### **VANDAGRAPH SENSOR TECHNOLOGIES**

### **Company OPERATING PROCEDURE**

## Oxygen Sensor manufacture

# R-22AEX Expedition Sensor VM3/COP/40.47

Date: 30-Sep-03 Revision Date: 21-Apr-22 Issue 1

# Only to be attempted by trained personel

Used in Oxycheq Expedition Monitor Pt Number OA-3 440006





#### **Parts Required**

Quantity	Description	Part No.	
1	R22 Sensor ( R-22MED: R-22A: R-22BUD		
	are all equivalent)		
	R-22A 1st choice		
2	Pins Farnell 143-116	9071046	
1	Shell 3pin Farnell 143-127	9071031	
1	Red wire 5 cm or Red	9070105	
1	Black wire 5 cm	9070106	
1	Pre-assy ( above 4 components)	9070110	
2	Serial number Labels		
1	Serial number Label for Outer bag		
1	Polythene Bag (outer)		
1	Gas Barrier bag		

Warning Use Soldering Iron set at 300C Do Not overheat the PCB on the Sensor Method.



- 1. Open the packaging and remove the  $O_2$  sensor.
- 2. Check the O<sub>2</sub> sensor for damage and signs of leaking electrolyte.
- 3. Remove excess outer case unto level of PCB. VM3COP40.11
- 4. Remove the Molex and connect wires
- 5. Connect Black & White wires
- 6. Pay attention to wire positions on the PCB Black to BLK: White

to RED

- 7. The lock position on the molex
- 8. The center is left unconnected
- 9. Flat side of molex White to the LEFT

- 10. Label sensor with R-22AEX
- 11. Wait until sensor cools to room temperature
- 12. Test for output 7-13mV.
- 13. Can be tested in Expedition analyser
- 14. Add R-22AEX label to sensor,& bag
- 15. Reseal in serial numbered gas barrier bag
- 16. Ensure the O<sub>2</sub> sensor is booked out in the stock books.
- (\*). If the O<sub>2</sub> sensor fails the output specification test, it should be replaced in it's original packet and re-boxed. It should then be placed in a docket and given a Repair sheet, tested and returned to supplier under the correct procedures.