

Bypass Oil Filtration Systems & Mounts

AMSOIL CUMMINS 5.0/5.9/6.7L SINGLE-REMOTE BYPASS SYSTEM

Product Code: BMK34-EA



Product Description

AMSOIL's Cummins 5.0/5.9/6.7L Single-Remote Bypass System adds a dedicated secondary filtration circuit to your Cummins diesel, continuously removing the ultra-fine contaminants and soot that standard full-flow filters are designed to let pass. It is a direct, bolt-on upgrade for 2004-and-newer Ram 2500, Ram 3500, and Ram 4500/5500 trucks equipped with the 5.9L or 6.7L Cummins turbodiesel, as well as applications running the Cummins 5.0L V8 diesel.

Full-flow oil filters face an engineering compromise. They have to pass enough oil volume to keep the engine lubricated at all times, which means their media cannot be dense enough to catch the smallest wear-causing particles. Contaminants in the 2-to-20 micron range, including combustion soot, circulate freely through a full-flow system and gradually degrade oil chemistry, accelerate bearing wear, and shorten engine life. In a high-soot engine like the 6.7L Cummins, this is not a theoretical concern. It is the primary mechanism behind premature oil degradation and the reason oil analysis reports often come back showing elevated wear metals well before the drain interval is reached.

SUPERIOR SMALL-PARTICLE FILTRATION, INCLUDING SOOT REMOVAL

The AMSOIL Ea Bypass Filter installed in this system works on a partial-flow basis, drawing approximately 10 percent of the oil pump's capacity at any given time. Because it only handles a fraction of total flow, the filter media can be far more restrictive than a full-flow element, trapping extremely small wear-causing contaminants that full-flow filters cannot remove. Over the course of normal operation, the bypass circuit filters all of the oil in the system multiple times per hour. The result is oil that stays analytically clean for the duration of the service interval, with soot levels and particle counts held to levels that a full-flow-only system simply cannot achieve.

EXTENDED FILTER SERVICE LIFE

This system uses AMSOIL Ea Bypass filter elements with service intervals that far exceed conventional oil filters. The EaBP90 element is rated for 60,000 miles or 600 hours. The EaBP100 extends that to 70,000 miles or 800 hours. And the EaBP110 is rated for 80,000 miles or 1,200 hours. All three carry a maximum calendar interval of two years. For a Ram 3500 owner towing heavy or a fleet operator tracking cost-per-mile, those intervals translate directly into fewer service stops and lower maintenance costs over the life of the engine.

ENGINEERED FOR CUMMINS DIESEL APPLICATIONS

The BMK34 system taps into the existing 1/8-inch NPT ports on the top of the Cummins full-flow oil filter housing, with the oil return line routed through a dedicated aluminum oil fill cap (BK1303) that replaces the factory cap. The kit includes all fittings, hoses, mounting hardware, and a filter mount assembly designed to be installed in the engine compartment close to the factory full-flow filter. If neither plug on the oil filter housing is accessible, an optional aluminum filter adapter (BK1104) provides an alternate oil supply connection. The system is compatible with 2004-to-current Cummins 5.0L, 5.9L, and 6.7L engines, covering a wide range of Dodge and Ram heavy-duty trucks as well as chassis cab and commercial applications.

KEEPS OIL CLEAN BETWEEN EXTENDED DRAIN INTERVALS

Running AMSOIL synthetic diesel oil on extended drain intervals is common in Cummins applications, but oil cleanliness has to keep pace with the drain schedule. A bypass filtration system closes that gap. By continuously pulling sub-micron particles and soot out of circulation, the BMK34 system helps maintain oil viscosity, reduce acid buildup, and protect turbocharger bearings, cam lobes, and main bearings throughout the full service interval. Oil analysis results from engines running bypass filtration consistently show lower wear metals and cleaner oil than identical engines running full-flow filtration alone.

