

## **IMPORTANT**

**THIS UNIT IS A MODEL "B" SERIES. IT SHOULD ONLY BE USED WITH MODEL "B" SERIES ACCESSORIES. IT WILL NOT WORK WITH EARLIER PRODUCTION UNITS. REFER TO PRODUCT IMPROVEMENT BULLETINS 600-2, 601-1 AND 602-3 FOR FULL DETAILS ON FIELD CHANGES FOR COMPATABILITY.**



NO.  
600-2

# Product Improvement Bulletin

**SUBJECT:** 600 LINEAR AMPLIFIER "MODEL B"

**HY-GAIN ELECTRONICS CORPORATION**  
Rural Route 3      Lincoln, Nebraska 68505

After May 15, 1972 all 600 amplifiers shipped will be model "B". This model series incorporates changes in the antenna relay wiring to allow turning off the DC power supply transistors during receive periods to provide cooler operation.

The 600B linear can be used only with the model 602B DC power supply and 601B AC power supply. It will not operate if used with the earlier 601 and 602 power supplies. No damage will result but the amplifier will be inoperative.

Earlier models of the 600 linear can be modified to the "B" series in the field for compatability with the 601B and 602B power supplies by following the steps outlined below:

- (1) Remove the top cover to expose the amplifier circuitry.
- (2) With the top cover removed and the rear panel facing you, locate the brown wire which runs from the eyelet in the preamp PC board between the relays to the top center of the power board and connects to R402 (22 K ohm/1 watt). Remove this short brown wire.

#### NOTE

Removal of the relays and bottom cover will  
make the job easier.

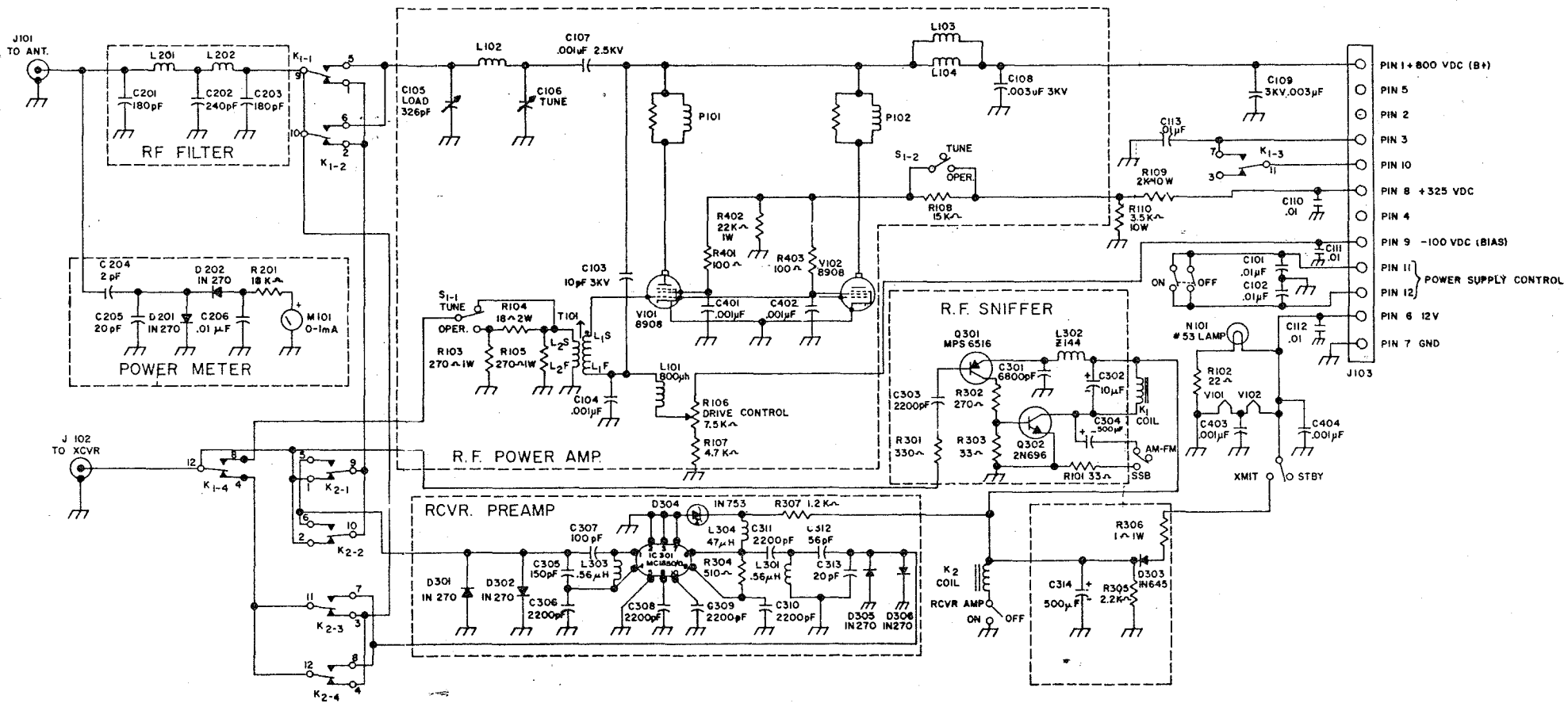
- (3) Locate the other brown wire which runs from between the relays to the "Tune-Operate" switch (S<sub>1</sub>). Remove the end of the brown wire connected to the switch and reconnect to pin 10 of the 12 pin power plug, J103.
- (4) Cut a 7" length of #20 AWG insulated wire. Solder this wire to the top center of the power board, R402 (22 K ohm/1 watt), see #2, and run to the "Tune-Operate" switch (S<sub>1</sub>-2) and solder to the pin vacated in step 3.

