AMATEUR SERVICE AGENCY BULLETIN       NO. 1009       DATE:  7-3-62

Page 1 of 3

EQUIPMENT TYPE:  TRANSCEIVERS KWM-2, KWM-2A; TRANSMITTERS 32S-1, 32S-2

SUBJECT:  INFORMATION

1.  **KWM-2,-2A; Low Crystal Calibrate Injection Voltage On 10 Meters**

   This low injection voltage can be remedied by adding a diode CR6 (1N34A, CPN 353-0103-00) from parts mounting turret EL00 terminal H to ground lug.  NOTE:  Mount diode with anode end to ground.

   Also add resistor R11, 1 meg ±10% 1/4 watt (CPN 745-0857-00) from turret EL00 terminal G to terminal H.

2.  **KWM-2,-2A; Extend Range Of Receiver Gain Adjust Control**

   To give wider range to receiver gain adjust potentiometer R132, add resistor R89, 180K ±10% 1/2 watt (CPN 745-1447-00), from tube socket X61 terminal 3 to parts mounting turret E40 terminal E.

3.  **KWM-2,-2A; Increase Accuracy Of "S" Meter And Extend Range Of Zeroing Potentiometer**

   On parts mounting turret E40, between terminals C and D, remove resistor R147, 82K 1/2 watt and replace with R147, 68K ohm ±10% 1/2 watt (CPN 745-1429-00).  Also on turret E40, between terminals C and E, remove resistor R158, 270 ohm, 1/2 watt and replace with R158, 220 ohm ±10% 1/2 watt (CPN 745-1324-00).

4.  **KWM-2,-2A; Transmitter Instability**

   It has been found that some transceivers will develop an unstable condition.  This is caused by output rf appearing on the transmitter wiring harness.  It may be eliminated as follows:

   a.  Remove PA cage.

   b.  Disconnect capacitor C148 from ground lug (near L17).

   c.  Remove and discard ground lug.  In its place install new two-terminal strip (CPN 306-0002-00).
d. Attach loose end of capacitor C148 to ground lug of new terminal strip.

e. Remove 800-volt line from base of inductor L17 and attach to insulated lug of new strip.

f. Install new choke L28, 120 uh (CPN 240-0194-00) between new 800-volt insulated terminal and L17.

g. Remove and discard capacitors C181 and C182 on contacts 6 and 8 of relay K3.

Remove bus wire between relay K3 terminal 7 and ground. Install new choke L32, 120 uh (CPN 240-0194-00) in place of the bus wire.

h. Physically move capacitor C211 (0.1 disc ceramic) from antenna relay K3 (in PA cage) terminal 2 to relay K4 (in relay compartment under chassis) terminal 1. This move does not change the electrical position of this capacitor.

5. 32S-1,-2; Instability On 80 Meters

This instability is due to some output rf appearing on the wiring harness. It may be eliminated as follows:

a. Disconnect capacitor C123 at ground lug.

b. Remove and discard lug; in its place install new two-terminal strip (CPN 306-0002-00).

c. Connect loose end of capacitor C123 to ground lug of new terminal strip.

d. Move 800-volt B+ wire from inductance L14 to insulated terminal of new strip.

e. Install L31, 120 uh choke (CPN 240-0194-00) between L14 and 800-volt terminal of new strip.

f. Remove and discard capacitor C145 (.01 disc ceramic) located at socket XV12 pin 4.

g. At socket XV5 pin 9 install new capacitor C145, 0.1 uf (CPN 913-3794-00). Attach free end to ground terminal near edge of chassis. Do not ground at same point as cathode resistors.

6. 32S-1,-2; ALC Indication Appears On Meter Before Grid Current Threshold Occurs

This premature meter activity is caused by output rf on the alc bus. It may be eliminated as follows:
a. On tube socket XVL3 (alc rectifier), transfer capacitor C83 from pins 1 and 2 to pin 6.

b. Install new resistor R122, 100 ohm 1/2 watt (CPN 745-1310-00) from pins 1 and 2 to pin 6 of tube socket XVL3.

Remove and discard the three-terminal strip (TS19) at the left side of PA shield and install new four-terminal strip (CPN 306-9032-00).

Reconnect parts as on original strip except attach white-red-orange-green wire (DA9235) to fourth lug of new strip TS19. Insert new resistor R122, 100 ohm 1/2 watt (CPN 745-1310-00), between wire DA9235 and the junction of 680K resistor R55 and capacitor C87.

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