Supplemental Filtration Products



The First in Synthetics ®

Premium filtration products from AMSOIL aftermarket partners.

OIL FILTERS

<u>Donaldsori</u>

AIR FILTERS

Donaldson Filtration Products

AMSOIL carries Donaldson[®] Endurance[™], P-Series and PowerCore[®] filtration products, regarded as among the best available, to complement the AMSOIL Ea[®] Heavy-Duty Extended-Life Oil Filter line.

Donaldson Endurance

Donaldson Endurance air and oil filters provide the highest level of filtration efficiency in the industry. Specifically designed for on-road, heavy-duty class 6, 7 and 8 vehicles, Donaldson Endurance air and oil filters feature exclusive nanofiber technology. Class 6 vehicles, 19,501 to 26,000 pounds gross vehicle weight (GVW), include single-axle vans, beverage trucks and school buses; class 7, 26,001 to 33,000 pounds GVW, include refuse trucks, tow trucks and city transit buses; class 8 trucks, 33,000 pounds GVW and greater, include fuel haulers, inter-city/tour buses and cement trucks.

Oil Filters

Donaldson Endurance oil filters are made with advanced synthetic technology that results in fibers that have a controlled size, down to sub-micron diameters. This controlled process allows Endurance oil filters to deliver both higher dirt-holding capacity at the same pressure differential and higher efficiency compared to conventional cellulose filters. The synthetic media also has better durability and increased resistance to water.

Throughout the service life of a cellulose filter, hot oil degrades the resins in the media. The synthetic media uses a wire-screen backing pleated with the media for superior strength and longterm durability. Endurance oil filters provide a filtering efficiency of 98.7 percent at 15 microns and 50 percent at 7 microns in accordance with industry-standard ISO 4548-12. This is the best rating in the industry. Whether extending maintenance intervals to the limit and running the engine for a million miles without an overhaul, maintaining a national fleet or running a coal mine, Endurance filters can lower total operating costs.

AMSOIL synthetic oils and Endurance filters with advanced synthetic technology form a superior extended-drain combination. AMSOIL guarantees Endurance oil filters up to twice the manufacturer's recommended service interval for heavy-duty diesel applications, to a maximum of 60,000 miles. Endurance filters are guaranteed to extend drain intervals when used under normal on-highway conditions while following these maintenance practices:

- Use of AMSOIL synthetic motor oil
- General preventative maintenance practices performed in accordance with manufacturer's recommendations
- Engine in good operating condition prior to attempting extended drain intervals

Endurance Oil Filters

- Extended Service Life
- Greater Engine Protection
- Prolonged Engine & Equipment Life
- Improved Lubricant Flow
- Improved Cold-Start Performance
- Reduced Operating Costs

Endurance Oil Filter with Nanofiber Media vs. Conventional Cellulose Media



Small synthetic fibers trap smaller particles and hold more contaminants, resulting in lower restriction.





Cellulose fibers are inconsistent in size and shape, allowing more contaminants to pass through, resulting in higher restriction and lower capacity.





Higher Efficiency

Dirt and other small contaminants cause wear that reduces engine and equipment life. Endurance oil filters are more effective than filters that employ cellulose media in removing these small contaminants.



Higher Capacity

Contaminant-holding capacity is a major factor in determining when a filter needs to be changed. Endurance oil filters have greater contaminantholding capacity than conventional filters.



Better Engine Protection During Cold Starts

Endurance oil filters have significantly lower restriction than conventional cellulose filters. During the engine warm-up period, an Endurance oil filter allows the oil to flow through the filter at a colder temperature than a typical cellulose filter. The additional filtering time decreases engine wear.

Endurance Air Filters

Endurance air filters offer longer engine life, longer filter life, initial efficiency up to 99.99 percent and five times more capacity than conventional cellulose filters. Endurance air filters come with a "twice the miles" guarantee to deliver twice the miles between change intervals over cellulose air filters for on-highway applications, or customers receive a new filter at no charge. The nanofiber technology traps sub-micron contaminants on the surface rather than dispersing them throughout the depth of the filter where there is less area for the air to flow. Therefore, in on-highway applications, where the contaminant is primarily sub-micron in size. Endurance air filters cause less restriction than conventional filters with cellulose media. The smaller, interfiber spaces have higher efficiency and capture more contaminants. Here's how it works: Imagine two filtration media, a chain link fence and a mosquito net. Each is required to stop contaminants, in this case tennis balls. A tennis ball fits nicely into an opening of a chain link fence, but will obstruct the hole almost 100 percent. Now, imagine a tennis ball covering a mosquito net. The tennis ball, at the point of contact with the netting, obstructs much less filter area than it does in the chain link fence example. In fact, air will flow around the tennis ball all the way to the point of contact. It will take many more particles to obstruct the netting surface area than the chain link fence.

