

**KWM-380 TRANSCEIVER (622-5093-101)
HF-380 TRANSCEIVER (622-3580-101)
RECEIVER-EXCITER CIRCUIT CARD A3 (638-6908-001)**

SERVICE BULLETIN NO 1

PRODUCT IMPROVEMENT

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

EQUIPMENT	APPLIES TO SERIAL NUMBER	PRODUCTION CUT-IN SERIAL NUMBER
KWM-380 622-5093-101	All units	None
HF-380 622-3580-101	All units	None
Production cut-in for receiver-exciter card A3 (638-6908-002) is REV G.		

The following product improvements are made by this service bulletin.

1. Mic termination is changed from 270-Ω to 3.3-k Ω to allow either a low- or high-impedance mic to be used.
2. Mic gain is increased by approximately 18 dB.
3. A greater range of adjustment for VOX sensitivity is provided.
4. Minimum VOX delay time is decreased to less than 50 ms to allow faster semibreak in CW operation.
5. Preemphasis to VOX preamplification is added to improve SSB VOX operation.
6. Line audio (600 Ω) output level is increased to ensure at least -10-dBm output.

All changes are on the receiver-exciter circuit card. The changes consist of replacing 7 resistors and 3 capacitors.

Estimated time required is 2 man-hours.

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Collins Telecommunications Products Division/Rockwell International

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 1 in all correspondence.

No special tools or equipment are required.

MODIFICATION PROCEDURE

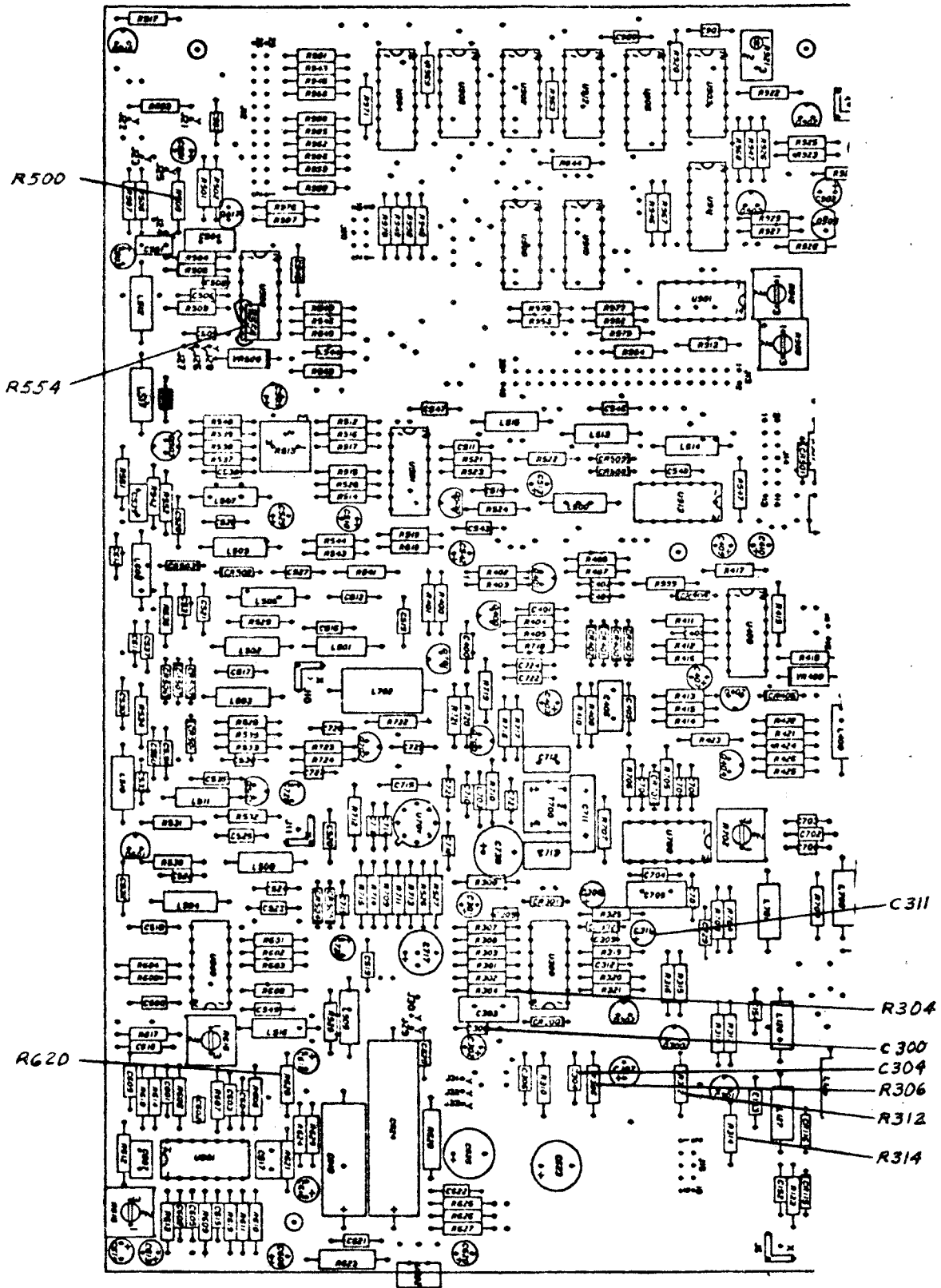
- A. Turn off all power to the transceiver.
- B. Remove the dust cover by removing the four screws located adjacent to the four feet on the bottom of the transceiver.

NOTE: All component changes are on the receiver-exciter card A3, located on the bottom of the chassis. Refer to figure 1 for location of components on the receiver-exciter card.
- C. Remove 100-k Ω resistor R554 and replace it with a 1-M Ω resistor (745-2449-000).
- D. Remove 270- Ω resistor R500 and replace it with a 3.3-k Ω resistor (745-0767-000).
- E. Remove 33-k Ω resistor R620 and replace it with an 18-k Ω resistor (745-0794-000).
- F. Remove 1- μ F capacitor C311 and replace it with a 0.22- μ F capacitor (184-9102-310).
- G. Remove 1-M Ω resistor R304 and replace it with a 100-k Ω resistor (745-0821-000).
- H. Remove 0.01- μ F capacitor C300 and replace it with a 1000-pF capacitor (913-3281-270).
- I. Remove 0.1- μ F capacitor C304 and replace it with a 4.7- μ F capacitor (184-9102-390). The negative lead of the capacitor should be connected to the hole on the left.
- J. Remove 1-k Ω resistor R306 and replace it with a 100- Ω resistor (745-0713-000).
- K. Remove 47-k Ω resistors R312 and R314 and replace them with 10-k Ω resistors (745-0785-000).
- L. Reinstall the transceiver dust cover.
- M. Attach a service bulletin information chart (280-3778-010) near the transceiver nameplate and mark SB 1 on the chart.

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>
745-2449-000	1		Resistor, 1 M Ω , R554
745-0767-000	1		Resistor, 3.3 k Ω , R500
745-0794-000	1		Resistor, 18 k Ω , R620
184-9102-310	1		Capacitor, 0.22 μ F, C311
745-0821-000	1		Resistor, 100 k Ω , R304
913-3281-270	1		Capacitor, 1000 pF, C300
184-9102-390	1		Capacitor, 4.7 μ F, C304
745-0713-000	1		Resistor, 100 Ω , R306
745-0785-000	2		Resistor, 10 k Ω , R312, R314
280-3778-010	1		Chart, information



P/O Receiver/Exciter Circuit Card A3
Figure 1