

**Wheels:** A letter from Jeff of Springboro states, “I have a 2004 Ford Ranger pickup truck equipped with the four-cylinder engine, manual transmission, and about 42,000 miles. Lately, the engine stalls when slowing down. This usually occurs after the vehicle has been driven several miles. The engine always starts back up again, but sometimes it stalls again. Any idea what could be wrong? Could I fix it myself? Thanks for any help you can give.”

**Halderman:** While there could be several possible causes for the stalling condition, I think that the two most likely include:

- **Alcohol enhanced gasoline** – Ethyl alcohol (ethanol) is being added to gasoline as a result of the ruling from the Environmental Protection Agency (EPA), which required that the previous additive called MTBE be eliminated due to health concerns. Adding ethanol changes the volatility of the gasoline which could lead to driveability concerns, especially rough idling and stalling. Warm weather makes the condition worse so when the weather cools down, the stalling problems may stop.
- **Dirty throttle plates** – Due to the way most fuel injected engines are designed, gases from the crankcase enter the intake manifold near the throttle plate(s). Over time, these fumes condense and cause a buildup of varnish that can affect the airflow into the engine. The engine controls idle speed electronically by using a valve called the idle air control valve (IACV) and the passages in the valve can also become partially clogged.

Intake passage deposits are so common today that most shops recommend that the intake be cleaned on a regular basis. Can you do this yourself? Yes. The intake system and throttle plate can be cleaned by a serious do-it-yourselfer and it requires that the intake hose be removed from the throttle body and the use of a shop cloth and throttle-body cleaner to clean the intake areas. However, care should be taken to avoid using too much cleaner as it can get onto the throttle shaft and wick into the throttle position (TP) sensor. This is a sensor used by the computer to determine the position of the throttle. Cleaning solution can damage this sensor. Instead of spraying cleaner into the intake, it is best to use an old toothbrush to remove the varnish deposits. Often dealers or shops combine throttle-body cleaning with injector cleaning so maybe having this service performed may be the best overall plan of action to cure the stalling problem.