COMPATIBILITY AND INSTALLATION NOTES

The system fits 2004-and-newer Cummins 5.0L, 5.9L, and 6.7L engines. It does not include the full-flow oil filter or oil filter adapter. The full-flow filter (EaO80) must be purchased separately. If both NPT plugs on the oil filter housing are inaccessible, the optional BK1104 aluminum filter adapter is required and available by contacting AMSOIL directly. All hose and fittings included in the kit are matched for maximum performance and service life. AMSOIL does not recommend substituting with other brands or types.

SERVICE INTERVALS

Technical Specifications

Filter Element	Mileage	Hours	Time
EaBP90	60,000 miles	600 hours	2 years
EaBP100	70,000 miles	800 hours	2 years
EaBP110	80,000 miles	1,200 hours	2 years

Frequently Asked Questions

Q1: What Cummins engines is the AMSOIL BMK34 Single-Remote Bypass System designed for?

The AMSOIL Cummins 5.0/5.9/6.7L Single-Remote Bypass System (BMK34-EA) is designed for 2004 to current Cummins 5.0L, 5.9L, and 6.7L diesel engines. It is compatible with a wide range of equipment categories including auto/light truck, heavy-duty on-road, heavy-duty off-road, and agriculture applications equipped with these Cummins engine platforms.

Q2: How does the AMSOIL Ea Bypass Filter in the BMK34 system protect my Cummins engine from wear?

The AMSOIL Ea Bypass Filter provides superior small-particle filtration, including soot removal, by trapping extremely small wear-causing contaminants that full-flow oil filters cannot remove. It operates on a partial-flow basis, drawing approximately 10 percent of the oil pump's capacity at any one time, and typically filters all the oil in the system several times an hour. This means the engine continuously receives analytically clean oil, helping increase engine efficiency and life while reducing maintenance costs.

Q3: What are the service intervals for AMSOIL Ea Bypass filters used in the Cummins BMK34 bypass system?

The AMSOIL Ea Bypass Filters used in the BMK34 system offer long service life with intervals varying by filter model. The EaBP90 is rated for 60,000 miles or 600 hours, the EaBP100 for 70,000 miles or 800 hours, and the EaBP110 for 80,000 miles or 1,200 hours. All three filter options have a maximum time-based service interval of 2 years, whichever limit is reached first.

Q4: How does the AMSOIL BMK34 bypass filtration system compare to using a full-flow oil filter alone on a Cummins diesel?

A full-flow oil filter alone cannot remove the extremely small, wear-causing contaminants that contribute to engine wear and oil degradation. The AMSOIL BMK34 bypass system works in conjunction with the engine's full-flow filter by continuously filtering approximately 10 percent of the oil pump's capacity, cycling all the oil through the bypass filter several times per hour. This dual-filtration approach delivers analytically clean oil to the engine at all times, providing a level of small-particle and soot filtration that a full-flow filter by itself cannot achieve.

Q5: How often should I change the bypass filter in the AMSOIL Cummins 5.0/5.9/6.7L bypass system?

Filter change intervals depend on which Ea Bypass Filter you select. The EaBP90 should be changed at 60,000 miles or 600 hours, the EaBP100 at 70,000 miles or 800 hours, and the EaBP110 at 80,000 miles or 1,200 hours. Do not exceed 2 years regardless of mileage or hours. Refer to the BMK34 Installation and Servicing Instructions for complete maintenance guidance.

Q6: Is the AMSOIL BMK34 bypass system compatible with all Cummins 5.9 and 6.7 filter housing configurations?

The BMK34 system includes fitting options to replace one plug on top of the full-flow oil filter housing, but it does not include an oil filter adapter. Before installation, check the top of the full-flow oil filter housing for two plugs. If both plugs are not accessible, an optional aluminum filter adapter (part BK1104) must be ordered separately by calling AMSOIL at (800) 956-5695. Detailed compatibility information is available in the BMK34 Installation and Servicing Instructions.

Available Product Codes

Product Code	Package Size	Unit of Measure
BMK34-EA	1 System	Each

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