TM 11-6130-233-35

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS

POWER SUPPLIES PP-2953/U, PP-2953A/U, PP-2953B/U, AND PP-2953C/U

This copy is a reprint which includes current pages from Changes 2 through 9.

HEADQUARTERS, DEPARTMENT OF THE ARMY
18 MARCH 1965

CHANGE

No. 9

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 1 January 1989

DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE MANUAL

POWER SUPPLIES PP-2953/U, PP-2953A/U, PP-2953B/U, AND PP-2953C/U (NSN 6130-00-985-7899)

TM 11-6130-233-35, 18 March 1965, is changed as follows:

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Chief of Staff

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Brigadier General, United States Army
The Adjutant General

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CHANGE

No. 8

HEADQUARTERS
DEPARTMENT OF THE ARMY
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Direct Support, General Support, and Depot Maintenance Manual

POWER SUPPLIES PP-2953/U, PP-2953A/U, PP-2953B/U, AND PP-2953C/U (NSN 6130-00-985-7899)

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Figures 4-4 and 4-5	Figures 4-4 and 4-5

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DISTRIBUTION :

To be distributed in accordance with DA Form 12-51 literature requirements for PP-2953(*)/U.

WARNING

DANGEROUS VOLTAGES EXIST IN THIS EQUIPMENT

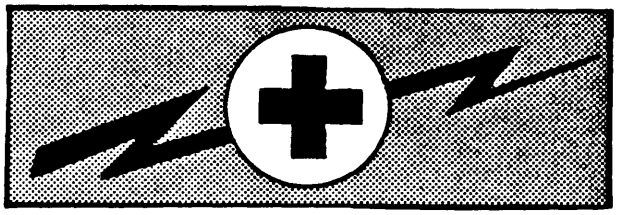
Be careful when working on the 115-volt or the 230-volt ac line connections. Serious injury or death can result from contact with these terminals.

DON'T TAKE CHANCES!

CAUTION

Do not make resistance measurements on the transistorized circuits of this power supply.

W A R N I N G



HIGH VOLTAGE

is used in the operation of this equipment

DEATH ON CONTACT

may result if personnel fail to observe safety precautions

Never work on electronic equipment unless there is another person nearby who is familiar with the operation and hazards of the equipment and who is competent in administering first aid. When the technicians are aided by operators, they must be warned about dangerous areas.

Whenever possible, the power supply to the equipment must be shut off before beginning work on the equipment. Take particular care to ground every capacitor likely to hold a dangerous potential. When working inside the equipment, after the power has been turned off, always ground every part before touching it.

Be careful not to contact high-voltage connections or 115 volt ac input connections when installing or operating this equipment.

Whenever the nature of the operation permits, keep one hand away from the equipment to reduce the hazard of curent flowing through the body.

Warning: Do not be misled by the term "low voltage." Potentials as low as 50 volts may cause death under adverse conditions.

For Artificial Respiration, refer to FM 21-11.

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 DRY WOODEN POLE OR A DRY 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

WARNING

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.

Compressed air shall not be used for cleaning purposes except where reduced to less than 29 pounds per square inch (psi) and then only with effective chip guarding and personnel protective equipment. Do not use compressed air to dry parts when TRICHLOROTRIFLUOROETHANE has been used. Compressed air is dangerous and can cause serious bodily harm if protective means or methods are not observed to prevent chip or particle (of whatever size) from being blown into the eyes or unbroken skin of the operator or other personnel.

Technical Manual

No. 11-6130-233-35

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 18 March 1965

Direct Support, General Support, and Depot Maintenance Manual

POWER SUPPLIES PP-2953/U, PP-29534/U, PP-2953B/U, AND PP-2953C/U (NSN 6130-00-985-7899)

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 and Fort Monmouth, ATTN: AMSEL-LC-ME-PS, Fort Monmouth, New Jersey 07703-5000.

In either case, a reply will be furnished direct to you.

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CHAPTER 1

FUNCTIONING OF POWER SUPPLY PP-2953/U

NOTE

Unless otherwise stated, information in this manual also applies to PP-2953A/U, PP-2953B/U, and PP-2953C/U.

1-1. Scope

a. This manual contains direct and general support and depot maintenance instructions for Power Supply PP–2953/U. It includes instructions for troubleshooting, testing, aligning, and repairing the equipment. It also lists tools, materials, and test equipment required for maintenance. Functional analysis of the equipment is covered in this chapter.

b. The complete technical manual for this equipment includes TM 11–6130–233-12.

1-2. Consolidated Index of Army Publications and Blank Forms

Refer to the latest issue of DA Pam 25-30 to determine whether there are new editions, changes or additional publications pertaining to the equipment.

1-2.1. Maintenance Forms, Records, and Reports

a. Reports of Maintenance and Unsatisfactory Equipment. Department of Army forms and procedures used for equipment maintenance will be those prescribed by DA Pam 738-750, as contained in Maintenance Management Update.

b. Reporting of Item and Packaging Discrepancies. Fill out and forward SF 364 (Report of Discrepancy) (ROD)) as prescribed in AR 735-11-2/DLAR 4140.55/SECNAVINST 4355.18/AFR 400-54/MCO 4430.3J.

c. Transportation Discrepancy Report (TDR) (SF 361). Fill out and forward Transportation Discrepancy Report (TDR) (SF 361) as prescribed in AR 55-37/NAVSUPINST 4610.33C/AFR 75-18/MCO P4610.19D/DLAR 4500.15.

1-2.2. Reporting Equipment Improvement Recommendations (EIR)

If your Power Supply 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 the equipment. Let us know why you don't like the design or performance. Put it on an SF 368 (Product Quality Deficiency Report). Mail it to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: AMSEL-PA-MA-D, Fort Monmouth, New Jersey 07703-5000. We'll send you a reply.

1-2.3. 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 5-23 through 5-25 of TM 11-6130-233-12.

1-2.4. Destruction of Army Electronics Materiel

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

1-3. Block Diagram

(fig. 1-1)

NOTE

PP–2953B/U and PP-2953C/U have circuit breakers instead of fuses.

a. Alternating current (at) power is applied through POWER switch S1 (CB–1 in PP–2953B/U and PP–2953C/U) to stepdowm power transformer T1. Full-wave bridge rectifier CR1–CR4 converts the transformed ac power at the output of T1 to a pulsating direct current (de) voltage.

b. The negative side of the bridge is applied to the load through filter network L1, C3 and series regulator Q3, Q4, Q5. The positive side of the bridge is applied direct to the load.

c. Series regulator Q3, Q4, Q5 provides regulation by varying the voltage drop across its terminals to compensate for variations of the output voltage.

d. The regulated output voltage is sampled by output-sensing potentiometer R11. The

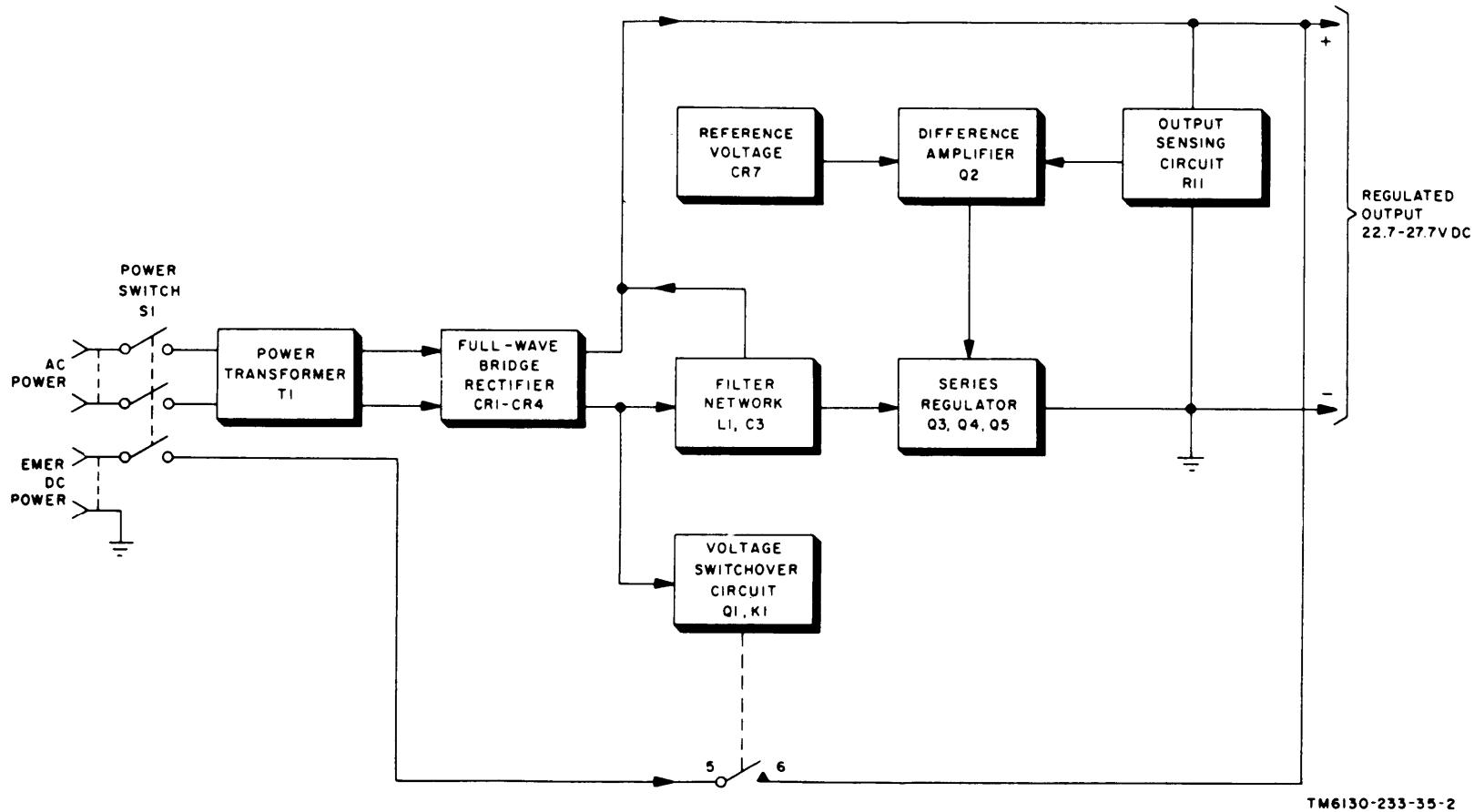

Figure 1-1. Power Supply PP-2953/U, block diagram.

sampled voltage is applied to difference amplifier Q2 where it is compared with a reference voltage established by Zener diode CR7. The output of Q2 controls the magnitude of the output voltage from Q3, Q4, Q5.

e. If the input ac voltage falls below a certain value, voltage switchover Q1 and relay K1 cause the output of an emergency dc supply to be applied to the output terminals of the power supply.

1-4. Circuit Analysis (fig. 4-3 and 4-4)

NOTE

PP-2953B/U and PP–2953C/U have circuit breakers instead of fuses.

a. Power Supply Circuits. Power is brought in through pins A and C of the J1 AC POWER connector and applied through POWER switch S1 (CB-1 in PP-2953B/U and PP-2953C/,U) to the two primaries of power transformer T1 and to voltage selector switch S2 (S1 in PP-2953 B/U and PP-2953C/U).

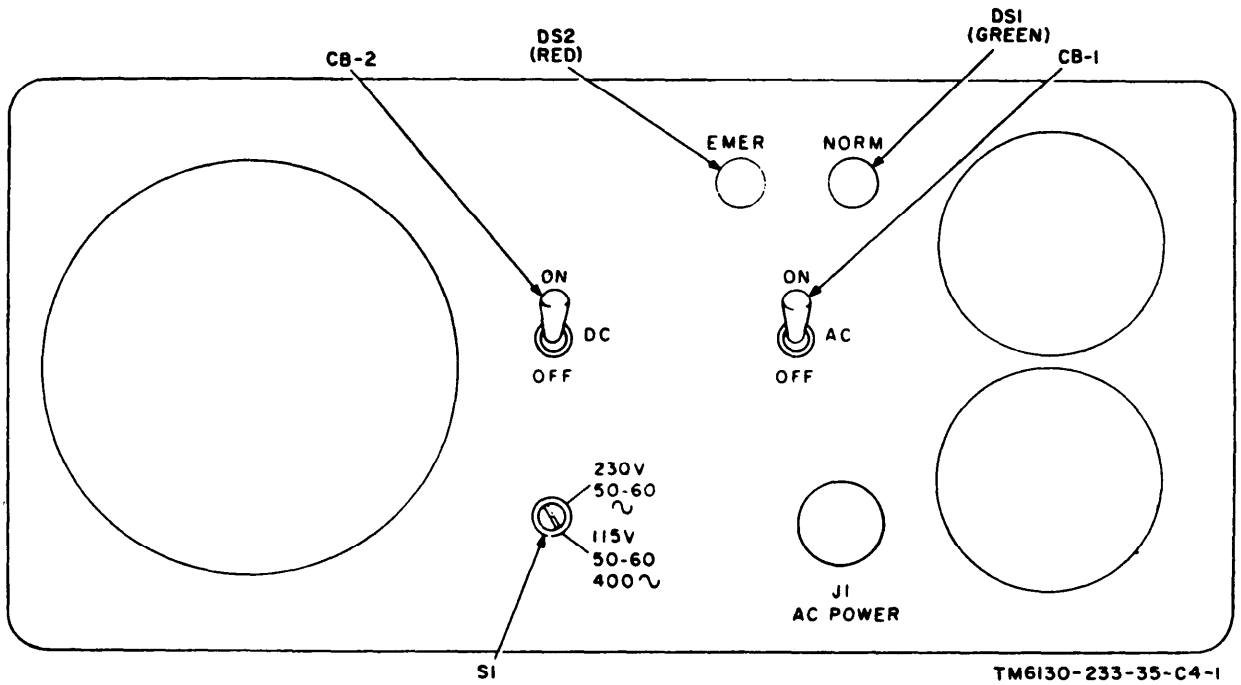

Figure 1-2. Power Supply PP-2953B/U front panel, parts location,

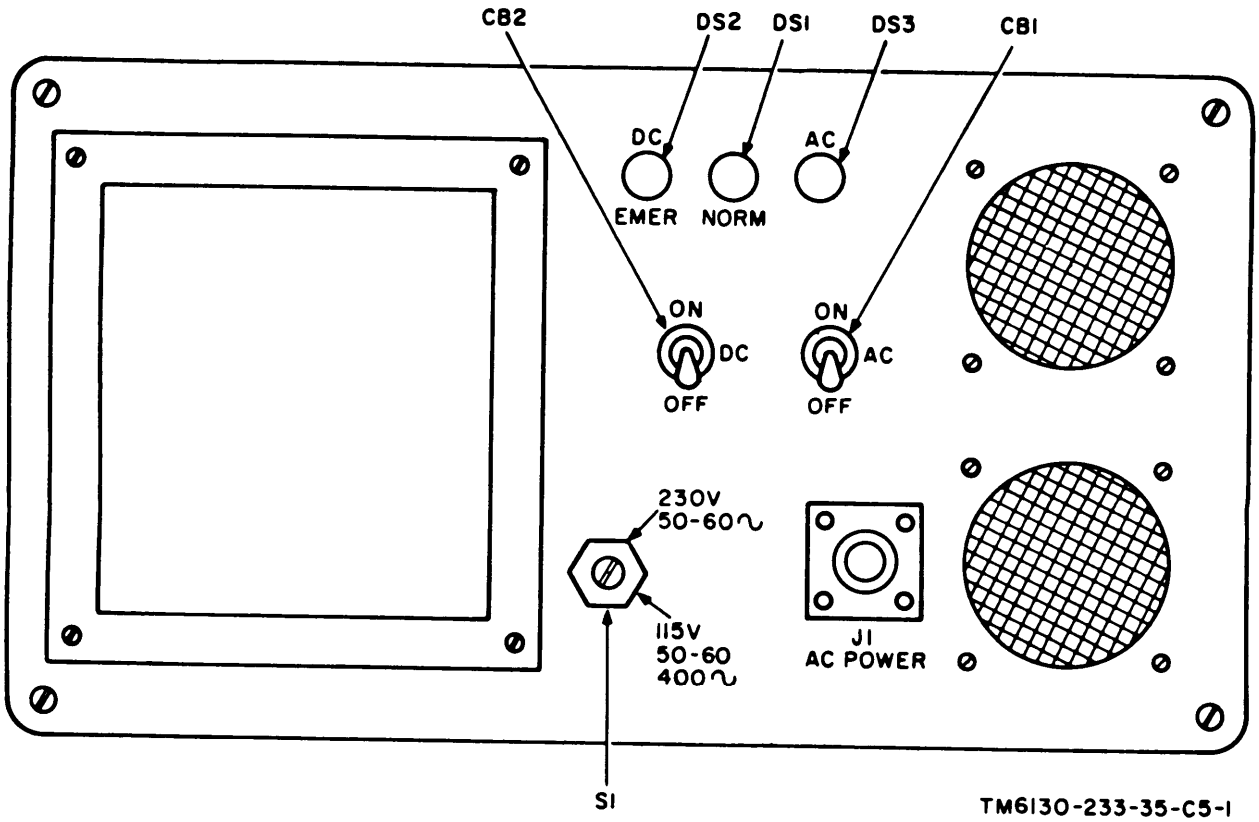

Figure 1-3. Power Supply PP-2953C/U front panel, parts location.

Capacitors C7, C8, and C1A prevent transient voltages from getting into or out of the power supply. Blower motor B1, connected across the 3-4 primary of T1, provides cooling for the interior of the power supply. Capacitor ClB permits the Mower motor to be self-starting.

(1) When the power supply is used with a 115-volt source, switch S2 (S1 in PP-2953 B/U and PP-2953C/U) connects the primaries of T1 in parallel. A 3-ampere fuse (Fl, F2, F3, F4) (CB-1 in PP-2953B/U and PP-2953C/U) in series with each leg of both primaries, provides overload protection regardless of how the external ac source is grounded. With S2 (S1 in PP-2953 B/U and PP-2953C/U) switched to the 230-volt position, the primaries of T1 are placed in series.

(2) The 115-volt ac input to T1 is transformed to 38.5 volts ac, which is available at the secondary winding. It. is then applied to the full-wave bridge rectifier, which is composed of CR1 through CR4. Capacitor C6 provides radiofrequency (rf) suppression. The rectifier converts the 38.5 volts ac to a pulsating dc voltage of 35 volts peak at the junctions of CR2 and CR3 and CR1 and CR4. This voltage is filtered by inductor L1 and capacitor C3. Bleeder resistor R5 prevents the voltage across C3 from exceeding the voltage rating of the capacitor. The output of this filter network is approximately 30 volts dc across C3 with a lo-ampere load, or 40 volts with no load.

(3) The operating voltage for difference amplifier Q2 and voltage switchover Q1 is supplied by the pulsating dc voltage which is rectified by CR5 and filtered by C2. Resistor R4 protects CR5 against surge currents. The voltage at the output of this supply is approximately 46 volts dc between L1-1 and J3-B. Capacitor C9 provides additional filtering.

b. Series Regulator Circuits.

(1) The negative output is applied through transistor Q5 to grounded pin A of J3 POWER OUT connector. The emitter-to-collector current (load current) of Q2 is controlled by its emitter-to-base voltage. The emitter-to-base voltage, in turn, is controlled by cascaded direct-coupled amplifiers Q3 and Q4, which provide sufficient current gain to drive Q5. Resistors R6 and R9 bias Q5 and Q4, respectively, to prevent minority, or *Icbo* currents, from causing excessive collector-to-emitter currents within these transistors. Capacitors C4 and C5 prevent the regulator circuits from oscillating by reducing their high-frequency gain.

(2) Difference amplifier Q2 compares the output from resistor R11 with the reference voltage established across Zener diode CR7, and generates an output proportional to this difference which, through Q3 and Q4, controls load current flow within Q5. Current flow through resistor R10 and Zener diode CR7 stabilizes the operation of CR7 and assures that the voltage drop across this diode will be constant. Resistor R7 is the load resistor for Q2. Resistors R8 and R12 limit the current through Q2.

c. Voltage Switchover Circuit.

(1) The 50 volts dc developed across capacitor C2 is applied across R1, CR6, and R2. Voltage switchover control Q1 conducts when CR6 breaks down at 39 volts. As a result of this conduction, ac power-failure relay K1 is energized.

(2) With the coil of K1 energized, contacts 6 and 7 break and disconnect the emergency battery circuit. The AC ON indicator lamp, DS2, (NORM DS1 in PP-2953B/U and PP-2953C/U) is energized through closed contacts 3 and 4.

(3) If the voltage of the ac power source falls below 80 volts for a 115-volt source, or 160 volts for a 230-volt source, the dc voltage developed across C2 is proportionately reduced. As a result, the voltage across CR6 falls below 39 volts, Q1 is cut off, and relay K1 deenergizes. With K1 deenergized, contacts 6 and 7 close, and

the emergency battery is connected across the output of the power supply. Also, contact 3 breaks with contact 4 to reenergize DS2, (DSl in PP-2953B/U and PP-2953-C/U) and connects with contact 2 to energize EMER DC ON indicator lamp DS1 (EMER DS1 in PP-2953B/U and PP-2953-C/U).

CHAPTER 2

DIRECT SUPPORT MAINTENANCE

Section I. GENERAL TROUBLESHOOTING TECHNIQUES

WARNING: When servicing the power supply, be extremely careful of the ac powerline voltages (either 115 or 230 volts). Serious injury or death may result from contact with these terminals.

2-1. General Instructions

Troubleshooting at the direct support level includes all the techniques outlined for organizational maintenance and any special or additional techniques required to isolate a defective part. Paragraphs 2-4 through 2-9 provide troubleshooting procedures to be used to localize and isolate faults at the direct support maintenance level.

2-2. Organization of Troubleshooting Procedures

a. General. The first step in servicing a defective power supply is to localize the fault. Localization means tracing the fault to a defective stage or circuit responsible for the abnormal condition. The second step is isolation. Isolation means locating the defective part or parts. Some defective parts, such as burned resistors and arcing transformers, can often be located by sight, smell, or hearing. Most defective parts, however, must be isolated by checking voltages and resistance.

b. Localization. The tests listed below will aid in isolating the trouble. The first step in tracking trouble is to localize the defective stage by one of the following methods:

(1) *Visual inspection.* The purpose of visual inspection is to localize faults without testing or measuring circuit voltages or resistances. Through this inspection, the repairman frequently can discover troubles or determine the circuit in which the trouble exists. This inspection is valuable in avoiding additional damage to the power supply, which might occur through improper servicing methods, and in preventing future failures.

CAUTION: This equipment is transistorized; make voltage measurements only as specified in the voltage and resistance chart (para 2-9).

(2) *Voltage and resistance measurements.* When measuring voltages, use tape or sleeving to insulate the entire test prod, except for the extreme tip. A momentary short circuit can damage a transistor. (For example, if the bias of a transistor is shorted out, excessive current between the emitter and the base would damage the transistor.) Use resistor and capacitor color codes (fig. 4-1 and 4-2) to determine the values of the components. Use the voltage and resistance chart to find the normal readings, and compare them with the readings taken.

(3) *Troubleshooting chart.* The indications listed in the chart of paragraph 2-6d will aid in localizing the trouble to a component part.

(4) *Intermittent troubles.* In all these tests, the possibility of intermittent troubles should not be overlooked.

If present, this type of trouble may be made to reappear by tapping or jarring the equipment. Check the internal wiring and connections for looseness.

2-3. Test Equipment Required

a. The following chart lists the test equipement required for troubleshooting the power supply at the direct support level, and the associated technical manual.

Test equipment	*Technical manual*
Multimeter TS-352B/U	TM 11-6625-366-15
Electronic Equipment Tool Kit, TK-105/G.	
Test Set, Transistor TS-1836/U.	TM 11-6625-539-15

b. In addition to the listed test equip ment, a dummy load (para 3-11) is required when testing the power supply. This dummy load is able to handle safely 2 or 10 amperes at approximately 25 volts.

Section II. TROUBLESHOOTING POWER SUPPLY PP-2953/U

Note. Unless otherwise stated, information in this manual also applies to PP-2953A/U and PP-2953B/U.

CAUTION: Do not attempt removal or replacement of parts before reading the instructions in paragraph 2-10.

2-4. Checking for Shorts

Note. PP-2953B/U has circuit breakers instead of fuses.

a. When to Check. Check the power supply when any one of fuses F1 through F5 blows with no load connected to the power supply, or when there is no dc output.

b. Conditions for Tests.

(1) Disconnect the power supply from the power source.

(2) Disconnect the load connected to the J3 POWER OUT connection.

c. *Resistance Measurements.* Make the resistance measurements indicated in the chart below if any fuse F1 through F4 blows.

CAUTION: Do not make any resistance measurements on the power supply other than those specified. The multimeter battery can destroy the transistors by excessive current flowing through them. In some instances, 0.1 volt dc applied between the base and emitter in the reverse direction can destroy a surface barrier transistor.

d. Short Circuit Tests.

Point of measurement	*Normal indication*	*Isolating procedure*
Remove all fuses. Measure the resistance from terminal 1 of relay K1 and terminal A (ground) of the J3 POWER OUT connector.	Resistance indication of approximately 700 ohms.	If the resistance indication is normal, proceed to the text step. If the resistance indication is abnormal, disconnect the gray lead from the terminal of R11 which connects to CR7. If the resistance indication rises to near normal, proceed to the next step. If the resistance indication remains approximately the same, refer to the schematic diagram (fig. 4-3) and check for a short on the regulator or rectifier assembly. If the short is within the voltage switchover circuit (on the regulator assembly), resistor R4 will show signs of overheating.
With the green and blue leads from terminals 5 and 6 of T1 disconnected, check the resistance of T1 secondary to ground.	Resistance indication of infinity . . .	If the resistance indication is normal, proceed to the next step. If the indication is abnormal, replace T1 and all wires, and replace the fuses.

Point of! measurement	Normal indication	Isolating procedure
With either lead of C6 disconnected, measure the resistance of C6.	Resistance indication of infinity.	If normal, proceed to the next step. If abnormal, replace C6, reconnect all wires, and replace the fuses.
With switch S1 set at OFF, S2 set at 116V 60-60400 ~, and the leads to 3 and *4* of T1 disconnected, measure the resistance of each T1 primary to ground.	Resistance indication of infinity.	If normal, proceed to the next step. If abnormal, replace Tl, return all leads, and replace the fuses.
With the two orange leads disconnected from C1A, measure the resistance of C1A.	Resistance indication of infinity.	If normal, proceed to the next step. If abnormal, replace C1, return all leads, l nd replace the fuses.
Chek resistance of B1.	Resistance indications: between yel and orn, 180 ohms; between yel and red, 120 ohms.	If normal, replace Tl, return all leads, and replace the fuses. If abnormal, replace B1 and return all leads and fuses to their proper positions.

2-5. Test Setup

(fig. 3-3)

Bench tests on the power supply require connections to an ac power source and to a shop constructed dummy load (para 3-11). The power supply with the dummy load set for 2 amperes must be connected to the power source for all tests; some of the test equipment connections will vary from test to test.

2-6. Localizing Troubles

a. General. In the troubleshooting chart (d below). The procedures are outlined for localizing troubles to a stage. The parts locations are shown in figures 2-1 and 2–2. Depending on the nature of the operational symptoms, one or more of the localizing procedures will be necessary. When trouble has been localized to a particular stage, use voltage and resistance measurements to isolate the trouble to a particular part.

b. Use of Chart. The troubleshooting chart supplements the troubleshooting chart in TM 11-6180-283-12. If previous operational checks have resulted in reference to a particular item of this chart, refer directly to the referenced item. If no operational symptoms are known, begin with item 1 of the troubleshooting chart in TM 11-6130-233-12 and proceed until a symptom of the trouble is found.

Caution: **If the operational symptoms are not known, or if they indicate the possibility of short circuits within the power supply, make the short-circuit checks described in paragraph 2-4 before applying power to the power supply.**

c. Conditions for Tests. All checks outlined in the chart are to be conducted with the power supply connected to the ac power source and with the 2-ampere dummy load across the J3 POWER OUT connections.

d. Troubleshooting Chart.

Note: Perform the steps in the troubleshooting chart in TM 11-6130-233-12 before using this chart, unless the trouble has already been localized.

Indication	Probable trouble	Procedure
1. AC ON indicator lamp DS2 does not light and blower assembly does not operate (as determined by placing hand over blower assembly screen) when POWER switch is set to ON.	No ac power is reaching power supply J1 AC POWER connector. POWER switch S1 defective.	Check continuity of power cable, and repair or replace if necessary. Check S1 (fig. 2-1) and replace if necessary.
	Voltage selector switch S2 defective.	Check S2 and replace if necessary.

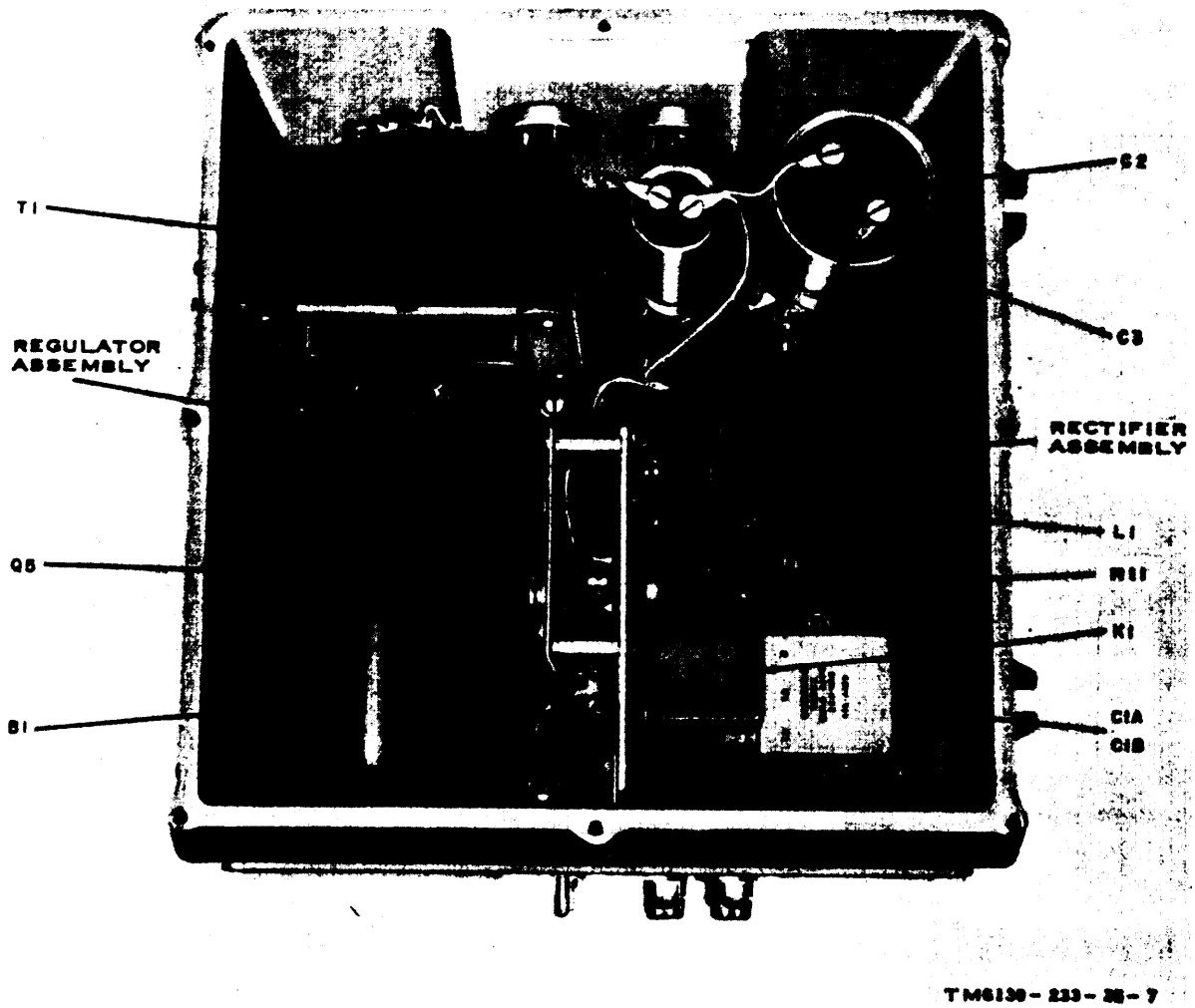

Figure 2-1. Power Supply PP-2959/U, parts location

d. Troubleshooting Chart -Continued.

