

KWM-380 TRANSCEIVER (622-5093-001, -101)
HF-380 TRANSCEIVER (622-3580-001, -101)
SYNTHESIZER A5A1 (638-6916-001, -002)

SERVICE BULLETIN NO 2**IMPROVE TRANSMITTER SPECTRAL PURITY**

This is a nonmandatory service bulletin that applies to the following:

EQUIPMENT	APPLIES TO SERIAL NUMBER	PRODUCTION CUT-IN SERIAL NUMBER
KWM-380 622-5093-001, -101	1 through 63 and 65	64, 66 and above
HF-380 622-3580-001, -101	6 and below	7
Production cut-in for synthesizer A5A1 (638-6916-001, -002) is REV G.		

The purpose of this modification is to improve transmitter spectral purity when operating on a frequency ending in 257 kHz (ie 14, 257 kHz). This ensures that transmitter spurious output will be within the -50 dB specification limit.

This modification consists of making two circuit trace cuts, adding two pins and one coil, adding a jumper wire, and replacing one capacitor.

Estimated time required is two man-hours.

The modification parts are itemized in the material information paragraph. For price and availability of parts, contact Collins Service Center, Rockwell International, 6001 Threadgill Avenue, El Paso, Texas 79924. Reference KWM-380/HF-380 Service Bulletin No 2 in all correspondence.

No special tools or equipment are required.

MODIFICATION PROCEDURE

- A. Turn off all power to the transceiver.

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- B. Remove the dust cover by removing the four screws located adjacent to the four feet on the bottom of the transceiver.
- C. Remove synthesizer assembly A5 from the transceiver card cage.

NOTE: All changes are made on synthesizer card A5A1. Refer to figures 1 and 2 for location of components.

- D. Remove the shield cover from A5A1 card (638-6916-001, -002) by removing 19 screws.
- E. Remove A5A1 from A5 assembly by removing seven screws.
- F. On the top of A5A1, cut circuit trace at right lead of coil L15.
- G. On top of card, cut circuit trace located between thru holes where two new pins are shown in figures 1 and 2.
- H. From the top of the card, insert pins (372-2656-130) into two thru holes as shown in figures 1 and 2.
- I. Connect 4.7- μ H coil (240-1576-000) between the two new pins. Use sleeving (152-2483-000) on L21 leads if needed.
- J. Remove the 27-pF capacitor C32 and replace it with an 18-pF capacitor (913-1098-030).
- K. On the bottom of the card, install a jumper wire (428-0282-050) from the left lead of L15 to the thru hole located under L15.
- L. Mark RWK REV G on the card near the part number.
- M. Reassemble the transceiver in the reverse order of disassembly.
- N. Mark SB 2 on the service bulletin information chart. If the transceiver does not have an information chart, attach a chart (280-3778-010) near the nameplate.

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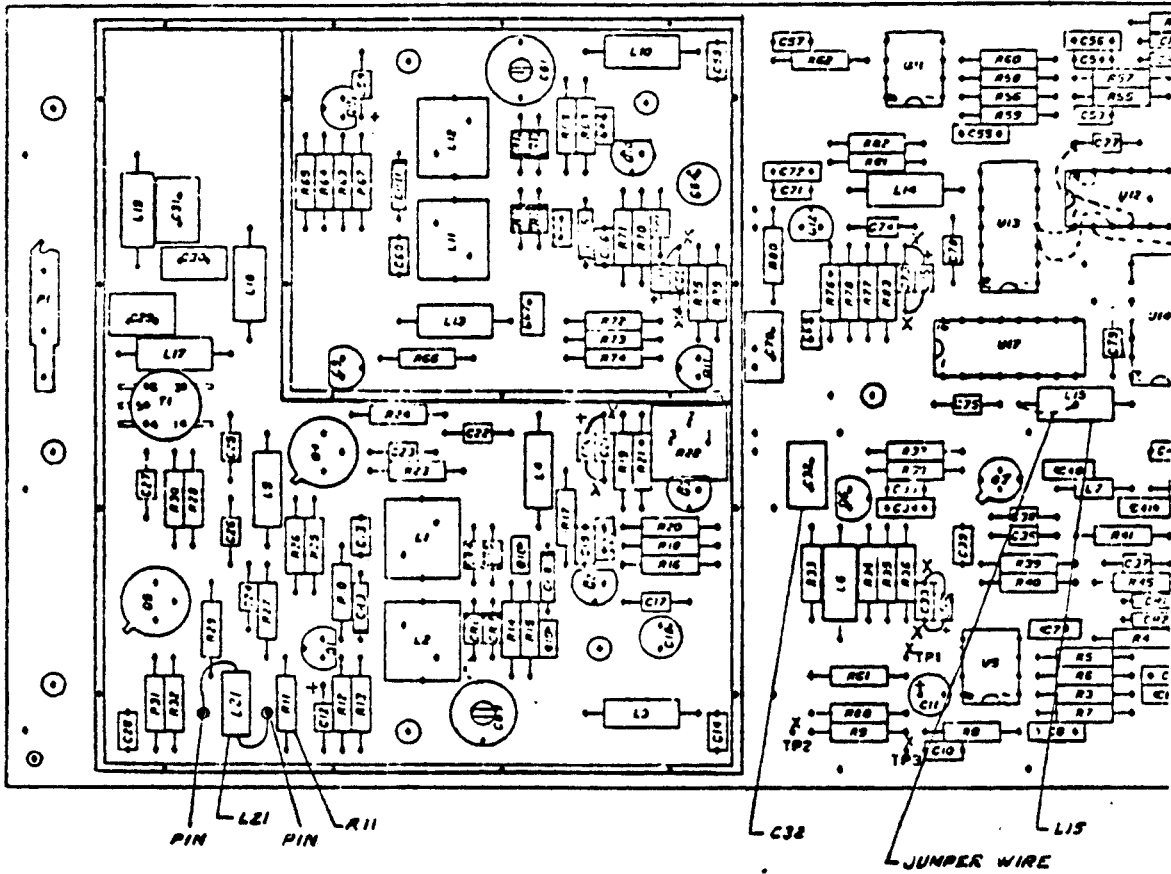
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MATERIAL INFORMATION

