VANDAGRAPH Ltd

VM3COP40.22 D-40 Oxygen Sensor Production Procedure

Parts list

Qty	Description	Part No.
1	Oxygen sensor – R-33S1	0110132
1	2 pin JST connector	9071014
1	Anti-static gas barrier bag	0150000

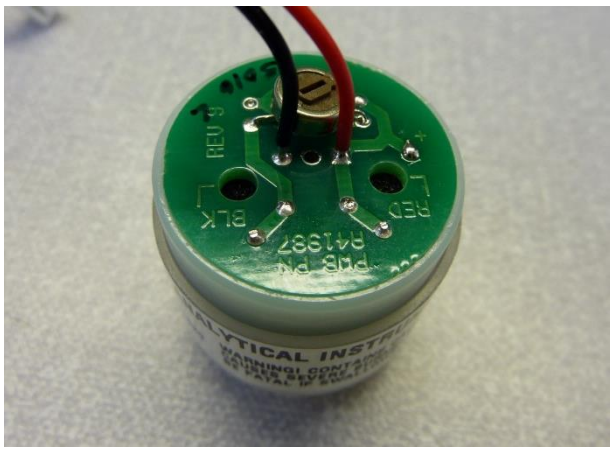
Tool list

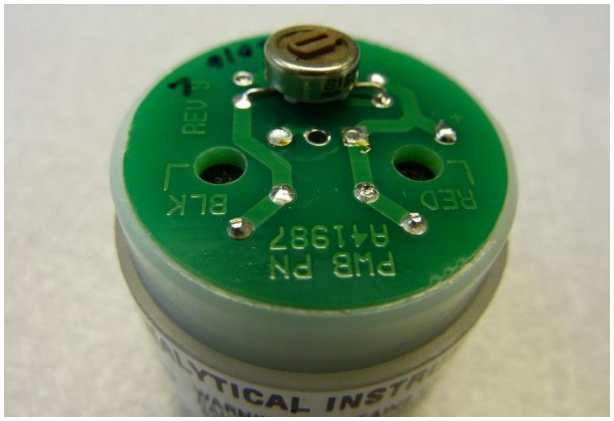
Soldering iron
Wire cutters
Stanley knife
Super glue
Small pliers

Production:

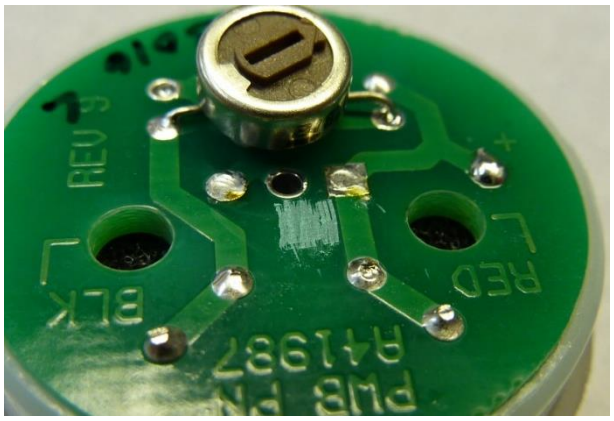
1) Remove the R-33S1 Oxygen sensor from the gas barrier bag.

2) Using a soldering iron, remove the black and red wires.

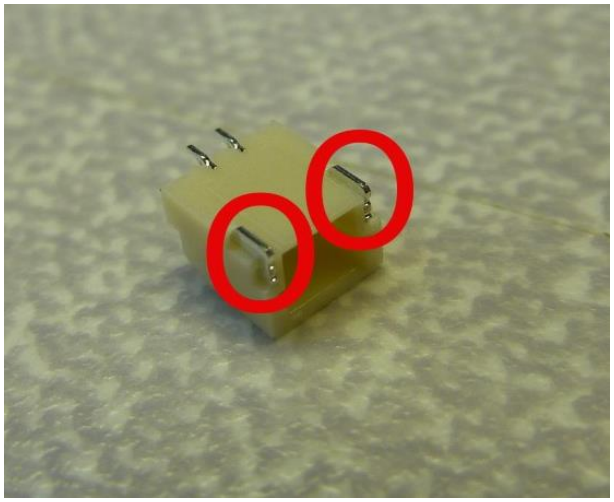




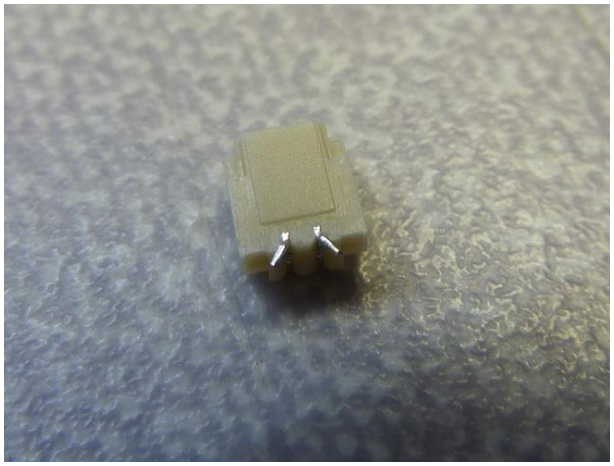
3) Using the flat edge of a Stanley knife, remove a small area of surface lacquer from in front of the solder contacts.



