

HOW TO INCREASE THE OUT-PUT POWER AND MODULATION  
OF  
TRS CHALLENGER RADIOS

GENERAL:

(All models) Set and prepare the unit as shown in the following fig. 1.

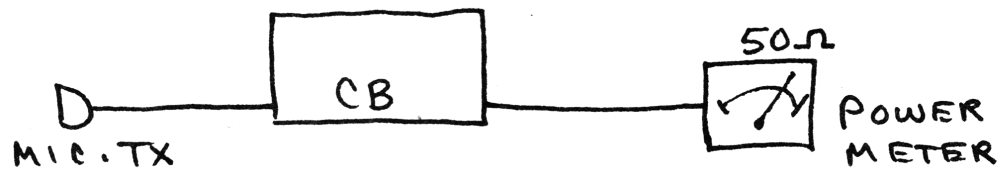


FIG 1

1. For models 460,600,730 and 1200 specifically, remove the glue locking the cores from the specific coils and then you are prepared for re-tuning.
2. Re-tune the coils per the following pages by monitoring the quality of the wave.

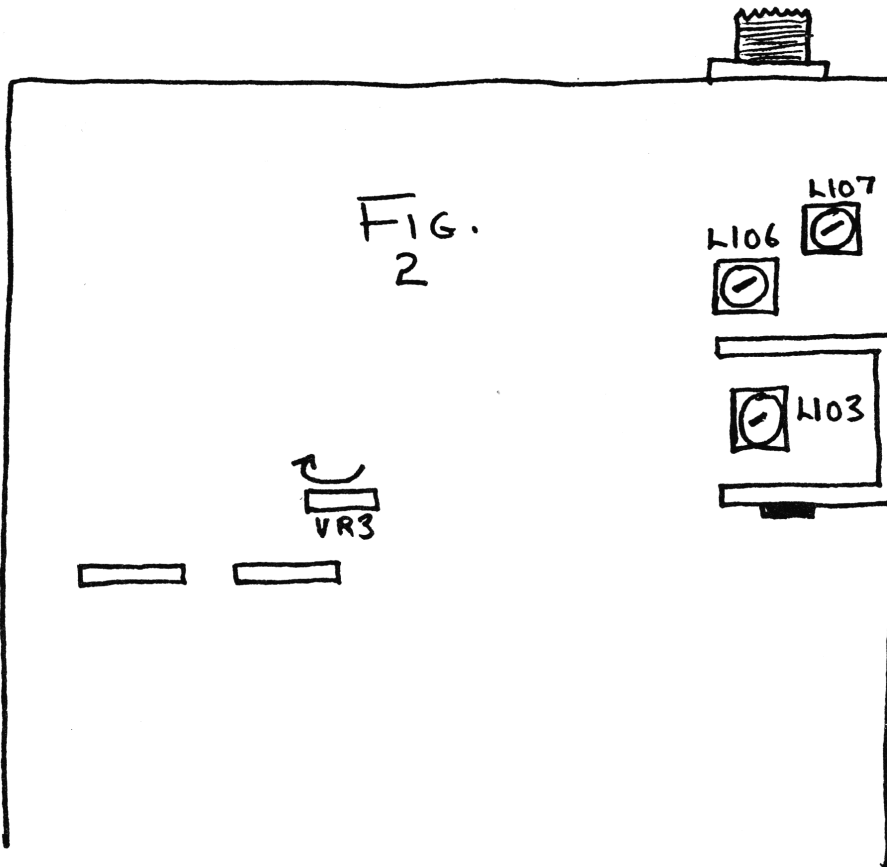
DETAIL

MODEL 460

1. How to increase out-put-power.
  - 1.1 Re-tune the coils, L103, L107 and L106 to increase the indicated out-put power meter. Then you can get the high power to 6 to 7W.
  - 1.2 After fixed item of 1.1, increase the power supply voltage to 16V if possible, then you can get the higher power 7 to 9W.
2. How to increase MOD %.

Turn VR3 shown as fig. 2.

Note: You can obtain higher output power but the power transistor may not be able to take more than 9W.



