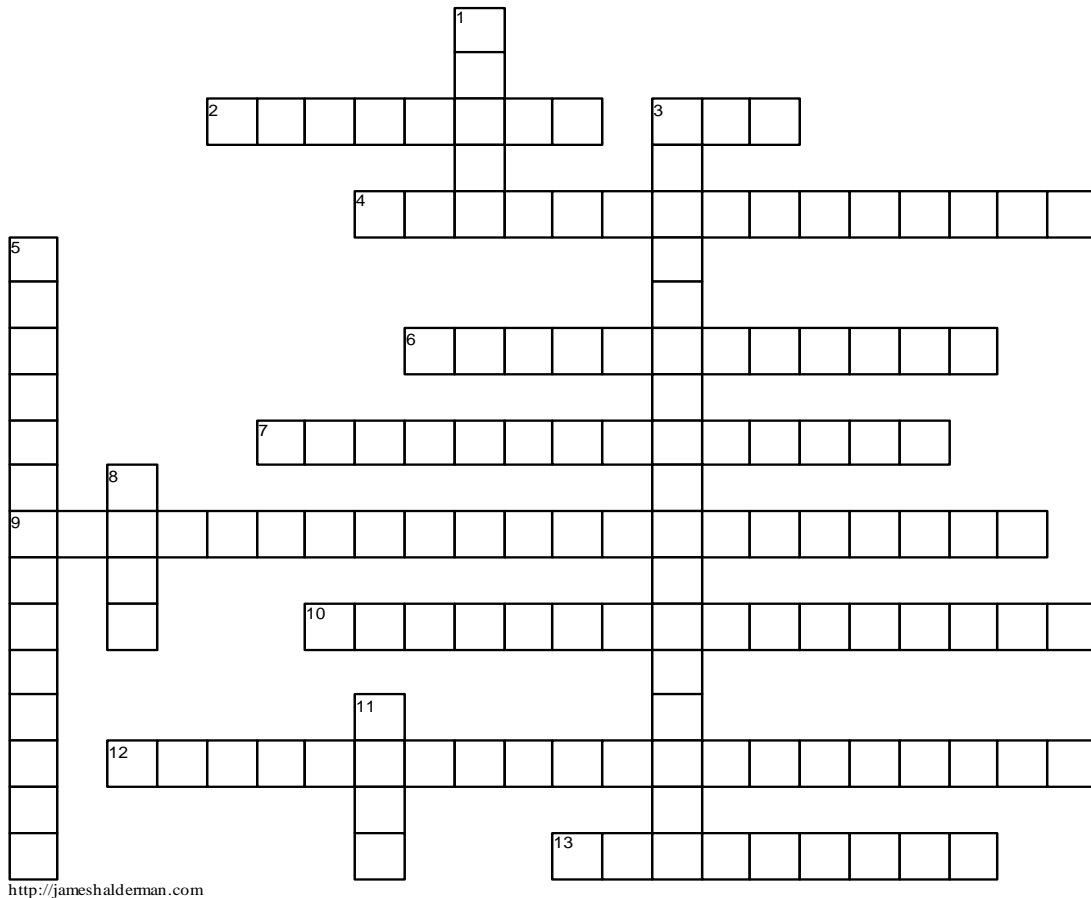


Fuel-Injection Components And Operation

Chapter 80



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ACROSS

- 2 A port fuel-injection system uses a pipe or tubes to deliver fuel from the fuel line to the intended fuel injectors, this pipe or tube is called the _____.
- 3 A ____ is employed at the tank to relieve overpressure due to thermal expansion of fuel.
- 4 A _____ valve may also be used and can readily reconfigure an existing design fuel sender into a returnless sender.
- 6 A _____ valve is employed at the tank to relieve overpressure due to thermal expansion of fuel.
- 7 New technology needed to address pulsation dampening/hammering and fuel transient response, therefore, the _____ system technology was developed.
- 9 A _____-_____-_____ system delivers fuel from a nozzle into the air above the throttle plate.
- 10 In some applications, an externally mounted permanent magnet motor called the _____ motor mechanically advances the throttle linkage to advance the throttle opening.

- 12 The idle air control valve is also called an _____ valve.

- 13 The method for pulsing injectors in groups is sometimes called _____.

DOWN

- 1 An increase and then decrease in engine speed is often called an engine _____.
- 3 A _____-_____ design uses a nozzle for each cylinder and the fuel is squirted into the intake manifold about 2 to 3 inches from the intake valve.
- 5 In this system, the injectors are timed and pulsed individually, much like the spark plugs are sequentially operated in firing order of the engine, this system is often called _____ injection.
- 8 The first production returnless systems employed the _____ approach.
- 11 The power driver contains a high-current transistor that controls the pump speed using pulse width modulation, this system is called _____.