

TECHNICAL BULLETIN

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Topic

Life expectancy of oxygen sensors

<u>Issue</u>

When faced with the prospect of replacing a vehicle's oxygen sensor(s) some people tend to reason that if the engine appears to be running well, why replace the sensors? Failing to replace a worn out oxygen sensor, however, can lead to an expensive repair job in the future. Some of the common problems that may be experienced by failing to replace oxygen sensors which are beyond their recommended service life may include:

- Higher exhaust emissions and failed emission test
- Increased fuel consumption
- Rough idling, surging and/or engine hesitation
- Eventual catalyst failure

It is virtually impossible to establish the life span of an oxygen sensor due to the hostile environment in which they operate and the very different circumstances each vehicle experiences. Sensors located directly in the manifold typically have a shorter life span due to the higher temperatures under which they operate and increased exposure to harmful exhaust particulates. Conversely, sensors that are further downstream in the exhaust system (known as catalyst monitoring sensors) are exposed to less harmful contaminants and operate under lower exhaust temperatures. Life expectancy of the sensor is significantly shortened by abnormal vehicle use such as altering the OE specifications and/or use of performance enhancements such as nitrous.

Solution

It is always a good idea to have oxygen sensors checked at each tune-up or regular service intervals (usually 60,000 km) for excess aging or premature signs of sensor poisoning and contamination. The following replacement intervals below should only be used as a guideline.

- Check / replace unheated oxygen sensors 30-50K (1&2 wire)
- Check / replace heated oxygen sensors 70-100K (3 or more Wires)

Additional information

The above information is for reference purposes only, as some of the factors that can significantly affect the life expectancy of an oxygen sensor include; individual driving habits, vehicle use, vehicle maintenance and fuel type used.