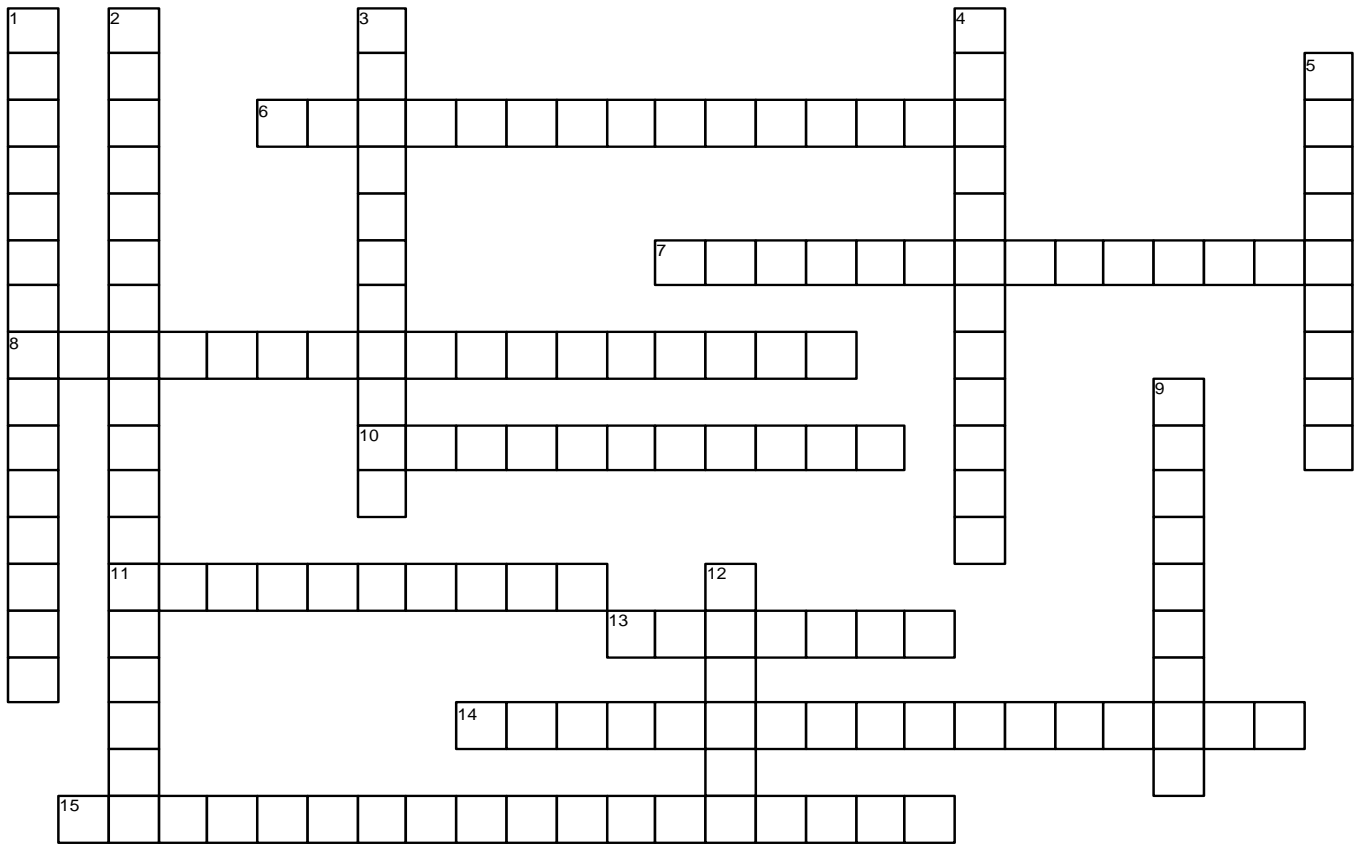


Fuel-Injection System Diagnosis And Service

Chapter 83



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ACROSS

- 6** The _____ test involves using an electrical timing device to pulse the fuel injectors for a given amount of time, usually 500 ms or 0.5 second, and observing the drop in pressure that accompanies the pulse.
- 7** An electronic stepper motor or pulse-width modulated solenoid is used to maintain the correct idle speed, this is often called the _____.
- 8** The _____ test involves measuring the injector coil winding resistance.
- 10** A _____ type is typically used for TBI and some port low-resistance injectors.
- 11** Due to the resistance and inductive reactance of the coil itself, it requires a fraction of a second for the coil to reach

_____ or maximum current flow.

- 13** If gasoline is visible in the vacuum hose, the regulator is _____ and should be replaced.
- 14** If the vacuum hose is removed from the fuel-_____ when the engine is running, the fuel pressure should increase.
- 15** Using a pressure transducer and a _____ allows the service technician to view the fuel pressure over time.

DOWN

- 1** In a _____-type injector-driven circuit, voltage is applied to the injector.
- 2** Using a _____ and a digital storage oscilloscope allows the service

technician to view the fuel pressure over time.

- 3** A commonly used test for injector operation is to listen to the injector using a stethoscope with the engine operating at idle speed.
- 4** During port fuel-injection pressure regulator diagnosis, connect a _____ gauge to monitor the fuel pressure.
- 5** A _____ is designed to electrically replace the injector in the circuit and to flash if the injector circuit is working correctly.
- 9** Normal _____ or percentage is usually 15 to 25.
- 12** Most port-fuel-injected engines use a _____ hose connected to the fuel-pressure regulator.