Indication	Probable trouble	Procedure
2. AC ON indicator lamp DS2 does not light, blower assembly operates, and EMER DC ON indicator lamp DS1 lights when POWER switch is set to ON.	Defective relay K1. Defective rectifier or voltage switchover circuit.	Check K1 (fig. 2-1) and replace if necessary. Measure voltages at rectifier output and at Q1 and compare them with values given in voltage and resistance chart in paragraph 2-9. If voltages are inconnect, check rectifiers CR1 through CR4 (fig. 2-2), Ql, and associated components, and replace if necessary.

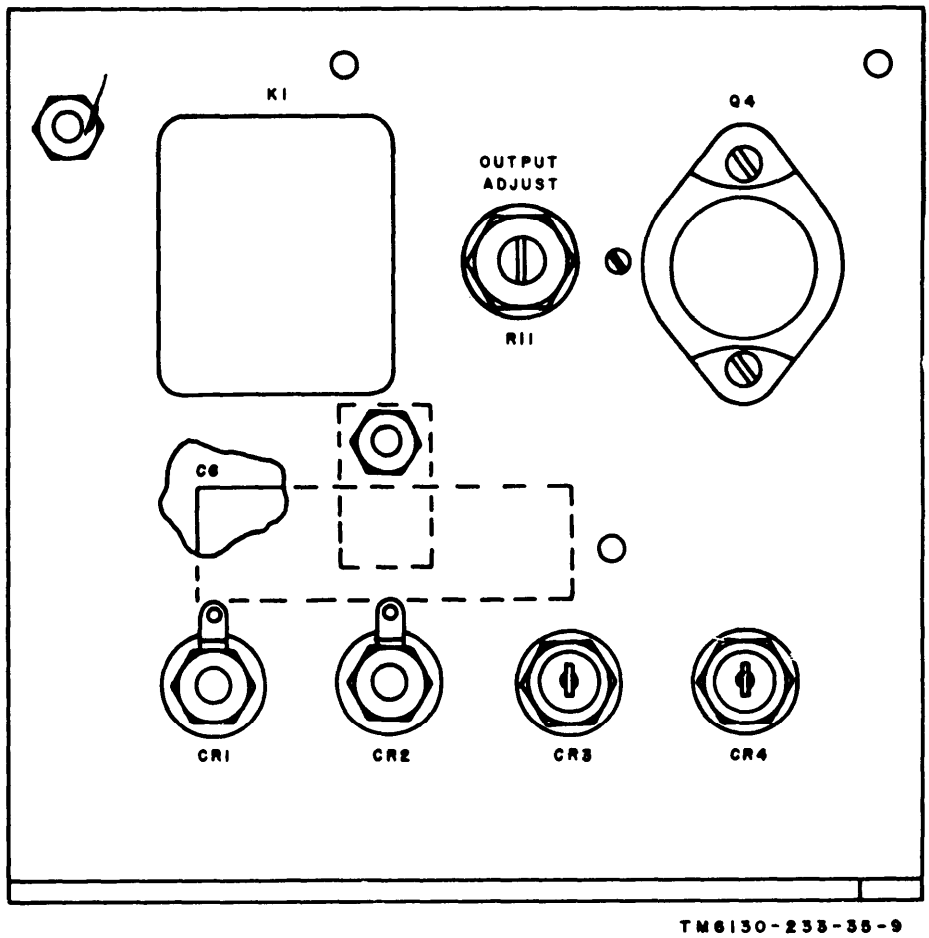

Figure 2-2. Power Supply PP-2953/U, rectifier assembly.

d. Troubleshooting Chart- Continued.

Indication	Probable trouble	Procedure
8. AC ON indicator lamp DS2 lights dimly and output voltage is normal when POWER switch is set to ON.	Defective contacts of K1.	Check and replace if necessary.
4. Voltage at J3 POWER OUT terminals (fig. 2-1) not 25.2 vdc, but within 22.7 and 27.7 vdc.	Misadjustment of potentiometer R11.	Connect TS-252/U (set to measure 25.2 volts dc) across B (positive) and A (ground) of J3. Loosen locknut on Rll and adjust for 25.2-volt indication on TS-362/U. Tighten locknut and disconnect TS-352/U.
6. Low voltage at J3 POWER OUT terminals.	Defective rectifier CR1 through CR4.	Check and replace if necessary.

d. Troubleshooting Chart -Continued.

Indication	Probable trouble	Procedure
	Defective regulator assembly.	Disconnect brown lead that is connected to base of Q4 and connect TS-362/U (set to measure 60 volts) across J3 POWER OUT connector. Connect negative lead of variable 28-volt dc source to disconnected brown lead and positive lead to pin B of J3 POWER OUT connector. Vary output of 28-volt source to bring output voltage to normal. If this cannot be accomplished, measure and compare voltages at Q4 (fig. 2-2) and Q6 (fig. 2-1) with values given in voltage and resistance chart (para 2-9). If voltages are incorrect, check components Q4, Q5, R5 (fig. 3-1), C9, and L1 (fig. 2-1).
		If output voltage can be set to normal by adjusting variable 28-volt source measure voltages between Q2, Q3, and the junction of R6 and R7 (fig. 3-1). If these voltages are incorrect, check Q2, Q8, and associated components.
6. Power supply output voltage varies with variation in bad current.	Defective transistor Q8, Q4, or Q5.	Measure voltages at Q3, Q4, and Q6 and compare them with those in voltage and resistance chart. If voltages are incorrect check and replace Q3, Q4, or Q5, if necessary.
	Defective difference amplifier circuit.	Measure voltage between Q2 and junction of R6 and R7, and compare them with those in voltage and resistance chart. If voltages are incorrect, check and replace Q2 and associated components, if necessary.
	Defective capacitor C8 (fig. 2-1).	Check and replace if necessary.
	Defective capacitor C2 (fig. 2-1).	Check and replace if necessary.
7. output voltage varies with variation in load current and rises excessively (over 80 volts) with no load current. Also, relay K1 may chatter and EMER DC ON indicator lamp will light.	Defective capacitor C2. Defective resistor R4 (fig. 3-1).	Check and replace if necessary. Measure voltage at emitter of Q1 and compare with that in voltage and resistance chart. If voltage is incorrect, check R4 and replace if necessary.
	Defective diode CR6 (fig. 4-1).	Measure voltage at emitter of Q1 and compare with that in voltage resistance chart. If voltage is incorrect, check CR5 and replace if necessary.

d. Troubleshooting Chart- Continued.

Indlcation	Probable trouble	Procedure
8. With no external voltage applied at J2 BATTERY IN connector, voltage at J8 POWER OUT terminals (fig. 2-1) is zero. Both indicator lamps are out, and blower assembly is operative.	Defective transistor Q5.	Check voltage at emitter and collector of Q5; they must be equal. If not, check Q5 and replace if necessary.
	Defective choke L1 (fig. 2-1).	Check resistance of Ll, which must be approximately 0.1 ohm. Replace L1 if necessary.
	Defective transformer T1 (fig. 2-1).	Check voltage at 6-6 winding of Tl, which must be 98.5 vac. If it is not, check and replace T1 if necessary.

2-7. Isolating Trouble Within Stages

a. When trouble has been localized to a stage during the operational checks listed in the troubleshooting chart (para 2-6 *d),* isolate the trouble to a component level by voltage measurements at the transistor terminals and other points related to the stage in question.

b. Use the schematic diagram (fig. 4-3) and the wiring diagram (fig. 4-4) to trace the circuits and isolate the faulty components.

c. The transistor terminal voltage readings were made with a 20,000-ohm-per-volt meter (TS-352/U). A measurement that differs widely from that in the voltage and resistance chart can localize the trouble when used with the schematic diagram.

Note: The voltages measured at the emitter and base terminals of replaced transistors may vary as much as 15 to 20 percent from the voltages listed. Collector voltages, however, must not vary more than 10 percent. Bias (voltage difference from emitter to base. must remain approximately the same.

2-8. De Resistance of Transformer T1, Inductor L, Motor B1, and Relay K1

a. The dc resistance values are provided as an aid to troubleshooting. When using the data, observe the following instructions:

(1) Before making resistance measureements of Tl, Ll, or Bl, determine whether faulty operation is due to one of these parts. To do this, follow the troubleshooting procedures (para 2-6 *d)* and make the voltage checks given in the voltage and resistance chart.

(2) Do not use the resistance measurements as the sole basis for discarding any of these parts as defective. Because of broad winding tolerances during manufacture, resistances of identical coils may vary from the chart values, which are typical average values.

(3) The normal resistance of replacement parts may differ slightly from the values given in the chart.

b. The dc resistances of the soils are listed below:

Part (fig. 4-4)	Teminals	Ohms
T1	1-2	Less than 1.
	8-4	Less than 1.
	5-6	Less than 1.
L1	1-2	Less than 1.
B1	Red-yel	120
	Orn-yel	180
K1	1-8	800

2-9. Voltage and Resistance Chart

Caution: **Disconnect the power supply from the power source before making** resistance **measurement.**

a. Check all voltages with a 20,000-ohm-per-volt meter (TS-352/U).

b. Connect the power supply to a 2-ampere load.

c. Set the voltage selector switch to the 115V 50-60400 ~position.

d. For voltage measurements, connect the power supply to a 115-volt ac source.

e. Set the POWER switch to ON:

Note. The prefix TP refers to test points on the schematic diagram.

Meter lead (+ or -)		*Volts*	Approximate resistance (ohms
From	To		
T1-1	T1-2	116 ac	Less than 1
T1-2	T1-4	115 ac	Less than 1
T1-5	T1-6	39 ac	Less than 1
TP-1 (-)	Ground (+)	-0.02	
TP-2 (-)	Ground (+)	-28	
TP-2 (-)	Ground (+)	-6.5	

Meter lead (+ of -)		Volts	Approximate resistance (ohms)
From	To		
TP-4 (-)	Ground (+)	-29	
TP-5 (-)	Ground (+)	-24	
TP-6 (-)	Ground (+)	-11.7	
TP-7 (+)	Ground (-)	+20	
TP-8 (+)	Ground (-)	+26.2	
K1-2 (+)	Ground (-)	+25.2	0
K1-3 (+)	Ground (-)	0	0
Kl-4 (+)	Ground (-)	0	20
K1-6 (+)	Ground (-)	0	10
K1-7 (+)	Ground (-)	+25.2	100
TP-2 (-)	TP-8 (+)	+33	70
TP-4 (-)	TP-8 (+)	+33	70
TP-5 (-)	TP-8 (+)	-50	300
TP-7 (-)	TP-8 (+)	-5.7	140

Section III. REPAIRS

2-10. General Parts Replacement Techniques

All the parts of the power supply can be replaced without special procedures. The following precautions apply specifically to this power supply:

a. Do not disturb the setting of resistor R1l.

b. The power supply is transistorized. Use a pencil-type soldering iron with a 25-watt *maximum* capacity. If the iron must be used with ac, use an isolating transformer between the iron and the line.

Caution: **Do not use a soldering gun; damaging voltages can be induced into components.**

2-11. Use of Heat Sink

When soldering transistor leads, solder quickly; wherever wiring permits, use a heat sink (such as long-nosed pliers) between the soldered joint and the transistor. Use approximately the same length and dress of transistor leads as used originally.

2-12. Cleaning Blower Assembly Screen

WARNING

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.

Refer to paragraph 3-4 for removing the screen. Remove dust and dirt from the screen with a small brush moistened with TRICHLOROTRIFLUOROETHANE (NSN 6850-00- 105-3084).

CHAPTER 3

GENERAL SUPPORT MAINTENANCE

Section I. REPAIRS

3-1. Overhaul Operations

Complete overhaul of the power supply may be accomplished by general support maintenance personnel when authorized. Overhaul action will include all repairs and replacement operations necessary to make the equipment suitable for return to DA supply system stocks for reissue to using organizations, as equip- established in the preceding portions of this for accomplishing the repairs and adjustments established in the preceding portions of this manual, and for such additional repair and overhaul operations as deemed necessary, will be established by the facility performing the work. Paragraphs 4-1 through 4-9 establish the requirements that *must be met* by overhauled or repaired equipment before it is returned to DA supply system stocks.

3-2. General Parts Replacement Techniques

Before removing a part from the power sup ply, note the position of the part and tag its leads. Install the replacement parts in the same position as the original.

3-3. Disassembly and Reassembly of Front Panel Assembly

(fig. 3-1)

Remove the six screws (16) and washers (16) to separate the front panel assembly (14) from the housing (48). To reassemble, line up the holes in the front panel with the matching holes in the housing, and replace the screws and washers.

3-4. Disassembly and Reassembly of Blower Assembly Screen

(fig. 3-l)

Remove the four screws (18) and washers (19) to separate the screen from the front panel (14). To reassemble, line up the holes in the screen with the matching holes in the front panel, and replace the screws and washers.

3-5 Disassembly and Reassembly of Blower Assembly

(fig. 3-1)

Remove the screen as described in paragraph 3-4. Remove the top cover (1) by loosening the eight captive screws (3) from the housing. Remove the four screws (27), washers (28), and nuts (29) to separate the blower assembly from the front panel (14). To reassemble, line up the holes in the blower assembly with the matching holes in the front panel, and replace the screws, washers, and nuts.

3-6. Disassembly and Reassembly of Regulator Assembly

(fig. 3-1)

Remove the three screws (142), spacers (139), lockwashers (140), and nuts (141) to separate the regulator assembly from the rectifier panel (117). To reassemble, replace and secure the screws, spacers, lockwashers, and nuts.

3-7. Equipment Adjustments

The only adjustment required on the power supply is the setting of resistor R1l. This procedure is described in step 1 of the trouble-shooting chart (para 2-6d).

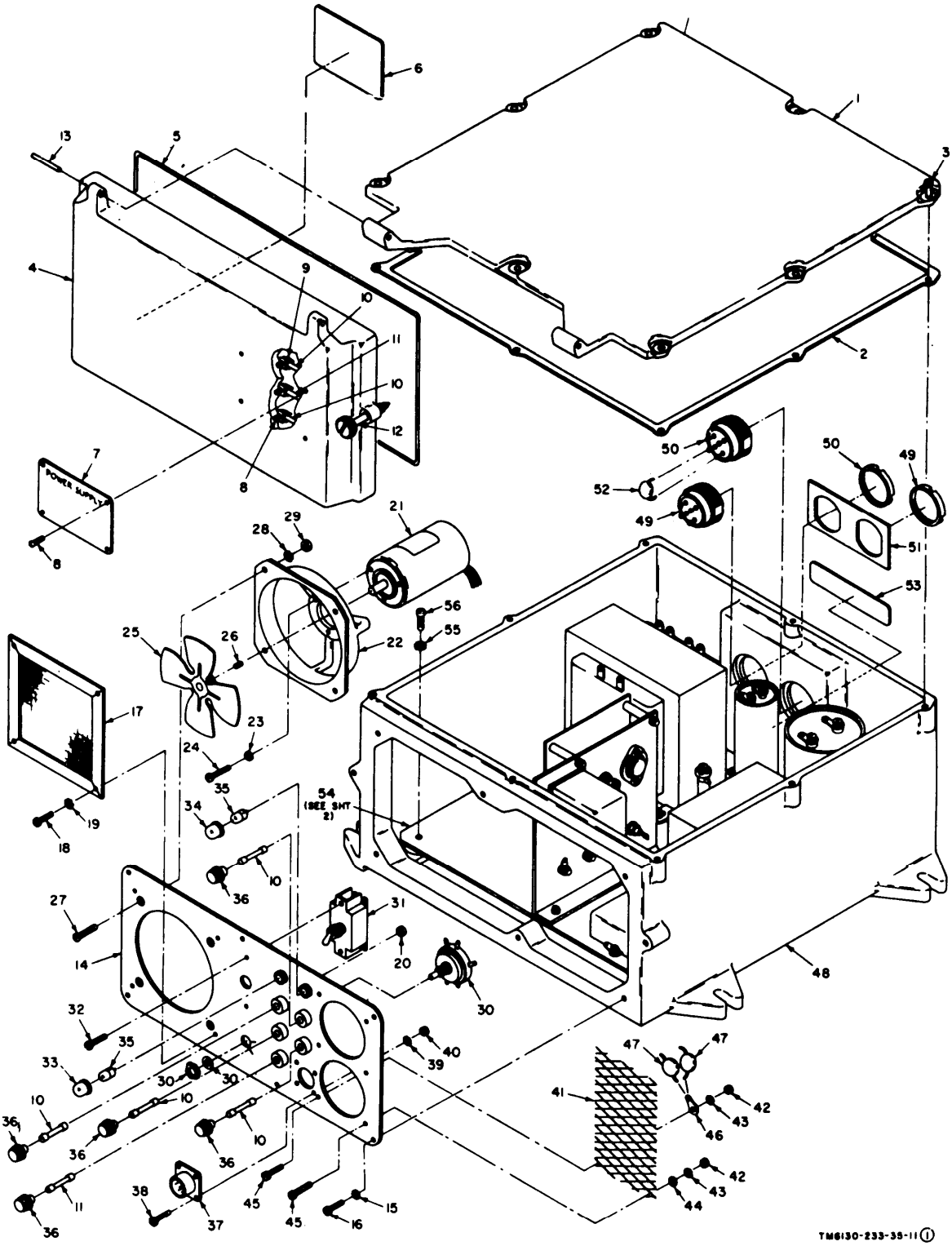

Figure 3-1 (1). Power Supply PP-2953/U, exploded view (part 1 of 2).

1 Top cover
2 Gasket
3 Captive screw 6–32
4 Front cover
5 Gasket
6 Instruction plate
7 Identification plate
8 Self-threading screw
9 Electrical clip
10 Fuse, 10 amp
11 Fuse, 3 amp
12 Captive screw 10–32
13 Roll pin
14 Front panel
15 Lockwasher #6
16 Panhead machine screw, 6–32 x 3/8 in.
17 Input screen
18 Panhead machine screw, 4–40 x 3/8 in.
19 External tooth washer #4
20 Hexagonal nut 4–40
21 Ac motor B1
22 Venturi assembly
23 Internal tooth washer #6
24 Panhead machine screw, 6–32 x 7/16 in.
25 Impeller, fan blade assembly
26 Setscrew 10–32
27 Flathead screw, 6–32 x 1/2 in.
28 External tooth washer #6
29 Hexagonal nut 6–32
30 Rotary switch S2
31 Toggle switch S1
32 Panhead machine screw, 6–32 x 3/8 in.
33 Lens
34 Lens
35 Lamp
36 Fuseholder
37 Connector J1
38 Panhead machine screw, 4–40 x 3/8 in.
39 External tooth washer #4
40 Hexagonal nut 4–40
41 Output screen
42 Hexagonal nut 4–40
43 External tooth washer #4
44 Flat washer #4
45 Panhead machine screw, 4–40 x 3/8 in.
46 Terminal lug
47 Capacitor C7, C8
48 Housing
49 Connector J2
50 Connector J3
51 Flat washer
52 Capacitor C9
53 Identification plate
54 Base plate assembly
55 Lockwasher, 1/4 in.
56 Fillister head screw, 1/4–20 x 1/2 in.

Figure 3-1 (1).-Continued

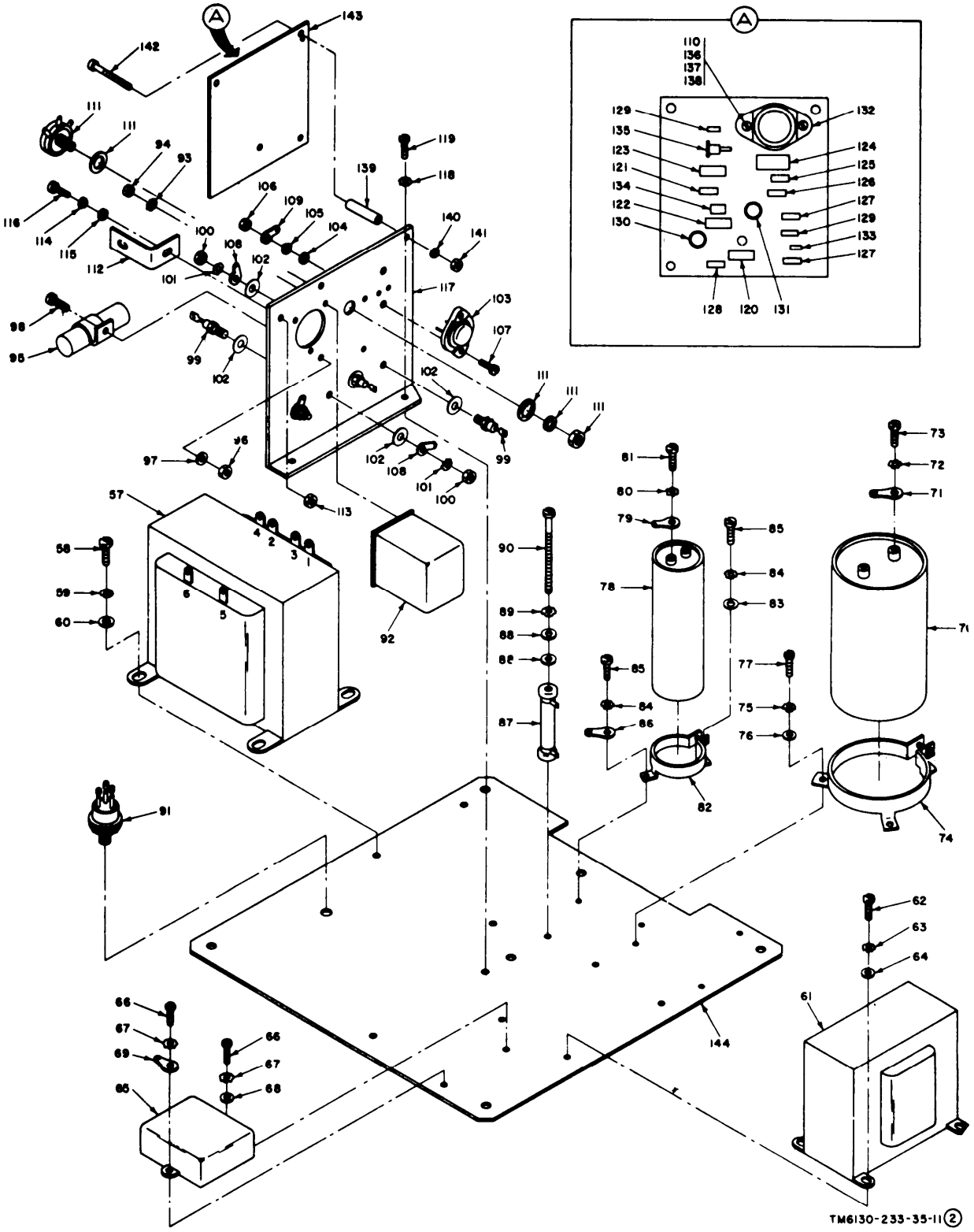

Figure 3-1 (2). Power Supply PP-2953/U, exploded view (part 2 of 2).

57 Power transformer T1
58 Panhead machine screw, 1/4–20 x 3/4 in.
59 Lockwasher, 1/4 in.
60 Flat washer, 1/4 in.
61 Choke L1
62 Panhead machine screw, 8–32 x 7/16 in.
63 External tooth washer #8
64 Flat washer #8
65 Fixed capacitor C1
66 Panhead machine screw, 6–32 x 7/16 in.
67 External tooth washer #6
68 Flat washer #6
69 Terminal lug
70 Fixed capacitor, C3
71 Terminal lug
72 External tooth washer #10
73 Panhead machine screw, 10–32 x 3/8 in.
74 Capacitor clamp
75 External tooth washer #6
76 Flat washer #6
77 Panhead machine screw, 6–32 x 7/16 in.
78 Fixed capacitor, C2
79 Terminal lug
80 External tooth washer #10
81 Panhead machine screw, 10–32 x 3/8 in.
82 Capacitor clamp
83 Flat washer #6
84 External tooth washer #6
85 Panhead machine screw, 6–32 x 7/16 in.
86 Terminal lug
87 Resistor R5
88 Flat washer #8
89 External tooth washer #8
90 Panhead machine screw, 8–32 x 2–1/2 in.
91 Transistor Q5
92 Armature relay K1
93 External tooth washer #6
94 Plain nut 6–32
95 Fixed capacitor C6
96 Plain nut 6–32
97 External tooth washer #6
98 Panhead machine screw, 6–32 x 3/8 in.
99 Diodes CR1, CR2, CR3, and CR4
100 Plain nut 10–32
101 External tooth washer #10
102 Flat washer #10
103 Transistor Q4
104 Flat washer #4
105 External tooth washer #4
106 Plain nut 4–40
107 Panhead machine screw, 4–40 x 1/2 in.
108 Terminal lug
109 Terminal lug
110 External tooth washer #4
111 Variable resistor R11
112 Bracket
113 Plain nut 6–32
114 External tooth washer #6
115 Flat washer #6
116 Panhead machine screw, 6–32 x 3/8 in.
117 Rectifier panel
118 External tooth washer #8
119 Panhead machine screw, 8–32 x 7/16 in.
120 Resistor R1
121 Resistor R2
122 Resistor R3
123 Resistor R4
124 Resistor R6
125 Resistor R7
126 Resistor R8
127 Resistors R9 and R10
128 Resistor R12
129 Capacitors C4 and C5
130 Transistor Q1
131 Transistor Q2
132 Transistor Q3
133 Diode CR7
134 Diode CR6
135 Diode CR5
136 Panhead machine screw, 4–40 x 3/8 in.
137 Flat washer #4
138 Hexagonal nut 4–40
139 Spacer
140 Lockwasher #6
141 Hexagonal nut 6–32
142 Panhead machine screw, 6–32 x 1–1/2 in.
143 Printed-circuit board
144 Base plate

Figure 3–1. (2) —Continued.

Section II. GENERAL SUPPORT MAINTENANCE TESTING PROCEDURES

3-8. General

a. Testing procedures are prepared for use by Signal Field Maintenance Shops and Signal Service Organizations responsible for general support maintenance of electronic equipment to determine the acceptability of repaired equipment. These procedures set forth specific requirements that repaired equipment *must* meet before it is returned to the using organization. These procedures may also be used as a guide for testing equipment that has been repaired at the general support level if the proper tools and test equipments are available. A summary of the performance standards is given in paragraph 3-14.

b. Comply with the instructions preceding each chart before proceeding to the chart. Perform each step in sequence. Do not vary the sequence. For each step, perform all the actions required in the *Control settings* columns; then perform each specific test procedure and verify it against its performance standard.

3-9. Test Equipment, Tools, and Materials

All test equipment, tools, materials, and other equipment required during the testing

procedures given in this section are listed in the following charts and and authorized under TA 11-17, Signal Field Maintenance Shops, and TA 11-100(11-17), Allowances of Signal Corps Expendable Supplies for Signal Field Maintenance Shops, Continental United States.

a. Test Equipment.

Nomenclature	Federal stock No.	Technical manual
Multimeter TS-862/U	6625-242-5023	TM 11-5527
Multimeter ME437A/U	----------	----------
Voltmeter, ME-20A/U.	6625-669-0742	TM 11-6825-820-12

b. Tool. The only tools necessary for them checks are those contained in Tool Kit, Electronic Equipment TK-106/G.

c. Other Equipment. The only other equip ment required for these procedures is Transformer, Variable TF-218 (or equal) and a shop-constructed dummy load.

3-10. Modification Work Orders

The performance standards listed in the tests (para 3-12 and 3-18) are based on the assumption that the modification work orders have been performed. *A* listing of current modification work orders will be found in DA Pam 310-4.

3-11. Dummy Load Construction and Use

A shop-constructed dummy load schematic diagram is shown in figure 3-2. With the dummy load connected as shown in figure 3-3, and the power supply connected to the proper ac source, close S1 and open S2. Set the 2-ampere adjust rheostat for a 2-ampere indication on the ME-87A/U. Leave S1 closed and close S2, and set the 10-ampere adjust rheostat for a 10-ampere indication on the ME-87A/U.

3-12. Physical Tests and Inspection

a. Test *Equipment and Materials.* Electric Light Assembly MX-1292/PAQ

b. Test Connections and Conditions.

(1) No connections necessary.

(2) Remove the power supply from it a case.

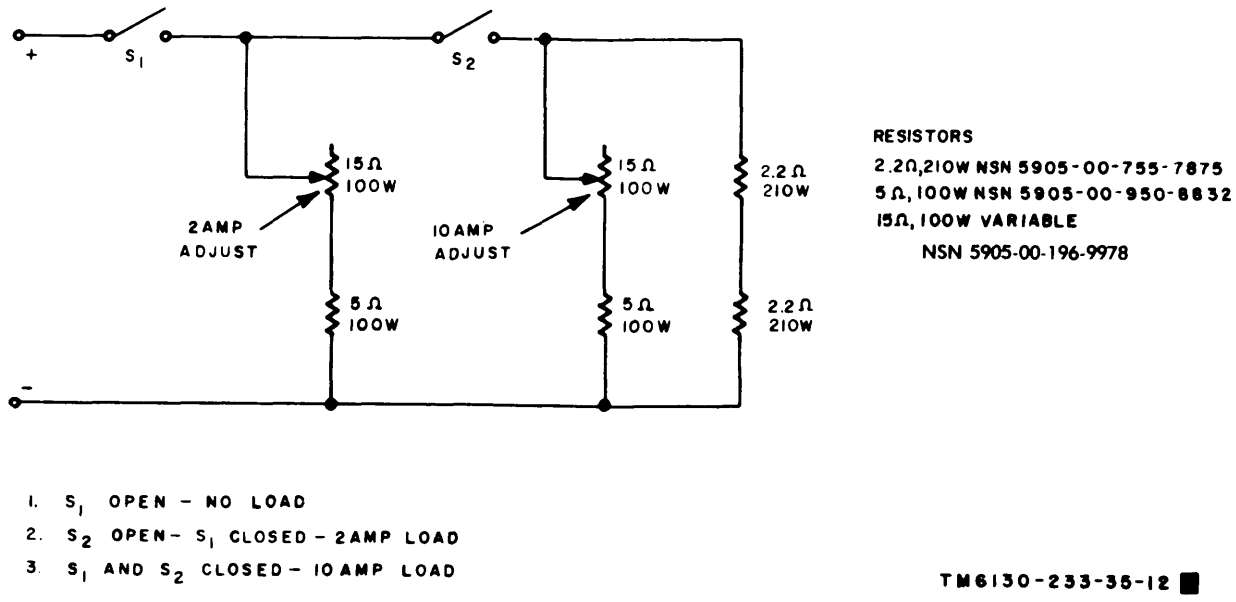

Figure 3-2. Dummy load, schematic diagram.

c. Procedure.

