



SERVICE BULLETIN

EQUIPMENT SERIES: KWM2

BULLETIN NO. 6

DATE: 1-11-62

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EQUIPMENT TYPE: TRANSCEIVERS KWM-2, KWM-2A

SUBJECT: TO ELIMINATE DELAY IN OPERATION WHEN SWITCHING FROM TRANSMIT TO RECEIVE FUNCTION

A few transceivers may exhibit indications of a delay in operation when switching from transmit to receive function. This delay of from 20 to 30 seconds may be caused by screen grid emission of the PA tubes. If so, it can be eliminated by changing PA tubes, or if a more permanent fix is desired, a 1N1490 diode can be installed as indicated below. Included below is a test that can be used to determine if this delay in operation is present, and is caused by screen grid emission of the 6146 PA tubes.

MODIFICATION PROCEDURE:

1. Remove cover of unit.
2. Connect a voltmeter from terminal 3 of tube socket XV9 to chassis ground. Set meter on 300-volt scale.
3. With power applied, turn EMISSION switch knob to LOCK KEY. Meter should read approximately 280 volts.
4. Turn EMISSION switch knob to USB so that unit is in receive function. Immediately upon switching, turn meter to 30-volt scale. If voltage is indicated and dies off slowly, there is screen grid emission on one or both 6146 tubes.
5. If screen grid emission is present, remove bus wire that is connected from terminal E3 (feedthrough terminal located near rear apron in PA grid box) to terminal 4 of terminal strip TS1. Install in its place a 1N1490 diode (353-1659-00) with anode connected to E3. Refer to figures 1 and 2.

CAUTION: Check that case of diode does not touch chassis or other ground.

PARTS REQUIRED:

<u>Qty</u>	<u>Description</u>	<u>Collins Part Number</u>
1	Diode, 1N1490	353-1659-00

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.

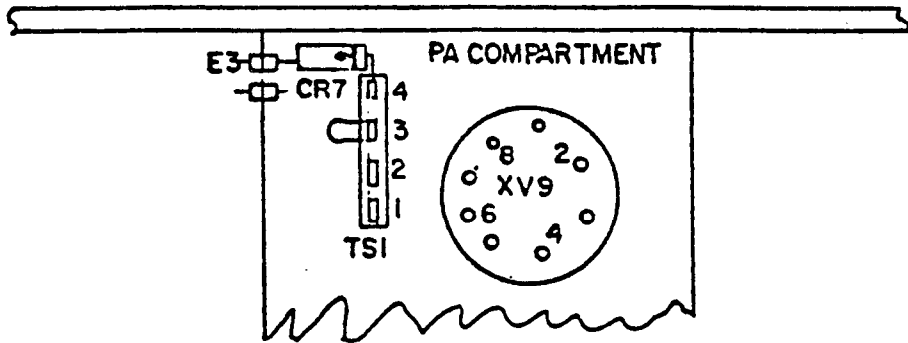


Figure 1. Location of Components Affected by this Modification.

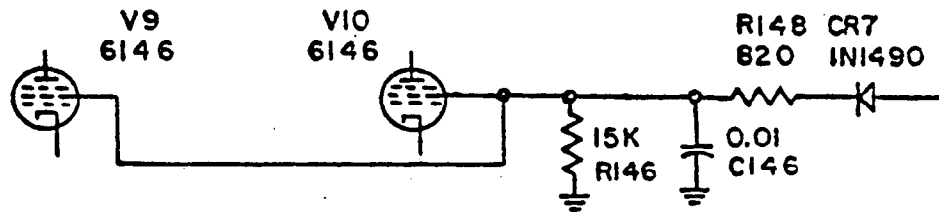


Figure 2. Partial Schematic Diagram Of PA Circuit Showing Addition Of 1N1490 Diode CR7.