

Bosch 13847

BOSCH 13847 Premium OE Fitment Oxygen Sensor User Manual

Model: 13847 | Brand: Bosch

1. INTRODUCTION

The Bosch 13847 Premium OE Fitment Oxygen Sensor is designed to provide accurate exhaust gas analysis, crucial for optimal engine performance, fuel efficiency, and reduced emissions. This sensor is engineered with decades of Bosch's technological expertise, ensuring reliable and long-lasting operation. Proper installation and maintenance are essential for its functionality and the overall health of your vehicle's engine.

2. PRODUCT OVERVIEW

The Bosch 13847 Oxygen Sensor features a robust design and advanced technology for superior performance:

- **Superior Performance:** Benefits from extensive technological and manufacturing experience, ensuring long-lasting, superior performance.
- **Factory Tested:** Each sensor undergoes a fully functional quality test before leaving the factory to ensure operation within design specifications.
- **Stainless Steel Body:** The stainless steel body is fully submersible and sealed tight to protect against damage from exhaust emissions, ensuring a longer sensor service life.
- **Fast-Acting Heater:** Optimizes sensor operation on Planar and 3, 4, and 5 wire Thimble type sensors, allowing the oxygen sensor to reach its operating temperature quicker (within seconds) for optimum performance.
- **Ready to Install:** Features true direct-fit OE type connectors and harnesses, along with gaskets or crush washers as necessary for simple and hassle-free installation.



Image 2.1: Bosch 13847 Premium OE Fitment Oxygen Sensor. This image shows the sensor unit with its integrated wiring and connector.

3. SPECIFICATIONS

Brand	Bosch
Model Number	13847
Material	Stainless Steel
Item Dimensions (L x W x H)	2.2 x 1.97 x 5.83 inches
Item Weight	4 ounces
Mounting Type	Flange Mount

Output Type	Push-Pull
UPC	028851138475
OEM Part Number	8125869960

4. COMPATIBILITY

The Bosch 13847 Oxygen Sensor is compatible with select vehicles. Always verify specific fitment details, including sensor position, with your vehicle's manufacturer specifications or a professional mechanic before installation.

Compatible with:

- Buick Rainier: 2004-2005
- Chevrolet Trailblazer: 2004-2005
- Chevrolet Trailblazer EXT: 2004-2005
- GMC Envoy: 2004-2005
- GMC Envoy XL: 2004-2005
- GMC Envoy XUV: 2004-2005
- Isuzu Ascender: 2004-2005
- Oldsmobile Bravada: 2004
- Saab 9-7x: 2005

5. INSTALLATION (SETUP)

Installation of an oxygen sensor requires specific tools and technical knowledge. It is highly recommended that this procedure be performed by a qualified automotive technician. Incorrect installation can lead to damage to the sensor, vehicle components, or personal injury.

General Installation Steps:

1. **Safety First:** Ensure the vehicle is turned off, cooled down, and properly secured on a lift or jack stands. Disconnect the battery.
2. **Locate Sensor:** Identify the oxygen sensor(s) to be replaced. Oxygen sensors are typically located in the exhaust system, both before (upstream) and after (downstream) the catalytic converter.
3. **Disconnect Wiring:** Carefully disconnect the electrical connector from the old oxygen sensor.
4. **Remove Old Sensor:** Use an appropriate oxygen sensor wrench (e.g., 7/8 inch or 22mm line wrench) to loosen and remove the old sensor. Be cautious as sensors can be seized due to heat and corrosion. Applying penetrating oil beforehand may assist in removal.
5. **Prepare New Sensor:** The Bosch oxygen sensor comes with pre-applied anti-seize compound on the threads. Do not apply additional anti-seize unless specified by the manufacturer. Ensure the protective cap on the sensor tip is removed just before installation.
6. **Install New Sensor:** Carefully thread the new Bosch oxygen sensor into the exhaust bung by hand to prevent cross-threading. Once hand-tight, use the oxygen sensor wrench to tighten it to the manufacturer's specified torque. Avoid overtightening.
7. **Connect Wiring:** Reconnect the electrical connector, ensuring it clicks securely into place. Secure any wiring to prevent contact with hot exhaust components.
8. **Final Checks:** Reconnect the battery. Start the vehicle and check for any exhaust leaks or illuminated check engine lights.

