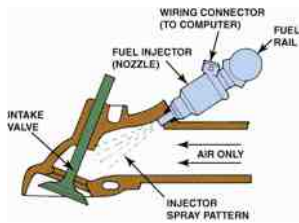




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FIGURE 41.3 A typical port fuel-injection system squirts fuel into the low pressure area (vacuum) of the intake manifold, about 2 to 3 in. (70–100 mm) from the intake valve.

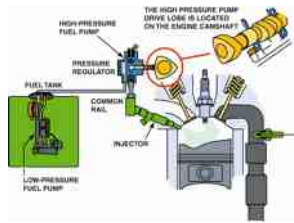


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FIGURE 41.4 A typical direct-injection system uses two pumps—one low-pressure electric pump in the fuel tank and the other a high-pressure pump driven by the camshaft. The high pressure fuel system operates at a pressure as low as 500 PSI during light load conditions and as high as 2,900 PSI under heavy loads.

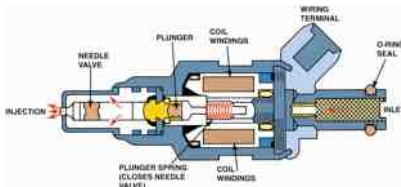


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FIGURE 41.5 Cross-section of a typical port fuel-injection nozzle assembly. These injectors are serviced as an assembly only; no part replacement or service is possible except for replacement of external O-ring seals.



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FIGURE 41.6 A typical port fuel-injected system showing a vacuum-controlled fuel-pressure regulator.

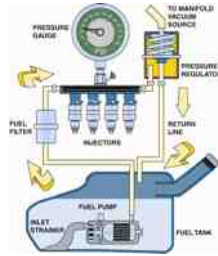


FIGURE 41.7 An idle control unit has four wires and it uses a reversible stepper motor to regulate the amount of air bypassing the throttle plate.



FIGURE 41.8 The throttle pedal is connected to the accelerator pedal position (APP) sensor. The electronic throttle body includes a throttle position sensor to provide throttle angle feedback to the vehicle computer. Some systems use a throttle actuator control (TAC) module to operate the throttle blade (plate).

