



SERVICE BULLETIN

EQUIPMENT SERIES: 30L

BULLETIN NO. 2

DATE: 2-20-62
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EQUIPMENT TYPE: LINEAR AMPLIFIER 30L-1

SUBJECT: BACKWARD DEFLECTION OF ALC METER

The 1N252 diode, in the 30L-1 metering circuit, may develop a reverse leakage which will permit some of the positive delay bias to appear in the exciter-alc circuit. This will cause the exciter meter to deflect to the left when the 30L-1 is on and the PTT is actuated.

The new 1N458 diode has a much higher voltage capability and will block the delay bias completely.

This modification need be made only if the meter displays the off-scale indication.

MODIFICATION PROCEDURE:

1. Remove cord from a-c source.
2. Remove the four feet and Phillips-head screws located between the rear feet.
3. Set unit upright, open top lid and remove the two bright Phillips-head screws in the panel rim.
4. Set unit face down on padded surface to facilitate removal of cabinet. Slide cabinet off unit.
5. Remove all screws from rear panel including the one on top which goes through the power supply compartment cover. Loosen the two smaller screws which fasten the r-f compartment cover to the top rear panel.
6. Remove rear panel to expose bases of tubes.
7. With the amplifier viewed from rear in its normal upright position, locate the five-terminal tie strip which is oriented vertically and located just to the left of antenna relay K1. Diode CR19 is soldered between the second terminal from the bottom of the tie strip and the center terminal of ALC adjust potentiometer R16. Clip off the anode lead of CR19 as close to the solder terminal (on the tie strip) as possible. Remove the insulated sleeving from this end and save it.
8. Clip the cathode lead of the diode about one inch from the potentiometer terminal. Remove the sleeving from this lead, cut about 1/4-inch off, and replace sleeving over the bare one-inch lead. Discard 1N252 diode.

9. Slip the insulated sleeving (which was removed from CR19 lead) over the anode lead of the new diode. Solder this lead to the same terminal on the tie strip, holding the lead tightly with a pair of pliers to protect the diode from the heat.
10. Splice the cathode lead to the wire which goes to the potentiometer (note that diode lead itself is too short to reach). Again, use pair of pliers as a heat sink.
11. Reassemble unit. No tuning or adjustments should be required.

PARTS REQUIRED:

<u>Qty</u>	<u>Description</u>	<u>Collins Part Number</u>
1	Diode, 1N458	CR19 353-0205-00

For modification parts, price quotations (minimum order charge is \$15.00), and availability contact Collins Radio Company, Service Parts Department, Cedar Rapids, Iowa 52406. All parts orders must specify the Collins modification kit number, or part numbers, quantity required, and reference this service bulletin.