Step No.	*Control* settings: Test equipment	*Control* settings: Equipment under test	Test procedure	Performance standard
1	None	Controls may be in any positiom	*a.* Inspect case and chassis for damage or missing parts, and for condition of paint.	*a.* No damage evident or parts missing. External surfaces intended to be painted must not show bare metal. Panel lettering must be legible
			Note: **Touch painting is recommended in place of refinishing whenever practicable; do not paint or polish screwheads, binding posts, receptacles, and other plated parts with abrasives.**	
			b. Inspect all controls and mechanical assemblies for loose or missing screws, bolts, and nuts.	*b.* Screws, bolts, and nuts must be tight; none missing.
			c. Inspect all connectors, sockets, receptacles, and fuseholders for looseness, damage, or missing parts.	*a. No* loose parts or damage No missing parts.
2	None	Controls may be in any position.	*a* Rotate all panel controls throughout their limits of travel.	*a.* Controls must rotate freely, without binding or excessive looseness.
			b. Operate all switches	*b.* Switches must operate properly.
3	None	Controls may be in any position.	Manually turn fan blades of blower motor.	Fan blades must turn freely, without binding.
4	MX-1292/ PAQ Connect mercury vapor lamp.	Controls may be in any position.	Turn on mercury vapor lamp and expose portion of equipment that has been repaired or disturbed, to direct rays of lamp.	All repaired or disturbed electrical components and chassis surfaces must be coved with moisture-fungiproofing varnish. There must be no varnish on switch contacts or moving parts of mechanical assemablies. *Note:* Moisture-fungiproofing varnish glows gray green under rays of mercury vapor lamp.

3-13. Output Voltage and Overload Protection Tests

a. Test Equipment and Materials.
Multimeter TS-352/U.
Multimeter MS-37A/U.
Voltmeter, Meter ME-30A/U.
Tool Kit, Electronic Equipment TK-105/G.
Dummy load (para 3-11).

b. Test Connection and Condition. Connect the equipment as shown in figure 3-3.

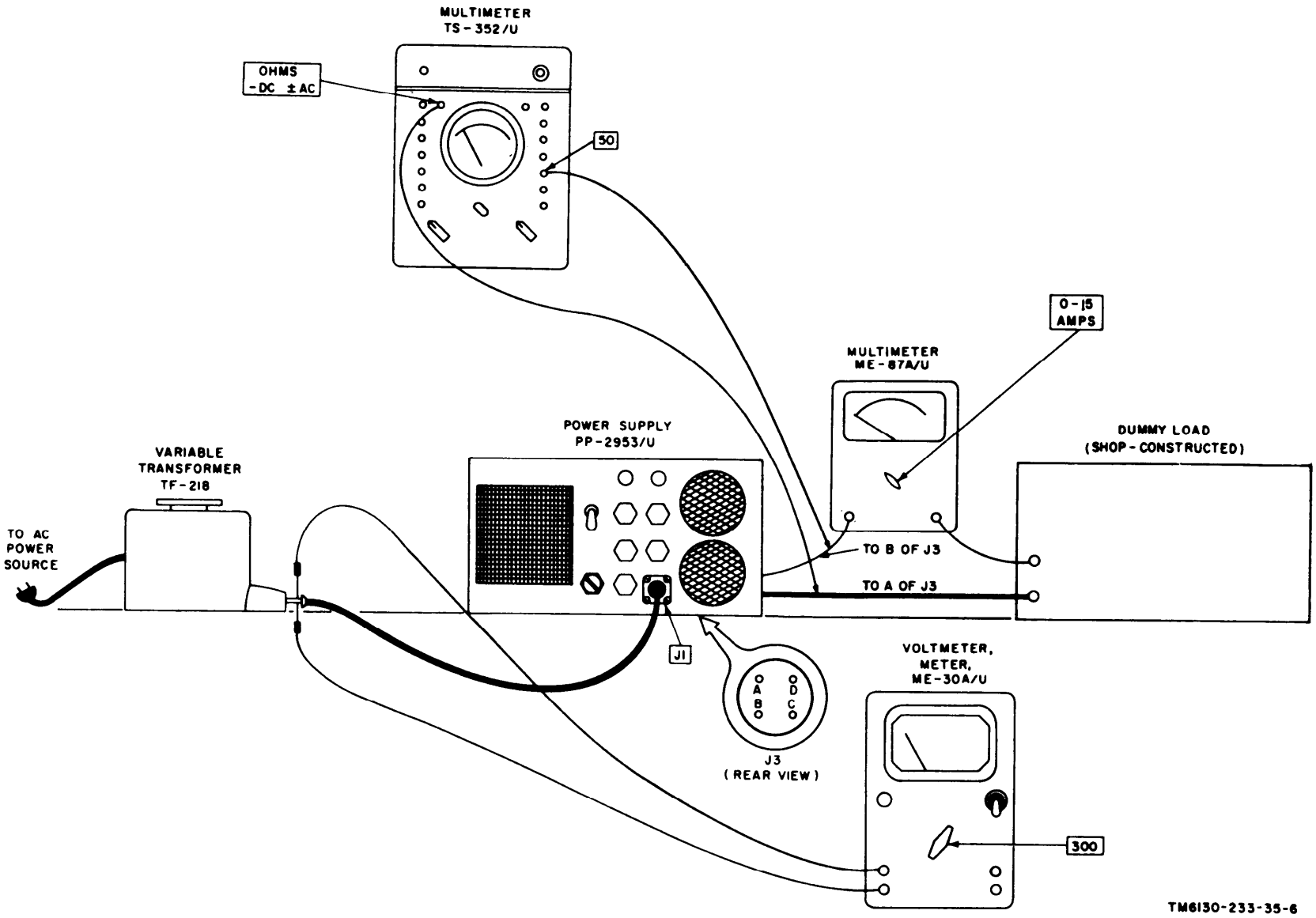

Figure 3-3. Power Supply PP-2953/U, test setup.

c. Procedure. The following procedure is applicable to Power Supply PP-2953/U.

Note. PP-2953B/U has circuit breakers instead of fuses.

Step No.	Control settings: Test equipment	Control settings: Equipment under test	Test procedure	Performance standard
1	*TF-218:* Voltage control to 115. *TS-352B/U* FUNCTION selector DIRECT. ME-30A/U **Range** selector switch: 300. ME-87A/U: Range selector switch: 0-15 AMPS. Dummy load: set for 2-ampere load.	POWER switch ON. Input voltage selector to correspond with ac power source being used.	Loosen locknut on R11 (fig. 2-1) and rotate until voltage measured by TS-352/U is 25.2 vdc. Tighten locknut.	None
2	Leave controls in positions last indicated in step 1.		Adjust voltage control of TF-218 for indication of 126.5 vac on ME-30A/U.	Indication on TS-352B/U must be 25.2 volts dc ± 10%.
3	Leave controls in positions last indicated in stetp 1.		Adjust voltage control of TF-218 for indication of 103.5 vac on ME-30A/U.	Indication on TS-352B/U must be 25.2 volts dc ±10%.
4	Leave controls in positions last indicated in step 1.		*a.* Adjust voltage control of TF-218 for indicatlon of 115 vac on ME-30A/U.	*a.* None.
			b. Set dummy load far 0-ampere indication on ME-87A/U.	*b.* Indication on TS-352B/U should continue to read 25.2 volts dc ±10%.
6	Leave controls in positions last Indicated in step 1.		Adjust dummy load for 10-ampere indication on ME-87A/U.	Indication on TS-352B/U must be 25.2 volts dc ±10%.
6	Leave controls in positions last indicated in step 1.		*a.* Adjust dummy load for 10-ampere Indication on ME-87A/U.	*a.* None.
			b. Slowly adjust dummy load (at rate of 0.1 ampere per second) until ME-87A/U indicates more than 10 amperes	b. AC ON indicator lamp must go out and ME-87A/U indication must drop to zero, indicating that protective DC 10A fuse has blown.

3-14. Test Data Summary

Note. PP-29153B/U has circuit breakers instead of fuses.

The test data are summarized as follows:

a. The 25.2-volt output must remain constant within 10 percent when the ac power source voltage is varied from 103.5 to 126.5 volts ac and the load varies from 0 to 10 amperes.

b. The 10-ampere output fuse must open-circuit when the load exceeds 10 amperes.

CHAPTER 4

DEPOT INSPECTION STANDARDS

4-1. Applicability of Depot Inspection Standards

The tests outlined in this chapter are designed to measure the performance capability of a repaired equipment. Equipment that is to be returned to stock should meet the standards given in these tests.

4-2. Applicable References

a. Repair Standards. The applicable procedures of the Army depot performing this test and its general standards for repaired electronic equipment form a part of the requirements for testing this equipment

b. Technical Publications. The following technical publication is applicable to this equipment: TM 11-6130233-12.

c. Modification Work Orders. Perform all modification work orders applicable to the equipment before making the tests specified. DA Pam 25-30 lists all available MWO's.

4-3 Test Facilities Required

The following facilities are required in determining compliance with requirement of this standard.

a. Test Equipment.

Equipment	*Technical manual*	*National stock No.*	Qty *reqd*
Multimeter TS-352B/U	**TM 11-625-366-15**	6625-00-242-5023	1
Multimeter ME-87A/U			1
Oscilloscope AN/USM-81	**TM 11-6626-219-12**	6625-00-701-4038	1
Voltmeter, Meter ME-30A/U	**TM 11-6625-320-12**	6625-00-669-0742	1

b. Additional Test Equipment.

Equipment	*National stock No.*	*Qty reqd*
Tool Kit, Radar and Radio Repairman, TK-87/U.		1
Transformer, Variable TF-218		1
Dummy load [a]		1

[a] Shop-constructed. See paragraph 3-11.

4-4. General Test Requirements

a. Most of the tests will be performed under the conditions given below and illustrated in figure 3-3. Testing will be simplified if connections and panel control set tings are made initially and modifications are made as required for individual tests.

b. Connect the equipment as shown in figure 3-3. In addition, connect the output of the power supply to charnel A or B of the oscilloscope.

Control	*Position*
Power supply	
POWER switch	ON.
Voltage selector switch	To correspond with ac power source.
7ransformer, Variable TF-218, or equal	l15 vac
Multimeter TS-352B/U	
FUNCTION selector	DIRECT, to measure 30 volts dc, maximum.
Voltmeter, Meter ME-30A/U	
Range selector switch	VOLTS 300.
POWER switch	ON.
Multimeter ME-87A/U	
Range selector	0-15 AMPS.
Dummy load	
Appropriate switch (para 3-11).	For a 2-ampere load.
Oscilloscope AN/USM-81	
TRIGGERING MODE	INT.
TIME/CM or DELAY TIME.	10 MILLI SEC.
DC-AC switch	AC.
VARIABLE VOLTS/ CM.	1 CALIBRATED.
POLARITY	NORMAL.
HORIZONTAL POSITION and VERTICAL POSITION.	Adjust both for centered display.
STABILITY TRIGGERING LEVEL.	Adjust until display just disappears.

4-5. Voltage Output Test

Connect the equipment as shown in figure 3-3 and set the controls according to paragraph 4-4b.

a. Loosen the locknut on resistor R11 (fig. 2-1).

b. Adjust R11 throughout its range while observing the indication on the TS-352B/U. The indication must vary from 22.7 to 27.7 volts dc. This test will again be performed with the voltage selector switch in the 230 V position and the input voltage at a nominal 230 vac from the line. After this test reconnect for 115 vac operation.

c. Adjust R11 for an indication of 25.2 volts.

d. Tighten the locknut on R11.

4-6. Voltage Regulation Test

Connect the equipment as shown in figure 3-3.

a. Adjust the TF-218 for an indication of 126.5 volts, 103.5 volts, and then 115 volts, as indicated on the ME-30A/U. For each voltage, the TS-352B/U indication must be 25.2 volts dc ± 10 percent.

b. Adjust the dummy load for an indication of 0 ampere, 2 amperes, and then 10 amperes, as indicated on the ME-87A/U. For each current, the indication on the TS-352 B/U must be 25.2 volts dc ± 10 percent. Decrease the ac input voltage until the EMER DC ON indicator light illuminates. The ac input voltage shall read 90 vac or less.

4-7. Overload Protection Test

Connect the equipment as shown in figure 3-3.

a. Adjust the dummy load for a 10-ampere load.

b. Slowly increase the load current until the AC ON indicator lamp goes out and the ME-87A/U indication drops to zero indicating the fuse has opened (PP-2953/U and PP-2953A/U) or the circuit breaker has tripped (PP-2953B/U and PP-2953 C/U).

NOTE

On PP-2953/U and PP-2953A/U models, it will require from 15-20 amperes for the fuse to open and on PP-2953B/U and PP-2953 C/U for the circuit breaker to trip.

4-8. Ripple Voltage Test

Set the controls according to paragraph 4-4 *b* and connect the equipment as shown in figure 3-3, except disconnect the ME-30A/U, set its range selector switch to 1, and connect it across the TS-352B/U.

a. Adjust the dummy load for a 10-ampere load.

b. Set the function selector of the ME-30-A/U to indicate ac volts.

c. Set the range selector switch on the ME-30A/U to 1.

d. The indication on the ME-30A/U must not exceed 0.12 volts.

4-9. Voltage Recovery Test

Connect the equipment as shown in figure 3-3 and set the controls according to paragraph 4-4b. Connect the vertical input of the AN/USM-81 across the output of the power supply.

a. Adjust the dummy load for a 2-ampere load.

b. Quickly adjust the dummy load from a 2-ampere load to a 10-ampere load, while observing the trace on the AN/USM-81. Repeat this step several times until the trace is clearly evaluated. The voltage output as indicated on the TS-352B/U must decrease sharply, and then recover to 25.2 volts within a maximum period of 150 milliseconds.

c. Adjust the dummy bad for a 10-ampere load

d. Quickly swim the dummy load from 10 amperes to 2 amperes while observing the trace on the AN/USM-81. Repeat this step several times until the TS-352B/U must rise to a value not to exceed 34 volts, and then recover to 25.2 volts within a maximum period of 150 milliseconds.

APPENDIX A

REFERENCES

Following is a list of references available to the general support and depot maintenance personnel of Power Supplies PP–2953/U, PP–2953A/U, PP–2953B/U, and PP–2953C/U.

DA Pam 25-30	Consolidated Index of Army Publications and B1ankForms.
DA Pam 738-750	The Army Maintenance Management System (TAMMS).
TM 11-6130-233-12	Operator's and Organizational Maintenance Manual: Power Supplies PP-2953/U,PP2953A/U, PP-2953B/U, and PP-2953C/U (NSN 6130-00-985-7899).
TM 11-6130-233-24P	Organizational, Direct Support, and General Support Maintenance Repair Parts and Special Tools Lists (Including Depot Maintenance Repair Parts and Special Tools): Power Supplies PP-2953/U,PP-2953A/U, PP-2953B/U, and PP-2953C/U (NSN6130-00-985-7899).
TM 11–6625-219-12	Organizational Maintenance Manual: Oscilloscope AN/USM-81.
TM 11-6625-219-20P	Organizational Maintenance Repair Parts and Special Tool Lists: Oscilloscope AN/USM–81.
TM 11-6625–219–35	DS, GS and Depot Maintenance Manual: Oscilloscope AN/USM–81.
TM 11-6625-320-12	Operator and Organizational Maintenance Manual: Voltmeter, Meter ME-30A/U and Voltmeters, Electronic ME-30B/U, ME-30C/U, and ME–30E/U.
TM 11-6625–320-25P	Organizational, DS, GS, and Depot Maintenance Repair Parts and Special Tools List: Voltmeters, Electronic ME-30A/U, ME-30B/U, ME-30C/U, and ME-30E/U.
TM 11-6625–320-35	DS, GS, and Depot Maintenance Manual: Voltmeter, Meter ME–30A/U and Voltmeters, Electronic ME-30 B/U and ME-30C/U.
TM 11-6625-366-15	Operator's, Organizational, DS, GS, and Depot Maintenance Manual: Multimeter TS-352B/U.
TM 11-6625-366-25P	Organizational, DS, GS, and Depot Maintenance Repair Parts, Multimeter TS-352B/U.
TM 11-6625–539-15	Operator, Organizational, Field and Depot Maintenance Manual: Test Set, Transistor TS-1836/U.
TM 11-6625-539-15-1	Organizational, DS, GS, and Depot Maintenance Manual, Including Repair Parts and Special Tool Lists: Test Set, Transistor TS-1836A/U.
TM 11-6625–539-15–2	Operator, Organizational, DS, GS, and Depot Maintenance Manual Including Repair Parts and Special Tool Lists: Test Set, Transistor TS-1836B/U.

TM 11-6625-539-20P	Organizational Maintenance Repair Parts and Special Tool Lists: Test Set, Transistor TS-1836/U.
TM 11-6625-539-45P	Field (fourth echelon) and Depot Maintenance Repair Parts and Special Tool Lists: Test Set, Transistor TS-1836/U.

APPENDIX B

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

Section I. INTRODUCTION

B-1. Scope

This appendix lists repair parts required for the performance of direct support, general support, and depot maintenance of the PP–2953/U, PP-2953A/U, PP-2953B/U, and PP-2953C/U.

NOTE

No special tools, test, or support equipment is required.

B-2. General

This Repair Parts 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 direct support, general support, and depot level.

b. Federal Stock Number and Reference Number Index-Section III. A list of Federal stock numbers in ascending numerical sequence followed by a list of reference numbers in ascending alpha-numeric sequence, cross-referenced to illustration figure number and item number.

c. Index-Reference Designation Cross-Reference to Page Number—Section IV. A list of reference designations cross-referenced to page numbers.

B-3. Explanation of Columns

The following provides an explanation of columns in the tabular lists:

a. Source, Maintenance, and Recoverability Codes (SMR).

(1) Source code indicates the selection status and source for the listed item. Source codes used are-

Code	*Explanation*
P	Repair parts which are stocked in or supplied form the GSA/DSA, or Army supply system, and authorized for use at indicated maintenance categories.
P2	Repair parts which are procured and stocked for insurance purposes because the combat or military essentiality of the end item dictates that a minimum quantity be available in the supply system.
P9	Assigned to items which are NSA design controlled: unique repair parts, special tools, test, measuring and diagnostic equipment, which are stocked and supplied by the Army COMSEC logistic system, and which are not subject to the provisions of AR 380-41.
P10	Assigned to items which are NSA design controlled: special tools, test, measuring and diagnostic equipment for COMSEC support, which are accountable under the provisions of AR 380-41, and which are stocked and supplied by the Army COMSEC logistic system.
M	Repair parts which are not procured or stocked, but are to be manufactured in indicated maintenance levels.
A	Assemblies which are not procured or stocked as such, but are made up of two or more units. Such component units carry individual stock numbers and descriptions, are procured and stocked separately, and can be assem-

Code	*Explanation*
	bled to form the required assembly at indicated maintenance categories.
X	Parts and assemblies which are not procured or stocked and the mortality of which normally is below that of the applicable end item or component. The failure of such part or assembly should result in retirement of the end item from the supply system.
Xl	Repair parts which are not procured or stocked. The requirement for such items will be filled by use of the next higher assembly or component.
X2	Repair parts which are not stocked. The indicated maintenance category requiring such repair parts will attempt to obtain same through cannibalization. Where such repair parts are not obtainable through cannibalization, requirements will be requisitioned, with accompanying justification, through normal supply channels.
G	Major assemblies that are procured with PEMA funds for initial issue only as exhange assemblies at DSU and GSU level. These assemblies will not be stocked above direct support and general support level or returned to depot supply level.

(2) Maintenance code indicates the lowest category of maintenance authorized to install the listed item. The maintenance level codes are-

Code	*Explanation*
C	Operator/crew
O	Organizational maintenance
F	Direct support maintenance
H	General support maintenance
D	Depot maintenance

(3) Recoverability code indicates whether unserviceable items should be returned for recovery or salvage. Items not coded are expendable. Recoverability codes are-

Code	*Explanation*
R	Repair parts and assemblies that are economically repairable at DSU activities and are normally furnished by supply on an exchange basis.
S	Repair parts and assemblies which are economically repairable at DSU and GSU activities and which normally are furnished by supply on an exchange basis. When items are determined by a GSU to be uneconomically repairable, they will be evacuated to a depot for evaluation and analysis before final disposition.
T	High dollar value recoverable repair parts which are subject to special handling and are issued on an exhange basis. Such repair parts normally are repaired or overhauled at depot maintenance activities.
U	Repair parts specifically selected for salvage by reclamation units, because of precious metal content, critical materials, or high dollar value reusable casings or castings.

b. Federal Stock Number. This column indicates the Federal stock number assigned to the item and will be used for requisitioning purposes.

c. Description. This column indicates the Federal item name and any additional description of the item required. The index number has been included as part of the description to aid in the location of “same as” items. A part number, or other reference number, is followed by the applicable five-digit Federal supply code for manufacturers in parentheses.

d. Unit of Measure (U/M). A two-character alphabetic abbreviation indicating the amount or quantity of the item upon which the allowances are based; e.g., ft, ea, pr, etc.

e. Quantity Incorporated in Unit. This column indicates the quantity of the item used in the PP-2953/U, PP-2953A/U, PP-2953B/U, and PP–2953C/U. Subsequent appearances of the same item in the same assembly are indicated by the letter "REF".

f. Allowances, 30-Day DS/GS Maintenance, 1 year Per Equipment (Contingency), and Depot Maintenance. Items authorized for requisition as required are identified by an asterisk in the allowance column.

g. Illustration. This column is divided as follows:

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

(2) *Item number or reference designation.* Indicates the reference designation used to identify the item in the illustration.

B-4. Special Information

a. Identifications of the usable on codes included in column 3 of this appendix are —

Code	*Used on*
1	PP-2953 / U
2	PP-2953A / U
3	PP-2953B / U
4	PP-2953C / U

b. Action change codes indicated in the left-hand margin of the listed page denote the following:

N — Indicates an added item
C — Indicates a change in data
R — Indicates a change in FSN only

B-5. Location of Repair Parts

a. This appendix contains two cross-reference indexes (see III and IV) to be used to locate a repair part when either the Federal stock number, reference number (manufacturer's part number), or reference designation is known. The first column in each index is prepared in numerical or alpha-numerical sequence in ascending order. Where a Federal stock number is not listed, refer to the reference number (manufacturer's part number) immediately following the Federal stock number.

b. When the Federal stock number or reference number is known. follow the procedures given in (1) and (2) below.

(1) Refer to the index of Federal stock numbers (see III) and locate the Federal stock number. The FSN is cross-referenced to the applicable figure and item or reference designation.

(2). When the reference designation is determined, refer to the reference designation index (see IV). The reference designations are listed in alpha-numerical ascending order and are cross-referenced to the page number on which they appear in the repair parts list (see II). Refer to the page number noted in the index and locate the reference designation in the repair parts list (COl 10 *b).* If the Description column indicates that it is a "SAME AS" item, locate the first appearance of the item by the index number referenced.

c. When the reference designation is known, follow the procedures given in *b* (a above.

d. When neither the Federal stock number, reference number, nor reference designation is known, identify the part in the illustration and follow directions given in c above, or scrutinize column 3 of the repair parts list (see II).

B-6. Federal Supply Codes for Manufacturers

Code	*Manufacturer*
02698	Rotating Components Div. of Instrument Systems Corp.
21070	Analytical Instruments, Inc
21071	Globe Plastics
72619	Dialight Cap.
72765	Drake Mfg. Co.
80063	Army Electronics
81349	Military Specifications
81350	Joint Amy-Navy Specifications
96906	Mlitary Standards

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(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(7) 30-DAY GS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(8) 1-YR ALW PER EQUIP CNTGCY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS (a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
A-F-S		A001 BASE PLATE ASSEMBLY: EM-D-450385 (80063)	1,2	EA	1									B-1	A1
X2-F	5305-543-5921	A002 SCREW, MACHINE: MS35273-79 (96906)	1,2	EA	6									B-2	A1H6
X2-F	5305-984-4988	A003 SCREW, MACHINE MS35223-28 (96906)	1,2	EA	2									B-2	A1H2
X2-F	5330-209-0786	A004 WASHER, LOCK: MS35335-33 (96906)	1,2	EA	6									B-2	A1H6
X2-F	5310-579-0079	A005 WASHER, LOCK MS35333-37 (96906)	1,2	EA	2									B-2	A1H2
P-F	5910-999-4172	A006 CAPACITOR, FIXED, ELECTROLYTIC: MS35223-28 (96906)	1,2	EA	1	*	*	*	*	*	*	*	*	B-2	A1H2
P-F	5910-053-0443	A007 CAPACITOR, FIXED, ELECTROLYTIC: CE71C701H (81349)	1,2	EA	1	*	*	*	*	*	*	*	*	B-1	A1C2
P-F	5910-909-7402	A008 CAPACITOR, FIXED, PAPER DTELECTRIC: SM-B-450411 (80063)	1,2		1	*	*	*	*	*	*	*	*	B-1	A1C1
X2-F	5305-229-4989	A009 SCREW, MACHINE: MS35206-229 (96906)	1,2	EA	8									B-1	A1C1H2
X2-F	5940-827-2653	A010 TERMINAL LUG: MS77068-2 (96906)	1,2	EA	2									B-1	A1C1E1
X2-F	5310-209-0788	A011 WASHER, LOCK: MS35335-30 (96906)	1,2	EA	21									B-1	A1C1H2
M-D		A012 PLATE, MOUNTING, ELECTRONIC COMPONENTS: SM-D-450394 (80063)	1,2	EA	1									B-1	A1MP1
P-F	5950-891-8677	A013 REACTOR: SM-C-450410 (80063)	1,2	EA	1	*	*	*	*	*	*	*	*	B-1	A1L1
X2-F	5305-984-6193	A014 SCREW, MACHINE: MS35206-245 (96906)	1,2	EA	7									B-1	A1L1H4
X2-F	5310-982-6831	A015 WASHER, FLAT: MS27183-37 (96906)	1,2	EA	4									B-1	A1L1H4
X2-F	5310-045-3299	A016 WASHER, SPRING TENSION: MS35338-42 (96906)	1,2	EA	7									B-1	A1L1H4
A-F-S		A017 RECTIFIER AND REGULATOR ASSEMBLY: EM-C-450388 (80063)	1,2	EA	1									B-1	A1A1
X2-F	5305-984-6193	A018 SCREW, MACHINE: SAME AS A014	1,2	EA	REF									B-1	A1A1H2
X2-F	5310-045-3299	A019 WASHER, SPRING TENSION: SAME AS A016	1,2	EA	REF									B-1	A1A1H2
A-F-S		A020 CIRCUIT CARD ASSEMBLY: SM-C-450418 (80063)	1,2	EA	1									B-3	A1A1A1
X2-F	5310-934-9747	A021 NUT, PLAIN, HEXAGON: MS35649-262 (96906)	1,2	EA	14									B-3	A1A1H3
X2-F	5305-984-6222	A022 SCREW, MACHINE: MS35206-235 (96906)	1,2	EA	3									B-3	A1A1A1H3
M-D		A023 SPACER, SLEEVE: SM-C-450388-1 (80063)	1,2	EA	3									B-3	A1A1A1MP3
X2-F	5310-209-0788	A024 WASHER, LOCK: SAME AS A011	1,2	EA	REF									B-3	A1A1A1H3
P-F	5910-080-8474	A025 CAPACITOR, FIXED, ELECTROLYTIC: CSR13G105K1 (81349)	1,2	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1C5
P-F	5910-469-5603	A026 CAPACITOR, FIXED, ELECTROLYTIC: CSR13G225ML (81349)	1,2	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1C4
P-F	6130-451-6154	A027 PRINTED WIRING BOARD: SM-D-450415 (80063)	1,2	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1TB1
P-F	5905-185-8518	A028 RESISTOR, FIXED, COMPOSITION:	1,2	EA	1	*	*	*	*	*	*	*	*	B-1	A1A1A1R7

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(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(7) 30-DAY GS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(8) 1-YR ALW PER EQUIP CNTGCY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS (a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
P-F	5905-195-6817	A029 RESISTOR, FIXED, COMPOSITION: RC20GF102K (81349)	1,2	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1R2
P-F	5905-171-2009	A030 RESISTOR, FIXED, COMPOSITION: RC20GF122K (81349)	1,2	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1R8
P-F	5905-195-6809	A031 RESISTOR, FIXED, COMPOSITION: RC20GF222K (81349)	1,2	EA	2	*	*	*	*	*	*	*	*	B-4	A1A1A1R9
P-F	5905-195-6809	A032 RESISTOR, FIXED, COMPOSITION: SAME AS A031	1,2	EA	REF	*	*	*	*	*	*	*	*	B-4	A1A1A1R10
P-F	5905-171-2005	A033 RESISTOR, FIXED, COMPOSITION: RC20GF471K (81349)	1,2	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1R12
P-F	5905-502-9691	A034 RESISTOR, FIXED, COMPOSITION: RC32GF2R7K (81349)	1,2	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1R4
P-F	5905-279-1722	A035 RESISTOR, FIXED, COMPOSITION: RC320F102K (81349)	1,2	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1R1
P-F	5905-299-2053	A036 RESISTOR, FIXED, COMPOSITION: RC32GF221K (81349)	1,2	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1R3
P-F	5905-272-3444	A037 RESISTOR, FIXED, COMPOSITION: RC42GF221K (81349)	1,2	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1R6
P-F	5961-577-6214	A038 SEMICONDUCTOR DEVICE, DIODE: 1N538 (81349)	1,2	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1CR5
P-F	5961-804-9845	A039 SEMICONDUCTOR DEVICE, DIODE: 1N752A (81349)	1,2	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1CR7
P-F	5961-850-9438	A040 SEMICONDUCTOR DEVICE DIODE: 1N3033B (81349)	1,2	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1CR6
P-F	5961-821-8976	A041 TRANSISTOR: 2M297A (81349)	1,2	EA	2	*	*	*	*	*	*	*	*	B-4	A1A1A1Q3
X2-F	5310-934-9748	A042 NUT, PLAIN, HEXAGON: MS35649-244 (96906)	1,2	EA	2									B-4	A1A1A1Q3H2
X2-F	5305-054-5649	A043 SCREW, MACHINE: MS35223-15 (96906)	1,2	EA	2									B-4	A1A1A1Q3H2
X2-F	5310-782-1349	A044 WASHER, FLAT: MS15795-804 (96906)	1,2	EA	2									B-4	A1A1A1Q3H2
X2-F	5310-058-3599	A045 WASHER, LOCK: MS35335-57 (96906)	1,2	EA	2								*	B-4	A1A1A1Q3H2
P-F	5961-752-5229	A046 TRANSISTOR: 2N404 (81349)	1,2	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1Q2
P-F	5961-837-7262	A047 TRANSISTOR: 2N697 (81349)	1,2		1	*	*	*	*	*	*	*	*	B-4	A1A1A1Q1
A-F-S		A048 ELECTRONIC COMPONENTS ASSEMBLY: SM-C-450404 (80063)	1,2	EA	1									B-3	A1A1A2
P-F	5910-851-6485	A049 CAPACITOR, FIXED, ELECTROLYTIC: SM-B-450414 (80063)	1,2	EA	1	*	*	*	*	*	*	*	*	B-5	A1A1A2C6
X2-F	5310-934-9747	A050 NUT, PLAIN, HEXAGON: SAME AS A021	1,2	EA	REF									B-5	A1A1A2C6H1
X2-F	5305-984-4988	A051 SCREW, MACHINE: SAME AS A003	1,2	EA	2									B-5	A1A1A2C6H1
X2-F	5310-209-0788	A052 WASHER, LOCK: SAME AS A011	1,2	EA	REF									B-5	A1A1A2C6H1
M-D		A053 PLATE, MOUNTING ELECTRONIC COMPONENTS: SM-C-45038T (80063)	1,2	EA	1									B-5	A1A1A2MP1
M-D		A054 BRACKET, ANGLE: SM-B-450407 (80063)	1,2	EA	1									B-5	A1A1A2MP1MP2
X2-F	5310-934-9747	A055 NUT, PLAIN, HEXAGON: SAME AS A021	1,2	EA	REF									B-5	A1A1A1A2MP1MP2H1
X2-F	5305-984-4988	A056 SCREW, MACHINE: SAME AS A051	1,2	EA	REF									B-5	A1A1A2MP1MP2H1

