

WHY FUEL PUMPS FAIL

Fuel pumps can fail due to a number of reasons. This article specifically targets gear rotor EFI type fuel pumps which are the most common fuel pumps found in vehicles manufactured after 1985. The top reasons for fuel pump failure are contamination, overheating, and the gears in the fuel pump wearing out over time.

Rust, debris, and dirt are three common particles that can somehow enter the gas tank and be fed towards or through the intank fuel filter and possibly into the fuel pump. These particles clog up your fuel pumps filter making it work harder to pump fuel. This causes stress and accelerated wear on the dozens of small components inside the fuel pump eventually leading to fuel pump failure. When filling up with gas, make sure no loose particles are being pushed by the gas pump into the gas tank or onto your gas tank cap. When installing a new fuel pump, clean out any partials from the bottom of your gas tank and ensure that dirt does not enter it while reinstalling the fuel sending unit.

Frequently running your vehicle on a low gas tank is extremely bad for your fuel pump and fuel system components. On many vehicles, approximately 10-15 times the amount of fuel your fuel pump sends towards your engine gets sent back to your fuel tank. This helps cool down your fuel components and the fuel in your gas tank. By running on a low gas tank, the fuel in the gas tank heats up a lot quicker causing the fuel pump to overheat or even worse, run dry. Avoid leaving your gas tank low whenever possible. This is very crucial during the first few weeks after a new fuel pump install. A new fuel pump should be installed into a minimum of half a tank full of gas.

A typical gear rotor fuel pump is made up of approximately 200 components. After several years of use, these parts can eventually wear out causing the fuel pump to fail.