Automotive Technology 7th Edition
Chapter 75: Fuel-Injection Parts and Operation
Short Answer Quiz

Name: Date:

1. Describe the function of the vacuum-controlled fuel-pressure regulator in fuel-injected engines.

2. Explain the modifications made to the base pulse width by the Throttle Position (TP) Sensor.

3. How does the Engine Coolant Temperature (ECT) sensor influence the base pulse width in fuel-injection systems?

4. What role does the Barometric (BARO) sensor play in modifying the base pulse width?

5. Discuss the impact of the Intake Air Temperature (IAT) sensor on the base pulse width.

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6. In what way does the Oxygen Sensor (O2S) modify the base pulse width?

7. What is the purpose of the fine screen filter in some fuel-pressure regulators, and what happens if it becomes clogged?

8. Describe the process and conditions that lead to the fuel shutoff mode being activated.

9. How does the idle air control (IAC) motor regulate idle bypass air in Port Fuel Injection (PFI) systems?

10. Explain the differences between the starting mode, clear flood mode, open-loop mode, closed-loop mode, and acceleration enrichment mode, mode in the context of fuel-injection modes of operation.