- 6. Zero the sensor on the airway adapter being used in this test. Ensure Zero Gas is set to Room Air
- 7. Attach a regulated flowing gas mixture of 5% CO2, balance N2 to the airway adapter.
- 8. Set the gas correction to off.
- 9. Allow a few seconds for the gas mixture to stabilize and observe the CO2 value. The expected value is 5% of the ambient pressure 2mmHg

### **NOTE**

Make sure that you follow the above steps correctly. If the sensor fails this check it must be exchanged. The sensor cannot be calibrated.

### Example for an expected test result:

The expected test result for an altitude of 0 m (sea level) at approximately 760 mmHg ambient pressure is:

#### Table 6:

| Test                            | Expected test results (x1)     | Acceptance Range     |
|---------------------------------|--------------------------------|----------------------|
| Mainstream CO2 Accuracy<br>Test | 5% of 760 mmHg pressure ±2mmHg | 36 mmHg -<br>40 mmHg |

### **NOTE**

The expected test results will differ depending on the conditions (i.e. altitude or ambient pressure).

# Sidestream CO2 Accuracy Check

Tools Required:

- Cal gas flow regulator M2267A
- Cal tube 13907A
- Verification Gas M2506A
- Straight Sample Line M2776A

You also need a local barometric pressure rating received from a reliable local source (airport, regional weather station or hospital weather station) which is located at the same altitude as the hospital.

#### **Procedure:**

- 1. Attach the M2741A CO2 sensor to the patient monitor. Attach the sample line and the cal tube to the sensor. Make sure that the sensor is disconnected from the patient circuit.
- 2. Switch on the patient monitor.
- 3. Enter the monitor's Service Mode.
- 4. Using the sensor status provided in the M2741A Serial protocol, wait for the M2741A sensor to warm up to its operating temperature.
- 5. Zero the sensor. Ensure Zero Gas is set to Room Air
- 6. Attach a regulated flowing gas mixture of 5% CO2, balance N2 to the cal tube.

- 7. Set the gas correction to off.
- 8. Allow a few seconds for the gas mixture to stabilize and observe the CO2 value. The expected value is 5% of the ambient pressure 2mmHg

# **NOTE**

Make sure that you follow the above steps correctly. If the sensor fails this check it must be exchanged. The sensor cannot be calibrated

# **Example for an expected test result:**

The expected test result for an altitude of 0 m (sea level) at approximately 760 mmHg ambient pressure is:

| Test                            | Expected test results (x2)     | Acceptance Range     |
|---------------------------------|--------------------------------|----------------------|
| Sidestream CO2 Accuracy<br>Test | 5% of 760 mmHg pressure ±2mmHg | 36 mmHg -<br>40 mmHg |

### **NOTE**

The expected test results will differ depending on the conditions (i.e. altitude or ambient pressure).

# **Sidestream CO2 Flow Check**

Check the flow rate in the Sidestream CO2 extension as follows:

- 1. Connect the flowmeter to the sample line
- Check on the flowmeter the flow that the Sidestream CO<sub>2</sub> extension pump draws. It should be 50 ml/min ± 10 ml/min. If the value is not within tolerance check your setup again and perform another flow check. If it fails again, the sensor must be replaced. The sensor cannot be calibrated.