

Automotive Technology 7<sup>th</sup> Edition  
Chapter 68: Ignition System Parts and Operation  
Short Answer Quiz

Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. Describe the primary function and operation of a knock sensor in an ignition system.

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2. Explain the process of electromagnetic induction in the context of an ignition coil and how it contributes to the creation of a high-voltage spark.

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3. What is the significance of the steel lamination used in an E coil, and how does it impact the coil's performance?

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4. Differentiate between the primary and secondary ignition circuits. List the main components of each.

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5. Describe the operation of a Hall-effect switch in the context of ignition systems. How does it generate an output or signal voltage?

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6. What role does the distributor cam play in a point-type ignition system?

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7. Explain the concept of self-induction in an ignition coil and its impact on the coil's magnetic field strength when first energized.

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8. What is the purpose of the rubbing block in early ignition systems, and how was it maintained?

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9. Discuss the operation and significance of a Coil-on-plug (COP) ignition system. How does it differ from traditional ignition systems?

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10. Describe the testing procedure for a knock sensor using a scan tool. What observations and outcomes should a technician expect during the test?

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