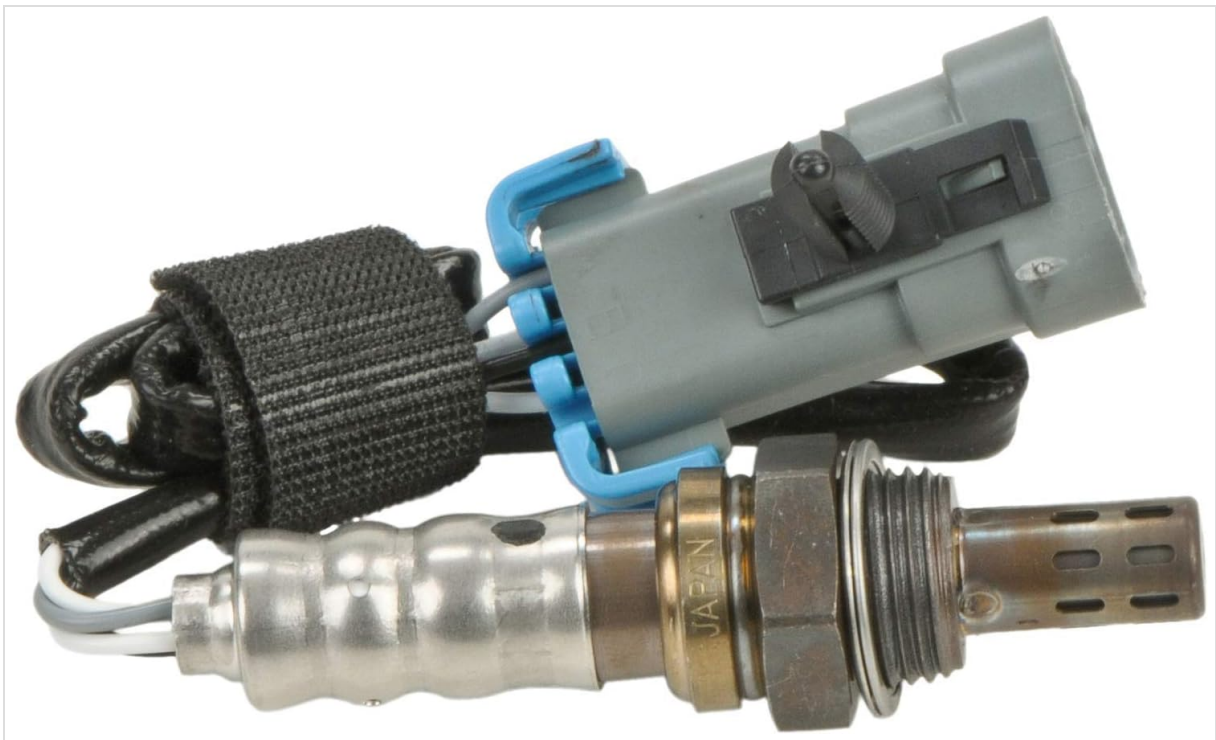


Image 5.1: Close-up of the Bosch Oxygen Sensor showing the electrical connector and threaded body.

6. OPERATION

Oxygen sensors play a vital role in your vehicle's engine management system. They measure the oxygen content in the exhaust gases and send this data to the Engine Control Unit (ECU). The ECU uses this information to adjust the air-fuel mixture, optimizing combustion for efficiency and emissions control. A properly functioning oxygen sensor ensures your engine runs smoothly, maintains fuel economy, and complies with emission standards.

7. MAINTENANCE

Oxygen sensors are wear-and-tear components and have a finite lifespan. It is critical that oxygen sensors are replaced at the suggested intervals provided by your vehicle manufacturer. Replacing sensors proactively, before they fail, can prevent long-term damage to your vehicle's engine, reduce harmful carbon dioxide (CO₂) emissions, and improve fuel efficiency.

Regular vehicle inspections by a qualified technician can help identify potential issues with oxygen sensors before they lead to significant problems.

8. TROUBLESHOOTING

If you experience issues after installing or with an existing oxygen sensor, consider the following:

- **Check Engine Light:** An illuminated Check Engine Light (CEL) is a common indicator of an oxygen sensor issue. A diagnostic scan tool can retrieve specific trouble codes (DTCs) related to the sensor.
- **Poor Fuel Economy:** A faulty oxygen sensor can cause the engine to run too rich or too lean, leading to decreased fuel efficiency.
- **Rough Idling or Misfires:** Incorrect air-fuel mixture data from a failing sensor can result in engine performance issues.
- **Increased Emissions:** A malfunctioning sensor can lead to higher levels of pollutants in the exhaust.
- **Installation Issues:** Double-check that the sensor is securely tightened and the electrical connector is fully seated. Ensure no wires are pinched or damaged.

If troubleshooting steps do not resolve the issue, consult a professional automotive technician for further diagnosis and repair.

9. WHAT'S IN THE BOX

- 1x Bosch 13847 Premium OE Fitment Oxygen Sensor

10. WARRANTY & SUPPORT

For detailed warranty information and customer support regarding your Bosch Oxygen Sensor, please refer to the official Bosch product documentation included with your purchase or visit the official Bosch website. You can also find more information and contact Bosch directly through their official store: [Bosch Official Store](#).