

# Premium Oxygen Sensor with OE SmartLink Connector

Oxygen Sensor Installation Guide



**BOSCH**

**Please read these instructions carefully before removing the installed oxygen sensor from your vehicle.**

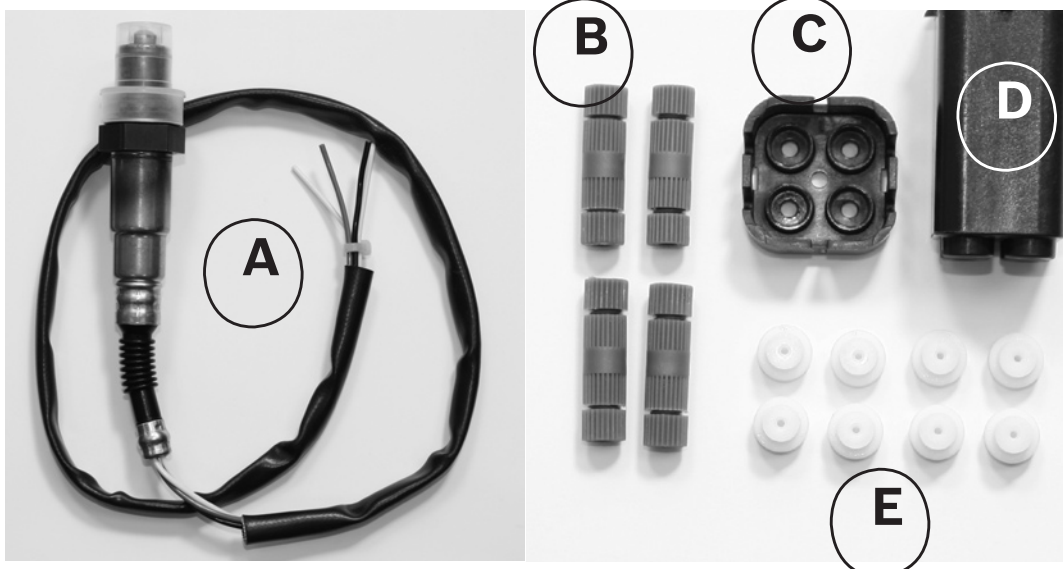
- ▶ **Do NOT cut wires while removing the existing sensor from the vehicle.**
- ▶ **Do NOT solder wires. Soldering wires will lead to early sensor failure.**
- ▶ Before removing the existing oxygen sensor from your vehicle, make note of the location of the connectors joining the oxygen sensor and vehicle wiring. Also note the routing of the existing sensor to ensure the OE SmartLink oxygen sensor is routed the same way.
- ▶ OE SmartLink kit assembly will add approximately 25 – 30 minutes to the complete installation time.

## Tools required to perform installation:

- ▶ Oxygen sensor removal tool or 22mm wrench (see manufacturers instructions)
- ▶ Tape measure
- ▶ Wire cutter
- ▶ Wire stripper (18-20 gauge)

## Contents of OE SmartLink Oxygen Sensor Connector Kit:

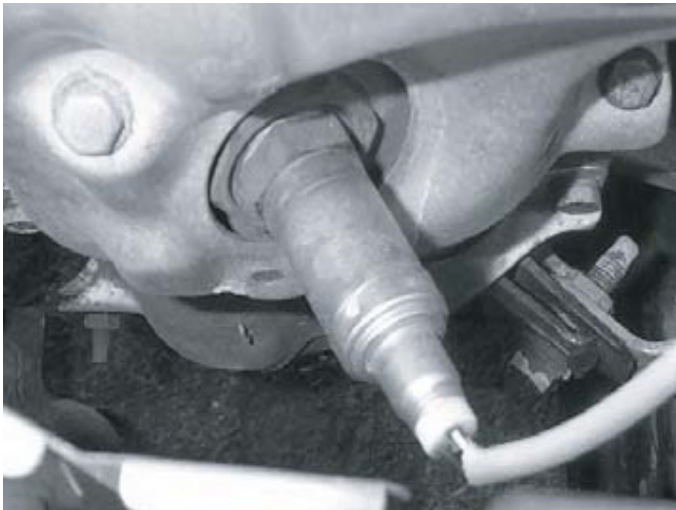
- A. OE SmartLink Oxygen Sensor (Qty. 1)
- B. Posi-Lock Terminals (Qty. 4)
- C. Cap (Qty. 1)
- D. Body (Qty. 1)
- E. Wire Seals (Qty. 8)



