

COLLINS

COLLINS RADIO COMPANY

CEDAR RAPIDS, IOWA, U. S. A.

AMATEUR SERVICE AGENCY BULLETIN

NO. 1005

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EQUIPMENT TYPES: KWM-2/2A, 75S-1/2, 30S-1, 136B-2

SUBJECT: SERVICE INFORMATION

KWM-2/2A

1. Audio Instability In Calibrate Function.

Occasionally audio instability occurs when the audio gain control is advanced and the calibrate signal is tuned near zero beat. This can be eliminated by the removal of capacitor C240 (100 uuf, 912-2817-00) from the grid to cathode of audio output amplifier V16B. This capacitor will not be installed in future production.

2. Excessive Hum On Carrier.

Some transceivers have excessive hum on the carrier that can be reduced by changing the BFO V11A plate voltage from the TR +275V line to the TR +200V line. This is done by moving resistor R57 (1000 ohm 1/2 W) from parts turret E10, tie point A, to adjacent tie point B.

3. Meter Calibration Resistor.

The value of R129 (located at tube socket XV10 pin 6) has been changed from 820 ohms 1/2 watt (745-1349-00) to 1000 ohms $\pm 10\%$, 1/2 watt (745-1352-00).

This change was made to meet production metering specifications.

4. T2 and L4 Same Part Number.

In the parts list under item T2 (278-0293-00) add the statement "included with L4 as a part of matched pair."

On the parts list under item L4 (278-0293-00) add the statement "included with T2 as a part of matched pair."

30S-1

1. Parts List Correction.

Resistor R232 is listed as 15K ohm $\pm 10\%$, 7 watt (710-9001-00). It should be R232, 10 ohm $\pm 5\%$, 12 watt (747-1114-00). The schematic is correct. The new edition of the instruction book will be corrected.

75S-1/2

1. 6BF5 Tube Selection.

To eliminate the necessity for tube selection to meet distortion and gain specifications, the fixed bias on audio output tube V8 has been reduced.

This is accomplished by changing resistor R54 from 27K ohm (745-1412-00) to 22K ohm 1/2 watt (745-1408-00).

2. 6U8A Tube Selection In High Frequency Crystal Oscillator.

To eliminate the necessity for tube selection to meet output voltage specification, the feedback capacitor has been changed.

This is accomplished by changing capacitor C79 from 100 uuf 500V (912-2817-00) to 47 uuf $\pm 10\%$, 500V (912-2793-00).

136B-2

1. Noise Blanker Unity Gain.

It has sometimes been found difficult to obtain unity gain through the VIF section of the Noise Blanker 136B-2.

To obtain the desired gain and resonant frequency, R-F choke L6 10 uhy (240-0164-00) has been changed to 15 uhy (240-0151-00).

In addition the value of capacitor C32 has been changed to 1000 uuf (913-3009-00). This capacitor value may be correct in some units.

The VIF gain through the blanker only will be approximately 1.3 at 2.955 mc, 1.0 at 3.055 mc and 1.6 at 3.155 mc. This variation is not due to the blanker output circuitry but is apparently due to the characteristics of transformers T1, T2 and associated circuitry.

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