

# ADVANCED TECHNOLOGY SOLUTIONS

by **STANDARD**

## WHAT IS AN OXYGEN SENSOR?

An O<sub>2</sub> sensor transmits information to the ECM about the oxygen content within the exhaust which enables the ECM to control the air and fuel mixture for efficient combustion. Oxygen sensors may also be referred to as lambda sensors, linear air/fuel sensors (LAF), or wide-range air/fuel sensors (WRAF).

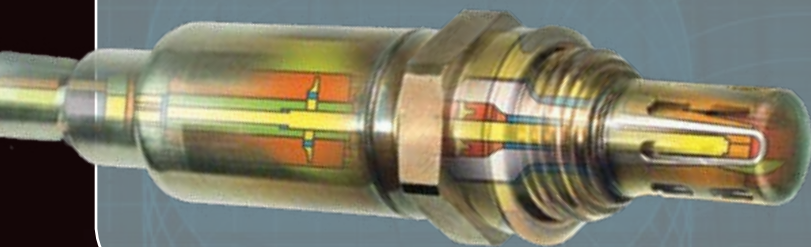
## STANDARD'S ATS OXYGEN SENSORS

Standard's ATS oxygen sensors are thoroughly tested in the factory, resulting in a superior quality product with improved performance. ATS oxygen sensors are thermally conditioned, which enhances performance and prolongs the unit's life.

## ADVANCED TECHNOLOGY SOLUTIONS (ATS)

- Most oxygen sensors have a two-piece body with welds or crimps, but ATS oxygen sensors have a one-piece body with only one laser weld thus insuring the best possible seal.
- As an improvement to the original equipment design, the hex nut on the ATS oxygen sensor is backed away from the manifold allowing easier access during removal and installation.
- While competitors' oxygen sensors rely on diffusion through the wires for reference air exchange, ATS oxygen sensors have a breathable Teflon membrane ensuring a continuous clean airflow improving sensor performance.
- OE sensors have only one internal seal but ATS oxygen sensors have dual internal seals to insure that the reference sides stay sealed therefore extending the life of the sensor.

## STANDARD'S COMPLETE COVERAGE



Standard's Advanced Technology Solutions oxygen sensor line includes zirconia, titania, planar, and wide-band sensors. This is a comprehensive line that offers factory fit applications for import and domestic vehicles.

***"When OE fails...trust Standard."***

# STANDARD'S OXYGEN SENSORS ARE BETTER FROM THE INSIDE OUT

## THE BODY

Designed to contain and protect the internal components, it is one piece with a single laser weld which insures superior resistance to water and contaminants.

## THE WIRES

Contain a high temperature resistant Teflon coating to prevent insulation breakdown and to guarantee efficient operation in tough environments. A protective sleeve is used on sensors that require additional resistance to heat or abrasion.

## THE CONNECTOR

Keyed to match the vehicle connector to enable proper and easy installation.

## THE STAINLESS STEEL PROTECTIVE SHIELD

Shields match original equipment requirements for proper air-flow across the sensor which permits efficient sensor response.

## BREATHABLE TEFLON MEMBRANE

Designed with a breathable Teflon membrane which allows continuous clean airflow, improving sensor performance.

## HEATING ELEMENT

Multiple heaters are used to match original manufacturer specifications, including fast light-off heating elements. Using the correct heating element eliminates failed inspections, reduces emissions and increases fuel efficiency.

## CERAMIC ELEMENT

Engineered from a high strength formulation that generates a strong signal and withstands thermal and physical shock, due to rough handling. The ATS ceramic thimble is the most durable thimble available.

## PLATINUM COATING

Manufactured using a vapor deposition which insures an even coating of platinum. The even coating of this precious metal insures efficient voltage generation leading to improved sensor performance.

## DUAL INTERNAL SEAL

Dual internal seal minimizes the possibility of contamination of the reference side and extends the life of the sensor.

