stud nuts are loose or missing.
						WARNING An improperly seated lockring can blow off. Never attempt to seat a lockring when tire is inflated. Serious injury or loss of life could result.	
						b. Check for improperly mounted lockring assembly (7).	Lockring is improperly mounted.
							
9	•					DRAWBAR RING	
						Check drawbar ring (8) for insecure mounting and obvious damage.	Ring is loose or bent.

Table 3-2. Operator/Crew Preventive Maintenance Checks and Services (PMCS) (cont).

B - Before D - During A - After W - Weekly M - Monthly

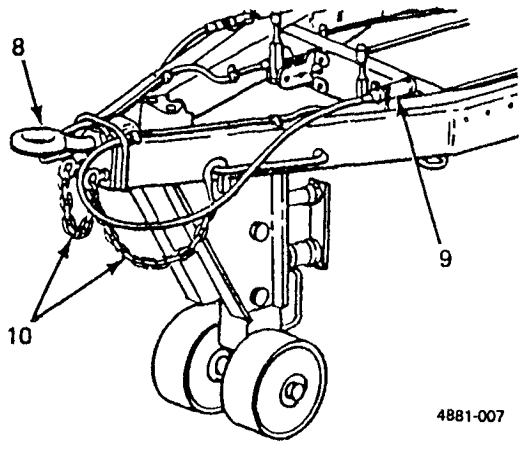
Item no.	Interval B	D	A	W	M	Item to be inspected. Procedure: check for and have repaired, filled, or adjusted as needed	Equipment is not ready/available if:
10	•					INTERVEHICULAR CABLE Check cable (9) and connector for cuts and breaks.	Intervehicular cable is broken or missing.
11	•					SAFETY CHAINS Check safety chains (10) for insecure mounting and obvious damage.  	Safety chains are missing or unsecured.
12	•					BOW ASSEMBLIES Inspect four long bow assemblies (11) and two short bow assemblies (12).	
13	•					FITTED COVER a. Check fitted cover (13) for missing and defective tiedown straps and snap fasteners (14). b. Check for missing and defective ropes (15). c. Check for missing and defective straps and buckles (16). d. Check for ripped seams and tears.	

Table 3-2. Operator/Crew Preventive Maintenance Checks and Services (PMCS) (cont).

B - Before D - During A - After W - Weekly M - Monthly

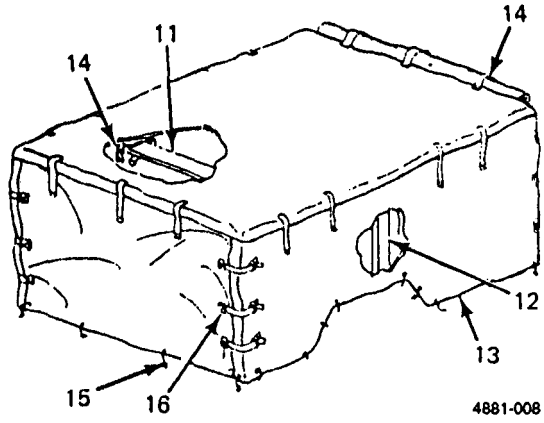
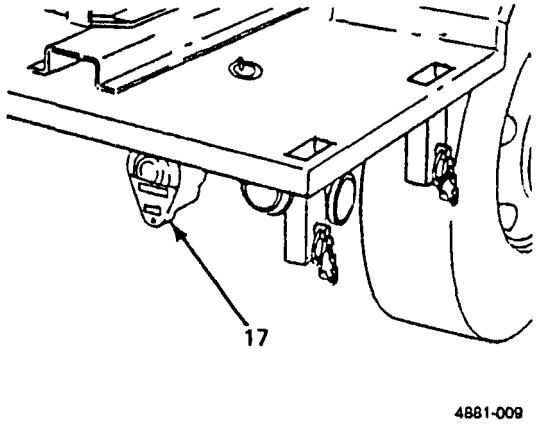
Item no.	Interval B	D	A	W	M	Item to be inspected. Procedure: check for and have repaired, filled, or adjusted as needed	Equipment is not ready/available if:
13	•					FITTED COVER (cont) 	
14	•					LIGHTS	
						a. With intervehicular cable connected to towing vehicle, operate vehicle light switch through all settings and check lights.	Lights fail to operate properly.
						NOTE An assistant is required while checking brake lights.	
						b. Step on brake pedal and check brake lights (17).	Brake lights fail to operate properly.
							

Table 3-2. Operator/Crew Preventive Maintenance Checks and Services (PMCS) (cont).

B - Before D - During A - After W - Weekly M - Monthly

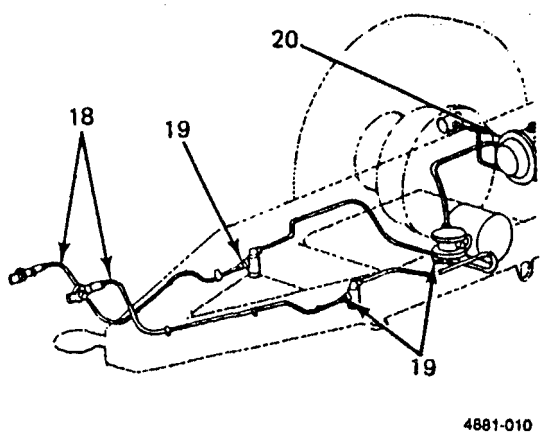
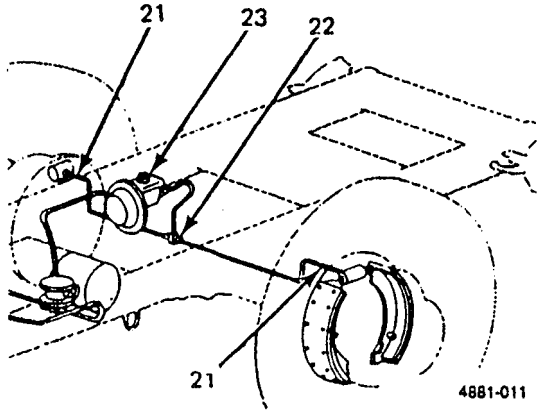
Item no.	Interval B	D	A	W	M	Item to be inspected. Procedure: check for and have repaired, filled, or adjusted as needed	Equipment is not ready/available if:
15	•					AIR HOSES, FITTINGS AND BRAKE AIR CHAMBER Check air hoses (18), fittings (19) and brake air chamber (20) for signs of damage or leaks.  	Damage or leaks are detected.
16	•					HYDRAULIC HOSES, FITTINGS AND MASTER CYLINDER Check brake system hoses (21) and fittings (22) and master cylinder (23), and check under vehicle for signs of brake fluid leaks.  	A brake fluid leak is detected.

Table 3-2. Operator/Crew Preventive Maintenance Checks and Services (PMCS) (cont).

B - Before D - During A - After W - Weekly M - Monthly

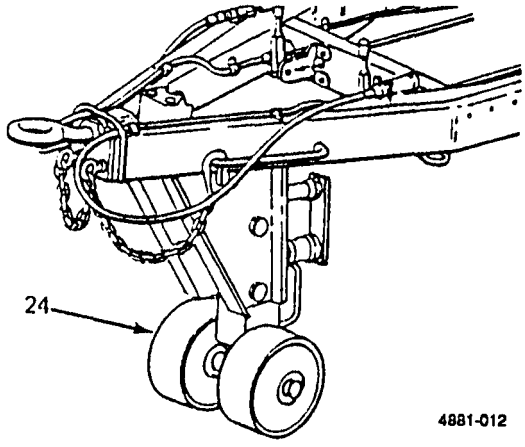
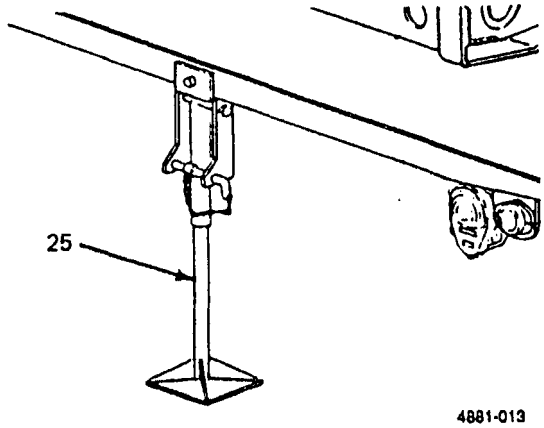
Item no.	Interval B	D	A	W	M	Item to be inspected. Procedure: check for and have repaired, filled, or adjusted as needed	Equipment is not ready/available if:
17	•					SUPPORT LEG ASSEMBLY With trailer connected to towing vehicle, check support leg assembly (24) for ease of operation.  	Support leg assembly is seized or damaged.
18	•					REAR LEG PROP ASSEMBLY Inspect leg prop assembly (25) for broken or missing parts.  	Leg prop assembly is unserviceable.
19	•					BRAKE SYSTEM Test brake system by hooking trailer to towing vehicle and applying brakes.	Service brakes fail to operate.

Table 3-2. Operator/Crew Preventive Maintenance Checks and Services (PMCS) (cont).

B - Before D - During A - After W - Weekly M - Monthly

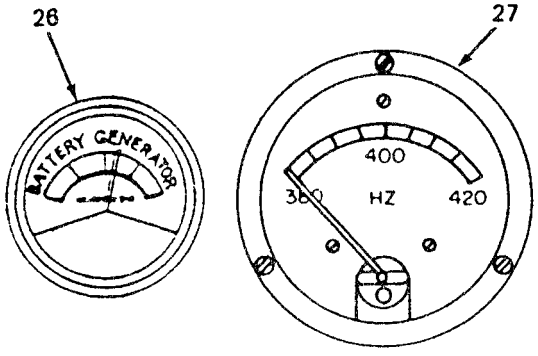
Item no.	Interval B	D	A	W	M	Item to be inspected. Procedure: check for and have repaired, filled, or adjusted as needed	Equipment is not ready/available if:
20		•				TRAILER OPERATION	
						a. Be alert for any unusual noises while towing trailer. Stop and investigate any unusual noises.	
						b. Ensure that trailer is tracking/following correctly behind towing vehicle with no side pull.	Trailer is not tracking/ following properly.
21		•				GENERATOR SET GAGES AND INSTRUMENTS	
						a. Check that battery indicator (26) is in yellow area while batteries are charging and in green area when batteries are fully charged.	Battery indicator not in correct area.
						b. Check that frequency meter (27) indicates 400 Hz (red line) when generator is operating under load.	Correct frequency cannot be obtained and maintained.
							
						c. Check that current meter (28) reading does not exceed 100 or more than 5% load difference between phases.	
						d. Check that voltmeter (29) indicates desired output voltage as determined by load connections and amps-volts transfer switch.	Desired voltage cannot be obtained and maintained.

Table 3-2. Operator/Crew Preventive Maintenance Checks and Services (PMCS) (cont).

B - Before D - During A - After W - Weekly M - Monthly

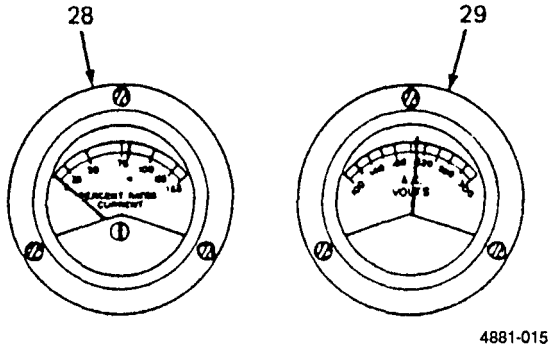
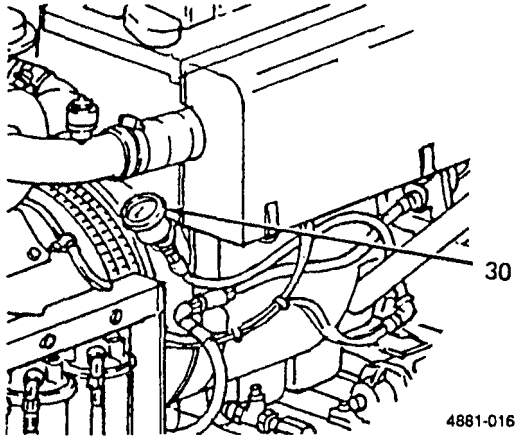
Item no.	Interval B	D	A	W	M	Item to be inspected. Procedure: check for and have repaired, filled, or adjusted as needed	Equipment is not ready/available if:
21						GENERATOR SET GAGES AND INSTRUMENTS (cont) 	
						e. Check engine oil pressure gage (30) for normal operating pressure of 25 psig. 	Oil pressure drops below 15 psig.
22	•					FUEL TANK a. Fill fuel tank (31). **NOTE** Fuel system temperature must be above freezing when draining water and sediment. b. Open drain (32) and drain water and sediment from fuel tank into a suitable container. Allow to drain until fuel runs clean.	

Table 3-2. Operator/Crew Preventive Maintenance Checks and Services (PMCS) (cont).

B - Before D - During A - After W - Weekly M - Monthly

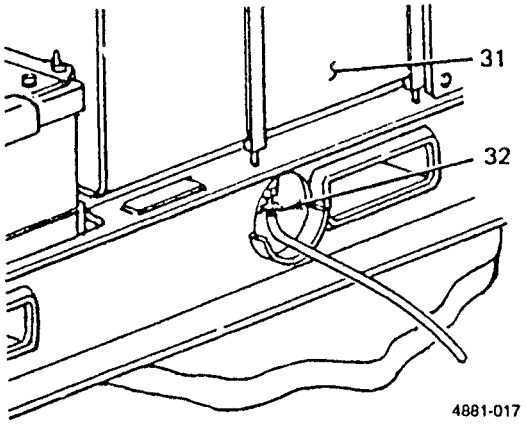
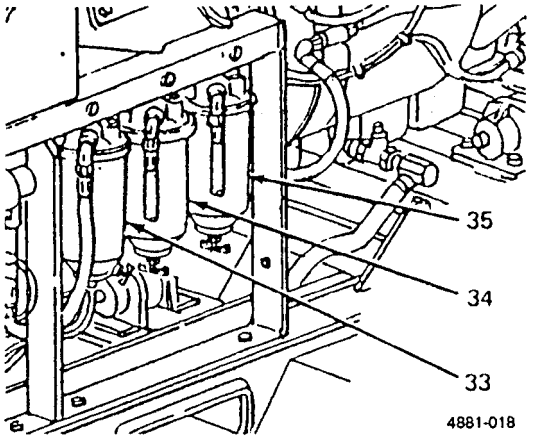
Item no.	Interval B	D	A	W	M	Item to be inspected. Procedure: check for and have repaired, filled, or adjusted as needed	Equipment is not ready/available if:
22	•					FUEL TANK (cont) 	
23	•					FUEL STRAINER AND FILTERS Drain water and sediment from strainer (33), primary (34) and secondary (35) filters into a suitable container. Allow to drain until fuel runs clean. 	

Table 3-2. Operator/Crew Preventive Maintenance Checks and Services (PMCS) (cont).

B - Before D - During A - After W - Weekly M - Monthly

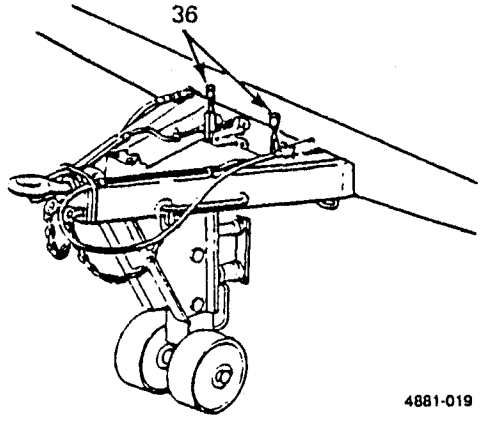
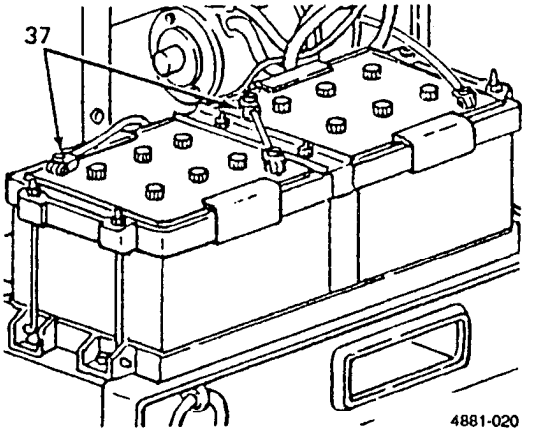
Item no.	Interval B	D	A	W	M	Item to be inspected. Procedure: check for and have repaired, filled, or adjusted as needed	Equipment is not ready/available if:
24			•			HANDBRAKES With trailer hooked to towing vehicle, set handbrakes (36). Move trailer slightly to see if handbrakes hold wheels.  	Handbrakes cannot be adjusted.
25			•			BRAKE DRUMS AND HUBS **WARNING** A defect in the operation of the brakes or hub can cause these parts to get hot enough to cause serious burns. Use extreme caution when attempting to detect heat in this area. Feel drums and hubs for overheating.	Brakes or hub are dragging or binding,
26				•		REFLECTORS Check for damaged or missing reflectors.	

Table 3-2. Operator/Crew Preventive Maintenance Checks and Services (PMCS) (cont).

B - Before D - During A - After W - Weekly M - Monthly

Item no.	Interval B	D	A	W	M	Item to be inspected. Procedure: check for and have repaired, filled, or adjusted as needed	Equipment is not ready/available if:
27				•		BATTERIES Check battery (37) electrolyte level. Level should be about 3/4 inch above top of plates. Add water if level is low. Use clean water (distilled water if available). 	
28					•	FIRE EXTINGUISHER a. Inspect seal and gage for damage b. Weigh fire extinguisher. (See paragraph 3-12.)	Fire extinguisher is damaged.
29					•	TRAILER FRAME Inspect entire chassis frame for damage, cracks, and broken welds.	Frame is obviously broken or cracked.

Section IV. TROUBLESHOOTING

3-10. **Power Unit Troubleshooting.** There are no troubleshooting procedures authorized at operator level for the power plant end item. Troubleshooting procedures for the individual generator sets and trailer are contained in their respective technical manuals referenced below.

a. Generator Set Troubleshooting. Refer to TM 5-6115-585-12 for troubleshooting procedures.

b. Trailer Troubleshooting. Refer to TM 9-2330-213-14&P for troubleshooting procedures.

Section V. OPERATOR/CREW MAINTENANCE

3-11. **Enclosure Maintenance.** Maintenance of the enclosure at operator level is limited to replacement of the fitted cover and/or the bows.

a. Fitted Cover Replacement. (See figures 3-1 and 3-2.)

(1) *Removal.*

(a) Untie 25 ropes (1, figure 3-1) fastening fitted cover to trailer body (2).

(b) Unfasten six straps and buckles (3) securing rear curtain (4). Roll up curtain, and secure with three rollup straps (5) provided.

(c) Unfasten six straps and buckles (3) securing front curtain (6). Roll up curtain, and secure with three rollup straps (5) provided.

(d) Roll up each side (7) of fitted cover, in turn, and secure each side with six rollup straps (5) provided.

(e) Working under fitted cover (1, figure 3-2), unfasten 12 straps (2) securing fitted cover to bow assemblies (3). Remove fitted cover.

(2) *Installation.*

NOTE

Front curtain is provided with three tie-down ropes. Rear curtain only has two ropes.

(a) Position fitted cover (1, figure 3-2) on top of bows (3) making certain front of fitted cover is at front of trailer.

(b) Secure fitted cover (1, figure 3-2) to bow assembly (3) with 12 straps (2) provided.

(c) Unfasten rollup straps (5, figure 3-1) securing sides of fitted cover and lower both sides (7).

(d) Unfasten rollup straps (5) securing front and rear curtains (4,6) and lower both curtains.

(e) Secure front and rear curtains (4, 6) to sides (7) with six straps and buckles (3) provided on each curtain.

(f) Secure fitted cover to trailer body (2) with 25 ropes (1) provided.

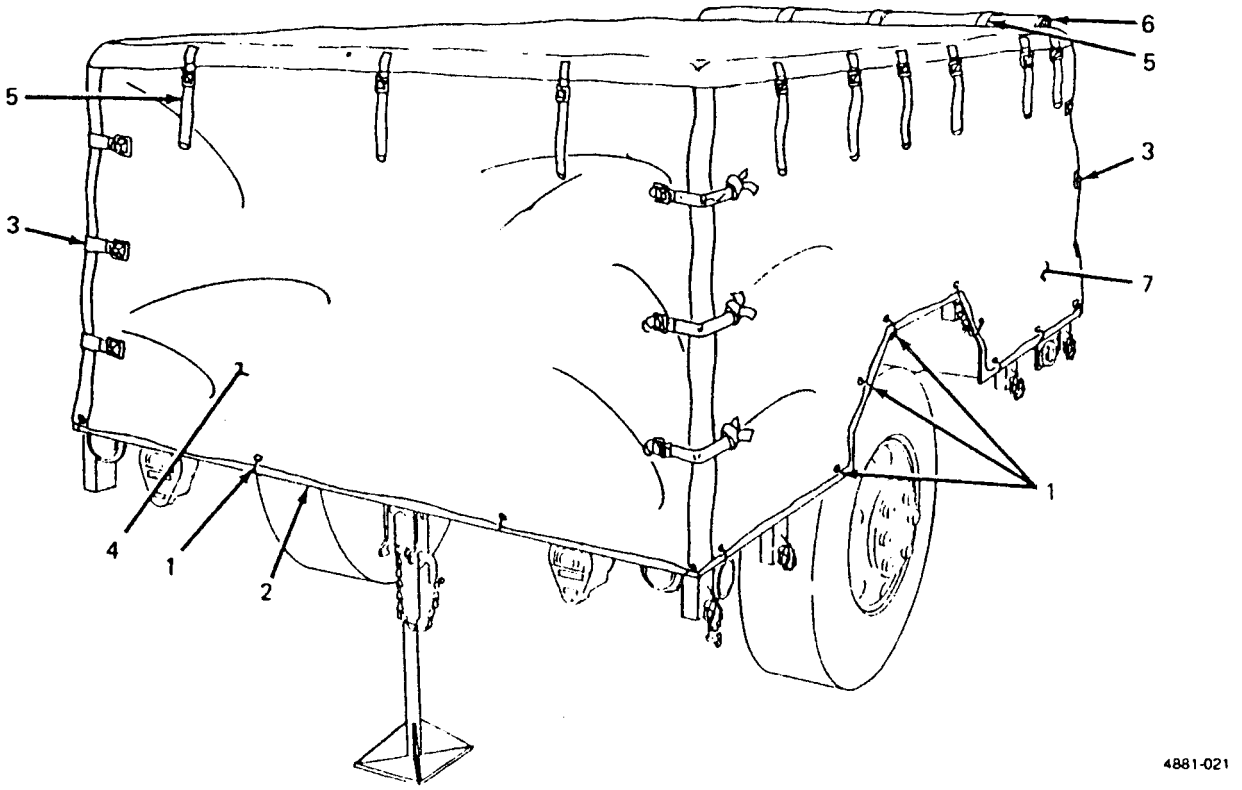


Figure 3-1. Fitted Cover Installed on Power Plant.

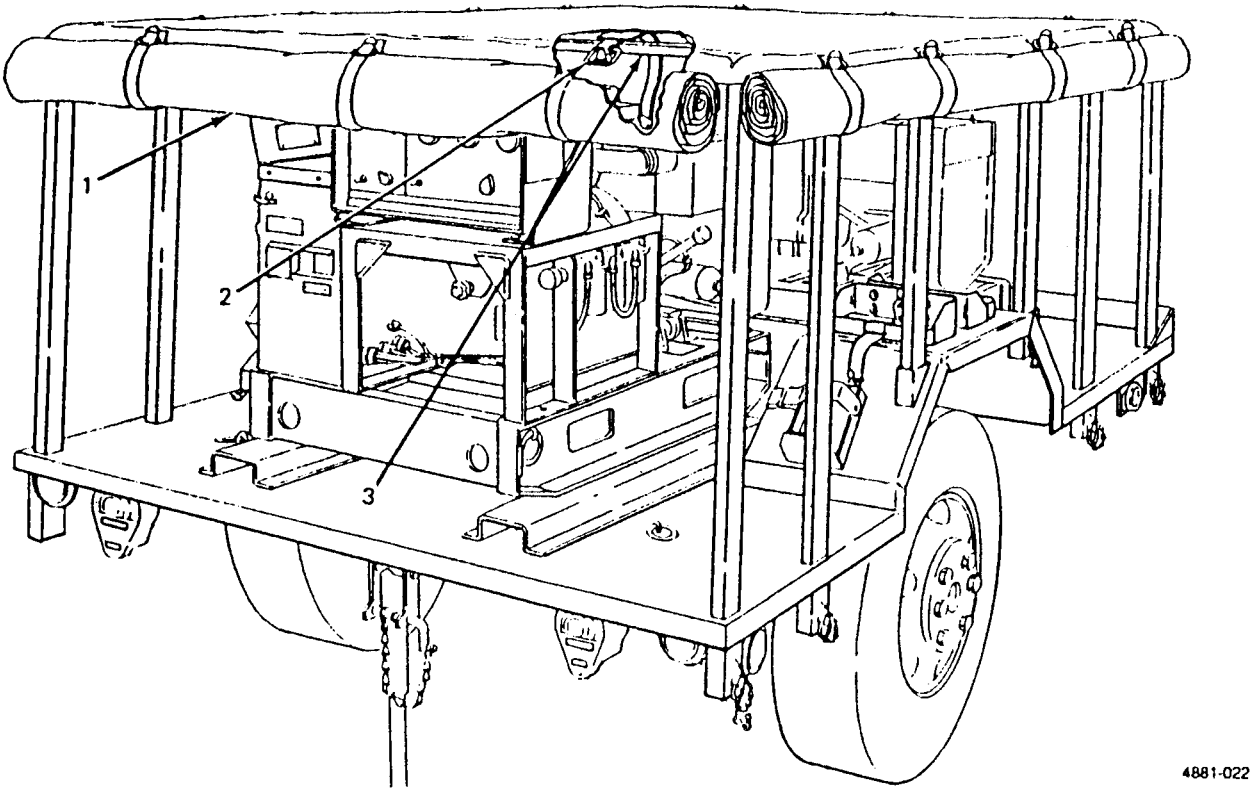


Figure 3-2. Fitted Cover Rolled Up for Removal.

b. Bow Assembly Replacement. (See figure 3-3.)

(1) *Removal.*

(a) Remove fitted cover (paragraph 3-11, a.(1)).

(b) Remove two quick release pins (1) securing each bow assembly (2) in pockets (3) on trailer body (4). Lift each bow out of pocket and off trailer body.

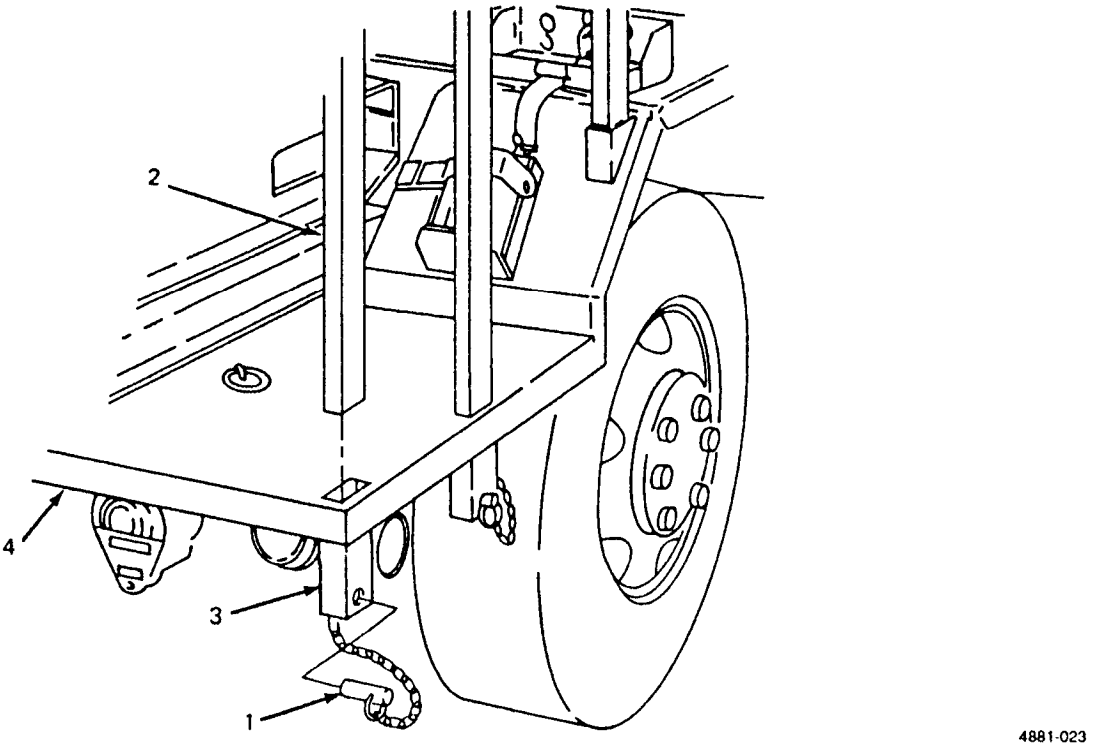


Figure 3-3. Bow Assembly Replacement.

(2) *Installation.*

(a) Lift each bow (2) onto trailer, aline ends with pockets (3) in trailer body (4) and drop bow in place. Secure each bow assembly with two quick release pins (1) provided.

(b) Install fitted cover on trailer (paragraph 3-11, a.(2)).

3-12. **Fire Extinguisher Maintenance.** The AN/MJQ-25 Power Plant is equipped with two 5 lb CO2 fire extinguishers. Maintenance is limited to weighing the fire extinguishers monthly to insure that they are sufficiently charged. Fully charged, each fire extinguisher weighs 15.5 lbs. Send the unit to specialized activity for recharging if it weights 15.0 lb or less.

CAUTION

Do not attempt to verify readiness of a fire extinguisher by partially discharging unit. Any discharge of contents will require refilling.

CHAPTER 4

UNIT MAINTENANCE

Section I. SERVICE UPON RECEIPT OF EQUIPMENT

4-1. **Inspecting and Servicing Equipment.** The power plant shall be unpacked, inspected, and serviced as described in the following paragraphs. Unpacked equipment must be checked against the Equipment Packing List to insure completeness. Discrepancies must be reported in accordance with the instructions given in DA Pam 738-750.

a. Unpacking Power Plant. (See figure 4-1.) The generator sets are packed in place on the trailer body. Before beginning the unpacking procedure, locate, remove, and save the two Depreservation Guides.

WARNING

Steel strapping used in packaging of power plant has sharp edges. Care should be taken when cutting and handling strapping to avoid injury to personnel.

(1) Remove lag screws securing plywood boxes over generator sets and lift boxes off generator sets. Remove wooden wedges and fiberboard pads positioned around base of generator sets.

(2) Remove barrier material and corrugated paper surrounding generator sets.

NOTE

Inspection and servicing of equipment will be easier to perform before fitted cover is put in place on power plant.

(3) Pry off end of plywood fitted cover box (strapped to one generator set box). Take out fitted cover. Remove plastic protective film and set fitted cover aside.

(4) Remove ground wires and clamps taped to one generator set.

(5) Take tape or covers off ends of power cables.

(6) Remove two boxed fire extinguishers taped to generator sets. Unpack fire extinguishers and secure one in each fender-mounted bracket.

(7) Take plywood box off switch box.

(8) Remove strapping, framing and fiberboard edge protectors securing bows and remove bows from trailer.

(9) Remove oil drain taped to generator set and install in place. (Refer to TM 5-6115-585-12.)

(10) Remove package of technical publications from accessory box and save.