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(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(7) 30-DAY GS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(8) 1-YR ALW PER EQUIP CNTGCY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS (a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
X2-F	5310-082-1404	A057 WASHER, FLAT: MS27183-6 (96906)	1,2	EA	6									B-5	A1A1A2MP1MP2H1
X2-F	5945-728-0617	A058 WASHER, LOCK: SAME AS A011	1,2	EA	REF									B-5	A1A1A2MP1MP2H1
P-F	5945-728-0617	A059 RELAY, ARMATURE: SM-B-450413 (80063)	1,2	EA	1	*	*	*	*	*	*	*	*	B-5	A1A1A2K1
X2-F	5310-934-9747	A060 NUT, PLAIN, HEXAGON: SAME AS A021	1,2	EA	REF									B-5	A1A1A2K1H3
X2-F	5310-209-0788	A061 WASHER, LOCK: SAME AS A011	1,2	EA	REF									B-5	A1A1A2K1H3
P-F	5905-721-2639	A062 RESISTOR, VARIABLE: RA20LAS8751A (81349)	1,2	EA	1	*	*	*	*	*	*	*	*	B-5	A1A1A2R11
P-F	5961-935-0138	A063 SEMICONDUCTOR DEVICE, DIODE: 1N1202 (81349)	1,2	EA	4	*	*	*	*	*	*	*	*	B-5	A1A1A2CR1
X2-F	5310-934-9751	A064 NUT, PLAIN, HEXAGON: MS35650-302 (96906)	1,2	EA	4									B-5	A1A1A2CR1H1
X2-F	5940-681-8184	A065 TERMINAL, LUG: MS35431-8 (96906)	1,2	EA	4									B-5	A1A1A2CR1E1
X2-F	5310-809-8546	A066 WASHER, FLAT: MS27183-8 (96906)	1,2	EA	4									B-5	A1A1A2CR1H2
X2-F	5310-596-7691	A067 WASHER, LOCK: MS35335-32 (96906)	1,2	EA	4									B-5	A1A1A2CR1H1
P-F	5961-935-0138	A068 SEMICONDUCTOR DEVICE, DIODE: SAME AS A063	1,2	EA	REF	*	*	*	*	*	*	*	*	B-5	A1A1A2CR2
X2-F	5310-934-9751	A069 NUT, PLAIN, HEXAGON: SAME AS A064	1,2	EA	REF									B-5	A1A1A2CR2H1
X2-F	5940-681-8184	A070 TERMINAL, LUG: SAME AS A065	1,2	EA	REF										A1A1A2CR2E1
X2-F	5310-809-8546	A071 WASHER, FLAT: SAME AS A066	1,2	EA	REF									B-5	A1A1A2CR2H1
X2-F	5310-596-7691	A072 WASHER, LOCK: SAME AS A067	1,2	EA	REF									B-5	A1A1A2CR2H1
P-F	5961-935-0138	A073 SEMICONDUCTOR DEVICE, DIODE: SAME AS A063	1,2	EA	REF	*	*	*	*	*	*	*	*	B-5	A1A1A2CR3
X2-F	5310-934-9751	A074 NUT, PLAIN, HEXAGON: SAME AS A064	1,2	EA	REF									B-5	A1A1A2CR3H1
X2-F	5940-681-8184	A075 TERMINAL, LUG: SAME AS A065	1,2	EA	REF									B-5	A1A1A2CR3E1
X2-F	5310-809-8546	A076 WASHER, FLAT: SAME AS A066	1,2	EA	REF										A1A1A2CR3H1
X2-F	5310-596-7691	A077 WASHER, LOCK SAME AS A067	1,2	EA	REF										A1A1A2CR3H1
P-F	5961-935-0138	A078 SEMICONDUCTOR DEVICE, DIODE: SAME AS A063	1,2	EA	REF	*	*	*	*	*	*	*	*	B-5	A1A1A2CR4
X2-F	5310-934-9751	A079 NUT, PLAIN, HEXAGON: SAME AS A064	1,2	EA	REF									B-5	A1A1A2CR4H1
X2-F	5940-681-8184	A080 TERMINAL, LUG: SAME AS A065	1,2	EA	REF										A1A1A2CR4E1
X2-F	5310-809-8546	A081 WASHER, FLAT: SAME AS A066	1,2	EA	REF									B-5	A1A1A2CR4H1
X2-F	5310-596-7691	A082 WASHER, LOCK: SAME AS A067	1,2	EA	REF									B-5	A1A1A2CR4H1
P-F	5961-821-8976	A083 TRANSISTOR: SAME AS A041	1,2	EA	REF	*	*	*	*	*	*	*	*	B-5	A1A1A2Q4
X2-F	5310-934-9739	A084 NUT, PLAIN, HEXAGON: MS35649-242 (96906)	1,2	EA	2									B-5	A1A1A2Q4H2
X2-F	5305-889-2989	A085 SCREW, MACHINE: MS35206-217 (96906)	1,2	EA	2									B-5	A1A1A2Q4H2

SECTION II. REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(7) 30-DAY GS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(8) 1-YR ALW PER EQUIP CNTGCY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS (a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
X2-F	5940-681-8183	A086 TERMINAL, LUG: MS35431-2 (96906)	1,2	EA	1									B-5	A1A1A2Q4E1
X2-F	5310-951-4679	A087 WASHER, FLAT: MS27183-3 (96906)	1,2	EA	2									B-5	A1A1A2Q4H2
X2-F	5310-616-3554	A088 WASHER, LOCK: MS35335-29 (96906)	1,2	EA	2									B-5	A1A1A2Q4H2
P-F	5905-844-2256	A089 RESISTOR, FIXED, WIREWOUND: RW32V151 (81349)	1,2	EA	1	*	*	*	*	*	*	*	*	B-1	A1R5
X2-F	5305-984-6203	A090 SCREW, MACHINE: MS35206-255 (96906)	1,2	EA	1									B-1	A1R5H1
X2-F	5310-982-6580	A091 WASHER, FLAT: MS27183-7 (96906)	1,2	EA	2									B-1	A1R5H2
X2-F	5310-045-3299	A092 WASHER, SPRING TENSION: SAME AS A016	1,2	EA	REF									B-1	A1R5H1
P-F	5910-966-2375	A093 RETAINER, CAPACITOR: SM-B-450392-1 (80063)	1,2	EA	1	*	*	*	*	*	*	*	*	B-1	A1MP3
X2-F	5310-934-9747	A094 NUT, PLAIN, HEXAGON: SAME AS A021	1,2	EA	REF									B-1	A1MP3H1
X2-F	5305-229-4989	A095 SCREW, MACHINE: SAME AS A009	1,2	EA	REF									B-1	A1MP3H3
X2-F	5305-889-3001	A096 SCREW, MACHINE: MS35206-231 (96906)	1,2	EA	2									B-1	A1MP3H1
X2-F	5310-082-1404	A097 WASHER, FLAT: SAME AS A057	1,2	EA	REF									B-1	A1MP3H3
X2-F	5310-209-0788	A098 WASHER, LOCK: SAME AS A011	1,2	EA	REF									B-1	A1MP3H4
P-F	5910-682-2543	A099 RETAINER, CAPACITOR: SM-B-450423 (80063)	1,2	EA	1	*	*	*	*	*	*	*	*	B-1	A1MP2
X2-F	5310-934-9747	A100 NUT, PLAIN, HEXAGON: SAME AS A021	1,2	EA	REF									B-1	A1MP2H1
X2-F	5305-229-4989	A101 SCREW, MACHINE: SAME AS A009	1,2	EA	REF									B-1	A1MP2H2
X2-F	5305-889-3001	A102 SCREW, MACHINE: SAME AS A096	1,2	EA	REF									B-1	A1MP2H1
X2-F	5310-082-1404	A103 WASHER, FLAT: SAME AS A057	1,2	EA	REF									B-1	A1MP2H2
X2-F	5310-209-0788	A104 WASHER, LOCK: SAME AS A011	1,2	EA	REF									B-1	A1MP2H1
P-F	5950-059-3060	A105 TRANSFORMER, POWER, STEPDOWN: SM-C-391736 (80063)	1,2	EA	1	*	*	*	*	*	*	*	*	B-1	A1T1
X2-F	5305-988-1724	A106 SCREW, MACHINE: MS35206-280 (96906)	1,2	EA	4									B-1	A1T1H4
X2-F	5310-809-4058	A107 WASHER, FLAT: MS27183-10 (96906)	1,2	EA	4									B-1	A1T1H4
X2-F	5310-582-5965	A108 WASHER, SPRING TENSION: MS35338-44 (96906)	1,2	EA	4									B-1	A1T1H4
P-F	5961-902-3444	A109 TRANSISTOR: SM-B-450422 (80063)	1,2	EA	1	*	*	*	*	*	*	*	*	B-2	A1Q5
M-D		A110 WIRING HARNESS, BRANCHED: SM-D-450426 (80063)	1,2	EA	1									B-6	A1W1
X2-F	5340-422-2594	A111 CLAMP, LOOP: SM-B-350038 (80063)	1,2	EA	4									B-1	A1W1MP4
X2-F	5310-934-9747	A112 NUT, PLAIN, HEXAGON: SAME AS A021	1,2	EA	REF									B-1	A1W1MP4H4
X2-F	5305-088-9044	A113 SCREW, MACHINE: MS35207-260 (96906)	1,2	EA	4									B-1	A1W1MP4H4
X2-F	5940-827-2653	A114 TERMINAL, LUG: SAME AS A010	1,2	EA	REF									B-1	A1W1E1

SECTION II. REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE		USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(7) 30-DAY GS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(8) 1-YR ALW PER EQUIP CNTGCY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS (a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
X2-F	5305-229-4989	A115	SCREW, MACHINE SAME AS A009	1,2	EA	REF									B-1	A1W1E1H1
X2-F	5310-045-3296	A116	WASHER, LOCK: SAME AS A011	1,2	EA	REF									B-1	A1W1H4
X2-F	5310-045-3296	A117	WASHER, SPRING TENSION: MS35338-43 (96906)	1,2	EA	4									B-1	A1W1H4
A-F-S		A118	BASE PLATE ASSEMBLY: SM-D-350041 (80063)	3	EA	1									B-1	A1
X2-F	5305-988-1724	A119	SCREW, MACHINE: SAME AS A106	3	EA	10									B-2	A1H6
X2-F	5310-582-5965	A120	WASHER, SPRING TENSION: SAME AS A108	3	EA	10									B-2	A1H6
X2-F	5305-229-4989	A121	SCREW, MACHINE SAME AS A009	3	EA	4									B-2	A1H2
X2-F	5310-082-1404	A122	WASHER, FLAT: SAME AS A057	3	EA	12									B-2	A1H2
X2-F	5310-209-0788	A123	WASHER, LOCK: SAME AS A011	3	EA	25									B-2	A1H2
P-F	5910-889-4412	A124	CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A006	3	EA	1	*	*	*	*	*	*	*	*	B-2	A1C3
P-F	5910-053-0443	A125	CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A007	3	EA	1	*	*	*	*	*	*	*	*	B-2	A1C2
P-F	5910-909-7402	A126	CAPACITOR, FIXED, PAPER DIELECTRIC: SAME AS A008	3	EA	1	*	*	*	*	*	*	*	*	B-1	A1C1
X2-F	5305-229-4989	A127	SCREW, MACHINE: SAME AS A009	3	EA	REF									B-1	A1C1H2
X2-F	5940-827-2653	A128	TERMINAL, LUG: SAME AS A010	3	EA	2									B-1	A1C1E1
X2-F	5310-209-0788	A129	WASHER, LOCK: SAME AS A011	3	EA	REF									B-1	A1C1H2
M-D		A130	PLATE, MOUNTING, ELECTRONIC COMPONENTS: SM-D-450395 (80063)	3	EA	1									B-1	A1MP1
P-F	5950-891-8677	A131	REACTOR: SAME AS A013	3	EA	1	*	*	*	*	*	*	*	*	B-1	A1L1
X2-F	5305-984-6193	A132	SCREW, MACHINE: SAME AS A014	3	EA	6									B-1	A1L1H4
X2-F	5310-982-6831	A133	WASHER, FLAT: SAME AS A015	3	EA	4									B-1	A1L1H4
X2-F	5310-045-3299	A134	WASHER, SPRING TENSION: SAME AS A016	3	EA	10									B-1	A1L1H4
A-F-S		A135	RECTIFIER AND REGULATOR ASSEMBLY: SAME AS A017	3	EA	1									B-1	A1A1
X2-F	5305-984-6193	A136	SCREW, MACHINE: SAME AS A014	3	EA	REF									B-3	A1A1H3
X2-F	5310-045-3299	A137	WASHER, SPRING TENSION: SAME AS A016	3	EA	REF									B-3	A1A1H3
A-F-S		A138	CIRCUIT CARD ASSEMBLY: SAME AS A020	3	EA	1									B-4	A1A1A1
X2-F	5310-934-9747	A139	NUT, PLAIN, HEXAGON SAME AS A021	3	EA	16									B-3	A1A1A1H3
X2-F	5305-984-6222	A140	SCREW, MACHINE: SAME AS A022	3	EA	3									B-3	A1A1A1H3
M-D		A141	SPACER, SLEEVE: SAME AS A023	3	EA	3									B-3	A1A1A1MP3

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X2-F	5310-209-0788	A142	WASHER, LOCK: SAME AS A011	3	EA	REF									B-3	A1A1A1H3
P-F	5910-469-5603	A143	CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A025	3	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1C5
P-F	5910-469-5603	A144	CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A026	3	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1C4
P-F	5961-454-3050	A145	MOUNTING PAD: 10086-1 (21071)	3	EA	2	*	*	*	*	*	*	*	*	B-4	A1A1A1Q2MP1
P-F	5961-454-3050	A146	MOUNTING PAD: SAME AS A145	3	EA	REF	*	*	*	*	*	*	*	*	B-4	A1A1A1Q1MP1
P-F	6130-456-1852	A147	PRINTED WIRING BOARD: SM-D-450420 (80063)	3	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1TB1
P-F	5905-195-6817	A148	RESISTOR, FIXED, COMPOSITION: SAME AS A029	3	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1R2
P-F	5905-185-8518	A149	RESISTOR, FIXED, COMPOSITION: SAME AS A028	3	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1R7
P-F	5905-171-2009	A150	RESISTOR, FIXED, COMPOSITION: SAME AS A030	3	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1R8
P-F	5905-195-6809	A151	RESISTOR, FIXED, COMPOSITION: SAME AS A031	3	EA	2	*	*	*	*	*	*	*	*	B-4	A1A1A1R9
P-F	5905-195-6809	A152	RESISTOR, FIXED, COMPOSITION: SAME AS A031	3	EA	REF	*	*	*	*	*	*	*	*	B-4	A1A1A1R10
P-F	5905-171-2005	A153	RESISTOR, FIXED, COMPOSITION: SAME AS A033	3	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1R12
P-F	5905-502-9691	A154	RESISTOR, FIXED, COMPOSITION: SAME AS A034	3	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1R4
P-F	5905-279-1722	A155	RESISTOR, FIXED, COMPOSITION: SAME AS A035	3	EA	2	*	*	*	*	*	*	*	*	B-4	A1A1A1R1
P-F	5905-279-1722	A156	RESISTOR, FIXED, COMPOSITION: SAME AS A035	3	EA	REF	*	*	*	*	*	*	*	*	B-4	A1A1A1R3
P-F	5905-272-3444	A157	RESISTOR, FIXED, COMPOSITION: SAME AS A037	3	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1R6
P-F	5961-577-6214	A158	SEMICONDUCTOR DEVICE, DIODE: SAME AS A038	3	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1CR5
P-F	5961-804-9845	A159	SEMICONDUCTOR DEVICE, DIODE: SAME AS A039	3	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1CR7
P-F	5961-850-9438	A160	SEMICONDUCTOR DEVICE, DIODE: SAME AS A040	3	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1CR6
P-F	5961-821-8976	A161	TRANSISTOR: SAME AS A041	3	EA	2	*	*	*	*	*	*	*	*	B-4	A1A1A1Q3
X2-F	5310-934-9748	A162	NUT, PLAIN, HEXAGON: SAME AS A042	3	EA	2									B-4	A1A1A1Q3H2
X2-F	5305-054-5649	A163	SCREW, MACHINE: SAME AS A043	3	EA	2									B-4	A1A1A1Q3H2
X2-F	5310-550-3715	A164	WASHER, LOCK: MS35333-70 (96906)	3	EA	2									B-4	A1A1A1Q3H2
P-F	5961-752-5229	A165	TRANSISTOR: SAME AS A046	3	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1Q2
P-F	5961-837-7262	A166	TRANSISTOR: SAME AS A047	3	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1Q1
A-F-S		A167	ELECTRONIC COMPONENTS ASSEMBLY: SAME AS A048	3	EA	1									8-3	A1A1A2
P-F	5910-851-6485	A168	CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A049	3	EA	1	*	*	*	*	*	*	*	*	B-5	A1A1A2C6
X2-F	5310-934-9747	A169	NUT, PLAIN, HEXAGON: SAME AS A021	3	EA	REF									B-5	A1A1A2C6H1

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X2-F	5305-984-4989	A170	SCREW, MACHINE: MS35225-29 (96906)	3	EA	1									B-5	A1A1A2C6H1
X2-F	5310-209-0788	A171	WASHER, LOCK: SAME AS A011	3	EA	REF									B-5	A1A1A2C6H1
H-D		A172	PLATE, MOUNTING, ELECTRONIC: COMPONENTS: SM-C-450405 (80063)	3	EA	1									B-5	A1A1A2MP1
H-D		A173	BRACKET, ANGLE: SAME AS A054	3	EA	1									B-5	A1A1A2MP1MP2
X2-F	5310-934-9747	A174	NUT, PLAIN, HEXAGON: SAME AS A021	3	EA	REF									B-5	A1A1A2MP1MP2H1
X2-F	5305-984-4988	A175	SCREW, MACHINE: SAME AS A051	3	EA	1									B-5	A1A1A2MP1MP2H1
X2-F	5310-082-1404	A176	WASHER, FLAT: SAME AS A057	3	EA	REF									B-5	A1A1A2MP1MP2H1
X2-F	5310-209-0788	A177	WASHER, LOCK: SAME AS A011	3	EA	REF									B-5	A1A1A2MP1MP2H1
P-F	5945-728-0617	A178	RELAY, ARMATURE: SAME AS A059	3	EA	1	*	*	*	*	*	*	*	*	B-5	A1A1A2K1
X2-F	5310-934-9747	A179	NUT, PLAIN, HEXAGON: SAME AS A021	3	EA	REF									B-5	A1A1A2K1H3
X2-F	5310-209-0788	A180	WASHER, LOCK: SAME AS A011	3	EA	REF									B-5	A1A1A2K1H3
P-F	5905-721-2639	A181	RESISTOR, VARIABLE: SAME AS A062	3	EA	1	*	*	*	*	*	*	*	*	B-5	A1A1A2R11
P-F	5961-935-0138	A182	SEMICONDUCTOR, DEVICE DIODE: SAME AS A063	3	EA	4	*	*	*	*	*	*	*	*	B-5	A1A1A2CR1
P-F	5961-935-0138	A183	SEMICONDUCTOR DEVICE, DIODE: SAME AS A063	3	EA	REF	*	*	*	*	*	*	*	*	B-5	A1A1A2CR2
P-F	5961-935-0138	A184	SEMICONDUCTOR DEVICE, DIODE: SAME AS A063	3	EA	REF	*	*	*	*	*	*	*	*	B-5	A1A1A2CR3
P-F	5961-935-0138	A185	SEMICONDUCTOR DEVICE, DIODE: SAME AS A063	3	EA	REF	*	*	*	*	*	*	*	*	B-5	A1A1A2CR4
X2-F	5940-681-8183	A186	TERMINAL, LUG: SAME AS A086	3	EA	2									B-5	A1A1A2CR1E1
P-F	5961-821-8976	A187	TRANSISTOR: SAME AS A041	3	EA	REF	*	*	*	*	*	*	*	*	B-5	A1A1A2Q4
X2-F	5310-934-9747	A188	NUT, PLAIN, HEXAGON: SAME AS A021	3	EA	REF									B-5	A1A1A2Q4H2
X2-F	5305-889-3001	A189	SCREW, MACHINE: SAME AS A096	3	EA	7									B-5	A1A1A2Q4H2
X2-F	5940-681-8183	A190	TERMINAL, LUG: SAME AS A086	3	EA	REF									B-5	A1A1A2Q4E1
X2-F	5310-082-1404	A191	WASHER, FLAT: SAME AS A057	3	EA	REF									B-5	A1A1A2Q4H2
X2-F	5310-209-0788	A192	WASHER, LOCK: SAME AS A011	3	EA	REF									B-5	A1A1A2Q4H2
P-F	5905-844-2256	A193	RESISTOR, FIXED, WIREWOUND: SAME AS A089	3	EA	1	*	*	*	*	*	*	*	*	B-1	A1R5
X2-F	5305-984-6203	A194	SCREW, MACHINE: SAME AS A090	3	EA	1									B-1	A1R5H1
X2-F	5310-982-6580	A195	WASHER, FLAT: SAME AS A091	3	EA	2									B-1	A1R5H2
X2-F	5310-045-3299	A196	WASHER, SPRING TENSION: SAME AS A016	3	EA	REF									B-1	A1R5H1
P-F	5910-966-2375	A197	RETAINER, CAPACITOR: SAME AS A093	3	EA	1	*	*	*	*	*	*	*	*	B-1	A1HP3

SECTION II. REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(7) 30-DAY GS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(8) 1-YR ALW PER EQUIP CNTGCY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS (a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
X2-F	5310-934-9747	A198 NUT, PLAIN, HEXAGON: SAME AS A021	3	EA	REF									B-1	A1MP3H1
X2-F	5305-889-3001	A199 SCREW, MACHINE: SAME AS A096	3	EA	REF									B-1	A1MP3H4
X2-F	5305-984-4989	A200 SCREW, MACHINE: SAME AS A170	3	EA	REF									B-1	A1MP3H3
X2-F	5310-082-1404	A201 WASHER, FLAT: SAME AS A057	3	EA	REF									B-1	A1MP3H3
X2-F	5310-209-0788	A202 WASHER, LOCK: SAME AS A011	3	EA	REF									B-1	A1MP3
P-F	5910-682-2543	A203 RETAINER, CAPACITOR: SAME AS A099	3	EA	1	*	*	*	*	*	*	*	*	B-1	A1MP2
X2-F	5310-934-9747	A204 NUT, PLAIN, HEXAGON: SAME AS A021	3	EA	REF									B-1	A1MP2H1
X2-F	5305-889-3001	A205 SCREW, MACHINE: SAME AS A096	3	EA	REF									B-1	A1MP2H1
X2-F	5305-984-4989	A206 SCREW, MACHINE: SAME AS A170	3	EA	REF									B-1	A1MP2H2
X2-F	5310-082-1404	A207 WASHER, FLAT: SAME AS A057	3	EA	REF									B-1	A1MP2H2
X2-F	5310-209-0788	A208 WASHER, LOCK: SAME AS A011	3	EA	REF									B-1	A1MP2H3
P-F	5950-059-3060	A209 TRANSFORMER, POWER, STEPDOWN: SAME AS A105	3	EA	1	*	*	*	*	*	*	*	*	B-1	A1T1
X2-F	5305-988-1724	A210 SCREW, MACHINE: SAME S A106	3	EA	REF									B-1	A1T1H4
X2-F	5310-809-4058	A211 WASHER, FLAT: SAME AS A107	3	EA	4									B-1	A1T1H4
X2-F	5310-582-5965	A212 WASHER, SPRING TENSION: SAME AS A108	3	EA	REF									B-1	A1T1H4
P-F	5961-902-3444	A213 TRANSISTOR: SAME AS A109	3	EA	1	*	*	*	*	*	*	*	*	B-2	A1Q5
M-D		A214 WIRING HARNESS, BRANCHED: SM-D-350048 (80063)	3	EA	1									B-6	A1W1
X2-F	5340-422-2594	A215 CLAMP, LOOP: SAME AS A111	3	EA	1									B-1	A1W1MP4
X2-F	5310-934-9747	A216 NUT, PLAIN, HEXAGON: SAME AS A021	3	EA	REF									B-1	A1W1MP4H4
X2-F	5305-984-4989	A217 SCREW, MACHINE: SAME AS A170	3	EA	REF									B-1	A1W1MP4H4
X2-F	5305-088-9044	A218 SCREW, MACHINE: SAME AS A113	3	EA	4									B-1	A1W1MP4H4
X2-F	5940-827-2653	A219 TERMINAL, LUG: SAME AS A010	3	EA	REF									B-1	A1W1E1
X2-F	5305-984-4989	A220 SCREW, MACHINE: SAME AS A170	3	EA	REF									B-1	A1W1E1H1
X2-F	5310-209-0788	A221 WASHER, LOCK: SAME AS A011	3	EA	REF									B-1	A1W1H4
X2-F	5310-045-3296	A222 WASHER, SPRING TENSION: SAME AS A117	3	EA	4										A1W1H4
A-F-S		A223 BASE PLATE ASSEMBLY: SM-D-391731 (80063)	4	EA	1									B-1	A1
X2-F	5305-543-5923	A224 SCREW, MACHINE: SAME AS A002	4	EA	6									B-2	A1H4
X2-F	5310-209-0786	A225 WASHER, LOCK: SAME AS A004	4	EA	10									B-2	A1H6
P-F	5910-053-0443	A226 CAPACITOR, FIXED, ELECTROLYTIC:	4	EA	1	*	*	*	*	*	*	*	*	B-1	A102

SECTION II. REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE		USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(7) 30-DAY GS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(8) 1-YR ALW PER EQUIP CNTGCY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS (a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
P-F	5910-889-4412	A227	CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A006	4	EA	1	*	*	*	*	*	*	*	*	B-1	A1C3
P-F	5910-909-7402	A228	CAPACITOR, FIXED, PAPER DIELECTRIC: SAME AS A008	4	EA	1	*	*	*	*	*	*	*	*	B-1	A1C1
X2-F	5305-229-4989	A229	SCREW, MACHINE: SAME AS A009	4	EA	5									B-1	A1C1H2
X2-F	5940-050-2308	A230	TERMINAL, LUG: MS35431-3 (96906)	4	EA	2									B-1	A1C1E1
X2-F	5310-982-6580	A231	WASHER, FLAT: SAME AS A091	4	EA	20									B-1	A1C1H2
X2-F	5310-209-0788	A232	WASHER, LOCK: SAME AS A011	4	EA	15									B-1	A1C1H2
M-D		A233	PLATE, MOUNTING, ELECTRONIC COMPONENTS: SM-D-391739 (80063)	4	EA	1									B-1	A1MP1
P-F	5950-891-8677	A234	REACTOR: SAME AS A013	4	EA	1	*	*	*	*	*	*	*	*	B-1	A1L1
X2-F	5305-984-6192	A235	SCREW, MACHINE: MS35206-244 (96906)	4	EA	6									B-1	A1L1H4
X2-F	5310-982-6580	A236	WASHER, FLAT: SAME AS A231	4	EA	REF									B-1	A1L1H4
X2-F	5310-596-7693	A237	WASHER, LOCK: MS35335-31 (96906)	4	EA	7									B-1	A1L1H4
A-F-S		A238	RECTIFIER AND REGULATOR ASSEMBLY: SM-C-391737 (80063)	4	EA	1									B-1	A1A1
X2-F	5305-984-6192	A239	SCREW, MACHINE: SAME AS A235	4	EA	REF									B-1	A1A1H2
X2-F	5310-596-7693	A240	WASHER, LOCK: SAME AS A237	4	EA	REF									B-1	A1A1H2
A-F-S		A241	CIRCUIT CARD ASSEMBLY: SM-C-391734 (80063)	4	EA	1									B-3	A1A1A1
X2-F	5310-934-9747	A242	NUT, PLAIN, HEXAGON: SAME AS A021	4	EA	10									B-3	A1A1A1H3
X2-F	5305-984-6223	A243	SCREW, MACHINE: MS35206-236 (96906)	4	EA	3									B-3	A1A1A1H3
M-H		A244	SPACER, SLEEVE: SM-C-391737-1 (80063)	4	EA	3									B-3	A1A1A1MP3
X2-F	5310-209-0788	A245	WASHER, LOCK: SAME AS A011	4	EA	REF									B-3	A1A1A1H3
P-F	5910-080-8474	A246	CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A025	4	EA	2	*	*	*	*	*	*	*	*	B-4	A1A1A1C4
P-F	5910-080-8474	A247	CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A025	4	EA	REF	*	*	*	*	*	*	*	*	B-4	A1A1A1C5
P-F	5970-431-3599	A248	MOUNTING PAD: SM-C-391734-1 (80063)	4	EA	2	*	*	*	*	*	*	*	*	B-4	A1A1A1Q2MP1
P-F	5970-431-3599	A249	MOUNTING PAD: SAME AS A248	4	EA	REF	*	*	*	*	*	*	*	*	B-4	A1A1A1Q2MP1
P-F	6130-456-1852	A250	PRINTING WIRING BOARD: SAME AS A147	4	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1TB1
P-F	5905-195-6817	A251	RESISTOR, FIXED, COMPOSITION: SAME AS A029	4	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1R2
P-F	5905-185-8518	A252	RESISTOR, FIXED, COMPOSITION: SAME AS A028	4	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1R7
P-F	5905-171-2009	A253	RESISTOR, FIXED, COMPOSITION: SAME AS A030	4	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1R8
P-F	5905-195-6809	A254	RESISTOR, FIXED, COMPOSITION: SAME AS A031	4	EA	2	*	*	*	*	*	*	*	*	B-4	A1A1A1R9

SECTION II. REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE		USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(7) 30-DAY GS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(8) 1-YR ALW PER EQUIP CNTGCY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS (a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
P-F	5905-171-2009	A255	RESISTOR, FIXED, COMPOSITION: SAME AS A030	4	EA	REF	*	*	*	*	*	*	*	*	B-4	A1A1A1R10
P-F	5905-171-2005	A256	RESISTOR, FIXED, COMPOSITION: SAME AS A033	4	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1R12
P-F	5905-279-1722	A257	RESISTOR, FIXED, COMPOSITION: SAME AS A034	4	EA	2	*	*	*	*	*	*	*	*	B-4	A1A1A1R4
P-F	5905-279-1722	A258	RESISTOR, FIXED, COMPOSITION: SAME AS A035	4	EA	REF	*	*	*	*	*	*	*	*	B-4	A1A1A1R1
P-F	5905-279-1722	A259	RESISTOR, FIXED, COMPOSITION: SAME AS A035	4	EA	REF	*	*	*	*	*	*	*	*	B-4	A1A1A1R3
P-F	5905-272-3444	A260	RESISTOR, FIXED, COMPOSITION: SAME AS A037	4	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1R6
P-F	5961-577-6214	A261	SEMICONDUCTOR DEVICE, DIODE: SAME AS A038	4	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1CR5
P-F	5961-804-9845	A262	SEMICONDUCTOR DEVICE, DIODE: SAME AS A039	4	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1CR7
P-F	5961-850-9438	A263	SEMICONDUCTOR DEVICE, DIODE: SAME AS A040	4	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1CR6
P-F	5961-821-8976	A264	TRANSISTOR: SAME AS A041	4	EA	2	*	*	*	*	*	*	*	*	B-4	A1A1A1Q3
X2-F	5310-934-9748	A265	NUT, PLAIN, HEXAGON: SAME AS A042	4	EA	2									B-4	A1A1A1Q3H2
X2-F	5305-054-5649	A266	SCREW, MACHINE: SAME AS A043	4	EA	2									B-4	A1A1A1Q3H2
X2-F	5310-782-1349	A267	WASHER, FLAT: SAME S A044	4	EA	2									B-4	A1A1A1Q3H2
X2-F	5310-058-3599	A268	WASHER, LOCK: SAME AS A045	4	EA	2									B-4	A1A1A1Q3H2
P-F	5961-752-5229	A269	TRANSISTOR: SAME AS A046	4	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1Q2
P-F	5961-837-7262	A270	TRANSISTOR: SAME AS A047	4	EA	1	*	*	*	*	*	*	*	*	B-4	A1A1A1Q1
A-F-S		A271	ELECTRONIC COMPONENTS: ASSEMBLY: SM-C-391732 (80063)	4	EA	1									B-3	A1A1A2
P-F	5910-851-6485	A272	CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A049	4	EA	1	*	*	*	*	*	*	*	*	B-5	A1A1A2C6
X2-F	5310-934-9747	A273	NUT, PLAIN, HEXAGON: SAME AS A021	4	EA	REF									B-5	A1A1A2C6H1
X2-F	5305-984-4988	A274	SCREW, MACHINE: SAME AS A051	4	EA	2									B-5	A1A1A2C6H1
X2-F	5310-209-0788	A275	WASHER, LOCK: SAME AS A011	4	EA	REF									B-5	A1A1A2C6H1
M-D		A276	PLATE, MOUNTING, ELECTRONIC COMPONENTS: SM-C-391738 (80063)	4	EA	1									B-5	A1A1A2MP1
X2-F		A277	BRACKET, ANGLE: SAME AS A054	4	EA	1									B-5	A1A1A2MP1MP2
X2-F	5310-934-9747	A278	NUT, PLAIN, HEXAGON: SAME AS A021	4	EA	REF									B-5	A1A1A2MP1MP2H1
X2-F	5305-984-4988	A279	SCREW, MACHINE: SAME AS A051	4	EA	REF									B-5	A1A1A2MP1MP2H 1
X2-F	5310-982-6580	A280	WASHER, FLAT: SAME AS A231	4	EA	REF									B-5	A1A1A2MP1MP2H1
X2-F	5310-209-0788	A281	WASHER, LOCK: SAME AS A011	4	EA	REF									B-5	A1A1A2MP1MP2H1
P-F	5945-728-0617	A282	RELAY, ARMATURE:	4	EA	1	*	*	*	*	*	*	*	*	B-5	A1A1A2K1

