TROUBLESHOOTING (cont.)

6. A. UNABLE TO HOLD A STABLE ZERO (DRIFT), OR...
   B. SYSTEM HAS LOW OR NO RESPONSE TO CALIBRATION GAS.
   - CONTAMINATION OF THE DETECTOR UNIT (WATER, DIRT, ETC.)
   - END OF DETECTOR UNIT SERVICE LIFE.
7. REMOTE RUN LAMP INOPERATIVE.
   - FAULTY LAMP IN REMOTE INDICATOR.
   - FAULTY SOLID STATE RELAY ON POWER SUPPLY.
   - FAULTY POWER SUPPLY CABLE.
   - FAULTY CONTROL UNIT.

CALIBRATION

CALIBRATION PROCEDURE
1. ALLOW SYSTEM TO WARM UP FOR 5 MINUTES PRIOR TO CALIBRATION.
2. REMOVE THE BAFFLE CAP AND CHECK THAT ALL HOLES AND SCREENS ARE FREE OF ANY DIRT OR OBSTRUCTIONS. RE-INSTALL BAFFLE CAP.
3. IN FRESH AIR OR BY USING ZERO AIR, SET THE ZERO POT SO THE CONTROL UNIT SHOWS 0.0 BE SURE TO SET TO THE CENTER OF THE 0.0 RANGE.
4. PLACE THE CALIBRATION CUP OVER THE BAFFLE CAP.
5. APPLY SPAN GAS OF A KNOWN CONCENTRATION AT 1.0 SCFH (0.5 LITERS/MIN). LET THE CONTROL UNIT DISPLAY STABILIZE.
6. SET THE SPAN POT SO THE CONTROL UNIT SHOWS THE SPAN GAS CONCENTRATION.
7. REMOVE CALIBRATION CUP AND LET THE DETECTOR UNIT CLEAR.
   NOTE: IN INSTANCES WHERE A LARGE NUMBER OF TURNS OF THE SPAN POT ARE NECESSARY TO BRING THE CONTROL UNIT INTO CALIBRATION, THE ZERO MAY SHIFT SLIGHTLY. THIS WILL BE NOTICED AFTER THE DETECTOR UNIT HAS CLEARED. IF THE ZERO HAS SHIFTED AFTER THE DETECTOR UNIT HAS CLEARED, REPEAT THIS PROCEDURE A SECOND TIME.

140B SYSTEM TEST VOLTAGE MEASUREMENTS
(All DC voltages measured with respect to 0 V ground)

<table>
<thead>
<tr>
<th>Power Supply</th>
<th>Readout</th>
</tr>
</thead>
<tbody>
<tr>
<td>GND</td>
<td>Chassis Ground</td>
</tr>
<tr>
<td>AC</td>
<td>Line Voltage Input</td>
</tr>
<tr>
<td>AON</td>
<td>Line Voltage Input</td>
</tr>
<tr>
<td>MAL</td>
<td>Negative Side of Remote Run Light Relay</td>
</tr>
<tr>
<td>LO</td>
<td>Negative Side of Remote Run Light Relay</td>
</tr>
<tr>
<td>HI</td>
<td>Negative Side of Main Contractor control Relay</td>
</tr>
</tbody>
</table>

Detector
- WHITE: 8.5 to 20 VDC (Power In)
- RED: 2.8 VDC @ 0% Gas to 3.6 VDC @ 5% Gas (Signal Out)
- BLACK: 0 V Ground
- GREEN: 0 V Ground