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## Denso Universal Oxygen Sensor (4-Wire) Part #1065034

The Denso universal 4-wire sensor is designed to replace your existing 4-wire sensor or it can also be used to upgrade your system from a single wire to a 4-wire sensor. The 4-wire oxygen sensor has a built in heater that makes the readings much more accurate and does not depend on the exhaust temp to operate.

There are two sets of instructions below. The first set will explain how to replace you existing 4-wire oxygen sensor. The second set of instructions will explain how to upgrade from a single wire sensor to your new 4-wire oxygen sensor.

**\*\*The following instructions are designed to work on just about every Toyota 20R/22R/RE/RET application. Due to the numerous factory variations and aftermarket parts the wiring may not match your application exactly.\*\***

### Replacing an existing 4-wire sensor: (Same as OEM)

- The BLUE wire on your stock oxygen sensor will go to the BLUE wire on the Denso 4-wire sensor.
- The WHITE wire on your stock oxygen sensor will go to the WHITE wire on the Denso 4-wire sensor.
- The 2 black wires on your stock oxygen sensor will go to the BLACK wires on the Denso 4-wire sensor.
- These are the heater wires for both sensors. Polarity does not matter on these wires.

### Upgrading from a single wire sensor:

- Your stock single wire oxygen sensor has one signal wire that will go to the **BLUE** wire from the Denso 4-wire sensor.
- The **WHITE** wire from the Denso 4-wire sensor will go to a good ground. **(Make sure you use a good ground with clean connections. A bad ground will cause inaccurate readings and possible sensor failure).**
- The two **BLACK** wires from the 4-wire sensor are for the internal heater. One will go to a switched 12 volt power source (12-volts with key on but 0-volts with key off). The other **BLACK** wire will go to a good ground.

### Recommendations:

1. We do not recommend splicing the WHITE ground wire and the BLACK heater ground wire together. We recommend running two individual wires to a known good ground with clean connections. You can use the same ground connection just don't splice the two wires together.
2. The heater will pull a maximum of about 2.5 to 3 amps. Make sure the power side of the heater is fused and the circuit can handle the extra load. Usually the ignition switch or an auxiliary circuit from the in cabin fuse panel can supply a good power source.



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## **Bosch Universal Oxygen Sensor (4-Wire) Part #1065034**

The Bosch universal 4-wire sensor is designed to replace your existing 4-wire sensor or it can also be used to upgrade your system from a single wire to a 4-wire sensor. The sensor comes with SmartLink™ connectors to make installation as easy as possible. The 4-wire oxygen sensor has a built in heater that makes the readings much more accurate and does not depend on the exhaust temp to operate.

There are two sets of instructions below. The first set will explain how to replace you existing 4-wire oxygen sensor. The second set of instructions will explain how to upgrade from a single wire sensor to your new 4-wire oxygen sensor.

**The following instructions are designed to work on just about every Toyota 20R/22R/RE/RET application. Due to the numerous factory variations and aftermarket parts the wiring may not match your application exactly.**

### **Replacing an existing 4-wire sensor:**

- Follow the Bosch instructions for installing the SmartLink™ connectors.
- The blue wire on your stock oxygen sensor will go to the black wire on the Bosch 4-wire sensor.
- The white wire on your stock oxygen sensor will go to the grey wire on the Bosch 4-wire sensor.
- The 2 black wires on your stock oxygen sensor will go to the white wires on the Bosch 4-wire sensor.
  - These are the heater wires for both sensors. Polarity does not matter on these wires.

### **Upgrading from a single wire sensor:**

- Your stock single wire oxygen sensor has one signal wire that will go to the black wire from the Bosch 4-wire sensor.
  - You can use the supplied Bosch SmartLink™ connectors for this connection. Follow the Bosch instructions for installing the SmartLink™ connector.
- The grey wire from the Bosch 4-wire sensor will go to a good ground.
  - Make sure you use a good ground with clean connections. A bad ground will cause inaccurate readings and possible sensor failure.
- The two white wires from the Bosch 4-wire sensor are for the internal heater. One will go to a switched 12 volt power source (12-volts with key on but 0-volts with key off). The other white wire will go to a good ground.
  - We do not recommend splicing the grey ground wire and the white heater ground together. We recommend running two individual wires to a known good ground with clean connections. You can use the same ground connection just don't splice the wires together.
  - The heater will pull a maximum of about 2.5 to 3 amps. Make sure the power side of the heater is fused and the circuit can handle the extra load. Usually the ignition switch or an auxiliary circuit from the in cabin fuse panel can supply a good power source.