



## **Water In The Fuel Tank Of Your Car? — Here Are The Problems, Symptoms & Solution!**

We need to be concerned if water seeps into the fuel tank. Modern cars have good sealing against water. However, reality is that there will be great chance in which water does come into your fuel tank. So what if water gets in the fuel tank? Water and fuel (petrol or diesel) have different densities and do not mix with each other. Engine components are designed to function with a specific type of fuel. Fuel is not only used for combustion but also acts as a lubricant and coolant in components such as the injectors and fuel pump.

Here are the problems, symptoms and solution if water gets into the fuel tank.

### **Problems.....**

#### **1. Rust in Fuel tank**

Since water and fuel do not mix with each other and because water is denser than fuel, water rests at the bottom of the fuel tank. The prolonged presence of water will cause rust there. The rusting is accelerated if there are ridges and sharp edges in the fuel tank.

Rust can also extend to other parts of the fuel line.

#### **2. Injector Failure**

Today's petrol engines (MPFI engines) make use of injectors to supply fuel into the combustion chamber rather than a carburetor. The pore size of these injectors is so designed that they spray the right amount of fuel under all conditions. The injector efficiency also depends on the density of the fuel. Water, being denser than petrol, cannot be sprayed as easily as fuel and will produce stresses in the injector. This might lead to injector failure.

In diesel engines, although fuel filters can remove foreign elements to an extent, high amount of water content would cause severe problems. The reason is that diesel fuel injector's work at higher spraying pressures.



### **3. Fuel pump failure**

The motor which runs to pump fuel from the tank to the engine is cooled down and lubricated by the fuel itself. Presence of foreign elements will hinder this operation. If water remains in the pump body for long, rust formation will also commence.

Since water is denser than fuel, it remains at the bottom of the tank. The fueling system is constructed such that fuel is sucked from the bottom of the tank. This will cause a higher proportion of water to get into the fuel system and ultimately into the engine. As explained earlier, the injectors and fuel lines might be affected by this.

### **4. Lubrication Problems**

If the engine has a faulty gasket, water (after being pumped into the engine) might leak into the oil sump. If the amount of water is high, it will form a sluggish mixture with the engine oil. This will seriously affect the lubricating property of the engine.

### **5. Engine Seizing**

A combination of all the above problems will lead to a complete engine failure. The intensity of the problem might range from a simple fuel line flushing to even the replacement of the entire engine.



## **Symptoms.....**

### **1. Low Power and Mileage**

Water content in the engine will reduce the combustion efficiency. This will cause a noticeable drop in power and mileage.

### **2. Unexpected Engine Stalling**

This happens mostly in diesel engines. Water, unlike fuel, cannot be compressed efficiently in the engine. Poor compression would also mean inefficient or no combustion. It is understood that if there is no combustion happening, the engine would just stop functioning.

### **3. Judders While Accelerating**

If the engine is fed with more water rather than fuel, there will be misfires. This is observed in the form of a lag in power delivery while depressing the accelerator. Moreover, you have to apply extra throttle pedal input than usual.

### **4. Engine Fails To Start**

Due to the same reason as above (inefficient combustion), the engine would refuse to start. If the engine is warm enough, the water content might be vaporized and the power plant could start up even if it requires prolonged cranking. However, if the engine is cold, the chances of it getting started will be bleak.

### **5. Steam Coming Out Of The Exhaust**

If combustion does happen (only if fuel quantity is more than water) inside the engine, the water content will be vaporized. The steam so formed will eventually escape out through the exhaust pipe. Some water will also drip down from the exhaust due to condensation.



## Solution.....

# **“Fuelfix”- Your number 1 water in Fuel contamination solution.**

- Removes residue responsible for increased fuel consumption & reduced performance
- Enhances smooth running & performance
- Helps lower engine emissions
- Cleans the whole fuel system, restoring optimum fuel flow
- Prevents corrosion of the fuel tank & entire fuel system
- Help with cold start.