## 4-Phase Installation Process

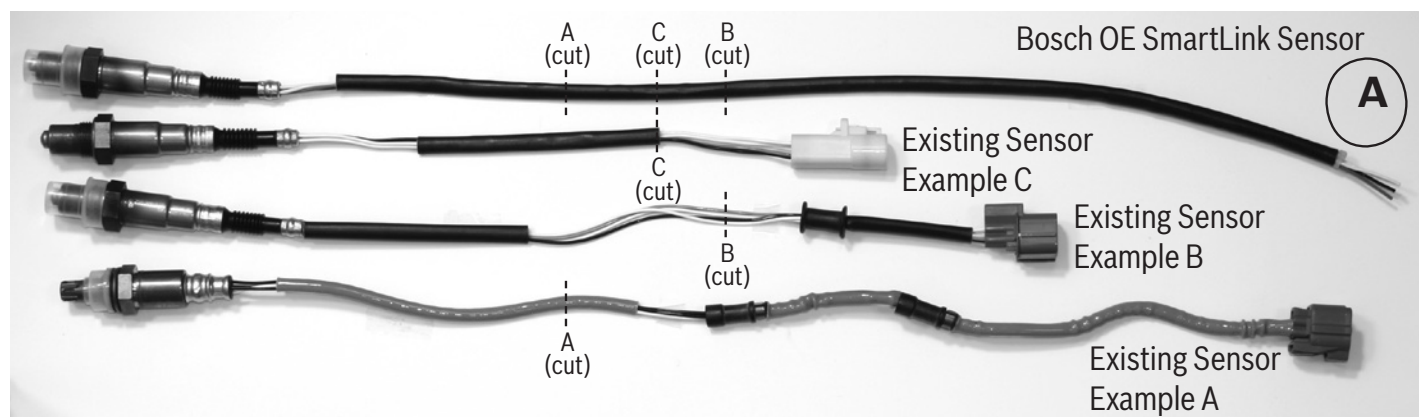
### Phase I – Sensor Removal

- 1) Remove the existing sensor from vehicle. Oxygen sensors can be located in a manifold or exhaust pipe.



*Do not cut the wiring while removing the existing sensor from the vehicle, as it is necessary to utilize a portion of this wiring on the OE SmartLink oxygen sensor.*

### Phase II – Sensor Preparation



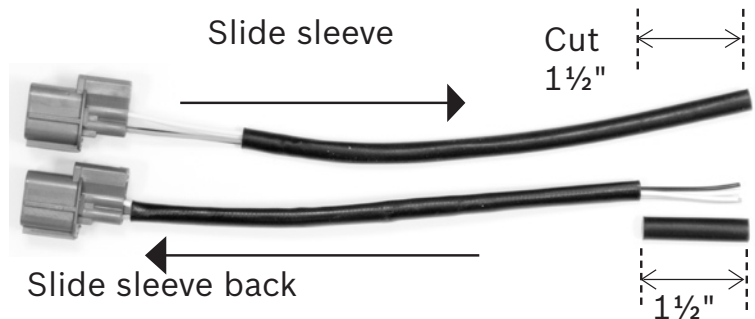
- 1) Lay the existing sensor and the OE SmartLink sensor next to each other on a work surface, with the sensor bodies at the same end.
- 2) Using the wire cutters, cut through the leads and insulation sleeves of both sensors at the same location. Discard the sensor end of the existing sensor and the excess lead end of the OE SmartLink sensor.

## Phase III – OE SmartLink Connection

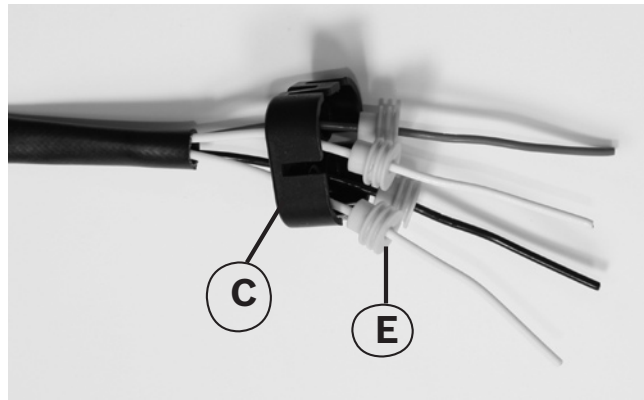
### Prepare the individual segment(s) for connection.

#### Assembly for Existing Connector Segment

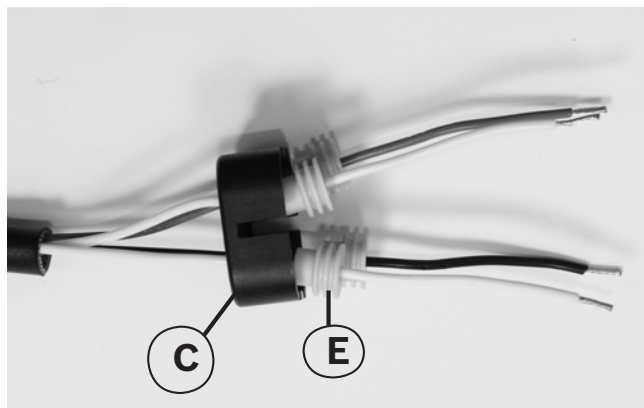
- 1) Slide the insulation sleeve off the wire leads far enough to cut 1 ½" from the length of the insulation sleeve, and slide the insulation sleeve back towards the existing connector.



