

LINEAR SUGGESTIONS

1. If your linear will not key in, listen closely to see if you hear the TX/RX relay click. If not, the problem is usually the key-up transistor. Most units use a 2N2222A. Cost \pm \$1.00.
2. If your linear runs too hot, check output transformer for number of turns. If it has 3 or 4 turns, add one more turn, using TEFLON wire only! The output transformer is the larger of the two.
3. If you have high SWR's on output, change the capacitor on the output transformer to a variable capacitor and tune to antenna or change from a 750pf to a 250pf dipped mica.

4. High SWR's from radio to linear on input can be helped by changing the capacitor on the input transformer to a variable capacitor of same range or change to 250pf mica.
5. If your unit sounds good on SSB, but bad on AM, you can build a high-medium-low switch as previously described elsewhere in this volume. By using the low position you will get excellent forward drive with modulation.

If you drive the amp with 5 watts and get 100 watts output, you have no leeway for AM modulation. At 3 watts you get about 80 watts, which will drive upward with modulation. Using the low position on a 100 watt linear, you will get about 20 watt dead carrier with 60 watts p-e-p and 100% modulation, with no modulation distortion.

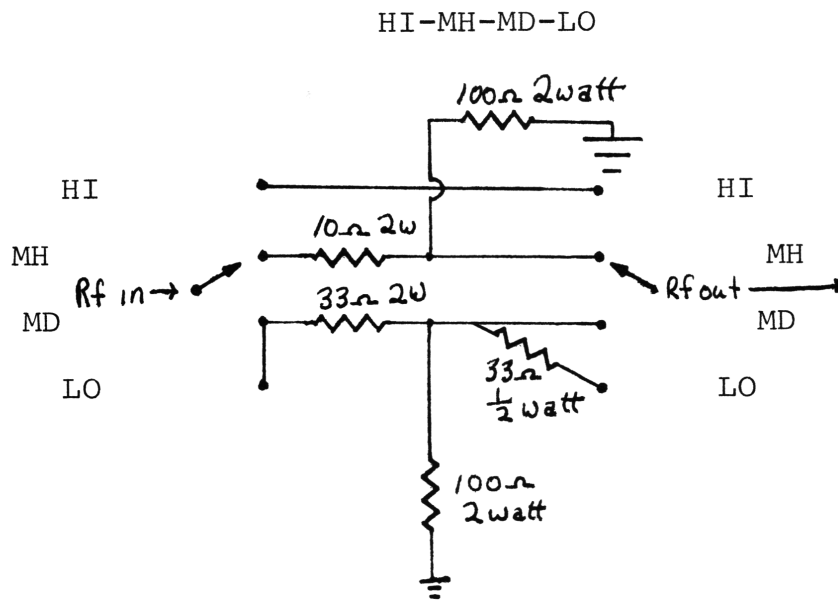
6. Make sure your antenna is rated for the high output power of your amplifier. An improper antenna, or one not properly adjusted, can cause excessive heat and probable transistor destruction.
7. The average amp. is designed to operate with an XMTR maximum output power of 4.25 watts AM, 12 watts PeP SSB. Amps with higher input power levels will be noted on the rear of the chassis.
8. Be sure you install your amplifier in a location where the heatsinks will be exposed to air circulation.
9. The hot lead of the amp. must be connected directly to the battery, with heavy gage wire of 6-10 awg, depending on current demand of amp and length of run. Ground Black lead to chassis. Neg. ground system only.

LINEAR SUGGESTIONS (CONT)

10. Key up XMTR and linear, and release. If XCVR does not return to RX mode (hangs up), this is an indication that the length of coax between the amp and radio (or antenna), may not be optimum. Increase the coax length by three feet.
11. Check SWR. It should be less than 2, with amp. on. If you cannot tune it below 2, suspect installation-such as Amp. grounding, bad antenna, XCVR grounding, or coax length.

90% of all problems encountered with a linear can be traced to inadequate installations- often antenna or wiring.

4 POSITION SWITCH FOR LINEARS



PARTS LIST

- | | | |
|---|--|---------------------------------|
| 1 | | 2 pole 4 position rotary switch |
| 1 | | 10 ohm 2 watt carbon resistor |
| 1 | | 33 ohm 2 watt carbon resistor |
| 1 | | 33 ohm 1/2 watt carbon resistor |
| 2 | | 100 ohm 2 watt resistor |