

## Collins Telecommunications Products Division/Rockwell International

350484

HF-380 TRANSCEIVER (622-3580-001)
KWM-380 TRANSCEIVER (622-5093-001
LOW-PASS FILTER ASSEMBLY A2 (641-7096-002)
LOW-PASS FILTER ASSEMBLY A2 (641-7132-001)
DIRECTIONAL COUPLER A2A2 (638-6788-001)

#### SERVICE BULLETIN NO 15

#### PROVIDE ANTENNA STATIC DISCHARGE PATH

This service bulletin applies to the following:

EQUIPMENT	APPLIES TO SERIAL NUMBERS	PRODUCTION CUT-IN SERIAL NUMBERS	
HF-380 622-3580-001	206 and below	207	
KWM-380 622-5093-001	2099 and below	2100	
Production cut-in	for directional coupler A2A2	(638-6788-001) is REV N.	

This modification adds a choke on directional coupler circuit card A2A2 to provide an antenna static discharge path. This will greatly reduce the possible loss of directional coupler diodes in the field.

Estimated time required is 0.5 man-hour.

The modification parts are listed in the material information paragraph. For additional information concerning parts, contact Collins Telecommunications Products Division/Rockwell International, Service Parts Department, Cedar Rapids, Iowa 52498. Reference HF-380/KWM-380 Service Bulletin No 15 in all correspondence.

No special tools or equipment are required.

#### MODIFICATION PROCEDURE

- A. Disconnect transceiver from primary power.
- B. Set transceiver on its side with power transformer on top. Remove dust cover by removing four screws adjacent to four feet on transceiver bottom.



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C. Remove card cage cover.

CAUTION: THIS EQUIPMENT CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE (ESDS) DEVICES. SPECIAL HANDLING METHODS AND MATERIALS MUST BE USED TO PREVENT EQUIPMENT DAMAGE. THE MAINTENANCE OPERATOR AND ALL TOOLS SHOULD BE GROUNDED.

- D. Lift up low-pass filter A2 and disconnect two ribbon cables and three coax cables. Tag the coax cables which connect to directional coupler jacks J1 and J2.
- E. Remove low-pass filter A2 from card cage.

CAUTION: BE CAREFUL TO NOT BEND ANY COILS ON FILTER BOARDS.

NOTE: Use a 25- to 30-watt soldering iron with a tip designed for use with printed circuits. The tip should be clean to ensure proper melting of the solder prior to component removal or when securing new components to the card. Take care to avoid application of excessive heat.

- F. Refer to figure 1. Install 220- $\mu$ H choke L8 (240-2524-000) as follows:
  - (1) Lay choke next to diode CR1 on A2A2 card.
  - (2) Connect and solder one end of choke to square pin at capacitor C9.
  - (3) Keeping leads as short as possible, lay other lead of choke on ground plane between C1 and L1 and solder.
- G. Mark SB 15 on directional coupler card A2A2.
- H. Reassemble transceiver in reverse order of disassembly. Ensure that the proper coax cables are connected to directional coupler jacks J1 and J2.
- I. Mark SB 15 on the service bulletin information chart. If the transceiver does not have an information chart (280-3778-010), order one and attach it near the name-plate.

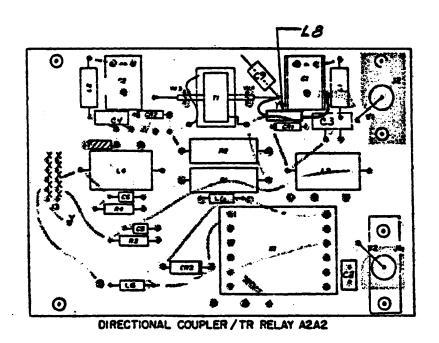
# MATERIAL INFORMATION

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

COLLINS PART NUMBER	<u>QTY</u>	UNIT PRICE	DESCRIPTION
240-2524-001 *280-3778-010	1 1		Choke, 220 $\mu$ H, L8 Chart, information

<sup>\*</sup>Order if needed

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Directional Coupler/TR Relay A2A2 Figure 1