

**This Manual is provided by**  
**CBTricks.com**

Someone who wanted to help you repair your equipment  
scanned this manual.

If you would like to help us put more manuals online support us.

Supporters of CBTricks.com paid for the hosting so you would have this file.

CBTricks.com is a non-commercial personal website was created to help promote the exchange of service, modification, technically oriented information, and historical information aimed at the Citizens Band, GMRS (CB "A" Band), MURS, Amateur Radios and RF Amps.

CBTricks.com is not sponsored by or connected to any Retailer, Radio, Antenna Manufacturer or Amp Manufacturer, or affiliated with any site links shown in the links database. The use of product or company names on my web site is not endorsement of that product or company.

If your company would like to provide technical information to be featured on this site I will put up on the site as long as I can do it in a non-commercial way.

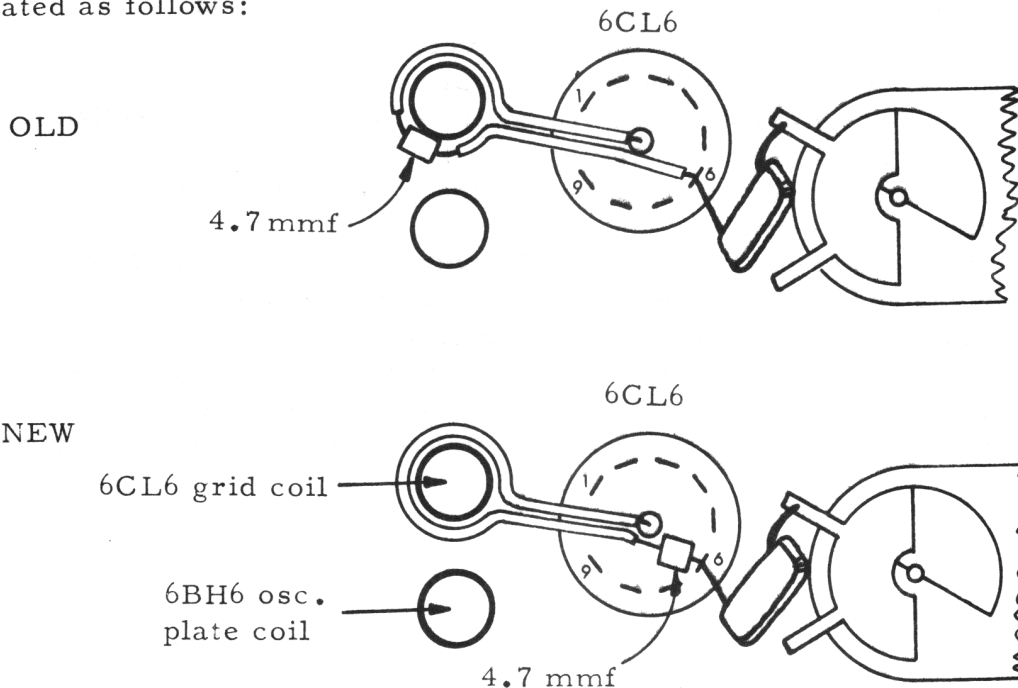
The site is supported with donation from users, friends and selling of the Galaxy Service Manual CD to cover some of the costs of having this website on the Internet instead of relying on banner ads, pop-up ads, commercial links, etc. to pay my costs. Thus I do not accept advertising banners or pop-up/pop-under advertising or other marketing/sales links or gimmicks on my website.

ALL the money from donations is used for CBTricks.com I didn't do all the work to make money (I have a day job). This work was not done for someone else to make money also, for example the ebay CD sellers.

All Trademarks, Logos, and Brand Names are the property of their respective owners.  
This information is not provided by, or affiliated in any way with any radio or antenna Manufacturers.  
Thank you for any support you can give.

The following changes have been made in late production Model 50A and Model 100A Executive transceivers. It is recommended that these changes be added to all sets where applicable.

1. Neutralization Loop. The 4.7 mmf neutralizing capacitor should be re-located as follows:



The 4.7 mmf capacitor should Solder directly to pin 6 of the 6CL6 socket with no more than 1/4 inch lead. Splice a piece of insulated wire on the other end of the 4.7 mmf capacitor and run the neutralization loop around the top end of the 6CL6 grid coil just under the top coil lead. This is same position on the coil the loop was previously positioned.