DETAIL

MODEL 600

1. How to increase output power.

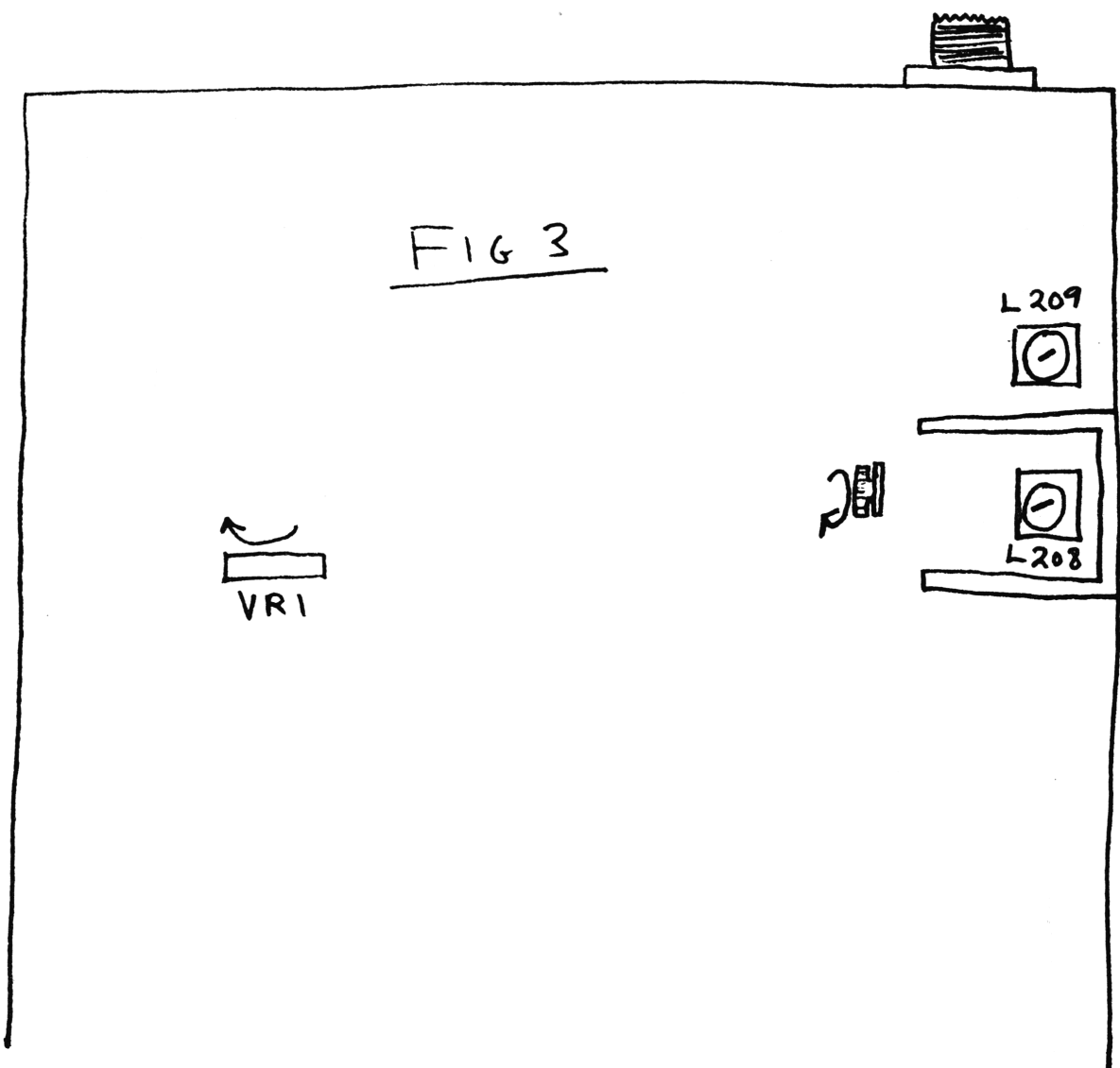
1.1 Re-tune the coils, L208 and L209 and turn VR10 shown as fig. 3. Then you get 5 to 6W.

1.2 After fixed item of 1.1, increase the power supply voltage to 16V if possible. Then you can get the higher power 6 to 7W.