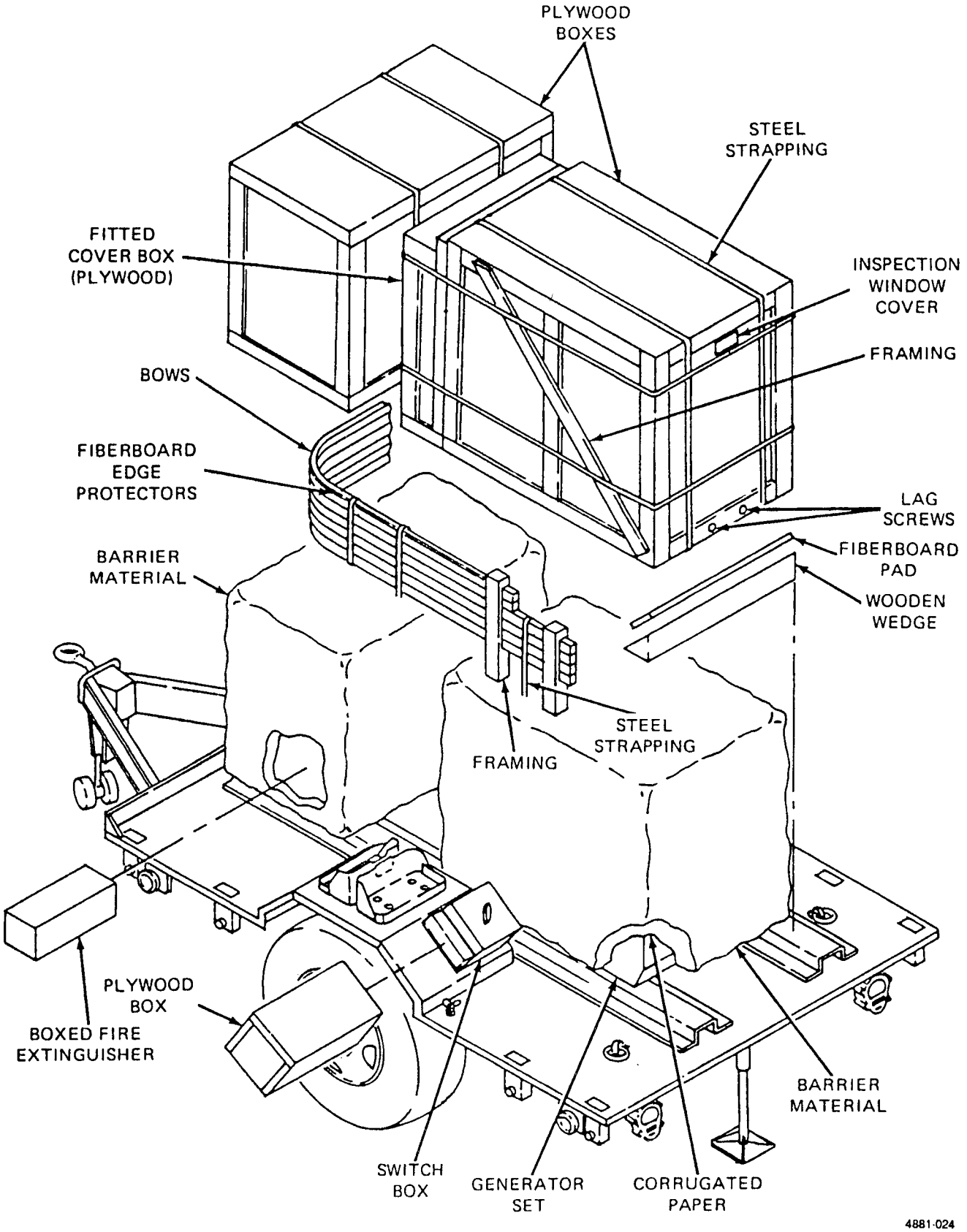


Figure 4-1. Unpacking Power Plant.

(11) Unpack and inventory accessories in accessory box.

(12) Connect power cables to each generator set load terminal board as follows and in accordance with identification on cables, wires and generator set terminals:

(a) White wire to load terminal L0;

(b) Black wire to load terminal L1;

(c) Red wire to load terminal L2;

(d) Blue wire to load terminal L3.

(e) Green wire to generator set ground terminal.

(13) Refer to DA Form 2258, Depreservation Guide for Vehicles and Equipment, packed with power plant and follow instructions given for putting power plant in service.

(14) Stow all authorized accessories in accessory box.

(15) Install bows on power plant (paragraph 3-11, b.(2)).

(16) Install fitted cover on power plant (paragraph 3-11, a.(2)).

b. Inspection and Servicing of Generator Set. Refer to Service Upon Receipt of Materiel in TM 5-6115-585-12 for initial inspection and servicing procedures.

c. *Inspection and Servicing of Trailer.* Refer to Service Upon Receipt of Materiel in TM 9-2330-213-14&P for initial inspection and servicing procedures.

4-2. **Installation.** (See figure 4-2.) Installation of the power plant at a worksite involves positioning the trailer and grounding the power plant.

a. Positioning Power Plant. Position the power plant on the worksite as follows:

(1) Select an area as level as possible to install power plant and position trailer.

(2) Set trailer handbrakes and lower trailer support leg.

(3) Chock both wheels and lower rear leg prop assembly. Adjust leg prop assembly by turning inner leg until leg base makes firm contact with ground.

(4) Lift and secure fitted cover in raised position away from generator set exhaust.

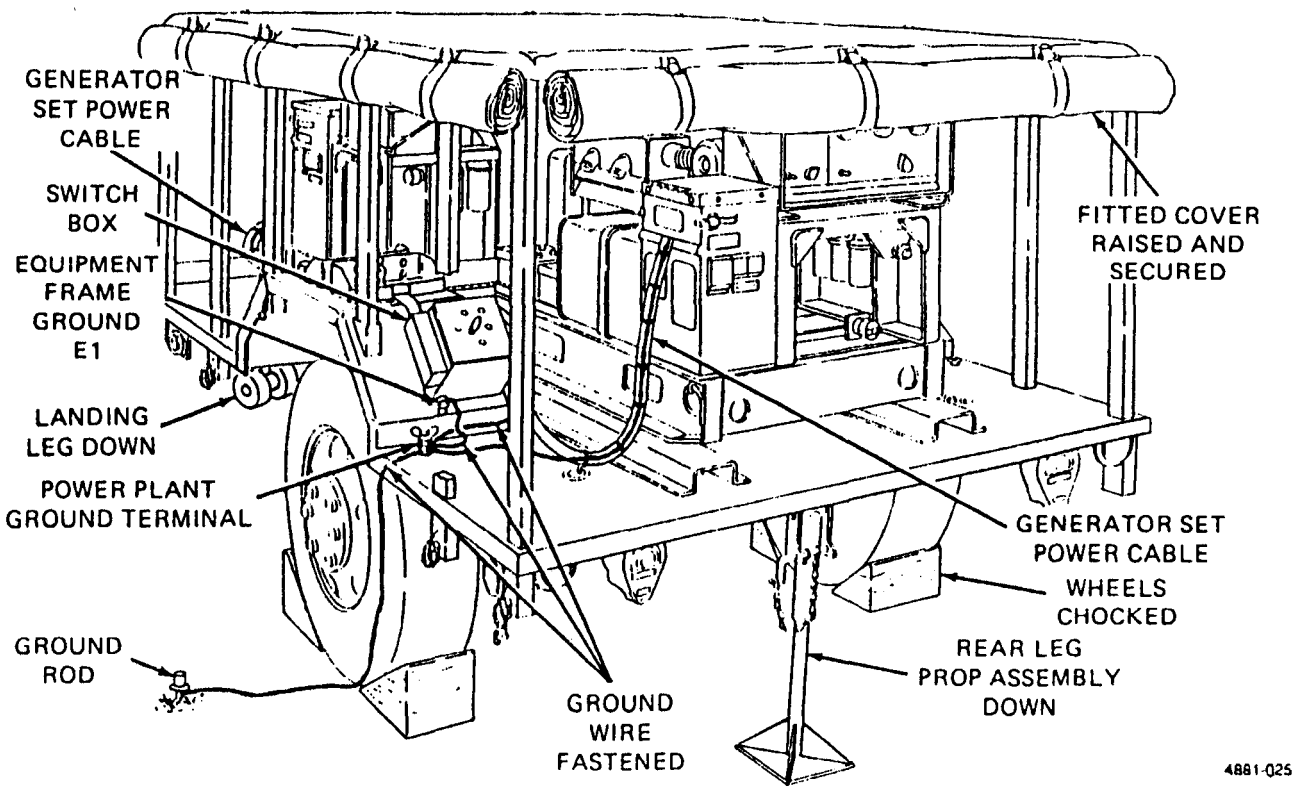


Figure 4-2. Installing Power Plant.

WARNING

Remove fire extinguisher and fuel cans from power plant when generator sets are in operation. This will insure that, in the event of fire, extra fuel will not be involved and extinguisher will remain accessible.

(5) Locate fuel cans and fire extinguishers on ground away from power plant.

WARNING

Do not operate generator sets until power plant is properly grounded (paragraph 4-2, b.). Serious injury or death by electrocution can result from operating an ungrounded power plant.

CAUTION

To avoid damage to equipment, make certain of voltage, frequency, and phase requirements of load being connected to generator sets.

(6) Refer to data plate on load terminal board cover and to TM 5-6115-585-12. Connect power plant to system or equipment to be powered.

b. Grounding. Check that generator sets are grounded to GROUND TERMINAL stud on trailer body. Using ground wire supplied, connect power plant to a suitable ground as described below. The following sources of a good ground are listed in order of preference.

NOTE

As a substitute for the supplied ground wire, any copper wire of a least No. 6 AWG may be used.

(1) *Underground water system.* Ground power plant to one of the accessible pipes in an underground water system. Make certain underground pipe is made of metal and there is no insulation, such as a water meter, between ground wire and the earth.

(2) *Ground rod.* Drive ground rod a minimum of eight feet into earth. A ground rod must have a minimum diameter of 5/8-inch, if solid, or 3/4-inch if pipe.

NOTE

It may be necessary to saturate the area around ground rod with water if soil conditions are dry.

(3) *Ground plate.* Ground power plant to a metal plate buried four feet deep. Ground plate should cover a minimum area of nine square feet.

c. External Fuel Line Connection. (See figure 4-3.) The power plant generator sets can be fueled from an external source such as a five-gallon fuel can or 55 gallon drum. This eliminates the need for frequent refilling of the generator's fuel tank during long intervals of operation.

(1) Remove fuel can adapter and fuel pickup tube from storage locations on generator set and assemble by threading pickup tube into adapter.

(2) Thread one end of auxiliary fuel line onto fuel can adapter fitting and tighten.

(3) Connect free end of auxiliary fuel line to AUXILIARY FUEL CONNECTION. This connection is located immediately below control cubicle on right-hand side of generator set.

(4) Insert fuel can adapter in external fuel source and secure by pressing down on lever.

(5) Set MASTER SWITCH on control panel to PRIME AND RUN AUX FUEL position.

NOTE

When generator set is run on auxiliary fuel, as described above, fuel is first pumped into generator set fuel tank by auxiliary fuel pump. Fuel is then fed to generator set engine from fuel tank.

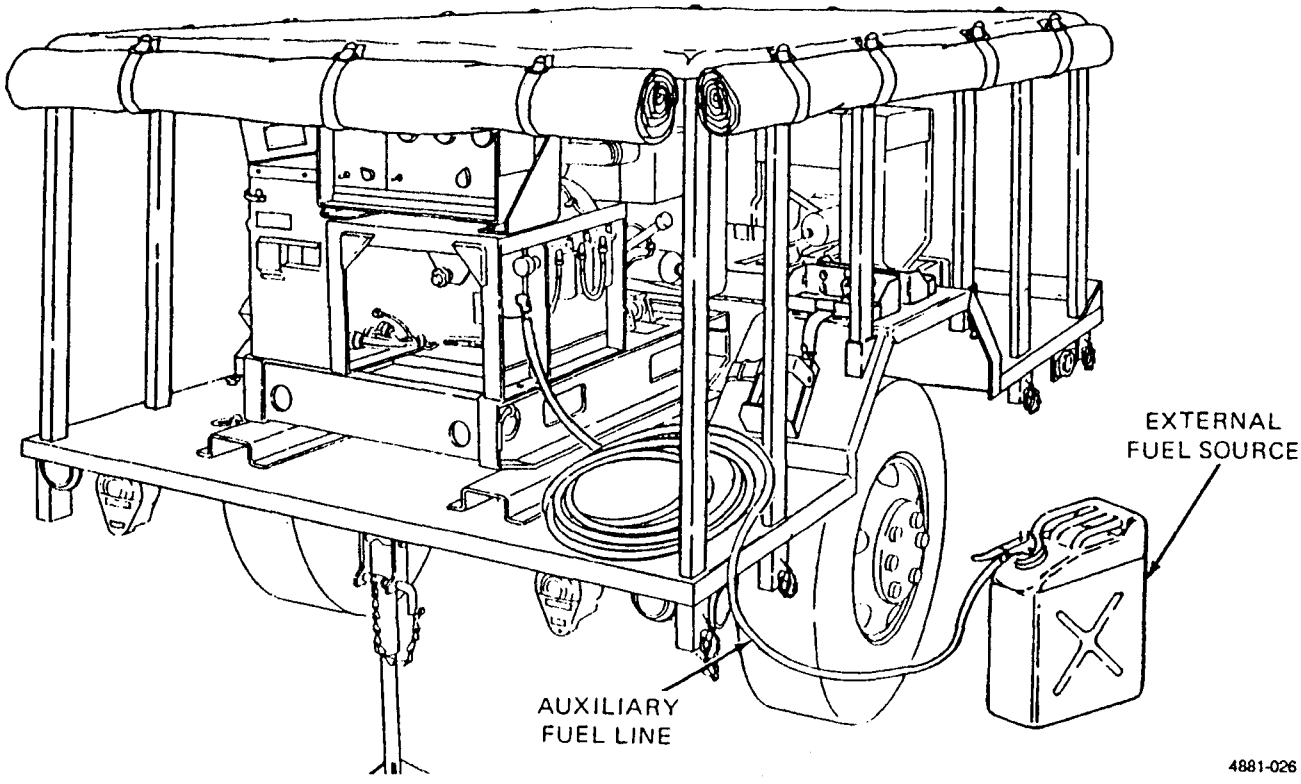


Figure 4-3. External Fuel Line Connection.

Section II. MOVEMENT TO A NEW WORKSITE

4-3. **Dismantling for Movement.** Because the power plant is designed to be mobile, a minimum amount of effort is required to relocate to a new worksite. Procedures are as follows:

a. Disconnect power plant from system or equipment being powered.

b. Disconnect ground cable from source of ground and from power unit GROUND TERMINAL stud. Roll up cable and store in accessory box.

c. Using slide hammer, remove ground rod. Disassemble, clean, and stow ground rod in accessory box.

d. Disconnect power plant from external fuel source, if applicable.

e. Stow any remaining authorized equipment in accessory box.

f. Secure fire extinguishers and fuel cans in their respective mounting brackets.

g. Lower and secure fitted cover in place on power plant.

h. Remove locking pin from leg prop assembly on rear of trailer. Swing leg prop back and up into traveling position and secure with pin.

i. Attach power plant to towing vehicle. (Refer to TM 9-2330-213-14&P.)

4-4. **Reinstallation After Movement.** After movement to a new worksite, install power plant in accordance with paragraph 4-2.

Section Ill. REPAIR PARTS, SPECIAL TOOLS, SPECIAL TEST, MEASUREMENT AND DIAGNOSTIC EQUIPMENT (TMDE)

4-5. **Tools and Equipment.** There are no special tools or equipment required to maintain the AN/MJQ-25 power plant.

4-6. **Maintenance Repair Parts.** Repair parts and equipment for maintenance of this power plant are listed and illustrated in the repair parts and special tools list in Appendix D of this manual.

Section IV. LUBRICATION INSTRUCTIONS

4-7. **General.** Detailed instructions for the lubrication of the major components of the power plant are contained in the applicable Lubrication Orders (LO's). Refer to DA Pam 25-30 to insure that the latest editions of the L.O.'s are used. This section contains lubrication instructions that are not included in the Lubrication Orders.

4-8. **Generator Lubrication.** Refer to TM 5-6115-585-12.

4-9. **Trailer Assembly Lubrication.**

a. Trailer Lubrication. Refer to TM 9-2330-213-14&P for trailer Lubrication Order.

b. Leg Prop Assembly Lubrication. The rear leg prop assembly is a modification to the standard M103A3 trailer and, as such, does not appear in the associated LO. Semiannually lubricate leg prop assembly as follows:

WARNING

Clean parts in a well-ventilated area. Avoid inhalation of solvent fumes and prolonged exposure of skin to cleaning solvent. Wash exposed skin thoroughly. Dry cleaning solvent (PD-680) used to clean parts is potentially dangerous to personnel and property. Do not smoke or use near open flame or excessive heat. Flash point of solvent is 100°F. to 138°F. (38°C. to 59°C.).

(1) Clean hydraulic lubrication fitting and area around lubrication points with PD-680 or equivalent.

(2) Inject sufficient GAA grease into hydraulic fitting to lubricate screw threads inside leg prop assembly.

NOTE

Refer to Lubrication Order in TM 9-2330-213-14&P for lubricating oils specified for use within different anticipated temperature ranges.

(3) Apply OE lubricating oil to both ends of leg prop assembly pivot shaft.

Section V. PREVENTIVE MAINTENANCE CHECKS AND SERVICES

NOTE

The PMCS chart in this section contains all necessary unit preventive maintenance checks and services for this equipment.

4-10. **General.** The trailer assembly and generator sets must be inspected and serviced systematically to insure that the power plant is ready for operation at all times. Inspection will allow defects to be discovered and corrected before they result in serious damage or failure. Table 4-1 contains a tabulated list of preventive maintenance checks and services to be performed by unit maintenance personnel. All of the unit PMCS on the trailer is scheduled to be performed semiannually or annually. Unit PMCS on the generator sets is scheduled monthly or on a per-hours-of-operation basis. The running time meters on the control panels are used to determine the operating time of the generator sets. Using the following as a guide, do the checks and services at the intervals shown. Observe all CAUTIONS and WARNINGS.

a. For PMCS performed on an operating time basis, perform your hourly (H) PMCS as close as possible to the time intervals indicated.

NOTE

For units in continuous operation, perform PMCS before starting operation if continuous operation will extend service interval past that which is shown.

b. Perform your monthly (M) PMCS every month or 100 hours of generator set operating time.

c. Do your semiannual (S) PMCS once every six months or 500 hours of operating time.

d. Do your annual (A) PMCS once every twelve months or 1,000 hours of operating time.

e. If you discover a problem with the equipment, refer to Section VI, Troubleshooting. If you cannot correct the problem, refer to paragraph 4-12, Reporting Deficiencies.

4-11. **Explanation Of Columns.** The following is a list of the PMCS table column headings with a description of the information found in each column.

a. *Item No.* This column shows the sequence in which to do the checks and services, and is used to identify the equipment area on the Equipment Inspection and Maintenance Worksheet, DA Form 2404.

b. *Interval.* This column shows when each check is to be done.

c. *Item to be Inspected.* This column identifies the general area or specific part where the check or service is to be done.

d. *Procedures.* This column lists the checks or service you have to do and explains how to do them.

4-12. **Reporting Deficiencies.** If you discover any problem with the equipment during PMCS that you are unable to correct, it must be reported. Refer to DA Pam 738-750 and report the deficiency using the proper forms.

Table 4-1. Unit Preventive Maintenance Checks and Services (PMCS).

H - Hours of operation (As indicated)	M – Monthly (100 hours)	S - Semiannually (500 hours)	A – Annually (1,000 hours)

Item no.	Interval H	Interval M	Interval S	Interval A	Item to be inspected	Procedures
						WARNING Before performing any maintenance that requires climbing on or under trailer, set trailer handbrakes, chock wheels, and lower rear leg prop. Injury to personnel could result from trailer suddenly rolling or tipping. **NOTE** This PMCS table lists the checks and services as performed on a single generator set. These procedures must be duplicated on each of the two generator sets that make up the AN/MJQ-25.
1		•			Generator Set	Inspect generator set for fuel and oil leaks, loose or missing components and hardware, and unusual wear or deterioration. Clean generator set.
						NOTE Fuel system must be above freezing temperature when draining water and sediment from strainer, filters, and tank.
2		•			Fuel Strainer and Filters	Open drains on fuel strainer, and primary and secondary filters. Drain water and sediment into a suitable container (para 3-20, TM 5-6115-585-12). Allow to drain until fuel runs clean.
3		•			Fuel Tank	Open drain on fuel tank and drain water and sediment into a suitable container (para 3-13, TM 5-6115-585-12). Allow to drain until fuel runs clean.
4			•		Fuel Pumps	Clean or replace, as necessary, fuel strainer in bottom of fuel pump.

Table 4-1. Unit Preventive Maintenance Checks and Services (PMCS) (cont).

H - Hours of operation (As indicated) | M - Monthly (100 hours) | S - Semiannually (500 hours) | A – Annually (1,000 hours)

Item no.	Interval H	M	S	A	Item to be inspected	Procedures
5	100				Lubricating Oil and Filter	Change lubricating oil and filter every 100 hours of operation (LO 5-6115-585-1 2).
6	300				Fuel Strainer	Clean fuel strainer every 300 hours of operation (para 4-20, TM 5-61 15-585-12).
7	500				Primary Fuel Filter	Service primary filter every 500 hours of operation (para 4-20, TM 5-61 15-585-12).
8	1000				Secondary Fuel Filter	Service secondary filter every 1000 hours (para 4-20, TM 5-61 15-585-12).
9	300				Batteries	Perform a hydrometer test on batteries every 300 hours, or quarterly. Refer to para 4-25c, TM 5-6115-585-12 for test procedures.
10	500				Crankcase Breather	Inspect breather tube every 500 hours. Clean as necessary (para 4-45, TM 5-6115-585-12).
11	100				Dust Caps on Air Cleaner	Clean out dust caps on air cleaner assembly every 100 operating hours (more frequently under unusual conditions).
12	1000				Air Cleaner	Clean every 1000 operating hours or as conditions dictate. Replace air cleaner every 2000 operating hours.
13			•		Taillights	Replace any broken or cracked lenses or defective bulbs.
14			•		Intervehicular Cable	Check for cuts, breaks, frayed wires, or damaged plug.
15			•		Drawbar Ring	Check security of mounting. Inspect ring for excessive wear.
16			•		Safety Chains	Inspect for broken links or missing chain(s).

Table 4-1. Unit Preventive Maintenance Checks and Services (PMCS) (cont).

H - Hours of operation (As indicated) | M - Monthly (100 hours) | S - Semiannually (500 hours) | A - Annually (1,000 hours)

Item no.	Interval H	M	S	A	Item to be inspected	Procedures
17			•		Reflectors	Replace any cracked, broken, or missing reflectors.
18			•		Data Plates and Markings	Make sure data plates are legible and secure. Replace illegible data plates.
19			•		Support Leg Assembly	Inspect brackets and leg for bent or broken parts.
20			•		Rear Leg Prop Assembly	Inspect bracket and leg prop for bent or broken parts.
21			•		Suspension Assemblies	a. Inspect shackles, bearings, pins, leaf springs and spring eyes for damage or broken parts. b. Inspect mounting brackets for cracks or loose or missing hardware. c. Inspect shock absorbers for damage or leaks.
22			•		Axle	a. Check for damaged axle tube. b. Check for loose or missing U-bolts or nuts.
23			•		Wheels and Tires	a. Check serviceability of tires as indicated in TM 9-2610-200-24. b. Tighten wheel stud nuts.
24			•		Brakes	a. Inspect brake linings for wear. Replace if brake shoe lining is less than 1/8-inch (3.2 mm) thick. b. Inspect brake adjusting screw, retaining screw, retaining pins, springs and clips for corrosion and wear. c. Inspect hydraulic wheel cylinders for leaks. d. Inspect master cylinder for leaks or low fluid level. Fill to within 1/2 inch from top. e. Adjust brakes (page 4-52, TM 9-2330-213-14&P).

Table 4-1. Unit Preventive Maintenance Checks and Services (PMCS) (cont).

H - Hours of operation (As indicated) | M - Monthly (100 hours) | S - Semiannually (500 hours) | A - Annually (1,000 hours)

Item no.	Interval H	M	S	A	Item to be inspected	Procedures
25				•	Wheel Bearings	Clean and repack (page 4-105, TM 9-2330-213-14&P).
26			•		Hydraulic Brake Tubes and Hoses	Inspect for dents, cracks, loose connections and leaks.
27			•		Trailer - Road Test	Perform road test paying special attention to items that were repaired or adjusted.

Section VI. TROUBLESHOOTING

4-13. **Troubleshooting.** Troubleshooting procedures for components unique to the power plant end item are given in paragraph 4-14. Troubleshooting information for the individual generator sets and trailer are contained in their respective technical manuals referenced below.

a. Generator set Troubleshooting. Refer to TM 5-6115-585-12 for troubleshooting procedures applicable to the generator set.

b. Trailer Troubleshooting. Refer to TM 9-2330-213-14&P for troubleshooting procedures applicable to the trailer.

4-14. **Power Plant Troubleshooting.** Table 4-2 contains troubleshooting information for locating and correcting operating troubles which may develop in components unique to the power plant end item. Each malfunction is followed by a list of tests or inspections which will help determine probable cause and corrective actions to take. Perform the tests/inspections and corrective actions in the order listed. This manual cannot list all malfunctions that may occur, nor all tests or inspections and corrective actions. If a malfunction is not listed or cannot be corrected by listed corrective actions, notify your supervisor.

Table 4-2. Troubleshooting.

Malfunction Test or Inspection Corrective Action

1. POWER IS ABSENT AT SWITCH BOX LOAD TERMINAL(S) WHEN ONE GENERATOR SET IS OPERATING.

Step 1. Check that generator set circuit breaker is set to ON position.

If circuit breaker is in OFF position, set to ON position.

Step 2. Check for power output at generator set load terminals.

If power is absent at generator set load terminals, troubleshoot generator set. (Refer to TM 5-6115-585-12).

Step 3. Inspect power cable connections inside switch box for looseness or broken wire terminals.

Tighten loose connections. If any wire terminals are broken, replace cable (paragraph 4-25, d.) or refer to higher level of maintenance for repair.

Step 4. Perform continuity check on associated generator set power cable (paragraph 4-23, a.).

If cable is defective, replace cable (paragraph 4-25, d.) or refer to higher level of maintenance for repair.

Step 5. Perform continuity check on rotary switch (paragraph 4-23, c.).

If switch is defective, notify higher level of maintenance.

2. POWER IS ABSENT AT ONE OR MORE SWITCH BOX LOAD TERMINALS WHEN EITHER GENERATOR SET IS OPERATING.

Step 1. Check wire associated with non-functioning load terminal(s) for looseness or broken terminals inside switch box.

Tighten loose connection(s). If any terminals are broken, replace wire (paragraph 4-25, c.).

Step 2. Perform continuity check on wire from switch to non-functioning load terminal(s) (paragraph 4-23, b.(2)).

Replace defective wire(s) (paragraph 4-25, c.).

Table 4-2. Troubleshooting (cont).

Malfunction Test or Inspection Corrective Action
Step 3. Perform continuity check on switch (paragraph 4-23, c.). If switch is defective, notify higher level of maintenance.
3. ONE OR BOATH INDICATOR LIGHTS FAIL TO LIGHT WHEN ASSOCIATED GENERATOR SET IS OPERATING AND ROTARY SWITCH IS SET TO "ON" POSITION FOR THAT GENERATOR.
Step 1. Check if bulb is defective. If bulb is defective, replace.
Step 2. Check wires inside switch box associated with non-functioning light for looseness or broken wire terminals. Tighten loose connections. If any terminals are broken, replace wire(s) (paragraph 4-25, c.) or refer to higher level of maintenance for repair.
Step 3. Perform continuity check on wires associated with non-functioning indicator (paragraph 4-23, b.(3) or (4), as applicable). If wires are defective, replace indicator light and wire assembly (paragraph 4-25, b.).
Step 4. Perform continuity check on indicator housing (paragraph 4-23, b.(3) or (4), as applicable). If housing is defective, replace indicator light and wire assembly (paragraph 4-25, b.).

Section VII. RADIO INTERFERENCE SUPPRESSION.

4-15. **General Methods Used to Attain Proper Suppression.** Essentially, suppression is attained by providing a low resistance path to ground for stray currents. The methods used include shielding ignition and high-frequency wires, grounding the frame with bonding straps, and using filtering systems.

4-16. **Radio Interference Suppression Components.** All component parts of the power plant end item, whose primary or secondary function is radio inteference suppression, are on the generator sets. Refer to TM 5-6115-585-12 for location of radio interference suppression components.

Section VIII. MAINTENANCE OF POWER PLANT TRAILER

4-17. **General.** This section of the manual contains unit level maintenance procedures for components of the M103A3 trailer added when the trailer is used as part of the AN/MJQ-25 power plant. These components are not covered in the overall trailer maintenance manual. When power plant has been previously painted in camouflage, any touch-up painting following repairs must match authorized patterns and colors as specified in TB 43-0147. Camouflage painting shall be done in accordance with MIL-C-53072. For all other unit maintenance procedures on the trailer, refer to TM 9-2330-213-14&P

WARNING

Before performing any maintenance that requires climbing on or under trailer, set trailer handbrakes, chock both wheels, and lower rear leg prop. Injury to personnel could result from trailer suddenly rolling or tipping.

4-18. **Fuel Can Bracket Replacement.** (See figure 4-4.) There are four fuel can brackets supplied with the AN/MJQ-25. Two brackets are mounted on top of each fender. Replacement procedures described below are typical for all four.

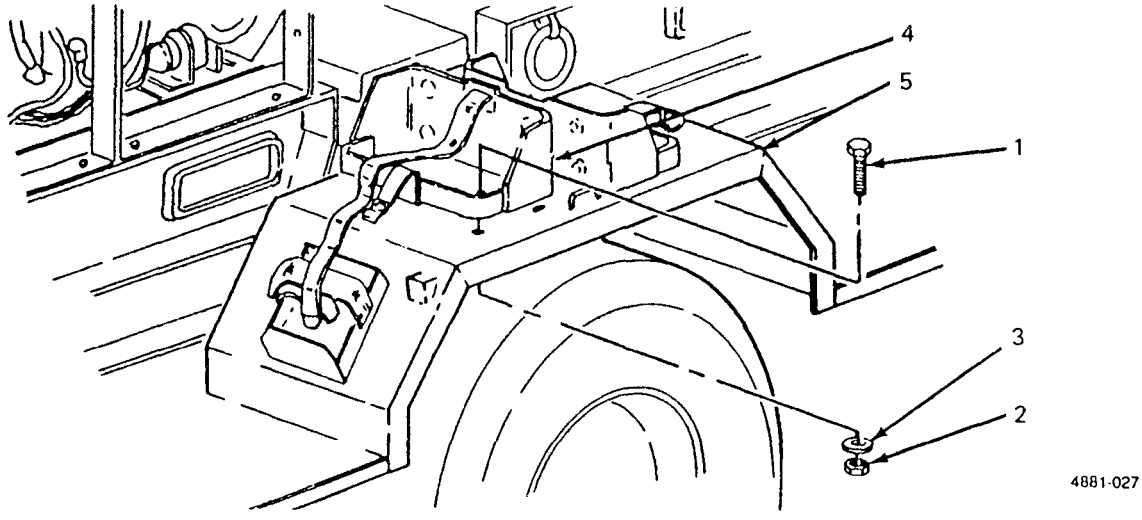


Figure 4-4. Fuel Can Bracket Replacement.

a. Removal.

(1) Remove four screws (1), four nuts (2) and four flat washers (3) securing bracket (4) to fender (5).

(2) Remove bracket (4) from fender (5).

b. Installation.

(1) Position fuel can bracket (4) on fender (5).

(2) Insert four screws (1) down through bracket (4) and through fender (5).

(3) Install one washer (3) and one nut (2) on each screw (1). Tighten hardware to secure bracket (4).

4-19. **Accessory Box Replacement.** (See figure 4-5). The power plant is equipped with an accessory box which is mounted to the trailer bed between the front and rear generator sets.