2. Grid Drive Coupling Loop. If the coupling loop has not been installed on sets with double coil coupling; it should be fabricated and installed as follows:

- (a) Cut a piece of #24 insulated hook-up wire 3 1/4 inches long. Strip 1/4 inch each end. Twist the two ends together, solder, and insulate the joint.
- (b) Form a loop and slip it over the ends of the two coupling coils. Position at the top end of the windings. Squeeze the loop together



between the coils to tighten. Do not twist the ends of the loop with respect to each other- leave as a flat loop as shown.

(3) Tuning Grid Coupling. The double coil coupling is tuned as follows:

- (a) Connect the dc probe of a VTVM to the center post of the 6BH6 tube socket. Use the 30volt negative range.
- (b) Install a channel 1,9, and 23 crystal in the transmitter. Set the switch for channel 9. Connect wattmeter to transmitter output and key transmitter.
- (c) Tune the 6BH6 plate coil for maximum voltage on VTVM.
- (d) Tune the 6CL6 grid coil for maximum voltage on VTVM.
- (e) Tune the 6CL6 plate pi-network for maximum power to wattmeter.
- (f) Remove channel 9 crystal, key transmitter, and check neutralization for no output. Adjust neutralizing loop if required.
- (g) Install channel 9 crystal and repeat steps (c) thru (f) until neutralization is complete.
- (h) Now switch the crystals alternately between channel 1 and 23 noting grid drive. Adjust the 6BH6 plate coil for equal drive on 1 and 23. Leave the 6CL6 grid coil peaked for channel 9.
- (i) Grid voltage will be 20-25 volts dc channel 9 and 15-20 volts channels 1 and 23. Grid voltage should exceed 13 volts in all cases.
- (j) Seal coupling and neutralization loops in position with RTV compound.

Model 50

Effective on units with serial #30200ZD and later.

Model 100

Effective on units with serial #31300ZD and later.

1. In section I, Rear Panel Controls, change last sentence of paragraph titled Power to read as follows.  
Five different cord assemblies are used; 115VAC, 6VDC negative ground, 6VDC positive ground, 12VDC negative ground, and 12VDC positive ground. Delete Caution note.
2. In section II under Power Supply Circuit Description change last sentence of first paragraph to read as follows.  
On 6 or 12 volt battery operation a transistor oscillator circuit is used to supply the necessary AC, square wave voltage for the primary circuit of the power transformer.
3. Change second sentence of second paragraph under Power Supply Circuit Description to read as follows.  
The unit may be operated either from 6 volt positive ground, 6 volt negative ground, 12 volt positive ground, 12 volt negative ground by use of the proper power cord assembly which may be purchased from your dealer.
4. In section III, delete section titled Vibrator Care Is Important.
5. In section IV, change paragraph titled Power Plugs to read as follows.

6VDC	plug	-gnd	Part No. 150-212	Price each	\$7.50
6VDC	plug	+gnd	Part No. 150-213	Price each	\$7.50
12VDC	plug	-gnd	Part No. 150-214	Price each	\$7.50
12VDC	plug	+gnd	Part No. 150-215	Price each	\$7.50
115VAC	plug		Part No. 150-174	Price each	\$7.50
	DC	plug kit	Part No. 150-191	Price each	\$3.95
	AC	plug kit	Part No. 150-192	Price each	\$3.95
6. In section IV, under title Wiring Power Plug For Model 100 change the first sentence to read as follows.  
The 3-way power supply may be operated from any one of 5 different power systems; 115VAC; 6VDC positive ground, 6VDC negative ground, 12VDC positive ground, 12 VDC negative ground.  
Delete all drawings and pin connections in this section and substitute the following.

115VAC Model 50 & 100

Part # 150-174

- 115VAC to pins 1 and 4
- Jumper pins 2 and 3
- Jumper pins 13 and 18

Part # 150-212

6VDC Neg. Gnd.

+6VDC Hot to pin 1 red  
-6VDC Gnd. to pin 15 brown  
Jumper pins 11 to 12 to 14 to 15 to 18  
Jumper pins 2 to 5 to 17  
Jumper pins 7 to 8  
Jumper pins 6 to 9  
Jumper pins 10 to 16

Part # 150-214

12VDC Neg. Gnd.

