

How to Spot a Faulty Coolant Temperature Sensor

Coolant Temperature Sensors measure the temperature of the engine and regulates it by turning the cooling fan on and off. The engine control system also uses information from the coolant temperature sensors to make fine adjustments that help the engine perform better. Like any electronic A/C component, coolant temperature sensors can fail over time. Faulty coolant temperature sensors can cause poor engine performance.

Signs of a faulty temperature sensor include:

- “Check Engine” light comes on
- Irregular reading of the dashboard gauge
- Engine overheats frequently
- Black smoke from exhaust pipe
- Rough engine sound when in idle
- Poor fuel economy

Reasons for failure:

- General failure due to age and exposure to heat
- Improper mixtures of water and coolant, rust or other corrosion from high acidic levels in the coolant will cause the corrosion
- Overheating from a failed radiator can cause the sensor to get hot and damage the internal sensing element
- Overheating and the coolant spraying into electrical connectors will cause the sensor to fail over time

Generally, if the radiator fails due to overheating, the coolant temperature sensor should also be replaced because it is likely the internal sensing element has been damaged.

