

Automotive Technology 7th 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.
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.
3. What is the significance of the steel lamination used in an E coil, and how does it impact the coil's performance?
4. Differentiate between the primary and secondary ignition circuits. List the main components of each.
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?

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

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

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

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