+12 VDC Hot to pin 1 red  
-12VDC Gnd. to pin 15 brown  
Jumper pins 10 to 14 to 15  
Jumper pins 7 to 8 to 16  
Jumper pins 2 to 5 to 18  
Jumper pins 6 to 9

7. Delete Power Supply Shcematic
8. Add the following power supply circuit.

Part # 150-213

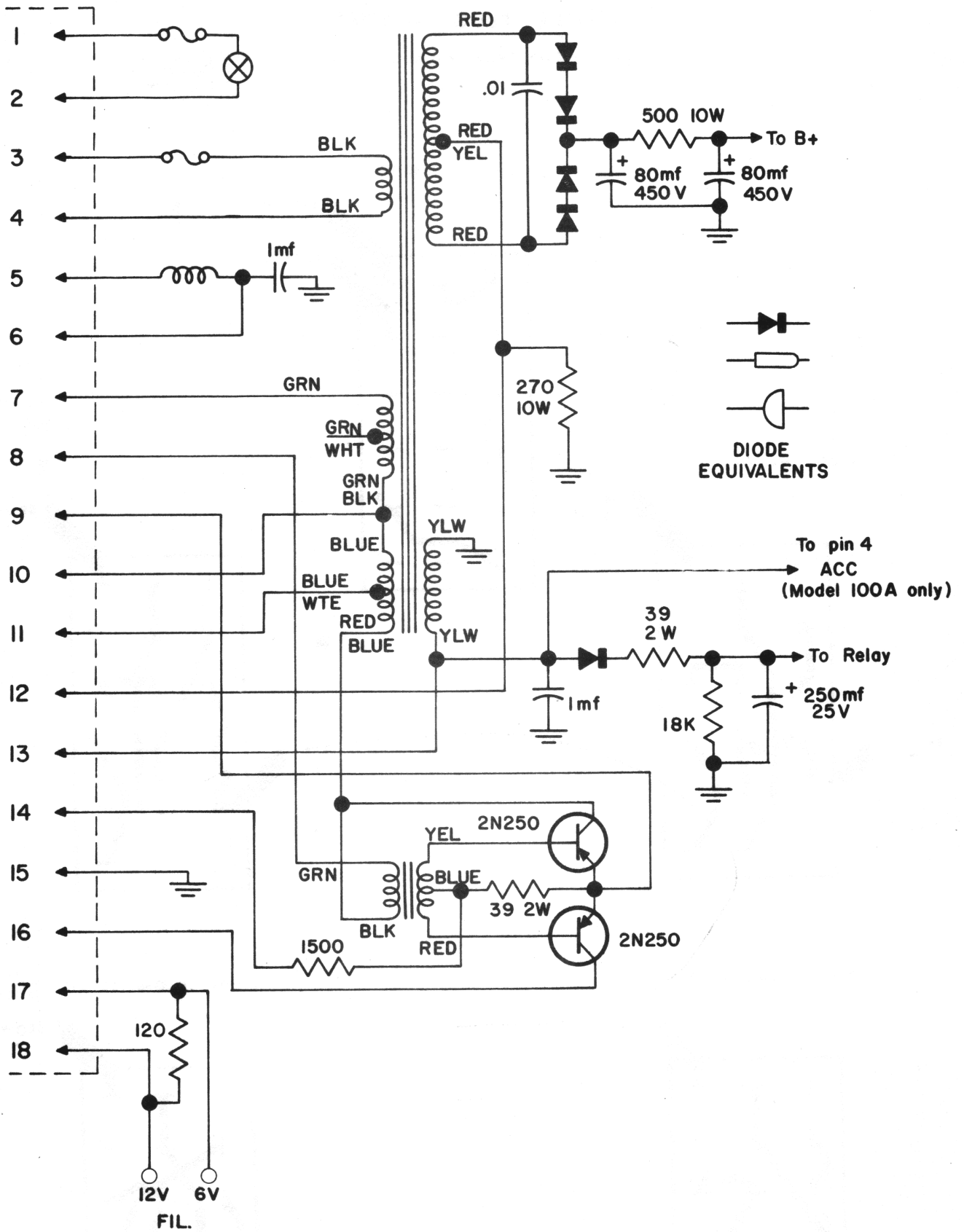
6VDC Pos. Gnd.

-6VDC Hot to pin 1 brown  
+6VDC Gnd. to pin 15 red  
Jumper pins 9 to 12 to 15 to 18  
Jumper pins 6 to 11 to 14  
Jumper pins 2 to 5 to 17  
Jumper pins 7 to 8  
Jumper pins 10 to 16

Part # 150-215

12VDC Pos. Gnd.