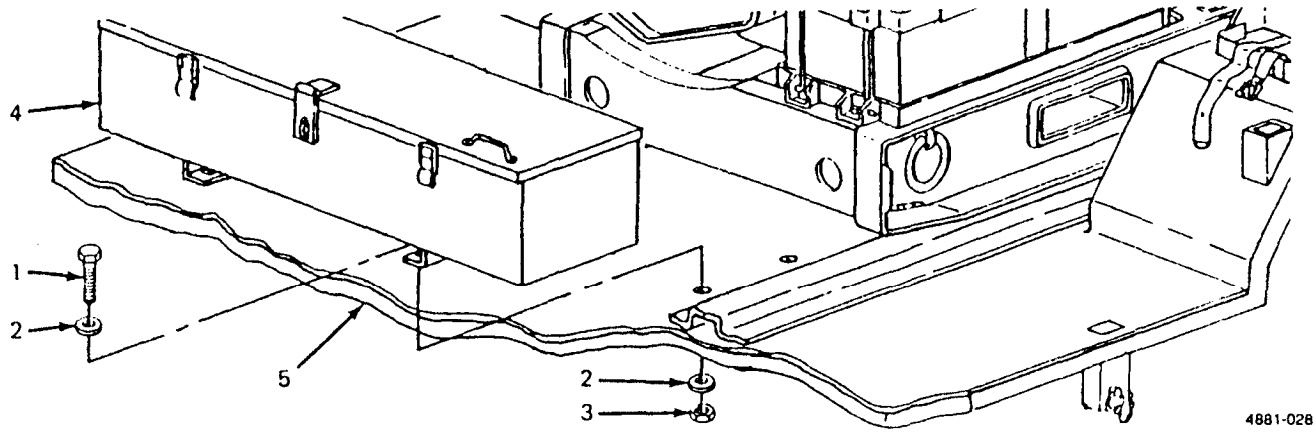


Figure 4-5. Accessory Box Replacement.

a. *Removal.*

(1) Remove four screws (1), eight lockwashers (2), and four nuts (3) securing accessory box (4) to trailer bed (5).

(2) Lift accessory box (4) off trailer bed (5).

b. Installation.

(1) Position accessory box (4) on trailer bed (5).

(2) Insert four screws (1) with lockwashers (2) through accessory box mounting brackets and trailer bed (5).

(3) Working under trailer, install one flat washer (2) and one nut (3) on each screw (1). Tighten hardware to secure accessory box (4).

4-20. **Fire Extinguisher Bracket Replacement.** (See figure 4-6.) Each of the two fire extinguishers supplied with the power plant is carried in a bracket. One bracket is mounted on each fender. Replacement procedures described below are the same for both brackets.

a. Removal.

(1) Remove four screws (1), eight flat washers (2) and four nuts (3) securing bracket (4) to fender (5).

(2) Remove bracket (4) from fender (5).

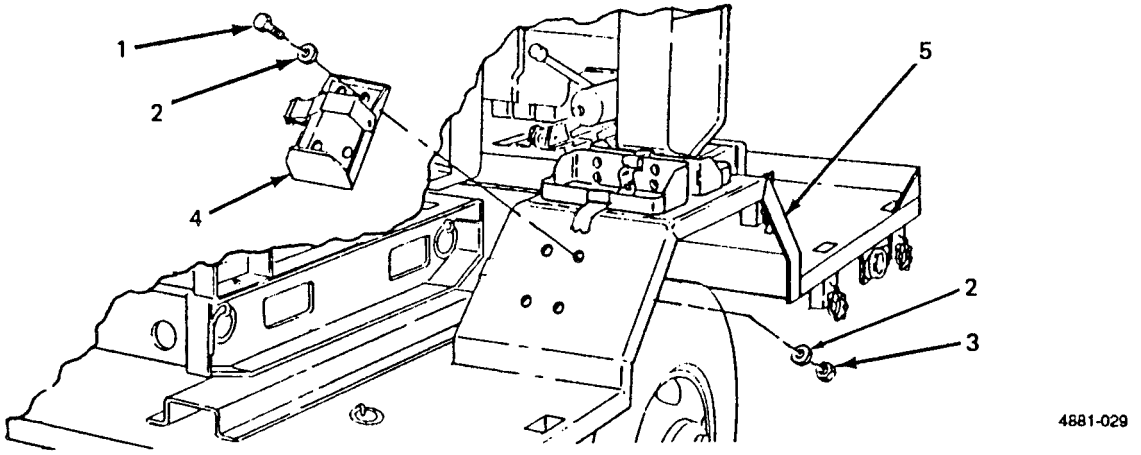


Figure 4-6. Fire Extinguisher Bracket Replacement.

b. Installation.

(1) Position fire extinguisher bracket (4) on fender (5).

(2) Insert four screws (1) with eight flat washers (2) down through bracket (4) and through fender (5).

(3) Install one nut (3) on each screw (1). Tighten hardware to secure bracket (4).

4-21. **Leg Prop Assembly Servicing.** Servicing of the leg prop assembly is limited to semiannual lubrication (paragraph 4-9, b.).

Section IX. MAINTENANCE OF ELECTRICAL SYSTEM

4-22. **General.** This section contains maintenance information on electrical components unique to the power plant end item. For all other electrical system maintenance, refer to the applicable generator set and trailer manuals as follows:

a. Generator Set Maintenance. For generator set maintenance procedures, refer to TM 5-6115-585-12.

b. Trailer Maintenance. For trailer maintenance procedures, refer to TM 9-2330-213-14&P.

4-23. Switch Box Testing. To isolate the source of an electrical system problem, perform continuity tests on the components of the switch box as described below. Refer to the schematic diagram inside the switch box (figure 4-7) to locate and identify the test points indicated in these procedures.

a. Power Cable Assembly Test.

(1) Set multimeter for continuity testing.

(2) Set switch box rotary switch to GEN 1 position and locate power cable assembly associated with that switch position.

(3) Test white wire by touching one probe of multimeter to load terminal LO on generator set and touching other probe to load terminal LO on switch box. Multimeter must indicate continuity between these points.

(4) Repeat step (3) for black wire (between L1 on generator set and Al on switch), red wire (between L2 on generator set and A2 on switch) and blue wire (between L3 on generator set and A3 on switch).

(5) The green (ground) wire must also be tested. Disconnect wire from frame ground stud under generator set control panel. Test for continuity between free end of wire and ground stud E1 on switch box.

(6) If multimeter does not indicate continuity exists on each wire in the cable, replace power cable assembly (paragraph 4-25, d.).

(7) To test power cable assembly associated with GEN 2 switch position, perform steps (2) through (6) substituting switch terminals B1, B2 and B3 for terminals A1, A2 and A3, as test points. Generator set load terminal designations and wire color-coding is identical for both power cables.

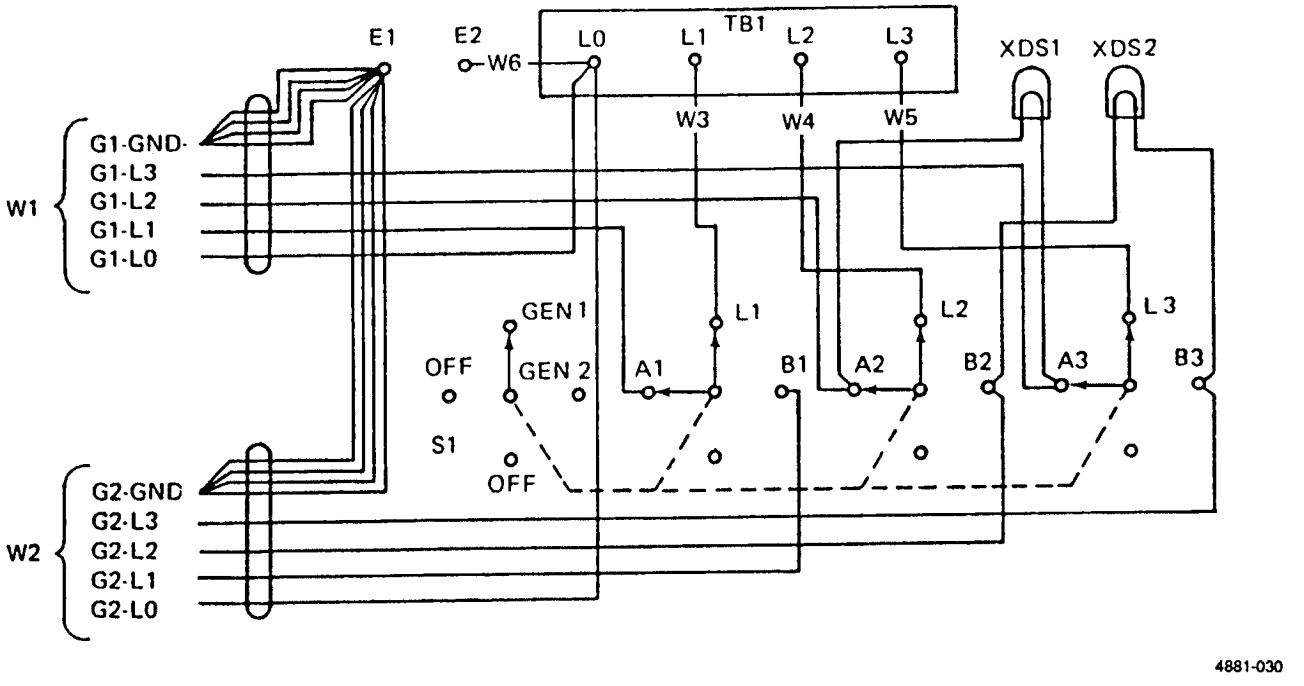


Figure 4-7. Switch Box Schematic Diagram.

b. Switch Box Internal Wiring Test.

(1) Set multimeter for continuity testing.

(2) Test wires between switch terminals and load terminals by touching probes to each of the following pairs of test points: L1 on switch to L1 load terminal, L2 to L2, and L3 to L3. If multimeter does not indicate continuity between each pair of test points replace associated wire (paragraph 4-25, c.).

(3) Test wires and socket associated with GEN 1 indicator light by testing for continuity between switch terminal A2 and socket XDS1, and switch terminal A3 and socket XDS1. If multimeter does not indicate continuity exists on both of these wires, replace light and wire assembly (paragraph 4-25, b.).

(4) Test wires and socket associated with GEN 2 indicator light by testing for continuity between switch terminal B2 and XDS2 socket, and switch terminal B3 and XDS2 socket. If multimeter does not indicate continuity exists on both of these wires, replace light and wire assembly (paragraph 4-25, b.).

(5) Test ground wire by touching one probe to switch box load terminal LO and touch remaining probe to AC GROUND terminal E2 on switch box. If multimeter does not indicate continuity, replace associated wire (paragraph 4-25, e.).

c. Switch Test.

(1) Set multimeter for continuity testing.

(2) Set switch lever to GEN 1 position.

(3) Touch one probe to switch terminal A1 and remaining probe to switch terminal L1. Repeat test between terminals A2 and L2, and terminals A3 and L3. If multimeter does not indicate continuity exists between each pair of terminals, switch is defective. Notify higher level of maintenance.

(4) Set switch lever to GEN 2 position and repeat step (3) above, substituting terminals B1, B2 and B3 for A1, A2 and A3.

4-24. **Switch Box Replace ment.** (See figure 4-8).

a. Removal.

(1) Detach power cables (1) from load terminals on generator sets (2). (Refer to paragraph 4-1, a(12).)

(2) Working underneath roadside fender (3), remove four screws (4), four flat washers (5) and four lockwashers (6) securing switch box (7) to fender.

(3) Lift switch box (7) off fender.

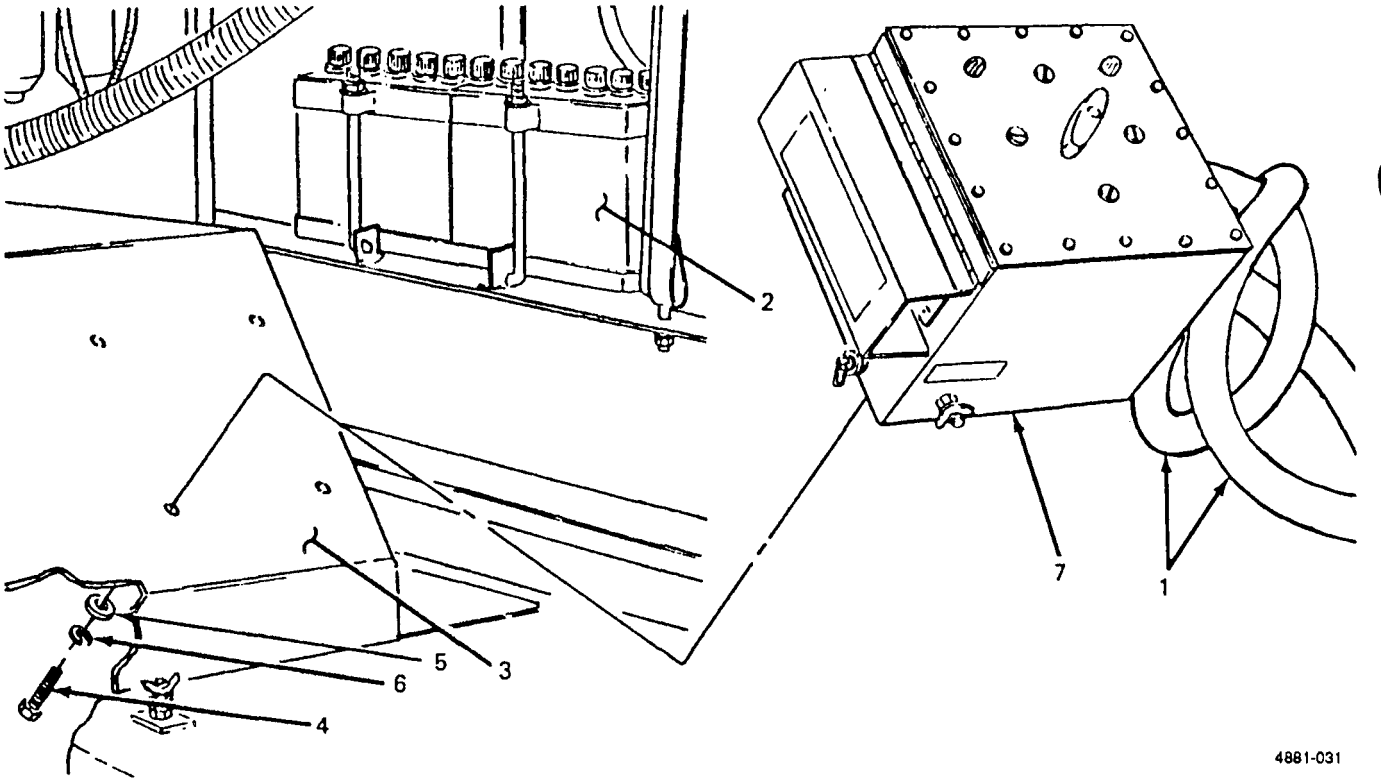


Figure 4-8. Switch Box Replacement.

b. Installation.

(1) Position switch box (7) on fender (3).

(2) Working underneath fender (3) insert four screws (4), four flat washers (5) and four lockwashers (6) through fender and into switch box (7) and tighten.

(3) Connect power cables (1) to load terminals on generator sets (2). (Refer to paragraph 4-1, a(12).)

4-25. Switch Box Repair.

WARNING

Make sure generator set circuit breakers are in OFF position before performing any repairs on switch box. Failure to observe this precaution may result in injury or death by electrocution.

a. Load Terminal and Terminal Board Replacement. (See figure 4-9.) There are four load terminals on the switch box terminal board. This procedure is typical for all four. When reconnecting wires, refer to the schematic inside the switch box (figure 4-7) and to the identification bands on the wires.

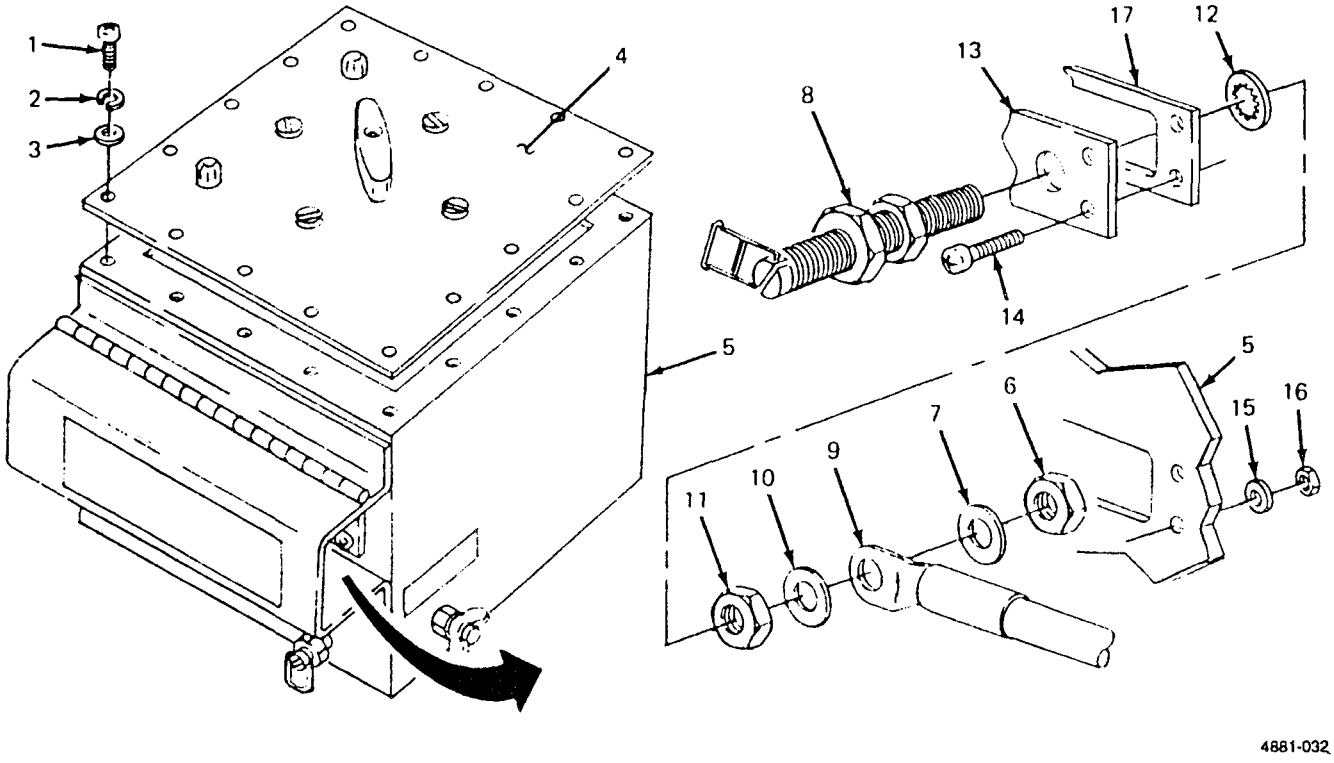


Figure 4-9. Load Terminal and Terminal Board Replacement.

(1) Removal.

(a) Remove 16 screws (1), 16 lockwashers (2) and 16 flat washers (3) securing cover (4) to switch box (5) and take cover off switch box.

NOTE

When disconnecting more than one wire, make sure wires are tagged to identify the load terminal to which they attach before disconnecting the wires.

(b) Working inside switch box (5), remove nut (6) and flat washer (7) from terminal (8). Detach wire(s) (9) by sliding terminal lug(s) off stud.

(c) Remove flat washer (10), nut (11) and internal tooth lockwasher (12) and pull terminal (8) off terminal board (13).

(d) Remove six screws (14), six flat washers 15) and six nuts (16) and take terminal board (13) and gasket (17) off switch box (5).

(2) *Installation.*

(a) Position gasket (17) and terminal board (13) on switch box (5) and fasten with six screws (14), six flat washers (15) and six nuts (16).

(b) Insert terminal (8) through terminal board (13) and into switch box (5).

(c) Install internal tooth lockwasher (12) and nut (11) on terminal stud (8) and tighten against inside of terminal board (13).

NOTE

Observe identification tags when installing internal wires.

(d) Slide flat washer (10) and terminal lug(s) of wire(s) (9) onto stud (8).

(e) Install flat washer (7) and nut (6) on terminal (8) and tighten against wire terminal lug.

(f) Position cover (4) on switch box (5) and secure with 16 screws (1), 16 lockwashers (2) and 16 flat washers (3).

b. Indicator Light and Wire Assembly Repair and Replacement. (See figure 4-10.) There are two indicator light and wire assemblies in the switch box. This procedure is typical for both. When attaching wires, refer to the schematic inside the switch box (figure 4-7). The indicator light and wire assembly is repaired by replacing defective terminals or soldering broken wires. Soldering shall be done in accordance with TB SIG 222.

(1) *Removal.*

(a) Remove 16 screws (1), 16 lockwashers (2) and 16 flat washers (3) securing cover (4) to switch box (5) and take cover off switch box.

(b) Remove screw (6), nut (7) and star washer (8) attaching each indicator light wire terminal (9) to its respective switch terminal (10). Take power cable wire (11) and indicator light wire (12) off switch terminal.

(c) Unscrew nut (13) and internal tooth lockwasher (14) securing indicator light housing (15) to cover (4) and slide nut and lockwasher off wires (12).

(d) Pull terminal (9) off each wire (12).

(e) Pull out light and wires through cover (4).

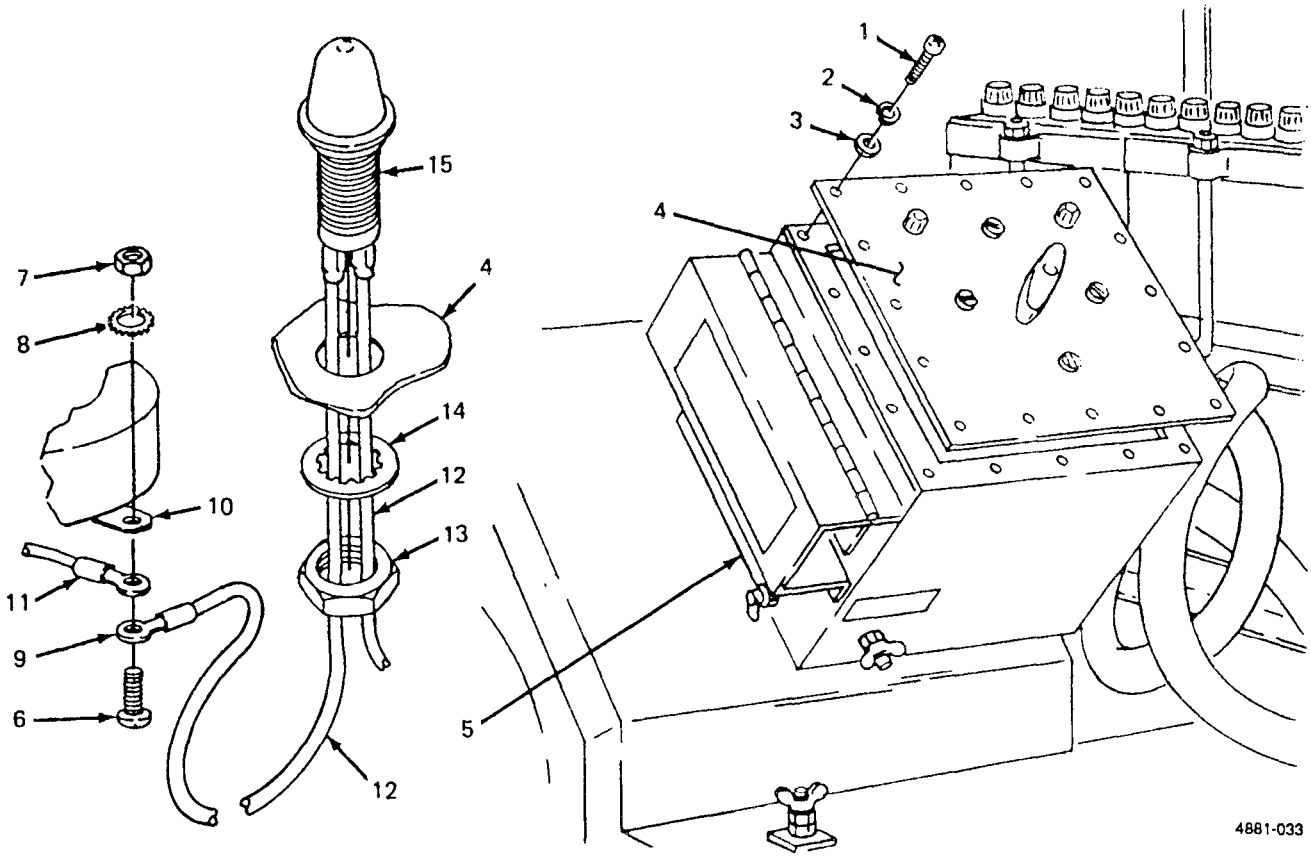


Figure 4-10. Indicator Light and Wire Assembly Replacement.

(2) Installation.

(a) Pull terminal (9) off each indicator light wire (12).

(b) Feed wires (12) through hole in cover (4) and fit light housing (15) in hole.

(c) Slide nut (13) and lockwasher (14) over both wires (12), thread onto housing (15) on inside of cover (4) and tighten.

(d) Crimp one terminal (9) onto each wire (12).

(e) Position terminal (9) of each indicator light wire (12) against underside of switch terminal (10). Position terminal of power cable wire (11) against terminal of indicator light wire. Insert screw (6) up through wire terminals and switch terminal. Install star washer (8) and nut (7) on screw and tighten against switch terminal.

(f) Position cover (4) on switch box (5) and secure with 16 screws (1), 16 lockwashers (2) and 16 flat washers (3).

c. Switch to Load Terminal Wire Replacement. (See figure 4-11.) There are three wires connecting the switch to the load terminals. When attaching wires, refer to the schematic (figure 4-7) inside the switch box and to the identification bands on the wires.

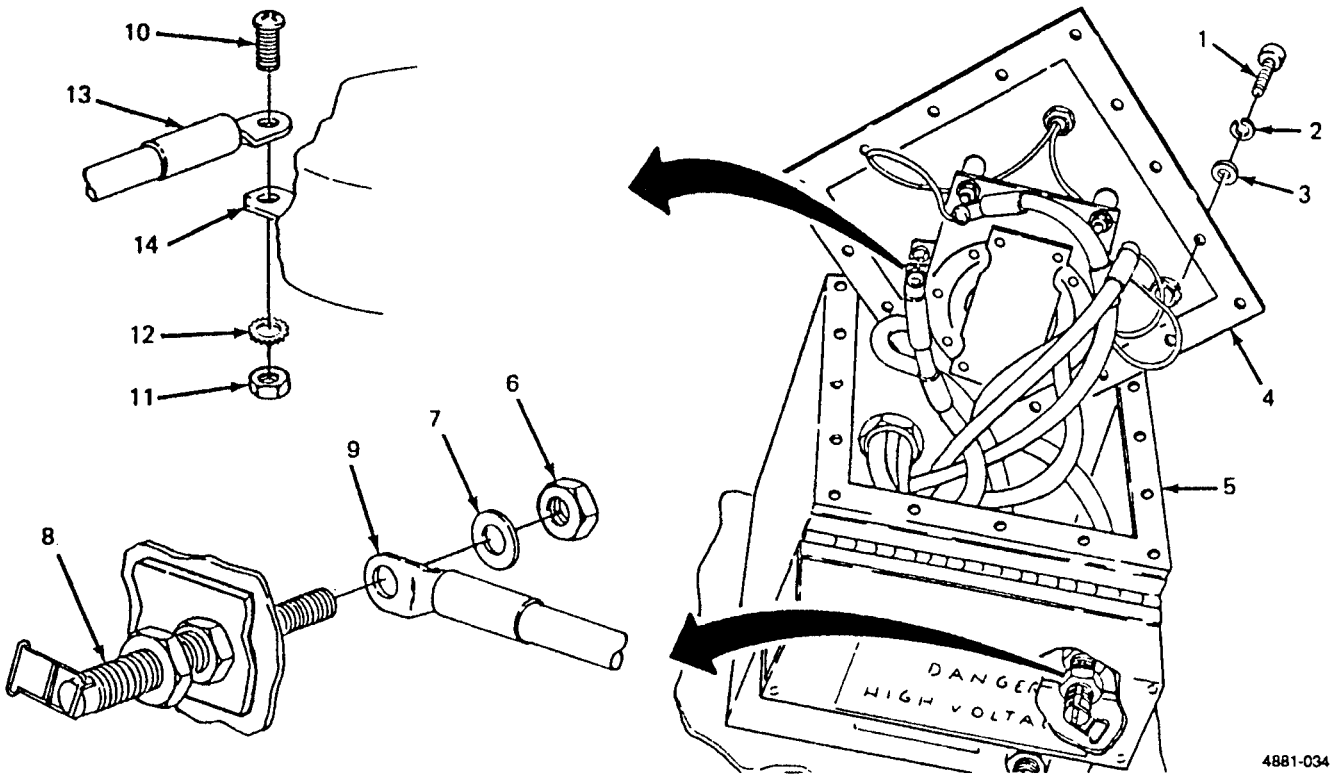


Figure 4-11. Switch to Load Terminal Wire Replacement.

(1) *Removal.*

(a) Remove 16 screws (1), 16 Iockwashers (2), and 16 flat washers (3) securing cover (4) to switch box (5) and take cover off switch box.

(b) Remove nut (6) and flat washer (7) from load terminal stud (8) inside switch box (5). Slide wire terminal (9) off stud.

NOTE

When removing more than one wire, tag switch terminals for identification.

(c) Remove screw (10), nut (11) and star washer (12) securing wire terminal (13) to switch terminal (14). Take wire off switch.

(2) Installation.

NOTE

Observe identification tags on switch terminals when installing wires.

(a) Position wire terminal (9) against underside of switch terminal (13). Insert screw (10) up through wire terminal and switch terminal. Install star washer (12) and nut (11) on screw and tighten against switch terminal.

(b) Slide terminal (9) at free end of wire onto load terminal stud (8) and secure with flat washer (7) and nut (6).

(c) Position cover (4) on switch box (5) and secure with 16 screws (1), 16 lockwashers (2) and 16 flat washers (3).

d. Power Cable Replacement. (See figure 4-12.) There are two power cables on the power plant - one for each generator set. This procedure is typical for both. When attaching wires, refer to the schematic inside the switch box (figure 4-7) and to the identification bands on each of the five wires that make up each cable.

(1) *Removal.*

(a) Disconnect power cable from load terminals on generator set. (Refer to paragraph 4-1, a (12).)

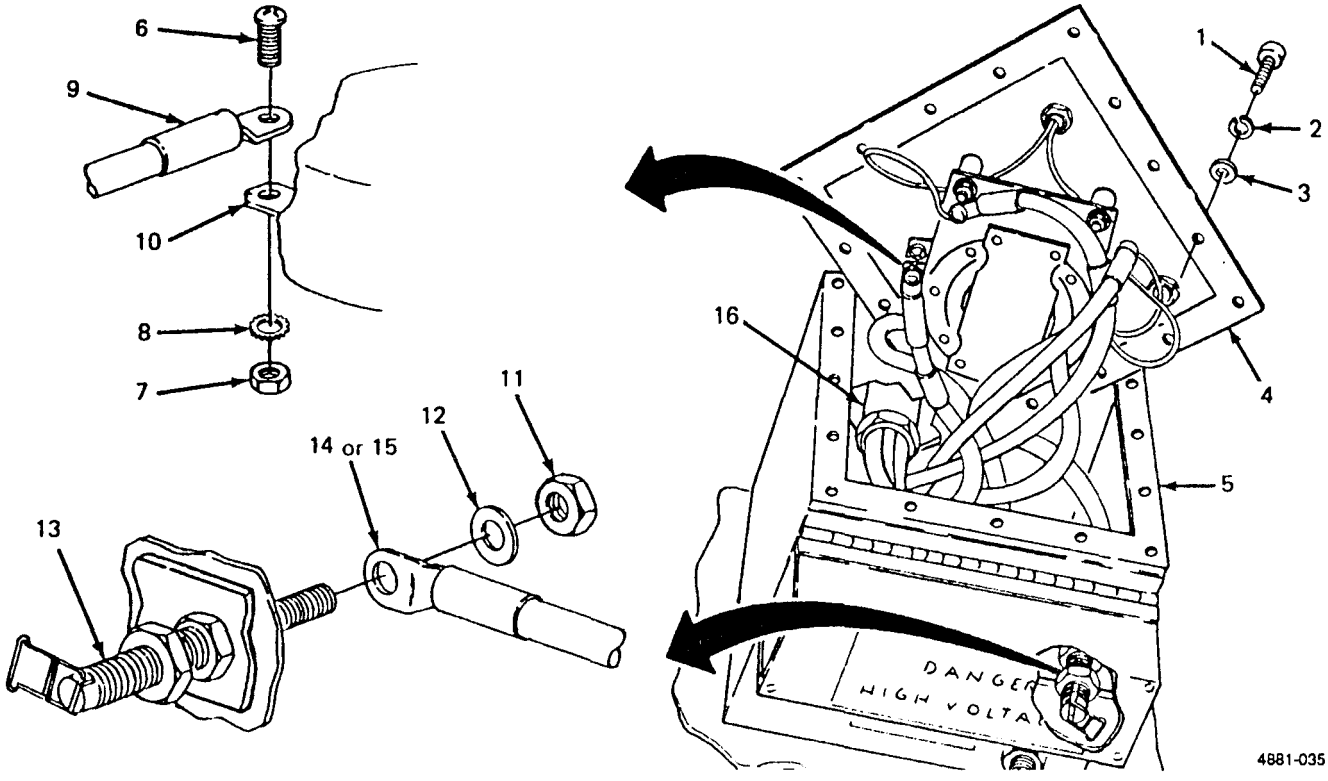


Figure 4-12. Power Cable Replacement.

