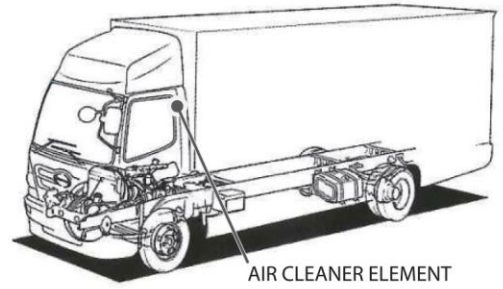
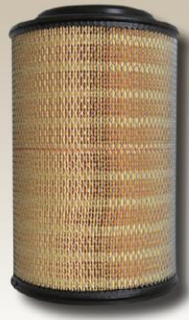


AIR CLEANER ELEMENT



AIR CLEANER ELEMENT

Function

The function of the air cleaner element is to remove dust contained in the intake air so as to supply clean air to the engine, and protect the moving parts in the engine from wear.

How foreign matter in air affect your engine

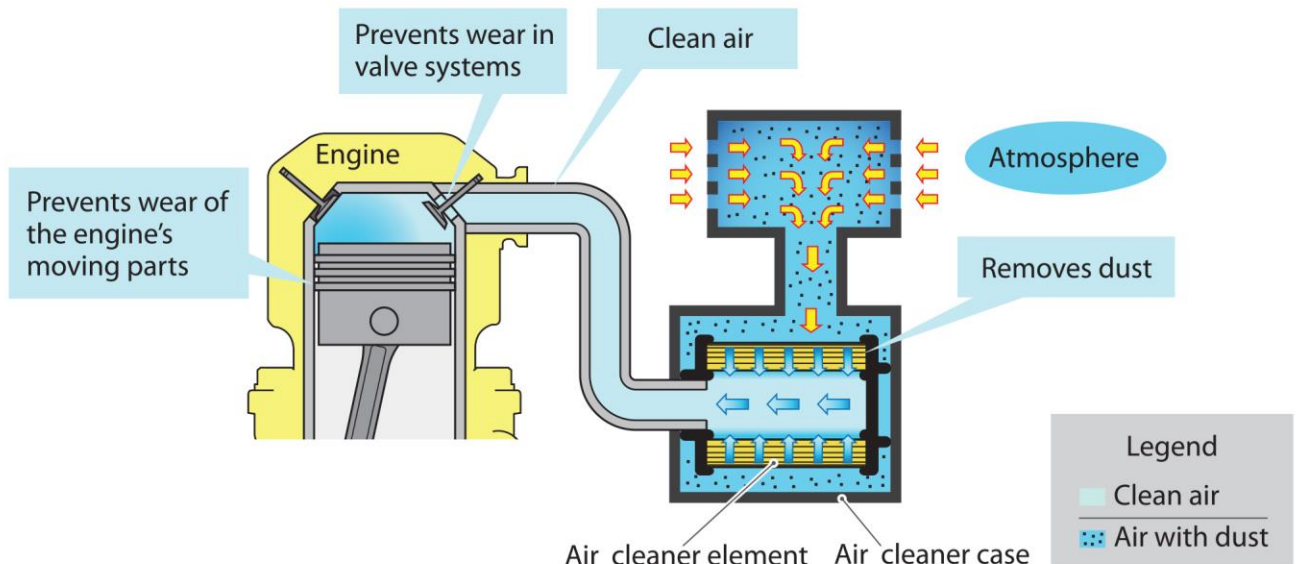
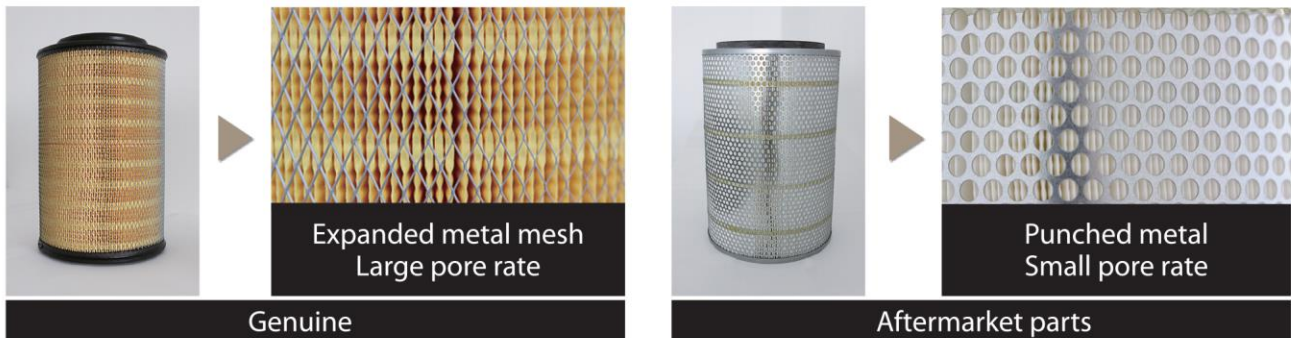


