DATA BULLETIN

Heavy-Duty Bypass System

Heavy-Duty Remote Filtration System and Bypass Filter combine to provide outstanding oil filtration efficiency

The AMSOIL Heavy-Duty Bypass System (BMK30) provides superior filtration performance for heavy-duty on- and off-road applications. It is designed specifically for the AMSOIL Heavy-Duty Bypass Filter (EABP120), bringing AMSOIL synthetic technology to the heavy-duty market.

Bypass Basics

Bypass oil filtration introduces a secondary filter with the purpose of eliminating nearly all contaminants from engine oil. Bypass filters have high capacities and eliminate much smaller particles than full-flow filters, including soot. Bypass filters reduce engine wear through high filtering efficiency, which means they have higher restriction and must be used in conjunction with a full-flow filter.

Bypass filters operate by filtering oil on a “partial-flow” basis. They draw approximately 10 percent of the oil pump’s capacity at any one time and trap the extremely small, wear-causing contaminants that full-flow filters can’t remove. Bypass filters have a high pressure differential, causing the oil to flow through them very slowly and allowing for the removal of smaller contaminants. It is called bypass filtration because the oil flows from the bypass filter back to the sump and bypasses the engine. This continual process eventually cleans all the oil in the system, reduces long-term wear and can dramatically extend the life of the engine.

AMSOIL Heavy-Duty Bypass System

The Heavy-Duty Bypass System includes the mount, mounting hardware, 15 feet of hose, hose fittings, installation instructions and Bypass Filter (EABP120). Fitting suggestions and fitting locations can be found on the Heavy-Duty Bypass webpage (https://www.amsoil.com/bypassfilters/instructions/BMK30_Fittings.pdf). Available separately, the oil sample valve (BK30) eases the process of collecting oil samples. The system provides most of the necessary fittings, except the fitting required to pull pressurized oil from the engine and the return fitting to return oil to the sump. Other parts and fittings can be purchased from any hydraulics or heavy-duty equipment outlet.

High-Quality, Durable Construction

The Heavy-Duty Bypass Filtration System is constructed of high-quality cast aluminum with a steel filter spud that has been thoroughly tested in on-road and severe off-road service. The mount is finished with a thick layer of powder-coated paint to provide maximum resistance to the degrading effects of road salt, debris and engine-compartment chemicals.

General Installation Guidelines

Determine the location of a pressurized oil port on the engine. Pressure ports are usually found on the main oil galley or in close proximity to the full-flow filter head assembly. The oil flow from this source should be plumbed into the inlet side of the filter mount. The outlet will be directed to a low-pressure point on the engine, typically a port located at or near the oil pan. Detailed instructions are included with the Heavy-Duty Bypass Filtration System.

AMSOIL Heavy-Duty Bypass Filter

The AMSOIL Heavy-Duty Bypass Filter (EABP120) features a proprietary media that removes 99% of all contaminants two microns and larger (ISO 4548-12), and provides superior soot-removal efficiency. It comes complete with a marine powder-coated finish for long filter life, even in extreme conditions.

Increased Oil Capacity

The Heavy-Duty Bypass Filter increases the fluid system capacity by approximately one gallon, depending on length of hose and distance the filter is mounted from the engine. The additional oil and extended filtration life provide improved oil cooling and ensure equipment constantly runs on highly filtered oil. Engine efficiency is increased, providing extended engine life.

Extended Service Life

The Heavy-Duty Bypass Filter offers long service life. Do not exceed the limits listed in the chart below. Extended oil drain intervals should always be accompanied by an oil analysis program.

	EABP120
Mileage	120,000
Hours	1,800
Time	1 year

Heavy-Duty Filtration

The Heavy-Duty Bypass Filter was designed for heavy-duty applications. Its robust construction and superior filtration performance provide maximum protection over extended drain intervals, reducing downtime, increasing equipment life and saving money.

- Significantly extended engine life
- Efficient removal of small particles and soot
- Removal of particles two microns and larger
- Increased engine efficiency
- Improved oil cooling
- Helps maintain oil viscosity
- Reduces unscheduled downtime
- Reduces operational costs
- Increased fluid system capacity
- Increased filtration capacity and life
- Environmentally friendly
- Extended drain intervals

APPLICATIONS

The Heavy-Duty Bypass System and Heavy-Duty Bypass Filter provide maximum filtration performance for virtually all heavy-duty gas and diesel applications, including Class 6, 7 and 8 heavy-duty trucks, off-road equipment, buses, generators, marine engines, logging and agricultural equipment. This bypass filtration system can be plumbed in series for larger applications with large sumps. For more information about the installation of one or more heavy-duty bypass systems on your application, contact AMSOIL Technical Services at (715) 399-TECH.

PRODUCT WARRANTY

AMSOIL products are backed by a Limited Liability Warranty. For complete information visit www.amsoil.com/warranty.aspx.

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