(5) Locate the violet wire attached to pin 3 of the 12 pin power plug J103. Move this wire to pin 8 of J103. Add a .01 ufd/600v disc ceramic capacitor from pin 8 of J103 to the adjacent ground terminal lug. Solder all connections.

(6) Cut a 6" length of #20 AWG insulated wire. Connect one end of this wire to pin 3 of the 12 pin power plug J103 vacated in step 5. Run this wire to the eye-let in the pre-amp PC board between the relays vacated in step 2. Solder all connections.

This completes modification of the 600 amplifier to the "B" model.

For best operation, the changes recommended in Bulletin 600-1 should have also been carried out.





NO.  
601-1

## Product Improvement Bulletin

**SUBJECT: 601 POWER SUPPLY MODEL "B"**

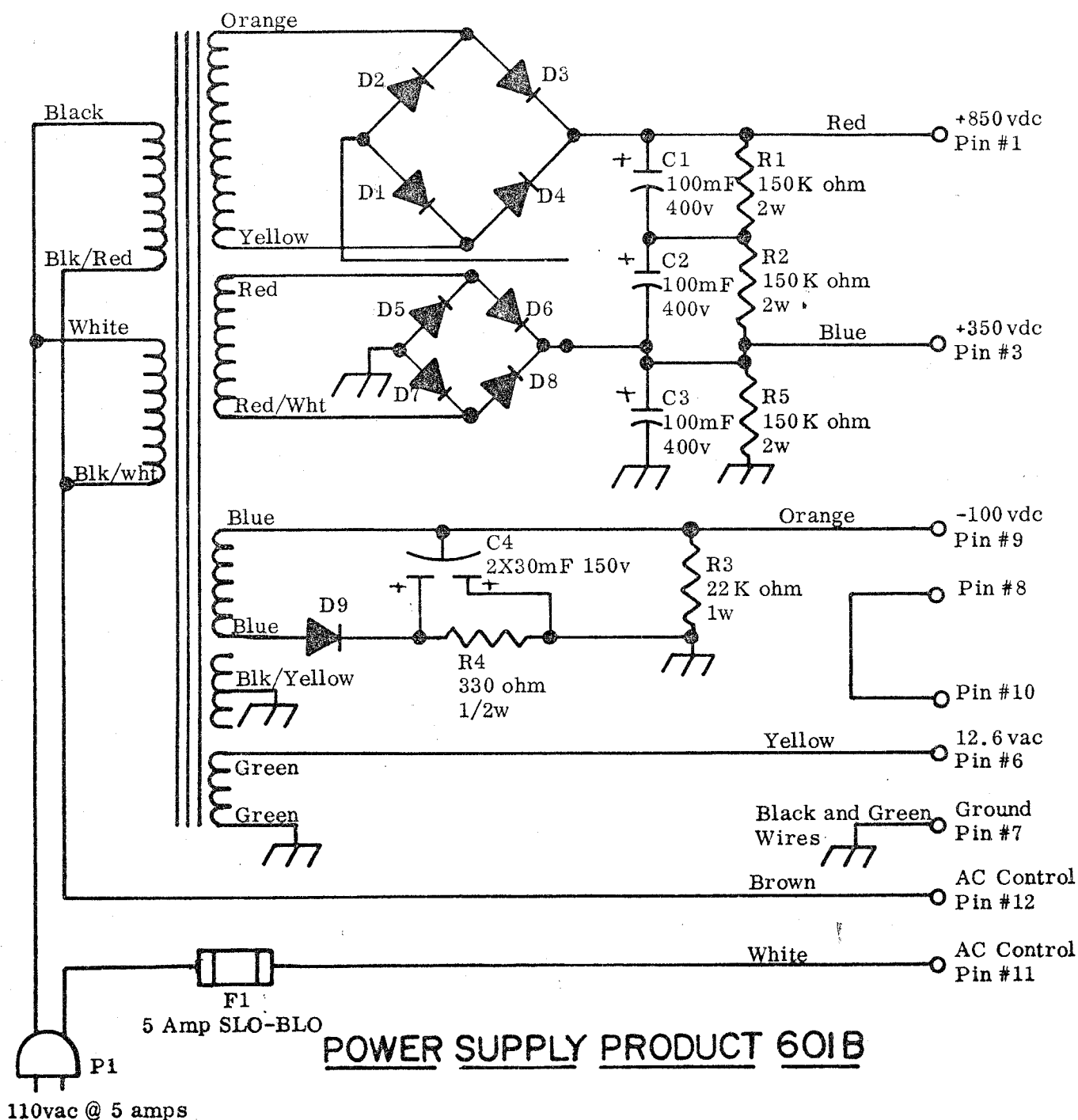
**HY-GAIN ELECTRONICS CORPORATION**  
Rural Route 3      Lincoln, Nebraska 68505

