

# DEPARTMENT OF THE ARMY TECHNICAL MANUAL

## Organizational Maintenance Manual Including Repair Parts and Special Tool Lists POWER SUPPLY PP-4606A/G

Headquarters, Department of the Army, Washington, D.C.  
9 October 1967

### WARNING

#### DANGEROUS VOLTAGES EXISTS IN THIS EQUIPMENT

High voltages and currents exist in this equipment. Serious injury or death may result from contact with the input and output connections. Deenergize the equipment before connecting or disconnecting the load to be powered, before changing jumper connections, and before performing any maintenance.

#### DON'T TAKE CHANCES!

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CHANGE }  
No. 1 }

HEADQUARTERS  
DEPARTMENT OF THE ARMY  
WASHINGTON DC, 4 December 1981 ■

**Organizational Maintenance Manual  
POWER SUPPLY PP-4606A/G  
(NSN 6130-00-504-0327)**

TM 11-6130-243-12-1, 9 October 1967, is changed as follows:

The title of this manual is changed as shown above. After Title/Contents page. Add Safety and Warning Statements. *Page 2.* Delete Appendix D.



**5**

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

**1**

**DO NOT TRY TO PULL OR GRAB THE INDIVIDUAL**

**2**

**IF POSSIBLE , TURN OFF THE ELECTRICAL POWER**

**3**

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

**4**

**SEND FOR HELP AS SOON AS POSSIBLE**

**5**

**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**

## **WARNINGS**

DANGEROUS VOLTAGES (220 vac and 440 vac) exist in this equipment. When equipment is operated with covers open or removed, DO NOT touch exposed connections or components. SERIOUS INJURY OR DEATH MAY RESULT. Reenergize the equipment before connecting or disconnecting the battery to be charged, and before performing any maintenance. Follow all precautions listed in TB 385-4.

Avoid personal injury. Power Supply PP-4606A/G weighs 360 pounds; be careful when moving. A mechanical lift is required.

Adequate ventilation should be provided while using TRICHLOROTRIFLUOROETHANE. Prolonged breathing of vapor should be avoided. The solvent should not be used near heat or open flame; the products of decomposition are toxic and irritating. Since TRICHLOROTRIFLUOROETHANE dissolves natural oils, prolonged contact with skin should be avoided. When necessary, use gloves which the solvent cannot penetrate. If the solvent is taken internally, consult a physician immediately.

Page 5. Paragraph 1-2 is superseded as follows:

## **1-2. Index of Technical Publications**

Refer to the latest issue of DA Pam 310-4 to determine whether there are new editions, changes or additional publications pertaining to the equipment.

Paragraph 1-3 is superseded as follows:

## **1-3. Maintenance Forms, Records, and Reports**

*a. Reports of Maintenance and Unsatisfactory Equipment.* Department of the Army forms and procedures used for equipment maintenance will be those prescribed by TM 38-750, The Army Maintenance Management System.

*b. Report of Packaging and Handling Deficiencies.* Fill out and forward SF 364 (Report of Discrepancy (ROD)) as prescribed in AR 735-11-2/DLAR 4140.55/NAVMATINST 4355.73/AFR 400-54/MCO 4430.3E.

*c. Discrepancy in Shipment Report (DISREP) (SF 361).* Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55-38/NAVSUPINST 4610.33B/AFR 75-18/MCO P4610.19C/DLAR 4500.15.

Paragraphs 1-3.1 through 1-3.4 are added after paragraph 1-3.

### **1-3.1. Reporting Errors and Recommending Improvements**

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) direct to: Commander, US Army Communications-Electronics Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07703. In either case a reply will be furnished direct to you.

### **1-3.2. Reporting Equipment Improvement Recommendations (EIR)**

If your equipment needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design. Tell us why a procedure is hard to perform. Put it on an SF 368 (Quality

Deficiency Report). Mail it to Commander, US Army Communications-Electronics Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07703. We'll send you a reply.

### **1-3.3. Administrative Storage**

Administrative storage of equipment issued to and used by Army activities will have preventive maintenance performed in accordance with the PMCS charts before storing. When removing the equipment from administrative storage the PMCS should be performed to assure operational readiness. Disassembly and repacking of equipment for shipment or limited storage are covered in paragraphs 4-1 and 4-2.

### **1-3.4 Destruction of Army Electronics Materiel**

Destruction of Army electronics materiel to prevent enemy use shall be in accordance with TM 750-244-2.

Page 7, paragraph 2-1 *b*, line 2. Insert after paragraph heading:

#### **WARNING**

Avoid personal injury. Power Supply PP-4606A/G weighs 360 pounds; be careful when moving. A mechanical lift is required.

Page 15, paragraph 3-8*a*. Warning is superseded as follows:

#### **WARNING**

Adequate ventilation should be provided while using TRICHLOROTRI-FLUOROETHANE. Prolonged breathing of vapor should be avoided. The solvent should not be used near heat or open flame; the products of decomposition are toxic and irritating. Since TRICHLOROTRI-FLUOROETHANE dissolves natural oils, prolonged contact with the skin should be avoided. When necessary, use gloves which the solvent cannot penetrate. If the solvent is taken internally, consult a physician immediately.

Paragraph 3-8*b*, lines 3 and 4. Replace "Cleaning Compound (FSN 7930-395-9542)" with "TRICHLORO-TRIFLUOROETHANE (NSN 6850-105 -3084)."

Page 27, Appendix D. Delete in its entirety.