Note: You can increase the power output, but the power transistor may not be able to take more than 7W.

2. How to increase MOD %.

Turn VR1 shown as fig. 3.



DETAIL

MODEL 730

1. How to increase output power.

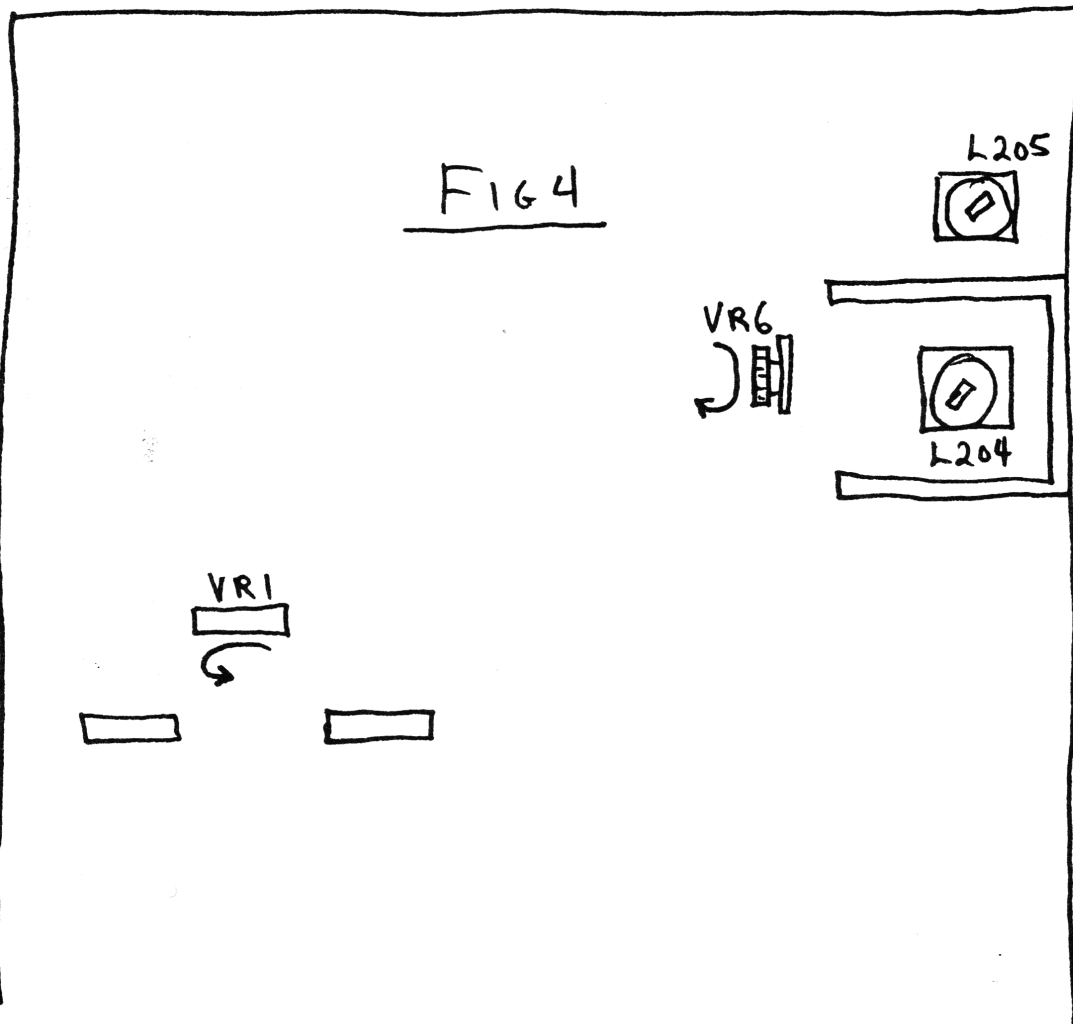
1.1 Re-tune the coils, L204 and L205 and turn VR6 shown as fig. 4. Then you can get 5 to 6W.

1.2 After fixed item of 1.1, increase the power supply voltage to 16V if possible. Then you can get the higher power 6 to 7W.