Endurance Air Filters

- Longer Engine Life
- Longer Filter Life

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- Double Mileage Guarantee
- Extended Maintenance Intervals

Endurance Air Filter with Nanofiber Media vs. Conventional Cellulose Media



Nanofibers have submicron diameters and small interfiber spaces, which result in more contaminants being captured on the surface of the media and lower restriction.

2 Micron Particle • 5 Micron Particle •



Cellulose fibers are larger than nanofibers and have larger spaces between the fibers, causing contaminants to load in the depth of the media and plug the airflow path, which results in higher restriction and less capacity.

Media Comparative Cross Section



P-Series

With many applications that differ from, and several that coincide with, the Endurance line, Donaldson P-Series filters offer premium filtration at a competitive price. P-Series filters feature housing constructed with heavy-gauge steel and domed construction, providing superior pressure-fatigue performance. P-Series oil filters are constructed with either full-synthetic media or synthetic blends for high efficiency. The center tube allows more flow without compromising strength, and the louvered design eliminates tearing during pleat movement. The media is embedded deeper into the sealing plastisol than conventional filters, allowing better sealing longevity. Additional features include a nitrile sealing gasket, a fully tucked seam, roll-formed threads and a compression spring holding all the components in place within the filter. AMSOIL carries Donaldson P-Series oil, air, fuel, hydraulic and coolant filters.

Greater Capacity

Donaldson P-Series filters hold more contaminants than the original equipment oil filter. The more contaminant-holding capacity a filter has, the longer the filter will perform and the more miles an engine can operate without a filter change.

Higher Efficiency

Advanced filter media delivers higher-efficiency engine protection than the original filter. Synteq filter media is the key to Donaldson P-Series heavy-duty filters' high-efficiency performance. Higher filter efficiency results in cleaner oil because the filter media stops more contaminants from passing through.

Fuel Filtration

Today's engines are built to more stringent specifications and finer tolerances. Fuel systems, pumps and injectors require cleaner fuel to achieve better combustion and lower emissions. Donaldson fuel filters provide clean, filtered fuel that helps prevent pump wear, injector clogging and premature engine wear. AMSOIL carries a complete line of spin-on and cartridge-style filters.

Coolant Filtration

The engine cooling system keeps engine temperature at the correct level to dissipate heat and maintain the right operating conditions for optimal fuel economy. Donaldson coolant filters remove contaminants, minimize the risk of filter plugging and keep engines running efficiently.

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Hydraulic Filters

Donaldson industrial hydraulic filters provide excellent protection for machinery and components in hundreds of applications in factories and on heavy-duty equipment. Donaldson provides filter housings, filter heads, replacement cartridges, spin-ons and hydraulic accessories.





Donaldson P-Series Filters

- Unique wide-mouth cartridge outflow allows unobstructed oil flow from the filter media, consistently delivering the maximum flow available
- Multi-density Synteq filter media holds more contaminants, meeting and even exceeding performance specifications for Cummins diesel engines
- Superior filter cartridge design permits 38 percent more full-flow surface area, allowing for high-efficiency filtration



PowerCore[®] Filters

The rugged structure of Donaldson PowerCore filters features an innovative, layered, fluted filter media, which allows only clean air into the engine. PowerCore filters provide less restriction and greater power. Applications include the Ford 6.0L Power Stroke[™] Diesel, GM H2 Hummer 6.0L Vortec, certain models of John Deere tractors and Freightliner M-2 engines, as well as an air induction box for Ford 7.3L Power Stroke Diesels.

Innovative Design

The design of the internationally patented housings, filters and filter media are key to Donaldson PowerCore filtration technology. Donaldson Power-Core filter media is formed into flutes. These flutes are layered to give tight, rugged structure to the filter. The fluted channels are alternately sealed allowing air to enter through an open flute and forcing it to exit an adjacent flute. The dirty air travels in and is filtered in one pass through the media.

Improved Efficiency and Protection

Donaldson PowerCore filters are 10 times more efficient than average conventional filters. PowerCore filters provide improved contaminant encapsulation, over 100 percent more dust-holding capacity in a given volume. That means dust and dirt won't dislodge during servicing.

Less Restriction with Straight-Through Airflow



The straight-through fluted filter design improves engine protection because there is no media movement, expansion, contraction or bunching. There is also less dust and dirt passed to the engine. The fluted design keeps contaminants inside the filter, preventing contamination of the unprotected air filter housing.

Improved Handling and Maintenance

PowerCore filters are lighter and smaller, making filter changes much easier. Their non-metal, incinerable construction makes them easier to dispose.