By Order of the Secretary of the Army:

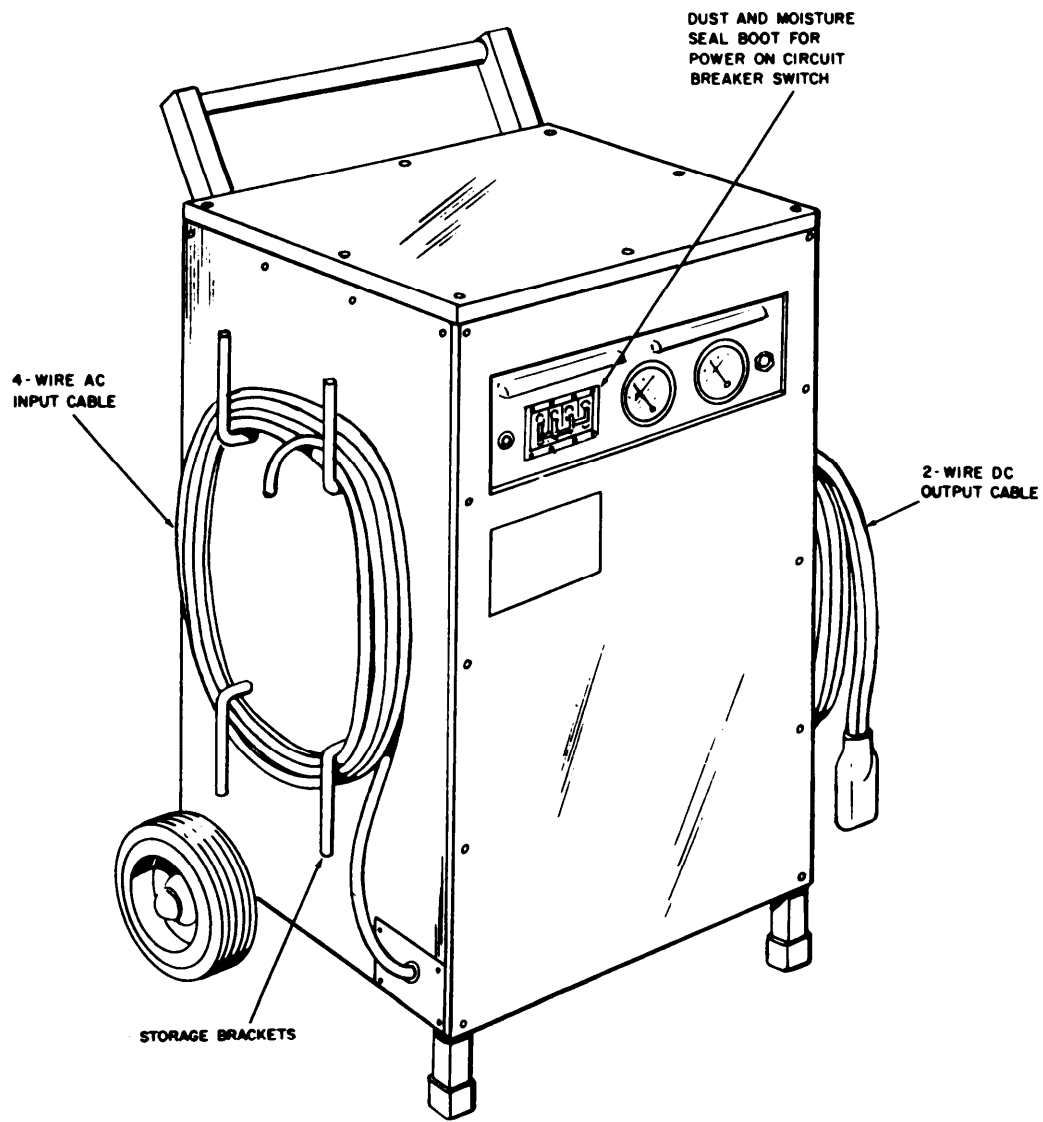
E. C. MEYER  
*General, United States Army*  
*Chief of Staff*

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*Brigadier General, United States Army*  
*The Adjutant General*

Distribution:

To be distributed in accordance with DA Form 12-31, Operator maintenance requirements for All Fixed & Rotor Wing Aircraft.



TM6130-243-12-1-1

Figure 1-1. Power Supply PP-4606A/G.



## CHAPTER 1

### INTRODUCTION

#### Section II. GENERAL

##### 1-1. Scope

This manual describes Power Supply PP-4606A/G (fig. 1-1) and provides instructions for installation, operation, operator and organizational maintenance. It includes instructions for cleaning and inspection of the equipment, and replacement of parts available to the operator and organizational repairman. Power Supply PP-4606A/G is referred to as the *power supply* in this manual.

##### 1-2. Index of Equipment Publications

Refer to DA Pam 310-4 and DA Pam 310-7 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.

##### 1-3. Forms and Records

*a. Reports of Maintenance and Unsatisfactory Equipment.* Use equipment forms and records in accordance with instructions in TM 38-750.

*b. Report of Packaging and Handling Deficiencies.* Fill out and forward DD Form 6 (Report of Packaging and Handling Deficiencies) as prescribed in AR 700-58 (Army), NAVSUP Publication 378 (Navy), AFR 71-4 (Air Force), and MCO P4610-5 (Marine Corps).

*c. Discrepancy in Shipment Report (DISREP) (SF361).* Fill out and forward Discrepancy in Shipment Report (DISREP) (SF361) as prescribed in AR 55-38 (Army), NAVSUP Pub 459 (Navy), AFM 75-34 (Air Force), and MCO P4610.19 (Marine Corps).

*d. Reporting of Equipment Manual Improvements.* Report of errors, omissions, and recommendations for improving this manual by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to DA Publications) and forwarded direct to Commanding General, U.S. Army Electronics Command, ATTN: AMSEP ME-NMP-TE, Fort Monmouth, N.J., 07703.

#### Section II. DESCRIPTION AND DATA

##### 1-4. Purpose and Use

Power Supply PP-4606A/G converts 220 or 440 volts alternating current (ac), three-phase power, to 28 volts direct current (dc) power. This power supply is used for ground support of aircraft with 28-volt dc electrical systems.

Phase . \_\_\_\_\_ Three-phase.  
current (full load) ---20 amperes for 220-volt  
ac input power or 10  
amperes for 440-volt ac  
input power.

Power output:

Voltage (no load) \_\_\_\_ Between 27 volts and 30  
volts

Current \_\_\_\_\_ 200 amperes (maximum).

Ripple \_\_\_\_\_ 5 percent (maximum).

Regulation \_\_\_\_\_ 10 per cent.

