

INSTALLATION GUIDE



Oil & Coolant Filter Kit

2008 – 2010 Ford 6.4L Powerstroke





DISCLAIMER

- 1) By installing this product onto your vehicle, you assume all risk and liability associated with its use.

- 2) It is your responsibility to make sure your vehicle complies with all federal, state, and local emissions laws. Federal and many state and local laws prohibit the removal, modification or rendering inoperative of any part of the design affecting emissions or safety on motor vehicles used on a public street or highway. Violation may result in a fine of up to \$32,500 per vehicle (or possibly higher depending on changes in the law). All civil penalties and fines for removing your vehicle's emissions equipment are the sole responsibility of the end user.

- 3) Due to its high performance nature, this product may void vehicle manufacturer's warranty.

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- 5) Depending on where you live, restrictions may apply. Check all applicable laws before installing or using!

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6.4L Oil & Coolant Filtration Kit



PACKING LIST:

Part#	QTY.	Description
A	1	Coolant Return Line
B	1	Coolant Supply Line
C	1	Oil Supply Line
D	1	Oil Return Line
E	1	Coolant Filter Block
F	1	Coolant Filter
G	1	Bypass Oil Filter
H	1	Oil Filter Block
I	1	Filter Block Mounting Bracket
J	1	Oil Filter Cap
K	1	Oil Cap w/ Return Fitting
L	1	Thread Seal Tape
M	4	Zip Ties
N	4	Size 5 Hose Clamps
O	2	Size 10 Hose Clamps
P	2	Ball Valves
Q	1	90° Barbed Fitting
R	1	Straight Barbed Fitting
S	4	3/8" Lock Washers
T	4	3/8" Hex Head Bolts
U	4	90° Flare Fittings

Recommended Tools

- 18, 36mm Sockets
- 1/2, 9/16, 11/16, and 3/4" Open End Wrenches
- 8mm Nut Driver
- Large Adjustable Wrench
- Utility Knife

Read all instructions prior to install.

Note: Prior to installation, please compare the parts that you have received with the bill of materials provided on this page to assure that you have all the parts necessary for the installation.



CAUTION!!! Never work on a hot vehicle. Serious injury in the form of burns can result if the vehicle has been in use. Allow vehicle to cool prior to installation. Always wear eye protection when working on or under any vehicle.

Note: Installation of the Sinister Manufacturing Company Coolant Filtration System requires cutting of coolant lines, resulting in coolant loss. We suggest draining the coolant before you start.

Step 1: Using a 8mm socket or combination wrench, disconnect both of the batteries.

Note: If you are only installing the oil bypass filter skip to step 10. Please disregard any further coolant filter instructions.

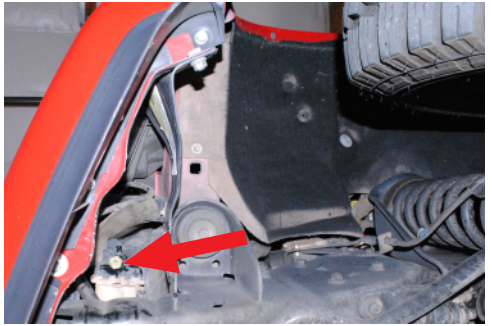


Image 1

Step 2: Remove the radiator cap and drain coolant by opening the valve on the bottom driver side of the radiator. (Image 1)

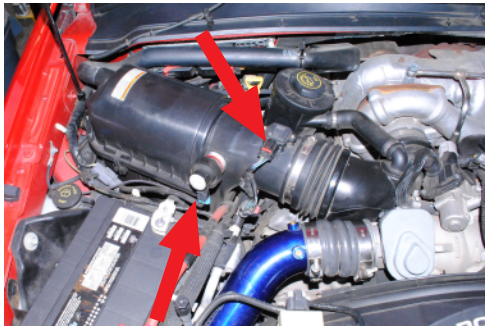


Image 2

Step 3: Disconnect the MAF sensor plug and the filter flow sensor plug. (Image 2)