Dust-Holding Capacity







PowerCore® Filters

- Three times more efficient than standard filter designs
- Increases contaminant-holding capacity
- Eliminates media movement, expansion, contraction and bunching
- Contaminants remain trapped and won't dislodge during service
- Utilizes RadialSeal[™] sealing for easy service
- Metal-free construction allows for incineration
- 99.99 percent efficiency

Overall Efficiency



Improved Filtration Efficiency

WIX[®] Filtration Products

AMSOIL offers WIX filters as a complement to the AMSOIL Ea[®] line of filters, allowing AMSOIL Dealers to offer one-stop shopping for automotive customers. AMSOIL carries a variety of air, oil, fuel, racing and transmission filters for automotive and light truck applications.

Oil Filters

WIX oil filters have a full metal base plate for superior strength at the double seal. They also feature a silicone anti-drainback valve that stays flexible in extreme temperatures. This improves oil flow and keeps oil in the filter to prevent dry starts. The up-front by-pass valve in WIX oil filters keeps oil from washing past dirty media and entering the engine. Their glass-enhanced media offers greater efficiency, capturing more 10- to 12-micron sized particles than other cellulose/synthetic-blend medias. WIX oil filters also have a coil steel spring to ensure internal filter parts are sealed properly.

Air Filters

WIX panel element air filters have a linear path through the filter for low airflow restriction, a specially formulated adhesive to form WIX's exclusive pocket pleat for the filter media and a soft-sealing urethane gasket molded in place on the filter element. Radial air filters are constructed of mesh screen on the inside wall diameter for element strength and media protection from backfire. Each round filter is manufactured with heat-resistant plastisol with specially designed crush seals on the top and bottom walls and adhesive seal joining the media ends.

Gasoline Filters

WIX gasoline filters provide superior gasoline cleansing performance. They help prevent pump wear, injector clogging and premature engine wear. WIX gasoline filters offer quick, easy filter replacement, long life and the possibility of extended service intervals. WIX spin-on filters reduce the possibility of improperly installed cover gaskets, and they provide effective, easy draining of excess water on filters equipped with a drain plug. The superior materials, design and construction of WIX gasoline filters provide excellent performance under all types of operating conditions.



WIX® Filters

- Oil filters' glass-enhanced media offers excellent efficiency
- Air fillers offer low restriction for maximum performance
- Full product line satisfies nearly all customer needs

Transmission Filters

WIX transmission filters provide superior protection for many transmission applications in the auto/light truck market.

Cabin Air Filters

AMSOIL carries WIX high-efficiency cabin interior air filters for passenger cars and light trucks.

Racing Filters

WIX racing filters are specially designed for racing applications and are not intended for normal driving applications.



MANN-FILTER Filtration Products

AMSOIL offers MANN-FILTER filtration products as a complement to the Ea® filtration line. MANN-FILTER specializes in filtration products for European applications from manufacturers like Audi, BMW, Mercedes, Volkswagen, Porsche, Volvo and Jaguar.

Oil Filters

Oil filters from MANN FILTER purify oil of dirt and solid particles such as dust, abaded metal, carbon deposits and soot particles. MANN-FILTER filter housings are pressure-resistant, designed to fight corrosion and feature a long-life elastomer seal. MANN-FILTER oil filters offer low restriction, allowing oil to flow easily for fast engine lubrication. MANN-FILTER offers cartridge-style filter elements, spin-on filters and transmission filters.

Air Filters

MANN-FILTER air filters feature optimum pleat geometry for maximum dirt-holding capacity and high filtration efficiency for dependable engine protection. MANN-FILTER air filters also correct air flow, enhanc-

ing engine protection. They effectively filter harmful parti-

cles including dust, pollen, sand, soot and water out of the intake air, ensuring only clean air makes it to the combustion chamber. The high quality of MANN-FILTER air filters offers reliable service throughout the entire service interval.

Fuel Filters

MANN-FILTER fuel filters provide superior operational safety for engines, reliably protecting the delicate injection mechanism and the carburetor while removing unwanted contaminants from the fuel. They also protect the injection system from corrosion and promote long engine life. MANN-FILTER fuel filters come in four different styles: fuel filter elements, metal-free elements, spin-on fuel filters and fuel line filters.

Cabin Air Filters

MANN-FILTER cabin air filters offer optimum ventilation inside the vehicle through low-flow resistance, filtering spores, pollen, pollution, dust and exhaust consistently throughout the entire service interval. They come with detailed fitting instructions for easy and fast installation and replacement.

MANN-FILTER Filters

- Filters for most European applications
- Oil filters offer low restriction for fast lubrication
- Air filters feature maximum dirt-holding capacity for dependable protection



The First in Synthetics Jeff Fisher 866-292-4700 www.SyntheticOils.us Contact your local full-service AMSOIL Dealer for more information on AMSOIL products or to place an order. You may also order direct by calling AMSOIL INC. at 1-800-956-5695 and providing the referral number listed here. ▼

Referral # <u>1393814</u>