



How it Works: Knock Sensor

The knock sensor can be found on the engine block, cylinder head, or intake manifold. This sensor is responsible for detecting unusual vibrations that signal a fault in the ignition system, such as pre-ignition or detonation. When these irregular vibrations are detected, the knock sensor sends a signal to the ECU, which then adjusts to correct ignition timing. This adjusts the air-fuel mixture in the engine so that it has adequate time to burn. The knock sensor is designed to detect nearly undetectable knocking and pinging in the engine. By the time the knocking and pinging is audible to the human ear, the vehicle will already be experiencing slow acceleration and decreased fuel economy. If ignored, a faulty knock sensor can damage the engine permanently.

Signs of a faulty knock sensor include:

- Check Engine light
- Slow acceleration
- Loss of fuel mileage
- Decrease in fuel economy
- Jerks and drags