(b) Remove 16 screws (1), 16 lockwashers (2) and 16 flat washers (3) securing cover (4) to switch box (5) and take cover off switch box.

NOTE

Tag switch terminals for identification when removing wires. If identification bands on wires are illegible, tag wires.

(c) Remove screw (6), nut (7) and star washer (8) attaching each of three wires (9) (black, red and blue) to its respective switch terminal (10). Take off wires.

(d) Remove nut (11) and flat washer(12) from load terminal LO (13) inside switch box (5). Take off white wire (14) associated with power cable being removed.

(e) Repeat step (d) for ground terminal E1 and green wire (15).

(f) Loosen power cable clamping nut (16) on outside of switch box (5) and pull cable through cable clamp and out of box.

(2) *Installation.*

(a) Feed cable through cable clamping nut (16) and through hole into switch box (5).

(b) Tighten clamping nut (16) on outside of switch box (5) to prevent cable from moving.

(c) Slide terminal of white wire (14) onto load terminal LO (13) and secure with flat washer (12) and nut (11).

(d) Repeat step (c) for ground terminal E1 and green wire (15).

NOTE

Observe identification tags when installing wires.

(e) Position each of three wires (9) (black, red and blue) against underside of its respective switch terminal (10). Insert screw (6) up through wire terminal and switch terminal. Install star washer (8) and nut (7) on screw and tighten against switch terminal. Where an indicator light wire is also mounted to the switch terminal, the indicator light wire shall be positioned against the underside of the switch terminal and the power cable wire shall be positioned against the indicator light wire.

(f) Position cover (4) on switch box (5) and secure with 16 screws (l), 16 lockwashers (2) and 16 flat washers (3).

(g) Connect power cable to load terminals on generator set. (Refer to paragraph 4-1, a(12).)

e. *Ground Wire Replacement.* (See figure 4-13.) Inside the switch box, a wire connects load terminal LO to AC GROUND terminal E2 located on the side of the switch box below the terminal board.

(1) *Removal.*

(a) Remove 16 screws (1), 16 lockwashers (2) and 16 flat washers (3) securing cover (4) to switch box (5) and take cover off switch box.

(b) Remove nut (6) and flat washer (7) from load terminal LO (8) inside switch box (5).

(c) Slide power cable ground (white) wire terminals (9) and switch box ground wire terminal (10) off load terminal LO (8).

(d) Remove nut (11) and flat washer (12) from AC GROUND terminal E2 (13) inside switch box (5). Slide ground wire terminal (14) off terminal E2.

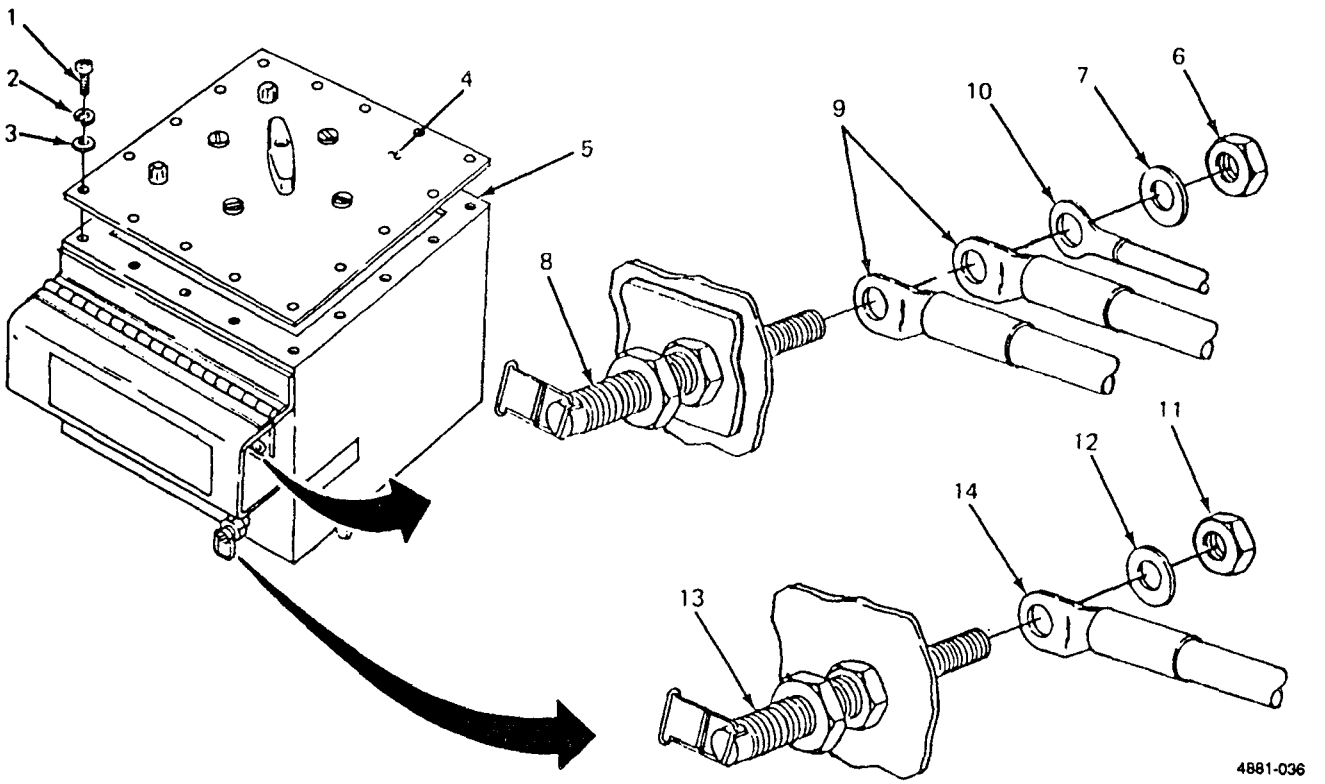


Figure 4-13. Ground Wire Replacement.

(2) Installation.

(a) Install switch box ground wire terminal (14) on AC GROUND terminal E2 (13) and secure with flat washer (12) and nut (11).

(b) Install other switch box ground wire terminal (10) on load terminal LO (8). Install power cable ground (white) wire terminals (9) on terminal LO and secure both wires with flat washer (7) and nut (6).

(c) Position cover (4) on switch box (5) and secure with 16 screws (1), 16 Iockwashers (2) and 16 flat washers (3).

4-26. **Taillight Cable Assembly and Electrical Lead Repair and Replacement.** One taillight cable assembly and one electrical lead connect each taillight to the trailer wiring harness. The taillight cable assembly and electrical lead are replaced by unplugging four connectors at each end. Repair is accomplished by replacing defective connectors. To manufacture a replacement cable assembly and electrical lead, install new connectors on suitable lengths of insulated wire using the procedure described for repair.

a. Male Connector Replacement. (See figure 4-14.)

(1) Slide shell (1) back on wire lead (2).

(2) Remove washer (3).

(3) Slide shell (1) off over contact (4).

(4) Cut off contact (4).

NOTE

Be careful not to strip too much insulation from wire. Connector contact must be crimped onto insulation to hold securely.

(5) Strip insulation off wire lead (2) equal to depth of new contact (4).

(6) Slide shell (1) and washer (3) of new connector onto wire lead (2).

(7) Slide contact (4) onto stripped wire and solder in accordance with TB SIG 222.

(8) Crimp contact onto wire.

(9) Slide shell (1) forward over washer (3) and contact (4).

b. Female Connector Replacement. (See figure 4-14.)

(1) Slide shell (5) and sleeve (6) back on wire lead (7).

(2) Cut off contact (8).

(3) Slide shell (5) and sleeve (6) off wire lead (7).

NOTE

Be careful not to strip too much insulation from wire. Connector contact must be crimped onto insulation to hold securely.

(4) Strip insulation off wire lead (7) equal to depth of new contact (8).

(5) Slide shell (5) and sleeve (6), onto wire lead (7).

(6) Slide contact (8) onto stripped wire and solder in accordance with TB SIG 222.

(7) Crimp contact onto wire.

(8) Slide shell (5) and sleeve (6) forward over contact (8).

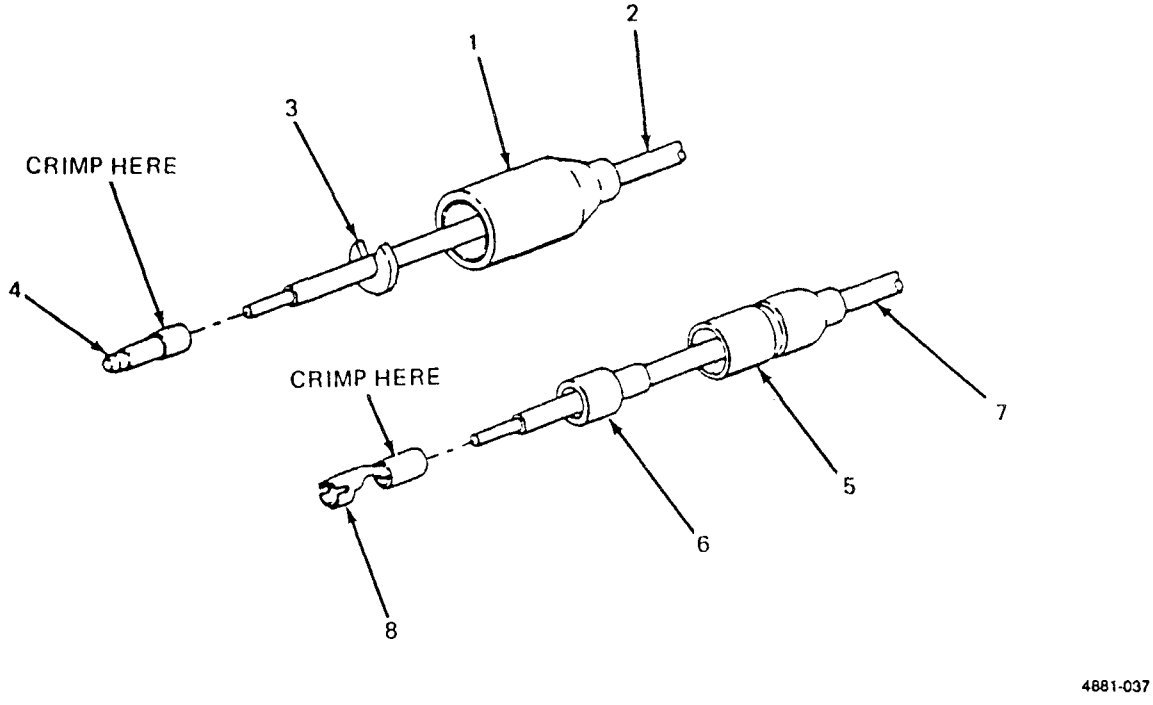


Figure 4-14. Taillight Cable Assembly and Electrical Lead Repair.

CHAPTER 5

DIRECT AND GENERAL SUPPORT MAINTENANCE INSTRUCTIONS

Section I. INTRODUCTION

5-1. **General.** This chapter contains direct and general support level maintenance procedures for components of the AN/MJQ-25 Power Plant which are not part of the basic generator sets or trailer. For all other direct and general support maintenance procedures on the trailer, refer to TM 9-2330-213-14&P. For direct and general support maintenance procedures on the generator set, refer to TM 5-6115-585-34P.

WARNING

Before performing any maintenance that requires climbing on or under trailer, set trailer handbrakes, chock wheels and lower rear leg prop. Injury to personnel could result from trailer suddenly rolling or tipping.

Section II. MAINTENANCE OF POWER PLANT TRAILER

5-2. **Leg Prop Assembly Maintenance.** Maintenance of the leg prop assembly at the direct and general support levels consists of repairing or replacing the assembly as required.

a. Leg Prop Assembly Replacement. (See figure 5-1.)

(1) *Removal.*

(a) While supporting leg prop assembly, pull out angled bar (1) and lower leg from traveling position.

(b) Line up boss (2) on upper leg (3) with holes in bracket (4) and insert angled bar (1) to lock leg in support position.

(c) Remove either one or two cotter pins (5) from leg prop assembly pivot shaft (6).

(d) While steadying leg prop assembly, remove shaft (6) with remaining cotter pin (5) in place.

WARNING

When angled bar is removed in step (e), leg prop assembly will fall from bracket if not supported. To prevent injury to personnel or damage to equipment, do not permit leg assembly to drop.

(e) Lift leg assembly slightly to take weight off angled bar (1) and remove bar.

(f) Lower leg assembly from bracket (4).

(g) Remove three screws (7), three flat washers (8) and three nuts (9), and remove bracket (4) from trailer frame (10).

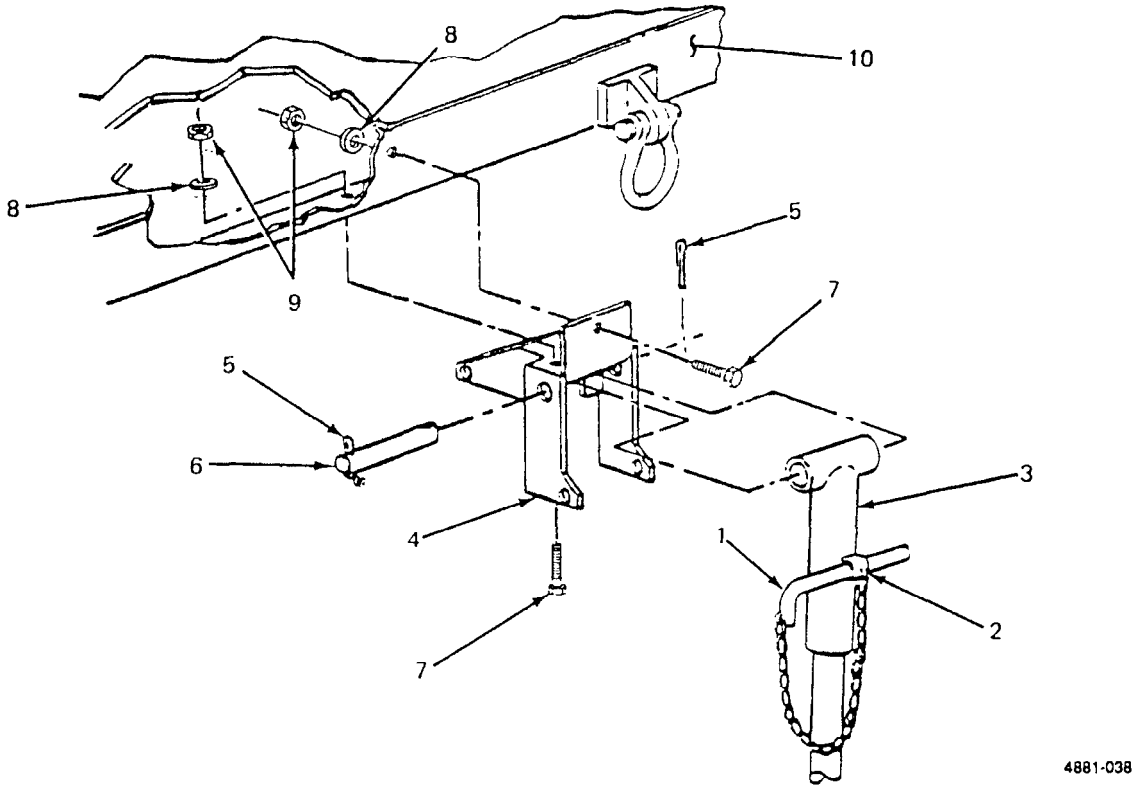


Figure 5-1. Leg Prop Assembly Replacement.

(2) *Installation.*

(a) Position bracket (4) on trailer frame (10) and install three screws (7), three flat washers (8), and three nuts (9). Tighten hardware to secure bracket.

(b) Lift leg assembly into bracket (4) and secure by inserting angled bar (1) through holes in bracket and boss (2) on upper leg (3).

(c) Position leg assembly to line up boss (2) on top of leg with pivot holes in bracket (4). Insert pivot shaft (6).

(d) Insert cotter pin (5) in pivot shaft (6) and bend cotter pin legs in opposite directions.

(e) Pull out angled bar (1) to unlock leg prop assembly.

(f) Swing leg prop assembly up into traveling position and secure by inserting angled bar (1) through holes in bracket (4) and boss (2) on upper leg (3).

b. Leg Prop Assembly Repair. (See figure 5-2.) Repair of the leg prop assembly is limited to welding and repainting. However, partial disassembly is possible to facilitate repair. If required, repaint in accordance with MIL-T-704, Type F, color Green No. 383 of MIL-C-46168. If power plant is painted in camouflage, refer to paragraph 5-6, Marking.

(1) *Disassembly.*

(a) Remove leg prop assembly from trailer (paragraph 5-2, a.(l)).

(b) Clamp leg prop assembly in vise with spring pin (1) facing up.

(c) Using suitable drift, drive spring pin (1) out of upper leg (2) and remove leg base (3).

(2) *Assembly.*

(a) Clamp upper leg (2) in vise with spring pin hole facing up.

(b) Insert leg base (3) into upper leg (2) and turn leg base until hole in screw lines up with hole in upper leg.

(c) Install spring pin (1) to secure leg base (3) to upper leg (2).

(d) Install leg prop assembly on trailer (paragraph 5-2, a.(2)).

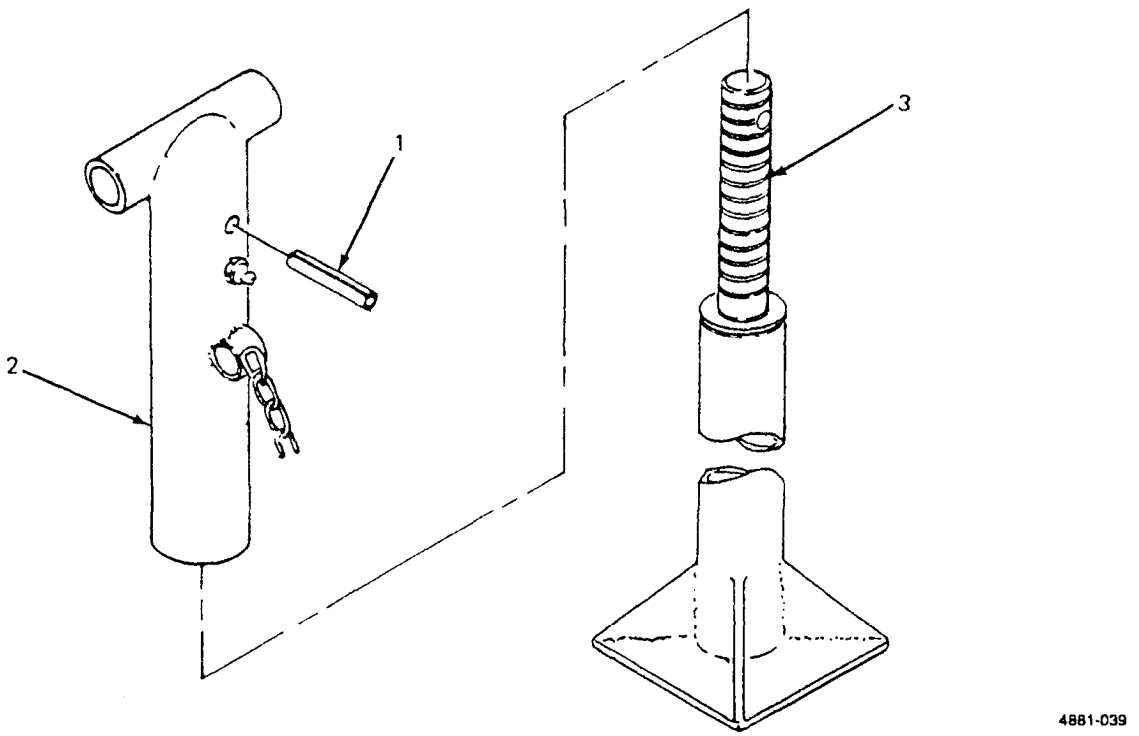


Figure 5-2. Leg Prop Disassembly.

5-3. **Trailer Bed and Fenders Repair and Replacement.** (See figure 5-3.) The body of the modified trailer consists of a single weldment that includes both fenders and the bed of the trailer.

a. Removal.

(1) Remove fitted cover (paragraph 3-11, a.(1)).

(2) Remove bow assemblies (paragraph 3-11, b.(1)).

(3) Remove accessory box (paragraph 4-19, a.)

(4) Remove switch box (paragraph 4-24, a.).

(5) Remove both generator sets (paragraph 5-7, a.).

(6) Working under trailer, unplug four connectors (1) joining trailer main wiring harness (2) to roadside composite light cable assembly (3), and four connectors (4) joining cable assembly to composite light (5).

(7) Repeat step (6) for curbside composite light cable assembly.

(8) Remove two screws (6) and two lockwashers (7) securing each composite light (5) to its bracket (8) and remove both composite lights.

(9) Remove eight screws (9), 16 flat washers (10) and eight nuts (11) securing each generator mounting rail (12) to trailer body (13) and remove both rails.

(10) Remove cotter pin (14), nut (15) and flat washer (16) from each of two trailer lifting rings (17) and remove lifting rings.

NOTE

The two trailer body support brackets located at the front of the trailer are secured with only two screws and two flat washers each.

(11) Working under trailer, remove 16 screws (1 8), 28 flat washers (19) and 12 nuts (20) securing trailer body support brackets (21) to trailer frame (22).

NOTE

There are 18 short screws and four long screws securing trailer body to trailer frame. Since corner screws must extend through trailer frame rails, corner mounting locations require longer screws (step (13)).

(12) Remove 18 screws (23), 36 flat washers (24) and 18 nuts (25) securing trailer body (13) to trailer frame (22).

(13) Remove four long screws (26), eight flat washers (27) and four nuts (28) securing trailer body (13) to trailer frame (22) at corner mounting locations.

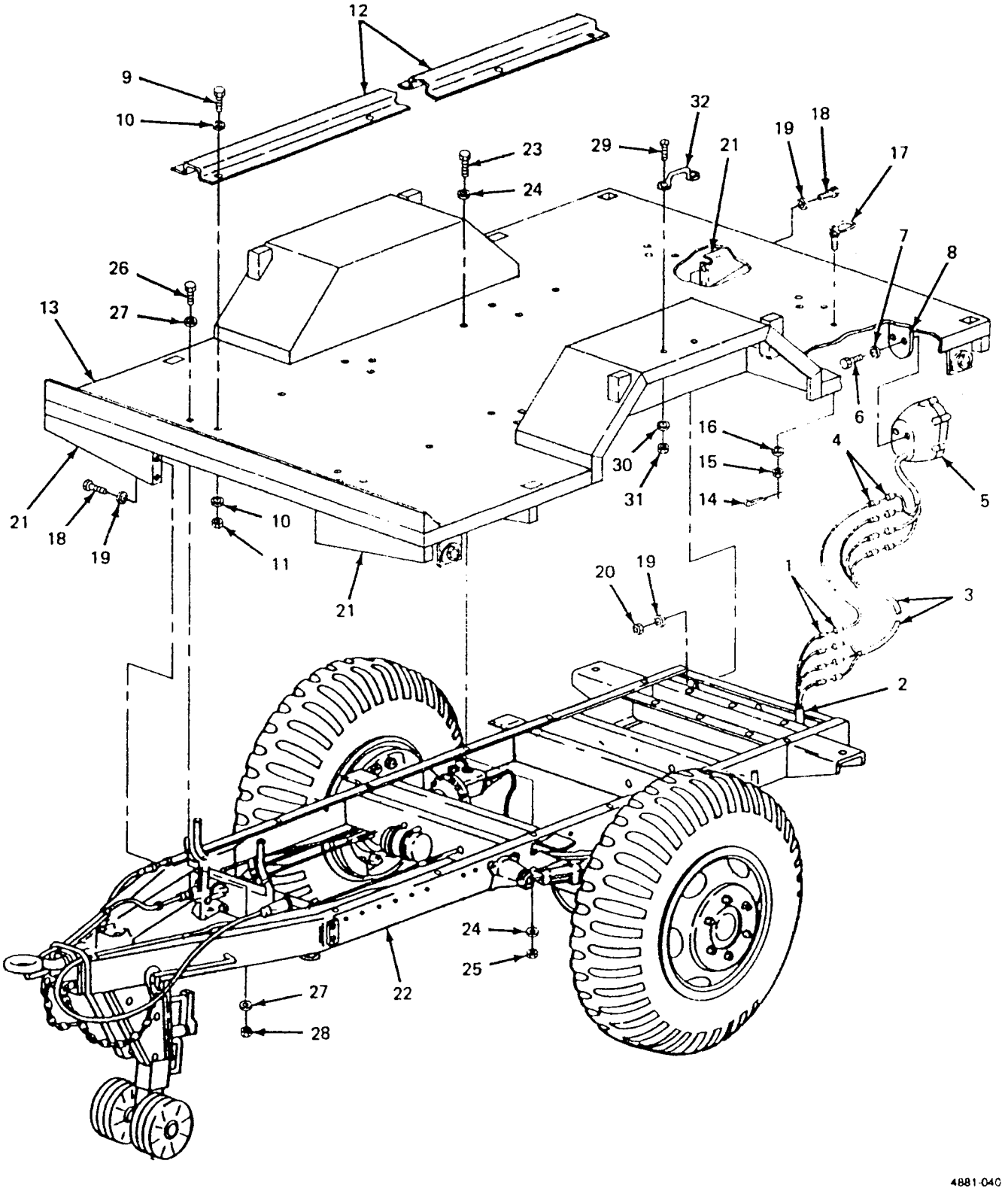


Figure 5-3. Fender and Bed Replacement.

WARNING

When lifting trailer body, use lifting equipment with a minimum lifting capacity of 2000 lb. Do not stand under trailer body while it is being lifted. Failure to observe these precautions can cause injury to personnel or damage to equipment.

(14) Using lifting equipment with a minimum lifting capacity of 2000 lb, lift trailer body (13) off of trailer frame (22).

b. Repair. Repair of the trailer bed and fenders is limited to replacement of footmans loops and straightening, welding, and repainting the bed and fender weldment. If required, repaint in accordance with MIL-T-704, Type F or G, as applicable, color Green, No. 383 of MIL-C-46168. If power plant is painted in camouflage, refer to paragraph 5-6, Marking. There is one footmans loop mounted to the top of each fender. Replace footmans loop as follows:

(1) Remove two screws (29), two flat washers (30) and two self-locking nuts (31) securing footmans loop (32) to fender and take off footmans loop.

(2) Position new footmans loop (32) on fender and secure with two screws (29), two flat washers (30) and two self-locking nuts (31).

c. Installation.

WARNING

When lifting trailer body, use lifting equipment with a minimum lifting capacity of 2000 lb. Do not stand under trailer body while it is being lifted. Failure to observe these precautions can cause injury to personnel or damage to equipment.

(1) Using lifting equipment with a minimum lifting capacity of 2000 lb, lift trailer body (13) onto trailer frame (22) and aline mounting holes.

NOTE

There are 18 short screws and four long screws, securing trailer body to trailer frame. Since corner screws must extend through trailer chassis rails, corner mounting locations require longer screws (step 2).

(2) Working on top of trailer body, insert four long screws (26) with one flat washer (27) each through trailer body (13) and rails of trailer frame (22) at corner mounting locations.

(3) Insert 18 screws (23) with one flat washer (24) each through trailer body (13) and rails of trailer frame (22).

(4) Working under trailer, install one flat washer (24 and 27) and one nut (25 and 28) on each of 22 screws installed in steps (2) and (3). Tighten hardware to secure trailer body (13) to trailer frame (22).

(5) Install and tighten two screws (18) and two flat washers (19) securing each of two front trailer body support brackets (21) to trailer frame (22).

(6) Install and tighten 12 screws (18), 24 flat washers (19) and 12 nuts (20) securing remaining trailer body support brackets (21) to trailer frame (22).

(7) Insert one lifting ring (17) into each of two mounting holes in trailer body (13) and secure with one flat washer (16) and one nut (15). Install one cotter pin (14) in each nut and spread cotter pin ends.

(8) Position two generator set mounting rails (12) on trailer body (13). Insert eight screws (9) with eight flat washers (10) through each mounting rail and through trailer bed and frame (22).

(9) Working under trailer, install one flat washer (10) and one nut (11) on each of 16 mounting rail screws (9) and tighten.

(lo) Position one composite light (5) on each rear mounting bracket (8) and secure each light with two screws (6) and two lockwashers (7).

(11) Working under trailer, connect one composite light cable assembly (3) to each composite light (5) by plugging four cable assembly connectors into four composite light connectors (4). Plug four connectors at opposite end of each cable assembly into four connectors (1) on trailer main wiring harness (2).

(12) Install both generator sets (paragraph 5-7, b.).

(13) Install switch box (paragraph 4-24, b.).

(14) Install accessory box (paragraph 4-19, b.).

(15) Install six bows (paragraph 3-11, b(2)).

(16) Install fitted cover (paragraph 3-11, a(2)).

5-4. **Fitted Cover Repair.** Repairs to the fitted cover shall be made in accordance with FM 10-16, Fabric Repairing.

5-5. **Accessory Box Repair.** (See figure 5-4.) The accessory box is repaired by replacing the hasp, the catches and the footmans loops, as required. The box itself may be straightened, welded, and repainted. If required, repaint in accordance with MIL-T-704, Type F, color Green, No. 383 of MIL-C-46168. If power plant is painted in camouflage, refer to paragraph 5-6, Marking.

a. *Catch and Hasp Replacement.*

(1) Grind off or drill out solid rivets (1) securing catch or hasp (2) to accessory box (3).

(2) Position new catch or hasp (2) on accessory box and secure with solid rivets (1).

(3) Touch up with paint as required.

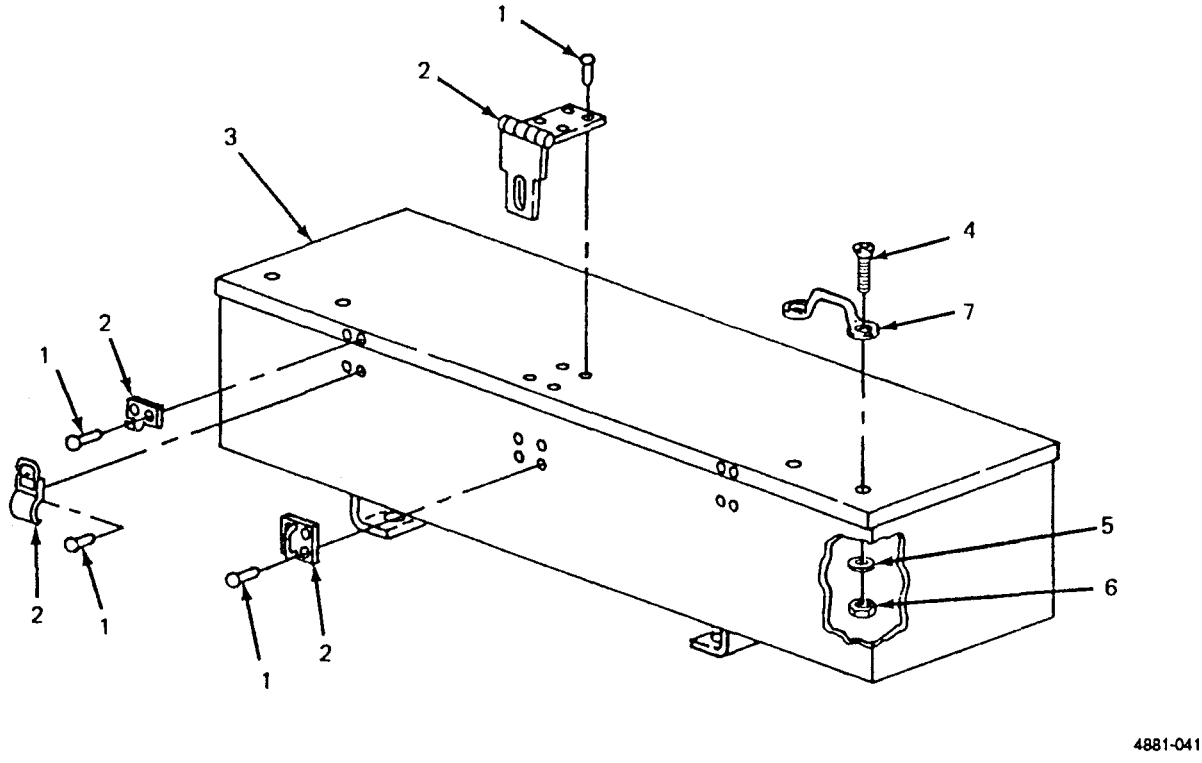


Figure 5-4. Accessory Box Repair.

b. Footmans Loop Replacement.