- 2) Install the cap (C) on the wires by inserting the wires into the designated holes.
- 3) Slide the wire seal (E) over each wire. The un-ribbed, smaller diameter end of the seal should face the cap.



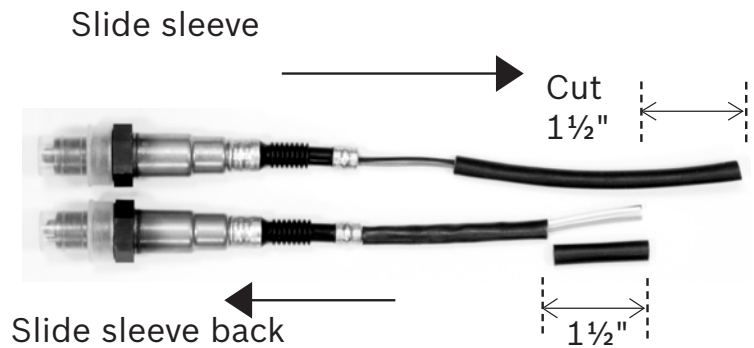
- 4) Strip 3/8" of insulation from the ends of each of the wire harness leads. Use proper tools to ensure that you strip only the insulation.



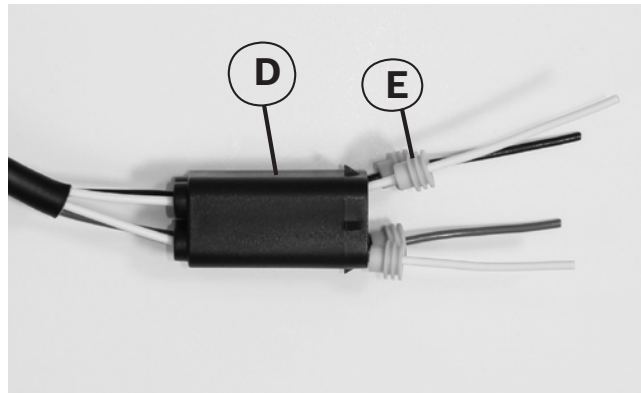
## Phase III – OE SmartLink Connection (Continued)

### Assembly for OE SmartLink Sensor Segment

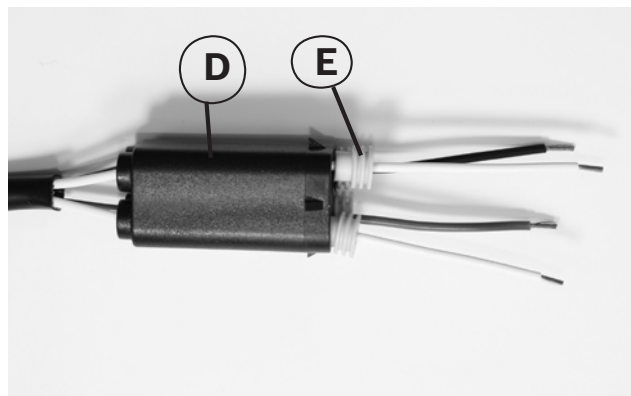
- 1) Slide the insulation sleeve off the wire leads far enough to cut 1 ½” from the length of the insulation sleeve, and slide the insulation sleeve back towards the OE SmartLink sensor body.



- 2) Install the body (D) on the wires by inserting the wires into the designated holes.
- 3) Slide the wire seal (E) over each wire. The un-ribbed, smaller diameter end of the seal should face the body.



- 4) Strip 3/8” of insulation from the ends of each of the wire harness leads. Use the proper tools to ensure that you strip only the insulation.



### Phase III – OE SmartLink Connection (Continued)

**Use the “Wire Color Reference Table” to determine the proper wire connection.**

- 1) Identify the two “heater” wires first (2 wires that are the same color) and match them with the OE SmartLink white wire.
- 2) Identify the signal wire. Match the signal wire with the OE SmartLink black wire.
- 3) Identify the ground wire. Match the ground wire with the OE SmartLink gray wire.

