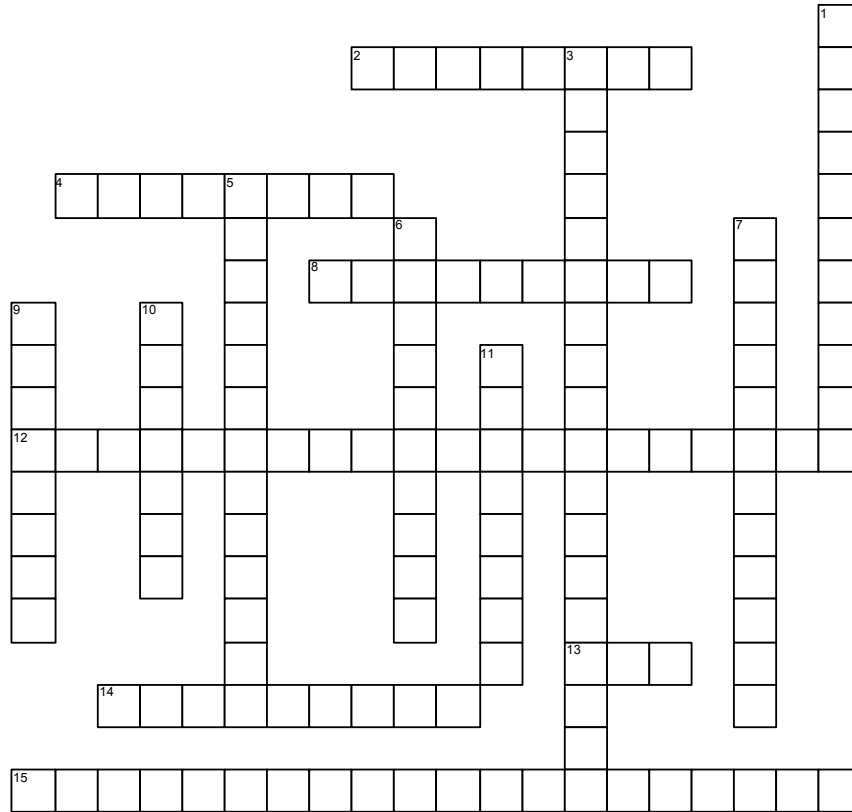


Oxygen Sensors

Chapter 32



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ACROSS

- 2 The _____ numbers are determined from the signals by the oxygen sensor.
- 4 A _____ oxygen sensor is made of zirconium dioxide, an electrically conductive material capable of generating a small voltage in the presence of oxygen.
- 8 If an oxygen sensor reads low as a result of a factor besides a lean mixture, it is often called a _____ indication.
- 12 _____ is exposed to the exhaust stream
- 13 The wrong type of _____ sealer on a valve cover gasket gives off harmful silica fumes during the curing process.
- 14 When the O₂S reads high as a result of other factors besides a rich mixture, it is often called a _____ indication.
- 15 _____ is exposed to outside air and is the signal electrode.

DOWN

- 1 Some vehicle manufacturers such as GM have the PCM apply 450 mV to the O₂S signal wire, this voltage is called _____.
- 3 Another name for the signal electrode is the _____.
- 5 Automotive computer systems use a sensor in the exhaust system to measure the oxygen content of the exhaust, these sensors are called _____.
- 6 The checking and adjusting of the PCM is called _____-_____ operation.
- 7 The fast heating, called _____-_____, helps improve fuel economy and reduces cold-start exhaust emissions.
- 9 _____-_____ oxygen sensors have been used since 1992 on some Hondas.
- 10 The _____ oxygen sensor does not produce a voltage but rather changes resistance due to the presence of oxygen in the exhaust.
- 11 When the PCM alone is determining the amount of fuel needed, it is called _____-_____ operation.