(1) Remove two screws (4), two flat washers (5), and two self-locking nuts (6) securing footmans loop (7) to accessory box lid.

(2) Position new footmans loop (7) on accessory box (3) and secure with two screws (4) two washers (5), and two self-locking nuts (6).

5-6. **Marking.** (See figure 5-5.) The power plant four-digit registration number, preceded by the prefix “VC” and the words “U.S. ARMY,” is marked in three places on the trailer. Marking is done in accordance with MIL-STD-642. On the fender, over each wheel, “T.P. 50 PSI” is marked in 1.00±.12 inch high characters in accordance with MIL-STD-1 30. On the switch box, “GEN 1”, “GEN 2“ and “OFF are marked on the cover at their respective switch lever positions and “E1” and “E2” are marked next to their respective ground terminal studs. Figure 5-5 shows the approximate location of markings on the power plant. If required, touch-up painting of the base color shall be done in accordance with MIL-T-704, Type F, color Green, No. 383 of MIL-C-46168. When power plant has been painted in camouflage, replacement parts must be painted to match authorized patterns and colors as specified in TB 43-0148. Camouflage painting shall be done in accordance with MIL-C-53072.

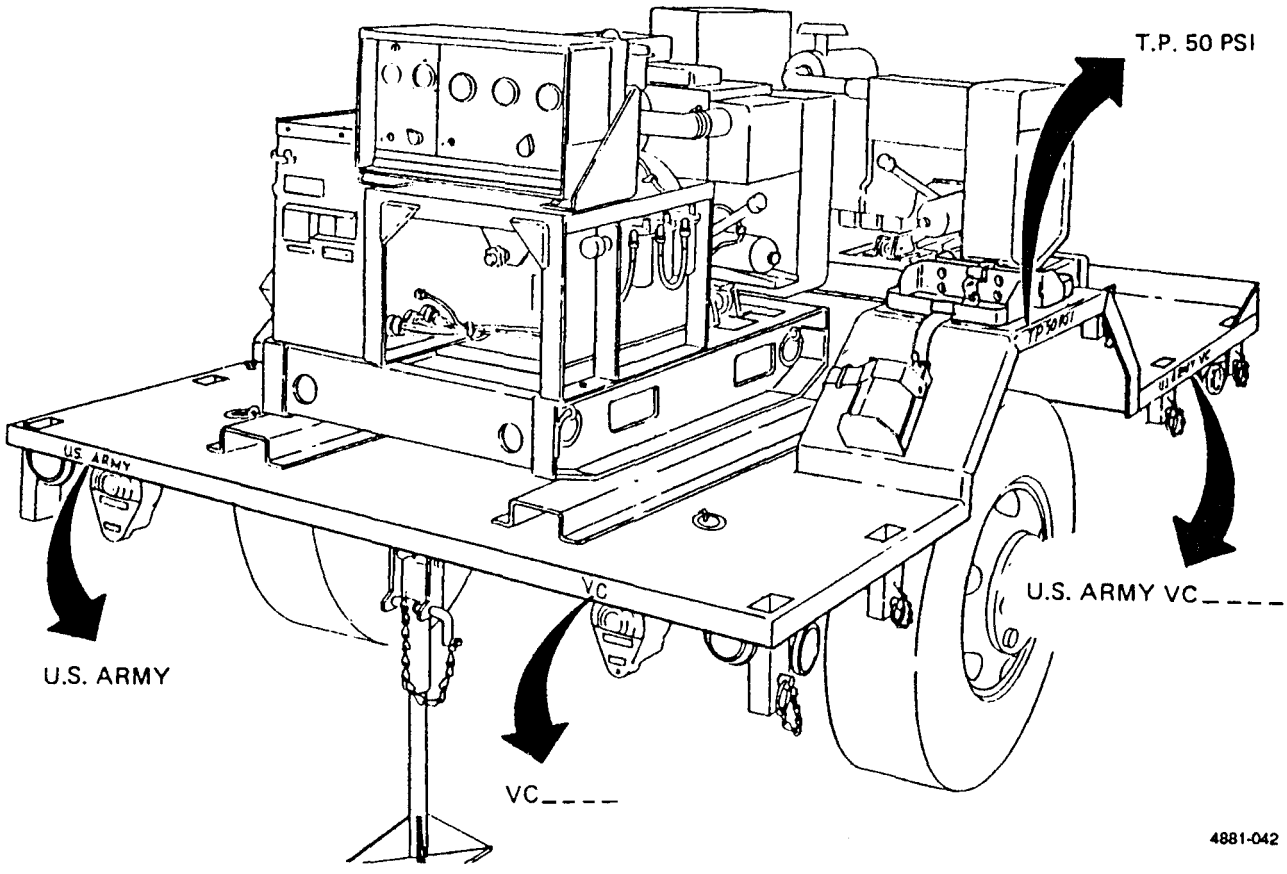


Figure 5-5. Power Plant Markings.

Section III. GENERATOR SET

5-7. **Generator Set Replacement.** (See figures 5-6 and 5-7. Power Plant AN/MJQ-25 has two generator sets. Replacement procedures are identical for both.

a. Removal.

(1) Remove fitted cover (paragraph 3-11, a.(1)).

(2) Remove six bow assemblies (paragraph 3-11, b.(1)).

(3) Disconnect all power cables and ground wires (1, figure 5-6) from generator set (2).

NOTE

The beveled washers (6) may have been welded in place.

(4) Remove four screws (3), four lockwashers (4), and four beveled washers (5), securing generator set (2), to mounting rails (6) on trailer bed (7).

(5) Remove engine oil drain hose (8) from grommet in trailer bed (7), if installed.

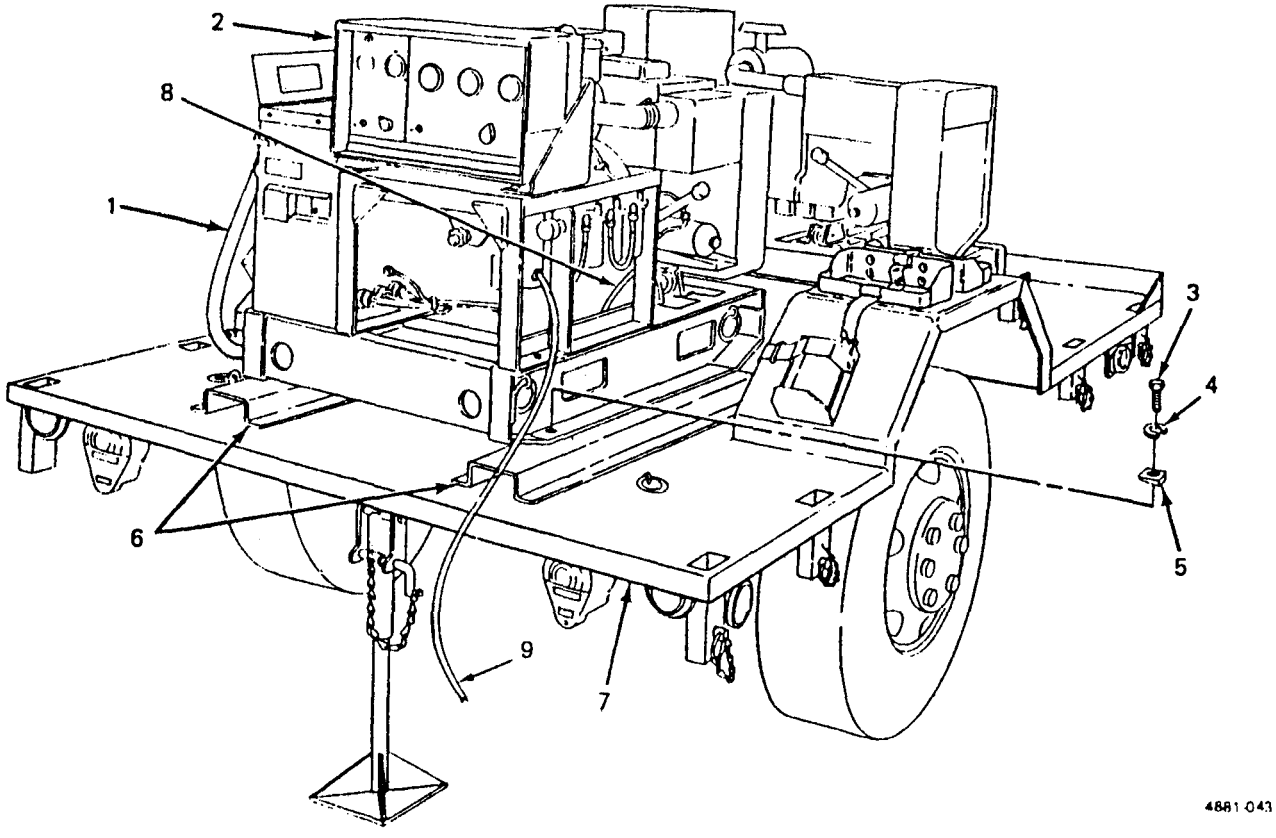


Figure 5-6. Detaching Generator Set from Trailer.

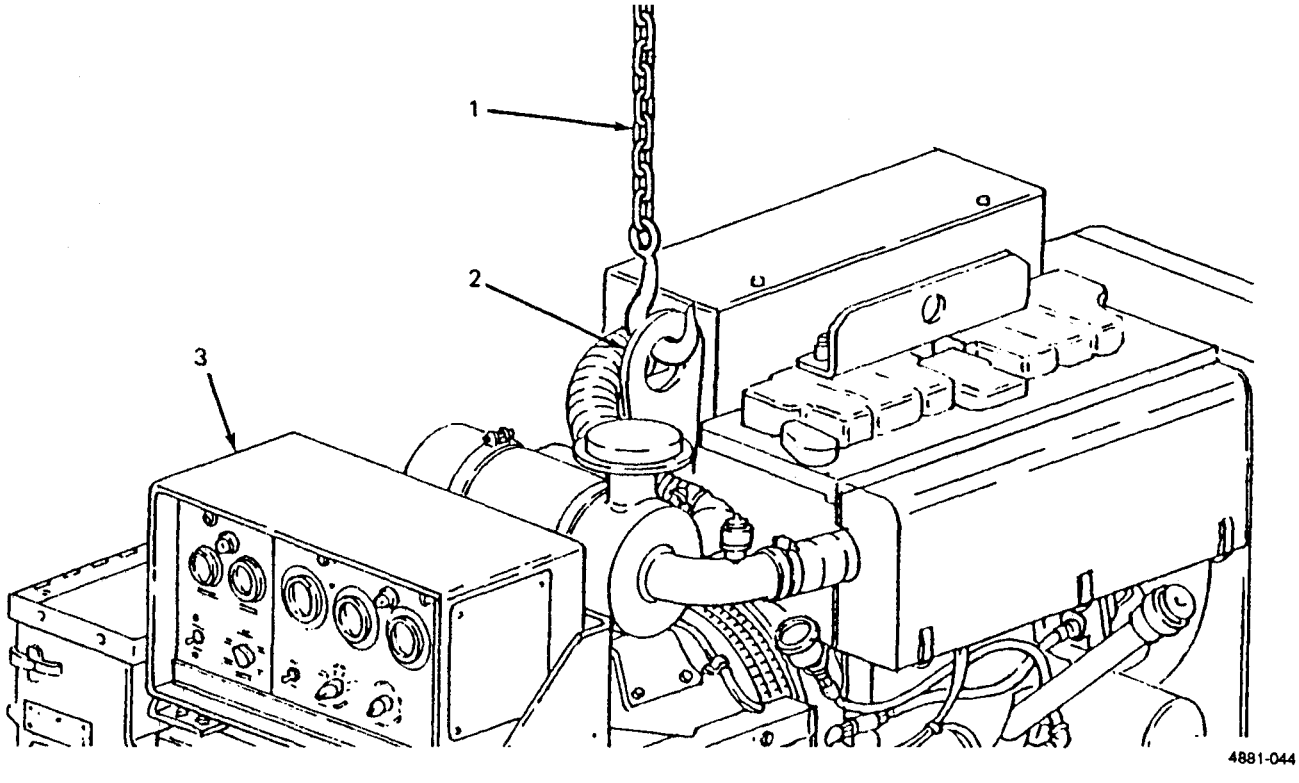


Figure 5-7. Lifting Generator Set.

(6) Disconnect external fuel line (9), if connected.

WARNING

When lifting generator set, use lifting equipment with a minimum lifting capacity of 1500 lb. Do not stand under generator while it is being lifted. Failure to observe these precautions can cause injury to personnel or damage to equipment.

(7) Attach lifting equipment with a minimum lifting capacity of 1500 lb (1, figure 5-7) to lifting eye (2) on top of generator set (3) and remove generator set from trailer.

b. Installation.

WARNING

When lifting generator set, use lifting equipment with a minimum lifting capacity of 1500 lb. Do not stand under generator while it is being lifted. Failure to observe these precautions can cause injury to personnel or damage to equipment.

(1) Attaching lifting equipment with a minimum lifting capacity of 1500 lb (1, figure 5-7) to lifting eye (2) on top of generator set (3) and lift generator.

(2) Lower generator set (2, figure 5-6) onto mounting rails (6) on trailer bed (7) and aline mounting holes.

(3) Insert four screws (3), with four Iockwashers (4) and four beveled washers (5), down through generator set skid into nuts welded to underside of mounting rails (6).

(4) Position beveled washers (5) so that screw heads are parallel to tops of washers. While holding beveled washers in position, tighten hardware to secure generator set (2) to mounting rails (6).

(5) Insert engine oil drain hose (8) through grommet in trailer bed 7).

(6) Install six bow assemblies (paragraph 3-11, b.(2)).

(7) Install fitted cover (paragraph 3-11, a.(2)).

Section IV. MAINTENANCE OF ELECTRICAL SYSTEM

5-8. **Switch Box Repair.** (See figure 5-8.) Repairs to the switch box require disconnecting wires. When reconnecting wires, refer to the schematic (figure 4-7) inside the switch box.

WARNING

Make sure generator set circuit breakers are in OFF position before performing any repairs on switch box. Failure to observe this precaution may result in injury or death by electrocution.

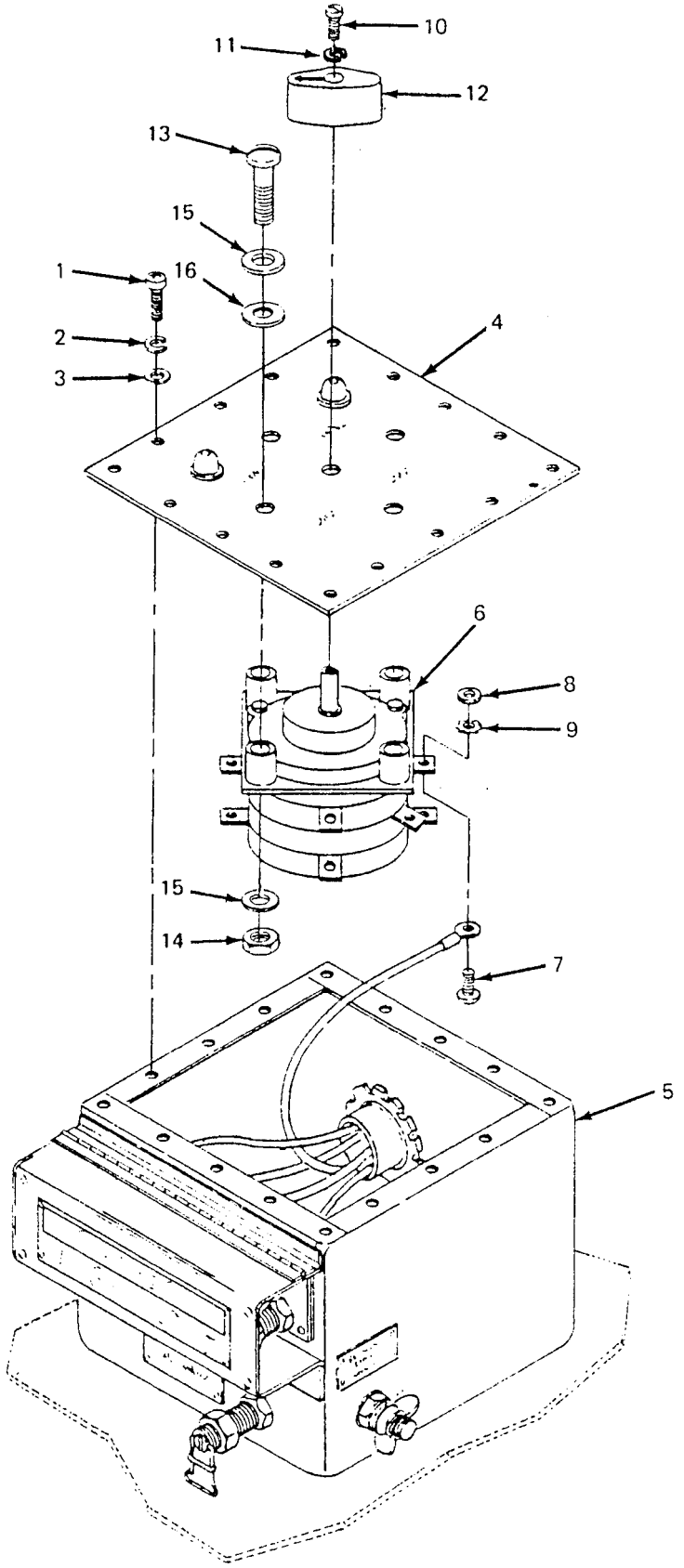


Figure 5-8. Switch Box Switch Replacement.

a. *Switch Replacement.*

NOTE

Replacement switch will have unmarked terminals and will have to be compared with original switch.

(1) *Removal.*

(a) Remove 16 screws (1), 16 lockwashers (2) and 16 flat washers (3) securing cover (4) to switch box (5) and take cover, with switch (6) attached, off switch box.

NOTE

Make sure identification bands on wires are legible before disconnecting wires from switch. Tag switch terminals and all unmarked wires.

(b) Disconnect all wires from switch (6) by removing one screw (7), one nut (8) and one star washer (9) from each switch terminal.

(c) Remove screw (10) and lockwasher (11) securing knob (12) to switch (6) and take off knob.

(d) Remove four screws (13), four nuts (14), eight flat washers (15) and preformed packing (16) securing switch (6) to cover (4) and take switch off cover.

(2) *Installation.*

(a) Position switch (6) on inside of cover (4). Insert four screws (13) with one flat washer (14) and one preformed packing (15) each through cover and switch standoffs.

(b) Install one flat washer (15) and one nut (14) on end of each screw (13) and tighten.

(c) Position knob (12) on switch (6) and install screw (10) and lockwasher(11).

NOTE

Observe identification bands on wires when reconnecting wires.

(d) Connect indicator light wires to switch (paragraph 4-25, b.(2)).

(e) Connect power cables to switch (paragraph 4-25, d.(2)).

(f) Connect load terminal wires to switch (paragraph 4-25, c.(2)).

(g) Position cover (4) on switch box (5) and secure with 16 screws (1), 16 lockwashers (2) and 16 flat washers (3).

b. Power Cable and Wiring Repair. The switch box wiring is repaired by tightening or replacing loose or damaged terminals. The power cables are repaired by replacing damaged terminals. The repair parts and special tools list in this manual lists part numbers for the terminals. The replacement terminals are soldered onto the wires in accordance with procedures given in TB SIG 222 and TM 55-1500-323-25.

CHAPTER 6

TEST AND INSPECTION AFTER REPAIR

Section I. GENERAL REQUIREMENTS

6-1. **General Requirements.** The activity performing the repair is responsible for the performance of all applicable tests and inspections specified in the technical manuals referenced below. Activities performing maintenance on any component of the power plant must perform those tests and inspections required by the applicable component or system repair instruction.

Section II. INSPECTION

6-2. **Generator Set Inspections.** Refer to TM 5-6115-585-12 and -34 for inspections required following repair of the generator set.

6-3. **Trailer Inspections.** Refer to TM 9-2330-213-14&P for inspections required following repair of the trailer.

Section Ill. OPERATIONAL TESTS

6-4. **Generator Set Operational Tests.** Refer to TM 5-6115-585-12 and -34 for operational tests required to verify satisfactory performance of the generator set.

6-5. **Trailer Operational Tests.** Refer to TM 9-2330-213-14&P for operational tests required to verify satisfactory performance of the trailer.

APPENDIX A

REFERENCES

A-1. **Scope.** This appendix lists all pamphlets, forms, technical manuals, specifications and miscellaneous publications referenced in this manual.

A-2. Forms and Records.

Supply Policy Below the Wholesale Level . . . . . AR 710-2
Recommended Changes to Publications and Blank Forms . . . . . DA Form 2028
Depreservation Guide for Vehicles and Equipment . . . . . DA Form 2258
Equipment Inspection and Maintenance Worksheet . . . . . DA Form 2404
Maintenance Request . . . . . DA Form 2407
Consolidated Index of Army Publications . . . . . DA PAM 25-30
The Army Maintenance Management System (TAMMS) . . . . . DA PAM 738-750
Product Quality Deficiency Report . . . . . SF 368

A-3. Military Specifications.

Chemical Agent Resistant Aliphatic Polyurethane Coating MIC-C-46168
Chemical Agent Resistant Coating (CARC) System Application Procedure and Q/C Inspection MIL-C-53072
Identification Marking of U. S. Military Properly MIL-STD-130
Identification Marking of Combat and Tactical Transport MIL-STD-642
Treatment and Painting of Materiel MIL-T-704

A-4. Technical Manuals.

Fabric Repairing, Tents, Canvas, Webbing . . . . . FM 10-16
Operator and Organizational Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical Skid Mounted, 10 KW, 1 Phase, 2 Wire; 1 Phase, 3 Wire and 3 Phase, 4 Wire; 120, 120/240 and 120/208 V (DOD Model MEP-003A) Utility Class 60 Hz (NSN 6115-00-465-1 030) and (Model MEP-112A), Utility Class, 400 Hz (6115-00-465-1027) . . . . . TM 5-6115-585-12
Organizational, Direct Support and General Support Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts and Special Tools) for Generator Sets, Diesel Engine Driven, Tactical Skid Mounted, 10 KW, 1 Phase, 2 Wire; 1 Phase, 3 Wire; 3 Phase, 4 Wire, 120, 120/240 and 120/208 V (DOD Model MEP-003A) Utility Class, 60 HZ (NSN 6115-00-465-1 030) and (Model MEP-112A), Utility Class 400 Hz (6115-00-465-1027) . . . . . TM 5-6115-585-24P
Intermediate (Field) (Direct and General Support) and Depot Level Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical Skid Mounted, 10 KW, 1 Phase, 2 Wire; 1 Phase, 3 Wire, 3 Phase, 4 Wire, 120, 120/240 and 120/208 V (DOD Model MEP-003A), Utility Class, 60 HZ (NSN 61 15-00-465-1030) and (Model MEP-112A), Utility Class, 400 HZ (6115-00-465-1027) . . . . . TM 5-6115-585-34

Installation Practices for Aircraft Electric and Electronic Wiring [TO 1-1A-14] . . . . . TM 55-1500-323-25
Procedures for Destruction of Equipment to Prevent Enemy Use (Mobility Equipment Command). . . . . TM 750-244-3
Operator's, Organizational, Direct Support and General Support Maintenance Manual (Including Repair Parts and Special Tools List) for Chassis Trailer: 1-1/2-Ton, 2-Wheel, M103A1 (NSN 2330-00-835-8620), M103A2 (2330-00-049-8050), M103A3 (2330-00-141-8052), M103A3C (2330-00-542-2181), M103A4, (2330-00-141-8051), M103A4C (2330-00-542-21 82); Trailer, Cargo; M104 (2330-00-754-0509), M104A1 (2330-00-835-8630), M105A1 (2330-00-835-8631), M105A2 (2330-00-141-8050) M105A2C (2330-00-542-5689); Trailer Tank, Water, 400 Gallon, M107A1 (2330-00-835-8633) M107A2 (2330-00-141-8049), M107A2C (2330-00-542-5688) and Trailer, Van, Shop, Folding Sides, M448 (2330-00-631-5692) . . . . . TM 9-2330-213-14&P
Organizational, Direct Support, and General Support Care Maintenance and Repair of Pneumatic Tires and Inner Tubes . . . . . TM 9-2610-200-24

A-5. **Technical Bulletins.**

Solder and Soldering [TO 31-3-63] . . . . . TB SIG 222
Color, Marking and Camouflage Patterns Used on Military Equipment Managed by USATROSCOM . . . . . TB 43-0147
Preservation of USAMECOM Mechanical Equipment for Shipment and Storage . . . . . TB 740-97-2

APPENDIX B

COMPONENTS OF END ITEM AND BASIC ISSUE ITEMS LISTS

Section I. INTRODUCTION

B-1. **Scope.** This appendix lists components of end item and basic issue items for the power plant to help you inventory items required for safe and efficient operation.

B-2. **General.** The Components of End Item and Basic Issue Items lists are divided into the following sections:

a. Section II. Components of End Item. This listing 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 properly accounts. Illustrations are furnished to assist you in identifying the items.

b. Section Ill. Basic Issue Items. These are the minimum essential items required to place the power plant in operation, to operate it, and to perform emergency repairs. Although shipped separately packaged, Bll must be with the power plant 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 Bll, based on TOE/MTOE authorization of the end item.

B-3. **Explanation Of Columns.** The following provides an explanation of columns found in the tabular listings:

a. Column (1). Illustration Number (Illus No.). This column indicates the number assigned to the item.

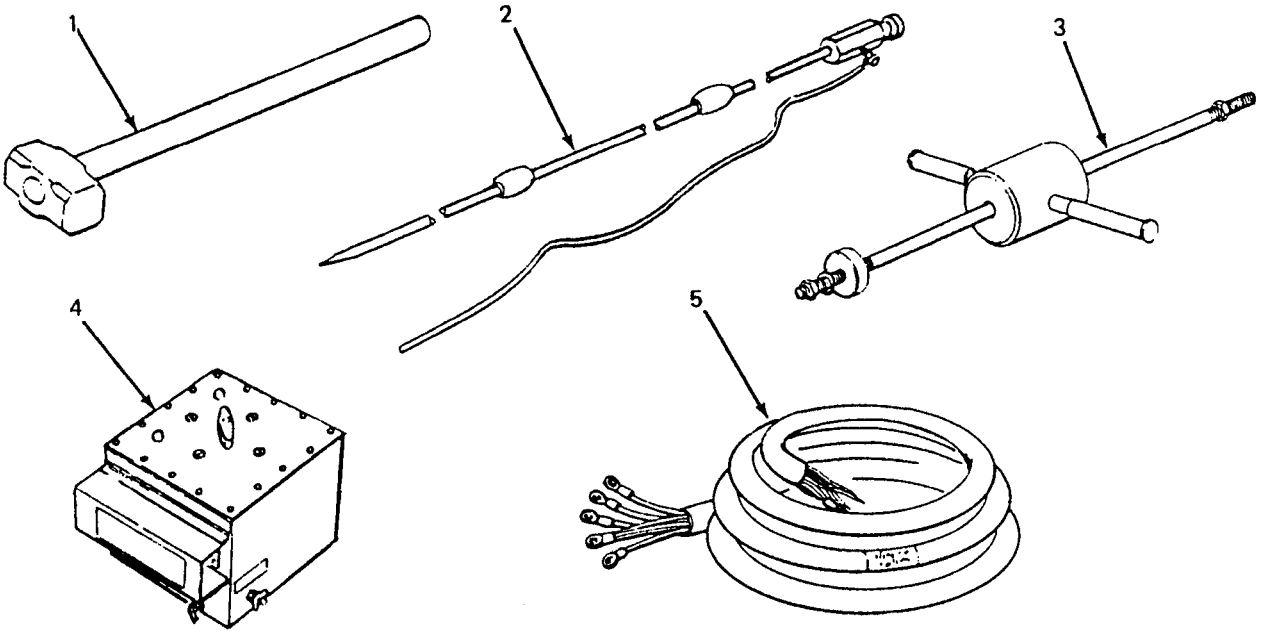
b. Column(2). National Stock Number. Indicates the National stock number assigned to the item.

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 the FSCM (in parentheses) followed by the part number. If item needed differed for different models of this equipment, the model would be shown under the “Usable on Code” heading in this column. The Usable on Code is not applicable for this equipment.

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 (eg, ea, in, pr).

e. *Column (5). Quantity Required (Qty Req'd).* Indicates the quantity of the item authorized to be used with/on the equipment.

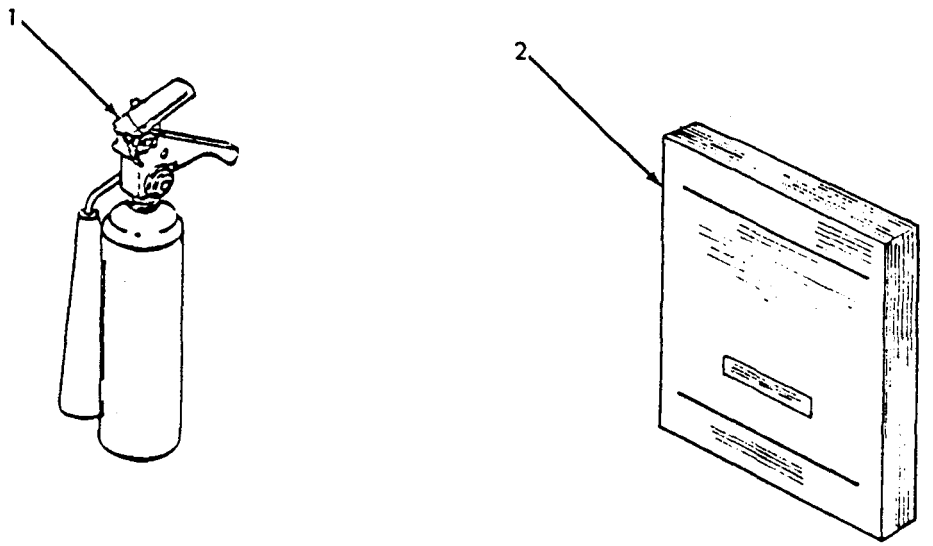
Section II. COMPONENTS OF END ITEM



4881-046

(1) Illus no.	(2) National stock number	(3) Description FSCM and part number	Usable on code	(4) U/M	(5) Qty req'd
1	5120-00-243-2957	Hammer, Hand, Engineers 8 lb. (3.6 kg) (81348) GGG-H-86		ea	1
2	5975-00-878-3791	Rod, Ground, Driven, Sectional, 9 ft (2.7 m) (81349) MIL-R-11461		ea	2
3	5120-01-013-1676	Hammer, Slide (97403) 13226E7741		ea	1
4		Switch Box (97403) 13226 E5859-1		ea	1
5		Cable Assembly (97403) 13226 E5888-1		ea	1
		and			
		Cable Assembly (97403) 13226 E5888-2		ea	1

Section III. BASIC ISSUE ITEMS



4881-047

		(3) Description FSCM and part number	Usable on code	(4) U/M	(5) Qty req'd
1	4210-00-270-4512	Extinguisher, Fire, Hand, 5 lb. (2.3 kg) (81348) O-E-910		ea	2
2		Manual, Technical TM 9-6115-650-14&P		ea	1

APPENDIX C

MAINTENANCE ALLOCATION CHART

Section I. INTRODUCTION

C-1. General.

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

b. 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 Ill lists the tools and test equipment required for each maintenance function as referenced from Section Il.

d. Section IV contains supplemental instructions, explanatory notes and/or illustrations required for a particular maintenance function.

C-2. Explanation of Columns in Section Il.

a. Group Number. Column 7. The assembly group is a numerical group assigned to each assembly in a top down breakdown sequence. The applicable assembly groups are listed on the MAC in disassembly sequence beginning with the first assembly removed in a top down disassembly sequence.

b. Assembly Group, Column 2. This column contains a brief description of the components of each assembly group.

c. Maintenance Functions. Column 3. This column lists the various maintenance functions (A through K) and indicates the lowest maintenance category authorized to perform these functions. The symbol designations for the various maintenance categories are as follows:

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

The maintenance functions are defined as follows:

A - Inspect. To determine serviceability of an item by comparing its physical, mechanical, and electrical characteristics with established standards.

