# RECTIFIER STACKS USED IN LORAIN PRODUCTS CORPORATION T603B1 POWER SUPPLY

## AND J86256 METALLIC- AND SEMICONDUCTOR-TYPE RECTIFIERS REPLACEMENT PARTS AND PROCEDURES

#### 1. GENERAL

- 1.01 This section covers the information necessary for ordering replacement parts to be used in the maintenance of the above apparatus. It also covers the approved procedures for replacing these parts.
- 1.02 Part 2 of this section covers ordering information for those parts which it is practicable to replace in the field in the maintenance of this apparatus. No attempt should be made to replace parts not designated. Part 2 also contains explanatory figures showing the different parts. The information is called Replacement Parts.
- 1.03 Part 3 of this section covers the approved procedures for the replacement of parts covered in Part 2. This information is called Replacement Procedures.

Caution: Voltages inside the rectifier case are over 300 volts to ground. Remove power before replacing rectifier stacks. The dc voltages across the capacitor terminals also exceed 300 volts. Insure that the capacitors are discharged before proceeding.

#### 2. REPLACEMENT PARTS

- 2.01 The figures included in this part show the various replacement parts in their proper relation to other parts of the apparatus together with their corresponding names.
- 2.02 When ordering replacement parts, give the name of the part as shown in the figures of this section and also the complete nameplate data of the apparatus including the model number and the name of the manufacturer or the J number. For example: Rectifier Stack for Lorain Products Corporation Model T603B1 Power Supply. Do not refer to the section number.

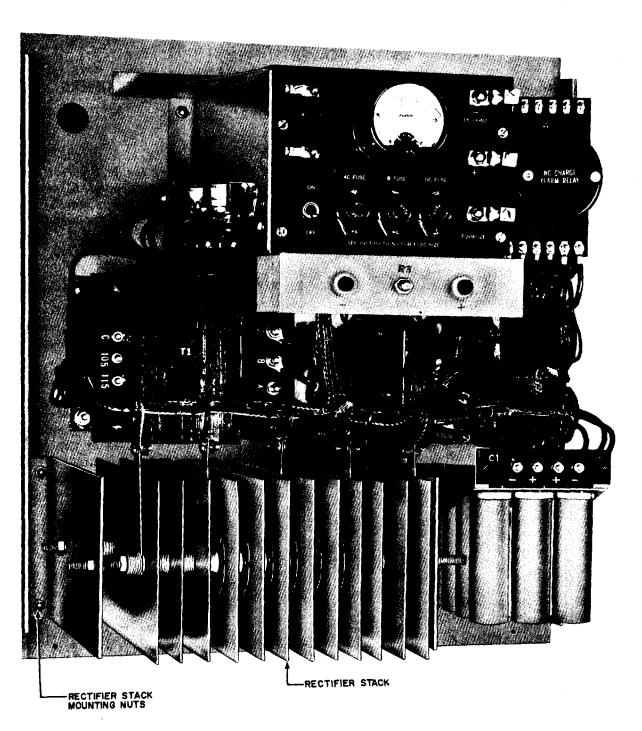


Fig. 1 - T603B1 Power Supply (Cover Removed)

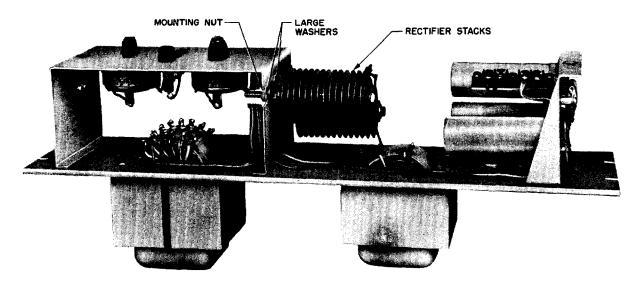


Fig. 2 - J86256A, L1 Rectifier

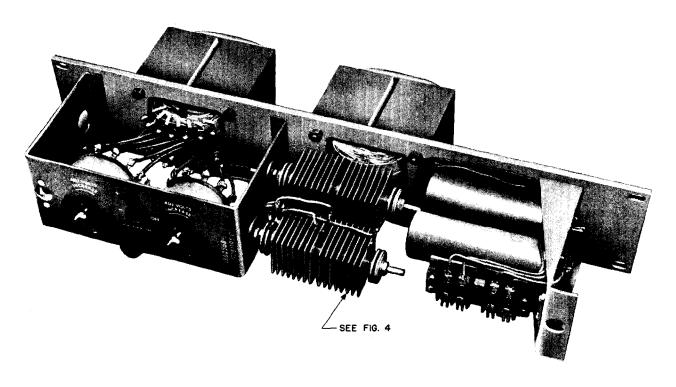


Fig. 3 – J86256B, L1 Rectifier (Showing Rectifier Stacks)