Weight ----- 360 pounds.

##### 1-5. Technical Characteristics

Power input:

Voltage ----- 220 or 440.

Frequency ----- 60 cycles per second (cps).

## 1-6. Description

(fig. 1-1)

Power supply PP-4606A/G is a two-wheel mobile unit in a metal cabinet, 43 1/2 inches high, 24 1/2 inches wide, and 26 1/2 inches deep. All operating controls are mounted on the front panel. Louvers on the panels of the cabinet and a fan are provided for air circulation. A terminal block with power transformer terminal jumpers (fig. 2-2 and 2-3) is installed on each of the three power transformers behind the front panel of the *PP-4606A/G* so that either 220- or 440-volt ac input power may be utilized. The power supply includes one spare indicator lamp and two spare power transformer terminal jumpers. The spare indi-

cator lamp and the jumpers are placed into a pocket on the right-hand side of the power supply cabinet, which is accessible when the front panel is removed. The four-wire ac input cable consisting of a red, a white, a black, and a green wire (the green wire is for ground connection) is 100 feet long. The two-wire dc output cable terminates in a molded and keyed female connector and is 16 feet long. A dust and moisture seal boot is provided for protection of the INPUT POWER circuit breaker switch. The dust and moisture seal boot is of flexible plastic material that does not interfere with positioning the INPUT POWER circuit breaker switch. Exercise care when energizing the circuit breaker so that the boot will not be damaged.

## CHAPTER 2

### INSTALLATION AND OPERATING INSTRUCTIONS

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#### Section I. SERVICE UPON RECEIPT OF EQUIPMENT

##### 2-1. Unpacking

(fig. 2-1)

*a. Packaging Data.* When packed for shipment, the power supply is placed in protective material and packed in a 51- by 31- by 30-inch wooden packing case. A typical wooden packing case and its contents are shown in figure 2-1. The volume is 27.4 cubic feet, and the total weight is 450 pounds.

*b. Removing Contents.*

- (1) Cut and remove the metal straps (14).
- (2) Remove the nails that secure the sides of the wooden packing case (13) to the mount base (2).
- (3) Lift the wooden packing off the base.
- (4) Remove the packing material (7 through 11) and the nuts (4), bolts (3), and lockwashers (5) that secure the mount base (2) to the power supply (1).
- (5) Stow all loose material in the wooden packing case.
- (6) Using the handle and the wheels, wheel the power supply to the area where it is to be used.

##### 2-2. Checking Unpacked Equipment

*a.* Inspect the equipment for damage incurred during shipment. If the equipment has been damaged, report the damage on DD Form 6 (para 1-3).

*b.* Check to see that the equipment is complete as listed on the packing slip. If a packing slip is not available, check the equipment against the basic issue items list (app B). Report all discrepancies in accordance with TM 38-750. Shortage of a minor assembly or part that does not affect proper functioning of the

equipment should not prevent use of the equipment.

*c.* If the equipment has been used or reconditioned, see whether it has been changed by a modification work order (MWO). If the equipment has been modified, the MWO number will appear on the front panel near the nomenclature plate. Check to see that any operational instruction changes resulting from the modification have been entered in the equipment manual.

*Note.* Current MWO's applicable to the equipment are listed in DA Pam 310-7.

##### 2-3. Input Power Connections

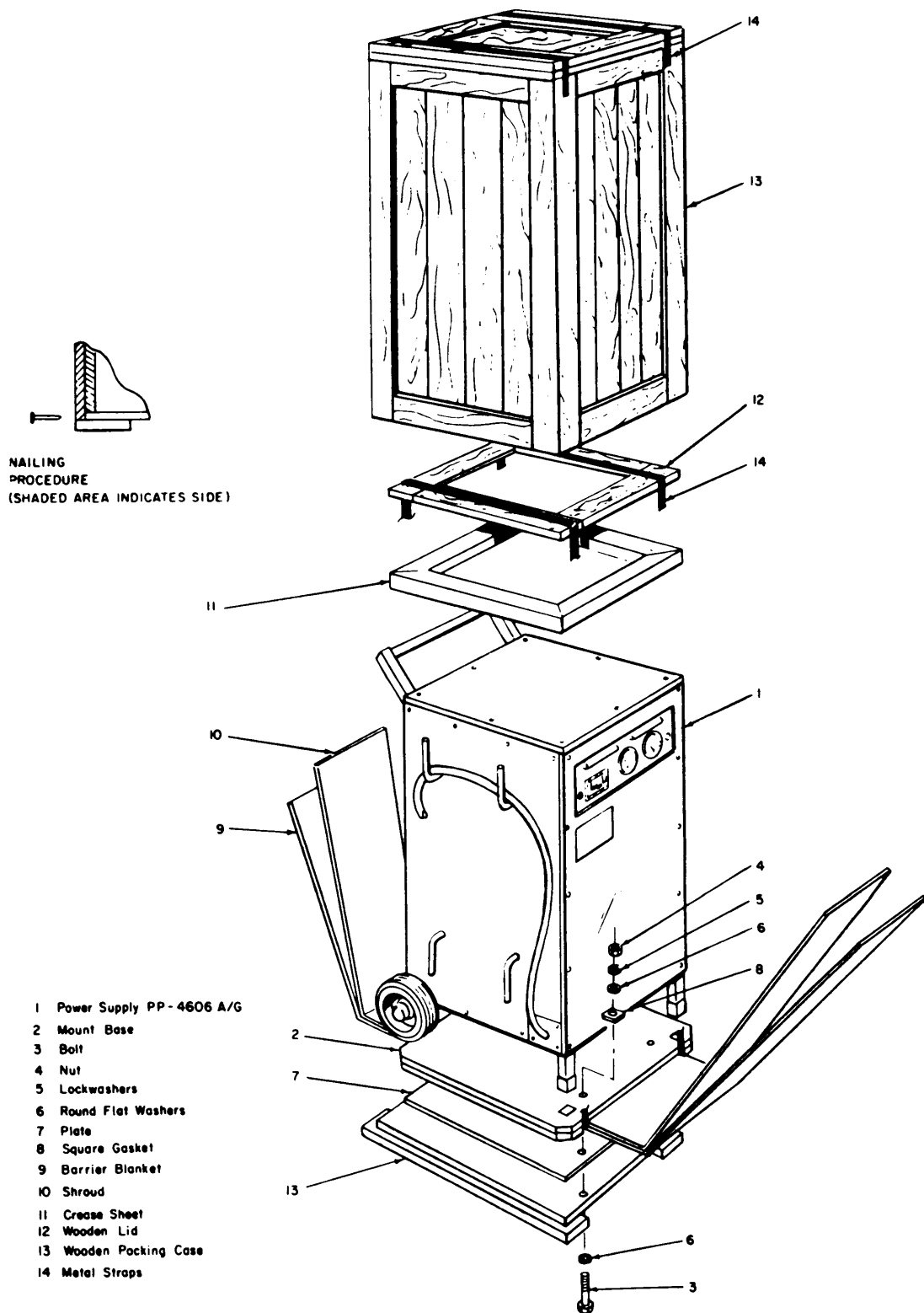
Before connecting the power supply to a power source, remove the top cover from the power supply to gain access to the terminals of power transformers T1, T2, and T3 and circuit breakers CB1, CB2, and CB3.

