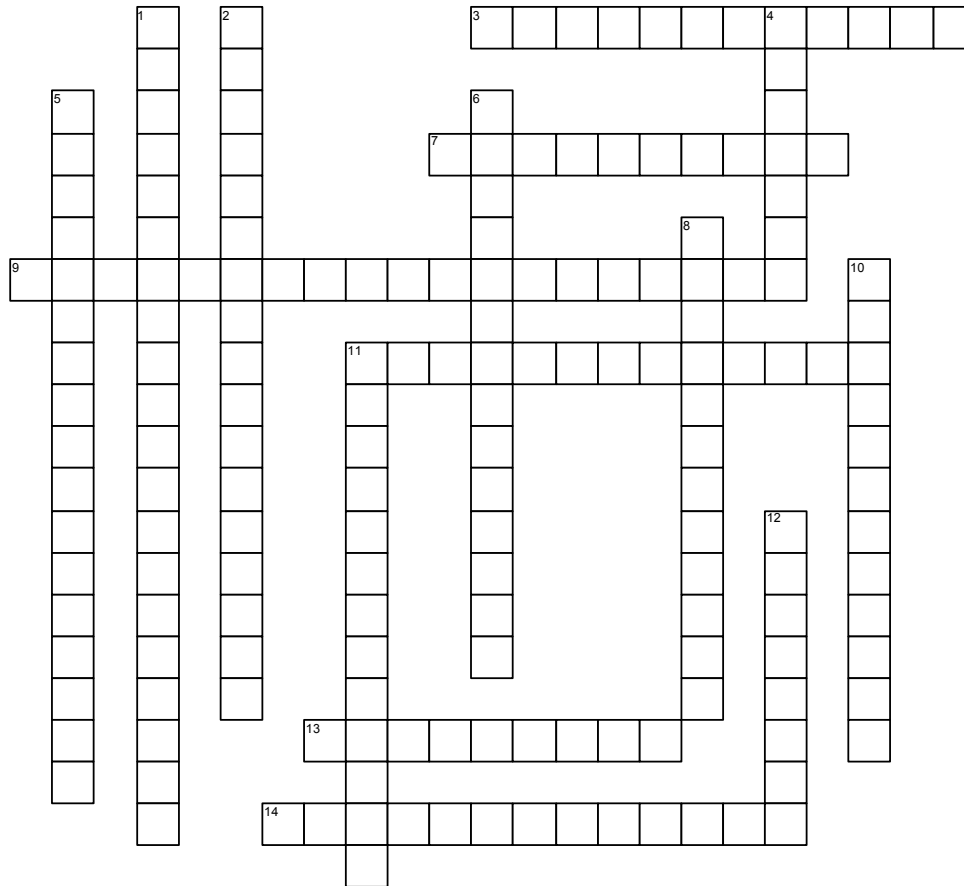


# Mass Air Flow Sensors

## Chapter 23



<http://jameshaldeman.com>

### ACROSS

- 3 If a sensor is defective yet still produces a signal to the computer, the computer will often accept the reading and make the required changes in fuel delivery and spark, to diagnose this, perform the \_\_\_\_\_.
- 7 The potentiometer provides the information the computer needs to vary the injector \_\_\_\_\_ proportionate to airflow.
- 9 A P0102 DTC would indicate \_\_\_\_\_.
- 11 The \_\_\_\_\_ uses a temperature sensing resistor to measure the temperature of the incoming air.
- 13 \_\_\_\_\_ is measured in hertz.
- 14 The \_\_\_\_\_ is similar to the hot film type, but uses a hot wire to sense the mass airflow instead of the hot film.

### DOWN

- 1 A P0103 DTC would indicate \_\_\_\_\_.
- 2 Most newer fuel injection systems use a \_\_\_\_\_ to calculate the amount of air volume delivered to the engine.
- 4 With the engine running at idle speed, gently tap the MAF sensor with the fingers of an open hand, this is called the \_\_\_\_\_.
- 5 Older systems use a movable vane in the intake stream called a \_\_\_\_\_.
- 6 Some high wire-type MAF sensors use a \_\_\_\_\_ to keep the sensing wire clean of dust and dirt.
- 8 Electronic fuel injection systems that do not use the \_\_\_\_\_ system for fuel calculation measure the airflow volume delivered to the engine.
- 10 A \_\_\_\_\_ sensor sends a sound wave through the turbulence created by incoming air passing through the sensor.
- 11 A \_\_\_\_\_ sensor is a sensor that has a major influence over the amount of fuel being delivered to the engine.
- 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 \_\_\_\_\_.