

CALIBRATION PROCEDURE FOR R-123

TOOLS REQUIRED:

- Calibration kit with **500ppm** Methane
- Adapter for sensor
- Digital Volt Multimeter (DVM)
- Small screw driver

PROCEDURE:

- 1 Sensor must first be powered for at least 24 hours prior to calibration
- 2 Remove the enclosure lid by turning counter clockwise.
- 3 Connect DVM to ground (GND) and signal out on the top plate of the transmitter.
- 4 Confirm that the sensor is presently exposed to clean air (or apply a source of clean air) and if necessary, adjust 4 mA adjust pot so that the meter reading is 0.20 VDC +/- 0.025 VDC.
- 5 Screw the Adapter for the sensor into the bottom of sensor.
- 6 Screw the valve, regulator, gauge and hose assembly on to the tank of 500ppm Methane calibration gas.
- 7 Slowly open tank valve
- 8 Adjust pressure gauge to read 2.5 psi by adjusting the regulator knob. (This sets the flow rate to 50 ml/min via the purple orifice that is in line with the hose.)
- 9 Attach the end of the hose to the adapter on the sensor.
- 10 Let the gas flow for three minutes.
- 11 With the span gas still flowing to the sensor, adjust the Span Adjust pot so that the meter reading is **1.0 volts**.
- 12 Remove the span gas and verify that the meter reading returns to **0.20 VDC** within five minutes.
- 13 If the reading doesn't return to **0.20 VDC** adjust the 4 mA pot until the meter reads **0.20 VDC +/- 0.005VDC** and repeat steps 4 to 12. (This may take a few iterations)