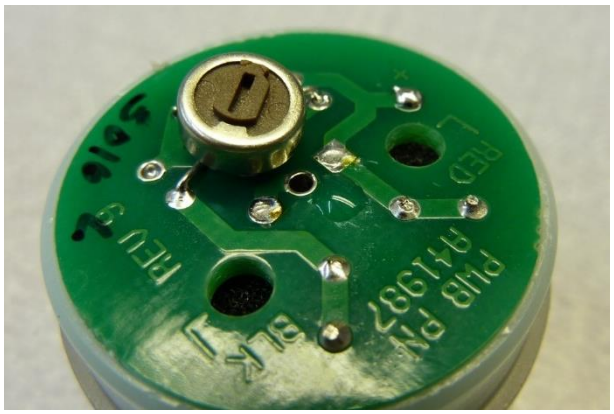
4) Using small pliers, remove the marked contacts.



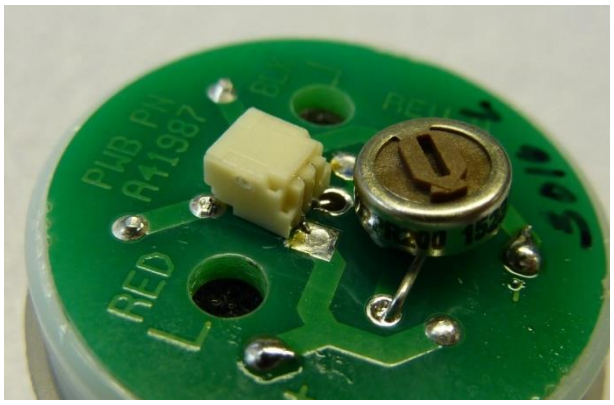
5) Splay the solder contacts to around a 30° angle.



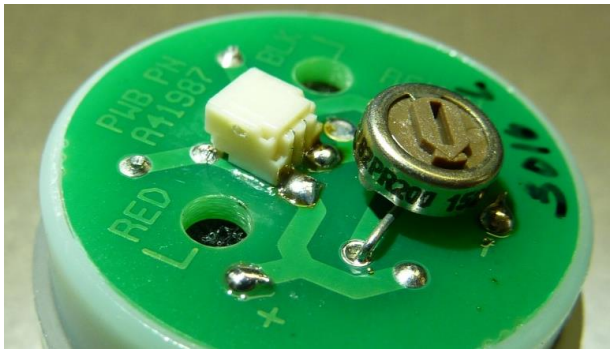
6) Place a drop of super glue on to the de-lacquered area of the PCB.



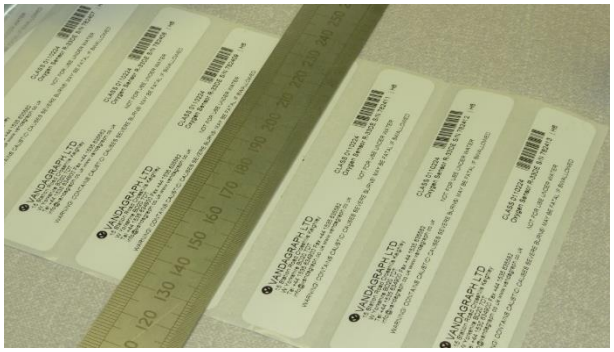
7) Place the JST connector on to the super glue, ensuring that the connector contacts align with the contacts of the PCB.



8) Solder the connector into place.



9) Using a Stanley knife and steel rule, remove the excess from the bottom on the serial number label.

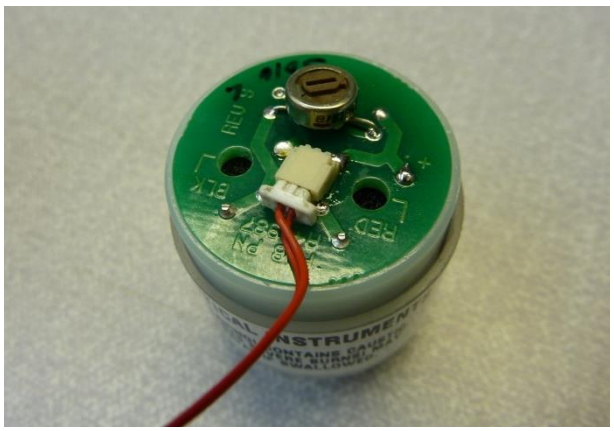


10) Remove the Teledyne label (R-33S1) and replace it with the Vandagraph (D-40) label with the same serial number.

    NB. To ensure retention of the original serial number, each sensor should be done individually.

QA:

11) Using the appropriate test lead, connect the sensor to a digital voltmeter.



12) Set the digital voltmeter to the millivolt scale.

13) Observe the output of the sensor. The output must be between 23mV and 27mV.

14) Using the Intrastats system, mark the sensor as having passed or failed as applicable.

Packing:

15) Take a sensor that is to be packed, note its serial number, and affix that corresponding bag serial number label to the bag.

16) Place the sensor in the bag.

17) Using a strip heat sealer, seal the sensor into the gas barrier bag.

18) Once passed, place the finished product, along with the production sheet, on to the production shelf to await stock entry.