



PLEASE READ:
Important Information
Regarding the Operation
of the Diesel Engine

6.4L POWER STROKE®

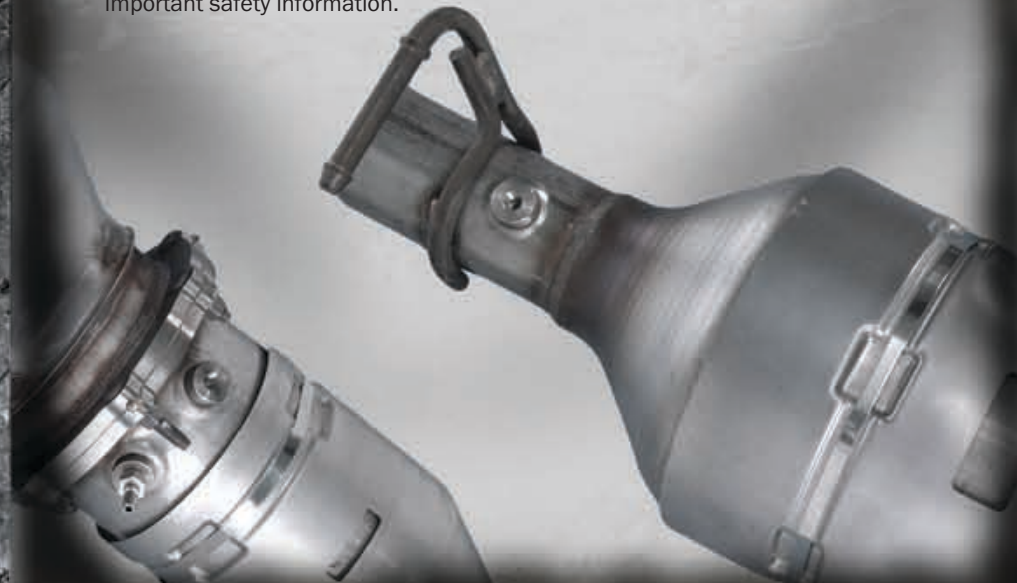
DIESEL ENGINE



INTRODUCTION TO THE POWER STROKE® ENGINE

Congratulations on selecting the new Super Duty with one of the most advanced pieces of automotive technology – the new 6.4L Power Stroke® diesel engine. The 6.4L Power Stroke® delivers all the horsepower and torque you will need along with new features such as a Diesel Particulate Filter (DPF), a two-stage turbocharger, and an enhanced Exhaust Gas Recirculation (EGR) system to meet strict new emissions standards.

All of this information is located in your vehicle Owner's Guide. Please see your Owner's Guide and Diesel Supplement for further information including important safety information.



DIESEL PARTICULATE FILTER (DPF) AND REGENERATION

The diesel particulate filter (DPF), an inline filter in the exhaust system, reduces carbon emissions by trapping exhaust particles before they reach the tailpipe. The DPF looks similar to a traditional exhaust catalyst, except larger, and is part of the exhaust system under the vehicle. Once the DPF is full of these particles, the engine control module will command the exhaust system to clean the DPF through a process called regeneration.

Regeneration requires the engine computer to raise the exhaust temperature to eliminate the particles. During cleaning, the particles are converted to harmless gasses, and the DPF will then be clean and ready to continue trapping exhaust particles. Similar to any vehicle, Ford recommends that you do not operate the vehicle in a closed garage or other enclosed area during regeneration to avoid exhaust fumes, which may be toxic. The regeneration process operates more efficiently when the vehicle is safely operated at least 30 mph (48 km/h) with a steady pedal for approximately 20 minutes to complete the process.

The frequency and duration of regeneration will fluctuate as both are determined by how you drive your vehicle, outside air temperature, and altitude. For most driving, regeneration frequency will vary from 100 - 668 miles (161 - 1075 km) between occurrences and each occurrence will last from 10 - 40 minutes. The duration of regeneration is usually reduced if a constant speed above 30 mph (48 km/h) is maintained.

When the engine control module detects that the DPF is nearly full of particulates and that the vehicle is not being operated in a manner to allow effective automatic cleaning, the message center (located in the instrument cluster) will display several messages guiding the vehicle operator to drive to clean the DPF. If the vehicle is operated in a manner to allow effective automatic cleaning, the message center will display "Cleaning Exhaust Filter", which is the normal regeneration process.

Once the "Drive to Clean Exhaust System" message is displayed, operator attention is required. Conditions such as idling can be

MESSAGES DISPLAYED WITH EXTENDED IDLE OPERATION




DRIVE TO CLEAN
EXHAUST FILTER

DRIVE TO CLEAN EXHAUST FILTER (DIESEL ENGINE ONLY)

Displayed when the engine control module detects the Diesel particulate filter (DPF) is full of particulates and that the vehicle is not being operated in a manner to allow automatic cleaning. The vehicle operator has to drive the vehicle above 30 mph (48 km/h) for at least 20 minutes to clean the DPF. This will continue to be displayed until an adequate drive cycle is completed. This message is NORMAL.

