GE Master II Modifications

Receiver:

1) Locate the Oscillator/Multiplier Board
   -- This board attaches to the "Silver" Helical Section

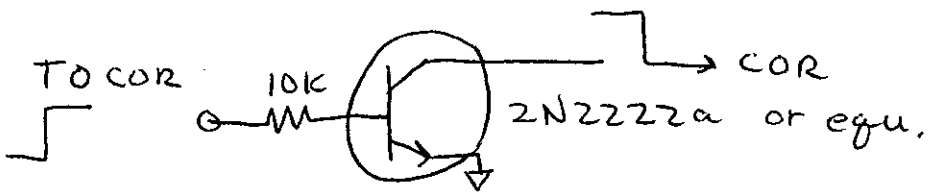
   1a) Tie Pin #1 to ground, selects F1 Crystal

   1b) Tie Pin #11 to Pin #12, applies +10V to RX Osc.

2) Locate on the Receiver/Audio Board
   -- This board is next to the Osc. Board

   2a) Connect Pin #11 to the RLC-XX Audio Input Pin #5
   -- This is Discriminator Audio Out, Install the De-Emphsis Jumper

   2b) Connect Pin #9 to the circuit below, Connect to RLC-XX Pin #7
   -- This is the Active high COR (Only RLC-II Needs Active Low COR)



COR Invertor Diagram

   2c) Cut trace connected to Pin #7 RX Mute when TX "ON"

   2d) Connect a 10KΩ Variable Resistor to control the Squelch.This connects to:

   -- Pin #10 (Squelch Arm)
   -- Pin #11 (Volume/Squelch High)
   -- Pin #12 (Volume/Squelch Low)

Transmitter:

1) Locate the Transmitter Exciter board

   1a) Tie Pin #8 to ground, selects F1 Crystal

   1b) Connect Pin #6 to RLC-XX Audio Output, Pin #4

2) Locate Carrier Control Timer Connector

-- This connector is located near a stud mounted transistor in the receiver corner of the radio.

2a) Connect Pin #6 (Closest to the Right side of radio, Nearest to the transistor center pin) to the RLC-XX PTT Output, Pin #3

3) Locate the System I/O Connector

-- This is the connector for the big system cable

-- These connections **DO NOT HAVE TO BE LARGE GAUGE WIRE**

3a) Connect Pin #29 to +12 Volts, Keeps Exciter Alive

3b) Connect Pin #24 to +12 Volts, Powers PTT Relay

3c) Connect Pin 30 to Ground, Grounds Exciter

4) No more system cable is needed

5) System +12 Volts is attached to the Large Pins on the front of the radio's connector. **WATCH THE POLARITY**

6) Connect separate antennas for the Transmitter and the Receiver. **YOU MUST USE DOUBLE SHIELDED WIRE FOR THIS CONNECTION.**

Now you have a Duplexed Radio...

It may be necessary to cover the inside plastic seperators with copper foil to keep the RX Oscillator from producing IM products in the TX pre-driver. Without the added sheilding, the RX Oscillator can producs very low levels of noise that mixes in the transmitter excitter board. This noise , down around -60dB can be amplified to cause serious interference at your site. Pre-caution should be taken.

Good Luck!!
Allan Overcast KF7FW