B - Test. To verify serviceability and to detect electrical or mechanical failure by use of test equipment.

C - Service. To clean, to preserve, to charge, and to add fuel, lubricants, cooling agents, and air. If it is desired that elements, such as painting and lubricating, be defined separately, they maybe so listed.

D - Adjust. To rectify to the extent necessary to bring into proper operating range.

E - Aline. To adjust specified variable elements of an item to bring to optimum performance.

F - Calibrate. To determine the corrections to be made in the readings of instruments or test equipment used in precise measurement. Consists of the comparison of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared with the certified standard.

G - Install. To setup for use in an operational environment such as emplacement, site, or vehicle.

H - Replace. To replace unserviceable items with serviceable like items.

I - Repair. Those maintenance operations necessary to restore an item to serviceable condition through correction of material damage to a specific failure. Repair maybe accomplished at each category of maintenance.

J - Overhaul. Normally, the highest degree of maintenance performed by the Army in order to minimize time work in process is consistent with quality and economy of operation. It consists of that maintenance necessary to restore an item to completely serviceable condition as prescribed by maintenance standard in technical publications for each item of equipment. Overhaul normally does not return an item to like new, zero mileage, or zero hour condition.

K - Rebuild. The highest degree of material maintenance. It consists of restoring equipment as nearly as possible to new conditions in accordance with original manufacturing standards. Rebuild is performed only when required by operational considerations or other paramount factors and then only at the depot maintenance category. Rebuild reduces to zero the hours or miles of the equipment, or component thereof, has been in use.

d. Symbo!s. The uppercase letter placed in the appropriate column indicates the lowest level at which that particular maintenance function is to be performed.

e. Tools and Equipment. Column 4. This column is provided for referencing by code, the special tools and test equipment, (Section Ill) required to perform the maintenance functions (Section II).

f. Remarks. Column 5. This column is provided for referencing by code, the remarks (Section IV) pertinent to the maintenance functions.

C-3. **Explanation of Columns in Section III.** This column is provided for referencing, by code. The special tools and test equipment (Section III required to perform the maintenance functions (Section II).

C-4. **Explanation of Columns in Section IV.** Section IV, Remarks, is not applicable.

Section II. MAINTENANCE ALLOCATION CHART

(1)	(2)	(3) Maintenance functions											(4)	(5)
		A	B	C	D	E	F	G	H	I	J	K		
Group no.	Assembly group	Inspect	Test	Service	Adjust	Align	Calibrate	Install	Replace	Repair	Overhaul	Rebuild	Tools and equipment	Remarks
01	ENCLOSURE													
	Feed Cover	C 0.1							C 0.5	F 1.0				
	Bows	C 0.1							C 0.1					
02	GENERATOR SET	C 0.2		C 2.0					F 3.0					See TM 5-6115-585-12, -34 for generator set maintenance.
03	ELECTRICAL SYSTEM													
0301	Switch Box	C 0.1	O 0.5						O 0.5	F 2.0			1	
	Switch		O 0.5						F 1.0				1	
	Load Terminals								O 0.5					
	Wiring	O 0.2	O 0.5						O 1.0	F 1.0			1	
	Light and Wire		O 0.2						O 0.4	O 0.4			1	
04	TRAILER ASSEMBLY	C 0.5	O 1.0	C 0.5										See TM 9-2330-213-14&P for trailer assmbly maintenance.
	Accessory Box								O 0.5	F 2.0				
	Fuel Can/Fire Extinguisher	C 0.1							O 0.5					
	Brackets Bed/Fenders								F 4.0	F 4.0				
	Reflectors	C 0.1							O 0.5					
	Data Plates								F 0.2					
	Leg Prop Assembly	C 0.1		O 0.2					F 0.5	F 0.7				
	Taillight Cable Assembly	C 0.1	O 0.3						O 1.0	O 0.5				
	Handbrake	C 0.1												

Section III. TOOLS, TEST AND SUPPORT EQUIPMENT REQUIREMENTS

Reference code	Maintenance category	Nomenclature	NSN
1	O	Multimeter, AN/PSM-45	6625-01-139-2512

APPENDIX D

UNIT, DIRECT, GENERAL SUPPORT AND DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST

Section I. INTRODUCTION

D-1. Scope. This manual lists repair parts and special tools required for the performance of unit, direct and general support and depot maintenance of the power plant.

D-2. General. The Repair Parts and Special Tools List is divided into the following sections:

a. *Repair Parts - Section II.* A list of repair parts authorized for the performance of maintenance at the unit, intermediate (field) (direct and general support) and depot level in figure and item number sequence.

b. *Special Tools, Test and Support Equipment - Section III.* A list of special tools, test and support equipment authorized for the performance of maintenance at the unit, intermediate (field) (direct and general support) and depot level.

c. *National Stock Number and Reference Number Index - Section IV.* A list of National stock numbers in numerical sequence, followed by a list of reference numbers appearing in all the listings, in alphanumeric sequence, cross-referenced to the illustration figure number and item number.

d. *Reference Designator Index - Section V.* The reference Designator Column includes all assigned reference designators arranged first in alphabetical order, second in numerical order. Opposite each symbol is listed the figure and item number of the part in Section II and the reference number.

D-3. **Explanation of Columns.** The following provides an explanation of columns in the tabular lists in Sections II and Ill.

a. *Illustrations. (Column 1).* This column is divided as follows:

(1) *Figure number.* Indicates the figure number of the illustration on which the item is shown.

(2) *Item number.* Indicates the number used to identify the item on the illustration.

b. Source, Maintenance, and Recoverability Codes (SMR), (Column 2).

(1) *Source codes.*

GENERAL: Source Codes are assigned to support items to indicate the manner of acquiring support items for maintenance, repair, or overhaul of end items. Source codes are entered in the first and second positions of the Uniform SMR Code format as follows:

Code	Definition
PA	Item procured and stocked for anticipated or known usage.
PB	Item procured and stocked for insurance purposes because essentially dictates that a minimum quantity be available in the supply systems.
PC	Item procured and stocked and which otherwise would be coded PA except that it is deteriorative in nature.
PD	Support item, excluding support equipment, procured for initial issue or outfitting and stocked only for subsequent or additional initial issues or outfittings. Not subject to automatic replenishment.
PE	Support equipment procured and stocked for initial issue or outfitting to specified maintenance repair activities.
PF	Support equipment which will not be stocked but which will be centrally procured on demand.
PG	Item procured and stocked to provide for sustained support for the life of the equipment. It is applied to an item peculiar to the equipment which because of probable discontinuance or shutdown of production facilities would prove uneconomical to reproduce at a later time.
KD	An item of depot overhaul/repair kit and not purchased separately. Depot kit defined as a kit that provides items required at the time of overhaul or repair.
KF	An item of maintenance kit and not purchased separately. Maintenance kit defined as a kit that provides an item that can be replaced at unit or intermediate levels of maintenance.
KB	Item included in both a depot overhaul/repair kit and a maintenance kit.
MO	Item to be manufactured or fabricated at unit level.

Code	Definition
MF	Item to be manufactured or fabricated at intermediate general support maintenance levels.
MD	Item to be manufactured or fabricated at depot maintenance level.
AO	Item to be assembled at unit level.
AF	Item to be assembled at intermediate direct support maintenance levels.
AH	Item to be assembled at intermediate general support maintenance levels.
AD	Item to be assembled at depot maintenance level.
XA	Item is not procured or stocked because the requirements for the item will result in the replacement of the next higher assembly.
XB	Item is not procured or stocked. If not available through salvage, requisition,
XC	Installation drawing, diagram, instruction sheet, field service drawing, that is identified by manufacturer's part number.
XD	A support item that is not stocked. When required, item will be procured through normal supply channels.

(2) *Maintenance codes:* GENERAL: Maintenance Codes are assigned to indicate the levels of maintenance authorized to USE and REPAIR support items. The Maintenance Codes are in the third and fourth position of the Uniform SMR Code Format.

(a) Use (third position): The Maintenance Code entered in the third position indicates the lowest level maintenance level authorized to remove, replace, and use the support item. The Maintenance Code entered in the third position indicates one of the following levels of maintenance.

Code	Application/Explanation
O	Support item is removed, replaced, used at the unit level of maintenance.
F	Support item is removed, replaced, used at direct support levels.
H	Support item is removed, replaced, used general support levels.

Code	Definition
D	Support items that are removed, replaced, used at depot only: Depot, Mobile Depot and Specialized Repair Activity.

(b) Repair (fourth position): The maintenance code entered in the foutih position indicates whether the item is to be repaired and identifies the lowest maintenance level with the capability to perform complete repair (i.e., all authorized maintenance functions),

Code	Application/Explanation
O	The lowest maintenance level capable of complete repair of the support item is the unit level.
F	The lowest maintenance level capable of complete repair of the support item is direct support level.
H	The lowest maintenance level capable of complete repair of the support item is general support level.

Code	Definition
D	The lowest maintenance level capable of complete repair of the support item is the depot level: Depot, Mobile Depot, and Specialized Repair Activity.

Code	Application/Explanation
L	Repair restricted to designated Specialized Repair Activity.
Z	Nonreparable. No repair is authorized.
B	No repair is authorized. The item maybe reconditioned by adjusting, lubricating, etc., at the user level. No parts or special tools are procured for the maintenance of this item.

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

Recoverability Codes	Definition
Z	Nonreparable item, When unserviceable, condemn and dispose at the level indicated in column 3.
O	Reparable item. When uneconomically reparable, condemn and dispose at unit level.
F	Reparable item. When uneconomically reparable, condemn and dispose at direct support level.
H	Reparable item. When uneconomically reparable, condemn and dispose at general support level.

Recoverability Codes	Definition
D	Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal not authorized below depot level.
L	Reparable item. Repair, condemnation and disposal not authorized below depot/Specialized Repair Activity level.
A	Item requires special handling or condemnation procedure because of specific reasons (i.e., precious metal content, high-dollar value, critical material or hazardous material). Refer to appropriate manuals/directives for specific instructions.

c. National Stock Number (Column 4). Indicates the National Stock Number assigned to the item and will be used for requisitioning purposes.

d. Description (Column 5). Indicates the Federal item name and any additional descriptions of the item required. The abbreviation "w/e" when used as a part of the nomenclature, indicates that the National Stock Number includes all armament, equipment, accessories and repair parts issued with the item. A part number or other reference number is followed by the applicable five digit Federal Supply Code for Manufacturer in parentheses. If two reference numbers and Federal Supply Codes for Manufacturer are listed, the first listing refers to the Department of Defense Drawing Number, the second listing refers to the actual part manufacturer. Items that are included in kits and sets are listed below the name of the kit or set with the quantity of each item in the kit or set indicated in the quantity incorporated in unit column.

e. Unit of Measure (U/M) (Column 6). Indicates the standard of the basic quantity of the listed item as used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr. etc.). When the unit of measure differs from the unit of issue, the lowest unit of issue that will satisfy the required units of measure will be requisitioned.

f. Quantity Incorporated in Unit (Column 7). Indicates the quantity of the item used in the assembly group. A "V" appearing in this column in lieu of a quantity indicates that a definite quantity cannot be indicated (e.g., shims, spacers, etc.).

D-4. **Special Information.**

a. Identification of Usable On Codes for this manual is not applicable.

b. Army unit maintenance personnel will extract the items which they require from Section II, 3rd or 4th position of column 2 of the intermediate direct and general support RPSTL. Parts which are manufactured or assembled at a higher level than that authorized to install the part are indicated by the use of higher level code in the source column.

c. Stockage Information. Army stockage is demand based in accordance with AR 710-2. Repair parts listed in this publication represent those authorized for use at indicated maintenance levels and will be requisitioned on an as-required basis until stockage is justified in accordance with AR 710-2.

d. In the parts list, some items are indented to show that they area component of the item under which they are indented.

D-5. How to Locate Repair Parts.

a. When National Stock Number or Reference Number is Unknown:

(1) Using the table of contents, determine the functional group; i.e., batteries and related parts, exhaust and breather pipes, within which the repair part belongs. This is necessary since illustrations are prepared for functional groups.

(2) Find the illustration covering the functional group to which the repair part belongs.

(3) Identify the repair part on the illustration and note the illustration figure and item number of the repair part.

(4) Using the Repair Parts Listing, find the figure and item number noted on the illustration.

b. When National Stock Number or Reference Number is Known:

(1) Using the Index of National Stock Numbers and Reference Numbers, find the pertinent national stock number or reference number. This index is in ascending NSN sequence followed by a list of reference numbers in alphanumeric sequence, cross-referenced to the illustration figure number and item number.

(2) After finding the figure and item number, locate the figure and item number in the repair parts list.

D-6. **Use of the Reference Designator Index Section.** This Section (Section V) is used when the reference designator is known or identified by other technical manuals supporting this equipment. The reference number is given in this section. If description or location is desired, note the figure and item number. Turn to Section II to the noted figure and item number. The location of the part and description is given in this listing.

D-7. Abbreviations.

Abbreviations	Explanation
Not Applicable	

D-8. Federal Supply Codes for Manufacturers.

Code	Manufacturer
Not Applicable	

D-9. **Recommendation for Maintenance Publication Improvements.** Report of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted directly to: Commander, US Army Troop Support Command, ATTN: AMSTR-MCTS, 4300 Goodfellow Boulevard, St. Louis, MO 63120-1798.

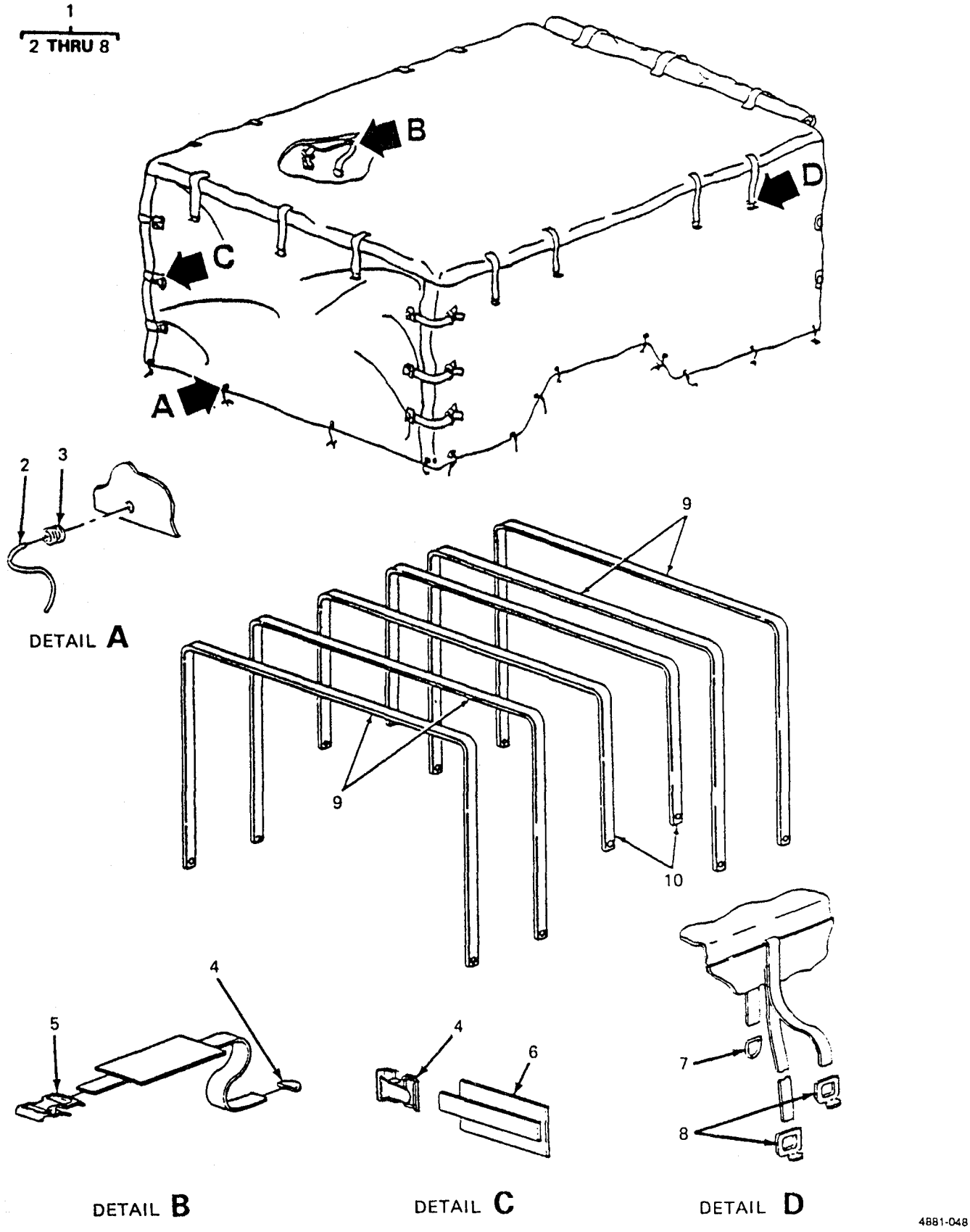


Figure D-1. Enclosure.

(1) ILLUS-TRATION		(2) SMR CODE				(3) USMC		(4)	(5) DESCRIPTION		(6)	(7)	(8)
A FIG NO.	B ITEM NO.	A ARMY	B AIR FORCE	C NAVY	D USMC	A SSI	B REPL FACTOR	NATIONAL STOCK NUMBER	REF NUMBER & MFR CODE	USABLE ON CODE	U/M	QTY INC IN UNIT	USMC QTY PER EQUIP
D-1	1	PAOFZ						6115-01-206-1271	FITTED COVER 13226E7740 97403		EA	1	
D-1	2	PAOZZ							.ROPE,SISAL T-R-605B 81349		EA	25	
D-1	3	PAOZZ							.GROMMET,METALLIC MIL-G-16491D 81349		EA	25	
D-1	4	PAOZZ						5340-00-078-7029	.CLIP,END STRAP MS51926-3 96906		EA	24	
D-1	5	PAOZZ						5340-00-057-6956	.BUCKLE,SPRING ACTION MS51929-2 96906		EA	12	
D-1	6	AFFFF							.CHAPE ASSEMBLY 13214E1392 97403		EA	12	
D-1	7	PAFZZ						5365-01-031-9674	.RING,DEE MS51925-1 96906		EA	16	
D-1	8	PAFFF							.HOOK,SNAP MIL-S-43770/1-SWZE3 81349		EA	26	
D-1	9	PAOZZ						2540-00-924-8478	BOW,TRAILER,TARP 13212E3597-1 97403		EA	4	
D-1	10	PAOZZ						2540-00-926-1003	BOW,TRAILER,TARP 13212E3597-2 97403		EA	2	

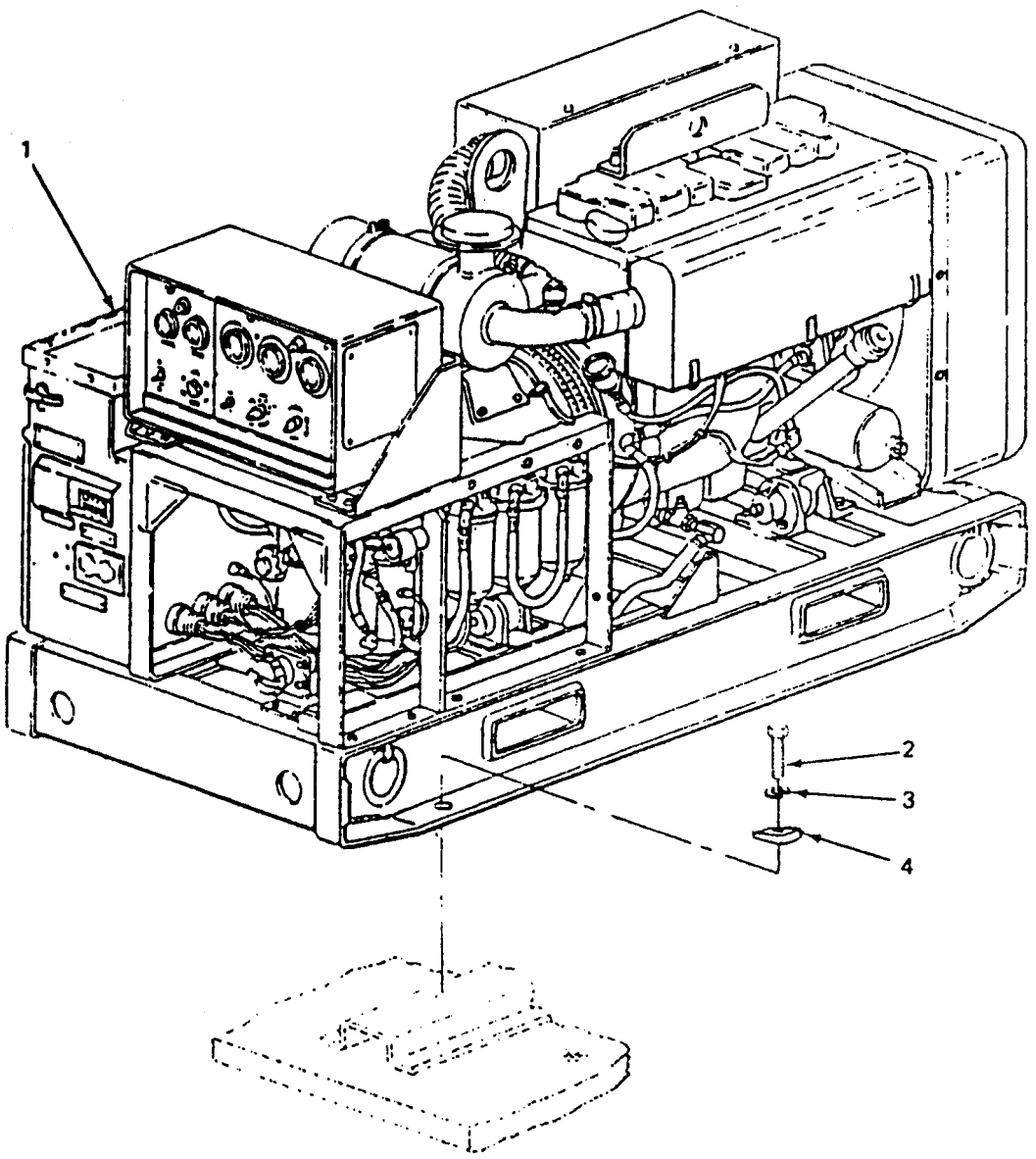


Figure D-2. Generator Set.

(1) ILLUSTRATION		(2) SMR CODE				(3) USMC		(4)	(5) DESCRIPTION		(6)	(7)	(8)
A FIG NO.	B ITEM NO.	A ARMY	B AIR FORCE	C NAVY	D USMC	A SSI	B REPL FACTOR	NATIONAL STOCK NUMBER	REF NUMBER & MFR CODE	USABLE ON CODE	U/M	QTY INC IN UNIT	USMC QTY PER EQUIP
									GROUP 02 - GENERATOR SET				
D-2	1	PAFFD						6115-00-465-1030	GENERATOR SET,DIESEL MEP-112A 30554		EA	2	
D-2	2	PAFZZ							SCREW,CAP,HEX MS90725-114 96906		EA	8	
D-2	3	PAFZZ						5310-00-584-5272	LOCKWASHER MS35338-48 96906		EA	8	
D-2	4	PAFZZ						5310-01-150-5922	WASHER,BEVELED 13206E4482-2 97403		EA	8	

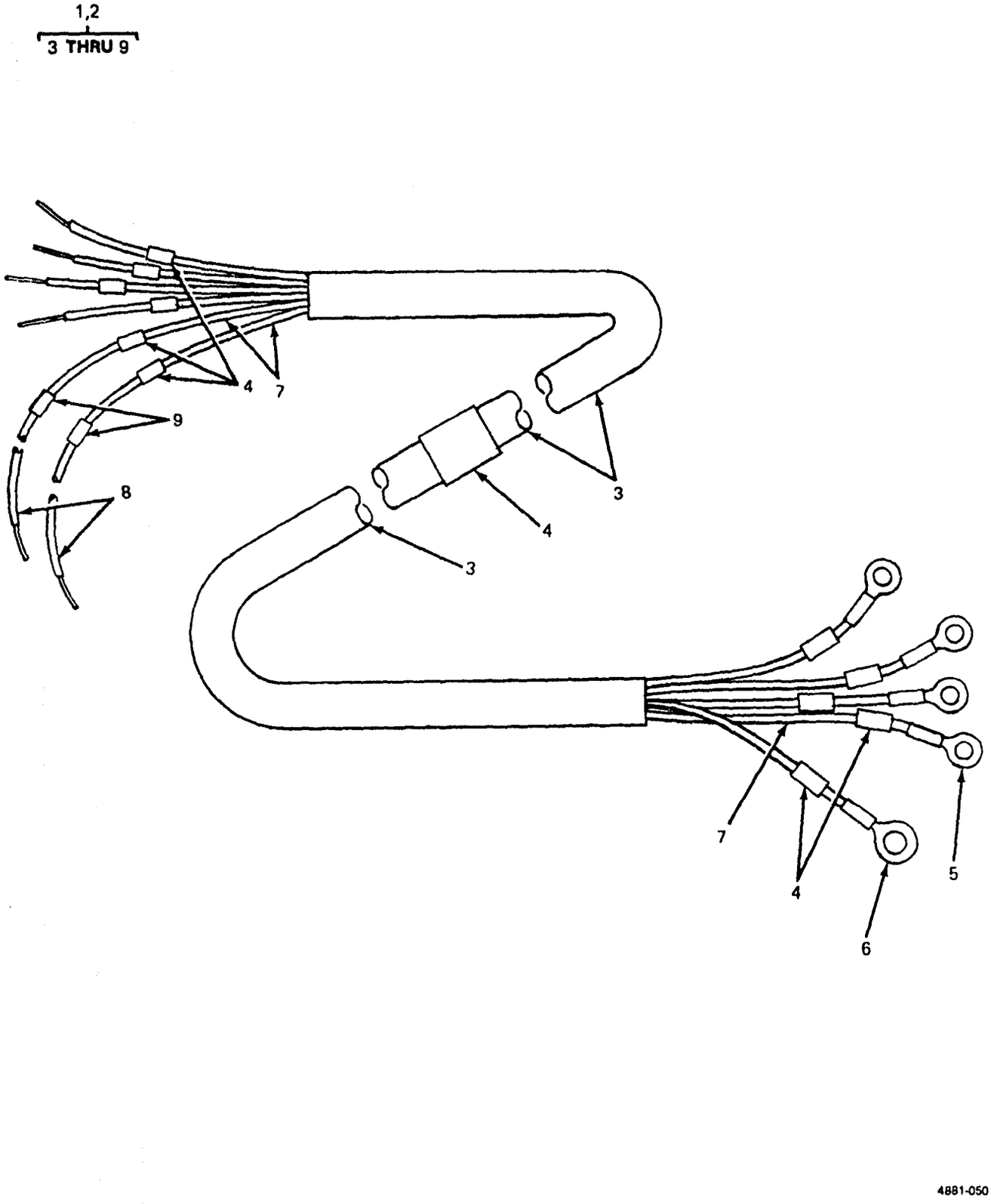


Figure D-3. Power Cable.

(1) ILLUS-TRATION		(2) SMR CODE				(3) USMC		(4)	(5) DESCRIPTION		(6)	(7)	(8)
A FIG NO.	B ITEM NO.	A ARMY	B AIR FORCE	C NAVY	D USMC	A SSI	B REPL FACTOR	NATIONAL STOCK NUMBER	REF NUMBER & MFR CODE	USABLE ON CODE	U/M	QTY INC IN UNIT	USMC QTY PER EQUIP
									GROUP 03 - ELECTRICAL SYSTEM 0301 - POWER CABLES				
D-3	1	PAOFF							CABLE ASSY,POWER(GEN 1) 13226E5888-1 97403		EA	1	
D-3	2	PAOFF						6150-01-285-6324	CABLE ASSY,POWER(GEN 2) 13226E5888-2 97403		EA	1	
D-3	3	PAFZZ							.CABLE CO-04-HDF- 81349 (4/1-4/8R) 1620		FT	AR	
D-3	4	PAOZZ							.BAND,IDENTIFICATION MIL-P-15024/8 81349 TYPE K2		EA	26	
D-3	5	PAOZZ						5940-00-115-5007	.TERMINAL,LUG MS25036-130 96906		EA	8	
D-3	6	PAOZZ						5940-00-113-9833	.TERMINAL,LUG MS225036-131 96906		EA	2	
D-3	7	PAOZZ						5970-00-983-7985	.SLEEVING,INSULATION M23053/5-107-5 81349		EA	AR	
D-3	8	PAOZZ							.WIRE,SIZE 6 AWG QQW343C06B1B 81348		EA	4	
D-3	9	PAOZZ							.SLEEVING,INSULATION M23053/5-109-5 81349		EA	A4	

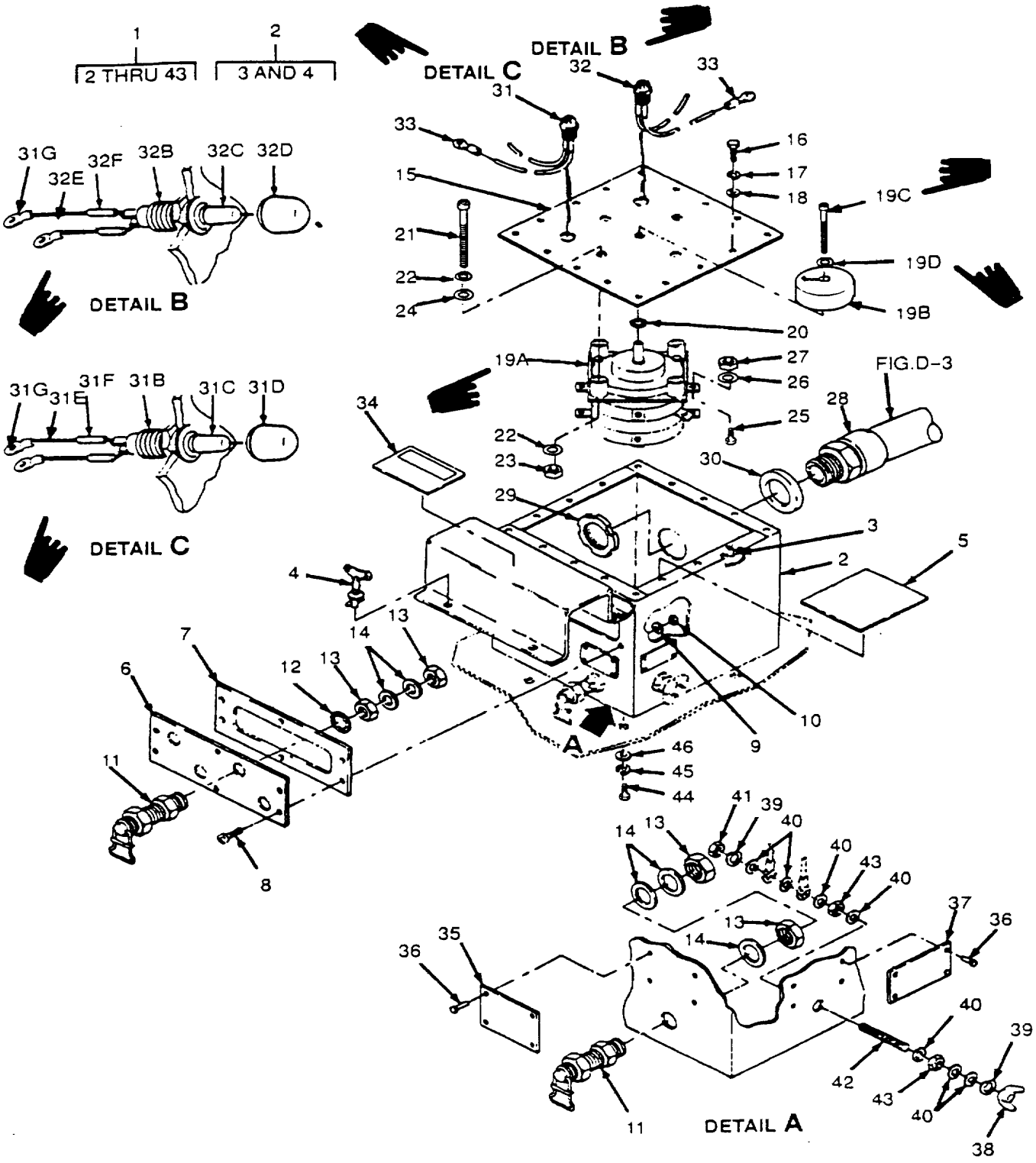


Figure D-4. Switch Box.