*a. 220-Volt, Three-Phase, 60 Cps Input Power Connection* (fig. 2-2).

- (1) **Using the six power transformer terminal jumpers that are supplied, connect a jumper from terminals T1-1 to T1-2, T1-3 to T1-4, T2-1 to T2-2, T2-3 to T2-4, T3-1 to T3-2, and T3-3 to T3-4.**
- (2) **Using the three tagged leads for circuit breakers CB1, CB2, and CB3, connect tagged lead 7 to terminal B of CB1, tagged lead 8 to terminal B of CB2, and tagged lead 9 to terminal B of CB3.**

*b. 440-Volt, Three-Phase, 60-Cps Input Power Connection* (fig. 2-3).

- (1) Using the three power transformer terminal jumpers that are supplied,



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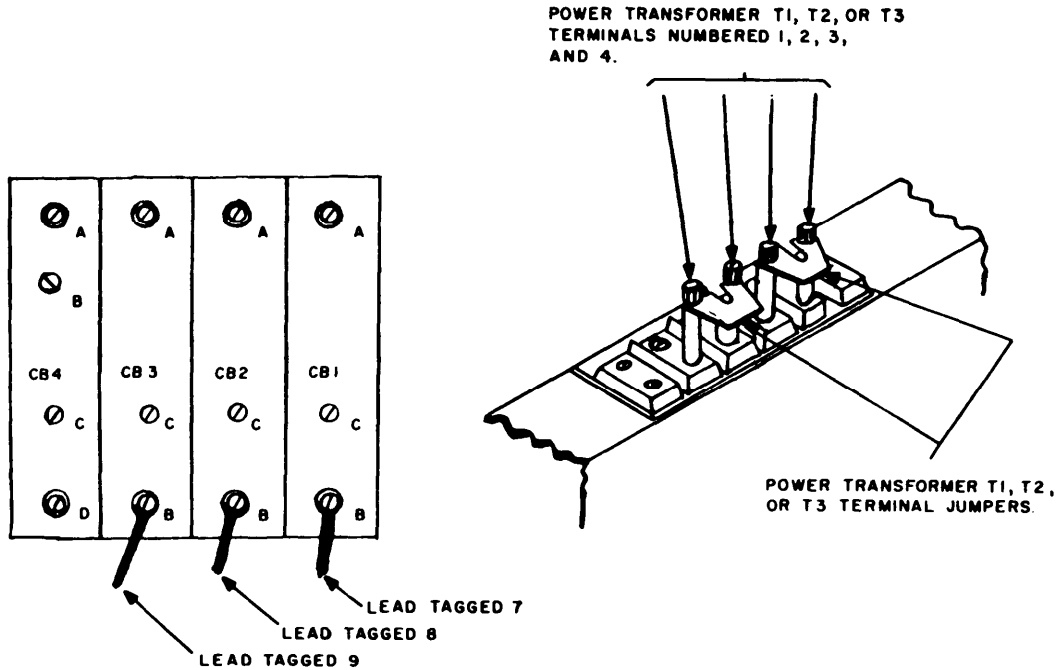
Figure 2-1. Packaging diagram.

connect a jumper from terminals T1-2 to T1-3, T2-2 to T2-3, and T3-2 to T3-3.

- (2) Using the three tagged leads for circuit breakers CB1, CB2, and CB3, connect tagged lead 7 to terminal C of CB1, tagged lead 8 to terminal C of CB2, and tagged lead 9 to terminal C of CB3.

*Note.* The ac power input electrical connections are made by authorized installation personnel and should be protected with a fuse and controlled by an external switch for convenient removal of power during maintenance.

*c. Input Power Cable Connection.* Connect the four-wire input power cable to the ac power input source.



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Figure 2-2. Connections on power transformer terminal and circuit breakers for 220-volt ac input power for Power Supply PP-4606A/G.

