Keeping Your Engine Clean & Dry ...and Lasting Longer

Diesel Fuel Filtration at a Glance

- Diesel engines operate best when the fuel is free of dirt and water.
- It’s critical that all dirt and water be removed as they can clog or damage the injectors.
- Dirty or contaminated fuel can reduce fuel efficiency, cause leaking injectors, and damage the engine.

Three Keys to Diesel Fuel Filtration

- For a diesel engine to run long and dependably, it depends on an efficient fuel filter
  - The fuel filter must be Efficient, capturing contaminants
  - It must have adequate Capacity to store contaminants until the next maintenance interval
  - And it can’t be Too Efficient as too many small particles can clog the filter leading to fuel starvation
  - Ford diesel fuel filters are designed to operate within a precise performance band

The Motorcraft® Advantage – Designed to Last

- The only fuel filter recommended by Ford engineers for the 6.7L Diesel engine
- They are designed to work within a very specific, carefully calibrated range
- Only Motorcraft diesel fuel filters are designed to operate efficiently within this narrow band
- High capacity elements maintain performance throughout filter life
- Designed for long life and subjected to harsh durability testing that includes:
  - External corrosion and vibration resistance
  - Temperature extremes thermal cycling
  - Automotive fluids compatibility

Efficient

- Filter Cartridge and Fuel/Water Separator elements capture 98.9% of particles larger than 5.1 microns
- Separator captures 95% of water from fuel

Low maintenance

- Large, 200ml capacity water reservoir
- No-tools-required drain valve
- Separator canister is easily serviceable

Limited labor costs. See seller for warranty details.
MOTORCRAFT®
DIESEL FUEL FILTERS VS. THE AFTERMARKET

Tested for Efficiency, Capacity and Water Separation

- We’ve proven how Motorcraft® Diesel Fuel Filters far outperform the competition.
- We tested Motorcraft® filters head-to-head against the major aftermarket competitors at a well-respected independent testing lab*.

Two Critical Tests

- The fuel filters were tested for Efficiency, Capacity, and Water Separation.
- Failure in any of these areas can lead to very expensive engine or injector repairs.

Carefully Calibrated Range

- 6.7L diesel fuel filters must perform within a carefully calibrated range.
- Under-performing filters allow too many particles to pass, leading to eventual fuel pump failure, clogged injectors, or even a failed engine.
- Over-performing filters - that capture too many small particles - can lead to a prematurely clogged filter especially under cold conditions if the fuel is waxy. This can restrict fuel flow needed for cooling and lubrication of the fuel injection system.
- Only Motorcraft diesel fuel filters- have the perfect balance – for the entire maintenance interval.

Test #1 -
ISO Multi-Pass Test for Efficiency and Capacity

- Measures ability of the filter to capture and store debris
- One competing filter collapsed and fell apart during the test
- One aftermarket filter was excessively efficient – capturing too many 4 and 5 micron particles – that could result in the filter plugging with waxed fuel (A cold-weather start-up condition)
- The Motorcraft diesel fuel filter collected the right amount of debris and had the largest capacity
- It performed within the desired range for the best overall engine performance. This means:
  - It didn’t let debris through it should have captured and it didn’t capture too much and become clogged
  - It had enough capacity to last until the next maintenance interval
- Water separation according to ISO 16332, 60 micron water droplet size, fuel interfacial tension (IFT) 13+/-3 capacity according to ISO 19438, 30 grams

Test #2 -
Water Separation Test

- Moisture in the fuel can lead to corrosion that can potentially damage injector seals and other engine components
- The competitors' fuel filters removed significantly less water
- The Motorcraft filter removed nearly all of the water, leaving behind crystal clear diesel fuel
- Motorcraft had the best and most consistent water separation efficiency

Test #3 -
New Filter Media, Cleanliness Test

- Measures debris on parts and filter surfaces from new filters
- New filters are flushed to capture and inspect any particulate on the clean (effluent) side of the filter media. This particulate is on the effluent (clean) side of the filter, and therefore would reach the fuel system when running
- The goal is to prevent wear and failure of systems from manufacturing debris in the system before leaving the plant
- Debris contained in the filters can damage the High Pressure Pump and Injectors
- Motorcraft diesel filters performed well in particle size and count for every filter tested, protecting the customers investment
- Motorcraft diesel filters was able to control the amount of loose fibers, exceeding cleanliness expectations
- 3 aftermarket filter brands had excessive particle size and count well above the High Pressure Pumps allowable limit
- * One competing filter had excessive particle size with a count exceeding 6 times the allowable limit

The Bottom Line

- Poorly performing diesel fuel filters can damage your engine and lead to costly repairs
- Rigorous independent tests demonstrate Motorcraft's superior performance

© 2016 Ford Motor Company

Motorcraft® is a registered trademark of Ford Motor Company