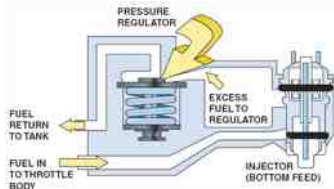




**FIGURE 27-4** The tension of the spring in the fuel-pressure regulator determines the operating pressure on a throttle-body fuel-injection unit.




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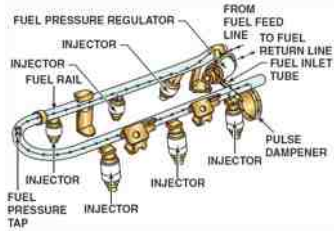
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**FIGURE 27-5** The injectors receive fuel and are supported by the fuel rail.




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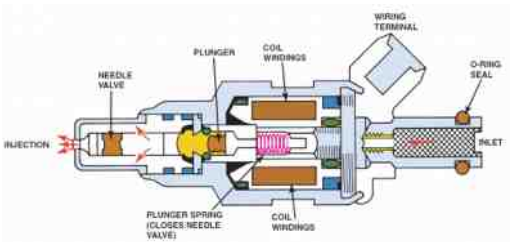
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**FIGURE 27-6** Cross-section of a typical port fuel-injection nozzle assembly. These injectors are serviced as an assembly only; no part replacement or service is possible except for replacement of external O-ring seals.




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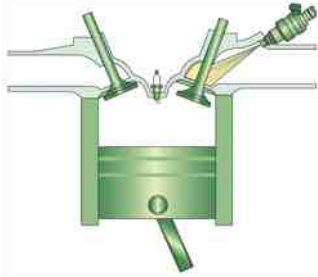
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**FIGURE 27-7** Port fuel injectors spray atomized fuel into the intake manifold about 3 inches (75 mm) from the intake valve.



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**FIGURE 27-8** A port fuel-injected engine that is equipped with long, tuned intake manifold runners.



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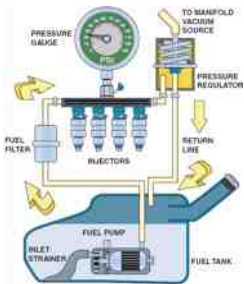
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**FIGURE 27-9** A typical port fuel-injected system showing a vacuum-controlled fuel-pressure regulator.



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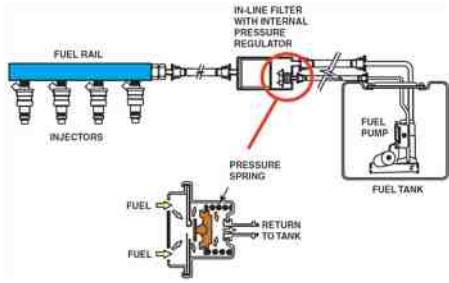
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**FIGURE 27-13** A mechanical returnless fuel system. The bypass regulator in the fuel tank controls fuel line pressure.




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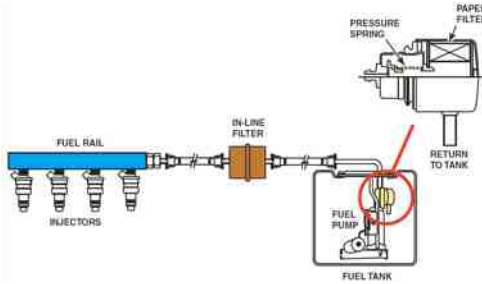
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**FIGURE 27-14** A demand delivery system uses an intake regulator.




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**FIGURE 27-15** A rectangular-shaped fuel rail is used to help dampen fuel system pulsations and noise caused by the injectors opening and closing.




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**FIGURE 27-19** A factory replacement unit for a CSFI unit that has individual injectors at the ends that go into the intake manifold instead of poppet valves.



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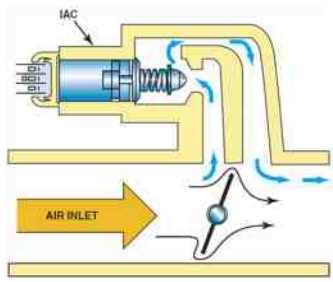
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**FIGURE 27-20** The small arrows indicate the air bypassing the throttle plate in the closed throttle position. This air is called minimum air. The air flowing through the IAC is the airflow that determines the idle speed.



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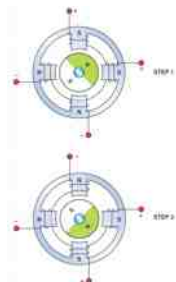
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**FIGURE 27-21** Most stepper motors use four wires, which are pulsed by the computer to rotate the armature in steps.



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