Note: You can obtain a higher output but the power transistor may not be able to take more than 7W.

2. How to increase MOD %.

Turn VR1 shown as fig 4.



DETAIL

MODEL 1200

1. How to increase output power.

- 1.1 Re-tune the coils, L204 and L205 and turn VR6 shown as fig. 5. Then you can get 5 to 6W.
- 1.2 After fixed item 1.1, turn VR1 which controls DC power supply voltage so as to be 15-16V between black and red wires. Then you can get higher power 6 to 7W.

Note: You can obtain a higher output but the power transistor may not be able to take more than 7W.

2. How to increase MOD %.

Turn VR1 shown as fig. 5.

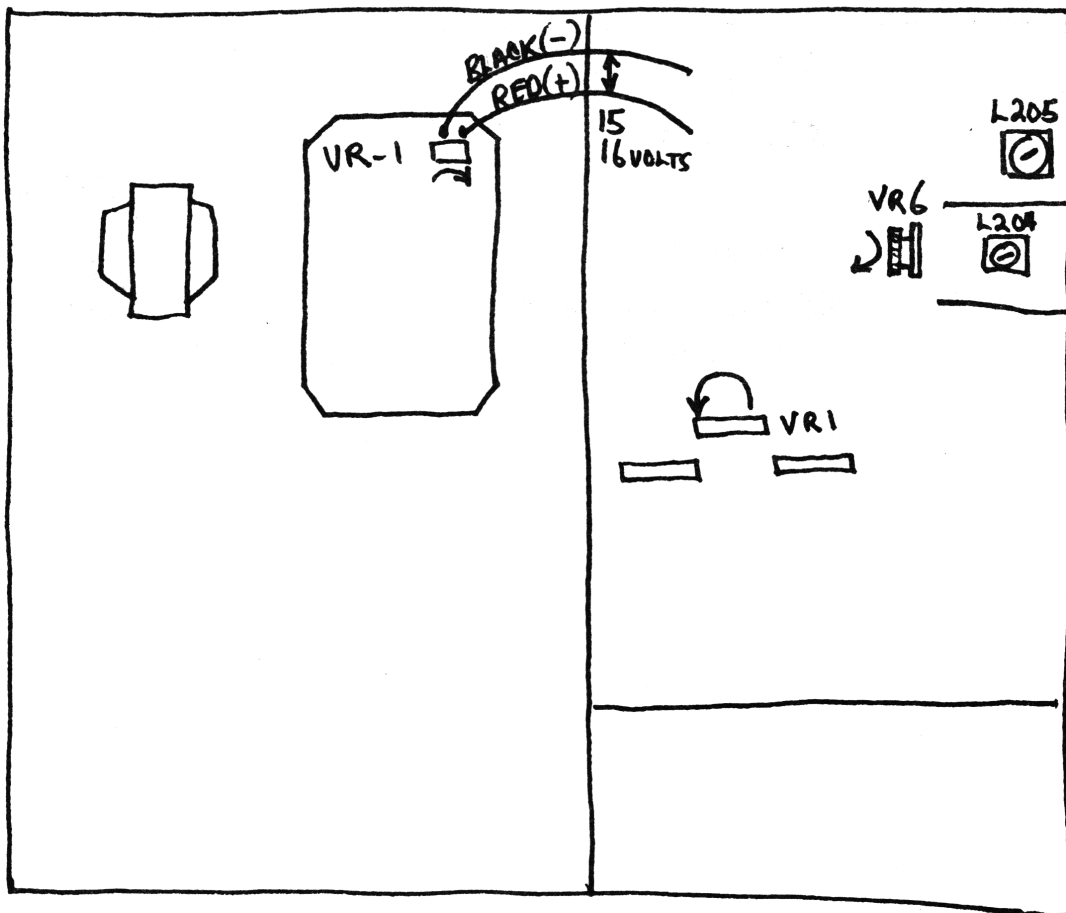


FIG. 5

MODEL 850 & 1400

1. How to increase output power.

1.1 AM mode.

Move the center-slide-tap of high watage resistor shown as fig. 6.  
Then you can get 5 to 6W.

