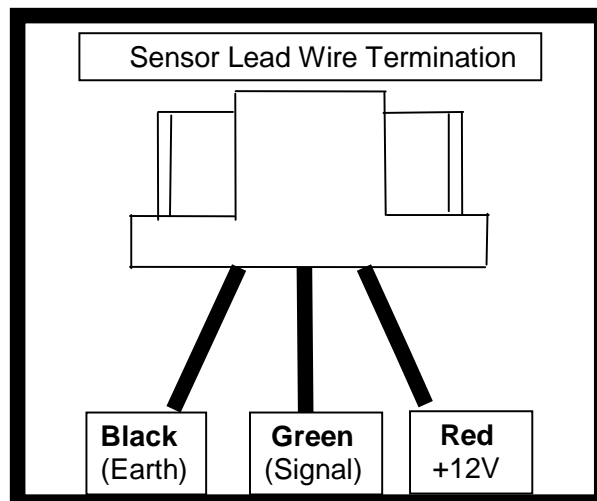


## **Saab 900 / 9000 OE Crank Position Insert Sensor** (OE ref p/n 7484546, 7482540, 9133067 & 8786246)

### **Models:-**

- ✓ **900 Model** - 1989->93 B202 & B212 Injection with EZK Ignition (3 Pin Rectangular Plug)
- ✓ **9000 Models:-**
- ✓ 1989->91 B202 with EZK Ignition (3 Pin Square Plug)
- ✓ 1992 B202 with EZK Ignition
- ✓ 1990->91 B202 with Red DI Cassette (3 Pin Square Plug)
- ✓ 1992 B202 Engine Turbo or Non Turbo with Red DI Cassette
- ✓ 1990->91 B234 Engine, Turbo or Non Turbo with Red DI Cassette
- ✓ 1992 B234 Engine, Turbo or Non Turbo with Red DI Cassette

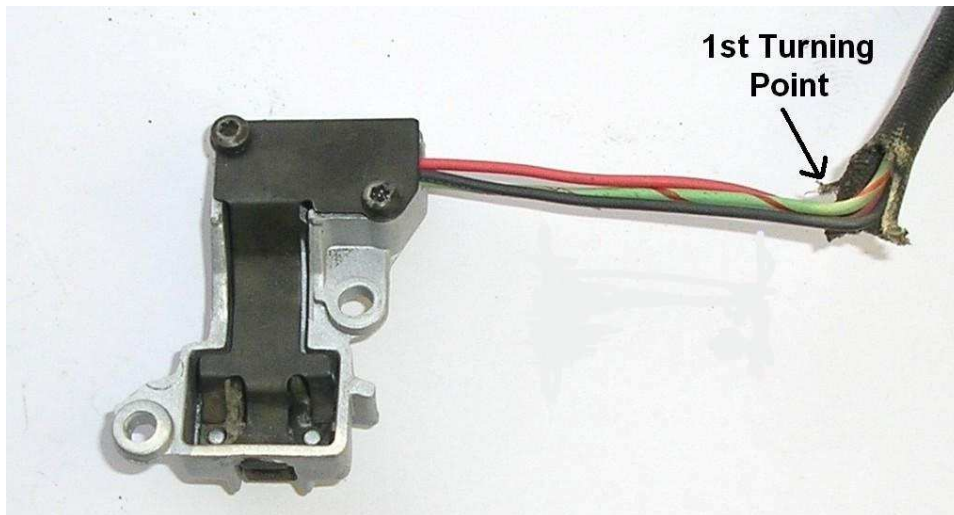
**Caution, this sensor maybe damaged if wired incorrectly. Please check the existing wiring harness and determine the +12V and earth connections and refer to the lead wire diagram below.**



(Continued)

