

Name _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) Gasoline direct injection (GDI) is also known as _____. 1) _____
 - A) SIDI
 - B) EFI
 - C) UIDI
 - D) DI

- 2) Where is the fuel injected in an engine equipped with gasoline direct injection? 2) _____
 - A) Into the intake manifold near the intake valve
 - B) Directly into the combustion chamber
 - C) Above the intake port
 - D) In the exhaust port

- 3) When compared to a port fuel injected engine, a GDI engine will have a _____ compression ratio. 3) _____
 - A) higher
 - B) lower
 - C) reversed
 - D) interrupted

- 4) GDI fuel injectors operate under a pressure of about _____. 4) _____
 - A) 35 to 45 PSI
 - B) 90 to 150 PSI
 - C) 500 to 2,900 PSI
 - D) 2,000 to 5,000 PSI

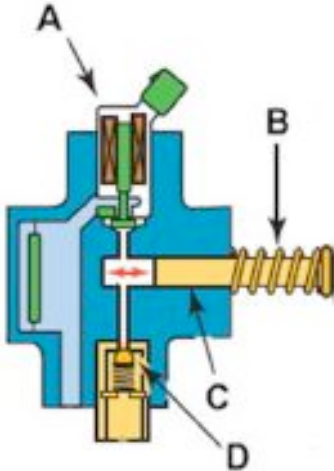
- 5) An engine equipped with GDI may have up to a _____ percent improvement in fuel economy. 5) _____
 - A) 10
 - B) 25
 - C) 50
 - D) 6

- 6) The high-pressure fuel pump pressure is regulated by using _____. 6) _____
 - A) an electric pressure control valve
 - B) a vacuum-biased regulator
 - C) a mechanical regulator at the inlet to the fuel rail
 - D) a non-vacuum-biased regulator

- 7) The GDI high pressure fuel pump uses a single-barrel piston plunger that is driven by _____. 7) _____
 - A) a square-lobed cam
 - B) a single flat sided cam
 - C) a three-lobed cam
 - D) an electric motor

8) Which component of this GDI high pressure pump is the pressure regulator?

8) _____



- A) A
- B) B
- C) C
- D) D

9) A lack of power from an engine equipped with gasoline direct injection could be due to _____.

9) _____

- A) noisy injectors
- B) carbon on the injectors
- C) carbon on the intake valves
- D) both B and C

10) All of the following are advantages of gasoline direct injection EXCEPT _____.

10) _____

- A) improved fuel economy
- B) higher engine efficiency
- C) able to use lower-octane gasoline
- D) decreased throttle response