SECTION II. REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE		USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(7) 30-DAY GS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(8) 1-YR ALW PER EQUIP CNTGCY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS (a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
X2-F	5310-934-9747	A283	NUT, PLAIN, HEXAGON: SAME AS A021	4	EA	REF									B-5	A1A1A2K1H3
X2-F	5310-209-0788	A284	WASHER, LOCK: SAME AS A011	4	EA	REF									B-5	A1A1A2K1H3
P-F	5905-721-2639	A285	RESISTOR, VARIABLE: SAME AS A062	4	EA	1	*	*	*	*	*	*	*	*	B-5	A1A1A2R11
X2-F	5310-550-2329	A286	NUT, PLAIN, HEXAGON: MS25082-7 (96906)	4	EA	1									B-5	A1A1A2R11H1
X2-F	5310-595-7237	A287	WASHER, LOCK: MS35333-42 (96906)	4	EA	1									B-5	A1A1A2R11H1
P-F	5961-935-0138	A288	SEMICONDUCTOR DEVICE, DIODE: SAME AS A063	4	EA	4	*	*	*	*	*	*	*	*	B-5	A1A1A2CR1
X2-F	5310-934-9751	A289	NUT, PLAIN, HEXAGON: SAME AS A064	4	EA	4									B-5	A1A1A2CR1H1
X2-F	5940-681-8184	A290	TERMINAL, LUG: SAME AS A065	4	EA	4									B-5	A1A1A2CR1E1
X2-F	5310-596-7691	A291	WASHER, LOCK: SAME AS A067	4	EA	4									B-5	A1A1A2CR1H1
P-F	5961-935-0138	A292	SEMICONDUCTOR DEVICE, DIODE: SAME AS A063	4	EA	REF	*	*	*	*	*	*	*	*	B-5	A1A1A2CR2
X2-F	5310-934-9751	A293	NUT, PLAIN, HEXAGON: SAME AS A064	4	EA	REF									B-5	A1A1A2CR2H1
X2-F	5940-681-8184	A294	TERMINAL, LUG: SAME AS A065	4	EA	REF										A1A1A2CR2E1
X2-F	5310-596-7691	A295	WASHER, LOCK: SAME AS A067	4	EA	REF									B-5	A1A1A2CR2H1
P-F	5961-935-0138	A296	SEMICONDUCTOR DEVICE, DIODE: SAME AS A063	4	EA	REF	*	*	*	*	*	*	*	*	B-5	A1A1A2CR3
X2-F	5310-934-9751	A297	NUT, PLAIN, HEXAGON: SAME AS A064	4	EA	REF									B-5	A1A1A2CR3H1
X2-F	5940-681-8184	A298	TERMINAL, LUG: SAME AS A065	4	EA	REF									B-5	A1A1A2CR3E1
X2-F	5310-596-7691	A299	WASHER, LOCK: SAME AS A067	4	EA	REF									B-5	A1A1A2CR3H1
P-F	5961-935-0138	A300	SEMICONDUCTOR DEVICE, DIODE: SAME AS A063	4	EA	REF	*	*	*	*	*	*	*	*	B-5	A1A1A2CR4
X2-F	5310-936-9751	A301	NUT, PLAIN, HEXAGON: SAME AS A064	4	EA	REF									B-5	A1A1A2CR4H1
X2-F	5940-681-8184	A302	TERMINAL, LUG: SAME AS A065	4	EA	REF									B-5	A1A1A2CR4E1
X2-F	5310-596-7691	A303	WASHER, LOCK: SAME AS A067	4	EA	REF									B-5	A1A1A2CR4H1
P-F	5961-821-8976	A304	TRANSISTOR: SAME AS A041	4	EA	REF	*	*	*	*	*	*	*	*	B-5	A1A1A2Q4
X2-F	5310-934-9747	A305	NUT, PLAIN, HEXAGON: SAME AS A021	4	EA	REF									B-5	A1A1A2Q4H1
X2-F	5305-889-2989	A306	SCREW, MACHINE: SAME AS A085	4	EA	2									B-5	A1A1A2Q4H2
X2-F	5940-681-8183	A307	TERMINAL, LUG: SAME AS A086	4	EA	1									B-5	A1A1A2Q4E1
X2-F	5310-982-6580	A308	WASHER, FLAT: SAME AS A231	4	EA	REF									B-5	A1A1A2Q4H2
X2-F	5310-596-7691	A309	WASHER, LOCK: SAME AS A067	4	EA	REF									B-5	A1A1A2Q4H1
X2-F	5310-616-3554	A310	WASHER, LOCK: SAME AS A088	4	EA	2									B-5	A1A1A2Q4H2
P-F	5905-844-2256	A311	RESISTOR, FIXED, WIREWOUND: SAME AS A089	4	EA	1	*	*	*	*	*	*	*	*	B-1	A1R5

SECTION II. REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE		USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(7) 30-DAY GS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(8) 1-YR ALW PER EQUIP CNTGCY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS (a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
X2-F	5305-984-6202	A312	SCREW, MACHINE: MS35206-254	4	EA	1									B-5	A1R5H1
X2-F	5310-982-6580	A313	WASHER, FLAT: SAME AS A231	4	EA	REF									B-5	A1R5H2
X2-F	5310-596-7693	A314	WASHER, LOCK: SAME AS A237	4	EA	REF									B-5	A1R5H1
P-F	5910-682-2548	A315	RETAINER, CAPACITOR: SM-D-450392-2 (80063)	4	EA	1	*	*	*	*	*	*	*	*	B-5	A1MP2
X2-F	5310-934-9747	A316	NUT, PLAIN, HEXAGON: SAME AS A021	4	EA	REF									B-5	A1MP2H1
X2-F	5305-598-4992	A317	SCREW, MACHINE: MS35206-232 (96906)	4	EA	5									B-5	A1MP2H4
X2-F	5940-050-2308	A318	TERMINAL, LUG: SAME AS A230	4	EA	REF									B-1	A1MP2H1
X2-F	5310-982-6580	A319	WASHER, FLAT: SAME AS A231	4	EA	REF									B-5	A1MP2H2
X2-F	5310-209-0788	A320	WASHER, LOCK: SAME AS A011	4	EA	REF									B-5	A1MP2H3
X2-F	5310-514-6674	A321	WASHER, LOCK: MS35335-34 (96906)	4	EA	2									B-5	A1MP2H1
P-F	5910-966-2375	A322	RETAINER, CAPACITOR: SAME AS A093	4	EA	1	*	*	*	*	*	*	*	*	B-5	A1MP3
X2-F	5310-934-9747	A323	NUT, PLAIN, HEXAGON: SAME AS A021	4	EA	REF									B-5	A1MP3H1
X2-F	5305-598-4992	A324	SCREW, MACHINE: SAME AS A317	4	EA	REF									B-5	A1MP3H1
X2-F	5305-229-4989	A325	SCREW, MACHINE: SAME AS A009	4	EA	REF									B-5	A1MP3H3
X2-F	5310-982-6580	A326	WASHER, FLAT: SAME AS A231	4	EA	REF									B-5	A1MP3H3
X2-F	5310-209-0788	A327	WASHER, LOCK: SAME AS A011	4	EA	REF									B-5	A1MP3H3
X2-F	5310-514-6674	A328	WASHER, LOCK: SAME AS A321	4	EA	REF									B-5	A1MP3H1
P-F	5950-059-3060	A329	TRANSFORMER, POWER, STEPDOWN: SAME AS A105	4	EA	1	*	*	*	*	*	*	*	*	B-1	A1T1
X2-F	5305-988-1725	A330	SCREW, MACHINE: MS35206-281 (96906)	4	EA	4									B-5	A1T1H4
X2-F	5310-982-6580	A331	WASHER, FLAT: SAME AS A231	4	EA	REF									B-5	A1T1H4
X2-F	5310-209-0786	A332	WASHER, LOCK: SAME AS A004	4	EA	REF									B-1	A1T1H4
M-H		A333	WIRING HARNESS, BRANCHED: SM-D-391747 (80063)	4	EA	1									B-5	A1W1
X2-F	5940-683-4339	A334	TERMINAL, LUG: MS35431-7 (96906)	4	EA	4									B-1	A1W1E1
X2-F	5305-990-6444	A335	SCREW, MACHINE: MS35207-261 (96906)	4	EA	4									B-1	A1W1E1H1
X2-F	5310-596-7691	A336	WASHER, LOCK: SAME AS A067	4	EA	REF									B-1	A1E1H1
X2-F	5940-683-4339	A337	TERMINAL, LUG: SAME AS A334	4	EA	REF										A1W1E4
X2-F	5305-990-6444	A338	SCREW, MACHINE: SAME AS A335	4	EA	REF										A1W1H4
X2-F	5310-596-7691	A339	WASHER, LOCK: SAME AS A067	4	EA	REF										A1W1H4

SECTION II. REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	USABLE ON CODE		(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(7) 30-DAY GS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(8) 1-YR ALW PER EQUIP CNTGCY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS (a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
A-C-S	5995-985-7900	A340	CABLE ASSEMBLY, POWER, ELECTRICAL CX-4524/U	1, 2, 3, 4	EA	1									B-7	W2
P-F	6145-504-1015	A341	CABLE, POWER, ELECTRICAL: C0-03MGF(3/16)0365 (81349)	1, 2, 3, 4	EA	1	*	*	*	*	*	*	*	*	B-7	W2W1
P-F	5935-931-7490	A342	CONNECTOR, PLUG, ELECTRICAL: UP121M (81349)	1, 2, 3, 4	EA	1	*	*	*	*	*	*	*	*	B-7	W2P1
P-F	5935-901-8871	A343	CONNECTOR, PLUG, ELECTRICAL: MS3116F12-35 (96906)	1, 2, 3, 4	EA	1	*	*	*	*	*	*	*	*	B-7	W2P2
M-D		A344	SLEEVE MARKER CABLE: SC-A-21825-4 (80063)	1, 2, 3, 4	EA	2									B-7	W2MP1
M-D		A345	SLEEVE MARKER CABLE: SM-B-165914 (80063)	1, 2, 3, 4	EA	REF									B-7	W2MP2
P-C-S	5995-823-2725	A346	CABLE ASSEMBLY, POWER: ELECTRICAL CX-4721/VRC	1, 2, 3, 4	EA	1	*	*	*	*	*	*	*	*	B-8	W1
P-F	6145-016-8765	A347	CABLE, POWER, ELECTRICAL: C0-04MDF(4/18)0360 (81349)	1, 2, 3, 4	EA	1	*	*	*	*	*	*	*	*	B-8	W1W1
P-F	5935-891-9152	A348	CONNECTOR, PLUG, ELECTRICAL: SC-DL-346249 (80063)	1, 2, 3, 4	EA	1	*	*	*	*	*	*	*	*	B-8	W1P1
P-F	5935-891-9153	A349	CONNECTOR, PLUG, ELECTRICAL: SC-DL-346250 (80063)	1, 2, 3, 4	EA	1	*	*	*	*	*	*	*	*	B-8	W1P2
M-D		A350	SLEEVE MARKER, CABLE: SAME AS A345	1, 2, 3, 4	EA	1									B-8	W1MP1
A-F-S		A351	FRONT COVER ASSEMBLY: SM-D-450389 (80063)	1, 2	EA	1									B-9	A2
X2-F	6130-230-3746	A352	COVER, FRONT: SM-D-450397 (80063)	1, 2	EA	1									B-9	A2MP1
P-F	5305-930-6279	A353	SCREW, EXTERNALLY RELIEVED BODY: SM-D-450417 (80063)	1, 2	EA	2	*	*	*	*	*	*	*	*	B-9	A2MP1H2
M-D		A354	PLATE, IDENTIFICATION: SM-C-450400 (80063)	1, 2	EA	1									B-9	A2MP2
X2-F	5305-052-8878	A355	SCREW, TAPPING, THREAD CUTTING: MS24630-9 (96906)	1, 2	EA	4									B-9	A2MP2H4
M-D		A356	PLATE, INSTRUCTION: SM-C-450399 (80063)	1, 2	EA	1									B-9	A2MP3
P-F	5330-419-3145	A357	SEAL, RUBBER ROUND SECTION: SM-B-450398 (80063)	1, 2	EA	1	*	*	*	*	*	*	*	*	B-9	A2MP4
A-F-S		A358	FRONT COVER ASSEMBLY: SM-D-350043 (80063)	3	EA	1									B-9	A2
X2-F	6130-409-9055	A359	COVER, POWER SUPPLY: SM-D-350034 (80063)	3	EA	1									B-9	A2MP1
P-F	5305-930-6279	A360	SCREW, EXTERNALLY RELIEVED BODY: SAME AS A353	3	EA	2	*	*	*	*	*	*	*	*	B-9	A2MP1H2
M-D		A361	PLATE, IDENTIFICATION: SM-C-350052 (80063)	3	EA	1									B-9	A2MP2
X2-F	5305-813-9580	A362	SCREW, SELF TAPPING: MS24650-10 (96906)	3	EA	4									B-9	A2MP2H4
M-D		A363	PLATE, INSTRUCTION: SAME AS A356	3	EA	1									B-9	A2MP3
P-F	5330-419-3145	A364	SEAL, RUBBER ROUND SECTION: SAME AS A357	3	EA	1	*	*	*	*	*	*	*	*	B-9	A2MP4
A-F-S		A365	FRONT COVER ASSEMBLY: SM-D-391743 (80063)	4	EA	1									B-9	A2
X2-F	6130-230-3746	A366	COVER, FRONT: SAME AS A352	4	EA	1									B-9	A2MP1
P-F	5305-475-2244	A367	SCREW, EXTERNALLY RELIEVED BODY: SM-B-391745 (80063)	4	EA	2	*	*	*	*	*	*	*	*	B-9	A2MP1H2

SECTION II. REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(7) 30-DAY GS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(8) 1-YR ALW PER EQUIP CNTGCY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS (a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
M-D		A368 PLATE, IDENTIFICATION: SM-C-391801 (80063)	4	EA	1									B-9	A2MP2
X2-F	5305-813-9580	A369 SCREW, SELF TAPPING: SAME AS A362	4	EA	4									B-9	A2MP2H4
M-D		A370 PLATE, INSTRUCTION: SM-C-391802 (80063)	4	EA	1									B-9	A2MP3
P-F	5330-470-2240	A371 SEAL, RUBBER ROUND SECTION: SM-B-391744 (80063)	4	EA	1	*	*	*	*	*	*	*	*	B-9	A2MP4
A-O-S		A372 FRONT PANEL ASSEMBLY: SM-D-450384 (80063)	1, 2	EA	1									B-10	A3
X2-F	5305-984-4988	A373 SCREW, MACHINE: SAME AS A003	1, 2	EA	8									B-10	A3H6
X2-F	5310-579-0079	A374 WASHER, LOCK: SAME AS A005	1, 2	EA	9									B-10	A3H6
P-F	5910-822-5683	A375 CAPACITOR, FIXED, CERAMIC DIELECTRIC: CK63AW103M (81349)	1, 2	EA	2	*	*	*	*	*	*	*	*	B-11	A3C7
P-F	5910-822-5683	A376 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A375	1, 2	EA	REF	*	*	*	*	*	*	*	*	B-11	A3C8
X2-F	5940-614-0537	A377 TERMINAL, LUG: MS35431-1 (96906)	1, 2	EA	1									B-11	A3C7C8E1
P-F	5935-879-1813	A378 CONNECTOR, RECEPTACLE, ELECTRICAL: MS3116E12-3P (96906)	1, 2	EA	1	*	*	*	*	*	*	*	*	B-11	A3J1
X2-F	5310-934-9739	A379 NUT, PLAIN, HEXAGON: SAME AS A084	1, 2	EA	10									B-11	A3J1H4
X2-F	5305-054-5649	A380 SCREW MACHINE: SAME AS A043	1, 2	EA	14									B-11	A3J1H4
X2-F	5310-616-3554	A381 WASHER, LOCK: SAME AS A088	1, 2	EA	14									B-11	A3J1H4
P-F	6105-985-8202	A382 FAN, CIRCULATING BRACKET: SM-C-450391 (80063)	1, 2	EA	1	*	*	*	*	*	*	*	*	B-11	A3B1
X2-F	5310-934-9747	A383 NUT, PLAIN, HEXAGON: SAME AS A021	1, 2	EA	4									B-11	A3B1H4
X2-F	5305-059-4553	A384 SCREW, MACHINE: MS35190-238 (96906)	1, 2	EA	4									B-11	A3B1H4
X2-F	5310-905-9865	A385 WASHER, LOCK: MS35336-30 (96906)	1, 2	EA	4									B-11	A3B1H4
X1-F		A386 IMPELLAR, FAN, CIRCULATING BRACKET: 702B-83C CW (02598)	1, 2	EA	1									B-12	A3B1MP1
X1-F		A387 SETSCREW: No. 10-32X1/4INSTL (02598)	1, 2	EA	2										A3B1MP1H2
X1-F		A388 MOTOR, ALTERNATING CURRENT: 6-11400 (02598)	1, 2	EA	1									B-12	A3B1B2
X1-F		A389 SCREW, MACHINE: 62-43-1413 (02598)	1, 2	EA	3									B-12	A3B1B2H3
X2-F	5310-579-0079	A390 WASHER, LOCK: SAME AS A005	1, 2	EA	REF									B-12	A3B1B2H3
X1-F		A391 VENTURI: 718-478 (02598)	1, 2	EA	1									B-12	A3B1MP2
M-D		A392 FRONT PANEL: SM-C-450403 (80063)	1, 2	EA	1									B-11	A3MP1
P-C	5920-296-1517	A393 FUSE, CARTRIDGE: F03A250V3A (81349)	1, 2	EA	4	*	*	*	*	*	*	*	*	B-11	A3F1
P-C	5920-296-1517	A394 FUSE, CARTRIDGE: SAME AS A393	1, 2	EA	REF	*	*	*	*	*	*	*	*	B-11	A3F2

SECTION II. REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(7) 30-DAY GS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(8) 1-YR ALW PER EQUIP CNTGCY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS (a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
P-C	5920-296-1517	A395 FUSE, CARTRIDGE: SAME AS A393	1, 2	EA	REF	*	*	*	*	*	*	*	*	B-11	A3F3
P-C	5920-296-1517	A396 FUSE, CARTRIDGE: SAME AS A393	1, 2	EA	REF	*	*	*	*	*	*	*	*	B-11	A3F4
P-C	5920-912-9191	A397 FUSE, CARTRIDGE: F03B32V12A (81349)	1, 2	EA	1	*	*	*	*	*	*	*	*	B-11	A3F5
P-F	5920-892-9311	A398 LAMPHOLDER: FHN26G (81349)	1, 2	EA	5	*	*	*	*	*	*	*	*	B-11	A3XF1
P-F	5920-892-9311	A399 LAMPHOLDER: SAME AS A398	1, 2	EA	REF	*	*	*	*	*	*	*	*	B-11	A3XF2
P-F	5920-892-9311	A400 LAMPHOLDER: SAME AS A398	1, 2	EA	REF	*	*	*	*	*	*	*	*	B-11	A3XF3
P-F	5920-892-9311	A401 LAMPHOLDER: SAME AS A398	1, 2	EA	REF	*	*	*	*	*	*	*	*	B-11	A3XF4
P-F	5920-892-9311	A402 LAMPHOLDER: SAME AS A398	1, 2	EA	REF	*	*	*	*	*	*	*	*	B-11	A3XF5
P-C	6240-155-7836	A403 LAMP, INCANDESCENT: MS25237-327 (96906)	1, 2	EA	2	*	*	*	*	*	*	*	*	B-11	A3DS1
P-C	6240-155-7836	A404 LAMP, INCANDESCENT: SAME AS A403	1, 2	EA	REF	*	*	*	*	*	*	*	*	B-11	A3DS2
P-O	6210-990-4637	A405 LENS, INDICATOR, LIGHT: LC12RN (81349)	1, 2	EA	1	*	*	*	*	*	*	*	*	B-11	A3XDS1MP1
P-O	6210-079-8943	A406 LENS, INDICATOR, LIGHT: LC12GN (81349)	1, 2	EA	1	*	*	*	*	*	*	*	*		A3XDS2MP1
P-F	6210-813-8265	A407 LIGHT, INDICATOR: LH73-1 (81349)	1, 2	EA	2	*	*	*	*	*	*	*	*	B-11	A3XDS1
P-F	6210-813-8265	A408 LIGHT, INDICATOR: SAME AS A407	1, 2	EA	REF	*	*	*	*	*	*	*	*	B-11	A3XDS2
M-D		A409 METAL, EXPANDED: SM B-450421 (80063)	1, 2	EA	1									B-11	A3MP2
X2-F	5310-934-9739	A410 NUT, PLAIN, HEXAGON: SAME AS A084	1, 2	EA	REF									B-11	A3MP2H6
X2-F	5305-054-5649	A411 SCREW, MACHINE: SAME AS A043	1, 2	EA	REF									B-11	A3MP2H6
X2-F	5310-982-6580	A412 WASHER, FLAT: MS15795-203 (96906)	1, 2	EA	6									B-11	A3MP2H6
X2-F	5310-616-3554	A413 WASHER, LOCK: SAME AS A088	1, 2	EA	REF									B-11	A3MP2H6
P-F	6130-763-0098	A414 SCREEN, ASSEMBLY: SM C-450408 (80063)	1, 2	EA	1	*	*	*	*	*	*	*	*	B-11	A3MP3
X2-F	5305-054-5649	A415 SCREW, MACHINE: SAME AS A043	1, 2	EA	REF									B-11	A3MP3H4
X2-F	5310-616-3554	A416 WASHER, LOCK: SAME AS A088	1, 2	EA	REF									B-11	A3MP3H4
P-F	5930-754-5467	A417 SWITCH, ROTARY: SM-A-450427 (80063)	1, 2	EA	1	*	*	*	*	*	*	*	*		A3S2
P-F	5930-655-1576	A418 SWITCH, TOGGLE: MS25105-24 (96906)	1, 2	EA	1	*	*	*	*	*	*	*	*	B-11	A3S1
X2-F	5305-984-4988	A419 SCREW, MACHINE: SAME AS A003	1, 2	EA	REF									B-11	A3S1H2
A-O-S		A420 FRONT PANEL ASSEMBLY: SM-D-350037 (80063)	3	EA	1									B-10	A3
X2-F	5305-229-4989	A421 SCREW, MACHINE: SAME AS A009	3	EA	6									B-10	A3H6
X2-F	5310-579-0079	A422 WASHER, LOCK: SAME AS A005	3	EA	9									B-10	A3H6

SECTION II. REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(7) 30-DAY GS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(8) 1-YR ALW PER EQUIP CNTGCY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS (a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
P-F	5910-822-5683	A423 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A375	3	EA	2	*	*	*	*	*	*	*	*	B-11	A3C7
P-F	5910-822-5683	A424 CAPACITOR, FIXED, CERAMIC DIELECTRIC SAME AS A375	3	EA	REF	*	*	*	*	*	*	*	*	B-11	A3C8
X2-F	5940-682-2477	A425 TERMINAL, LUG: MS77068-1 (96906)	3	EA	1									B-11	A3C7C8E1
P-F	5925-233-9253	A426 CIRCUIT BREAKER: SM-D-350030 (80063)	3	EA	1	*	*	*	*	*	*	*	*	B-13	A3CB1
P-F	5925-168-3645	A427 CIRCUIT BREAKER: SM-C-391805 (80063)	3	EA	1	*	*	*	*	*	*	*	*	B-13	A3CB2
P-F	5935-879-1813	A428 CONNECTOR, RECEPTACLE ELECTRICAL: SAME AS A378	3	EA	1	*	*	*	*	*	*	*	*	B-13	A3J1
X2-F	5310-934-9739	A429 NUT, PLAIN, HEXAGON: SAME AS A084	3	EA	10									B-13	A3J1H4
X2-F	5305-889-2997	A430 SCREW, MACHINE: MS35206-215 (96906)	3	EA	14									B-13	A3J1H4
X2-F	5310-616-3554	A431 WASHER, LOCK: SAME AS A088	3	EA	10									B-13	A3J1H4
P-F	6105-985-8202	A432 FAN, CIRCULATING BRACKET: SAME AS A382	3	EA	1	*	*	*	*	*	*	*	*	B-11	A3B1
X2-F	5310-934-9747	A433 NUT, PLAIN, HEXAGON: SAME AS A021	3	EA	4									B-11	A3B1H4
X2-F	5305-059-4553	A434 SCREW, MACHINE: SAME AS A384	3	EA	4									B-11	A3B1H4
X2-F	5310-209-0788	A435 WASHER, LOCK: SAME AS A011	3	EA	4									B-11	A3B1H4
X1-F		A436 IMPELLAR, FAN, CIRCULATING BRACKET: SAME AS A386	3	EA	1									B-12	A3B1MP1
X1-F		A437 SETSCREW: SAME AS A387	3	EA	2										A3B1MP1H2
X1-F		A438 MOTOR, ALTERNATING CURRENT: SAME AS A388	3	EA	1									B-12	A3B1B2
X1-F		A439 SCREW, MACHINE: SAME AS A389	3	EA	3									B-12	A3B1B2H3
X2-F	5310-579-0079	A440 WASHER, LOCK: SAME AS A005	3	EA	REF									B-12	A3B1B2H3
X1-F		A441 VENTURI: SAME AS A391	3	EA	1									B-12	A3B1MP2
M-D		A442 FRONT PANEL: SM-C-350036 (80063)	3	EA	1									B-13	A3MP1
P-C	6240-155-7836	A443 LAMP, INCANDESCENT: SAME AS A403	3	EA	2	*	*	*	*	*	*	*	*	B-13	A3DS1
P-C	6240-155-7836	A444 LAMP, INCANDESCENT: SAME AS A403	3	EA	REF	*	*	*	*	*	*	*	*	B-13	A3DS2
P-O	6210-421-4110	A445 LENS, INDICATOR LIGHT: 150D-101(GREEN) (72765)	3	EA	1	*	*	*	*	*	*	*	*	B-13	A3XDS1MP1
P-O	6240-421-4111	A446 LENS, INDICATOR LIGHT: 150D-101(RED) (72765)	3	EA	1	*	*	*	*	*	*	*	*		A3XDS2MP1
P-F	6210-926-7786	A447 LIGHT, INDICATOR: SM-B-450166 (80063)	3	EA	2	*	*	*	*	*	*	*	*	B-13	A3XDS1
P-F	6210-926-7786	A448 LIGHT, INDICATOR: SAME AS A447	3	EA	REF	*	*	*	*	*	*	*	*	B-13	A3XDS2
M-D		A449 METAL, EXPANDED: SAME AS A409	3	EA	1									B-13	A3MP2

SECTION II. REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE		USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(7) 30-DAY GS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(8) 1-YR ALW PER EQUIP CNTGCY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS (a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
X2-4	5310-934-9739	A450	NUT, PLAIN, HEXAGON: SAME AS A084	3	EA	REF									B-13	A3MP2H6
X2-4	5305-889-2997	A451	SCREW, MACHINE: SAME AS A430	3	EA	REF									B-13	A3MP2H6
X2-4	5310-951-4679	A452	WASHER, FLAT: SAME AS A087	E	EA	6									B-13	A3MP2H6
X2-4	5310-616-3554	A453	WASHER, LOCK: SAME AS A088	3	EA	REF									B-13	A3MP2H6
P-F	6130-763-0098	A454	SCREEN ASSEMBLY: SAME AS A414	3	EA	1	*	*	*	*	*	*	*	*	B-13	A3MP3
X2-F	5305-889-2997	A455	SCREW, MACHINE: SAME AS A430	3	EA	REF									B-13	A3MPH4
X2-F	5310-275-3683	A456	WASHER, SPRING, TENSION: MS35338-40 (96906)	3	EA	4	*	*	*	*	*	*	*	*	B-13	A3MP3H4
P-F	5930-417-3093	A457	SWITCH, ROTARY: SM-A-350031 (80063)	3	EA	1									B-13	A351
X2-F	5310-550-2329	A458	NUT, PLAIN, HEXAGON: SAME AS A286	3	EA	1									B-13	A3S1H1
X2-F	5310-595-7237	A459	WASHER, LOCK: AN936-616B (81350)	3	EA	1									B-13	A3S1H1
A-O-S		A460	FRONT PANEL ASSEMBLY: SM-D-391727 (80063)	4	EA	1									B-10	A3
X2-4	5305-984-4988	A461	SCREW, MACHINE: SAME AS A003	4	EA	6										A3B6
X2-F	5310-579-0079	A462	WASHER, LOCK: SAME AS A005	4	EA	10									B-10	A3B6
P-F	5910-822-5683	A463	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A375	4	EA	2	*	*	*	*	*	*	*	*	B-11	A3C7
P-F	5910-822-5683	A464	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A375	4	EA	REF	*	*	*	*	*	*	*	*	B-22	A3C8
X2-F	5940-614-0537	A465	TERMINAL LUG: SAME AS A377	4	EA	1									B-11	A3C7C8E1
P-F	5925-233-9253	A466	CIRCUIT BREAKER: SAME AS A426	4	EA	1	*	*	*	*	*	*	*	*	B-14	A3CB1
P-F	5925-168-3645	A467	CIRCUIT BREAKER: SAME AS A427	4	EA	1	*	*	*	*	*	*	*	*	B-14	A3CB2
P-F	5935-879-1813	A468	CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS A378	4	EA	1	*	*	*	*	*	*	*	*	B-14	A3J1
X2-F	5310-934-9739	A469	NUT, PLAIN, HEXAGON: SAME AS A084	4	EA	10									B-10	A3J1H4
X2-F	5305-054-5649	A470	SCREW, MACHINE: SAME AS A043	4	EA	10									B-14	A3J1H4
P-F	6105-985-8202	A471	FAN, CIRCULATING BRACKET: SAME AS A382	4	EA	1	*	*	*	*	*	*	*	*	B-11	A3B1
X2-F	5310-=934-9747	A472	NUT, PLAIN, HEXAG ON: SAME AS A021	4	EA	4									B-11	A3B1H4
X2-F	5305-959-2673	A473	SCREW, MACHINE: MS35190-248 (97906)	4	EA	4									B-11	A3B1H4
X2-F	5310-209-0788	A474	WASHER, LOCK: SAME AS A011	4	EA	10									B-11	A3B1H4
X1-F		A475	IMPELLER, FAN, CIRCULATING BRACKET: SAME AS A386	4	EA	1									B-12	A3B1MP1
X1-F		A476	SETSCREW: SAME AS A387	4	EA	2										A3B1MP1H2

