

Name _____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

1) How is a MAF sensor tested?

2) How does a hot film MAF sensor work?

3) What change in the signal will occur if engine speed is increased?

4) What are the types of mass air flow sensors?

5) What is the purpose of a MAF sensor?

Answer Key

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- 1) A MAF sensor can be tested using a DMM to check for proper output compared to specifications. A DSO can also be used and the signal checked for proper frequency and waveform shape. A scan tool can also be used to check a MAF sensor for proper operation.
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- 2) A typical mass air flow sensor uses a hot wire to sense the mass of the air entering the engine. The electronics in the sensor itself determine the amount of cooling effect the incoming air exerts on the hot wire and converts this to a voltage or frequency output.
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- 3) The frequency or the voltage increases with increased airflow through the sensor.
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- 4) MAF sensors can be hot wire or hot film, or Karman-vortex to determine airflow volume.
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- 5) The purpose of the MAF sensor is to measure the mass of the air entering the engine so the PCM can calculate the needed injector pulse width.
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