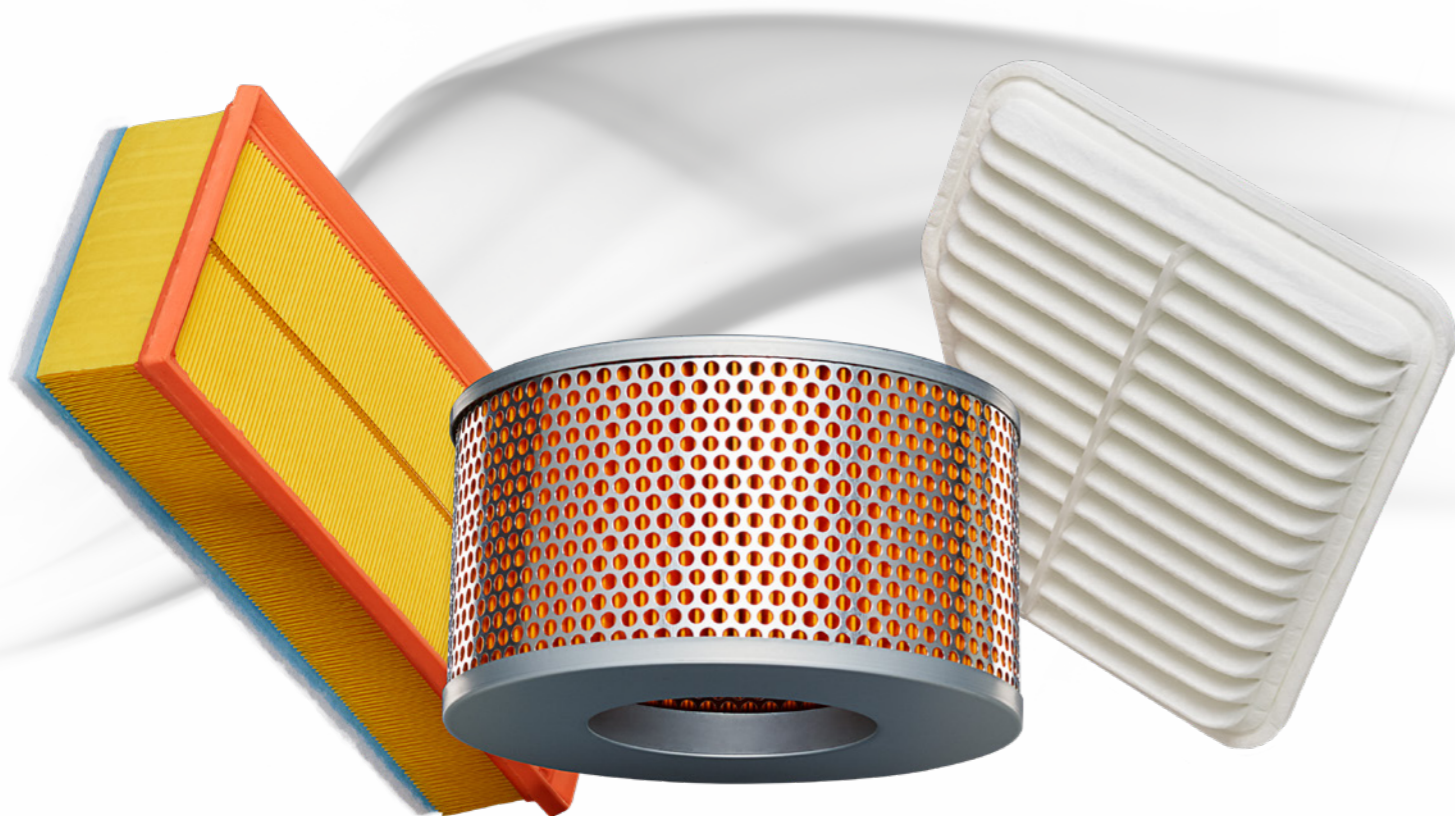


Air Filters

Strength and capacity for outstanding performance



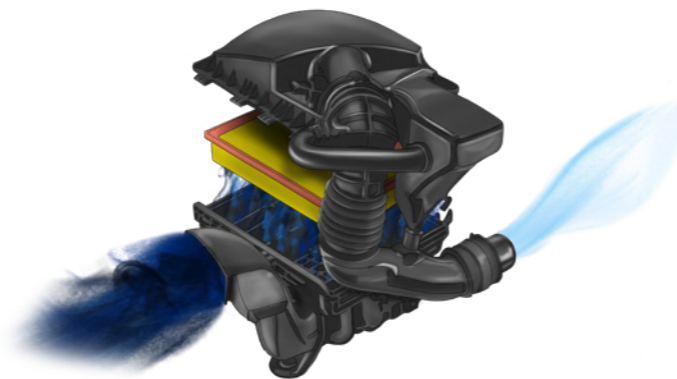
Air – Millions of Litres to Filter

Internal combustion engines consume a vast amount of air. The average petrol engine consumes air at the rate of 10,000 litres for every litre of fuel used.

Or to put this into context...

An air filter in a 2012 Nissan Qashqai 1.6i should be replaced every 2 years or 60,000km. In 60,000km the engine will have consumed in the region of 4,000 litres of petrol and 40,000,000 litres of air!

A diesel engine will consume even more air to the quantity of fuel used, and with the adoption of engine cubic capacity downsizing combined with turbo charging, engine air consumption and filtration has become even more important for an efficient combustion.



The Nitty-gritty

These airborne contaminants can vary from visible highly abrasive granules of grit and sand, to microscopic soot particles, tyre rubber, silica, brake dust, pollen and moisture. In hard surface road conditions the average dust content in the air is 1mg/m³, so an air filter will have trapped around 10 grams of contaminants during its service life. In dusty road conditions it would increase significantly, by as much as 40 times.

If contaminants were able to bypass an air filter it would result in increased wear of pistons, rings, cylinder walls and valves. Additionally, any dirt particles that enter the combustion chamber can work their way into the crankcase, contaminating the oil and reducing the service-life of the oil filter.

Two Sides to Every Filter

During normal use the air filter media becomes loaded with contaminants. As it increases, so does the difference in pressure between the two sides of the air filter, dramatically so on engines with forced-air induction, and this creates an extremely strong suction on the clean side of the filter. The pressure differential, allied to the powerful pressure pulse waves produced by an engine, can become so great that a sub-standard air filter may collapse. The consequences of a collapsed filter can vary from an air leak that allows dirt to bypass the filter, to immediate and serious engine damage from ingesting pieces of contaminated filter.