SECTION II. REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE		USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(7) 30-DAY GS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(8) 1-YR ALW PER EQUIP CNTGCY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS (a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
X1-F		A477	MOTOR, ALTERNATING CURRENT: SAME AS A388	4	EA	1									B-12	A3B1B2
X1-F		A478	SCREW, MACHINE: SAME AS A389	4	EA	3									B-12	A3B1B2H3
X2-F	5310-579-0079	A479	WASHER, LOCK: SAME AS A005	4	EA	REF									B-12	A3B1B2H3
X1-F		A480	VENTURI: SAME AS A391	4	EA	1									B-12	A3B1MP2
M-D		A481	FRONT PANEL: SM-C-391728 (80063)	4	EA	1									B-14	A3MP1
P-C	6240-155-7836	A482	LAMP, INCANDESCENT: SAME AS A403	4	EA	2	*	*	*	*	*	*	*	*	B-14	A3DS1
P-C	6240-155-7836	A483	LAMP, INCANDESCENT: SAME AS A403	4	EA	REF	*	*	*	*	*	*	*	*	B-14	A3DS2
P-F	6210-416-8292	A484	LIGHT, INDICATOR: 109-8430-0131-201 (72619)	4	EA	1	*	*	*	*	*	*	*	*	B-10	A3XDS2
P-F	6240-451-1109	A485	LIGHT, INDICATOR 109-8430-0131-201 (72619)	4	EA	1	*	*	*	*	*	*	*	*	B-14	A3XDS1
P-F	6210-455-6235	A486	LIGHT, INDICATOR: 249-7841-0931-544 (71619)	4	EA	1	*	*	*	*	*	*	*	*	B-14	A3XDS3
M-D		A487	METAL, EXPANDED: SAME AS A409	4	EA	1									B-14	A3MP2
X2-F	5310-934-9739	A488	NUT, PLAIN, HEXAGON: SAME AS A084	4	EA	REF									B-14	A3MP2H6
X2-F	5305-054-5649	A489	SCREW, MACHINE SAME AS A043	4	EA	REF									B-14	A3MP2H6
X2-F	5310-982-6580	A490	WASHER, FLAT: SAME AS A231	4	EA	6									B-14	A3MP2H6
X2-F	5310-209-0788	A491	WASHER, LOCK SAME AS A011	4	EA	REF									B-14	A3MP2H6
P-F	6130-763-0098	A492	SCREEN ASSEMBLY: SAME AS A414	4	EA	1	*	*	*	*	*	*	*	*	B-14	A3MP3
X2-F	5310-275-3683	A493	WASHER, SPRING TENSION: SAME AS A456	4	EA	4									B-14	A3MP3H4
X2-F	5305-889-2997	A494	SCREW, MACHINE: SAME AS A430	4	EA	4									B-14	A3MP3H4
P-F	5930-419-3148	A495	SWITCH, ROTARY: SM-A-391803 (80063)	4	EA	4	*	*	*	*	*	*	*	*	B-14	A3S1
A-F-S		A496	HOUSING ASSEMBLY: SM-D-450393 (80063)	1,2	EA	1									B-15	A4
P-F	5910-822-5683	A497	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A375	1,2	EA	1	*	*	*	*	*	*	*	*	B-16	A4C9
X2-F	6130-471-8672	A498	CASE, POWER SUPPLY: SM-D-450393-1 (80063)	1,2	EA	1									B-15	A4MP1
P-F	5935-071-1235	A499	CONNECTOR, RECEPTACLE, ELECTRICAL: SC-DL-323140 (80063)	1,2	EA	1	*	*	*	*	*	*	*	*	B-15	A4J2
P-F	5935-853-5876	A500	CONNECTOR, RECEPTACLE ELECTRICAL SM-C-414990 (80063)	1,2	EA	1	*	*	*	*	*	*	*	*	B-15	A4J3
M-D		A501	PLATE, ESCUTCHEON:	1,2	EA	1									B-16	A4MP2
M-D		A502	PLATE, IDENTIFICATION:	1,2	EA	1									B-16	A4MP3
A-F-S		A503	HOUSING ASSEMBLY	3	EA	1									B-15	A4

SECTION II. REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE		USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(7) 30-DAY GS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(8) 1-YR ALW PER EQUIP CNTGCY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS (a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
P-F	5910-822-5683	A504	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A375	3	EA	1	*	*	*	*	*	*	*	*	B-16	A4C9
X1-F		A505	CASE, POWER SUPPLY: SM-D-350032 (80063)	3	EA	1									B-15	A4MP1
P-F	5935-071-1235	A506	CONNECTOR, RECEPTACLE ELECTRICAL: SAME AS A499	3	EA	1	*	*	*	*	*	*	*	*	B-15	A4J2
P-F	5935-853-5876	A507	CONNECTOR, RECEPTACLE ELECTRICAL: SAME AS A500	3	EA	1	*	*	*	*	*	*	*	*	B-15	A4J3
M-D		A508	PLATE, EXCUTCHEON: SAME AS A501	3	EA	1									B-16	A4MP2
M-D		A509	PLATE, IDENTIFICATION: SM-D-350032 (80063)	3	EA	1									B-16	A4MP3
A-F-S	6130-444-2239	A510	HOUSING ASSEMBLY SM-D-391746 (80063)	4	EA	1									B-15	A4
P-F	5910-822-5683	A511	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A375	4	EA	1	*	*	*	*	*	*	*	*	B-16	A4C9
X2-F	6130-185-8124	A512	CASE, POWER SUPPLY SM-D-391746 (80063)	4	EA	1									B-15	A4MP1
P-F	5935-071-1235	A513	CONNECTOR, RECEPTACLE: ELECTRICAL: SAME AS A499	4	EA	1	*	*	*	*	*	*	*	*	B-15	A4J2
P-F	5935-853-5876	A514	CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS A500	4	EA	1	*	*	*	*	*	*	*	*	B-15	A4J3
M-D		A515	PLATE, ESCUTCHEON: SAME AS A501	4	EA	1									B-16	A4MP2
M-D		A516	PLATE, IDENTIFICATION: SAME AS A502	4	EA	1									B-16	A4MP3
A-F-S		A517	TOP COVER ASSEMBLY: SM-C-450385 (80063)	1,2	EA	1									B-18	A5
X2-F	5315-844-6796	A518	PIN, SPRING: MS16562-39 (96906)	1,2	EA	2									B-18	A5H2
X2-F	6130-444-2243	A519	COVER, POWER SUPPLY: SM-D-450396 (80063)	1,2	EA	1									B-17	A5HP1
P-F	5308-419-0583	A520	SCREW, EXTERNALLY RELIEVED BODY: SM-B-350039 (80063)	1,2	EA	8	*	*	*	*	*	*	*	*	B-17	A5MP188
P-F	5330-159-3181	A521	GASKET: SM-D-450401 (80063)	1,2	EA	1	*	*	*	*	*	*	*	*	B-17	A5MP2
A-F-S		A522	TOP COVER ASSEMBLY: SM-C-350042 (80063)	3	EA	1									B-17	A5
X2-F	5315-844-6796	A523	PIN, SPRING: SAME AS A518	3	EA	2									B-18	A5H2
X2-F	6130-191-1548	A524	COVER, POWER SUPPLY: SM-D-350033 (80063)	3	EA	1									B-17	A5MP1
P-F	5305-419-0583	A525	SCREW, EXTERNALLY RELIEVED BODY: SAME AS A520	3	EA	8	*	*	*	*	*	*	*	*	B-17	A5MP1B8
P-F	5330-419-5938	A526	GASKET: SM-D 350044 (80063)	3	EA	1	*	*	*	*	*	*	*	*	B-17	A5MP2
A-F-S		A527	TOP COVER ASSEMBLY: SM-C-391740 (80063)	4	EA	1									B-17	A65
X2-F	5315-844-6796	A528	PIN, SPRING SAME AS A518	4	EA	2									B-18	A5H2
X2-F	6130-220-3745	A529	COVER, POWER SUPPLY: SM-D-391741 (80063)	4	EA	1									B-17	A5MP1

SECTION II. REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (CONTINUED)

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR. CODE	USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30-DAY DS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(7) 30-DAY GS MAINT ALLOWANCE (a) 1-20	(b) 21-50	(c) 51-100	(8) 1-YR ALW PER EQUIP CNTGCY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUSTRATIONS (a) FIG NO.	(b) ITEM NO. OR REFERENCE DESIGNATION
P-F	5305-470-2237	A530 SCREW, EXTERNALLY RELIEVED BODY: SM-8-391742 (80063)	4	EA	8	*	*	*	*	*	*	*	*	B-17	A5MP1H8
P-F	5330-159-3181	A531 GASKET: SAME AS A521	4	EA	1	*	*	*	*	*	*	*	*	B-17	A5MP2

SECTION III. INDEX-FEDERAL STOCK NUMBER AND REFERENCE NUMBER CROSS REFERENCE TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION
5305-052-8878	B-9	A2MP2H4
5305-054-5649	B-4	A1A1AQ3H2
5305-054-5649	B-11	A3JH4
5305-B54-5649	B-14	A3JH4
5305-054-5649	B-11	A3MP2H6
5305-054-5649	B-14	A3MP2H6
5305-054-5649	B-11	A3MP3H4
5305-059-4553	B-11	A3B1H4
5305-088-9041	B-1	A1W1MP4H4
5305-229-4989	B-1	A1C1H2
5305-229-4989	B-2	A1H2
5305-229-4989	B-1	A1P2H2
5305-229-4989	B-1	A1P3H3
5305-229-4989	B-1	A1W1E1H1
5305-229-4989	B-10	A3H6
5305-419-0583	B-17	A5MP1H8
5305-470-2237	B-17	A5MP1H8
5305-475-2244	B-9	A2MP1B2
5305-543-5923	B-2	A1H4
5305-543-5923	B-2	A1H6
5305-598-4992	B-5	A1MP2H4
5305-598-4992	B-5	A1MP3H1
5305-813-9580	B-9	A2MP2H4
5305-889-2989	B-5	A1A1A2Q4H2
5305-889-2997	B-13	A3JH4
5305-889-2997	B-13	A3MP2H6
5305-889-2997	B-13	A3MP3H4
5305-889-2997	B-14	A3MP3H4
5305-889-3001	B-1	A1MP2H1
5305-889-3001	B-1	A1MP2H1
5305-889-3001	B-1	A1MP3H4
5305-889-3001	B-5	A1A1A2Q4H2
5305-930-6279	B-9	A2MP1H2
5305-934-6202	B-5	A1R5H1
5305-959-2673	B-11	A3B1H4
5305-984-4988	B-2	A1H2
5305-984-1988	B-10	A3H6
5305-984-4988	B-11	A3S1H2
5305-984-4988	B-5	A1A1A2C6H1
5305-984-4988	B-5	A1A1A2MP1MP2H1
5935-984-4989	B-1	A1MP2H2
5305-984-4989	B-1	A1MP3H3
5305-984-4989	B-1	A1W1E1H1
5305-984-4989	B-1	A1W1MP4H4
5305-984-4989	B-5	A1A1A12C6H1
5305-984-6192	B-1	A1L1H4
5305-984-6192	B-1	A1A1H2
5305-984-6193	B-1	A1L1H4
5305-984-6193	B-1	A1AH2
5305-984-6193	B-3	A1A3H3
5305-984-6203	B-1	A1R5H1
5305-964-6222	B-3	A1A1A1H3
5305-984-6223	B-3	A1A1A1H3
5305-988-1724	B-2	A1H6
5305-988-1724	B-1	A1T1H4
5305-988-1725	B-5	A1T1H4
5305-990-6444	B-1	A1W1E1H1
5305-990-6444		A1W1H4
5310-0o5-3296	B-1	A1W1H4
5310-045-3299	B-1	A1A1H2
5310-045-3299	B-3	A1A1H3
5310-045-3299	B-1	A1AL1H4
5310-045-3299	B-1	A1R5H1
5310-058-3599	B-4	A1A1A1Q3H2
5310-082-1404	B-2	A1H2
5310-082-1404	B-1	A1MP2H2
5310-082-1404	B-1	A1MP3H3
5310-082-1404	B-5	A1A1A2MP1MP2H1
5310-062-1404	B-5	A1A1A2Q4H2
5310-209-0786	B-2	A1H6
5310-209-0786	B-1	A1T1H4
531o-209-0788	B-2	A1H2
5310-209-0788	B-1	A1C1H2
5310-209-0788	B-1	A1MP2H3
5310-209-0788	B-1	A1MP3H4
5320-209-0788	B-5	A1MP3H3
5310-209-0788	B-3	A1A1A1H3
5310-209-0788	B-5	A1A1A12C6H1
5310-209-0788	B-5	A1A1A12K1H3
5310-209-0788	B-5	A1A1A2MP1MP2H1
5310-209-0788	B-5	A1A1A2Q4H2
5310-209-0788	B-1	A1W1H4
5310-209-0788	B-11	A3B1H4
5310-209-0788	B-14	A3MP2H6
5310-275-3683	B-13	A3MP3H4
5310-275-3683	B-14	A3MP3H4
5310-514-6674	B-5	A1MP2H1
5310-514-6674	B-5	A1MP3H1
5310-550-2329	B-5	A1A1A12R11H1
5310-550-2329	B-13	A3S1H1
5310-550-3715	B-4	A1A1A1Q3H2
5310-579-0079	B-2	A1H2
5310-579-0079	B-10	A3H6
5310-579-0079	B-12	A3B1B2H3
5310-582-5965	B-2	A1H6
5310-582-5965	B-1	A1T1H4
5310-595-7237	B-5	A1A1A2R11H1
5310-595-7237	B-13	A3S1H1
5310-596-7691	B-1	A1E1H1
5310-596-7691		A1W1H4
5310-596-7691	B-5	A1A1A2CR1H1
5310-596-7691	B-5	A1A1A2CR2H1
5310-596-7691		A1A1A2CR3H1
5310-596-7691	B-5	A1A1A2CR4H1
5310-596-7691	B-5	A1A1A2Q4H1
5310-596-7693	B-1	A1L1H4
5310-596-7693	B-5	A15H1
5310-596-7693	B-1	A1A1H2
5310-616-3554	B-5	A1A1A2Q4H2
5310-616-3554	B-11	A3J1H4
5310-616-3554	B-11	A3MP2H6
5310-616-3554	B-11	A3MP3H4
5310-782-1349	B-4	A1A1A1Q3H2
5310-809-4058	B-1	A1T1H4
5310-809-8546	B-5	A1A1A2CR1H2
5310-809-8546	B-5	A1A1A2CR2H1
5310-809-8546		A1A1AACR3H1
5310-809-8546	B-5	A1A1A2CR4H1
5310-905-9865	B-11	A3B1H4
5310-934-9739	B-5	A1A1A2Q4H2
5310-934-9739	B-11	A3J1H4
5310-934-9739	B-1	A3J1H4
5310-934-9739	B-11	A3MP2H6
5310-934-9739	B-14	A3MP2H6
5310-934-9747	B-1	A1MP3H1
5310-934-9747	B-1	A1MP2H1
5310-934-9747	B-3	A1A1A1H3
5310-934-9747	B-5	A1A1A2C6H1
5310-931-9747	B-5	A1A1A2K1H3
5310-934-9747	B-5	A1A1A2Q4H1
5310-934-9747	B-5	A1A1A2Q4H2
5310-934-9747	B-5	A1A1A2MP1MP2H1
5310-934-9747	B-1	A1W1MP4H4
5310-934-9747	B-11	A3B1H4
5310-934-9748	B-4	A1A1AQ3H2
5310-934-9751	B-5	A1A1A2CR1H1
5310-934-9751	B-5	A1A1A2CR2H1
5310-934-9751	B-5	A1A1A2CR3H1

SECTION III. INDEX-FEDERAL STOCK NUMBER AND REFERENCE NUMBER CROSS REFERENCE TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION
5310-934-9751	B-5	A1A1A2CR4H1
5310-951-4679	B-5	A1A1A2Q4H2
5310-951-4679	B-13	A3MP2H6
5310-982-6580	B-1	A1C1H2
5310-982-6580	B-1	A1L1H4
5310-982-6580	B-5	A1MP2H2
5310-982-6580	B-5	A1MP3H3
5310-982-6580	B-1	A1R5H2
5310-982-6580	B-5	A1T1H4
5310-982-6580	B-5	A1A1A2MP1MP2H1
5310-987-6580	B-5	A1A1A2Q4H2
5310-982-6580	B-11	A3MP2H6
5310-982-6580	B-14	A3MP2H6
5310-982-6831	B-1	A1L1H4
5315-844-6796	B-18	A5H2
5330-159-3181	B-17	A5MP2
5330-419-3145	B-9	A2MP4
5330-419-5938	B-17	A5MP2
5330-470-2240	B-9	A2MP4
5340-422-2594	B-1	A1W1MP4
5905-171-2005	B-4	A1A1A1R12
5905-171-2009	B-4	A1A1A1R8
5905-171-2009	B-4	A1A1A1R10
5905-185-8518	B-1	A1A1A1R7
5905-195-6809	B-4	A1A1A1R9
5905-195-6809	B-4	A1A1A1R10
5905-195-6817	B-4	A1A1A1R2
5905-272-3444	B-4	A1A1A1R6
5905-279-1722	B-4	A1A1A1R1
5905-279-1722	B-4	A1A1A1R3
5905-299-2053	B-4	A1A1A1R3
5905-502-9691	B-4	A1A1A1R4
5905-721-2639	B-5	A1A1A2R11
5905-844-2256	B-1	A1R5
5910-053-04O3	B-1	A1C2
5910-080-8474	B-b	A1A1A1C4
5910-080-8474	B-4	A1A1A1C5
5910-269-5603	B-4	A1A1A1C4
5910-682-2543	B-1	A1MP2
5910-682-2548	B-5	A1MP2
5910-822-5683	B-11	A3C7
5910-822-5683	B-11	A3C8
5910-822-5683	B-16	A4C9
5910-851-6485	B-5	A1A1A2C6
5910-999-4172	B-1	A1C3
5910-909-7402	B-1	A1C1
5910-966-2375	B-1	A1MP3
5920-296-1517	B-11	A3F1
5920-296-1517	B-11	A3F2
5920-296-1517	B-11	A3F3
5920-296-1517	B-11	A3F4
5920-892-9311	B-11	A3XF1
5920-892-9311	B-11	A3XF2
5920-892-9311	B-11	A3XF3
5920-892-9311	B-11	A3XF4
5920-892-9311	B-11	A3XF5
5920-912-9191	B-11	A3F5
5925-168-3645	B-13	A3CB2
5925-168-3645	B-14	A3CB2
5925-233-9253	B-13	A3CB1
5925-233-9253	B-11	A3CB1
5930-417-3093	B-13	A3S1
5930-419-3148	B-14	A3S1
5930-655-1576	B-11	A3S1
5930-754-5467		A32
5935-071-1235	B-15	A4J2
5935-853-5876	B-15	A4J3
5935-879-1813	B-11	A3J1
5935-879-1813	B-14	A3J1
5935-891-9152	B-8	W1P1
5935-891-9153	B-8	W1P2
5935-901-8871	B-7	W2P2
5935-931-7490	B-7	W2P1
5940-050-2308	B-1	A1C1E1
5940-050-2308	B-1	A1MP2H1
5940-614-0537	B-11	A3C7C8E1
5940-681-8183	B-5	A1A1A2CR1E1
5940-681-8183	B-5	A1A1A2Q4E1
5940-681-8184	B-5	A1A1A2CR1E1
5940-681-8184		A1A1A2CR2E1
5940-681-8184	B-5	A1A1A2CR3E1
5940-681-8184		A1A1A2CR4E1
5940-682-2477	B-11	A3C7C8E1
5940-683-4339	B-1	A1WE1
5940-683-4339		A1W1E4
5940-827-2653	B-1	A1C1E1
5940-827-2653	B-1	A1W1E1
5945-728-0617	B-5	A1A1A2K1
5950-059-3060	B-1	A1T1
5950-891-8677	B-1	A1L1
5961-454-3050	B-4	A1A1A1Q1MP1
5961-454-3050	B-4	A1A1A1Q2MP1
5961-577-6214	B-4	A1A1A1CR5
5961-752-5229	B-4	A1A1A1Q2
5961-804-9845	B-4	A1A1A1CR7
5961-821-8976	B-4	A1A1A1Q3
5961-821-8976	B-5	A1A1A2Q4
5961-837-7262	B-4	A1A1A1Q1
5961-850-9438	B-4	A1A1A1CR6
5961-902-3444	B-2	A1Q5
5961-935-0138	B-5	A1A1A2CR1
5961-935-0138	B-5	A1A1A2CR2
5961-935-0138	B-5	A1A1A2CR3
5961-935-0138	B-5	A1A1A2CR4
5970-431-3599	B-4	A1A1A1Q2MP1
5995-823-2725	B-8	W1
5995-985-7900	B-7	W2
6105-985-8202	B-11	A3B1
6130-185-81i2	B-15	A4MP1
6130-191-1548	B-17	A5MP1
6130-220-3745	B-17	A5MP1
6130-230-3746	B-9	A2MP1
6130-409-9055	B-9	A2MP1
6130-444-2239	B-15	A4
6130-444-2243	B-17	A5MP1
6130-451-6154	B-4	A1A1A1TB1
6130-156-1852	B-4	A1A1A1TB1
6130-471-8672	B-15	A4MP1
6130-763-0098	B-11	A3MP3
6130-763-0098	B-14	A3MP3
61i5-016-8765	B-8	W1W1
6145-504-1015	B-7	W2W1
6210-079-8943		A3XDS2MP1
6210-416-8292	B-14	A3XDS2
6210-421-4110	B-13	A3XDS1MP1
6210-455-6235	B-14	A3XDS3
6210-813-8265	B-11	A3XDS1
5210-813-8265	B-11	A3XDS2
6210-926-7786	B-13	A3XDS1
6210-926-7716	B-13	A3XDS2
6210-990-4637	B-11	A3XDS1MP1
6240-155-7836	B-11	A3DS1
62o0-155-7836	B-14	A3DS1
6240-155-7836	B-11	A3DS2
6240-155-7836	B-14	A3DS2
6240-421-4111		A3XDS2MP1
624o-451-1109	B-14	A3XDS1

SECTION III. INDEX-FEDERAL STOCK NUMBER CROSS REFERENCE

TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION (CONTINUED)

REFERENCE NO.	MFG. CODE	FIG. NO.	REF. DESIG. OR ITEM NO.	FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION
SC-A-21825-4	80063	B-7	W2MP1			
SM-B-165914	80063	B-8	W1MP1			
SM-B-165914	80063	B-7	W2MP2			
SM-B-450390	80063	B-16	A4MP3			
SM-B-450406	80063	B-16	A4MP2			
SM-B-450407	80063	B-5	A1A1A2MP1MP2			
SM-B-450421	80063	B-11	A3MP2			
SM-B-450421	80063	B-14	A3MP2			
SM-C-350036	80063	B-13	A3MP1			
SM-C-350042	80063	B-17	A5			
SM-C-350052	80063	B-9	A2MP2			
SM-C-391728	80063	B-14	A3MP1			
SM-C-391732	80063	B-3	A1A1A2			
SM-C-391734	80063	B-3	A1A1A1			
SM-C-391737	80063	B-1	A1A1			
SM-C-391737-1	80063	B-3	A1A1A1MP3			
SM-C-391738	80063	B-5	A1A1A2MP1			
SM-C-391740	80063	B-17	A5			
SM-C-391801	80063	B-9	A2MP2			
SM-C-391802	80063	B-9	A2MP3			
SM-C-450386	80063	B-18	A5			
SM-C-450387	80063	B-5	A1A1A2MP1			
SM-C-450388	80063	B-1	A1A1			
SM-C-450388-1	80063	B-3	A1A1A1MP3			
SM-C-450399	80063	B-9	A2MP3			
SM-C-450400	80063	B-9	A2MP2			
SM-C-450403	80063	B-11	A3MP1			
SM-C-450404	80063	B-3	A1A1A2			
SM-C-450405	80063	B-5	A1A1A2MP1			
SM-C-450418	80063	B-3	A1A1A1			
SM-C-450418	80063	B-4	A1A1A1			
SM-D-350032	80063	B-15	A4MP1			
SM-D-350032	80063	B-16	A4MP3			
SM-D-350037	80063	B-10	A3			
SM-D-350040	80063	B-15	A4			
SM-D-350041	80063	B-1	A1			
SM-D-350043	80063	B-9	A2			
SM-D-350048	80063	B-6	A1W1			
SM-D-391727	80063	B-10	A3			
SM-D-391731	80063	B-1	A1			
SM-D-391739	80063	B-1	A1MP1			
SM-D-391743	13		A2			
SM-D-391747	80063	B-6	A1W1			
SM-D-450384	80063	B-10	A3			
SM-D-450385	80063	B-1	A1			
SM-D-450389	80063	B-9	A2			
SM-D-450393	80063	B-15	A4			
SM-D-450394	80063	B-1	A1MP1			
SM-D-450395	80063	B-1	A1MP1			
SM-D-450426	80063	B-6	A1W1			
10-32X1/4 IN STL	02598		A3B1MP1H2			
6-11400	02598	B-12	A3B1B2			
62-43-1413	02598	B-12	A3B1B2H3			
702B-83CCW	02598	B-12	A3B1MP1			
718-478	02598	B-12	A3B1MP2			

SECTION IV INDEX- REFERENCE DESIGNATION

CROSS REFERENCE TO PAGE NUMBER

REFERENCE DESIGNATION	PAGE NUMBER
W1	B17
W1MP1	B17
W1P1	B17
W1P2	B17
W1W1	B17
W2	B17
W2MP1	B17
W2MP2	B17
W2P1	B17
W2P2	B17
W2W1	B17
A1	B5
A1C1	B5
A1C1E1	B5
A1C1H2	B5
A1C2	B5
A1C3	B5
A1E1H1	B16
A1H2	B5
A1H4	B12
A1H6	B5
A1L1	B5
A1L1H4	B5
A1MP1	B5
A1MP2	B8
A1MP2H1	B8
A1MP2H2	B8
A1MP2H3	B8
A1MP2H4	B8
A1MP3	B8
A1MP3H1	B8
A1MP3H3	B8
A1MP3H4	B8
A1Q5	B8
A1R5	B8
A1R5H1	B8
A1R5H2	B8
A1T1	B8
A1T1H4	B8
A1W1	B8
A1W1E1	B8
A1W1E1H1	B9
A1W1E4	B16
A1W1H4	D9
A1W1MP4	B8
A1W1MP4H4	B8
A1A1	B5
A1A1H2	B5
A1A1H3	B9
A1A1A1	B5
A1A1A1C4	B5
A1A1A1C5	B5
A1A1A1CR5	B6
A1A1A1CR6	B6
A1A1A1CR7	B6
A1A1A1H3	B5
A1A1A1MP3	B5
A1A1A1Q1	B6
A1A1A1Q1MP1	B10
A1A1A1Q2	B6
A1A1A1Q2MP1	B10
A1A1A1Q3	B6
A1A1A1Q3H2	B6
A1A1A1R1	B6
A1A1A1R2	B6
A1A1A1R3	B6
A1A1A1R4	B6
A1A1A1R6	B6
A1A1A1R7	B5
A1A1A1R8	B6
A1A1A1R9	B6
A1A1A1R10	B6
A1A1A1R12	B6
A1A1A1TB1	B5
A1A1A2	B6
A1A1A2C6	B6
A1A1A2C6H1	B6
A1A1A2CR1	B7
A1A1A2CR1E1	B7
A1A1A2CR1H1	B7
A1A1A2CR1H2	B7
A1A1A2CR2	B7
A1A1A2CR2E1	B7
A1A1A2CR2H1	B7
A1A1A2CR3	B7
A1A1A2CR3E1	B7
A1A1A2CR3H1	B7
A1A1A2CR4	B7
A1A1A2CR4E1	B7
A1A1A2CR4H1	B7
A1A1A2K1	B7
A1A1A2K1H3	B7
A1A1A2MP1	B6
A1A1A2MP1MP2	B6
A1A1A2MP1MP2H1	B6
A1A1A2Q4	B7
A1A1A2Q4E1	B8
A1A1A2Q4H1	B8
A1A1A2Q4H2	B7
A1A1A2R11	B7
A1A1A2R11H1	B15
A2	B17
A2MP1	B17
A2MP1H2	B17
A2MP2	B17
A2MP2H4	B17
A2MP3	B17
A2MP4	B17
A3	B18
A3B1	B18
A3B1B2	B18
A3B1B2H3	B18
A3B1H4	B18
A3B1MP1	B18
A3B1MP1H2	B18
A3B1MP2	B18
A3CB1	B20
A3CB2	B20
A3C7	B18
A3C7C8E1	B18
A3C8	B18
A3DS1	B19
A3DS2	B19
A3F1	B18
A3F2	B18
A3F3	B19
A3F4	B19
A3F5	B19
A3H6	B18
A3J1	B18
A3J1H4	B18
A3MP1	B18
A3MP2	B19
A3MP2H6	B19
A3MP3	B19
A3MP3H4	B19
A3S1	B19
A3S1H1	B21
A3S1H2	B19
A3S2	B19
A3XDS1	B19
A3XDS1MP1	B19
A3XDS2	B19
A3XDS2MP1	B19
A3XDS3	B22
A3XF1	B19
A3XF2	B19
A3XF3	B19
A3XF4	B19
A3XF5	B19
A4	B22
A4C9	B22
A4J2	B22
A4J3	B22
A4MP1	B22
A4MP2	B24
A4MP3	B24
A5	B23
A5H2	B23
A5MP1	B23
A5MP1H8	B23
A5MP2	B23

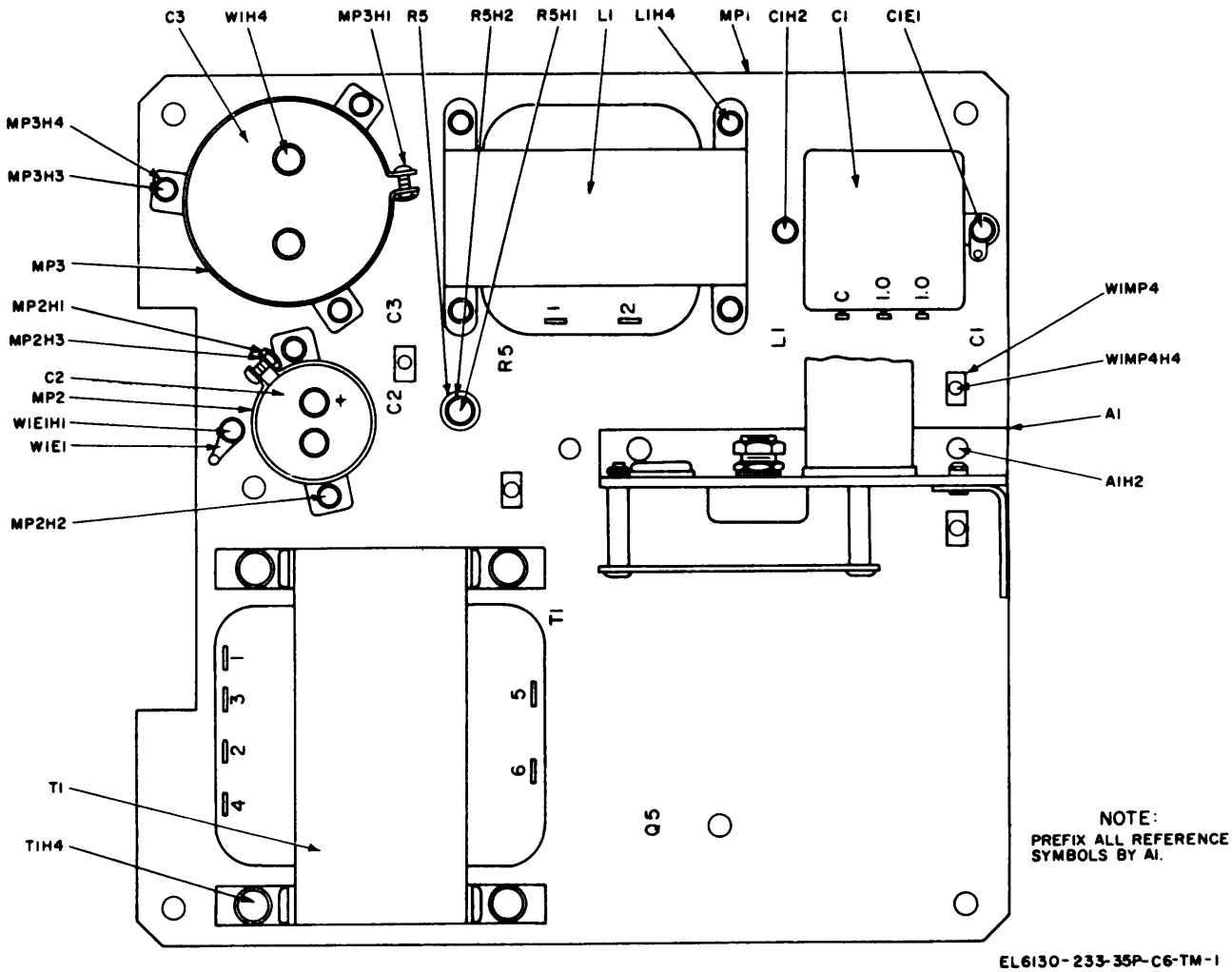


Figure B-1. Base plate assembly.