1.2 SSB Mode.

Turn VR8 shown as fig. 6.

2. Increase in MOD %.

Turn VR1 shown as fig. 6.

3. Increase in Mic-Gain.

Turn VR2 shown as fig. 6.

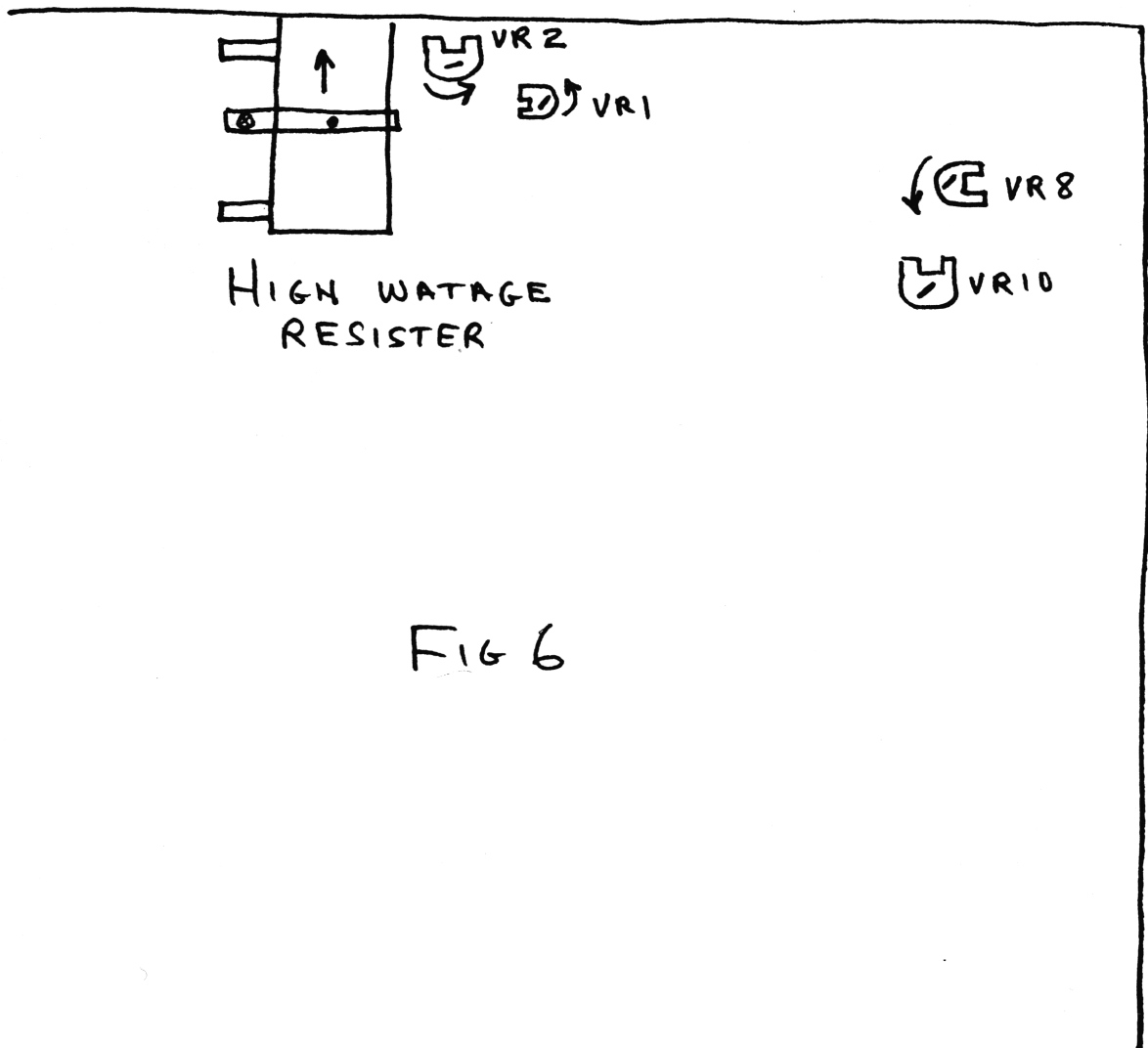


FIG 6