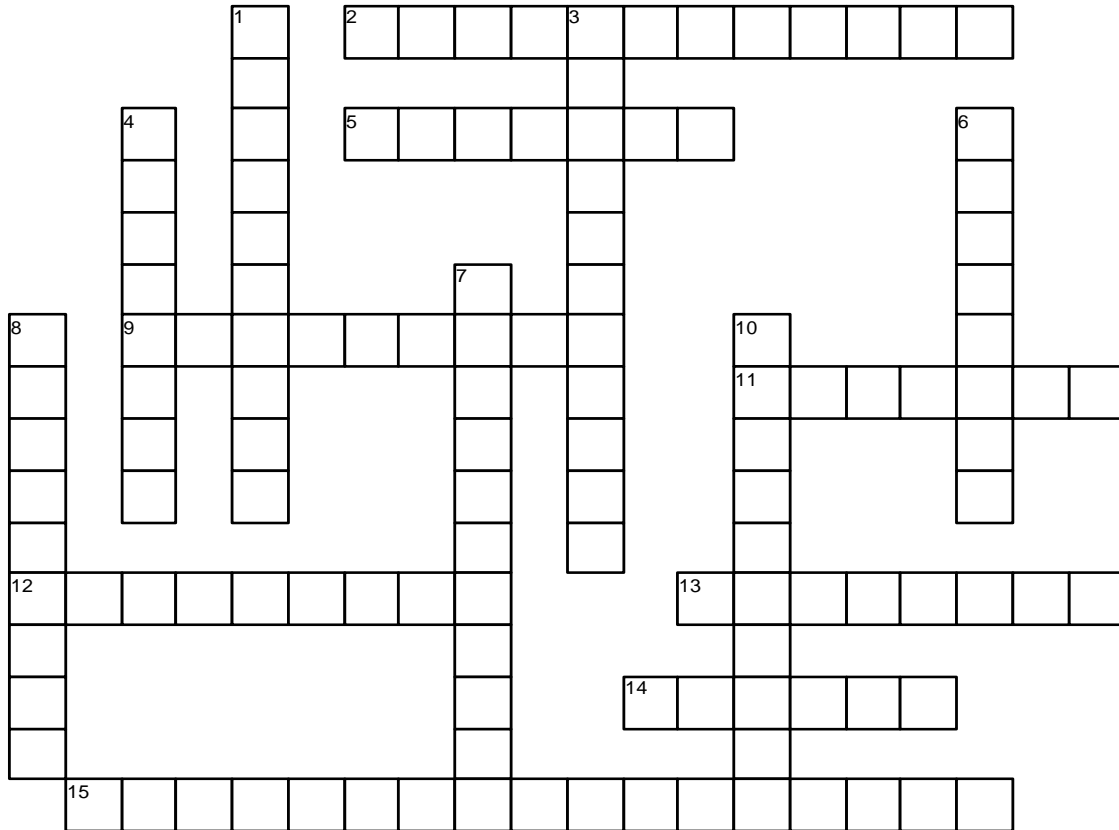


Fuel-Injection System Diagnosis And Service

Chapter 78



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ACROSS

- 2 During port fuel-injection pressure regulator diagnosis, connect a ____-____ gauge to monitor the fuel pressure.
- 5 An electronic stepper motor or pulse-width modulated solenoid is used to maintain the correct idle speed, this is often called the ____ control.
- 9 In a _____ switch- type injector-driven circuit, voltage is applied to the injector.
- 11 If gasoline is visible in the vacuum hose, the regulator is _____ and should be replaced.
- 12 Normal ____ or percentage is usually 15 to 25.
- 13 Using a _____ transducer and a digital storage oscilloscope allows the service technician to view the fuel pressure over time.
- 14 Most port-fuel-injected engines use a _____ hose connected to the fuel-pressure regulator.
- 15 If the vacuum hose is removed from the fuel- _____ when the engine is running, the fuel pressure should increase.

DOWN

- 1 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.
- 3 A ____-__-____ type is typically used for TBI and some port low-resistance injectors.
- 4 The _____ balance 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.
- 6 Using a pressure transducer and a _____ multimeter allows the service technician to view the fuel pressure over time.
- 7 A commonly used test for injector operation is to listen to the injector using a _____ with the engine operating at idle speed.
- 8 A _____ is designed to electrically replace the injector in the circuit and to flash if the injector circuit is working correctly.
- 10 The _____ balance test involves measuring the injector coil winding resistance.