Rockwell- SERVICE INFORMATION LETTER

Collins Telecommunications Products Division/Rockwell International

.350354

KWM-380 TRANSCEIVER (622-5093-001, -101) HF-380 TRANSCEIVER (622-3580-001, -101)

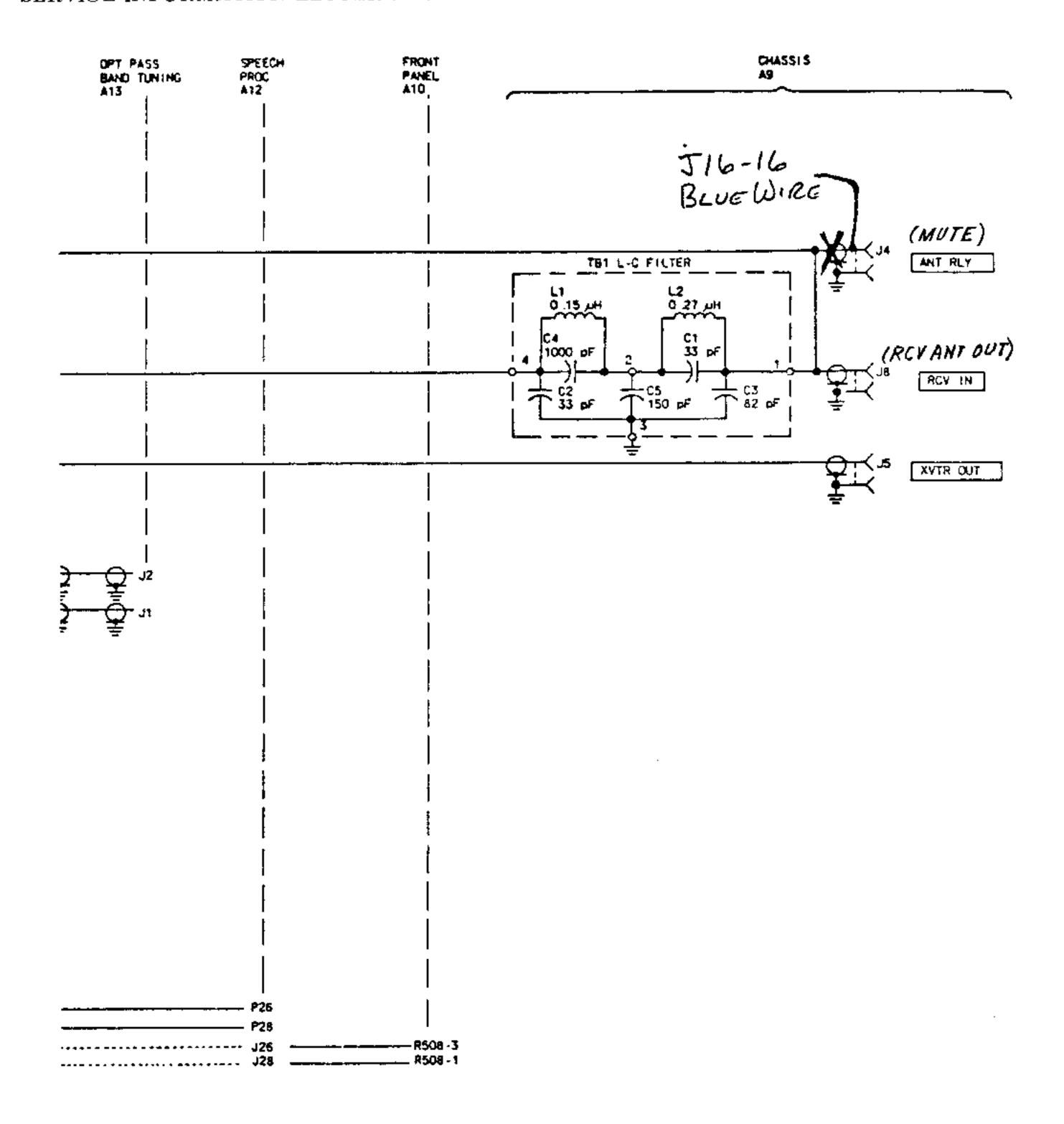
SERVICE INFORMATION LETTER 1-81

PROVIDE MUTE FUNCTION FOR EXTERNAL RECEIVER

The purpose of this service information letter is to describe a method for providing a mute function for an external receiver such as the Collins 75S-3C. Refer to the attached illustrations and perform the following:

