

RECTIFIER, J87202A, LIST 1

1.00 INTRODUCTION

1.01 This section covers identification, installation, connections, and maintenance of J87202A, List 1 rectifier.

1.02 The rectifier provides nominal dc voltages required by power supply option in some transistor amplifier systems. Refer to sections entitled Loudspeaker Sets, 106-Type, and Amplifier, KS-16754.

2.00 IDENTIFICATION

2.01 The rectifier (Fig. 1) is a compact unit designed to convert 117 volts 60 cycles ac to +12 volts and +30 volts dc.

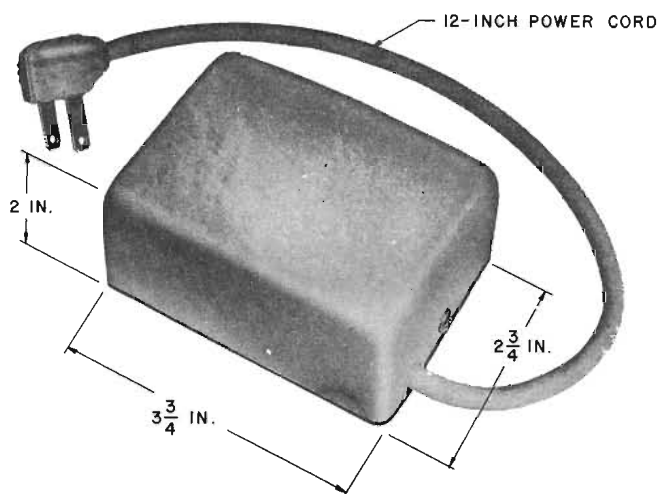


Fig. 1 — J87202A, List 1 Rectifier

2.02 The dc voltages are unregulated and obtained by means of a step-down transformer and a semiconductor rectifier.

2.03 The rectifier (Fig. 2) provides:

- Terminal H, +24 to +30 volts dc (nominal +30 volts dc).
- Terminal L, +10.5 to +15 volts dc (nominal +12 volts dc).

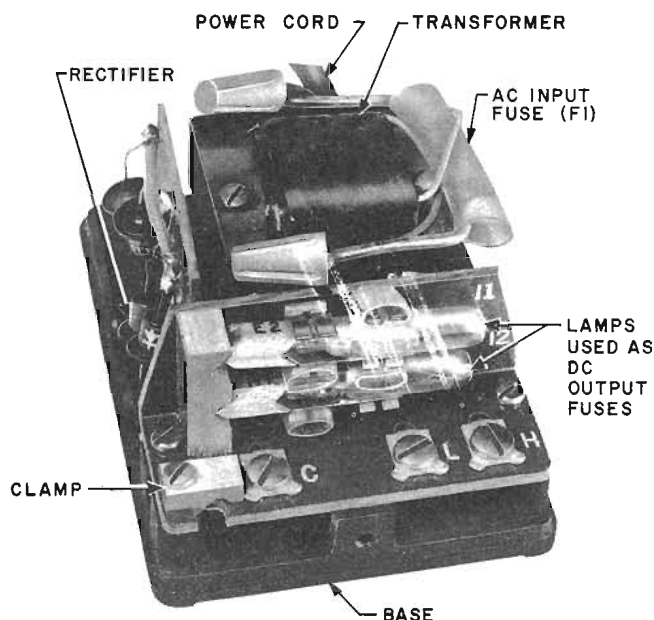


Fig. 2 — J87202A, List 1 Rectifier, Cover Removed

- Terminal C, common negative to both positive dc voltages.
- Current-limiting protection for both dc outputs (I1 and I2).
- AC input protection (F1).
- 12-inch power cord.

2.04 Components of rectifier are mounted on a base and protected by a metal cover. Two Phillips head screws hold cover on base. An attached wallplate (Fig. 3) is used to mount rectifier on a vertical surface.

3.00 INSTALLATION

3.01 Rectifier requires a nominal 117-volt 60-cycle ac outlet to be provided by customer. Outlet should not be wired through an ON-OFF switch.

