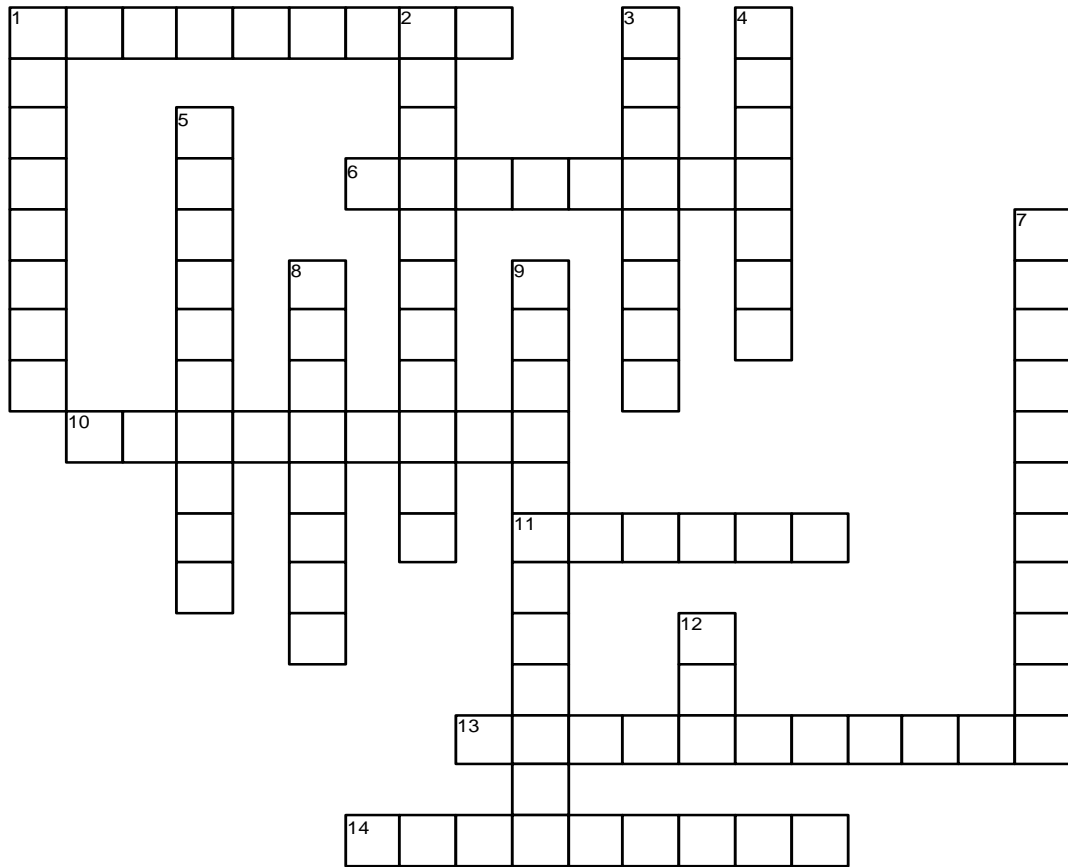


# Oxygen Sensors

## Chapter 24



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### ACROSS

- 1 If an oxygen sensor reads low as a result of a factor besides a lean mixture, it is often called a \_\_\_\_\_ indication.
- 6 A \_\_\_\_\_ oxygen sensor is made of zirconium dioxide, an electrically conductive material capable of generating a small voltage in the presence of oxygen.
- 10 When the O2S reads high as a result of other factors besides a rich mixture, it is often called a \_\_\_\_\_ indication.
- 11 Automotive computer systems use a sensor in the exhaust system to measure the oxygen content of the exhaust, these sensors are called \_\_\_\_\_ sensors.
- 13 Some vehicle manufacturers such as GM have the PCM apply 450 mV to the O2S signal wire, this voltage is called \_\_\_\_\_.
- 14 Another name for the signal electrode is the \_\_\_\_\_ electrode.

### DOWN

- 1 The \_\_\_\_\_ numbers are determined from the signals by the oxygen sensor.
- 2 \_\_\_\_\_ electrode is exposed to outside air and is the signal electrode.
- 3 When the PCM alone is determining the amount of fuel needed, it is called \_\_\_\_\_-\_\_\_\_\_ operation.
- 4 The \_\_\_\_\_ oxygen sensor does not produce a voltage but rather changes resistance due to the presence of oxygen in the exhaust.
- 5 The checking and adjusting of the PCM is called \_\_\_\_\_-\_\_\_\_\_ operation.
- 7 \_\_\_\_\_ electrode is exposed to the exhaust stream.
- 8 \_\_\_\_\_-\_\_\_\_\_ oxygen sensors have been used since 1992 on some Hondas.
- 9 The fast heating, called \_\_\_\_\_-\_\_\_\_\_, helps improve fuel economy and reduces cold-start exhaust emissions.
- 12 The wrong type of \_\_\_\_\_ sealer on a valve cover gasket gives off harmful silica fumes during the curing process.