**These instructions are for the Classic 900 Sensor. For the 9000 sensor use these instructions as a guide.**

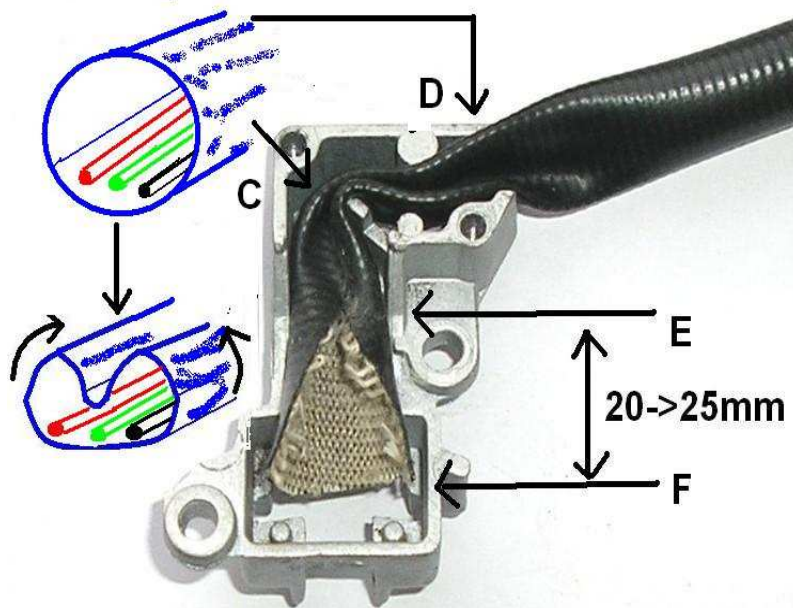
- 1) Remove the existing sensor body / holder from the engine noting the routing of the wiring harness around any tight turning points. When the new insert sensor is wired in, avoid creating joints at the 1<sup>st</sup> turning point.
- 2) Working in an area free from dirt / ferrous metal fillings, remove the old sensor from its housing. Clean the housing removing all oil, dirt, grit & metal fillings (etc)
- 3) Decide if the new sensor will be installed using either
  - a) Three staggered joints (recommended) OR
  - b) Three equal length joints.
- 4) Push back the old black thermal insulating sleeve and cut off the old sensor head **AFTER** the 1st turning point and at an overall length **SHORTER** than the length of the new sensor leads.



- 5) **The new black thermal insulation sleeve is pre-cut to the correct length.** Attach a rigid rod / wire to the three leads of the old wiring harness and slide off the old black thermal sleeve. Feed the rod into the NEW black thermal sleeve and push back the sleeve to expose the three leads.
- 6) Trim the three new sensor leads to the same length as the old sensor adding 1 to 2cm to the length. Slide on the heat shrink tubing over each of the old leads.
- 7) Solder the three joints (recommended). Alternatively, use the enclosed crimp connectors. Cover each joint with the heat shrink tubing and shrink to fit.
- 8) Push the thermal sleeve down to the sensor head. Install the new sensor into the housing.
- 9) Referring to the picture below, the thermal sleeve needs to be reduced in diameter to correctly fit into the housing.

- a) Between points "C" & "D" fold the thermal sleeve along its length and double back onto its self. Fit into the cable grip section of the housing.
- b) Between points "E" & "F", make a cut of 20 ->25mm at the end of the sleeve. **Tightly** fold one end of the sleeve end inwards and fold the other end inwards **tightly overlapping the first fold**.

**Important:-** When correctly fitted, the sleeve will fit inside the cable channel of the housing without protruding over the edges (between points "E" & "F") and sits flush with the top of the cable grips between "C" & "D".



- 10) Refit the sensor back plate into the housing ensuring that the sensor head is **fully seated** in the correct position and that the back plate sits **flush** with the housing.
- 11) Clean the old vane wheel / trigger disc of any oil, dirt and other contaminants.
- 12) Before installing the sensor, check that the sensor is working correctly. Connect the sensor leads to the wiring harness and with the ignition switched on, check that an approximate +5.0V signal is produced when a solid section of the trigger wheel is placed between the sensor heads. This voltage should be reduced down to approximately +0.1V when the cut out section of the trigger wheel passes over the sensor head. **Avoid scraping the sensor head with the trigger wheel when performing this test.**