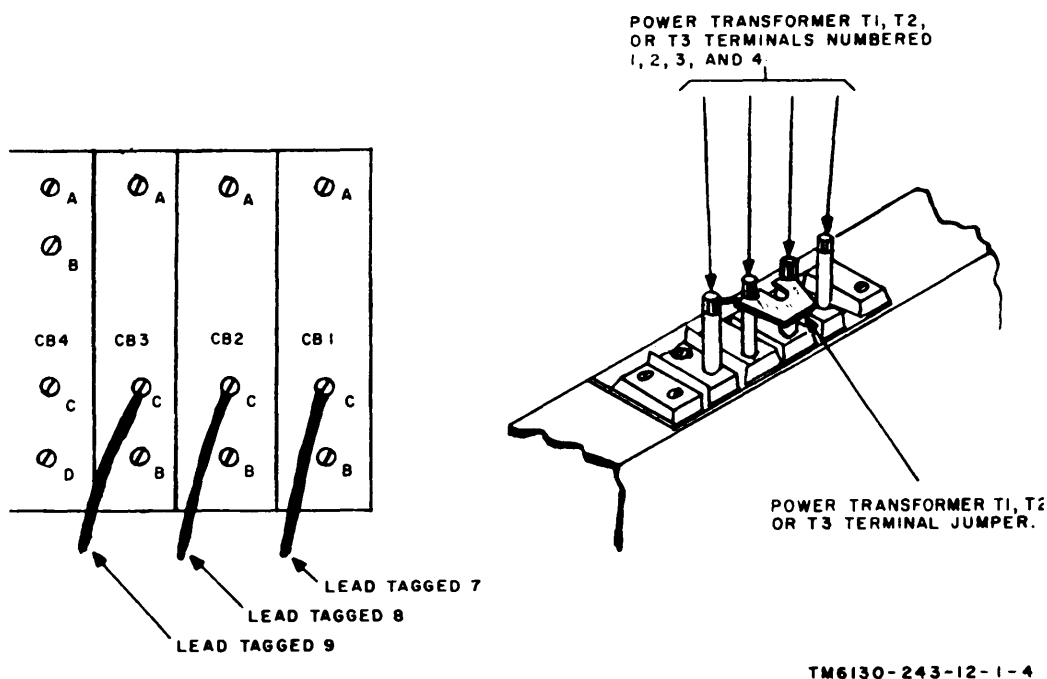


Figure 2-3. Connections on power transformer terminals and circuit breakers for 440-volt ac input power for power Supply PP-4606A/G.

## Section II. OPERATION

### 2-4. Controls and Indicators (fig. 2-4)

The chart below lists the power supply controls and indicators and their functions.

Control or indicator	Function
INPUT POWER circuit breaker switch -----	Turns power supply on and off manually. Provides overload protection by automatically disconnecting ac input power.
DC OUTPUT indicator lamp -----	When illuminated, indicates that output power is generated.
PUSH TO INDICATE switch (two-position, spring-loaded).	When switch is depressed, CURRENT meter indicates power supply output current.
VOLTAGE meter -----	Indicates output voltage.
CURRENT meter -----	Indicates output current when PUSH TO INDICATE switch is depressed.

### 2-5. Operating Procedure (fig. 2-4)

After performing the input power connection procedures given in paragraph 2-3, proceed as described in *a* through *d* below.

*a.* Connect the dc output cable to the equipment to be powered.

*b.* Set the INPUT POWER circuit breaker switch to ON and the equipment to be powered to on.

*c.* Check to see that the VOLTAGE meter indicates between 26 and 30 volts.

*d.* Depress the PUSH TO INDICATE switch, and check to see that the CURRENT meter indicates output current (200 amperes maximum).

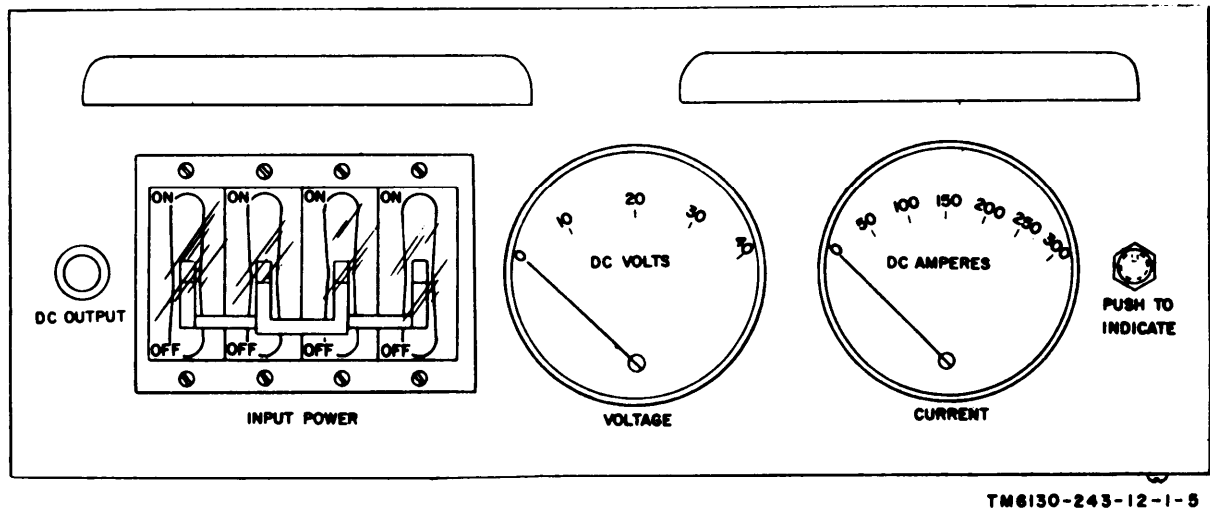


Figure 2-4. Power Supply PP-4606A/G, controls and indicators.

## 2-6. Stopping Procedure

Stop the power supply as follows:

- a. Set the equipment being powered to off.
- b. Set the INPUT POWER circuit breaker switch to OFF.
- c. Disconnect the dc output cable from the equipment being powered, and rewind the dc output cable on the brackets provided on the side of the power supply.

## CHAPTER 3

### MAINTENANCE INSTRUCTIONS

#### 3-1. Scope of Maintenance

The maintenance duties assigned to the operator and organizational repairman of the equipment are listed below, together with references to the paragraphs covering the specific maintenance functions. The tools and test equipment required are listed in appendix C.

- a. Operator's daily preventive maintenance checks and services (para 3-4).
- b. Operator's weekly preventive maintenance checks and services (para 3-5).
- c. Organizational monthly preventive maintenance checks and services (para 3-6).
- d. Organizational quarterly preventive maintenance checks and services (para 3-7).
- e. Cleaning (para 3-8).
- f. Touchup painting (para 3-9).
- g. Troubleshooting (para 3-10).
- h. Replacement of indicator lamp (para 3-11).

