

Want To Extend The Life Of Your Injectors?

6.0L Power Stroke Fuel Filter Maintenance

Have you ever considered how important the maintenance of your Power Stroke diesel engine is to the long term performance and reliability of your Ford Super Duty truck? The cleanliness of the fuel and oil used in today's high speed diesel engines is important to their longevity. Given modern emission requirements, engine companies manufacture engine components that are more highly sophisticated and require greater attention to maintenance.

If the vehicle is being used in "Normal Service" the oil and oil filter should be changed every 7,500 miles (12,000km). The recommend fuel filter change interval is 15,000 (24,000 km). If the vehicle is being used in "Severe Operating Conditions", the oil and oil filter should be changed every 5,000 miles (8,000 km) or 200 hours of engine operation whichever comes first. Under "Severe Operating Conditions", the fuel filters should be changed every other oil change, 10,000 miles (16,000 km) or 400 hours of engine operation whichever comes first.

Examples of "Severe Operating Conditions" are listed below:

- Towing a trailer or using a camper or car-top carrier
- Extensive Idling and /or low-speed driving for long distances as in heavy commercial use such as delivery, taxi, patrol, or livery
- Operating in dusty conditions such as unpaved or dusty roads
- Off-road operation
- Short trip in cold operating conditions
- Use of BioDiesel, up to and including 5% BioDiesel (B5)

The fuel filters in Figure A represent the condition of the filters after an extended change interval. The fuel filters in Figure B are from a vehicle that has been properly maintained.



Figure A

Figure B

An owner's failure to properly maintain the engine can cause the fuel filter to become contaminated with either debris or asphaltenes. Asphaltenes are found in diesel fuel as a result of the oil refining process. They have a tar like consistency that can over time plug the fuel filter media. The high restriction in the fuel filters will cause decreased fuel flow and a loss of fuel pressure which can ultimately cause damage to the fuel injectors. The 6.0L Power Stroke is equipped with two fuel filter elements. The primary fuel filter is located inside of the left hand frame rail, below the driver's side floorboard, with the fuel pump. This element will collect particles larger than 10 microns. The secondary fuel filter is located on the engine next to the fuel oil filter housing and is designed to capture particles larger than 4 microns. It is very important that both primary and secondary fuel filters are replaced at the same time. It is also important that the fuel filter cap o-rings are replaced at this time.

Like nearly every other vehicle on the road with an internal combustion engine, the 6.0L needs routine maintenance. Following the recommended maintenance guidelines can reduce the concerns often associated with poor maintenance practices and keep it running well for many years.