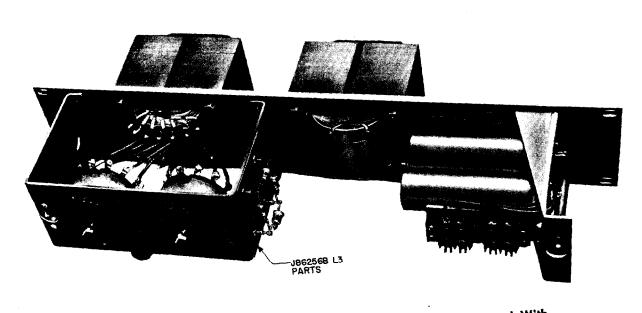


Fig. 4 – J86256B, L1 Rectifier (Showing Rectifier Stacks Replaced With J86256B, L3 Apparatus Assembly)

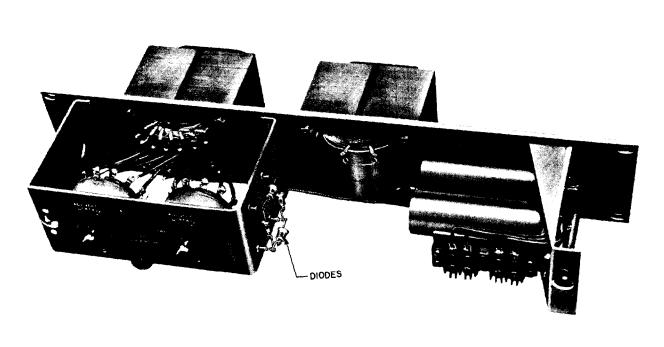


Fig. 5 – J86256B, L2 Rectifier (Latest Version)

#### 3. REPLACEMENT PROCEDURES

#### 3.01 List of Tools

CODE OR SPEC NO.	DESCRIPTION
102	3/8-Inch Hex. Single-End Socket Wrench
R-1542	6-Inch Adjustable Wrench
	4-Inch E Screwdriver

3.02 Before making any replacement of parts, transfer the load to a spare rectifier to insure that service will not be interrupted. Remove any fuses necessary to insure that the rectifier being worked on is not connected to power.

3.03 No replacement procedures are specified for parts where the replacement consists of a simple operation.

#### Rectifier Stacks (T603B1 Power Supply) (See Fig. 1)

- 3.04 Disconnect the power supply as follows.
  - (a) Operate the ON-OFF switch to OFF.
  - (b) Remove the front cover using the 4-inch screwdriver.
  - (c) Disconnect the leads at the rectifier stack terminals using the screwdriver and the adjustable wrench.
  - (d) Remove the rectifier stack mounting nuts using the socket wrench.
  - (e) Remove the rectifier stack and replace with a new stack. Fasten the leads and the mounting nuts securely.
  - (f) All stacks that have been in service two or more years shall be replaced.

#### Rectifier Stacks (J86256A and J86256B, L1 Rectifiers)

- 3.05 Disconnect the rectifier as follows.
  - (a) Operate the ADJ VOLTS FINE switch to the OFF position.
  - (b) Remove the cover by turning the locking screws with the screwdriver.
  - (c) Unsolder the leads at the rectifier stack terminals. Remove the mounting nut using the adjustable wrench. Remove the rectifier stack. Retain the large diameter washers.
- 3.06 Defective rectifier stacks in J86256A rectifiers (see Fig. 2) shall be replaced with KS-15557, L1 or L2. If L1 rectifier stacks are not available, L2 may be substituted. However, rectifier stacks in any rectifier shall be from the same supplier and have the same list number. Re-use the large washers to mount the new rectifier stacks as shown in Fig. 2. When mounting rectifier stacks in the J86256A rectifier, position them so that there is at least 1/8 inch clearance between the two stacks and between the stacks and the adjacent components. All stacks that have been in service two or more years shall be replaced.
- 3.07 Defective rectifier stacks in J86256B, L1 rectifiers (see Fig. 3) shall be replaced with the J86256B, L3 apparatus assembly (diode replacement parts) (see Fig. 4), making use of the rectifier stack mounting holes.

### Diodes (J86256B, L2 Rectifiers) (See Fig. 5)

3.08 Disconnect the rectifier as covered in 3.05.

Do not solder or unsolder connection to diodes before referring to Section 069-140-811.

When replacing a defective diode or diodes, all other diodes in the rectifying bridge shall also be replaced.