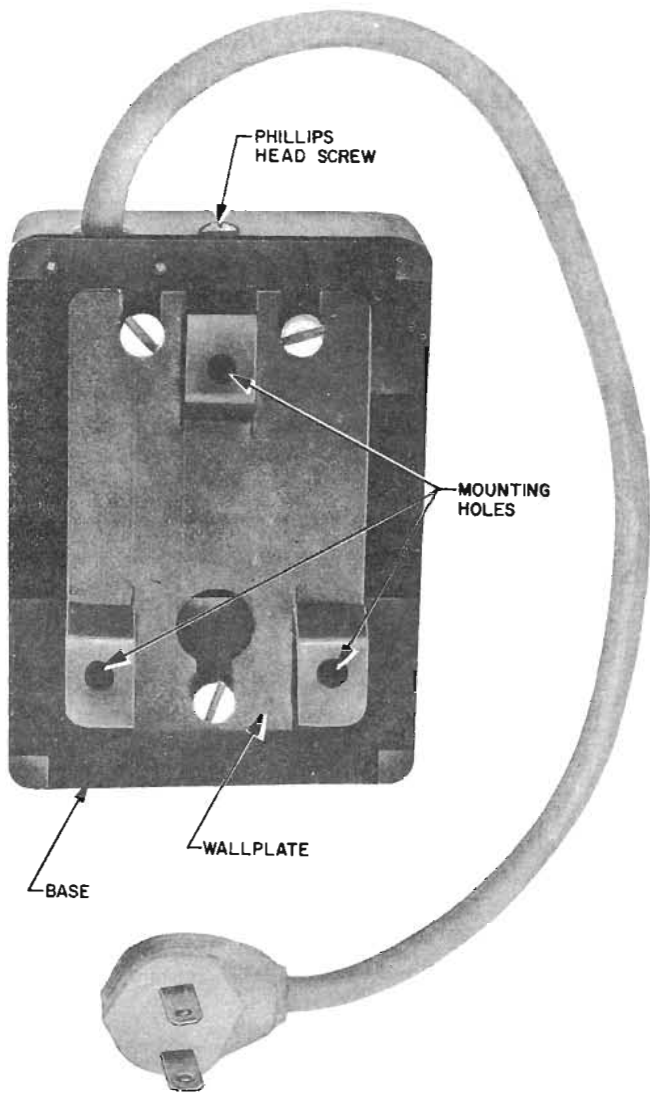


Fig. 3 — J87202A, List 1 Rectifier, Back View

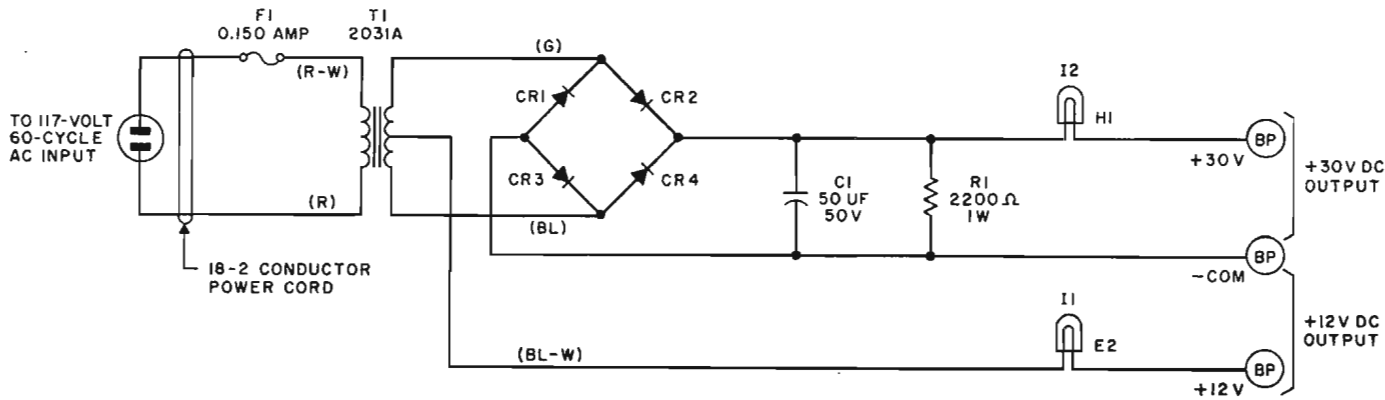


Fig. 4 — J87202A, List 1 Rectifier Schematic

3.02 Rectifier shall be mounted within 12 inches of the outlet. This requirement is due to 12-inch power cord furnished with list 1 rectifier.

3.03 A 6-foot power cord (P-41L431) may be used in place of 12-inch power cord if rectifier cannot be mounted within the required distance of the outlet.

3.04 Mount wallplate on vertical surface with three screws. Three furnished screws are attached to back of base and slip into slots provided on wallplate.

4.00 CONNECTIONS

4.01 Use station wire to connect rectifier output to transistor amplifier system and terminate as shown in Table A.

TABLE A
CONNECTIONS

Rectifier Terminal	Amplifier System Terminal
H	+30 volts dc
L	+12 volts dc
C	Common negative

4.02 Secure station wire under clamp on rectifier (Fig. 2).

5.00 MAINTENANCE

5.01 Rectifier maintenance is limited to checking for and replacing a blown fuse (Fig. 4). If fuses check okay and rectifier fails to put out required voltages, replace rectifier.

5.02 Switchboard lamps fuse dc outputs. An H1 lamp fuses H output. An E2 lamp fuses L output. A 0.150-amp Fusetron fuses ac input.