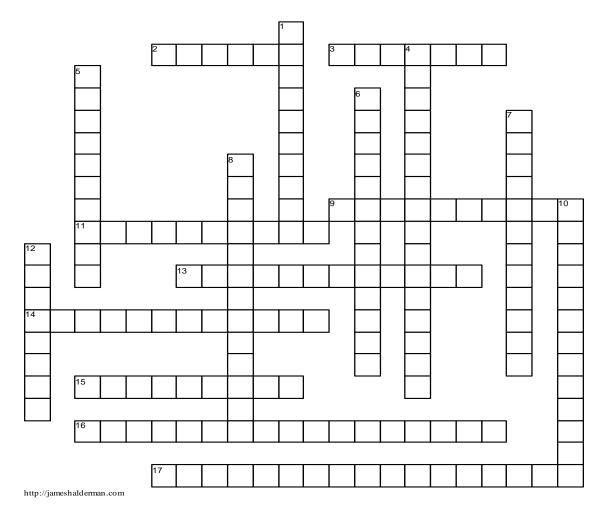
## Manifold Absolute Pressure and MASS Airflow Sensors

Chapter 17



## ACROSS

- 2 A low pressure within the engine is called \_\_\_\_
- 3 Think of an internal combustion engine as a big \_
- **9** The potentiometer provides the information the computer needs to vary the injector \_\_\_\_\_ proportionate to airflow.
- 11 If it is green, it is a \_\_\_\_\_
- 13 A \_\_\_\_\_\_ sensor sends a sound wave through the turbulence created by incoming air passing through the sensor.
- 14 The MAP sensor is used on a \_\_\_\_\_-type fuelinjection system to determine the load on the engine, and therefore the amount of fuel needed.
- 15 The \_\_\_\_\_ may be a ceramic capacitor diaphragm, an aneroid bellows, or a piezoresistive crystal.
- 16 Most newer fuel injection systems use a \_\_\_\_\_\_\_\_ to calculate the amount of air volume delivered to the engine.
- 17 Older systems use a movable vane in the intake stream called a \_\_\_\_\_.

## DOWN

- 1 The \_\_\_\_\_\_ is actually a combination of a BARO and MAP sensor in the same hosing.
- 4 There are four resistors attached to the silicon wafer, which changes in resistance when strain is applied to the wafer, this change in resistance is called \_\_\_\_\_.
- 5 A \_\_\_\_\_ is similar to a MAP sensor, but senses more subtle changes in barometric absolute pressure.
- 6 A \_\_\_\_\_\_ sensor is a sensor that has a major influence over the amount of fuel being delivered to the engine.
- 7 Electronic fuel injection systems that do not use the \_\_\_\_\_\_ \_\_\_\_\_ system for fuel calculation measure the airflow volume delivered to the engine.
- 8 The \_\_\_\_\_ is similar to the hot film type, but uses a hot wire to sense the mass airflow instead of the hot film.
- **10** The \_\_\_\_\_\_ uses a temperature sensing resistor to measure the temperature of the incoming air.
- 12 If an air hose between the MAF sensor and the throttle body was loose or had a hole, extra air could enter the engine without being measured, this air is called \_\_\_\_\_\_\_.