**Wire Color Reference Table**

Existing Sensor Types	Heater Wires* (2 Wires)		Signal Wire		Ground Wire (optional)	
	Existing Sensor (Column A)	OE SmartLink (Column B)	Existing Sensor (Column A)	OE SmartLink (Column B)	Existing Sensor (Column A)	OE SmartLink (Column B)
Bosch	White	<b>White</b>	Black	<b>Black</b>	Gray	<b>Gray</b>
Type A	Dark Brown	<b>White</b>	Purple	<b>Black</b>	Light Brown	<b>Gray</b>
Type B	Black	<b>White</b>	Blue	<b>Black</b>	White	<b>Gray</b>
Type C	Black	<b>White</b>	White	<b>Black</b>	Green	<b>Gray</b>
Type D	Black	<b>White</b>	Yellow	<b>Black</b>	Green	<b>Gray</b>
Type E	White	<b>White</b>	Black	<b>Black</b>	Gray	<b>Gray</b>
1996 - 95 Mazda Millenia (V6 - 2.5L) 1996 -95 Mazda 626 V6	White	<b>White</b>	Black	<b>Black</b>	Red	<b>Gray</b>
1996 - 95 Ford Probe	White	<b>White</b>	Black	<b>Black</b>	Red	<b>Gray</b>
1995 91 Geo Tracker, Suzuki Sidekick	Red	<b>White</b>	Black	<b>Black</b>	No Ground	<b>Gray</b>

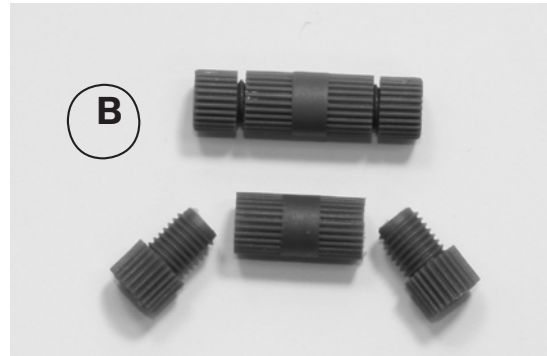
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## Phase III – OE SmartLink Connection (Continued)

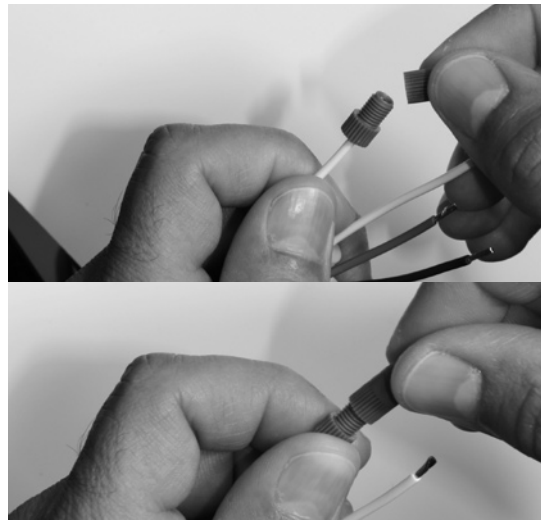
### Connect the two segments using the Posi-Lock® terminals.

#### Using the Posi-Lock terminals

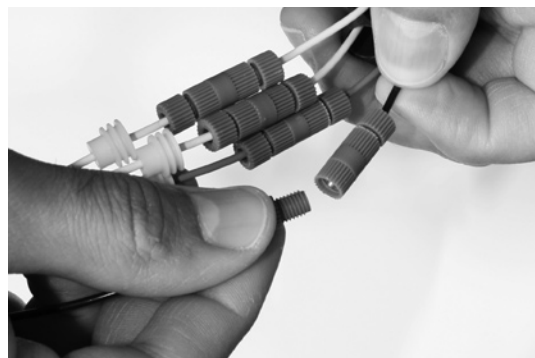
- 1) Unscrew the ends from the center of the Posi-Lock terminals (B).



- 2) Insert the wire through the end caps.
- 3) Keeping slight pressure on the wire, hand tighten the male (threaded) end into the center section (barrel end) of the Posi-Lock connector.
- 4) Repeat this process for all wires on the OE SmartLink sensor segment.



- 5) Follow the wire color reference table to match the appropriate wire colors on the existing connector segment to the OE SmartLink sensor segment.
- 6) Align wires so that the appropriate matching color wires are straight across from each other. Avoid crisscrossing the wires.
- 7) Repeat the steps above for using the Posi-Lock terminals (B).



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## Phase III – OE SmartLink Connection (*Continued*)

### Assemble the OE SmartLink Connector

- 1) Push the wire seals (E) against the Posi-Lock terminals (B).
- 2) Insert the seals (E) and Posi-Lock terminals (B) into the body (D).
- 3) Push the cap (C) onto the body until both tabs on the cap lock into position.



***The OE SmartLink connection is now complete.***

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## Phase IV – Sensor Re-Installation

The OE SmartLink oxygen sensor is now ready to be installed on the vehicle. Route the OE SmartLink oxygen sensor in the same way as the existing sensor, utilizing any clips and grommets attached to the wire harness. Remove the plastic cap from the OE SmartLink oxygen sensor protection tube and re-install onto the vehicle. It is critical to locate wires away from sources of extreme heat and possible abrasion.