(1) ILLUS-TRATION A FIG NO.	B ITEM NO.	(2) SMR CODE A ARMY	B AIR FORCE	C NAVY	D USMC	(3) USMC A SSI	B REPL FACTOR	(4) NATIONAL STOCK NUMBER	(5) DESCRIPTION REF NUMBER & MFR CODE	USABLE ON CODE	(6) U/M	(7) QTY INC IN UNIT	(8) USMC QTY PER EQUIP
									0301 - SWITCH BOX				
D-4	1	PAOFH							BOX,SWITCH 13226E5859-1 97403		EA	1	
D-4	2	PBOFH						6115-01-B76-1197	.BOX 13226E5861 97403		EA	1	
D-4	3	PAFZZ							..NUT,BLIND RIVET MS27130-S99 96906		EA	16	
D-4	4	PAFZZ							..FASTENER,PANEL PN NOT AVAILABLE		EA	2	
D-4	5	XBOZZ							.PLATE,INFORMATION 13212E3587 97403		EA	1	
D-4	6	PAOZZ						5940-01-B76-1201	.BOARD,TERMINAL 13211E4775 97403		EA	1	
D-4	7	PAFZZ						5330-01-178-9319	.GASKET 13212E3583 97403		EA	1	
D-4	8	PAOZZ						5305-00-988-1727	.SCREW,MACHINE MS35206-283 96906		EA	6	
D-4	9	PAOZZ						5310-00-809-4058	.WASHER,FLAT MS27183-10 96906		EA	6	
D-4	10	PAOZZ						5310-00-088-1251	.NUT,SELF-LOCKING MS51922-1 96906		EA	6	
D-4	11	PAFZZ							.POST,TERMINAL MS39347-4 96906		EA	5	
D-4	12	PAOZZ						5310-00-042-4229	.LOCKWASHER,INTERNAL TOOTH MS35333-113 96906		EA	4	
D-4	13	PAOZZ						5310-00-006-8286	.NUT,PLAIN,HEX MS16203-41 96906		EA	10	
D-4	14	PAOZZ						5310-01-188-1690	.WASHER,FLAT AN961-816S 81352		EA	11	
		PAOZZ						5310-00-465-2719	.WASHER,FLAT AN961-816T 88044		EA	11	
D-4	15	XBFZZ							.COVER 13212E3579 97403		EA	1	
D-4	16	PAOZZ						5305-00-989-7435	.SCREW,MACHINE MS35207-264 96906		EA	16	
D-4	17	PAOZZ						5310-00-045-3296	.LOCKWASHER MS35338-43 96906		EA	16	
D-4	18	PAOZZ						5310-00-014-5850	.WASHER,FLAT MS27183-42 967906		EA	16	
D-4	19	PAFZZ							.SWITCH,ROTARY MIL-S-15291/12 81349		EA	1	
D-4	20	PAFZZ						5330-00-579-7916	.PACKING,PREFORMED MS28775-115 96906		EA	1	
D-4	21	PAFZZ						5305-00-983-7467	.SCREW,CAP,SOCKET HEAD MS16997-149 96906		EA	4	

(1) ILLUSTRATION a FIG NO.	b ITEM NO.	(2) SMR CODE a ARMY	b AIR FORCE	c NAVY	d USMC	(3) USMC a SSI	b REPL FACTOR	(4) NATIONAL STOCK NUMBER	(5) DESCRIPTION REF NUMBER & MFR CODE	USABLE ON CODE	(6) U/M	(7) QTY INC IN UNIT	(8) USMC QTY PER EQUIP
									0301 - Switch Box (cont)				
D-4--	22	PAFZZ						5310-000-309-599s	WASHEP FLAT		EA	3	
									MS27183-18	96906			
D-4	23	PAFZZ						5310-00-225-6993	NUT SELF-LOCKING		EA	4	
									MS51922-33	96906			
D-4	24	PAFZZ						5330-0-618-5361	PACKING, PREFORMED		EA	1	
									MS23775-015	96906			
D-4-	25	PAOZZ						5305-01-135-7528	SCREW, MACHINE		EA	9	
									M5352'5-35	96906			
0-4	25	PAOZZ						5310-00-9l3-9776	LOCKWASHER EXTERNAL TOOTH		EA	3	
									MS35335-91	96906			
D-4	27	PAOZZ						531-00-411-0687	NUT, PLAIN, HEX		EA	9	
									MS35650-3385T	96906			
-D-4	28	PAFZZ						5975-01-211-3346	TUBE. STUFFING		EA	2	
									13219E5149-10	97403			
D-4	29	PAOZZ							WASHER		EA	2	
									13218E5149-5	97403			
D-4	30	PAOZZ						5330-01-164-2351	GASKET		EA	2	
									13218E5140-5	97403			
D-4	31	PAOOO						5120-00-253-0688	LGHT ANO WIRE ASSY		EA	1	
									13212E3581-2	97403			
D-4-	31A	PAOOO						6210-00-900-9423	LIGHT INDICATOR		EA	1	
									13214E1391	97403			
D-4	31B	PAOZZ						6210-01-230-1851	HOUSING		EA	1	
									l81-8836-09-553	72619			
D-4	31C	PAOZZ							LAMP		EA	1	
									G9B(GR)	73070			
D-4	31D	PAOZZ						6210-00-941-5690	LENS		EA	1	
									181-0937-003	72619			
D-4	31E	MOOZZ							WIRE		EA	2	
									MS086/1 18	96906			
D-4	31F	PAOZZ						5970-00-814-2878	:NSULAT!ON TUBING		EA	2	
									M23053/5-106-9	81349			
D-4	31G	PAOZZ						5940-00-13-3184	TERMINAL		EA	2	
									MS25036-150	96906			
D-4	32	PAOOO						6120-00 406-1398	LIGHT AND WIRE ASSY		EA	1	
									3212E358 -	97403			
D-4	32A	*PAOOO*						6210-00-900-9423	LIGHT INDICATOR		EA	1	
									132-4E1391	97403			
D-4	32B	PAOZZ						6210-01-230-1851	HOUSING		EA	1	
									18 1 -8836-09-553	72619			
D-4	32C	PAOZZ							LAMP		EA	1	
									G98(GR)	73070			
D-4	32D	OAOZZ						6210-00-941-6690	LENS		EA	1	
									181 -937-003	72519			
0-4	32E	MOOZZ							WIRE		EA	2	
									M508&6/1-8	96906			
D-4	32F	PAOZZ						5970-00-814-2878	INSULATION TUBING		EA	2	
									M230535-106	81349			
D-4	32G	PAOZ							TERMINAL LUG		EA	2	
									S25036-: 05	96906			
D-4	33	PAFZZ						5940-00-143-4773	TERMINAL LUG		EA	4	
									US25036-' 5A	96906			

(1) ILLUS-TRATION		(2) SMR CODE				(3) USMC		(4)	(5) DESCRIPTION		(6)	(7) QTY	(8) USMC
a FIG NO.	b ITEM NO.	a ARMY	b AIR FORCE	c NAVY	d USMC	a SSI	b REPL FACTOR	NATIONAL STOCK NUMBER	REF NUMBER & MFR CODE	USABLE ON CODE	U/M	INC IN UNIT	QTY PER EQUIP
									0301 - Switch Box (cont)				
D-4	34	XBFZZ							PLATE, VARNING		EA	1	
									32 6E7603	97403			
0-4	35	MOFZ							PLATE INFORMATION		EA	1	
									13225E5889-1	97403			
D-4	36	PAOZZ						5320-00-721-5239	RIVET		EA	3	
									MS 16535- 153	96906			
D-4	37	MOFZZ							PLATE, INFORMATION		EA	1	
									13225E5889-2	97403			
D-4	38	PAOZZ						5310-01-078-5996	NUT PLAIN WING		EA	1	
									MS35425-75	96906			
D-4	39	PAOZZ						5310-00-184-8971	LOCKWASHER		EA	2	
									MS35338-103	96906			
D-4	40	PAOZZ						5310-00-187-2413	WASHER, FLAT		EA	7	
									AN96t-6S6T	81352			
D-4	41	PAOZZ						5310--584-7995	NUT,PLAIN, HEX		EA	1	
									MS 6203-27	96906			
D-4	42	PAOZZ						5307-00-227-1741	STUD		EA	1	
									13214E1223	97403			
D-4	43	PAOZZ						5310-01-026-5824	NUT PLAIN, HEX		EA	2	
									MS16203-39	96906			
D-4	44	PAOZZ						5305-00-269-3211	SCREW, CAP HEX		EA	4	
									MS90725-60	96906			
D-4	45	PAOZZ						5310-00-637-9541	LOCKWASHER		EA	4	
									MS35338-46	96906			
D-4	46	PAOZZ							WASHER. FLAT		EA	4	
									PIN NOT AVAILABLE				

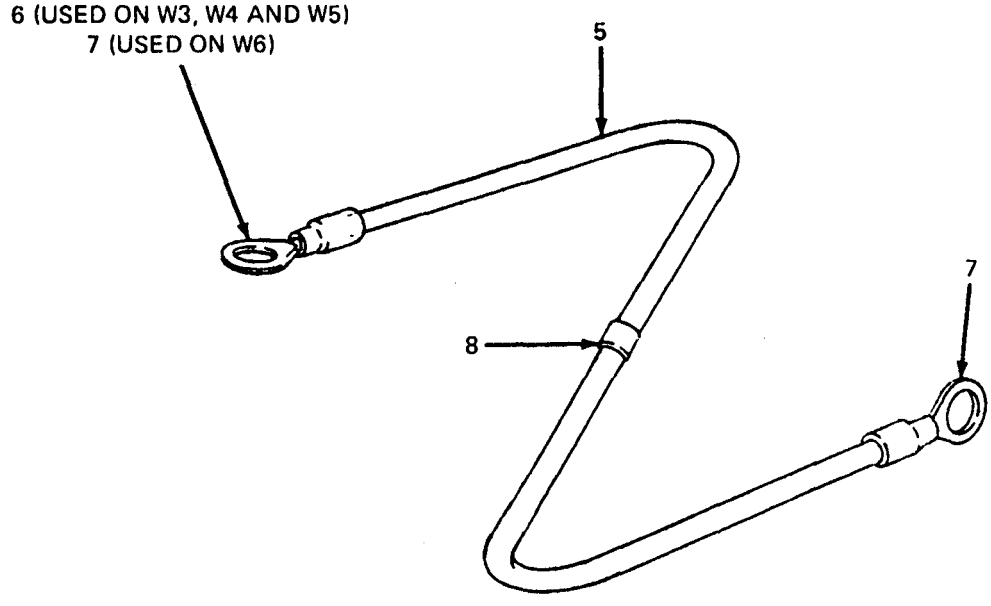


Figure D-5. Switch Box Electrical Leads.

(1) ILLUS-TRATION		(2) SMR CODE				(3) USMC		(4)	(5) DESCRIPTION		(6)	(7)	(8)
A FIG NO.	B ITEM NO.	A ARMY	B AIR FORCE	C NAVY	D USMC	A SSI	B REPL FACTOR	NATIONAL STOCK NUMBER	REF NUMBER & MFR CODE	USABLE ON CODE	U/M	QTY INC IN UNIT	USMC QTY PER EQUIP
									0301 - SWITCH BOX ELECTRICAL LEADS				
D-5	1	MFFFF						6150-01-152-8315	LEAD,ELECTRICAL(W3) 13212E3586-1 97403		EA	1	
D-5	2	MFFFF							LEAD,ELECTRICAL(W4) 13212E3586-2 97403		EA	1	
D-5	3	MFFFF							LEAD,ELECTRICAL(W5) 13212E3586-3 97403		EA	1	
D-5	4	MFFFF							LEAD,ELECTRICAL(W6) 13212E3586-4 97403		EA	1	
D-5	5	PAOZZ							.WIRE M5086/2-2 81349		FT	AR	
D-5	6	PAOZZ						5940-00-113-8191	.TERMINAL,LUG MS25036-127 CL 1 SZ 2 96906		EA	3	
D-5	7	PAFZZ						5940-00-113-9831	.TERMINAL,LUG MS25036-128 CL 1 SZ 2 96906		EA	5	
D-5	8	PAFZZ						5970-00-983-7993	.TUBING,SHRINKABLE M23053/5-108-5 81349		EA	AR	

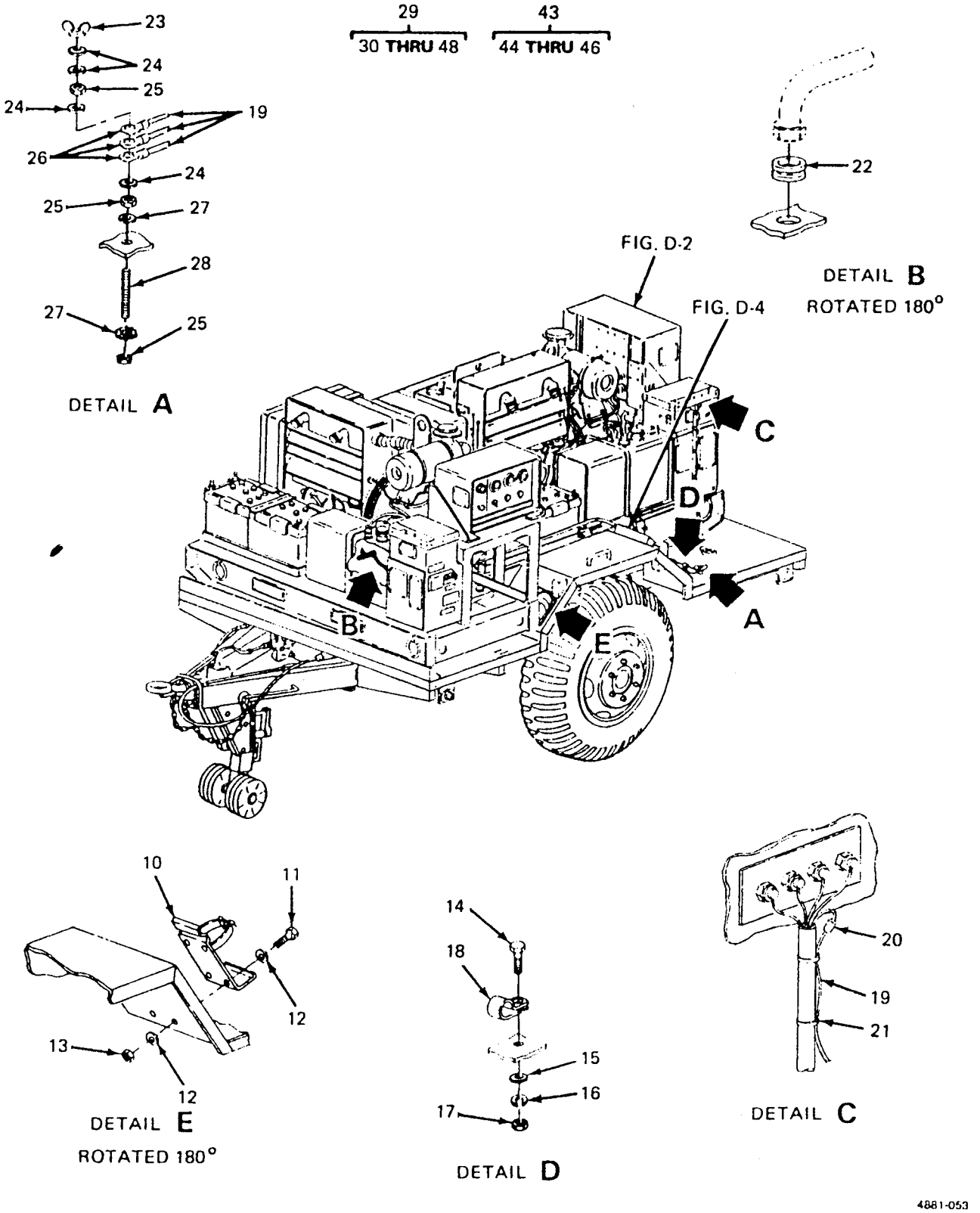


Figure D-6. Trailer Body (Sheet 1 of 2).

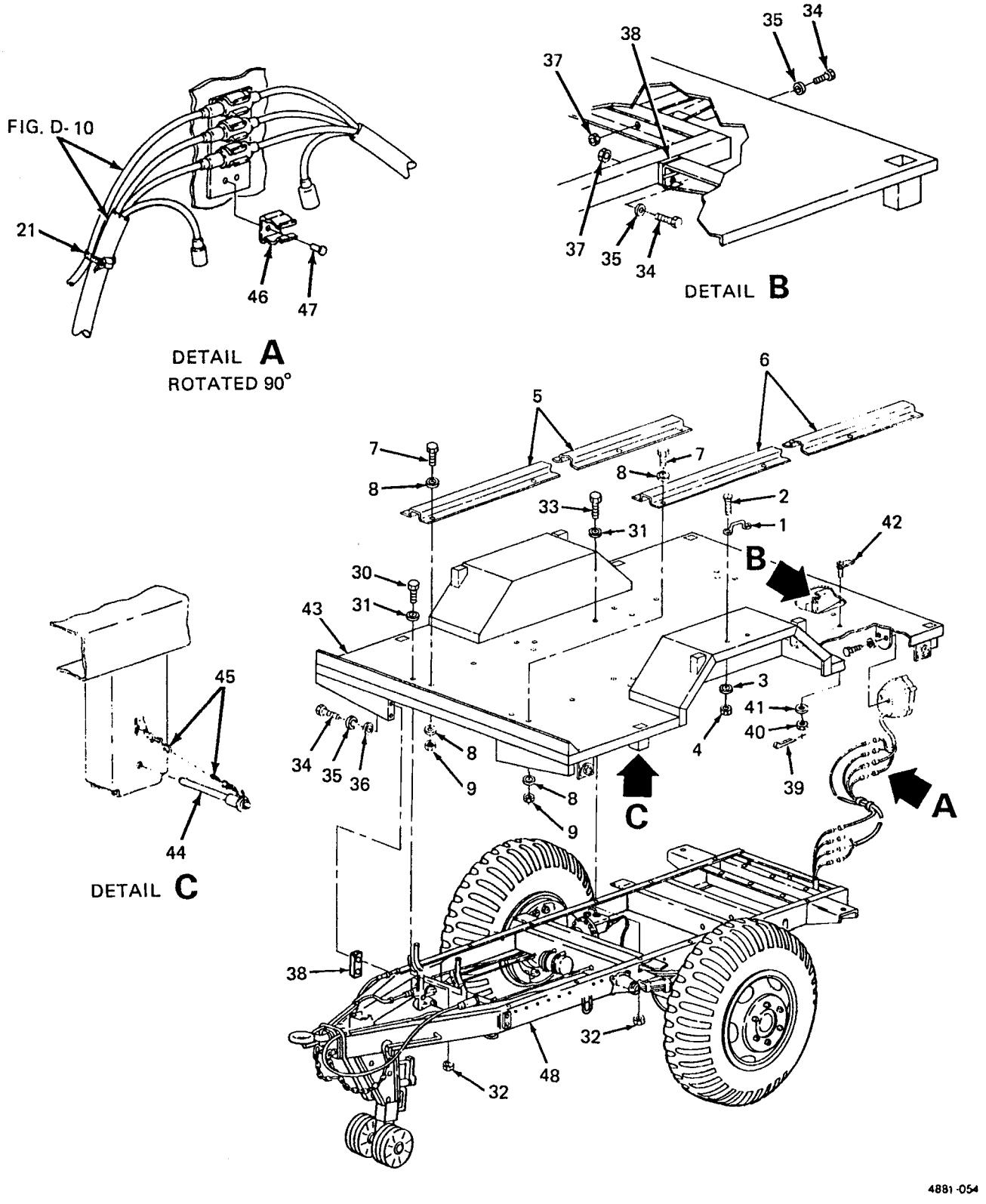


Figure D-6. Trailer Body (Sheet 2 of 2).

(1) ILLUS-TRATION A FIG NO.	B ITEM NO.	(2) SMR CODE A ARMY	B AIR FORCE	C NAVY	D USMC	(3) USMC A SSI	B REPL FACTOR	(4) NATIONAL STOCK NUMBER	(5) DESCRIPTION REF NUMBER & MFR CODE	USABLE ON CODE	(6) U/M	(7) QTY INC IN UNIT	(8) USMC QTY PER EQUIP
									GROUP 04 TRAILER 04 - BODY				
D-6	1	PAOZZ						5340-00-229-0340	LOOP,STRAP FASTENER MS51939-3 96906		EA	4	
D-6	2	PAOZZ						5305-00-957-7086	SCREW,MACHINE MS24693-S273 96906		EA	8	
D-6	3	PAOZZ						5310-00-014-5850	WASHER,FLAT MS27183-42 96906		EA	8	
D-6	4	PAOZZ						5310-00-059-9263	NUT,SELF-LOCKING MS21046C3 96906		EA	8	
D-6	5	XBFFF							RAIL,MOUNTING,CURBSIDE 13220E4457-2 97403		EA	1	
D-6	6	XBFFF							RAIL,MOUNTING,ROADSIDE 13220E4458-2 97403		EA	1	
D-6	7	XDOZZ						5305-00-782-9495	SCREW,CAP,HEX MS90725-111 96906		EA	16	
D-6	8	PAFZZ						5310-00-809-5998	WASHER,FLAT MS27183-18 96906		EA	32	
D-6	9	PAOZZ						5310-00-225-6993	NUT,SELF-LOCKING MS51922-33 96906		EA	16	
D-6	10	XBOZZ						4210-00-223-4857	BRACKET,FIRE EXTINGUISHER 13214E1235 97403		EA	2	
D-6	11	PAOZZ						5305-00-068-0502	SCREW,CAP,HEX MS90725-6 96906		EA	8	
D-6	12	PAOZZ						5310-00-809-4058	WASHER,FLAT MS27183-10 96906		EA	16	
D-6	13	PAOZZ						5310-00-088-1251	NUT,SELF-LOCKING MS51922-1 96906		EA	8	
D-6	14	PAOZZ						5305-00-984-6202	SCREW,MACHINE MS35206-264 96906		EA	1	
D-6	15	PAOZZ						5310-00-809-8546	WASHER,FLAT MS27183-8 96906		EA	2	
D-6	16	PAOZZ						5310-00-045-3296	LOCKWASHER MS35338-43 96906		EA	1	
D-6	17	PAOZZ						5310-00-934-9758	NUT,PLAIN MS35649-202 96906		EA	1	
D-6	18	PAOZZ						5340-00-930-1754	CLAMP,LOOP MS21334-2 96906		EA	2	
D-6	19	PAOZZ							WIRE,NO.6AWG QQ-W-343C06B1B 81348		FT	AR	
D-6	20	PAOZZ						5970-00-914-3118	SLEEVING,INSULATION M23053/5-109-0 81349		EA	AR	
D-6	21	PAOZZ						5975-00-074-2072	STRAP,TIEDOWN MS3367-1-9 TYP 1 CL 1 96906		EA	AR	

(1) ILLUS-TRATION A FIG NO.	B ITEM NO.	(2) SMR CODE A ARMY	B AIR FORCE	C NAVY	D USMC	(3) USMC A SSI	B REPL FACTOR	(4) NATIONAL STOCK NUMBER	(5) DESCRIPTION REF NUMBER & MFR CODE	USABLE ON CODE	(6) U/M	(7) QTY INC IN UNIT	(8) USMC QTY PER EQUIP
									04 - BODY(CONT)				
D-6	22	PAOZZ						5325-00-903-5909	GROMMET MS35489-112 96906		EA	2	
D-6	23	PAOZZ						5310-00-543-4717	NUT,PLAIN WING MS35425-28 96906		EA	1	
D-6	24	PAOZZ						5310-01-004-9129	WASHER,FLAT AN961-616S 81352		EA	4	
		PAOZZ						5310-00-187-2413	WASHER,FLAT AN961-616T 88044		EA	4	
D-6	25	PAOZZ						5310-01-026-5824	NUT,PLAIN,HEX MS16203-39 96906		EA	3	
D-6	26	PAOZZ						5940-00-115-4992	TERMINAL,LUG MS20659-110 TY 1 CL 1 96906		EA	6	
D-6	27	PAOZZ						5310-00-913-9776	LOCKWASHER,EXTERNAL TOOTH MS35335-91 96906		EA	3	
D-6	28	PAOZZ						5307-00-227-1741	STUD 13214E1223 97403		EA	1	
D-6	29	XBFHD							TRAILER ASSY 13226E5858 97403		EA	1	
D-6	30	PAOZZ						5805-01-186-7145	.SCREW,CAP,HEX 13218E0021-41 97403		EA	2	
D-6	31	PAOZZ						5310-00-823-8803	.WASHER,FLAT MS27183-21 96906		EA	18	
D-6	32	PAOZZ						5310-00-269-4040	.NUT,SELF-LOCKING MS51922-49 96906		EA	18	
D-6	33	PAOZZ						5305-00-724-5911	.SCREW,CAP,HEX MS90725-163 96906		EA	16	
D-6	34	PAOZZ						5305-00-269-3211	.SCREW,CAP,HEX MS90725-60 96906		EA	16	
D-6	35	PAOZZ						5310-00-080-6004	.WASHER,FLAT MS27183-14 96906		EA	16	
D-6	36	PAOZZ						5310-00-637-9541	.LOCKWASHER MS35338-46 96906		EA	4	
D-6	37	PAOZZ						5310-00-087-4652	.NUT,SELF-LOCKING MS51922-17 96906		EA	12	
D-6	38	PAFZZ						5365-01-B75-1770	.SHIM 13212E3590-2 97403		EA	AR	
D-6	39	PAOZZ							.PIN,COTTER PN NOT AVAILABLE		EA	2	
D-6	40	PAOZZ						5310-00-832-9719	.NUT,SELF-LOCKING MS51922-61 96906		EA	2	
D-6	41	PAOZZ						5310-00-584-7888	.WASHER MS35338-51 96906		EA	2	
D-6	42	PAOZZ							.RING,LIFTING 13226E7730-6 97403		EA	2	

(1) ILLUS-TRATION A FIG NO.	B ITEM NO.	(2) SMR CODE A ARMY	B AIR FORCE	C NAVY	D USMC	(3) USMC A SSI	B REPL FACTOR	(4) NATIONAL STOCK NUMBER	(5) DESCRIPTION REF NUMBER & MFR CODE	USABLE ON CODE	(6) U/M	(7) QTY INC IN UNIT	(8) USMC QTY PER EQUIP
									04 - BODY(CONT)				
D-6	43	XAFFF							.FLATBED,TRAILER 13226E5857 97403		EA	1	
D-6	44	PAOZZ						5340-01-126-3826	..PIN,QUICK-RELEASE MS17990C613 96906		EA	12	
D-6	45	PAOZZ						4010-01-B75-1772	..CHAIN,WELDLESS 13218E0025-4 97403		EA	12	
D-6	46	PBFZZ							..CLIP,SPRING TENSION M24066/2-128 81349		EA	8	
D-6	47	PAFZZ						5320-00-637-6068	..RIVET,SOLID MS20427-4C5 96906		EA	16	
D-6	48	XBFHH							.CHASSIS,TRAILER 97403 13226E7734		EA	1	

1
2 THRU 9

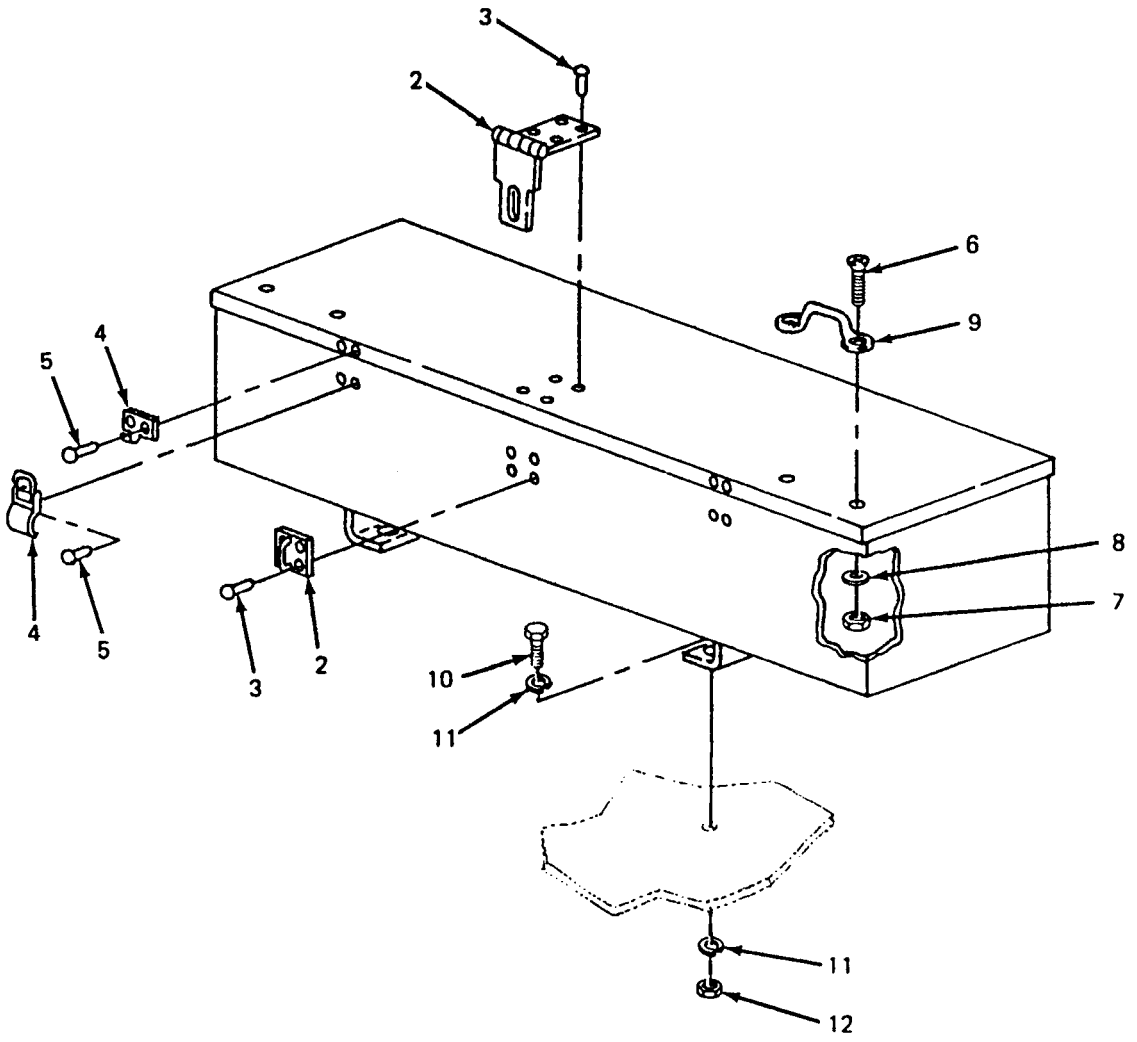


Figure D-7. Accessory Box.