The parts listed below are required to modify one KWM-380 or one HF-380.

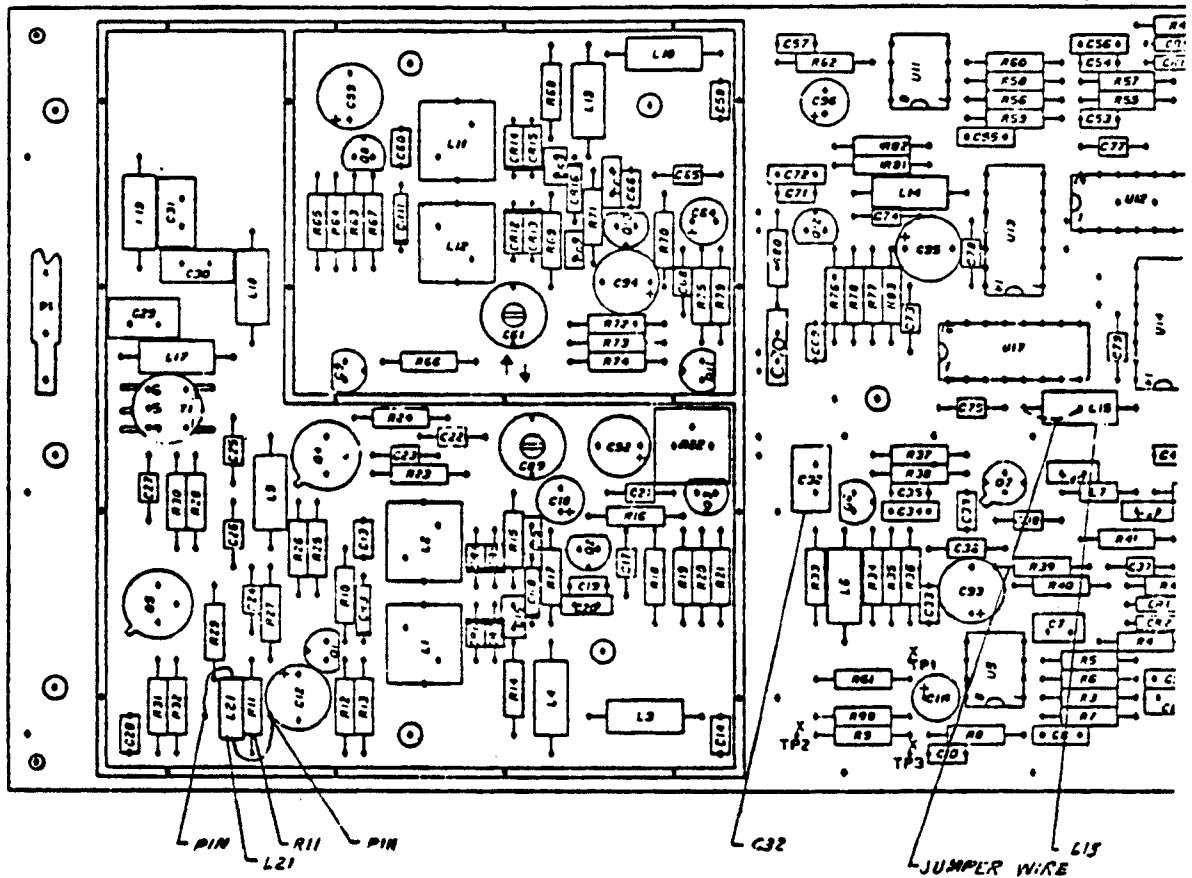
<u>COLLINS PART NUMBER</u>	<u>QTY</u>	<u>UNIT PRICE</u>	<u>DESCRIPTION</u>
372-2656-130	2		Pins
240-1576-000	1		Coil, 4.7 μ H, L21
152-2483-000	152 mm (6 in)		Sleeving, insulation
913-1098-030	1		Capacitor, 18 pF, C32
428-0282-050	152 mm (6 in)		Wire, #30 AWG, bus, insulated
*280-3778-010	1		Chart, information

*Order if needed.



P/O Synthesizer Card A5A1 (638-6916-001)

Figure 1



P/O Synthesizer Card A5A1 (638-6916-002)
Figure 2