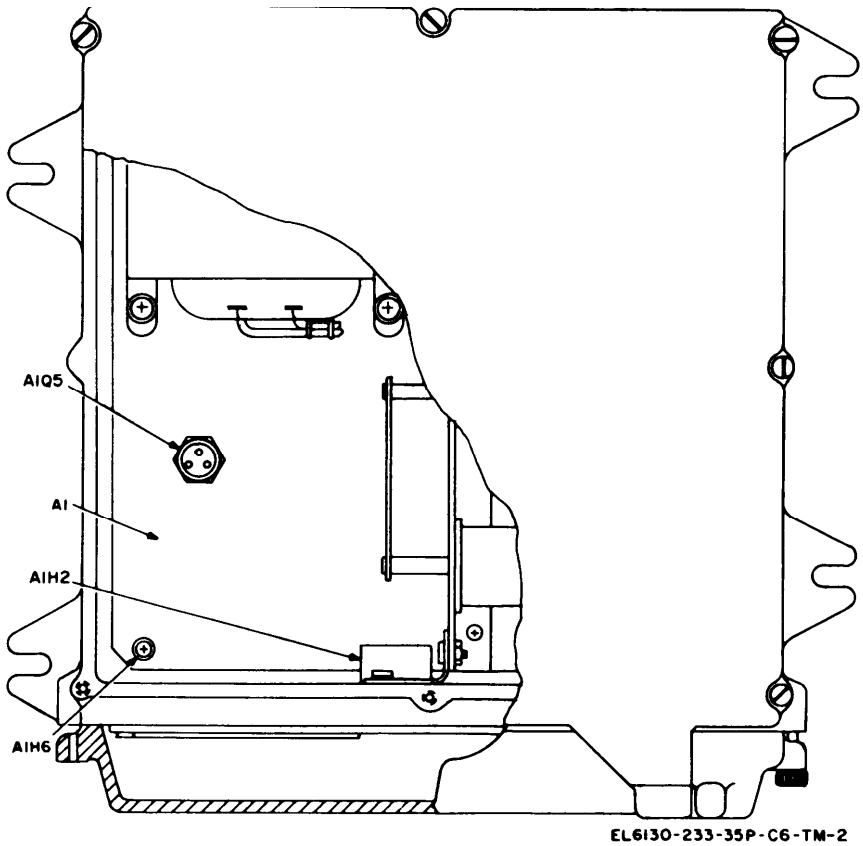


Figure B-2. Location of base plate assembly.

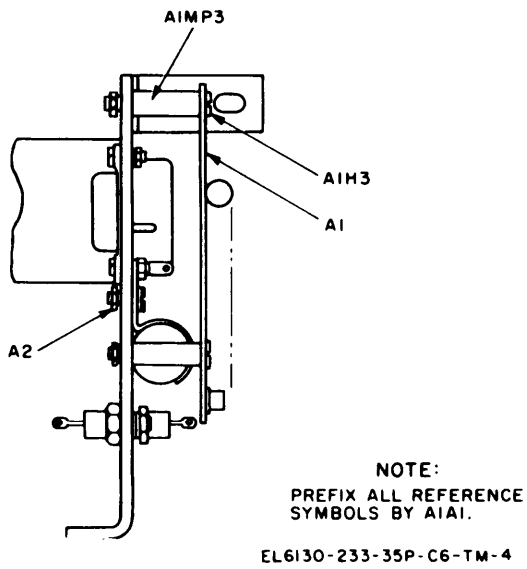


Figure B3. Rectifier and regulator assembly.

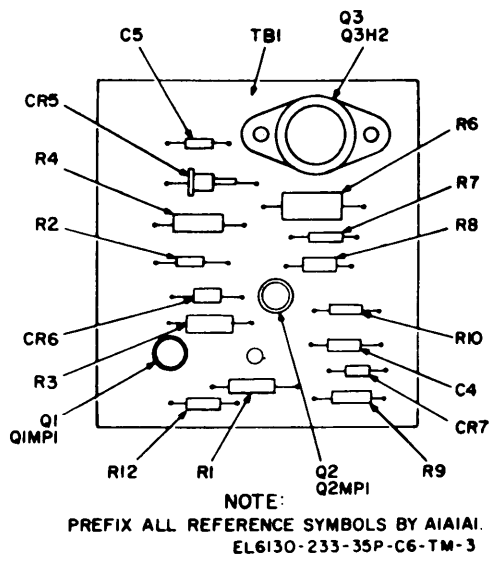


Figure B-4 Circuit card assembly.

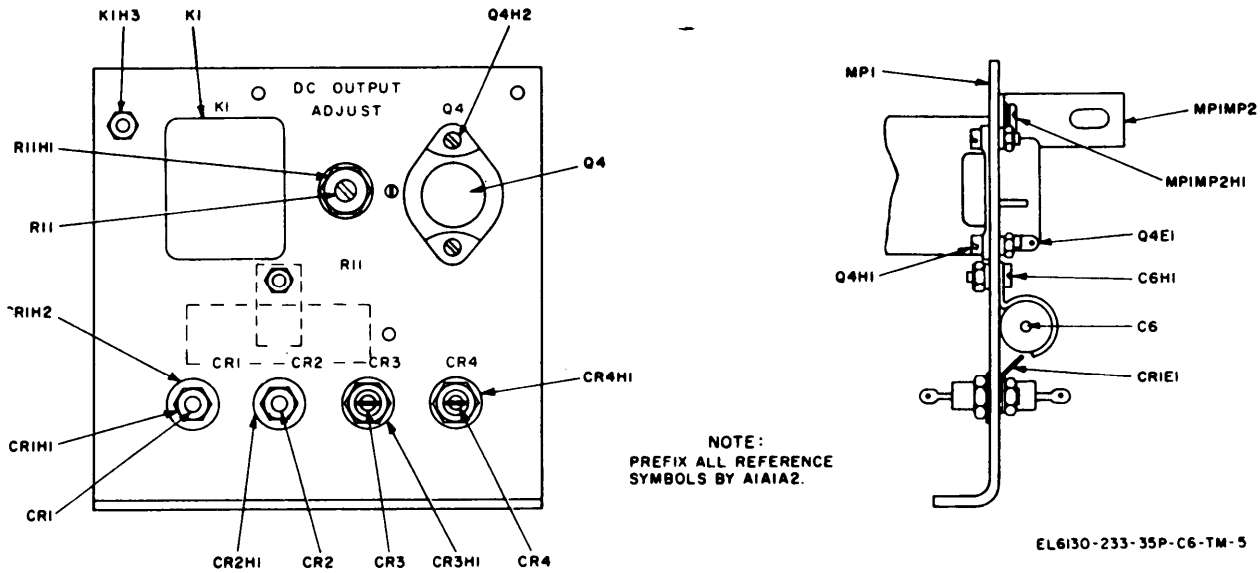


Figure. B-5. Electronic component assembly.

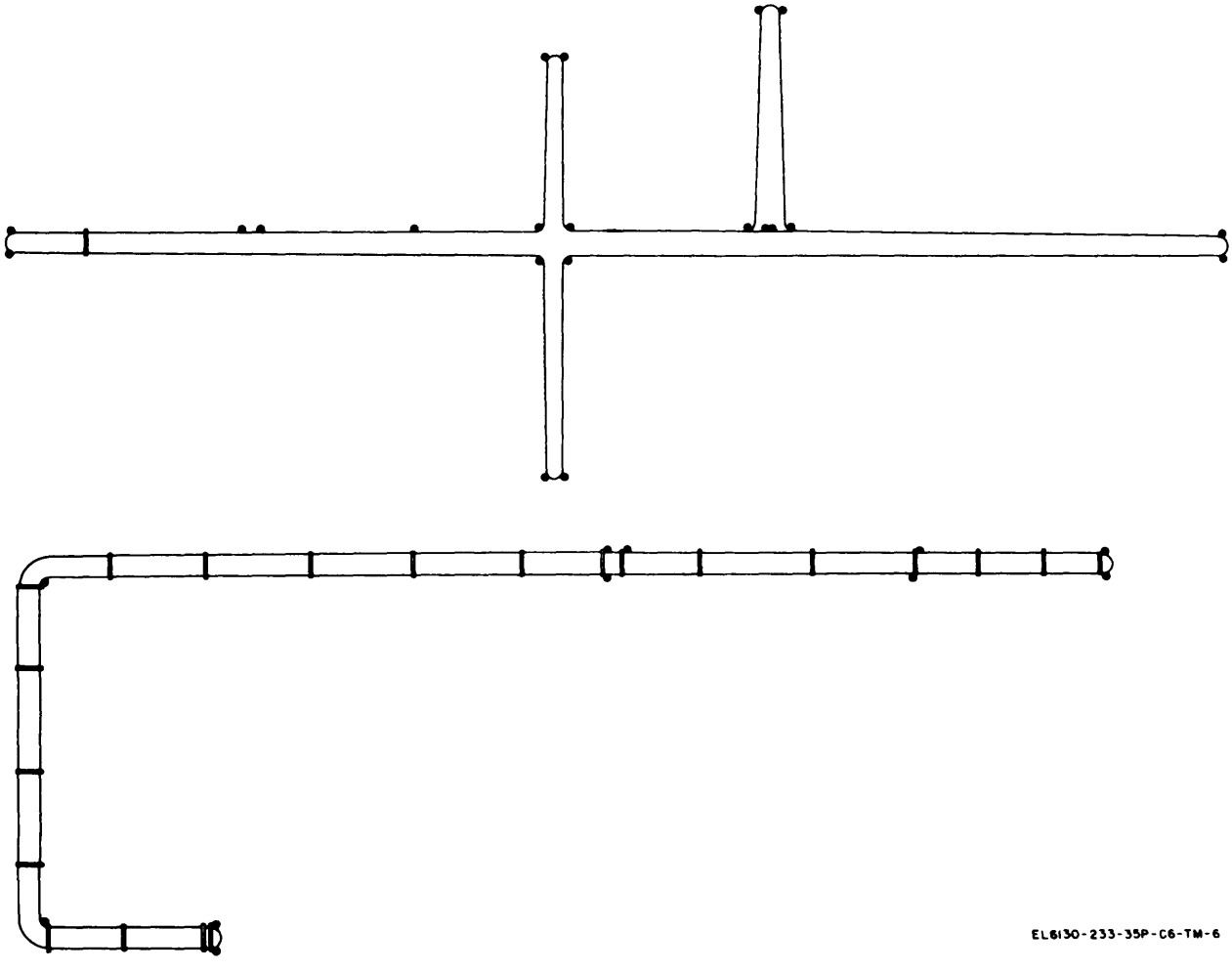


Figure B-6. Branched wiring harness A1 W.

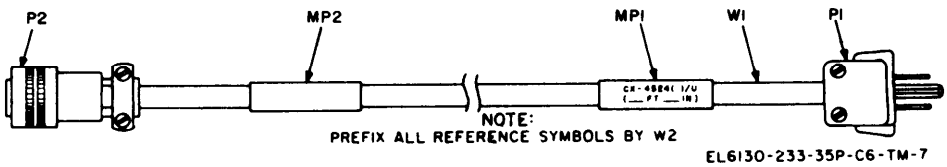


Figure B–7. Cable Assembly, Power, Electrical CX–4524/U.

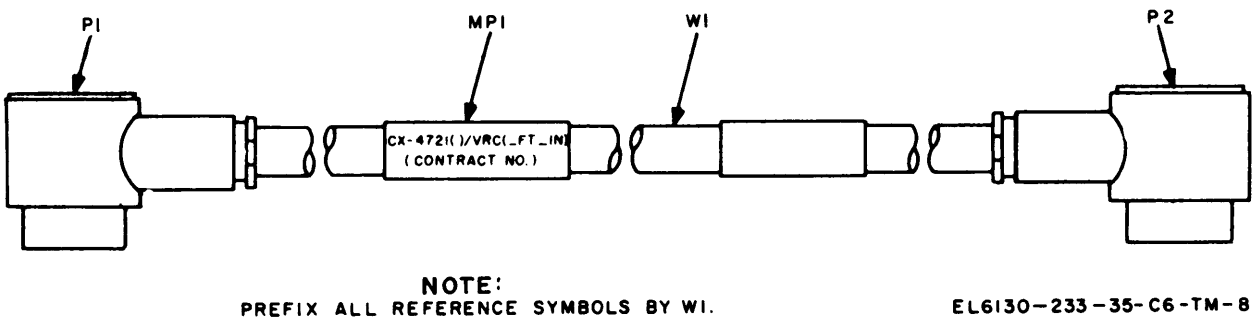


Figure B-8. Cable Assemble, Power, Electrical CX-4721/VRC.

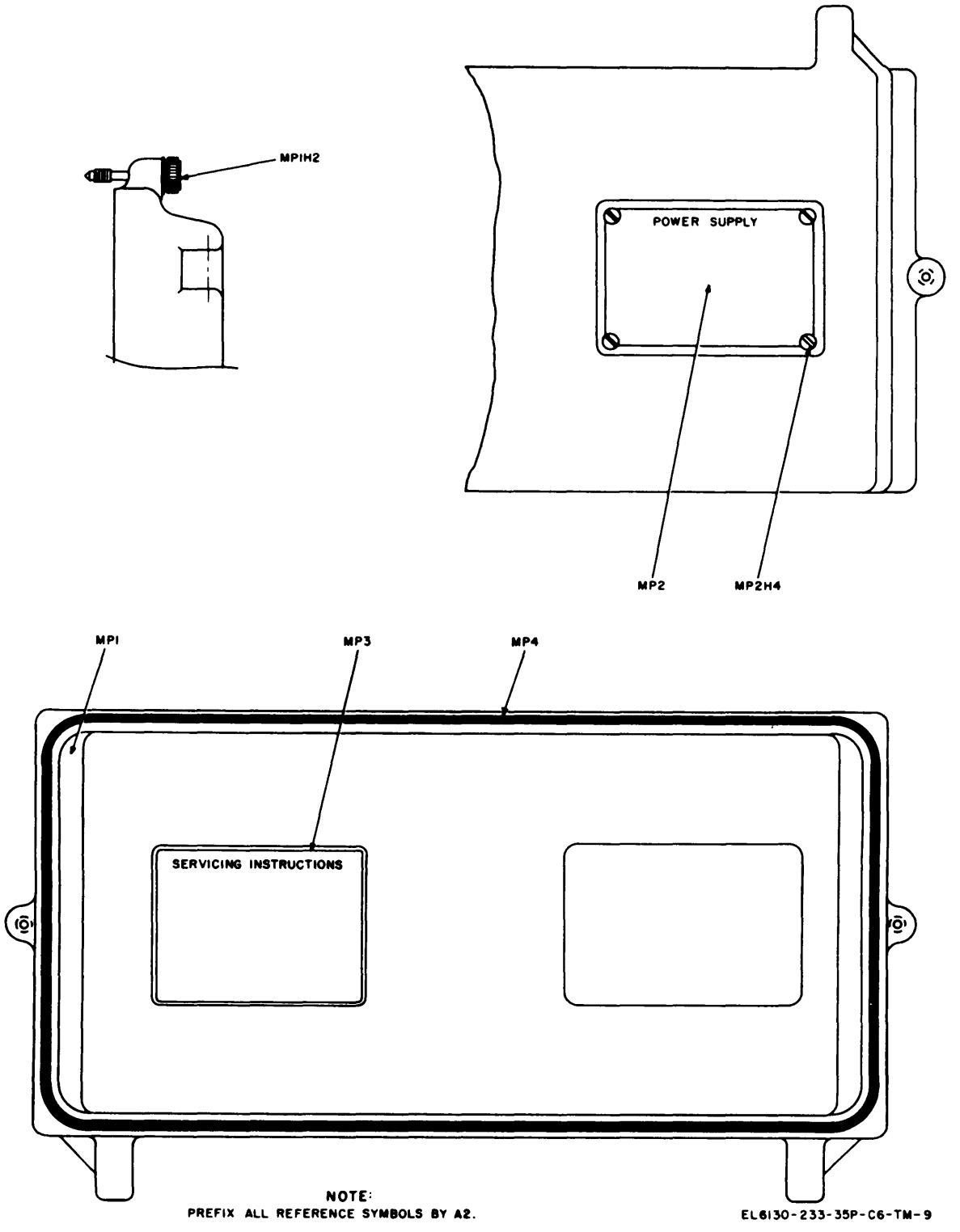


Figure B-9. Front cover assembly.

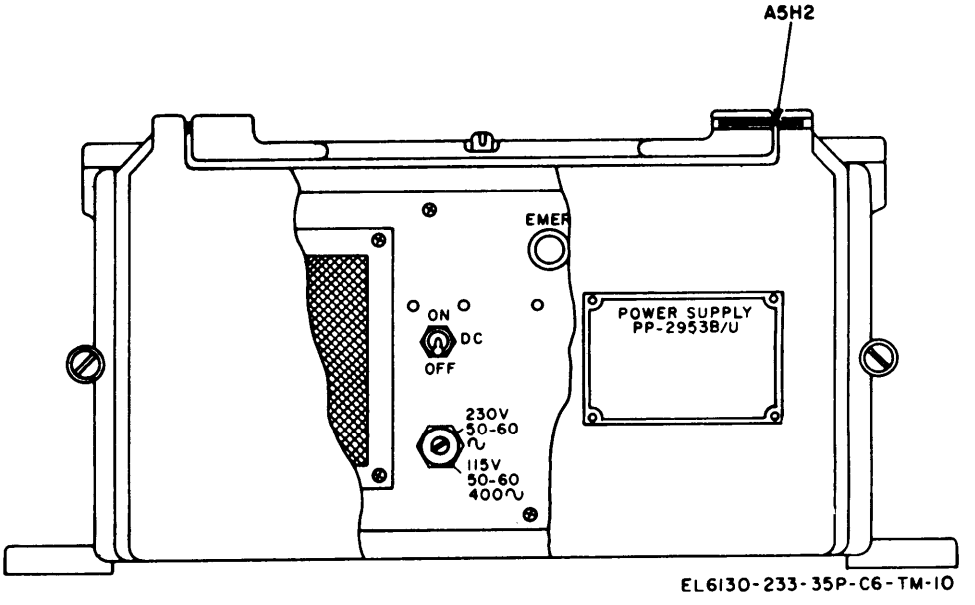


Figure B10. Location of front panel assembly.

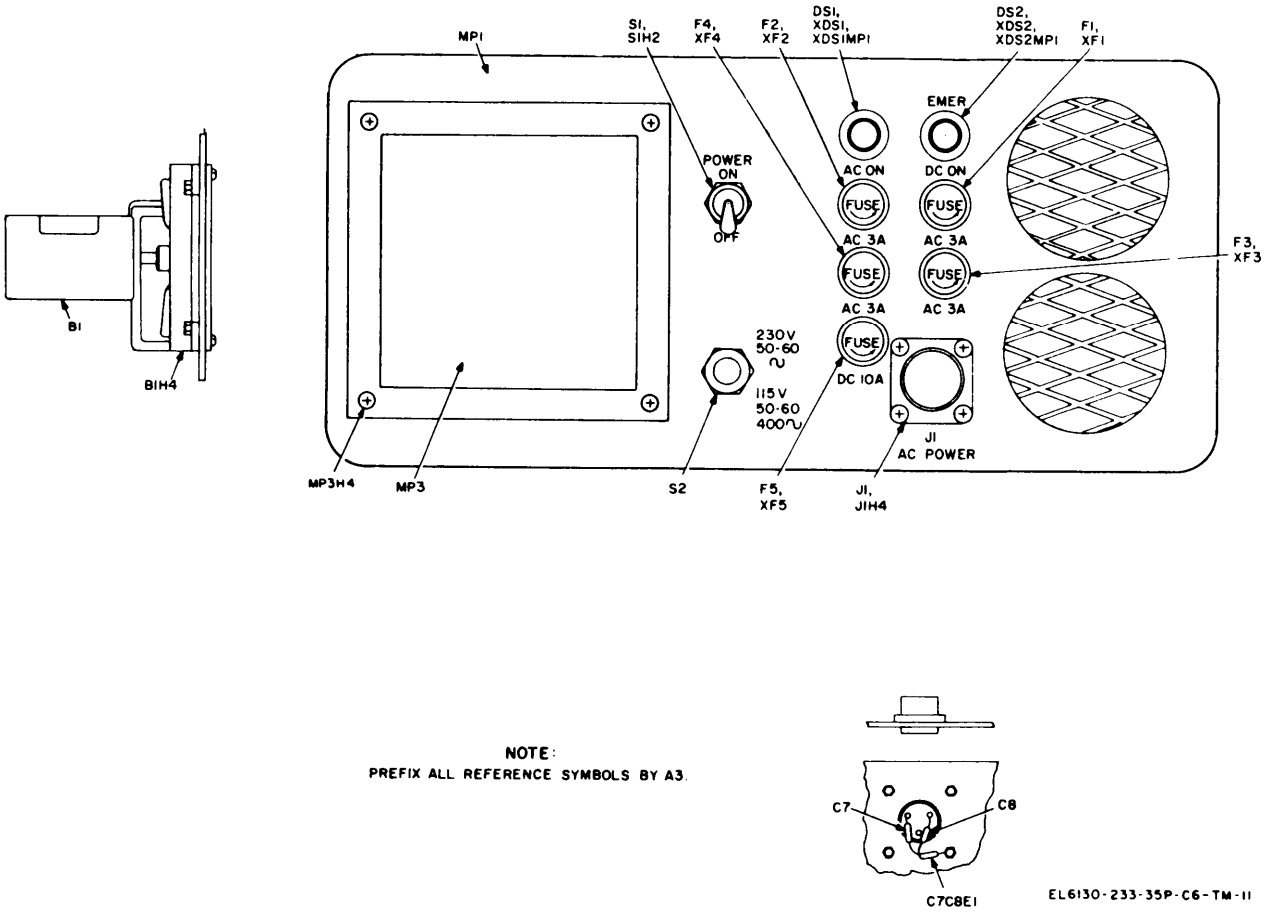


Figure B–11. Front Panal Assembly of Power Supp1ies PP–2953/U and PP-2953A/U.

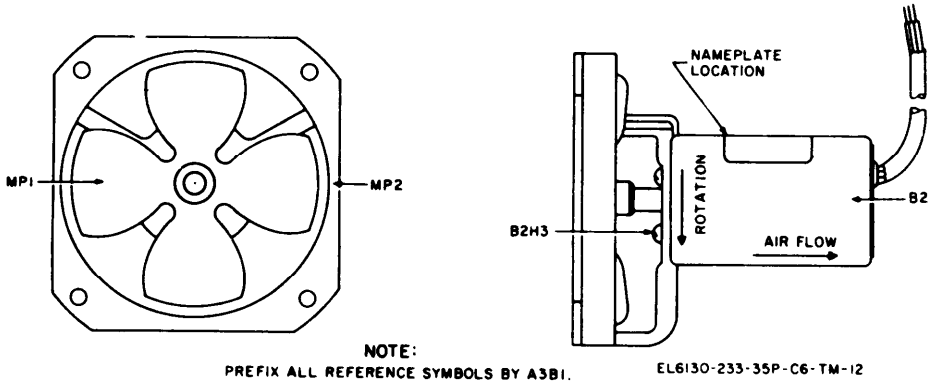


Figure B–12. Fan circulating, bracket.

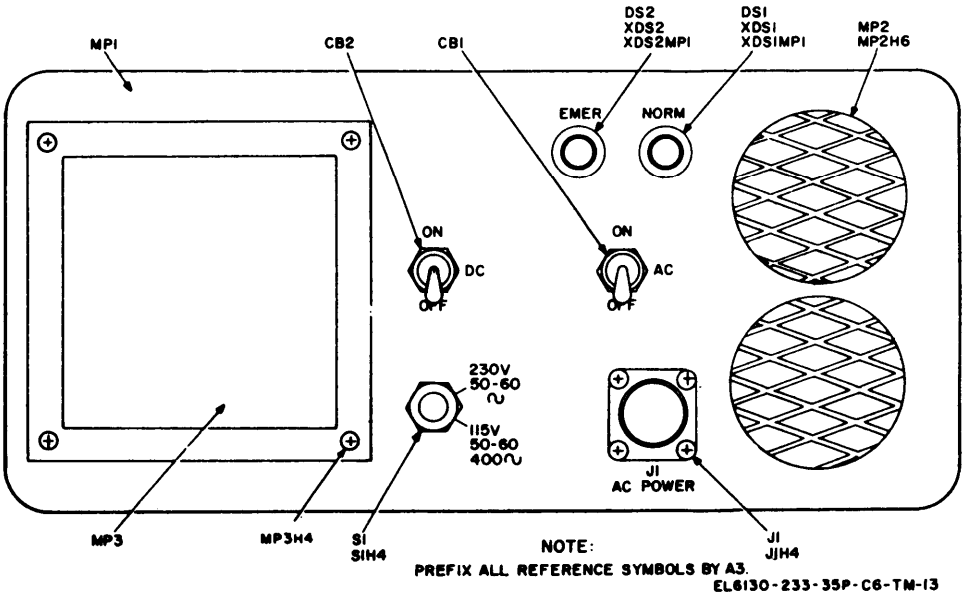


Figure B-13. Front Panel Assembly of Power Supply PP-2953B/U.

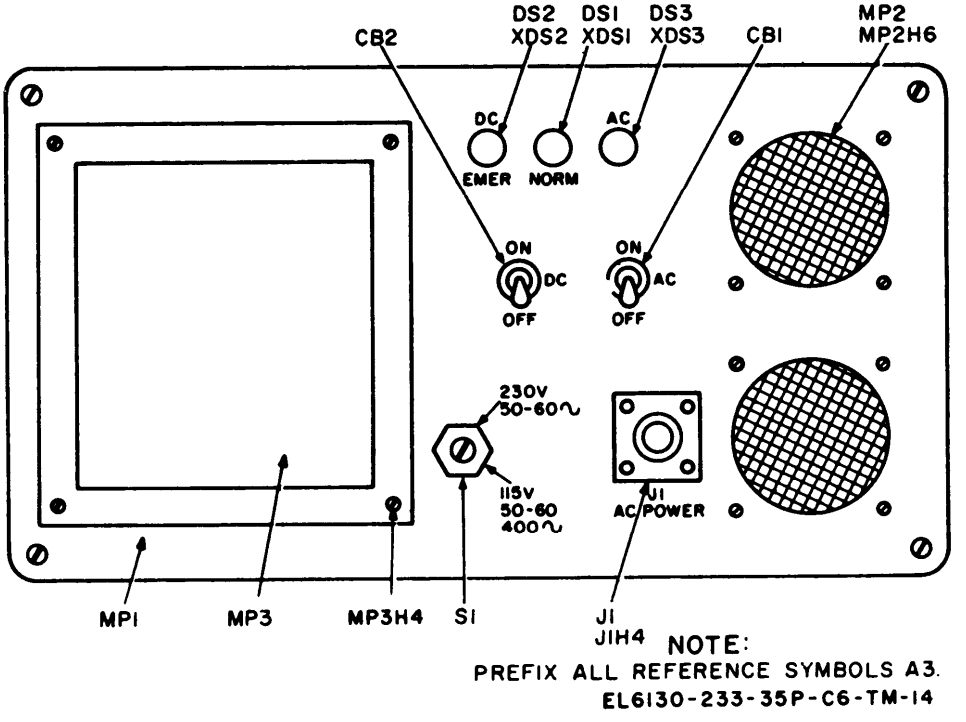


Figure B-14. Front Panel Assembly of Power Supply PP-2953C/U.

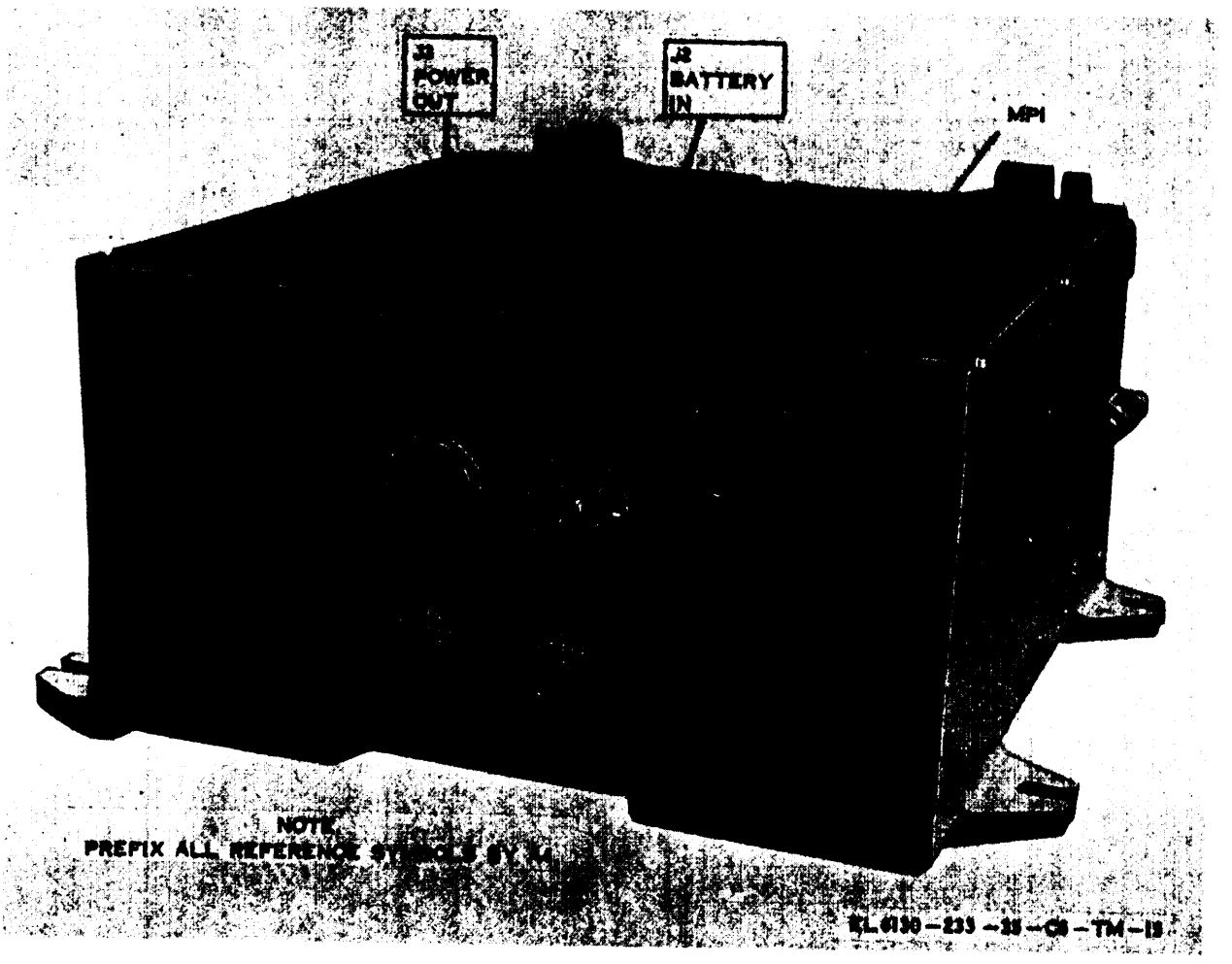


Figure B-15. Housing assembly.