Regular Servicing

An air filter should be replaced regularly as part of scheduled routine maintenance, as per each vehicle manufacturer's recommendations. In high dust conditions this should be more frequent.

Driving with a heavily loaded filter can cause issues such as excessive fuel consumption, reduced power and restricted performance. It will also cause incorrect air-fuel mixture resulting in increased emissions and soot particles (diesels) which will lead to further problems on diesel particulate filter (DPF) equipped vehicles.



In hard-road conditions, this is the least amount of contamination an air filter will capture during its service life.

And there's more...

The air intake system of an internal combustion engine has evolved a lot over time; from being a simple housing for the air filter, to an integral part of the vehicle's emissions system and noise, vibration and harshness strategy (NVH). A poorly constructed or ill-fitting filter can not only increase the risk of accelerated wear to an engine, but also cause extra induction noise, resonance and vibrations.

- Blue Print air filters are manufactured with high-quality filter media to give the necessary protection and durability required for a long service life, with exceptional contaminant separation and resistance to moisture and humidity.

- Regular quality control checks guarantee a precision construction for 100% reliability and perfect fit, preventing unfiltered air from entering the air intake system and causing engine or component damage.
- The latest high-tech construction methods give Blue Print filters the strength and rigidity required to withstand the pressures demanded from modern turbo and supercharged engines.
- Fitting matching OE quality filters ensures that the engine's performance, fuel economy and emissions remain as originally designed.



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.