-12 VDC Hot to pin 1 brown  
+12VDC Gnd. to pin 15 red  
Jumper pins 6 to 10 to 14  
Jumper pins 7 to 8 to 16  
Jumper pins 2 to 5 to 18  
Jumper pins 9 to 15



Revision of 7-18-62 *ZJ*

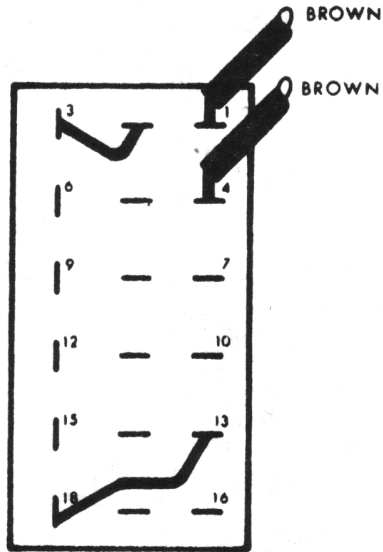
**POWER SUPPLY  
MODELS 50A & 100A**

DRAWN BY - <i>ZJ</i>	CHECKED BY - <i>ZJ</i>	APPROVED BY - <i>ZJ</i>
DATE - 6/6/62	DATE - 6-11-62	
INTERNATIONAL CRYSTAL MFG. CO., INC.		
18 N. LEE, OKLAHOMA CITY, OKLAHOMA		

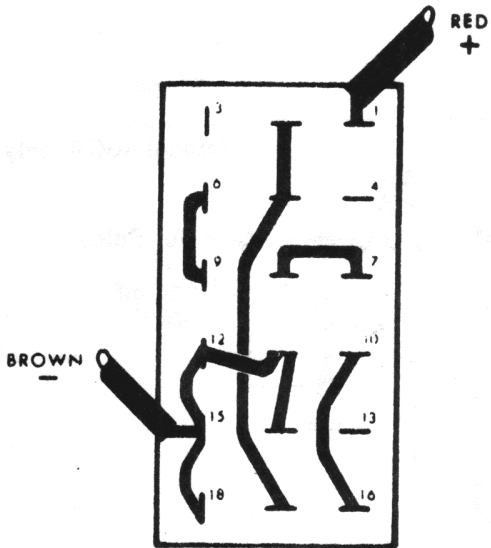
# POWER PLUG WIRING

(ALL VIEWS FROM BACK OF PLUG)

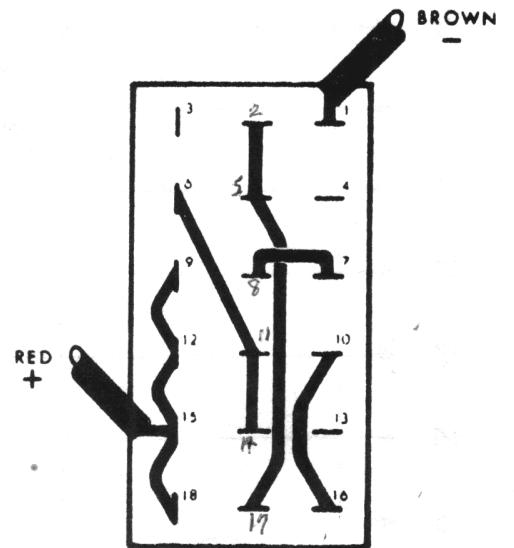
115 VAC 150-174



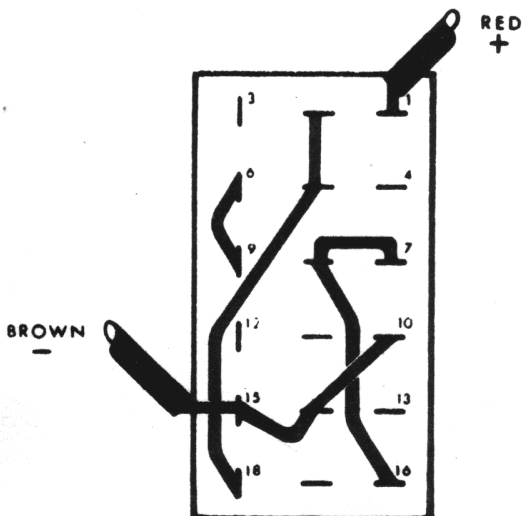
6 VDC Neg Gnd 150-212



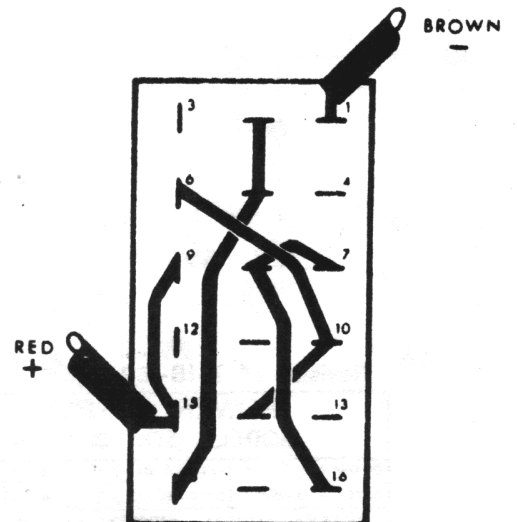
6 VDC Pos Gnd 150-213



12 VDC Neg Gnd 150-214



12 VDC Pos Gnd 150-215



ADDENDUM MODEL 50 OPERATION AND MAINTENANCE MANUAL

The following changes have been made in all executive Model 50 transceivers with serial number SD and later.

