

# TECH TIPS

## FULL-FLOW AND BY-PASS OIL FILTERS

### Understand Various Types Of Oil Filters.

What is the difference between a full-flow oil filter and a by-pass oil filter?

A **full-flow oil filter** is the type of oil filter that is standard on most of the vehicles that we drive every day. On your vehicle, it is most likely a full-flow design.

The oil that goes through this filter goes on to lubricate the engine. This filter removes the larger particles of contaminant from the oil that may be harmful to the engine.

A **by-pass oil filter** is not quite as common. This type of filter may be found on older applications, or used with a full-flow filter on some engines today.

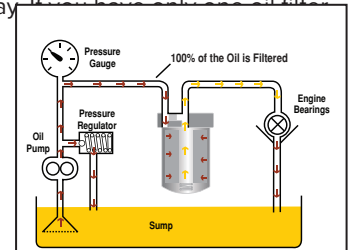
The by-pass filter receives anywhere from 10 to 20 percent of the oil going to the engine.

The media used in this filter is very efficient and is designed to remove the smallest particles of contaminant. Oil that has gone through a by-pass filter typically gets returned to the sump.

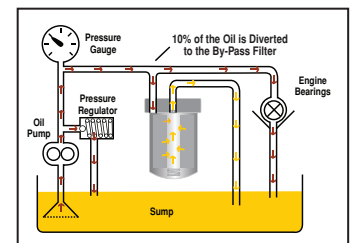
Using a full-flow oil filter along with a by-pass oil filter will typically allow for longer oil change intervals.

This is due to the fact that cleaner oil is being introduced to the full-flow oil filter as the by-pass filter removes the smallest contaminants. As a result, the full-flow filter does not plug with contaminant as quickly as it would without the by-pass filter.

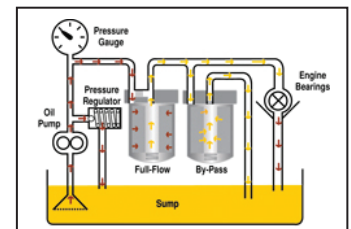
Dual-flow filters are designed with both full-flow and by-pass oil filter within the same canister.



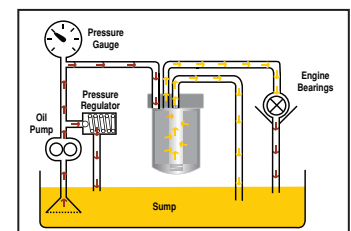
Full-Flow



By-Pass



Full-Flow & By-Pass



Dual-Flow

