

Instructions for replacing the LCD assembly in the DG535

## Tools needed

- 1. Phillips head screwdriver
- 2. Small wrench
- 3. Wire cutters
- 4. Wire stripper
- 5. Heat shrink gun

## Parts Included

- 1. LCD (with wires , resistors and heat shrink tubing attached)
- 2. 3- Cable ties
- 3. 2 pieces of heat shrink tubing

## Installation procedure

## MAKE CERTAIN THAT THE POWER IS TURNED OFF AND THAT THE INSTRUMENT IS UNPLUGGED. IT IS **DANGEROUS** TO INSTALL THE LCD WITH THE POWER ON!!!

- 1. Remove the top cover
- 2. Loosen the two pem nuts securing the top board to the front panel using a wrench.
- 3. Remove the two screws securing the top board to the rear panel.
- 4. Gently pull up on the top board and disconnect the ribbon cable to the LCD.
- 5. Using a Phillips head screwdriver remove the 4 screws holding the LCD to the front panel. Save the screws and washers.
- 6. Pull the old LCD out and remove the screws holding the cable ties on the bottom board.

- 7. Cut the two wires attached to the LCD near the grommet (next to the switch assembly at the rear of the instrument). Leave about 3 cm of wire.
- 8. Discard the old LCD assembly.
- 9. Remove the protective plastic cover from the new LCD.
- 10. Install the new LCD on to the front panel using the 4 screws and washers.
- 11. Strip the insulation off the wires coming out of the grommet.
- 12. Insert a piece of heat shrink tubing over both wires.
- 13. Solder the wires attached to the LCD to the wires coming out of the grommet.
- 14. Pull the heat shrink tubing over the soldered wires and shrink with a heat shrink gun. The wires can not make electrical contact, or the fuse will blow when the instrument is powered on.
- 15. Secure the wires to the chassis using the cable ties.
- 16. Reattach the ribbon cable to the LCD.
- 17. Re tighten the pem nuts securing the top board to the front panel.
- 18. Install the two screws securing the top board to the rear chassis.

Turn on the instrument and check the LCD and the contrast. If the contrast and backlighting are good then put the top cover back on. If the contrast is too light then change R407 from  $6.8k\Omega$  to  $10K\Omega$ . If the contrast is too dark then install a  $6.8K\Omega$  resistor in parallel with R407.