- 1. Remove the jumper between J4 and J8 on the rear of the chassis.
- 2. Remove the coax from J4 and connect it to J8. J4 should now be empty and J8 should have two coax cables attached to it.
- 3. Connect the blue wire from the ribbon cable (coming from J16-16 on the receiver-exciter board) to J4. The blue wire will be found in the rear of the radio near J4 and J8.
- 4. Place a small jumper between the indicated pad and ground on receiver-exciter circuit board A3 (near K900).
- 5. Connect the 75S-3C antenna jack to KWM-380 RCV IN jack (J8). Connect the 75S-3C mute jack to the KWM-380 ANT RLY jack (J4).

Connector J8 will now provide a receive antenna output to the external receiver in parallel with the KWM-380/HF-380 receiver. Connector J4 will now provide the mute function for the external receiver by providing a ground during receive and an open during transmit.



TPA-2232-055

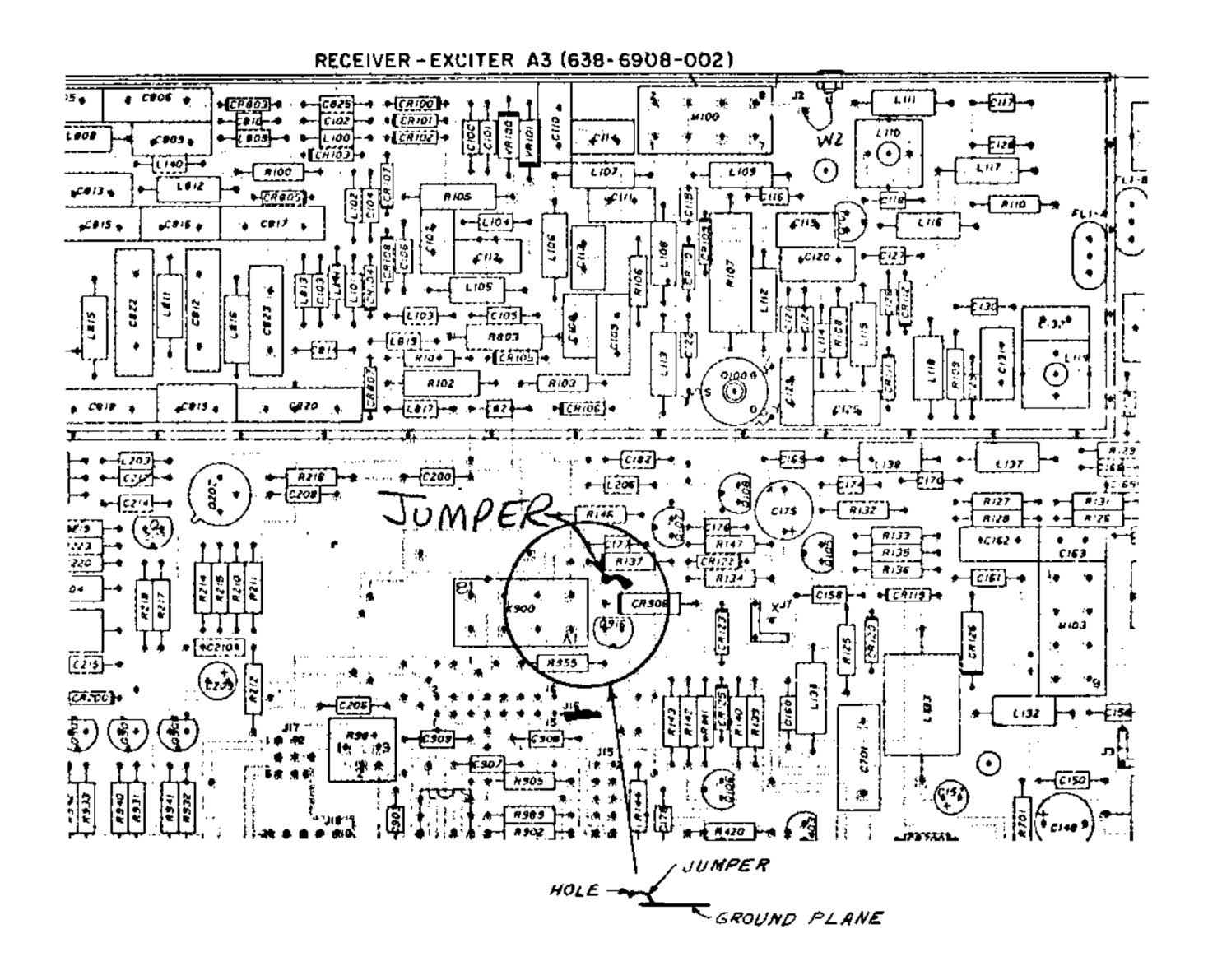
KWM-380 Interconnect Diagram Figure 1

— FF (7)

USB

558 R (2,4,5,8) LS8 - GG (7) P/0 J13 1 09124 2 455.0 kHz ENABLE â U9108 454.2 kHz ENABLE 12 | U9100 13 09030 5_ U909A U905C 131 7 r CW OSE KEYING 10 11 CW - KK (7) 0901 SIDETONE OF 1000 pF 0900 0,1 R920 1 M R921 U908A SIDETONE _15 - X (5) U9038 **U905A** U903A U905G AA (4) CM CC (5.8) -+5 V OC Q917 MP\$A14 +5 V DC CW 00 (5.8) Q904 +9 Y OC MPS2907A — +9 V DC XMT T 0908 P/0 J15 ≹ R925 10 k R924 十 C902 Q902 MPSA14 R923 820 +9 V DC XMT (TO PA) P/0 J12 PTT PIT HH (7) RCV RCV JJ (7) Q905 MPS2907A +9 V DC +9 V OC RCV R929 10 k JUMPER. \$ R928 10 k Q903 MPSA14 8927 820 P/0 J16 R926 RCVR MUTE 18 % AMP CTL 12 XMT HON 14 V DC K900 R955 16 k Q916 MPSA14 CR906 1N400Z P/D J13 634 -6913 TPA-1687-084 32

Receiver-Exciter A3, Schematic Diagram Figure 2



Receiver-Exciter A3 (638-6908-002) Figure 3

Rockwell-Collins SERVICE INFORMATION LETTER

Collins Telecommunications Products Division/Rockwell International

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KWM-380 TRANSCEIVER (622-5093-001, -101) HF-380 TRANSCEIVER (622-3580-001, -101)