#### 3-2. Preventive Maintenance

Preventive maintenance is the systematic care, servicing, and inspection of equipment to prevent the occurrence of trouble, to reduce downtime, and to assure that the equipment is serviceable.

a. *Systematic Care.* The procedures given in paragraphs 3-4 through 3-8 cover routine systematic care and cleaning essential to proper upkeep and operation of the equipment.

b. *Preventive Maintenance Checks and Services.* The preventive maintenance checks

and services charts (para 3-4 through 3-7) outline functions to be performed at specific intervals. These checks and services are to maintain Army electronic equipment in a combat-serviceable condition; that is, in good general (physical) condition and in good operating condition. To assist operators in maintaining combat serviceability, the chart indicates what to check, how to check, and what the normal conditions are. The references column lists the paragraphs, figures, or manuals that contain detailed repair or replacement procedures. If the defect cannot be remedied by the corrective actions listed, higher category of maintenance or repair is required. Records and reports of three checks and services must be made in accordance with the requirements set forth in TM 38-750.

#### 3-3. Preventive Maintenance Checks and Services Periods

Preventive maintenance checks and services of the equipment are required daily, weekly, monthly, and quarterly.

a. Paragraph 3-4 specifies the checks and services that must be accomplished daily (or at least once each week if the equipment is maintained in standby condition).

b. Paragraph 3-5, 3-6, and 3-7 specify additional checks and services that must be performed on a weekly, monthly, and quarterly basis, respectively.

#### 3-4. Operator's Daily Preventive Maintenance Checks and Services Chart

Sequence No.	Item to be Inspected	Procedure	References
1	Completeness -----	Check to see that the equipment is complete.	App B.
2	Exterior surfaces -----	Clean the exterior surfaces, including the panel meter glasses. Check both meter glasses and the indicator lens for cracks.	Para 3-8.



Sequence No.	Item to be inspected	Procedure	References
3	Connectors -----	Check the tightness of all connectors	
4	Controls and indicators -----	While making the operating checks (sequence No. 5 through 7 below), check to see that the mechanical action of each switch is smooth and free of external or internal binding and that there is no excessive looseness. Also, check the meters for sticking or bent pointers.	
5	Connections -----	Check to see that the jumper leads are connected properly for input power.	Para 2-3.
6	Operation -----	During operation, be alert for any abnormal indications. The DC OUTPUT indicator lamp should glow, and the VOLTAGE and CURRENT meters should indicate output voltage and current, respectively.	Para 2-5.
7	INPUT POWER circuit breaker switch.	Set to OFF. Check to see that the DC OUTPUT indicator lamp extinguishes.	

## 3-5. Operator's Weekly Preventive Maintenance Checks and Services Chart

Sequence No.	Item to be inspected	Procedure	References
1	Cables -----	Inspect cables for chaffed, cracked, or frayed insulation. Replace connectors that are broken, arced, stripped, or worn excessively.	
2	Metal surfaces -----	Inspect exposed metal surfaces for rust and corrosion.	

## 3-6. Organizational Monthly Preventive Maintenance Checks and Services Chart

Sequence No.	Item to be inspected	Procedure	References
1	Transformer terminals -----	Inspect the terminals on the power transformer(s). All nuts must be tight. There should be no evidence of dirt or corrosion.	
2	Resistors -----	Inspect resistors for cracks, blistering, or other defects.	
3	Gaskets and insulators -----	Inspect gaskets, insulators, bushings, and sleeves for cracks, chipping, and excessive wear.	
4	Terminal block -----	Inspect the terminal block for loose terminals, cracks, and other defects.	
5	Interior -----	Clean the interior of the chassis and cabinet.	Para 3-8.
6	Metal surfaces -----	Inspect the equipment to determine that it is free of bare spots, rust, and corrosion.	Para 3-9.

## 3-7. Organizational Quarterly Preventive Maintenance Checks and Services Chart

Sequence No.	Item to be inspected	Procedure	References
1	Publications -----	Check to see that all publications are complete, serviceable, and current.	DA Pam 310-4.
2	Modifications -----	Check DA Pam 310-4 to determine whether new applicable MWO's have been published. All URGENT MWO's must be applied immediately. All NORMAL MWO's must be scheduled.	TM 38-750 and DA Pam 310-
3	Spare parts -----	Check the spare parts for general condition and method of storage. No overstock should be evident, and shortages must be on valid requisitions.	App B.

### 3-8. Cleaning

Inspect the exterior of the equipment. The exterior surfaces should be free of dirt, grease, and fungus.

a. Remove dust and other loose dirt with a clean soft cloth.

**Warning:** Prolonged breathing of cleaning compound is dangerous; make certain that adequate ventilation is provided. Cleaning compound is flammable; do not use near a flame. Avoid contact with the skin; wash off any that spills on your hands.

b. Remove grease, fungus, and ground-in dirt from the case; use a cloth dampened (not wet) with Cleaning Compound (FSN 7930-395-9542) .

c. Remove dirt from plugs and jacks with a brush.

**Caution:** Do not press on the meter faces (glasses) when cleaning; the meters may become damaged.

d. Clean the front panel, meters, and switches; use a soft clean cloth. If necessary, dampen the cloth with water; mild soap may be used for more effective cleaning.

### 3-9. Touchup Painting Instructions

Remove rust and corrosion from metal surfaces by lightly sanding them with fine sandpaper. Brush two thin coats of paint on the bare metal to protect it from further corrosion. Refer to the applicable cleaning and refinishing practices specified in TB SIG 364.

### 3-10. Troubleshooting

a. *General.* The troubleshooting chart (*b* below) will help locate trouble in the power supply. Only those corrective measures are given which the unit repairman can accomplish. If the corrective measure does not restore normal equipment performance, higher category of maintenance is required.

