

# Fuel Filters

Keeping the clean fuel flowing



## Protecting Precision Engineered Components

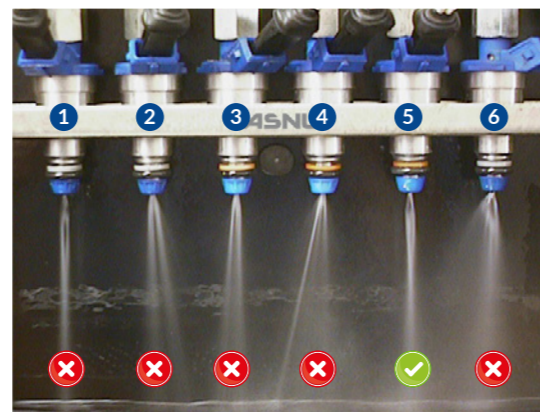
Advancements in filter technology are a direct response to changes in engine technology. Modern petrol and diesel fuel systems contain the most accurately engineered components in an engine, manufactured to incredible tolerances of less than two microns and put under enormous loads. Fuel not only burns to make power, but in the case of a Diesel engine it also lubricates moving parts in the high pressure fuel pump and injectors. Therefore the fuel has to be clean.

## Impurities in the Fuel

Unfortunately impurities from service station refills and corrosion in metal fuel tanks are ever-present and can ruin a modern fuel system. Even the smallest particles can cause damage to an injector pintle causing spray pattern distortion which in turn affects combustion efficiency, fuel consumption, idle stability and emissions.



Good Flow: 5 Fair Flow: 1 Bad Flow: 2,3,4,6

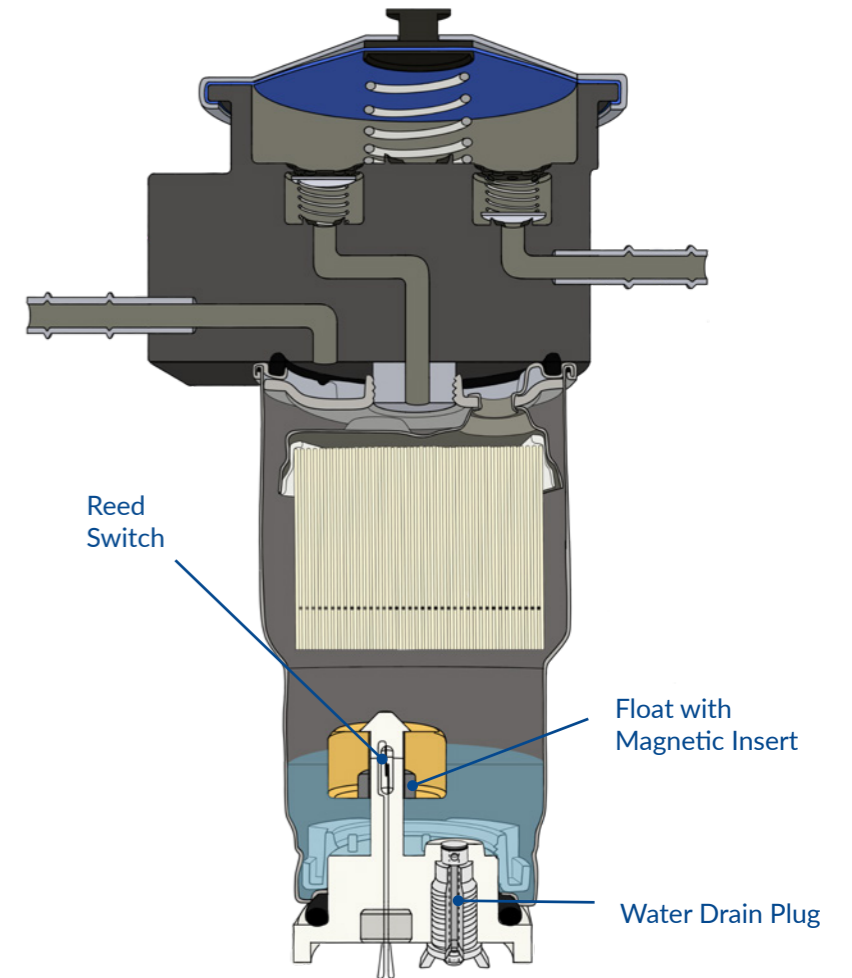


## Water Contamination and Separation

Whilst both petrol and diesel fuels need thorough filtering against abrasive contaminants, diesel has additional filtration requirements.

Water molecules found in diesel fuel systems are a problem. Condensation takes place in the tank and the fuel can hold molecules of water in suspension or in emulsion. Without the correct filtration, water can corrode the components that make up the pump and injectors in the fuel system.

Blue Print diesel fuel filters use a hydrophobic coalescing material which allows fuel to pass through but retains the water. The separated water forms droplets that collect at the bottom of the filter canister where they can be drained periodically as part of routine maintenance.



## Mushroom in your tank?



Diesel fuel is an unstable organic liquid and acts as a food for certain fungi (*Cladisporium resinae*). The spores are in the air and contaminate the fuel. The growth of the fungi happens wherever diesel and water come together and under optimum temperature conditions. Many modern diesel systems continually circulate and filter fuel between the tank and the engine, returning

warm diesel to the tank and creating the perfect environment for fungal growth.

The waste product of the fungi contaminates the fuel and clogs the fuel lines. The solution is regular maintenance using a quality filter that will remove the water from the fuel and prevent the formation of the fungi.

## Original Equipment Quality

Blue Print's range of petrol and diesel fuel filters are manufactured to original equipment standards to ensure the correct fuel flow and efficiency whilst offering maximum engine and fuel system protection.



## The Blue Print Manufacturer Guarantee

In order to underline our high product quality standards, we are providing a **3 Year Manufacturer Guarantee** for all of our replacement parts – exceeding the statutory warranty. This is our commitment to quality.