

Bypass Oil Filtration Systems & Mounts

AMSOIL UNIVERSAL SINGLE-REMOTE BYPASS SYSTEM

Product Code: BMK21-EA



Product Description

Full-flow oil filters do a necessary job, but they have a fundamental limitation. They must allow oil to pass through quickly enough to maintain adequate flow and pressure to the engine, which means they can only capture particles down to a certain size. The smaller, wear-causing contaminants, including soot, pass right through. Over thousands of miles, those fine particles accumulate in the oil, accelerate wear on bearings, rings, and cylinder walls, and degrade the oil itself. This is especially true in diesel engines and high-hour applications where soot loading is a constant reality.

REMOVES WHAT YOUR FULL-FLOW FILTER CANNOT

The AMSOIL Ea Bypass Filter operates on a partial-flow basis, drawing approximately 10 percent of the oil pump's capacity at any given time. Because it processes a smaller volume, it can filter to a much finer level than a full-flow filter, trapping the extremely small contaminants that cause the most cumulative damage. Over the course of normal operation, the bypass filter cycles all the oil in the system several times per hour. The result is oil that stays analytically clean for far longer than it would with a full-flow filter alone.

BUILT FOR DIESELS, TOWING RIGS, AND HIGH-HOUR EQUIPMENT

Diesel engines in trucks like the Ford 6.7L Power Stroke, Duramax, and Cummins produce significant soot as a byproduct of combustion. That soot ends up in the oil. A bypass filtration system continuously scrubs it out, reducing the abrasive load on internal components. The same applies to commercial equipment, agricultural machinery, and fleet vehicles that accumulate hours quickly. Whether you are towing heavy with a Ram 3500 or logging hours on a skid steer, bypass filtration directly addresses the root cause of premature oil degradation and engine wear.

EXTENDED FILTER SERVICE LIFE

The system accepts three different AMSOIL Ea Bypass Filter elements, each matched to engine oil capacity. The EaBP90 is designed for systems up to 15 quarts and is serviceable at 60,000 miles or 600 hours. The EaBP100 handles up to 18 quarts with a 70,000-mile or 800-hour interval. The EaBP110 covers systems up to 24 quarts and reaches 80,000 miles or 1,200 hours. All three have a maximum time interval of 2 years. Selecting a larger filter than your minimum requirement can further extend the service interval.

UNIVERSAL FITMENT WITH FLEXIBLE INSTALLATION OPTIONS

The BMK21 system connects to the engine through a pressurized oil port, typically the oil pressure sending unit location. It includes 12 feet of 1/4-inch I.D. hose, JIC fittings, a street tee, a self-tapping hollow bolt for oil return to the pan or valve cover, and a filler cap return fitting (BP89) as an alternate return path. The mount accommodates a range of mounting angles and locations, and the included hardware covers most installations without additional parts. For engines with a 1/4-inch NPT oil pressure sending unit thread, the kit includes the necessary reducer bushing and pipe nipple.

REDUCES LONG-TERM MAINTENANCE COSTS

Cleaner oil means less wear. Less wear means fewer rebuilds, fewer component failures, and longer intervals between oil changes when used alongside AMSOIL synthetic motor oils and oil analysis. For fleet operators tracking cost per mile or cost per hour, bypass filtration is one of the most effective ways to lower the total cost of engine ownership. For owner-operators running a Power Stroke or Cummins to 300,000 miles and beyond, it provides measurable protection that pays for itself over time.

FILTER COMPATIBILITY

Technical Specifications

Vehicle Oil Capacity	Recommended Filter	Filter Length	Mileage Interval	Hours Interval	Time Interval
Up to 15 quarts	EaBP90	5.78 inches	60,000 miles	600 hours	2 years
Up to 18 quarts	EaBP100	7.25 inches	70,000 miles	800 hours	2 years
Up to 24 quarts	EaBP110	10.44 inches	80,000 miles	1,200 hours	2 years

Frequently Asked Questions

Q1: What vehicles and equipment is the AMSOIL Universal Single-Remote Bypass System BMK21 designed for?

The AMSOIL Universal Single-Remote Bypass System (BMK21) is designed for a wide range of applications including auto/light truck, motorcycle, ATV, UTV, snowmobile, marine outboard, PWC, heavy-duty on-road, heavy-duty off-road, agriculture, and powersports equipment. It connects to the engine through a pressurized oil port and works in conjunction with the engine's existing full-flow oil filter. Verified buyers have installed it on vehicles ranging from diesel trucks like the 6.7L Powerstroke to small engines like a 33 hp Dixie Chopper mower.

Q2: How does the AMSOIL bypass oil filter system protect my engine better than a standard oil filter?

The AMSOIL Ea Bypass Filter operates on a partial-flow basis, drawing approximately 10 percent of the oil pump's capacity at any one time to trap extremely small, wear-causing contaminants that full-flow filters cannot remove. It typically filters all the oil in the system several times an hour, so the engine continuously receives analytically clean oil. This superior small-particle filtration, including soot removal, helps increase engine efficiency and life while reducing maintenance costs. One verified buyer reported that at 120,000 miles, a mechanic was extremely impressed by the internal cleanliness of the engine.

Q3: What does partial-flow filtration mean on the AMSOIL Universal Single-Remote Bypass System?

Partial-flow filtration means the AMSOIL Ea Bypass Filter does not filter all oil simultaneously like a full-flow filter. Instead, it draws approximately 10 percent of the oil pump's capacity at any given time and passes it through the bypass filter element to capture extremely fine contaminants. Because it cycles continuously, it typically filters all the oil in the system several times per hour. This approach provides superior small-particle filtration without restricting oil flow to the engine.

Q4: How does the AMSOIL bypass filtration system compare to running only a standard full-flow oil filter?

A standard full-flow oil filter must balance filtration efficiency with flow rate, meaning it cannot trap the smallest wear-causing particles without restricting oil delivery to the engine. The AMSOIL Ea Bypass Filter works alongside the full-flow filter to capture those extremely small contaminants that full-flow filters can't remove, including soot. This dual-filtration approach means the engine constantly runs on analytically clean oil, which helps increase engine life and reduce maintenance costs beyond what a full-flow filter alone can achieve.

Q5: How often do you change the AMSOIL Ea Bypass Filter in the BMK21 system?

AMSOIL Ea Bypass Filters offer long service life with intervals depending on the filter model used. The EaBP90 is rated for up to 60,000 miles or 600 hours, the EaBP100 for up to 70,000 miles or 800 hours, and the EaBP110 for up to 80,000 miles or 1,200 hours. Regardless of mileage or hours, none should exceed a maximum service life of 2 years. Refer to the AMSOIL filter options table and installation instructions (BMK21) for the correct filter for your application.

Q6: Is the AMSOIL Universal Single-Remote Bypass System compatible with diesel engines and emissions systems?

Yes, the AMSOIL Universal Single-Remote Bypass System (BMK21) is compatible with diesel engines and is widely used in heavy-duty on-road and off-road diesel applications. It connects to the engine through a pressurized oil port and works alongside the existing full-flow filter. Verified buyers have successfully installed it on diesel trucks including the 6.7L Powerstroke and other diesel equipment, reporting benefits such as cleaner oil, extended oil change intervals, and increased oil capacity that aids engine cooling.

Available Product Codes

Product Code	Package Size	Unit of Measure
BMK21-EA	1 System	Each

ORDER ONLINE