

## 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.

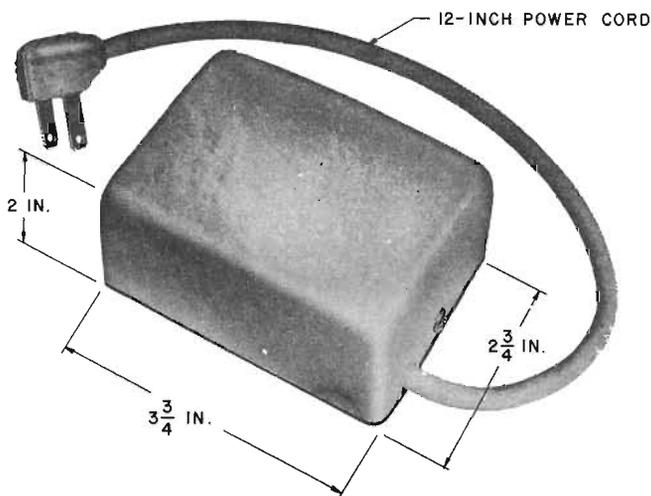


Fig. 1 - J87202A, List 1 Rectifier

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).

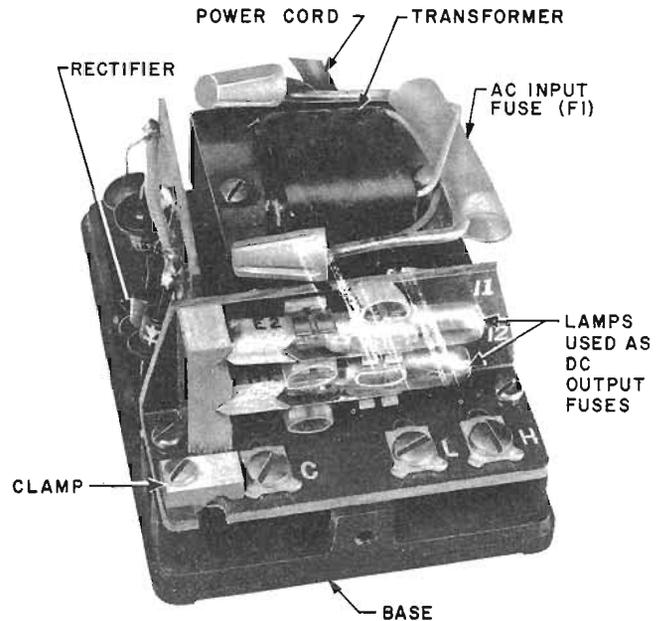


Fig. 2 - J87202A, List 1 Rectifier, Cover Removed

- 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.

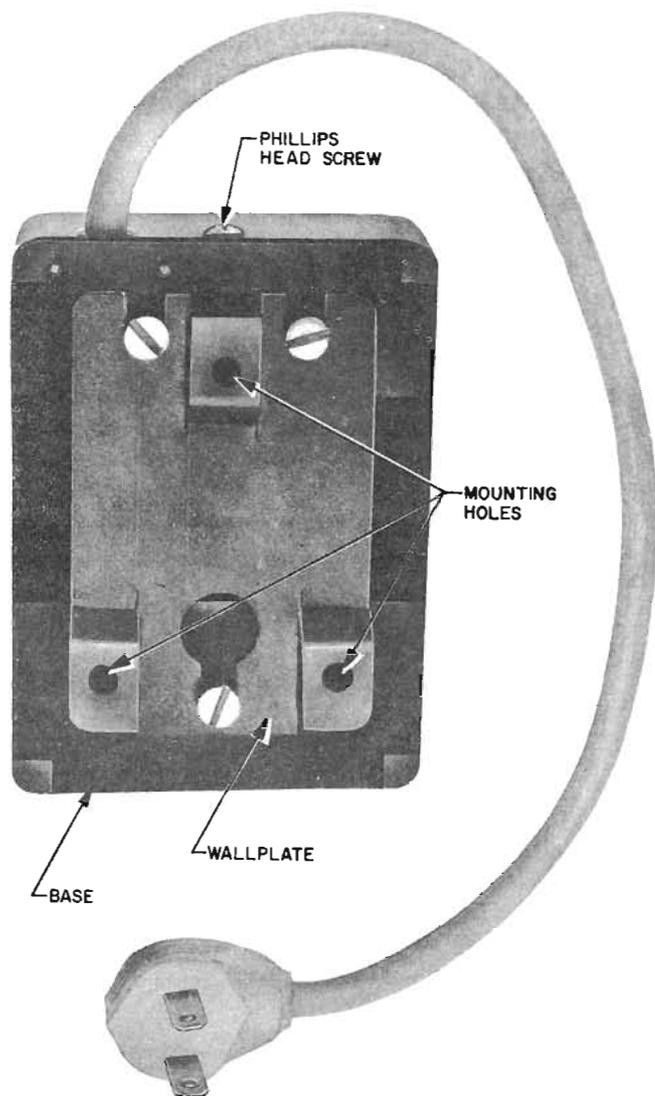


Fig. 3 — J87202A, List 1 Rectifier, Back View

**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.

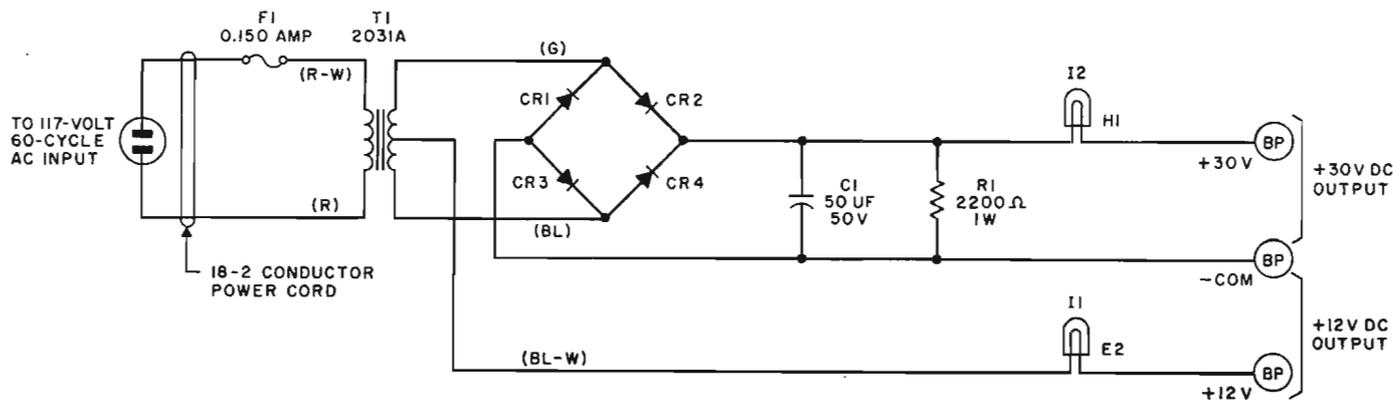


Fig. 4 — J87202A, List 1 Rectifier Schematic