



# VANDAGRAPH LTD

## Replacement of the Analox O2 EII Oxygen Sensor SA2 EII 9B Kit using Vandagraph R-33DE or R-22DEM



1. There are two compatible sensors
  - a. R-33DE - uses a small connector
  - b. R-22DEM - uses a 2 pin molex connectorCheck the colour and type of connector: white or black  
When ordering please clarify the model you require.
2. Loosen the 4 screws located on the front cover:
  - a. This may be yellow or green
  - b. Front cover has the sensor EII adapter
3. The gasket seal is designed to prevent water leaking into the O2 EII and may therefore be tight.
4. Loosen the seal by moving the lid from side to side, and then carefully lift the cover.
5. Disconnect the connector from the back of the sensor
  - a. Wires to the connector are very fine and easily broken
  - b. Check they are intact and not corroded before removing the sensor.
  - c. Check the cable for corrosion; normally the wire turns black.
  - d. With the 2 pin Molex connector version separate the plug and socket.
6. Unscrew the sensor from the front cover
7. Remove the new sensor from its pack and check it for leaks
8. Check the sensor has a rubber O-Ring fitted at the base of the thread on the front of the sensor.
9. Screw the sensor into the front cover finger tight and connect the EII connector to the R-33DE.
10. Make sure the metal prongs on the connector are facing the sensor and the key on the connector matches the key on the socket.
11. Push in gently but firmly
12. With the Molex version connect the pins from the R-22DEM to the molex socket.
13. Check the reading, should be +ve, if -ve reverse the connectors (this applies to black connector only - R-22DEM)
14. Replace the cover carefully taking care that the sensor locates properly and that you do not trap any wires.
15. Do not over tighten the screws.
16. Ensure the EII adapter is fitted
17. Leave exposed to dry outdoor air for at least two minutes. N.B. All galvanic sensors can take an hour to fully stabilize after they have first been exposed to air to achieve maximum accuracy.
18. Calibrate to 20.9%
19. Dispose of the old sensor according to local regulations for Lead and Potassium Hydroxide solution.  
If in doubt, Vandagraph offer a free of charge disposal service, please contact us for returns bags.



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