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## Bosch 15283

# BOSCH 15283 Premium OE Fitment Oxygen Sensor User Manual

Model: 15283 | Brand: Bosch

## PRODUCT OVERVIEW

The Bosch 15283 Premium OE Fitment Oxygen Sensor is engineered to provide long-lasting, superior performance for compatible vehicles. As a critical component in your vehicle's emission control system, it measures the oxygen content in the exhaust gas, allowing the engine control unit (ECU) to optimize the air-fuel mixture for efficient combustion and reduced emissions.

This sensor incorporates advanced technology and manufacturing experience, ensuring it meets rigorous quality and performance standards. Its robust design, including a double laser-welded stainless steel body, protects against environmental damage, contributing to a longer service life.

## SETUP AND INSTALLATION

Installation of the Bosch 15283 Oxygen Sensor is designed to be straightforward due to its true Direct-fit OE connectors and harnesses. For optimal results and safety, it is recommended that installation be performed by a qualified technician or an experienced individual following the vehicle manufacturer's service manual.

- **Preparation:** Ensure the engine is cool before beginning the installation process. Disconnect the vehicle's battery to prevent electrical issues.
- **Removal of Old Sensor:** Locate the existing oxygen sensor. Use an appropriate oxygen sensor socket or wrench to carefully remove the old sensor. Be mindful of the wiring harness.
- **New Sensor Installation:** The Bosch 15283 sensor comes with threads pre-coated with anti-seize compound. This eliminates the need for additional application and helps prevent seizing in the exhaust manifold or pipe. Carefully thread the new sensor into place by hand to avoid cross-threading, then tighten to the vehicle manufacturer's specified torque.

- **Connect Wiring:** Connect the sensor's harness to the vehicle's electrical connector. Ensure a secure and proper connection.
- **Final Steps:** Reconnect the vehicle's battery. Start the engine and check for any exhaust leaks or warning lights.

*Always refer to your specific vehicle's service manual for detailed, model-specific installation instructions and torque specifications.*

## OPERATING PRINCIPLES

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The Bosch 15283 Oxygen Sensor plays a vital role in your vehicle's engine management system. It continuously monitors the oxygen levels in the exhaust gases after combustion. This data is then sent to the vehicle's Engine Control Unit (ECU).

Based on the sensor's readings, the ECU adjusts the air-fuel ratio to maintain optimal engine performance, fuel efficiency, and emission control. The fast-acting heater within the sensor ensures it reaches its operating temperature quickly, typically within seconds, allowing for precise readings and efficient operation soon after engine start-up.

A properly functioning oxygen sensor helps ensure your vehicle runs cleanly and efficiently, contributing to lower harmful carbon dioxide (CO<sub>2</sub>) emissions and improved fuel economy.

## MAINTENANCE

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Oxygen sensors are wear-and-tear components and should be replaced at the intervals suggested by your vehicle manufacturer. Regular maintenance and timely replacement of the oxygen sensor are crucial for several reasons:

- **Prevent Engine Damage:** A failing oxygen sensor can lead to an incorrect air-fuel mixture, which can cause long-term damage to the engine and catalytic converter.
- **Reduce Emissions:** A properly functioning sensor ensures the vehicle's emissions are within legal limits, reducing harmful pollutants.
- **Improve Fuel Economy:** An accurate oxygen sensor helps the engine maintain optimal fuel efficiency, saving money on fuel costs.
- **Maintain Performance:** Correct air-fuel ratio contributes to consistent engine performance and responsiveness.

Inspect the sensor and its wiring during routine vehicle inspections for any signs of physical damage or contamination. While the sensor's protection tube may appear "seared" due to factory testing, this is normal and indicates full functionality.

## TROUBLESHOOTING

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If you experience issues after installing or while using the Bosch 15283 Oxygen Sensor, consider the following common troubleshooting steps:

- **Check Engine Light (CEL):** A lit Check Engine Light is often the first indicator of an oxygen sensor issue. Use an OBD-II scanner to retrieve diagnostic trouble codes (DTCs). Codes related to oxygen sensors typically start with P0130 to P0167.
- **Poor Fuel Economy:** A faulty oxygen sensor can cause the engine to run rich or lean, leading to a noticeable decrease in fuel efficiency.
- **Rough Idling or Misfires:** Incorrect air-fuel mixture can result in rough engine operation, hesitation, or misfires.
- **Exhaust Odor:** An overly rich mixture due to a failing sensor can lead to a strong sulfur or rotten egg smell from the exhaust.
- **Installation Issues:** Double-check all connections for tightness and ensure the wiring harness is not pinched or damaged. Verify the sensor is properly torqued.
- **Contamination:** While the sensor is designed to resist contamination, severe engine issues (e.g., excessive oil burning, coolant leaks) can foul the sensor.

*If troubleshooting steps do not resolve the issue, it is highly recommended to consult a certified automotive technician for professional diagnosis and repair. They have specialized tools and knowledge to accurately identify and fix complex vehicle problems.*

## SPECIFICATIONS

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Feature	Detail
Brand	Bosch
Model Number	15283
Item Dimensions (L x W x H)	2.2 x 3.94 x 5.83 inches
Material	Stainless Steel
Item Weight	0.25 Pounds (4 ounces)
Style	Oxygen Sensor
Maximum Supply Voltage	12 Volts
Measuring Range	200 - 800 °C
Mounting Type	Flange Mount
Output Type	Physical
Specific Uses For Product	Temperature (sensing)
Upper Temperature Rating	800 Degrees Celsius
UPC	028851152839
Manufacturer Part Number	15283
OEM Part Number	12640115

## PRODUCT VISUALS



**Image 1:** Top view of the Bosch 15283 Oxygen Sensor, highlighting the sensor tip on the left and the electrical connector with its distinctive blue clips on the right, connected by the insulated wire harness.



**Image 2:** Side view of the Bosch 15283 Oxygen Sensor, displaying the metallic sensor body with visible threads and the attached wire leading to the electrical connector.



**Image 3:** Alternate side view of the Bosch 15283 Oxygen Sensor, providing a different angle of the sensor tip and the connector, emphasizing the overall length and design.



**Image 4:** View of the Bosch 15283 Oxygen Sensor from the electrical connector side, showing the connector's details and the wire extending towards the sensor tip.

## WARRANTY INFORMATION

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Bosch products are manufactured to high standards and undergo rigorous quality control. While specific warranty terms may vary by region and retailer, Bosch typically offers a limited warranty against defects in materials and workmanship for its automotive parts.

For detailed warranty information, including coverage period and claims process, please refer to the documentation provided with your purchase or visit the official Bosch Automotive website. Keep your proof of purchase for any warranty claims.

*Please note that the return policy for this product, as per the buybox winner, allows for returns within 30 days for refund or replacement. This is separate from the manufacturer's warranty.*

## SUPPORT AND CONTACT

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For technical assistance, installation guidance, or any questions regarding your Bosch 15283 Oxygen Sensor, please utilize the following resources:

- **Bosch Automotive Website:** Visit the official Bosch Automotive website for product information, FAQs, and support contacts.
- **Certified Automotive Technician:** For complex diagnostic or installation issues, it is always best to consult a professional and certified automotive technician.
- **Retailer Support:** Contact the retailer from whom you purchased the product for assistance with returns or initial product inquiries.

When contacting support, please have your product model number (15283) and any relevant vehicle information readily available.