SERVICE INFORMATION LETTER 2-81

CONNECTIONS TO COLLINS S-LINE PHONE PATCHES

This service information letter describes a method of connecting S-line 312B-4 and 312B-5 phone patches to the KWM-380 and HF-380 Transceivers.

- A. Refer to the schematic diagram, figure 13, in the 312B-4 and 312B-5 Station Controls Instruction Book. Connector J3 (PTT) on the phone patch is connected to J9 (PTT) on the transceiver using phono plugs.
- B. Connector J4 (PHONE PATCH OUT) on the phone patch is connected to a mating connector for the front panel MIC jack on the transceiver, center conductor to the ring and outer conductor to the sleeve. If the station microphone is connected at J1 (MIC) on the phone patch, the microphone output will be routed to the transmitter for normal SSB operation when phone patch switch S2 is switched to OFF.
- C. A low wattage audio transformer (supplied by user) must be wired between J5 (ANTI VOX IN) and J7 (4Ω AUDIO IN) on the phone patch. Connect the $4-\Omega$ winding between J7 and ground. Connect the $600-\Omega$ winding between J5 and ground. This 4- to $600-\Omega$ transformer will be permanent when used with the KWM/HF-380. To accommodate other connections to J5 and J7, the transformer should be wired under the phone patch chassis. This transformer will provide the proper level conversion to drive the telephone line.
- D. A 4- Ω signal from J11 (SPKR) on the transceiver is connected to J7 (4 Ω AUDIO IN) on the phone patch. The connecting cable must use a quarter-inch phone plug at J11 and a phone plug at the patch connection.
- E. Since the audio transformer provides the antivox signal, no additional connections are required at J5 or J6.
- F. The remaining connections (to the telephone, etc) are standard with all patches. Refer to the 312B-4 and 312B-5 instruction book operation paragraph 3.1.2 for instructions on setting up and operating the patch with a transceiver.