

## Motorola GM300 Interface

The following items are included in the Motorola GM300 interface kit:

1. GM300 interface cable assembly.
2. Cable tie.
3. Instruction sheet.

The following steps outline the procedure for interfacing the Motorola GM300 radio to the TrakIt-20.

1. Set the TrakIt-20 up for a bench test and use the AVL Installer program to set the following operating constants in the installer table to the indicated value:

Transmit indicator active:	Low
Receive indicator active:	High *
PTT output active:	Low
Enable Tx indicator as event 2:	No
External output active:	Low
External output mode:	Speaker mute

2. Configure the following jumpers as indicated:

JP1	Removed
JP4	A-B

3. Program pin 8 of the accessory connector of the GM300 radio for CSQ output active high. \*
4. Remove the control head and the top and bottom covers of the GM300 radio by following the instructions in the GM300 service manual.
5. Pass the green and red/black wires from the GM300 interface cable through the accessory connector hole in the radio chassis before connecting them to points internal to the radio
6. Solder the green wire of the GM300 interface cable to pin 1 of J9.
7. Solder the red/black wire of the GM300 interface cable to pin 1 of U501.
8. Insert the remaining wires of the GM300 interface cable into the radio's accessory connector as follows:

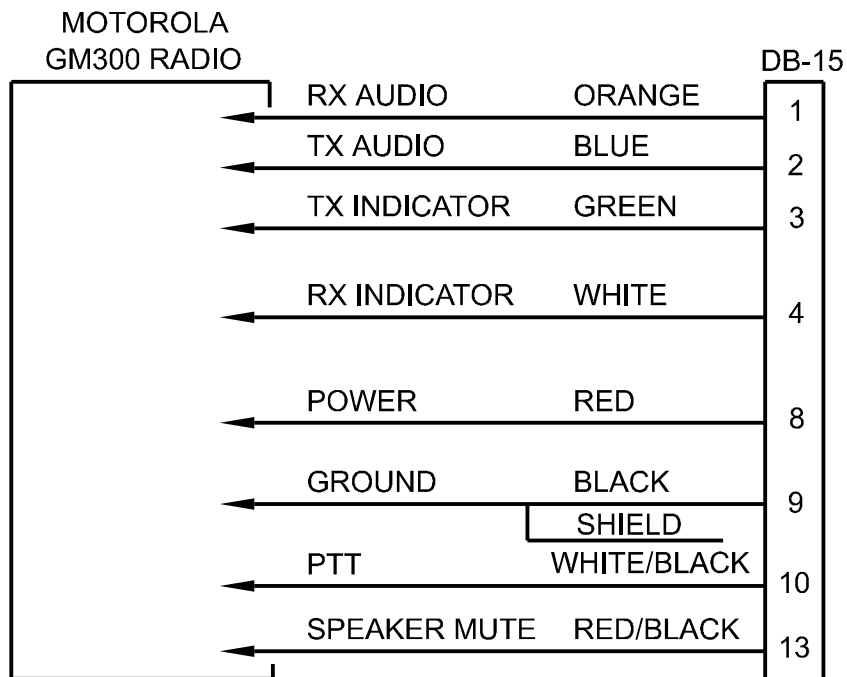
<b>Pin #</b>	<b>Wire</b>
2	Blue
3	White/Black
7	Black/Shield
8	White
11	Orange
13	Red

## Motorola GM300 Interface

- Secure the GM300 interface cable to the accessory connector with the cable tie strap and connect the accessory connector to the radio.
- Replace the control head and the top and bottom covers of the radio.
- Connect the DB-15 end of the GM300 interface cable to the DB-15 connector on the back of the TrakIt-20.
- Check the TrakIt-20's audio levels by performing the alignment procedure described in this manual.

\* Depending on logic board in radio, this may not be a programmable pin. It may be COR only - active low. This application note was done with HLN8070D logic board.

Note: If the microphone being used with the GM300 radio is a newer version and has power and/or transmit LED's, be aware that it may have an effect on the TX audio level from the TRAKIT-20. The level will change as the microphone is plugged in or removed as it tends to load down the TRAKIT-20's audio output.



**Motorola GM300 Interface Cable Kit  
106-MOTGM300**

<b>Item</b>	<b>Description</b>	<b>Part No.</b>	<b>Qty.</b>
1	CABLE TIE (SHORT)	200-0081	1
2	SCREW/CLIP KIT	231-0014	1
3	CONN DB15 MALE	231-0035	1
4	COVER DB15	231-0036	1
5	AMP, PINS	234-0096	6
6	CBL, 8 CONN 22 AWG STR	800-1114	1'