Fig. 1 Air intake system

Differences between genuine and aftermarket parts

1) Performance

The filter media in genuine parts are held in place with an expanded metal mesh, providing a pore rate of 80%. This produces low airflow resistance, which in turn results in smaller loss of output, and better fuel economy. In some aftermarket parts, the filter medium is held in place with punched metal. This can reduce the pore rate of the filter medium to 40%, which in turn increases airflow resistance, resulting in greater loss of output.



2) Quality

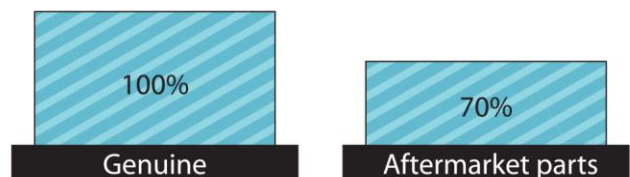
Because the ends of the filter medium in genuine parts are made of single-piece molded plastic and glued in place with adhesive, there is no concern of dust leakage.

Although the separate parts in aftermarket parts are glued together by adhesive, there can be inconsistencies in adhesion which can lead to dust leakage.



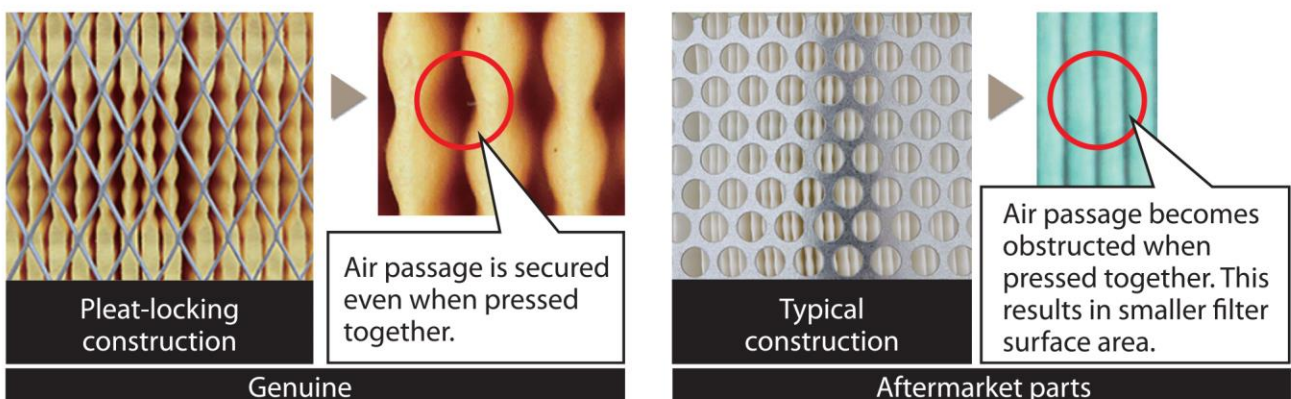
3) Life time

(1) Genuine parts provide more folds and sufficient filtering areas. Some aftermarket parts have smaller filtering areas and shorter life times.



(2) Genuine filters feature a pleat-locking construction to properly maintain the spaces between filter medium surfaces in order to maintain its effective surface area.

Filter media in some aftermarket parts can become stuck to each other, which can obstruct airflow, reduce the effective surface area, and shorten the filter's life time.



The performance data of aftermarket parts shown above were obtained from a limited sampling of parts and do not represent the performance of all aftermarket parts.

The importance of maintenance

Continuing to use a dirty air cleaner element instead of replacing it may impair your engine's performance or fuel economy, so you must clean or replace your air cleaner periodically. In a worst case scenario, the filter medium can rupture, allowing dust to enter the engine, which can cause engine breakdowns.



New air filter



Dense build-up of dust on its surface

Used air filter



Loss of engine power



Fuel economy drops