#### b. Troubleshooting Chart.

Sequence No.	Symptom	Probable trouble	Corrective measure
1	DC OUTPUT indicator lamp does not illuminate.	Defective indicator lamp or no power output.	Check power output. If correct, replace indicator lamp (para 3-11).
2	VOLTAGE meter does not indicate properly.	Connections to meter faulty or defective.	Check for loose connection in output circuit. Check connections to meter. If meter connations are not faulty, higher category maintenance is required.
3	CURRENT meter does not indicate properly.	Connections to meter or to PUSH TO INDICATE switch faulty or defective.	Check for loose connections at meter and switch. If connections are nut faulty, higher category maintenance is required.
4	With INPUT POWER circuit breaker switch set to OFF, CURRENT mater does not indicate 0 and indicator lamp does not extinguish.	Defective circuit breaker switch.	Higher category maintenance is required.
5	INPUT POWER circuit breaker trips excessively.	a. Overload -----	a. Disconnect from input power, and check wire and jumper connections.  b. Higher category maintenance is required.

### 3-11. Replacement of Indicator Lamp

*a.* Turn the red indicator jewel counterclockwise, and pull it out to expose the defective lamp.

*b.* Press in the lamp, and turn it counterclockwise to unlock it.

*c.* Pull the defective lamp out and replace it with a new one. Push the new lamp in, and twist it clockwise to lock it.

*d.* Secure the red indicator jewel in place by turning it clockwise.

## CHAPTER 4

### SHIPMENT, LIMITED STORAGE, AND DEMOLITION TO PREVENT ENEMY USE

#### Section I. SHIPMENT AND LIMITED STORAGE

##### 4-1. Repackaging for Shipment or limited Storage

The exact procedure for repackaging depends on the material available and the conditions under which the equipment is to be shipped or stored. Adapt the procedure outlined in *b* below whenever circumstances permit. The information concerning the original packaging (para 2-1) will also be helpful.

*a. Material Requirements.* The following materials are required for packaging the power supply. For stock numbers of materials, refer to SB 38-100.

Material	Quantity
Corrugated, single-face, flexible paper.	100 sq ft
Gummed paper tape -----	30 ft
Pressure-sensitive tape -----	25 ft
Waterproof paper -----	80 sq ft
Wooden packing case( inside dimensions 44 by 25 in.).	1

*b. Packaging* (fig. 2-1). Package the items of the power supply as outlined in (1) and (2) below.

- (1) Cushion the power supply on all sides with fillers and pads made up of corrugated, single-face, flexible paper. Secure the cushioning with gummed paper tape. Wrap the cushioned unit

with corrugated, single-face, flexible paper, and secure the wrap with gummed paper tape.

- (2) Place the indicator lamp and jumpers into an envelope. Wrap the technical manual in waterproof paper, and seal the package with pressure-sensitive tape. Place the packages containing the technical manual and spare parts into the pocket on the inside right front of the power supply, and tape it to the side panel with pressure-sensitive tape.

##### 4-2. Packing

Pack the equipment as described in *a* through *e* below.

*a.* Use waterproof paper and pressure-sensitive tape to make a waterproof liner for the wooden packing case.

*b.* Place the equipment on the mount base of the wooden packing case.

*c.* Fasten the power supply to the bottom of the wooden packing case with four bolts, nuts, and washers.

*d.* Nail the top and sides of the wooden packing case into place.

*e.* Fasten the metal straps to the wooden packing case.

#### Section II. DEMOLITION OF MATERIAL TO PREVENT ENEMY USE

##### 4-3. Authority for Demolition

The demolition procedures given in paragraph 4-4 are to be used to prevent the enemy from using or salvaging this equipment. Demolition of the equipment will be accomplished only upon the order of the commander.

##### 4-4. Methods of Destruction

The tactical situation and time available will determine the method to be used when destruction of equipment is ordered. In most cases, it is preferable to demolish completely some

portions of the equipment rather than to partially destroy all the equipment components.

*a. Smash.* Smash the cabinet meters, and controls. Smash the internal components.

*b. Cut.* Cut the wiring of the power supply.

**Warning:** Be extremely careful with ex-

**plosives and incendiary devices. Use these items only when the need is urgent.**

*c. Burn.* Burn the technical manual first. Burn as much of the equipment as is flammable.

*d. Dispose.* Bury or scatter the destroyed parts.

## APPENDIX A

### REFERENCES

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Following is a list of applicable references that should be available to the operator and organizational repairman of Power Supply PP-4606A/G:

DA Pam 310-4	Index of Technical Manuals, Technical Bulletins, Supply Manuals (types 7,8, and 9), Supply Bulletins, and Lubrication Orders.
DA Pam 310-7	Index of Modification Work Orders.
SB 38-100	Preservation, Packaging, and Packing Materials, Supplies, and Equipment Used by the Army.
TS SIG 364	Field Instructions for Painting and Preserving Electronics Command Equipment.
TM 114625-203-12	Operator and Organizational Maintenance Manual: Multimeter AN/URM-105, Including Multimeter ME-77/U.
TM 38-750	Army Equipment Record Procedures.

## APPENDIX B

### BASIC ISSUE ITEMS

---

#### Section I. INTRODUCTION

##### B-1. General

This appendix lists items for Power Supply PP-4606A/G, the component items comprising it, and the items which accompany it, or are required for installation, operation, or operator's maintenance.

##### B-2. Explanation of Columns

An explanation of the columns in section II is given below.

*a. Source, Maintenance, and Recoverability Codes, Column 1.* Not used.

*Note.* When no code is indicated in the recoverability column, the part will be considered expendable.

*b. Federal Stock Number, Column 2.* The Federal stock number for the item is indicated in this column.

*c. Description, Column 3.* The Federal item name, a five-digit manufacturer's code, and a part number are included in this column.

*d. Unit of Issue, Column 4.* The unit used

as a basis of issue (e.g., ea, pr, ft, yd, etc) is noted in this column.

*e. Quantity Incorporated in Unit Pack, Column 5.* Not used.

*f. Quantity Incorporated in Unit, Column 6.* The total quantity of the item used in the equipment is given in this column.

*g. Quantity Authorized, Column 7.* The total quantity of an item required to be on hand and necessary for the operation and maintenance of the equipment is given in this column.

*h. Illustration, Column 8.*

(1) *Figure number, column 8a.* Not used.

(2) *Item or symbol number, column 8b.*

This column lists the reference symbols used for identification of the items.