After May 15, 1972 all 601 AC power supplies will be model "B". The 601B power supply is for use with the 600B linear amplifier. It can also be used with the earlier model 600 linear amplifier without change.

The earlier model 601 AC supply can be converted for use with the new, improved 600B by following the steps below:

- (1) Remove the cover from the 12 pin power plug.
- (2) Install an #18AWG jumper from pin 8 to pin 10.
- (3) Replace the cover on the 12 pin power plug.

This completes the change to the "B" model.



**POWER SUPPLY PRODUCT 601B**

SUBJECT: 602 DC POWER SUPPLY "MODEL B"

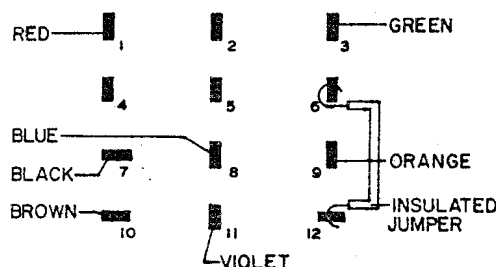
HY-GAIN ELECTRONICS CORPORATION  
Rural Route 3 Lincoln, Nebraska 68505

After May 15, 1972 all 602 power supplies shipped will be model "B". This model series incorporates changes in the base drive circuit, relay circuit, and power cable to turn off the power transistors during receive periods to provide cooler operation.

The 602B DC power supply can be used only with the model 600B linear amplifier. It will not operate properly if used with the earlier 600 linear amplifier.

Earlier models of the 602 DC power supply can be modified to the "B" series in the field for compatability with the 600B linear amplifier by following the steps below:

- (1) Remove the top and bottom covers of the supply to expose the power supply circuitry.
- (2) With the power supply terminal strip facing you, locate the blue wire attached to the +12 volt terminal (#3 terminal). Trace this blue wire back to the main power relay. Remove it from the relay and attach to the lug projecting from the rear of the 40 amp primary fuse holder.
- (3) Place the power supply on its back with the torroid transformer on top. Locate the base drive equalizing resistors,  $R_1$ - $R_4$ , (1.5 ohm/5 watt sandstone) in the corners. The base drive resistors  $R_1$ - $R_4$  should be changed to 0.68 ohm/5 watt sandstone.
- (4) The 602 power cable plug must be rewired as shown below for compatability with the 602B power supply and 600B linear amplifier.



(5) The color code for wire connections to the terminal strip in the 602 power supply is unchanged. Mark the cable "for 602B supply ONLY".

(6) The secondary fuse F<sub>2</sub> should be changed from 0.5 amp/AGC to 0.75 amp/AGC as manufactured by Buss Fuse.

Parts for this conversion can be purchased from the Customer Service Department.

Description	Part #	Cost
0.68 ohm/5 watt resistor	722224	.60 ea.
0.75 amp/AGC fuse	710009	.35 ea.

### PRODUCT 602 B MOBILE POWER SUPPLY