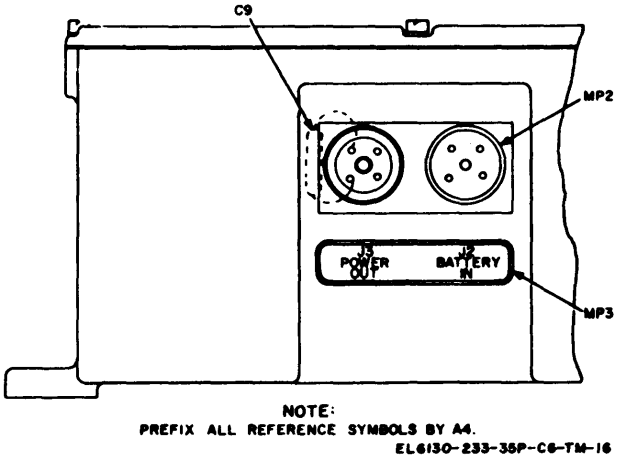


Figure B-16. Housing assembly component piece parts location.

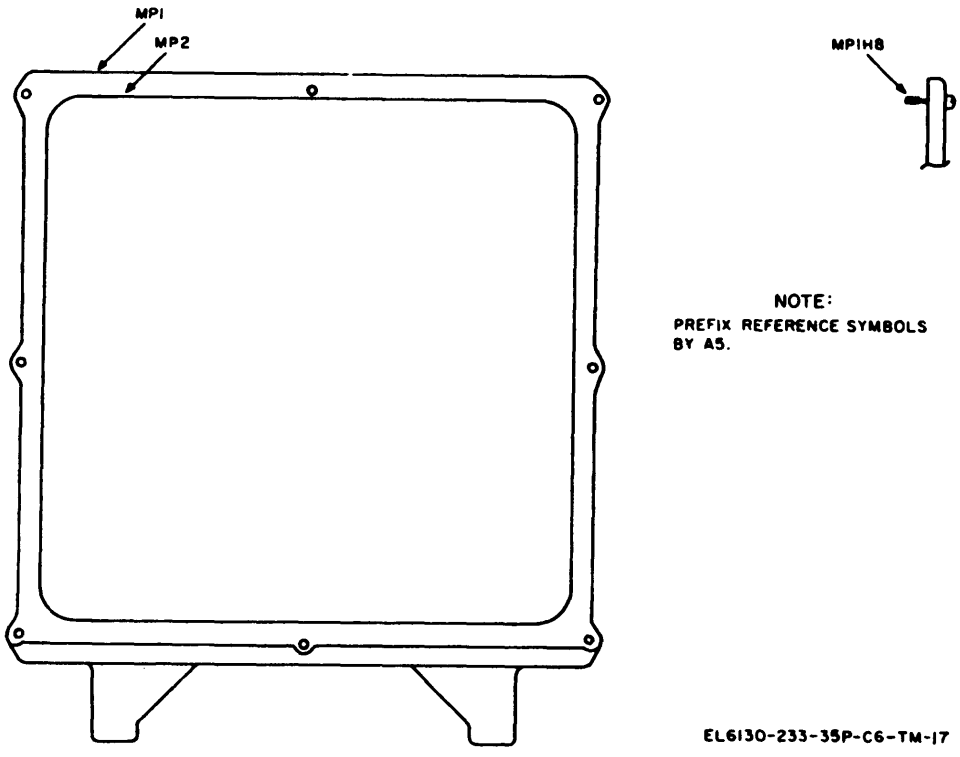
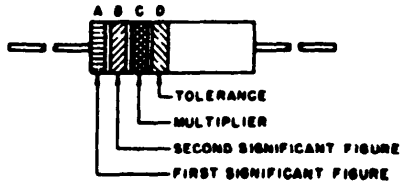


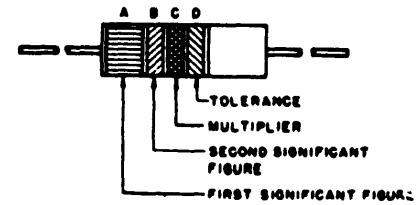
Figure B-17. Top cover assembly.

COMPOSITION-TYPE RESISTORS



BAND A— Equal Width Band Signifies Composition-Type

WIREWOUND-TYPE RESISTORS

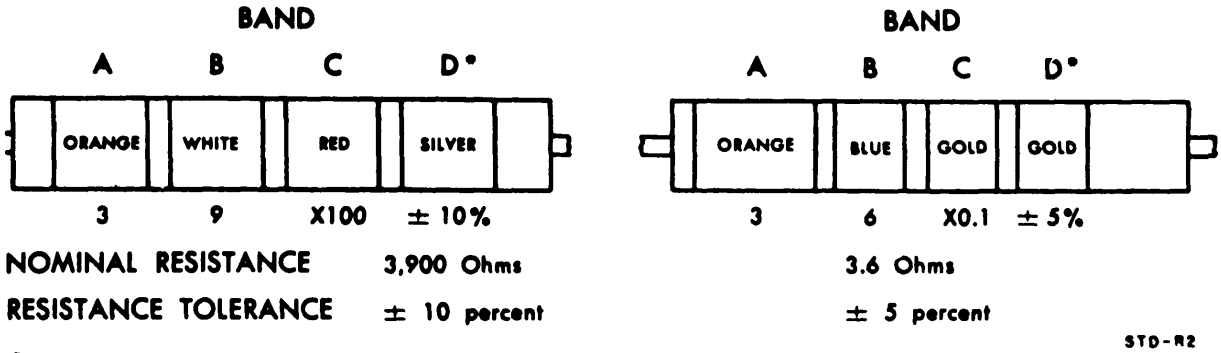


BAND A— Double Width Signifies Wire-wound Resistor

COLOR CODE TABLE

BAND A		BAND B		BAND C		BAND D*	
COLOR	FIRST SIGNIFICANT FIGURE	COLOR	SECOND SIGNIFICANT FIGURE	COLOR	MULTIPLIER	COLOR	RESISTANCE TOLERANCE (PERCENT)
BLACK	0	BLACK	0	BLACK	1		
BROWN	1	BROWN	1	BROWN	10		
RED	2	RED	2	RED	100		
ORANGE	3	ORANGE	3	ORANGE	1,000		
YELLOW	4	YELLOW	4	YELLOW	10,000	SILVER	± 10
GREEN	5	GREEN	5	GREEN	100,000	GOLD	± 5
BLUE	6	BLUE	6	BLUE	1,000,000		
PURPLE (VIOLET)	7	PURPLE (VIOLET)	7				
GRAY	8	GRAY	8	SILVER	0.01		
WHITE	9	WHITE	9	GOLD	0.1		

EXAMPLES OF COLOR CODING

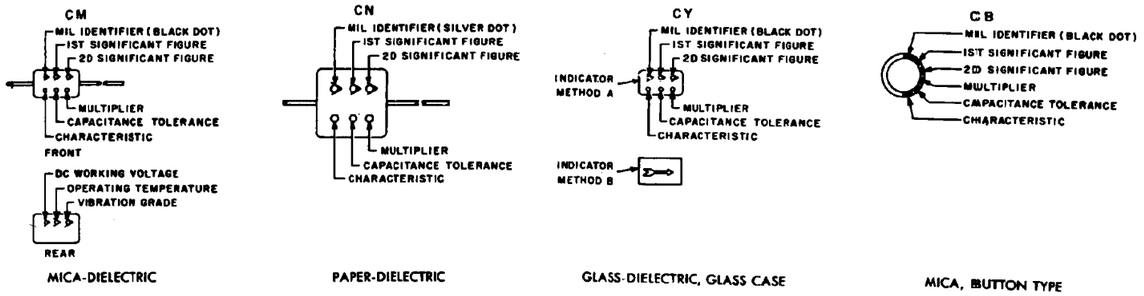


*If Band D is omitted, the resistor tolerance is ±20%, and the resistor is not Mil-Std.

Figure 4-1. Resistor color code.

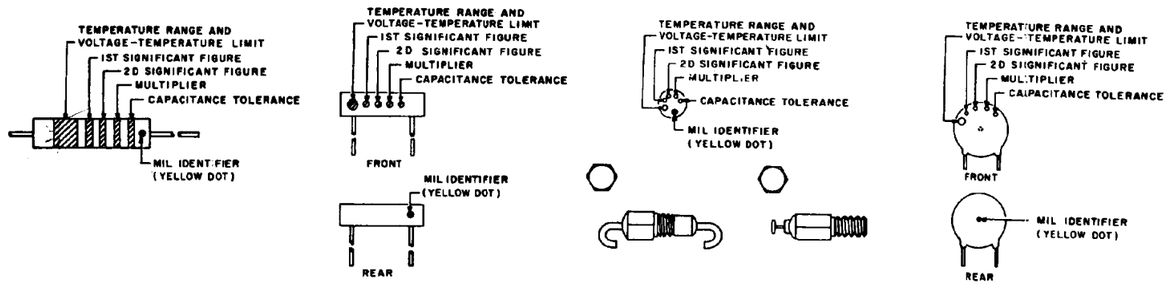
COLOR CODE MARKING FOR MILITARY STANDARD CAPACITORS

GROUP I Capacitors, Fixed, Various-Dielectrics, Styles CM, CN, CY, and CB



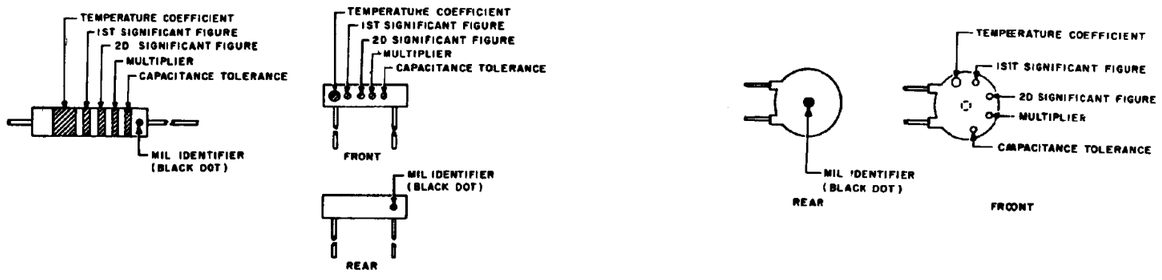
MICA-DIELECTRIC | PAPER-DIELECTRIC | GLASS-DIELECTRIC, GLASS CASE | MICA, BUTTON TYPE

GROUP II Capacitors, Fixed Ceramic-Dielectric (General Purpose) Style CK



AXIAL LEAD | RADIAL LEAD | FEED-THROUGH | STAND-OFF | DISK-TYPE

GROUP III Capacitors, Fixed, Ceramic-Dieletric (Temperature Compensating) Style CC



AXIAL LEAD | RADIAL LEAD | DISK-TYPE

COLOR CODE TABLES

TABLE I – For use with Group I, Styles CM, CN, CY and CB

COLOR	MIL ID	1st SIG FIG	2nd SIG FIG	MULTIPLIER[1]	CAPACITANCE TOLERANCE				CHARACTERISTIC[2]				DC WORKING VOLTAGE	OPERATING TEMP. RANGE	VIBRATION GRADE
					CM	CN	CY	CB	CM	CN	CY	CB	CM	CM	CM
BLACK	CM, CY CB	0	0	1			± 20%	± 20%		A				−55° to +70°C	10–55 cps
BROWN		1	1	10					B	E		B			
RED		2	2	100	± 2%		± 2%	± 2%	C		C			−55° to +85°C	
ORANGE		3	3	1,000		± 30%			D			D	300		
YELLOW		4	4	10,000					E					−55° to +125°C	10–2,000 cps
GREEN		5	5		± 5%				F				500		
BLUE		6	6											−55° to +150°C	
PURPLE (VIOLET)		7	7												
GREY		8	8												
WHITE		9	9												
GOLD				0.1			± 5%	± 5%							
SILVER	CN				± 10%	± 10%	± 10%	± 10%							

TABLE II – For use with Group II, General Purpose, Style CK

COLOR	TEMP. RANGE AND VOLTAGE – TEMP LIMITS[3]	1st SIG FIG	2nd SIG FIG	MULTIPLIER[1]	CAPACITANCE TOLERANCE	MIL ID
BLACK		0	0	1	± 20%	
BROWN	AW	1	1	10	± 10%	
RED	AX	2	2	100		
ORANGE	BX	3	3	1,000		
YELLOW	AV	4	4	10,000		CK
GREEN	CZ	5	5			
BLUE	BV	6	6			
PURPLE (VIOLET)		7	7			
GREY		8	8			
WHITE		9	9			
GOLD						
SILVER						

TABLE III – For use with Group III, Temperature Compensating, Style CC

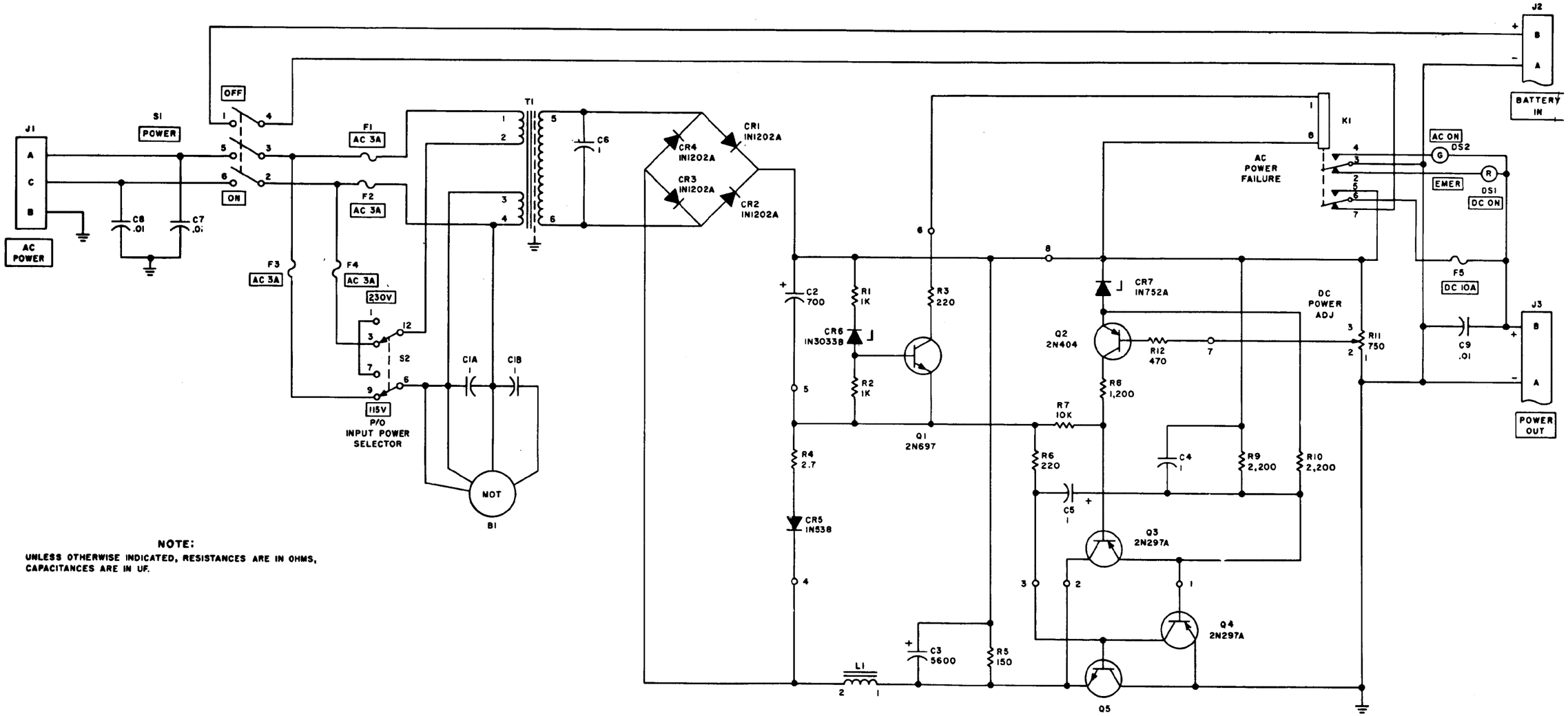
COLOR	TEMPERATURE COEFFICIENT[4]	1st SIG FIG	2nd SIG FIG	MULTIPLIER[1]	CAPACITANCE TOLERANCE		MIL ID
					Capacitances over 10uuf	Capacitances 10uuf or less	
BLACK	0	0	0	1		± 2.0uuf	CC
BROWN	−30	1	1	10	± 1%		
RED	−80	2	2	100	± 2%	± 0.25uuf	
ORANGE	−150	3	3	1,000			
YELLOW	−220	4	4				
GREEN	−330	5	5		± 5%	± 0.5uuf	
BLUE	−470	6	6				
PURPLE (VIOLET)	−750	7	7				
GREY		8	8	0.01			
WHITE		9	9	0.1	± 10%		
GOLD	+100					± 1.0uuf	
SILVER							

1. The multiplier is the number by which the two significant (SIG) figures are multiplied to obtain the capacitance in uuf.
2. Letters indicate the Characteristics designated in applicable specifications: MIL-C-5, MIL-C-91, MIL-C-11272, and MIL-C-10950 respectively.
3. Letters indicate the temperature range and voltage-temperature limits designated in MIL-C-11015.
4. Temperature coefficient in parts per million per degree centigrade.

STD-C2

Figure 4-2. Capacitor color code.

Army-Ft Monmouth, NJ-MON 524-61

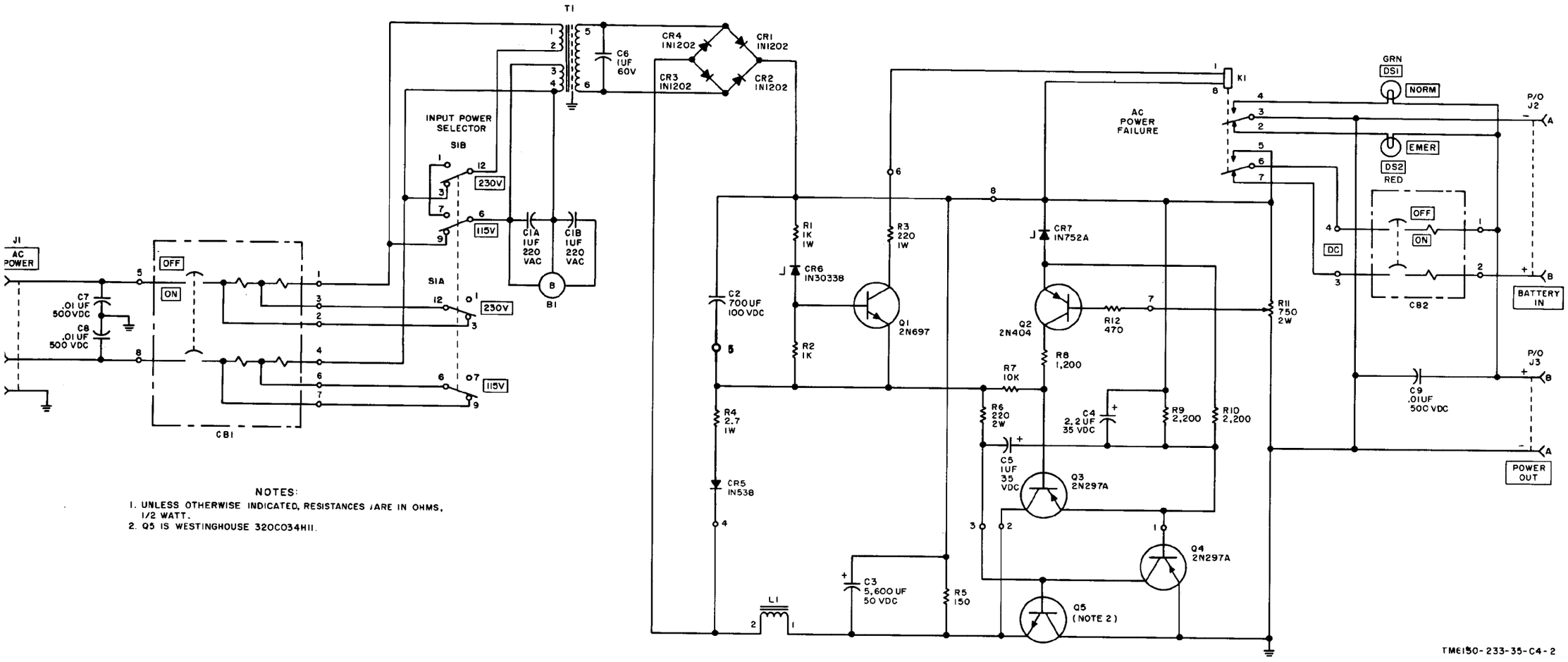


NOTE:

UNLESS OTHERWISE INDICATED, RESISTANCES ARE IN OHMS, CAPACITANCES ARE IN UF.

Figure 4-3. Power Supply PP-2953/U, schematic diagram.

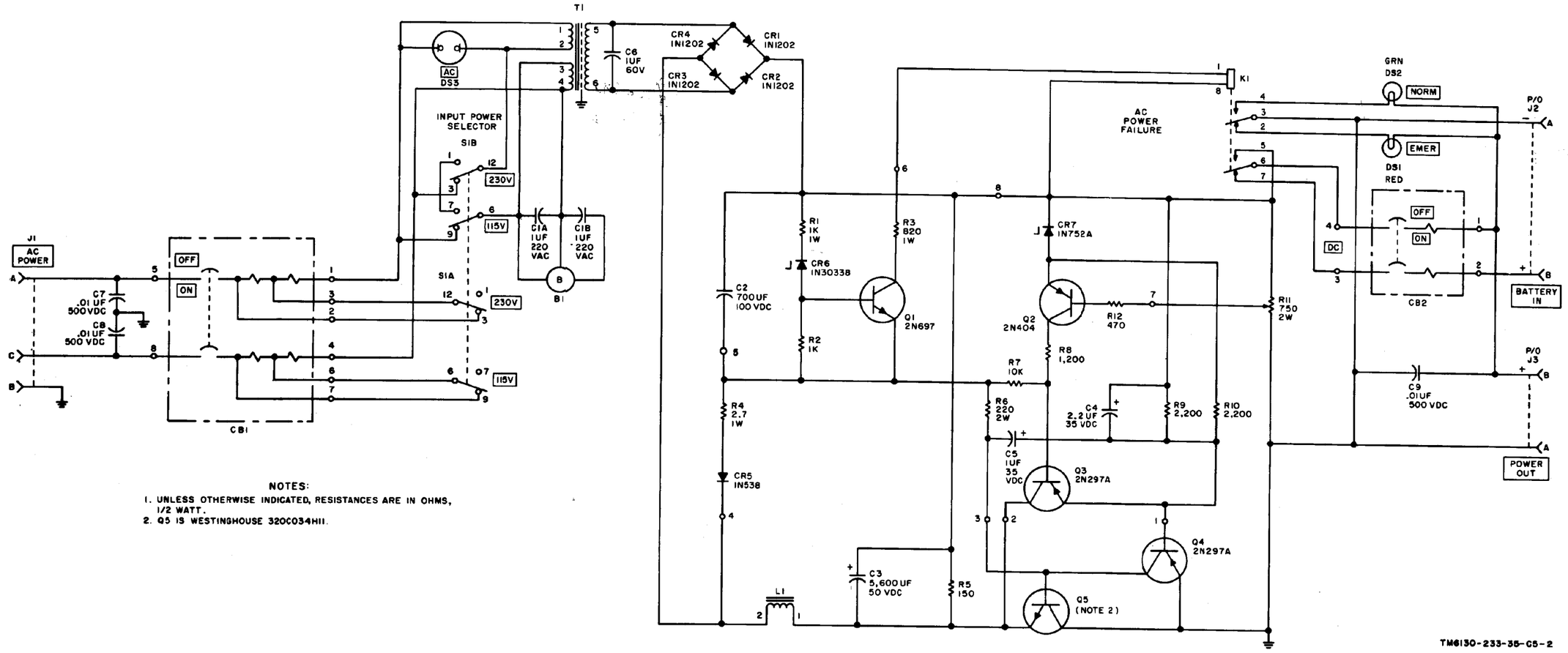
TM 6130-233-35-C2-1



NOTES:
1. UNLESS OTHERWISE INDICATED, RESISTANCES ARE IN OHMS, 1/2 WATT.
2. Q5 IS WESTINGHOUSE 320C034H11.

Change 8

Figure 4-4. Power Supply PP-2953B/U, schematic diagram.



NOTES:

1. UNLESS OTHERWISE INDICATED, RESISTANCES ARE IN OHMS, 1/2 WATT.
2. Q5 IS WESTINGHOUSE 320C034H11.

TM6130-233-35-C5-2

Change 8

■ *Figure 4-5. Power Supply PP-2953C/U, schematic diagram.*

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USACDCSWA (1)
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MDW (1)
Armies (2)
Corps (2)
USA Corps (3)
USATC AD (2)
USATC Engr (2)
USATC Inf (2)
USATC Armor (2)
USASTC (2)
Instls (2) except
  Fort Monmouth (70)
  Fort Huachuca (10)
  Fort Gordon (10)
Svc Colleges (2)
Br Svc Sch (2)
GENDEP (OS) (2)
Sig Sec, GENDEP (OS) (5)
Sig Dep (OS) (12)
Army Dep (2) except
  FTWOAD (10)
  LXAD (14)
  SAAD (30)
  TOAD (14)
  LEAD (5)
  SHAD (3)
  SVAD (5)
  NAAD (5)
  CHAD (3)
  ATAD (10)
USAERDAW (13)
USAERDAA (2)
Trans Tml Comd (1)
Army Tml (1) except
  Oakland Army Tml (5)
AMS (1)
WRAMC (1)
Army Pictorial Cen (2)
Sig Fld Maint Shops (2)
11th Air Assault Div (3)
WSMR (5)
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  (2 copies each UNOINDC)
  11–16
  11–57
  11–97
  11–98
  11–117
  11–155
  11–157
  11–337
  11–500 (AA–AE) (4)
  11–557
  11–587
  11–592
  11–597

NG: None.

USAR: None.

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

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. Centimeter = 10 Millimeters = 0.01 Meters = 0.3937 Inches
1 Meter = 100 Centimeters = 1000 Millimeters = 39.37 Inches
1 Kilometer = 1000 Meters = 0.621 Miles

'VEIGHTS

Gram = 0.001 Kilograms = 1000 Milligrams = 0.035 Ounces
1 Kilogram = 1000 Grams = 2.2 lb.
1 Metric Ton = 1000 Kilograms = 1 Megagram = 1.1 Short Tons

LIQUID MEASURE

1 Milliliter = 0.001 Liters = 0.0338 Fluid Ounces
1 Liter = 1000 Milliliters = 33.82 Fluid Ounces

SQUARE MEASURE

1 Sq. Centimeter = 100 Sq. Millimeters = 0.155 Sq. Inches
1 Sq. Meter = 10,000 Sq. Centimeters = 10.76 Sq. Feet
1 Sq. Kilometer = 1,000,000 Sq. Meters = 0.386 Sq. Miles

CUBIC MEASURE

1 Cu. Centimeter = 1000 Cu. Millimeters = 0.06 Cu. Inches
1 Cu. Meter = 1,000,000 Cu. Centimeters = 35.31 Cu. Feet

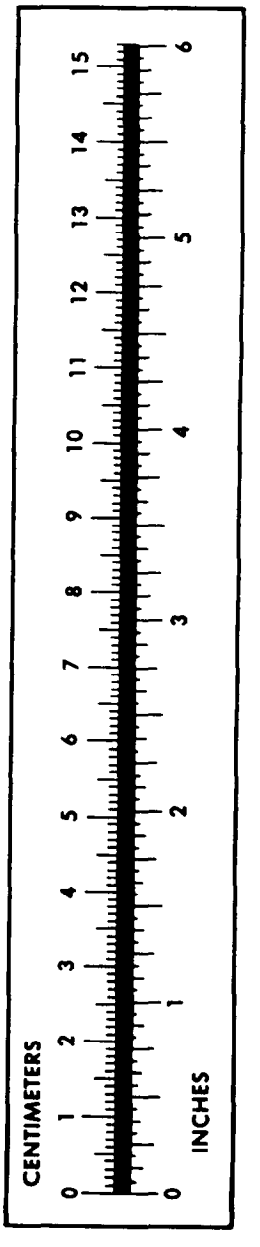
TEMPERATURE

5/9(°F - 32) = °C
212° Fahrenheit is evuivalent to 100° Celsius
90° Fahrenheit is equivalent to 32.2° Celsius
32° Fahrenheit is equivalent to 0° Celsius
9/5C° + 32 =°F

APPROXIMATE CONVERSION FACTORS

TO CHANGE	TO	MULTIPLY BY
Inches	Centimeters	2.540
Feet	Meters	0.305
Yards	Meters	0.914
Miles	Kilometers	1.609
Square Inches	Square Centimeters	6.451
Square Feet	Square Meters	0.093
Square Yards	Square Meters	0.836
Square Miles	Square Kilometers	2.590
Acres	Square Hectometers	0.405
Cubic Feet	Cubic Meters	0.028
Cubic Yards	Cubic Meters	0.765
Fluid Ounces	Milliliters	29.573
ıts	Liters	0.473
arts	Liters	0.946
allons	Liters	3.785
Ounces	Grams	28.349
Pounds	Kilograms	0.454
Short Tons	Metric Tons	0.907
Pound-Feet	Newton-Meters	1.356
Pounds per Square Inch	Kilopascals	6.895
Miles per Gallon	Kilometers per Liter	0.425
Miles per Hour	Kilometers per Hour	1.609

TO CHANGE	TO	MULTIPLY BY
Centimeters	Inches	0.394
Meters	Feet	3.280
Meters	Yards	1.094
Kilometers	Miles	0.621
Square Centimeters	Square Inches	0.155
Square Meters	Square Feet	10.764
Square Meters	Square Yards	1.196
Square Kilometers	Square Miles	0.386
Square Hectometers	Acres	2.471
Cubic Meters	Cubic Feet	35.315
Cubic Meters	Cubic Yards	1.308
Milliliters	Fluid Ounces	0.034
Liters	Pints	2.113
Liters	Quarts	1.057
ers	Gallons	0.264
ms	Ounces	0.035
ograms	Pounds	2.205
Metric Tons	Short Tons	1.102
Newton-Meters	Pounds-Feet	0.738
Kilopascals	Pounds per Square Inch	0.145
lometers per Liter	Miles per Gallon	2.354
meters per Hour	Miles per Hour	0.621



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