##### B-3. Federal Supply Codes

This paragraph lists the Federal supply code with the associated manufacturer's name.

<b>Code</b>	<b>Manufacturer</b>
96906 ----	Military Standards

## SECTION II. BASIC ISSUE ITEMS LIST

(f)			BASIC ISSUE ITEMS LIST							(4)	(5)	(6)	(7)	(8)	
SOURCE CD (1)	MAINT. CD (2)	REC. CODE (3)	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION						UNIT OF ISSUE	QTY INC IN UNIT PACK	QTY INC IN UNIT	QTY AUTH	(8)	
				MODEL										(a) FIGURE NUMBER	(b) ITEM OR SYMBOL NUMBER
				1	2	3	4	5	6						
			6130-504-0327							POWER SUPPLY PP-4606A/G: (This item is nonexpendable)	ea			1	
										TECHNICAL MANUAL TM 11-6130-243-12-1					
										Requisition through pinpoint account number if assigned; otherwise through nearest Adjutant General facility.					
										NOTE: For technical manuals the quantity indicates the maximum number of copies authorized for packing (or issue) with the equipment. Where a number of these equipments are concentrated in a small area, the quantity on hand may be reduced to practical levels. Excess publications must be returned to publication supply centers through AG channels.					
			6240-155-8714							LAMP, INCANDESCENT: 96906; MS25231-313	ea		1	1	D81
										NO ACCESSORIES, TOOLS, OR TEST EQUIPMENT ARE TO BE ISSUED WITH THIS EQUIPMENT.					
										NO BASIC ISSUE ITEMS ARE MOUNTED IN OR ON THIS EQUIPMENT.					



## APPENDIX C

### MAINTENANCE ALLOCATION

---

#### Section 1. INTRODUCTION

##### C-1. General

This appendix provides a summary of the maintenance operations covered in the equipment literature for Power Supply PP-4606A/G. It authorizes categories of maintenance for specific maintenance functions on repairable items and components and the tools and equipment required to perform each function. This appendix may be used as an aid in planning maintenance operations.

##### C-2. Explanation of Format for Maintenance Allocation Chart

- a. Group Number.* Not used.
- b. Component Assembly Nomenclature.* This column lists the item names of component units, assemblies, subassemblies, and modules on which maintenance is authorized.
- c. Maintenance Function.* This column indicates the maintenance category which performance of the specific maintenance function is authorized. Authorization to perform a function at any category also includes authorization to perform that function at higher categories. The codes used represent the various maintenance categories as follows:

Codes	Maintenance category
C --	Operator/Crew
O --	Organizational maintenance

Codes	Maintenance category
F --	Direct support maintenance
H --	General support maintenance
D --	Depot maintenance

*d. Tools and Equipment.* The numbers appearing in this column refer to specific tools and equipment which are identified by these numbers in section III.

*e. Remarks.* Self-explanatory.

##### C-3. Explanation of Format for Tool and Test Equipment Requirements

The columns in the tool and test equipment requirements chart are as follows:

*a. Tools and Equipment.* The numbers in this column coincide with the numbers used in the tools and equipment column of the MAC. The numbers indicate the applicable tool for the maintenance function.

*b. Maintenance Category.* The codes in this column indicate the maintenance category normally allocated the facility.

*c. Nomenclature.* This column lists tools, test, and maintenance equipment required to perform the maintenance functions.

*d. Federal Stock Number.* This column lists the Federal stock number.

*e. Tool Number.* Not used.

SECTION II. MAINTENANCE ALLOCATION CHART

MAINTENANCE ALLOCATION CHART														
GROUP NUMBER	COMPONENT ASSEMBLY NOMENCLATURE	MAINTENANCE FUNCTIONS										TOOLS AND EQUIPMENT	REMARKS	
		INSPECT	TEST	SERVICE	ADJUST	ALIGN	CALIBRATE	INSTALL	REPLACE	REPAIR	OVERHAUL			REBUILD
	POWER SUPPLY PP-4606A/G	C O		C					O				6 6 3 2,4,8,9 1,2,4,5,9,10 7	Exterior only  Lamps, power cables, and connectors Output voltage and circuit continuity All tests except efficiency and transformer winding dielectric All repairs All tests

SECTION III. TOOL AND TEST EQUIPMENT REQUIREMENTS

TOOL AND TEST EQUIPMENT REQUIREMENTS				
TOOLS AND EQUIPMENT	MAINTENANCE CATEGORY	NOMENCLATURE	FEDERAL STOCK NUMBER	TOOL NUMBER
		PP-4606A/G (continued)		
1	D	AMMETER AN/USM-69		
2	H, ID	AMMETER m-65( )/U	6625-752-8817	
3	O	MULTIMETER AN/URM-105	6625-581-2036	
4	F, H, D	MULTIMETER TS-352B/U	6625-242-5023	
5	F, H, D	OHMMETER ZM-21( )/U	6625-581-2466	
6	O	TOOL KIT, ELECTRONIC EQUIPMENT TK-101/G	5180-064-5178	
7	F, H, D	TOOL KIT, ELECTRONIC EQUIPMENT TK-105/G	5180-610-8177	
8	H, ID	VOLTAGE TEST SET TV-100	4910-092-9136	
9	F, H, D	VOLTMETER ME-30( )/U	6625-669-0742	
10	H, ID	WATTMETER TS-430( )/U	6625-498-3630	

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ATAD (10)  
Gen Dep (2)  
Sig Sec, Gen Dep (5)  
Sig Dep (12)  
AMS (1)  
WRAMC (1)  
USARMA (2)  
USAERDAA (2)  
USAERDAW (13)  
USACRREL (2)  
Army Pic Cen (2)  
Sig FLDMS (2)  
Units org under fol TOE:- 2 ea.  
11-57  
11-97  
11-98  
11-117  
11-127  
11-155  
11-157  
11-158  
11-500(AA-AC)  
11-587  
11-592  
11-597

NG: None.

USAR: None.

For explanation of abbreviations used, see AR 320-50.

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