

Name _____

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

1) How can EMI be reduced or controlled?

2) What is the result if a magnet cracks?

3) What is the difference between a “married” ignition coil and a “divorced” ignition coil?

4) What is the relationship between electricity and magnetism?

5) What is the difference between mutual induction and self-induction?

Answer Key

Testname: SHORT 47

1) Electromagnetic interference (EMI) can be reduced by using:

- Resistance in the circuit
- Capacitor in the circuit
- Coils in the circuit
- Shielding
- Ground wire or strap

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2) A cracked magnet becomes two weaker magnets.

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3) Many ignition coils contain two separate, but electrically connected, windings of copper wire. This type of coil is called a “married” type. Other coils are true transformers in which the primary and secondary windings are not electrically connected. This type of coil is often called a “divorced” type.

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4) Whenever electricity is flowing through a conductor, a magnetic field around the conductor is formed. Whenever a conductor is moved through a magnetic field or a magnetic field is moved past a conductor, electricity is created.

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5) Self-induction occurs when current starts to flow through a conductor, creating a self-induced voltage that opposes the current. Mutual induction occurs when the magnetic field in one conductor or coil induces a voltage in another conductor or coil.

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