



Oil Filters

Ensuring maximum protection for the engine



Oil – Only as Good as the Filter Looking After it...

Oil is the life blood of an engine, with engines relying on clean oil circulating under pressure to lubricate and prevent metal-to-metal contact of bearings and cam gear. The oil also aids cooling by carrying heat away from the pistons, cylinders and turbochargers.

Oil manufacturers offer a vast range of engine oils, from the standard mineral multi-grade to very specific synthetic blends, mixed with a large variety of additives (anti-acids/detergents/antifoam/etc).

Most vehicle manufacturers make oil

change interval recommendations based on 'normal' driving conditions. However, frequent cold starts and short journeys mean the oil doesn't reach the temperatures required for combustion residue contaminants such as moisture and unburnt fuel to evaporate, which significantly reduces oil quality and necessitates more frequent changes.

Direct injection petrol engines also produce particulates which get into the oil and can form deposits on vital engine components. Choosing

the correct lubricant gives peace of mind that the engine is being looked after, but have you considered the importance of a quality filter?

Most oil filters are known as 'full flow', where all of the oil has to pass through the filter before reaching the galleries that carry the oil to the moving parts of the engine. Oil relies on the filter to trap the microscopic wear particles and contaminants circulating within the oil and prevent them from becoming embedded into the bearing surfaces.

Filter Media/Paper

The filter media, or paper, has arguably the most important job of a filter. It must have the capacity and durability to trap and hold the contaminants whilst maintaining its integrity between the extended service intervals of a modern motor vehicle.

Anti-drain-back Valve

Built into spin-on type filters is a silicone diaphragm which allows the oil to pass through the filter in one direction only. This prevents oil draining away from the filter and siphoning back through the oil pump when the engine is switched off, thus ensuring that oil pressure rises quickly on start-up and minimising engine wear.

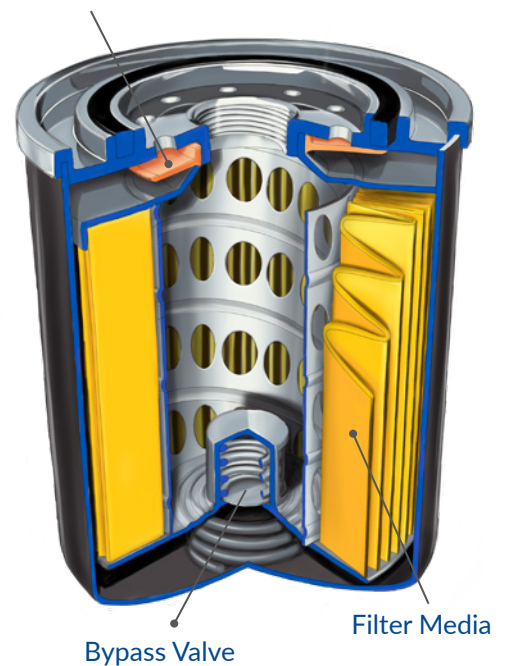
Bypass Valve

The bypass valve has two jobs to do. It protects the filter media on start-up and it allows unfiltered oil to bypass the filter should the media become clogged, protecting the engine against starvation.

On start-up, the sudden rise in pressure on the pump side of the filter is not balanced by pressure on the engine side of the filter. This could cause the filter media to collapse or starve the engine of oil if it were not for a correctly specified bypass valve fitted either in the filter itself or in the filter housing.

The pressure at which the bypass valve opens is critical. Too high a pressure and the load on the filter media could cause it to collapse or starve the engine of oil on start-up; too low and the bypass valve will open before the filter reaches its capacity during its service life. This would mean that the engine would be exposed to unfiltered oil and wear would increase rapidly.

Anti -drain-back Valve



Oil Filter Types



Spin-on canister



Eco / Cartridge

Original Equipment Quality

- Blue Print oil filters are manufactured using premium quality filter media and materials to ensure maximum engine protection and the long term performance required by the extended service intervals of a modern motor vehicle.
- Always ensure that the oil and oil filters are replaced at vehicle manufacturer recommended intervals and that the oil is of the correct grade and specification.
- All Blue Print oil filters are manufactured with premium quality filter media with the efficiency and capacity to protect between extended service intervals.
- Correct performance under cold-start conditions allowing maximum lubrication and preventing metal-to-metal contact of bearings and cam gear.
- High quality anti-drain back valve to prevent oil siphoning back to the oil pump, ensuring rapid oil pressure on cold starts.
- Accurately engineered bypass valve to ensure oil delivery on start-up and in the event of a filter blockage.
- Protects vital engine components from wear particles including dust and soot from combustion for an extended engine life.



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.