The following changes should be made in this manual.

1. Under section II, Transmit-Receive Relay Circuit Description change 6 volt secondary to 12 volt secondary.
2. Under section IV, Power Plugs  
 Add: 115 VAC plug, part No. 150-174, price each \$7.50.  
 NOTE: 115 VAC plug, part No. 150-120 is used on units made prior to April 1, 1962, or units with serial numbers before SD.
3. Under Power Plug Wiring, Model 50 diagram is used only for units produced prior to April 1, 1962. The Model 100 diagram is used on all units produced after this date.
4. Under Section V, Voltage and Resistance Charts, the following column changes should be made.

Power Pin No.	Receive	Transmit
4	13 VAC	13 VAC
20	Not Used	----
21	13 VAC	13 VAC
24	Not Used	----
36	13 VAC	13 VAC

5. Under Section V, Vacuum Tube Voltage and Resistance Chart, the following changes should be made.

Tube No.	See Note	1	2	3	4	5	6	7	8	9
V2	R T					13VAC 13VAC				
V4	R T				13VAC 13VAC					

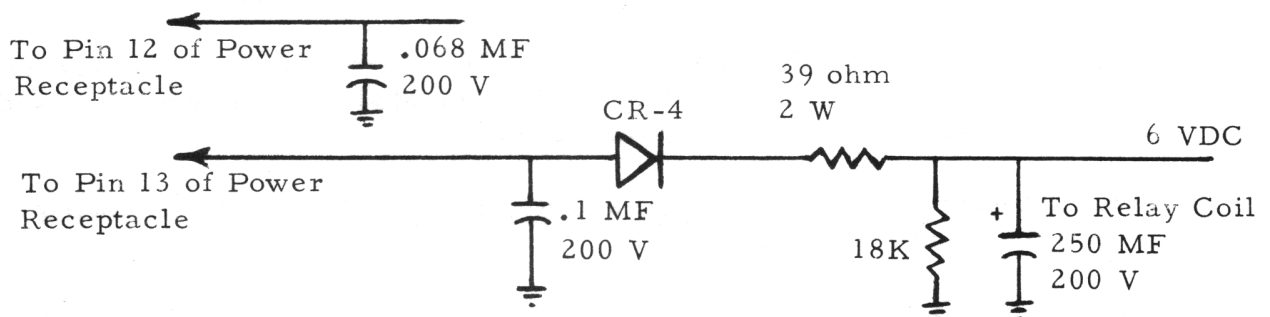


V5     R            13VAC  
        T            13VAC

V7     R  
        T

V8     R  
        T

6. On Transmitter Model 50 circuit, Add a neon bulb (NE-1) across the coil of relay TR-1.
7. On Power Supply Model 50 circuit, change circuit as shown below.



8. Power supply connections on Power Supply Circuit; change 115 VAC legend to read as follows.

115 VAC            115 VAC to pins 1 and 4  
                          Jumper Pins 2-3, 13-18

9. On Power Supply Model 50; Top View, Power Supply and Transmitter; Bottom View, Power Supply and Transmitter note that the following parts have been used in modification.

T4, Power transformer changed from 6 volt to 12 volt secondary.

39 ohm, 2W resistor added to relay power supply.

.1 mf 200 V capacitor added to relay power supply.

.068 mf 200 V capacitor added to pin 12 of power receptacle.

Remove 470 ohm, 1/2 Watt resistor from relay power supply.

18K, 1/2 Watt resistor added to relay power supply.

Vibrator socket shield added to vibrator socket.

Neon bulb added across relay coil.

10. The above changes should also be made on the fold out circuit of the Model 50 in the back of your maintenance manual.

ADDENDUM TO MODEL 50

3/21/62

Effective on units with (SD) serial numbers and later.

Change the following component on power supply schematic.

Change R46 from 39 ohm 2W 10%  
to 56 ohm 2W 10%