NOTE: Power Take-Off (PTO) and/or Stationary Elevated Idle (SEIC) must be disabled in order to initiate Diesel Particulate Filter (DPF) cleaning.



CLEANING
EXHAUST FILTER

CLEANING EXHAUST FILTER (DIESEL ENGINE ONLY)

Displays continuously when the vehicle has entered the cleaning mode normally or when cleaning the filter after a DRIVE TO CLEAN EXHAUST SYSTEM message was previously displayed. When this message is displayed various engine actions will raise the exhaust temperature in the DPF to clean the exhaust filter. After the exhaust filter is cleaned, the exhaust temperature will fall back to normal levels. This message is NORMAL.


WARNING: When the CLEANING EXHAUST FILTER message appears in the message center do not park near flammable materials, vapors and structures until filter cleaning is complete.


EXHAUST FILTER
DRIVE COMPLETE


EXHAUST FILTER DRIVE COMPLETE (DIESEL ENGINE ONLY)


Displayed when the vehicle has completed the adequate drive cycle to clean the DPF. This message is NORMAL.

WARNING: Do not park, idle, or drive your vehicle in dry grass or other dry ground cover. The emission system heats up the engine compartment and exhaust system, which can start a fire.

tolerated for up to four hours, once this message is displayed. If this message is ignored, your vehicle is being operated in a manner that will continue to fill the DPF. As a result, the DPF may become full of particles. If this occurs, the "reduced engine power" light  will illuminate and engine power will be limited. Your message center will also display "Reduced Engine Power". The engine control module will continue to

attempt to clean the filter. If the filter cannot be cleaned, the "service engine soon" light  will be illuminated and engine power will be further limited. Dealer service will then be required to restore your vehicle to full power operation.

If the DPF needs to be serviced or replaced, the "service engine soon" light  and/or "reduced engine

power” light  will illuminate in the instrument cluster. Take your vehicle to your authorized Ford dealer for service.

If the vehicle is brought to an idle during the regeneration process, the operator may notice an increase in engine idle

speed and engine tone. This is normal and due to the DPF being cleaned. After about five minutes of continuous idle, the regeneration process will be discontinued and there may be a noticeable change in engine sound.

HIGH ENGINE IDLE CONDITIONS

You may experience several conditions in which the engine idle speed will be elevated above the base operating range. Conditions such as low battery voltage, PTO operation and cold engine warm-up will elevate the engine idle speed.

All of these conditions noted above are NORMAL and do not require the vehicle to be taken to the dealership for diagnostic testing or service.

OPERATING YOUR POWER STROKE® ENGINE

ULTRA-LOW SULFUR HIGHWAY DIESEL FUEL (15 ppm Sulfur Maximum)

Required for use in all model year 2007 and later highway diesel vehicles and engines

Recommended for use in all diesel vehicles and engines

Ultra-Low Sulfur Diesel Fuel (ULSD) – Your Power Stroke® requires ultra low sulfur diesel fuel (15 ppm maximum). Do not use any other fuels.

Do NOT use Low Sulfur Diesel Fuel (500 ppm maximum) or non-highway diesel fuel (agricultural diesel) higher than 500 ppm.

LOW SULFUR HIGHWAY DIESEL FUEL (500 ppm Sulfur Maximum)

WARNING

Federal law *prohibits* use in model year 2007 and later highway vehicles and engines.

Its use may damage these vehicles and engines.

These higher sulfur fuels will lead to the malfunction of emissions-related components and significant damage to the engine may occur.

The use of biodiesel is acceptable as long as the rating does not exceed 5% (B5). Any percentage of biodiesel requires you to maintain your vehicle using the Severe Duty maintenance schedule (e.g., oil change every 5,000 miles).

Use the recommended CJ-4 engine oil in your 6.4L Power Stroke® engine. This engine oil has been designed to operate properly with the new emissions standards.

If your vehicle is operated at high speeds while fully loaded, let the engine idle three to five minutes before shutting it off. This will allow the turbochargers to cool sufficiently and prevent the engine from overheating.

NON-HIGHWAY DIESEL FUEL (May Exceed 500 ppm Sulfur)

WARNING

Federal law *prohibits* use in highway vehicles or engines.

Its use may damage these vehicles and engines.

A winter grille cover is now available as a Production option for Canadian customers and select cold weather U.S. states. The grille cover is also available at authorized Ford dealers for customers to purchase. The cover can be installed by the customer when heavy snow conditions exist. It must be removed at temperatures above 50°F (10°C) or above 32°F (0°C) when towing a trailer.

Using the engine block heater during cold weather is very important to ensure proper starting of the vehicle and adequate lubrication during start-up. This will prevent cold weather start-up engine damage. A block heater must be used when temperatures are below -10°F (-23°C.) For conditions when the coolant temperature is below -10°F (-23°C), the message center will display a 30 second countdown timer. During this time, the engine will be limited to idle for a period of 30 seconds from engine start before normal operation can be continued. After this time has elapsed, a message “OK to Drive” will be displayed for five seconds. These messages are NORMAL.



