



AIR AND OIL FILTERS

Quality Filters To Provide Maximum Engine Protection

PRODUCT DESCRIPTION

PENNZOIL® AIR AND OIL FILTERS are precision engineered and manufactured from the highest quality materials. PENNZOIL® filters exceed all Original Equipment Manufacturers' (O.E.M.) design specifications. The burst pressures of PENNZOIL® oil filters average higher than engine makers' requirements, reducing the possibility of a ruptured filter when operating an engine at cold temperatures. The use of resin-impregnated filter elements results in one of the most efficient lines of oil and air filters in removing the most damaging contaminants. PENNZOIL® filters use an advanced filtering material designed to trap the most harmful particles -- those between 10 and 20 microns -- the first time they reach the filter. Conventional filter materials primarily hold the dirt on the surface of the media. The PENNZOIL® OIL AND AIR FILTER material is made of fine interlocking fibers that trap particles inside the media as well. PENNZOIL® OIL AND AIR FILTER media is thicker than conventional filter material, allowing fewer particles through to the engine. PENNZOIL® AIR FILTER media incorporates two layers of fibers, bonded together for high efficiency and capacity performance. PENNZOIL® AIR FILTER media traps more dirt than conventional single layer elements. The outer ply traps the fine contaminant particles while the inner ply acts as a final filter to stop and retain large contaminant particles. The target efficiency of PENNZOIL® OIL FILTER media is 94% single pass efficiency. By removing the maximum amount of air and oil-borne contaminants, engine wear is greatly reduced and the life of the engine is increased.

PENNZOIL® OIL FILTERS are full-flow filters. All of the oil is filtered before it passes into the engine. Full flow filters must provide low restriction to oil flow while having a high degree of filtering efficiency. This means that a PENNZOIL® OIL FILTER must remove as much engine-damaging dirt and grit as possible from the oil. When required by OEM design specifications, PENNZOIL® OIL FILTERS contain anti-drain and pressure by-pass valves. The anti-drain valve helps prevent oil from completely draining out of the filter after an engine shutdown. When restarted, the engine does not have to wait for the filter to refill with oil before the moving parts receive lubricant. The pressure by-pass valve will allow oil to flow past the filter media in the event that the filter element becomes blocked with contaminants. PENNZOIL® OIL FILTERS also have a resilient gasket material for positive seal between filter and engine mount that is designed to withstand extreme service conditions.

The major cause of internal leaks in oil filters is separation of the filter element from the end caps. Pennzoil uses a specially engineered adhesive to assure complete bonding between the filter element and end caps.

PENNZOIL® AIR FILTERS utilize surgical white paper filter elements. Besides providing superior filtering efficiency, the white color of the filter paper demonstrates that the filter is working and acts as a gauge for change intervals. The target efficiency of the PENNZOIL® AIR FILTER media is 98.5%.

APPLICATION

PENNZOIL® AIR AND OIL FILTERS are manufactured in a variety of models to fit domestic and imported vehicles on the road today. Subtle differences in filter width, height, gasket diameter and width, mounting thread size, and by-pass valve pressure settings between filter models make choosing the correct filter model imperative. Using an incorrect filter model could result in severe engine damage. Always refer to the Pennzoil Filter Guide for the proper filter model for a particular application. Do not rely on filter cross reference charts.

BENEFITS

- Advanced filtering material designed to trap the most harmful particles
- Resin-impregnated filter paper provides maximum efficiency in removing contaminants
- Resilient gasket material makes installation and removal of oil filters easier and quicker while providing superior, leak-proof seal
- 94% target single pass efficiency on OIL FILTERS
- 98.5% target efficiency on AIR FILTERS