

KWM-380 TRANSCEIVER (622-5093-001, -101)
 HF-380 TRANSCEIVER (622-3580-001, -101)
 SYNTHESIZER VARIABLE REFERENCE
 FREQUENCY LOOP A5A2 (638-6920-001)

SERVICE BULLETIN NO 3

POTENTIAL FREQUENCY WARBLE

This service bulletin may apply to the following:

EQUIPMENT	APPLIES TO SERIAL NUMBERS	PRODUCTION CUT-IN SERIAL NUMBERS
KWM-380 622-5093-001, -101	56 and below, 58 through 67, 69 through 102, 105, 107 through 112, and 114 through 117	57, 68, 103, 104, 106, 113, 118 and above
HF-380 622-3580-001, -101	6 and below	7
Production cut-in for circuit card A5A2 (638-6920-001) is REV G.		

A frequency warble may occur at certain frequencies in some radios. The warble will usually occur at the top end of each 1 MHz band. The problem has been traced to two integrated circuits on synthesizer variable reference frequency loop A5A2. When U14 and U26 are at the low end of their specified parameters, a low rf input may cause them to miscount.

This modification increases the rf input levels to the integrated circuits by replacing two coils and two capacitors.

Estimated time required is 1.5 man-hours.

The modification parts are listed 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 3 in all correspondence.

MODIFICATION PROCEDURE

- A. Turn off all power to the transceiver.
- B. Remove the dust cover by removing the four screws located adjacent to the four feet on the bottom of the transceiver.
- C. Remove the card cage cover by removing all screws on the cover.
- D. Remove A5 card from the card cage. Two cable clamps on the side of the card cage must be removed to provide enough slack in the cable to remove A5.
- E. Remove the screws that secure A5A2 card to the center plate. This will allow access to the rear of A5A2 for soldering purposes.

NOTE: Refer to figure 1 while performing steps F through H.

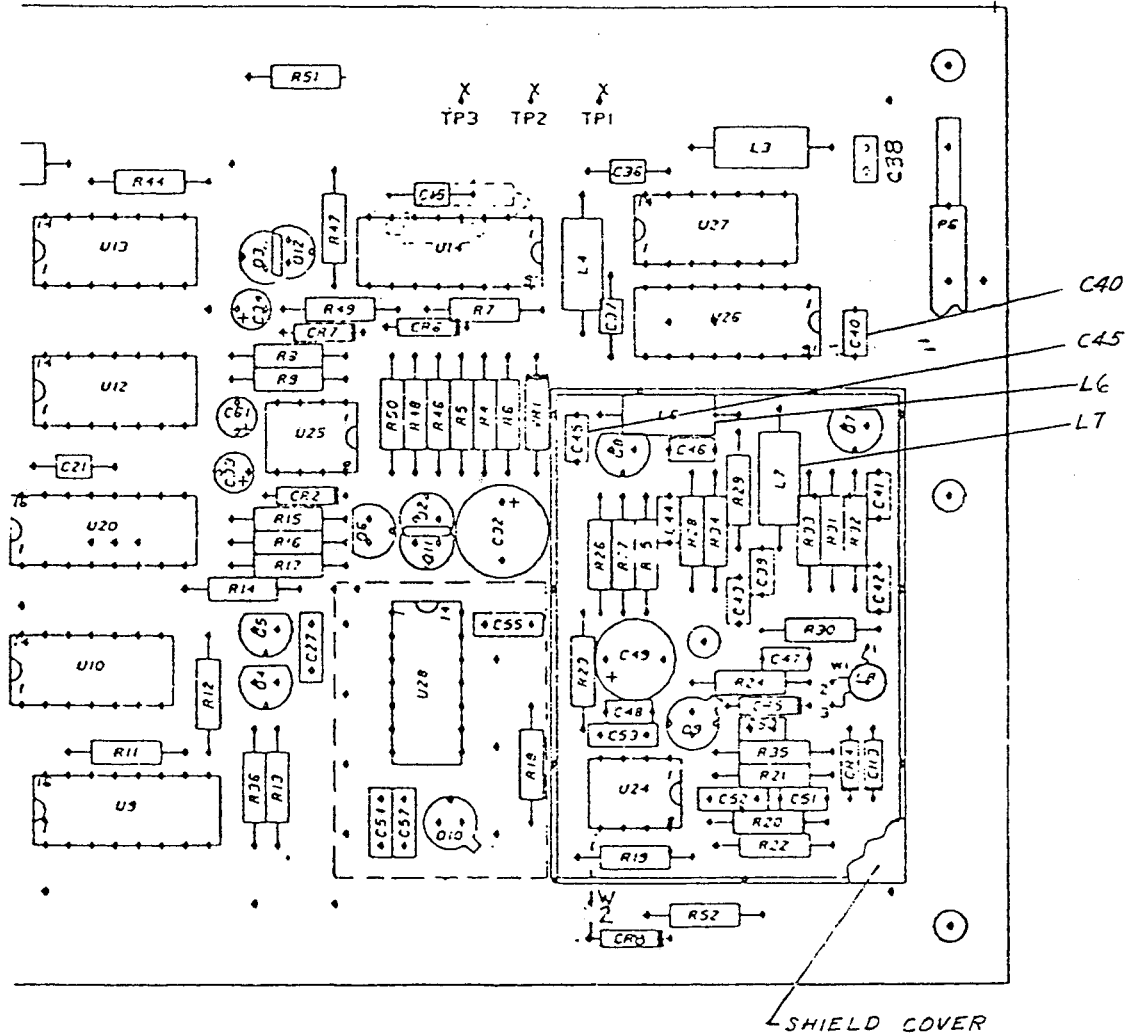
- F. Remove shield cover by removing seven screws.
- G. Remove coils L6 and L7 and replace them with new 0.15 μ H coils (240-1562-000).
- H. Remove capacitors C40 and C45 and replace them with new 4 pF capacitors (912-4141-080).
- I. Mark RWK REV G on the A5A2 card.
- J. Reassemble the transceiver in the reverse order of disassembly.
- K. Mark SB 3 on the service bulletin information chart. If the transceiver does not have an information chart, install a chart (280-3778-010) near the nameplate.

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>
240-1562-000	2		Coil 0.15 μ H, L6, L7
912-4141-080	2		Capacitor, 4 pF, C40, C45
*280-3778-010	1		Chart, information

*Order if needed.



P/O Synthesizer Variable Reference Frequency Loop A5A2
Figure 1