IMPROVE YOUR FUEL ECONOMY

DRIVE SENSIBLY

Aggressive driving (speeding, rapid acceleration, and braking) wastes fuel. It can lower your fuel mileage by 33 percent at highway speeds and by 5 percent around town. When accelerating, limit boost to 10 psi and try to stay below 2000 rpm for maximum fuel economy.

Fuel Economy Benefit: 5-33%

KEEP TIRES PROPERLY INFLATED

You can improve your fuel mileage by around 3.3 percent by keeping your tires inflated to the proper pressure. Under-inflated tires can lower fuel mileage by 0.4 percent for every 1 psi drop in pressure of all four tires. Properly inflated tires are safer and last longer. **Fuel Economy Benefit: Up to 3%**

USE SPEED CONTROL ON THE HIGHWAY

Using speed control on the highway helps you maintain a constant speed and, in most cases, will save fuel.

DON'T CARRY MORE THAN YOU NEED

Avoid keeping unnecessary items in your vehicle, especially heavy ones. An extra 100 pounds (45 kg) in your vehicle could reduce your mpg by up to 1 percent. **Fuel Economy Benefit: Up to 1% per 100 lbs (45 kg)**

OBSERVE THE SPEED LIMIT

Fuel mileage usually decreases rapidly at speeds above 60 mph (96 km/h). In highway driving, more than 50 percent of the energy required to move your vehicle down the road goes to overcoming aerodynamic drag (pushing air out of the way).

Fuel Economy Benefit: 7-23%

AVOID EXCESSIVE IDLING (LONGER THAN 3 TO 5 MINUTES)

Idling gets 0 miles per gallon. Every hour of idling consumes as much fuel as 30-50 miles (48 - 80 km) of driving.

MAKE SURE YOUR VEHICLE IS PROPERLY MAINTAINED

Fixing a vehicle that is noticeably out of tune or has failed an emissions test can improve its fuel mileage by an average of 4 percent. Fixing a serious maintenance problem can improve your mileage by as much as 40 percent. Replacing a clogged air filter can improve your truck's fuel mileage by as much as 10 percent. Not only will replacing a dirty air filter save fuel, it will protect your engine.

Fuel Economy Benefit: 4-40%

USE RECOMMENDED GRADE OF MOTOR OIL

You can improve your fuel mileage by 1-2 percent by using the manufacturer's recommended grade of motor oil. For example, using 10W-30 motor oil in an engine designed to use 5W-30 can

lower your fuel mileage by 1-2 percent. Using 5W-30 in an engine designed for 5W-20 can lower your fuel mileage by 1-1.5 percent. Also, look for motor oil that says "Energy Conserving" on the API performance symbol to be sure it contains friction-reducing additives.

Fuel Economy Benefit: 1-2%

KEEP TAILGATE IN UP POSITION

Keeping the tailgate in the up position greatly reduces the aerodynamic drag and thus reduces the amount of energy required to move your truck down the road.

ADD TONNEAU COVER

Adding a tonneau cover further improves the truck's aerodynamic shape and also reduces the amount of energy required to move the vehicle down the road.

SERVICE MAINTENANCE INTERVALS

ENGINE OIL, OIL FILTER, FUEL FILTERS AND ENGINE COOLANT

It is important to maintain your vehicle to keep it running in peak condition. Engine oil and filter changes along with fuel filter (two fuel filters on diesel vehicles) and engine coolant inspection/replacement are common maintenance items that can be done to prolong the life of your engine. If you drive your vehicle in severe situations, more frequent service will be required on some items. Please refer to the scheduled maintenance information chapter of your Diesel Supplement for details.

ENGINE OIL AND FILTER MAINTENANCE INTERVALS

Under normal conditions, the engine oil and filter need to be changed at 10,000 miles (16,093 km) or 6 month intervals (whichever comes first). Under severe conditions, the intervals are sooner; 5,000 miles (8,046 km) or 3 months (whichever comes first). Refer to the scheduled maintenance information chapter of the Diesel Supplement for specific information on normal and severe conditions. Use the same engine oil and filter change intervals when using synthetic engine oil.

AIR FILTER

Your vehicle has an air filtration system with a restriction indicator gauge that will alert you when you need to change your filter. The gauge has a viewable indicator located underhood on the air filter assembly which should be inspected every oil change. A "Check Air Filter" message will also appear in the message center when the system restriction reaches its upper limit for proper operation.

Please refer to you Owner's Guide and Diesel Supplement for correct service interval requirements for engine oil and filter, engine-mounted and chassis-mounted fuel filters, air filter restriction gauge inspection, air filter replacement, supplemental coolant additive and coolant replacement intervals.

This Supplement is not intended to replace your vehicle Owner's Guide which contains more detailed information concerning the features of your vehicle, as well as important safety warnings designed to help reduce the risk of injury to you and your occupants. Please read your entire Owner's Guide carefully as you begin learning about your new vehicle and refer to the appropriate chapters when questions arise.

All information contained in this Supplement was accurate at the time of duplication. We reserve the right to change features, operation and/or functionality of any vehicle specification at any time. Your Ford dealer is the best source for the most current information. For detailed operating and safety information, please consult your Owner's Guide.



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August 2008 | First Printing | Litho in U.S.A.

9C3J 19A285 EA