(1) ILLUS-TRATION		(2) SMR CODE				(3) USMC		(4)	(5) DESCRIPTION		(6)	(7)	(8)
A FIG NO.	B ITEM NO.	A ARMY	B AIR FORCE	C NAVY	D USMC	A SSI	B REPL FACTOR	NATIONAL STOCK NUMBER	REF NUMBER & MFR CODE	USABLE ON CODE	U/M	QTY INC IN UNIT	USMC QTY PER EQUIP
									04- ACCESSORY BOX				
D-7	1	PBOOO						6115-01-230-0677	BOX,ACCESSORY 13226E7737 97403		EA	1	
D-7	2	PAOZZ						5340-00-234-8422	.HASP,HINGED MS27969-4 96906		EA	1	
D-7	3	PAOZZ						5320-01-168-3097	.RIVET,SOLID MS9460-102 96906		EA	8	
D-7	4	PAOZZ						5340-00-975-2126	.CATCH,CLAMPING AND STRIKE MS18015-1 96906		EA	2	
D-7	5	PAOZZ						5320-00-753-3830	.RIVET,SOLID MS20613-4P5 96906		EA	8	
D-7	6	PAOZZ						5305-00-957-7086	.SCREW,MACHINE MS24693-S273 96906		EA	4	
D-7	7	PAOZZ						5310-00-059-9263	.NUT,SELF-LOCKING MS21046C3 96906		EA	4	
D-7	8	PAOZZ						5310-00-014-5850	.WASHER,FLAT MS27183-42 96906		EA	4	
D-7	9	PAOZZ						5340-00-229-0340	.LOOP,STRAP FASTENER MS51939-3 96906		EA	2	
D-7	10	PAOZZ						5306-00-225-8496	SCREW,CAP,HEX MS90725-31 96906		EA	4	
D-7	11	PAOZZ						5310-00-407-9566	LOCKWASHER MS35338-45 96906		EA	4	
D-7	12	PAOZZ						5310-00-880-7744	NUT,PLAIN,HEX MS51967-5 96906		EA	4	

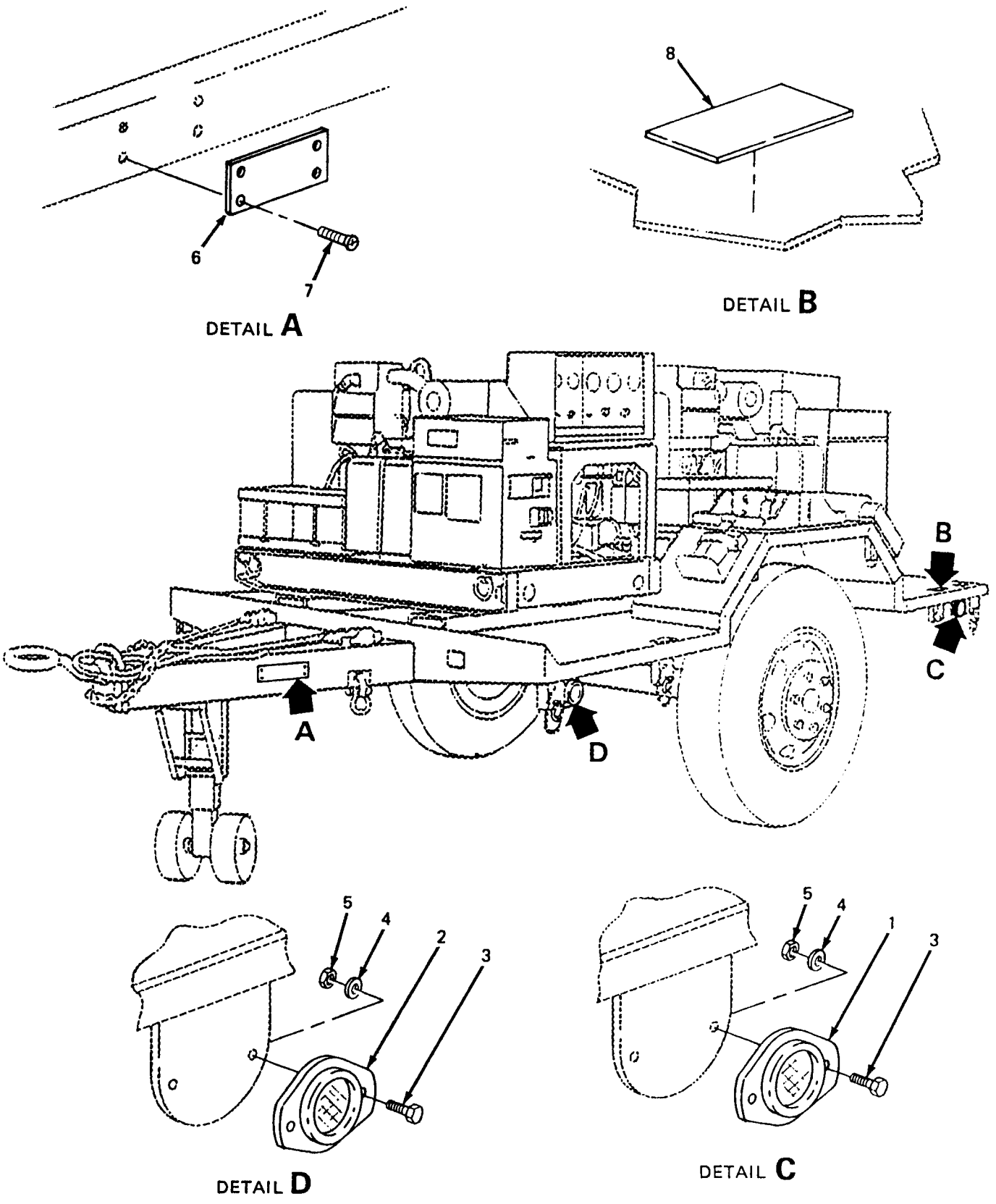


Figure D-8. Data Plates and Reflectors.

(1) ILLUS-TRATION		(2) SMR CODE				(3) USMC		(4)	(5) DESCRIPTION		(6)	(7)	(8)
A FIG NO.	B ITEM NO.	A ARMY	B AIR FORCE	C NAVY	D USMC	A SSI	B REPL FACTOR	NATIONAL STOCK NUMBER	REF NUMBER & MFR CODE	USABLE ON CODE	U/M	QTY INC IN UNIT	USMC QTY PER EQUIP
									04 - DATA PLATES AND REFLECTORS				
D-8	1	PAOZZ						9905-00-205-2795	REFLECTOR,RED MS35387-1 96906		EA	4	
D-8	2	PAOZZ						9905-00-202-3639	REFLECTOR,AMBER MS35387-2 96906		EA	2	
D-8	3	PAOZZ						5305-00-068-0500	SCREW,CAP,HEX MS90725-3 96906		EA	12	
D-8	4	PAOZZ						5310-00-809-4058	WASHER,FLAT MS27183-10 96906		EA	12	
D-8	5	PAOZZ						5310-00-088-1251	NUT,SELF-LOCKING MS51922-1 96906		EA	12	
D-8	6	XBFZZ							PLATE,IDENTIFICATION 13220E4463-2 97403		EA	1	
D-8	7	PAOZZ						5305-00-253-5614	SCREW,DRIVE MS21318-20 96906		EA	4	
D-8	8	PAFZZ						9905-01-085-7703	PLATE,IDENTIFICATION 13205E4918 97403		EA	4	

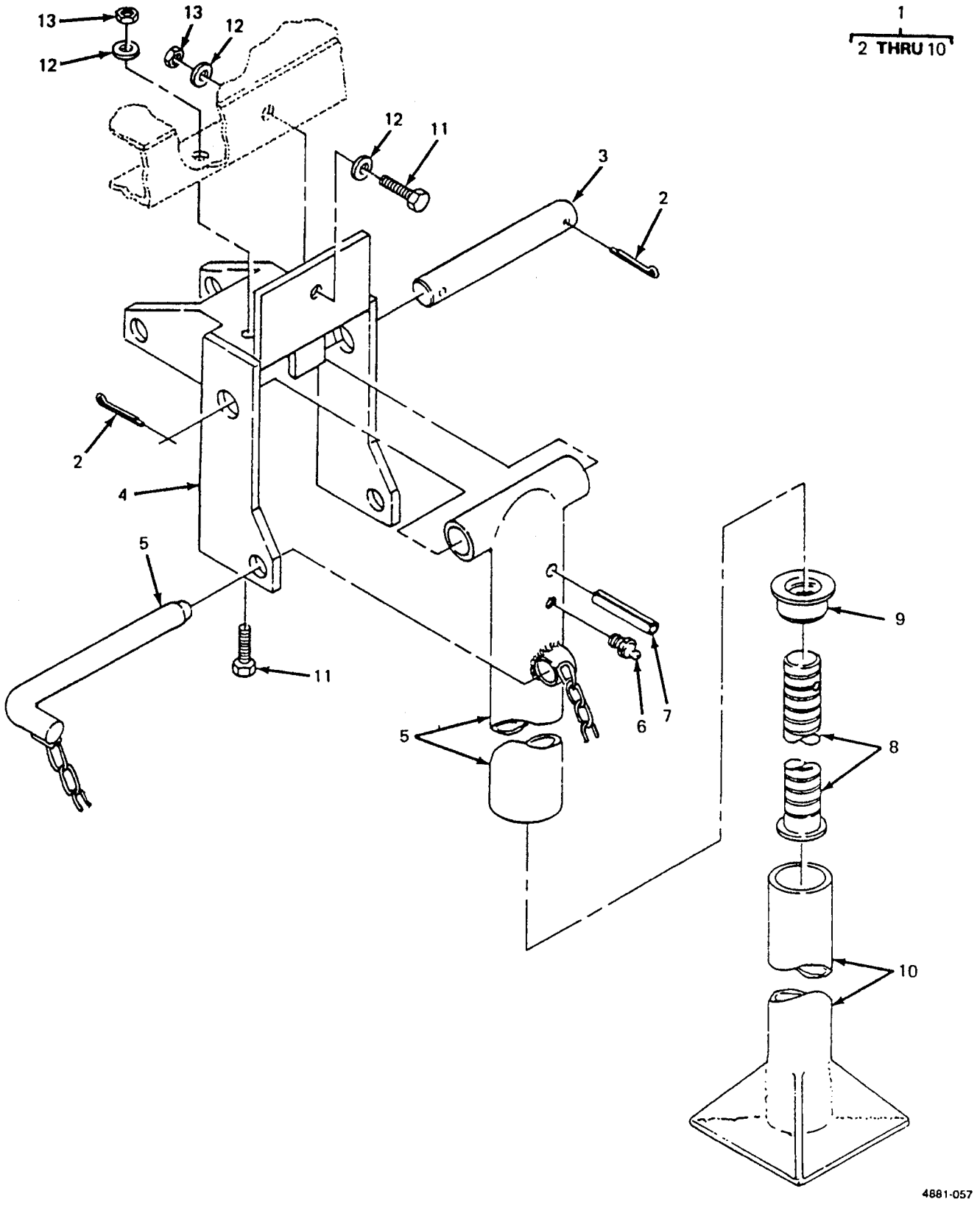


Figure D-9. Leg Prop Assembly.

(1) ILLUS-TRATION		(2) SMR CODE				(3) USMC		(4)	(5) DESCRIPTION		(6)	(7)	(8)
A FIG NO.	B ITEM NO.	A ARMY	B AIR FORCE	C NAVY	D USMC	A SSI	B REPL FACTOR	NATIONAL STOCK NUMBER	REF NUMBER & MFR CODE	USABLE ON CODE	U/M	QTY INC IN UNIT	USMC QTY PER EQUIP
									04 - FRAME				
D-9	1	XBFFF						2950-00-420-8929	LEG PROP ASSEMBLY 13214E1206 97403		EA	1	
D-9	2	PAOZZ						5315-00-839-5822	.PIN,COTTER MS24665-353 96906		EA	2	
D-9	3	XBOZZ						5315-01-162-0143	.SHAFT 13214E1209 97403		EA	1	
D-9	4	XBOZZ						6115-01-220-1548	.BRACKET 13214E1207 97403		EA	1	
D-9	5	XBOZZ						2590-00-453-8977	.LEG,UPPER 13214E1208 97403		EA	1	
D-9	6	PAOZZ						4730-00-172-0049	.FITTING,LUBRICATION MS15006-1 96906		EA	1	
D-9	7	XBOZZ						5315-00-838-4584	.PIN,SPRING MS16562-66 96906		EA	1	
D-9	8	XBOZZ						5315-01-158-2144	.SCREW 13214E1210 97403		EA	1	
D-9	9	PAOZZ						5310-01-149-0869	.NUT 13214E1211 97403		EA	1	
D-9	10	XBOZZ						2590-01-167-8596	.BASE,LEG 13214E1212 97403		EA	1	
D-9	11	PAOZZ						5305-00-269-3213	SCREW,CAP,HEX MS90725-62 96906		EA	3	
D-9	12	PAOZZ						5310-00-080-6004	WASHER,FLAT MS27183-14 96906		EA	6	
D-9	13	PAOZZ						5310-00-087-4652	NUT,SELF-LOCKING MS51922-17 96906		EA	3	

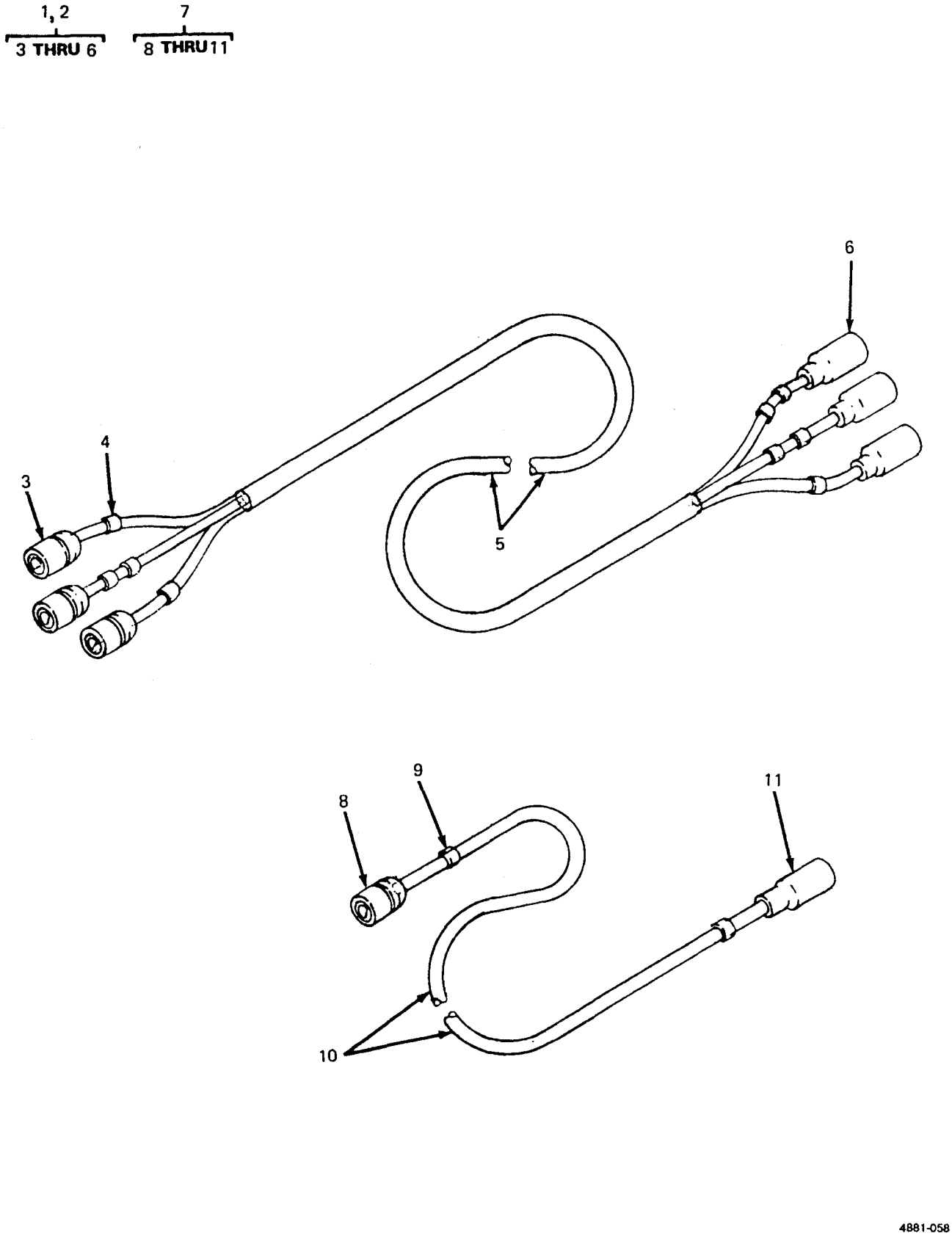


Figure D-10. Taillight Cable Assembly and Electrical Lead.

(1) ILLUS-TRATION A FIG NO.	B ITEM NO.	(2) SMR CODE A ARMY	B AIR FORCE	C NAVY	D USMC	(3) USMC A SSI	B REPL FACTOR	(4) NATIONAL STOCK NUMBER	(5) DESCRIPTION REF NUMBER & MFR CODE	USABLE ON CODE	(6) U/M	(7) QTY INC IN UNIT	(8) USMC QTY PER EQUIP
									04 - TAILLIGHT CABLE ASSEMBLIES AND ELECTRICAL LEAD				
D-10	1	MFOFF						6150-01-166-9112	CABLE ASSY,ROADSIDE 13216E7479-1 97403		EA	1	
D-10	2	MFOFF						6150-01-166-9111	CABLE,ASSY,CURBSIDE 13216E7479-2 97403		EA	1	
D-10	3	PAOZZ						5935-00-167-7775	.CONNECTOR,PLUG MS27144-1 96906		EA	6	
D-10	4	PAOZZ						9905-01-B75-1051	.BAND,MARKER M43436/1-6 81349		EA	20	
D-10	5	MFFFF							.CABLE M13486/7-1 TYPE 1, 81349 TYPE I,CL B		EA	2	
D-10	6	PAOZZ						5935-00-462-6603	.CONNECTOR,PLUG MS27142-2 96906		EA	6	
D-10	7	MFOFF						6150-01-166-9135	LEAD,ELECTRICAL 13216E7476 97403		EA	2	
D-10	8	PAOZZ						5935-00-167-7775	.CONNECTOR,PLUG MS27144-1 STYLE 1 96906		EA	2	
D-10	9	PAOZZ						9905-01-B75-1051	.BAND,MARKER M43436/1-6 81349		EA	4	
D-10	10	PAOZZ						6145-00-152-6499	.CABLE M13486/1-5 81349 TYPE 1,CL A		EA	2	
D-10	11	PAOZZ						5935-00-462-6603	.CONNECTOR,PLUG MS27142-2 96906		EA	2	

SECTION III. SPECIAL TOOLS, TEST AND SUPPORT EQUIPMENT

NOT APPLICABLE

SECTION IV NATIONAL STOCK NUMBER AND PART NUMBER INDEX

NSN	FIG NO	ITEM NO	NSN	FIG NO	ITEM NO
2540-00-924-8478	D-1	9		D-9	13
2540-00-926-1003	D-1	10	5310-00-088-1251	D-4	10
2590-00-420-8929	D-9	1		D-6	13
2590-00-453-8977	D-9	5		D-8	5
2590-01-167-8596	D-9	10	5310-00-184-8971	D-4	39
4010-00-B75-1772	D-6	45	5310-00-187-2413	D-4	40
4210-00-223-4857	D-6	10		D-6	24
4730-00-172-0049	D-9	6	5310-00-225-6993	D-4	23
5305-00-068-0500	D-8	3		D-6	9
5305-00-068-0502	D-6	11	5310-00-269-4040	D-6	32
5305-00-253-5614	D-8	7	5310-00-407-9566	D-7	11
5305-00-269-3211	D-4	44	5310-00-411-0687	D-4	27
	D-6	34	5310-00-465-2719	D-4	14
5305-00-269-3213	D-9	11	5310-00-543-4717	D-6	23
5305-00-724-5911	D-6	33	5310-00-584-5272	D-2	3
5305-00-782-9495	D-6	7	5310-00-584-7888	D-6	41
5305-00-957-7086	D-6	2	5310-00-584-7995	D-4	41
	D-7	6	5310-00-637-9541	D-4	45
5305-00-983-7467	D-4	21		D-6	36
5305-00-984-6202	D-6	14	5310-00-809-4058	D-4	9
5305-00-988-1727	D-4	8		D-6	12
5305-00-989-7435	D-4	16		D-8	4
5305-01-135-7258	D-4	25	5310-00-809-5998	D-4	22
5306-00-225-8496	D-7	10		D-6	8
5307-00-227-1741	D-4	42	5310-00-809-8546	D-6	15
	D-6	28	5310-00-823-8803	D-6	31
5310-00-006-8286	D-4	13	5310-00-832-9719	D-6	40
5310-00-014-5850	D-4	18	5310-00-880-7744	D-7	12
	D-6	3	5310-00-913-9776	D-4	26
	D-7	8		D-6	27
5310-00-045-3296	D-4	17	5310-00-934-9758	D-6	17
	D-6	16	5310-01-004-9129	D-6	24
5310-00-059-9263	D-6	4	5310-01-026-5824	D-4	43
5310-00-059-9263	D-7	7		D-6	25
5310-00-080-6004	D-6	35	5310-01-078-5996	D-4	38
	D-9	12	5310-01-149-0869	D-9	9
5310-00-087-4652	D-6	37	5310-01-150-5922	D-2	4

Section IV. NATIONAL STOCK NUMBER AND REFERENCE NUMBER INDEX (cont)

NATIONAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER
5310-01-166-6154	D-4	29
5310-01-188-,690	D-4	14
5315-00-838-4584	D-9	7
5315-00-839-5822	0-9	2
5315-01-158-2144	D-9	8
5315-01-162-0143	D-9	3
5320-00-637-6068	D-6	47
5320-00-721-5239	D-4	36
5320-00-753-3830	D-7	5
5320-01-168-3097	D-7	3
5325-00-903-5909	D-6	22
5330-00-579-7916	D-4	20
5330-00-618-5361	D-4	24
5330-01-164-2351	D-4	30
5330-01-178-9319	D-4	7
5340-00-057-6956	D-1	5
5340-00-078-7029	D-1	4
5340-00-229-0340	D-6	1
	D-7	9
5340-00-234-8422	D-7	2
5340-00-930-1754	D-6	18
5340-00-975-2126	D-7	4
5340-01-126-3826	D-6	44
5365-01-B75-1770	D-6	38
6210-00-900-9423	D-1	7
5805-01-186-7145	D-6	30
5935-00-167-7775	D-10	3
	D-10	8
5935-00-462-6603	D-10	6
5940-00-B76-1201	D-4	6
5940-00-113-8184	D-4	31G
5340-00-113-8191	0-5	6
5940-00-113-9831	0-5	7
5940-00-113-9833	D-3	6
5940-00-115-4992	D-6	26
5940-00-115-5007	0-3	5
5940-00-143-4473	D-4	33
5970-00-914-3118	D-6	20
5970-00-814-2878	0-4	31F
		32F
5970-00-983-7985	D-3	7
5970-00-983-7993	D-5	8
5975-00-2072	D-6	21
5975-01-211-3346	-4	2
5115-00-B76-1197	D-4	2
6115-00-465-1030	-2 -	1
6115-01-206-1271	C-1	1
6115-10-220-1548	D-9	4
6115-01-230-0677	D-7	1
6145-00-153-6499	D-10	10
6150-01-152-8315	0-5	1
6150-01-166-9111	D-10	2
6150-01-166-9112	0-10	1
6150-01-166-9135	0-10	7
6150-01-285-6324	D-3	2
6210-00-253-0688	D-4	31
6210-00-406-1398	0-4	32
5365-01-031-9674	D-4	31A
		32A
6210-00-941-6690	0-4	31D
		32D
6210-01-230-1851	0-4	31B
		32B
9905-00-202-3639	D-8	2
9905-00-205-2795	D-8	1
9905-01-B75-1051	D-10	4
	D-10	9
9905-01-085-7703	D-8	8

SECTION IV. NATIONAL STOCK NUMBER AND PART NUMBER INDEX

REFERENCE NUMBER	FSCM	FIG. NO.	ITEM NO.
AN961-616S	81352	D-64	
AN961-616T	81352	D-440	
		D-6	24
AN961-816S	81352	D-4	14
AN961-816T	81352	D-4	14
CO-04HDF-(4/1-4/8R)	81349	D-3	3
1620			
G9B(GR)	73070	D-4	31C
			32C
MEP-112A	30554	D-2	1
MIL-G-16491D	81349	D-1	3
MIL-P-1502418TYPE K2	81349	D-3	4
MIL-S-15291112		D-4	19
MIL-S-43770il-SWZE3	81349	D-1	8
MS15006-1	96906	D-9	6
MS16203-27	96906	D-4	41
MS16203-39	96906	D-4	43
		D-6	25
MS16203-41	96906	D-4	13
MS16535-153	96906	D-4	36
MAS16562-66	96906	D-9	7
MS16997-149	96906	D-4	21
MS17990C613	96906	D-6	44
MS18015-1	96906	D-7	4
MS20427-4C5	96906	D-6	47
MS20613-4P5	96906	D-7	5
MS20659-110 TY1 CL1	96906	D-6	26
MS21046C3	96906	D-6	4
MS21046C3	96906	D-7	7
MAS21318-20	96906	D-8	7
MS21334-2	96906	D-6	18
MS24665-353	96906	D-9	2
MS24693-S273	96906	D-6	2
		D-7	6
MS25036-105A,TYPE 2	96906	D-4	33
MS25036-127 CL53 SZ2	96906	D-5	6
MS25036-129 CLi SZ2	96906	D-5	7
MS25036-130	96906	D-3	5
MS25036-131	96906	D-3	6
FMS27130-S99	96906	D-4	3
MAS27142-2	96906	D-10	6
		D-10	11
MS27144-1	96906	D-103	2-17
MS27144-, STYLE 1	96906	D-10	8
MS27183-10	96906	D-4	9
		D-6	12
		D-8	4
MS27183-14	96906	D-6	35
		D-9	12
MS27183-18	96906	D-4	22
		D-6	8
MS27183-21	96906	D-6	31
MS27183-42	96906	D-4	18
		D-6	3
		D-7	8
MS27183-8	96906	D-6	15
MS27969-4	96906	D-7	2
MS28775-015	96906	D-4	24
MS28775-115	96906	D-4	20
MS3367-1-9 TYCL1	96906	D-6	21
MS35206-264	96906	D-6	14
MS35206-283	96906	D-4	8
MS35207-264	96906	D-4	16
AMS35215-95	96906	D-4	25
		D-6	16
MS35335-91	96906	D-4	26
		D-6	27
MS35338-43	96906	D-4	17
MS35338-45	96906	D-7	11
MS35338-46	96906	D-4	45
		D-6	36
MS35338-43	96906	D-2	3
fMS35338-51	96906	D-6	41
MS35338-103	96906	D-4	39
MS35387-1	96906	D-8	1
MS35387-2	96906	D-8	2
IMS35425-28	96906	D-6	23
MS35425-75	96906	D-6	38
S35489-112	96906	D-6	22
MS35649-202	96906	D-6	17
MS35650-3385T	96906	D-4	27
2S39347-4	96906	D-4	11
MS51922-1	96906	D-4	10
		D-6	13
		D-8	5
MSA51922-17	96906	D-6	37

SECTION IV. NATIONAL STOCK NUMBER AND PART NUMBER INDEX

REFERENCE NUMBER	FSCM	FIG. NO.	ITEM NO.
MS51922-17	96906	D-9	13
MS51922-33	96906	D-4	23
		D-6	9
MS51922-33	96906	D-4	23
		D-6	9
MS51922-49	96906	D-6	32
MS51922-61	96906	D-6	40
MS51925-1	96906	D-1	7
MS51926-3	96906	D-1	4
MS51929-2	96906	D-1	5
MS51939-3	96906	D-6	1
		D-7	9
MS51967-5	96906	D-7	12
MS90725-3	96906	D-8	3
MS90725-6	96906	D-6	11
MS90725-31	96906	D-7	10
MS90725-60	96906	D-4	44
MS90725-62	96906	D-9	11
MS90725-111	96906	D-6	7
MS90725-114	96906	D-2	2
MS9460-102	96906	D-7	3
M13486/1-5TYPE 1, CLA	81349	D-10	10
M13486/7-1 TYPE 1, CLB	81349	D-10	5
M23053/5-106-9	81349	D-4	31F
			32F
M2305315-107-5	81349	D-3	7
M23053/5-108-5	81349	D-5	8
M23053/5-109-0	81349	D-6	20
M23053/5-109-5	81349	D-3	9
M24066/2-128	81349	D-6	46
M25036-105	96906	0-4	32G
M25036-150	96906	D-4	31G
1M4343611-6	81349	D-10	9
	91349	D-10	4
M25036-150	96906		
M508611-18	96906	D-4	31E
			32E
M508612-2	81349	D-5	5
Q0W343C06BlB	81348	D-3	8
OQ-W-343CO6B1B	81348	D-6	19
T-R-6056	81349	D-1	2
13205E4918	97403	D-8	8
13206E4482-2	97403	D-2	4
13211E4775	97403	D-4	6
13212E3579	97403	D-4	15
13212E3581-1	97403	D-4	32
13212E3581-2	97403	D-4	31
13212E3583	97403	D-4	7
13212E3586-1	97403	D-5	1
13212E3586-2	97403	D-5	2
13212E3586-3	97403	D-5	3
13212E3586-4	97403	D-5	4
13212E3587	97403	D-4	5
13212E3590-2	97403	D-6	38
13212E3597-1	97403	D-1	9
13212E3597-2	97403	D-1	10
13214E1206	97403	D-9	1
1321E1207	97403	D-9	4
13214E1208	97403	D-9	5
13214E1209	97403	D-9	3
13214E1210	97403	D-9	8
13214E1211	97403	D-9	9
13214E1212	97403	D-9	10
13214E1223	97403	D-4	42
		D-6	28
13214E1235	97403	D-6	10
13214El391	97403	D-4	31A
			32A
13214E1392	97403	D-1	6
13216E7476	97403	D-10	7
13216E7479-1	97403	D-10	1
13216E7479-2	97403	D-O	2
13216E7603	97403	D-4	34
13218E0021-41	97403	D-6	30
13218E0025-4	97403	D-6	45
13218E5139-5	97403	D-4	29
13218E5140-5	97403	0-4	30
13218E5149-10	97403	D-4	28
13220E4457-2	97403	D-6	5
		D-4	31G
1322018E4458-2	97403	D-6	6
13220E4463-2	97403	D-8	6
13226E5857	97403	D-6	43
13226E5858	97403	D-6	29
13226E5859-1	97403	D-4	1
13226E5861	97403	D-4	2
13226E5888-1	97403	D-3	1

SECTION III. NATIONAL STOCK NUMBER AND PART NUMBER INDEX

REFERENCE NUMBER	FSCM	FIG. NO.	ITEM NO.
13226E5888-2	97403	D-3	2
13226E5889-1	97403	D-4	35
13226E5889-2	97403	D-4	37
13226E7734	97403	D-6	48
13226E7740	97403	D-1	1
13226E-7730-6	97403	D-6	42
181-0937-003	72619	0-4	31D
			32D
181-8836-09-553	72619	0-4	31B
			32B

Section V. REFERENCE DESIGNATOR INDEX

Not Applicable

By Order of the Secretary of the Army:

CARL E. VUONO
General, United States Army
Chief of Staff

Official:

WILLIAM J. MEEHAN, II
Brigadier General, United States Army
The Adjutant General

DISTRIBUTION:

To be distributed in accordance with DA Form 12-25A, Operator, Unit, Direct Support and General Support Maintenance requirements for Generator Set, Diesel Engine Driven, Trailer Mounted.

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS

SOMETHING WRONG WITH THIS PUBLICATION?

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)
PFC JOHN DOE
COA, 3d ENGINEER BN
FT. LEONARDWOOD, MO 63108

DATE SENT

PUBLICATION NUMBER	PUBLICATION DATE	PUBLICATION TITLE
TM 9-6115-650-14&P	15 Feb 1990	Power Plant AN/MJQ-25 (NSN 6115-01-153-7742)

BE EXACT. . .PIN-POINT WHERE IT IS

PAGE NO.	PARA-GRAPH	FIGURE NO.	TABLE NO.	IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:
6	2-1 a			In line 6 of paragraph 2-1a the manual states the engine has 6 Cylenders. The engine on my set only has 4 Cylenders. Change the manual to show 4 Cylenders.
B1		4-3		Callout 16 on figure 4-3 is pointing at a bolt. In key to figure 4-3, item 16 is called a shim - Please correct one or the other.
125	line 20			I ordered a gasket, item 19 on figure B-16 by NSN 2910-00-762-3001. I got a gasket but it doesn't fit. Supply says I got what I ordered, so the NSN is wrong. Please give me a good NSN

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER
JOHN DOE, PFC (268) 317-7111

SIGN HERE: John Doe
JOHN DOE

DA FORM 1 JUL 79 2028-2 PREVIOUS EDITIONS ARE OBSOLETE.
DRSTS-M Overprint 1, 1 Nov 80

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.

TEAR ALONG PERFORATED LINE

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 decigram = .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

Liquid Measure

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

Square Measure

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

Cubic Measure

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

Approximate Conversion Factors

To change	*To*	*Multiply by*	*To change*	*To*	*Multiply by*
inches	centimeters	2.540	ounce-inches	newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29,573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2 113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	newton-meters	1.356	metric tons	short tons	1.102
pound-inches	newton-meters	.11296			

Temperature (Exact)

°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C