Step 4: Using an 8mm nut driver, loosen the hose clamp on the intake tube. Remove the intake filter box by carefully pulling up and out of the vehicle. (Image 3)



Image 3

Step 5: Mark the filter side of the supply lines with some tape or marker to identify the lines under the vehicle. The coolant supply line has the blue tee installed on it. The oil supply line is the longer of the two stainless braided lines. (Image 4)

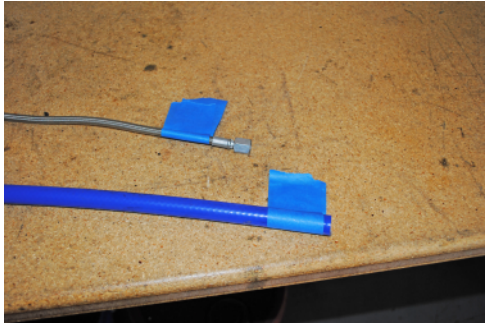


Image 4

Step 6: Cut the lower heater hose in the middle of the two bends. (Image 5)



Image 5

Step 7: Slide on the two size 10 hose clamps, and install the blue tee with the hose pointing downward. You should have already marked the other end of this line to identify it under the vehicle. (Image 6)

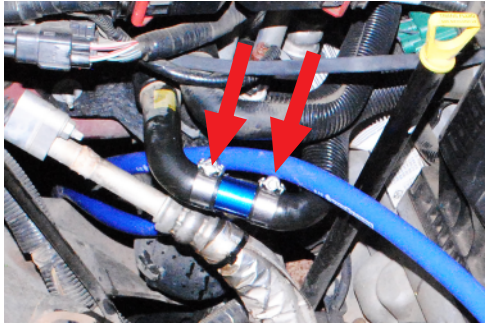


Image 6

Step 8: Cut the radiator return line on the passenger side. Slide on two of the smaller hose clamps and install the return line with the 3/8 barbed tee. (Image 7)



Image 7

Step 9: Route the lines down over the passenger fender keeping them away from any hot or moving parts. We recommend going down around the outside of the frame.

Step 10: Wrap any fittings with bare threads with thread sealer tape. Any of the flare fittings with the tapered end do not need thread sealer tape.

Step 11: Replace the factory oil fill cap with the Sinister Diesel oil fill cap. (Image 8 & 9)

Step 12: Using a 36mm socket or large adjustable wrench, remove the factory oil filter cap. Disconnect the cap from the filter leaving the filter on the motor. Check to make sure the O-ring seal is in place on the Sinister Diesel Oil Filter Cap. Install the Sinister Diesel Oil Filter Cap. (Image 8 & 9)

Step 13: Install the 90° flare fittings onto the oil filter cap and the oil fill cap. (Image 9)

Step 14: Connect the shorter stainless braided line to the oil fill cap. (Image 10)

Step 15: Connect the longer stainless braided line to the oil filter cap. You should tape the other end of this line to identify it underneath the vehicle. This is the oil supply line. (Image 11)



Image 8



Image 9



Image 10



Image 11

Step 16: Route both of the stainless braided lines down over the passenger fender well making sure that they do not come in contact with any wires or lines. The stainless braided lines are highly abrasive and can wear through other components.



Image 12

Step 17: Using the 9/16" socket for the 3/8" bolts and lock washers, assemble the filter blocks to the mounting bracket. The smaller coolant filter block will be installed on the left side of the bracket. The larger oil filter block will be installed on the right side of the bracket. (Image 12)



Image 13

Step 18: Apply thread seal tape to any bare threaded fittings.

Step 19: Install the ball valves onto the coolant filter block. Orientate the valves so that they are facing down for easy access to them on the vehicle. Any threads that have orange sealant on them do not need thread seal tape. (Image 13)



Step 20: Install the 90° 3/8" barbed brass fitting to the top of the coolant filter. Position the fitting so that it will point toward the front of the vehicle. Looking at the filter block from the top, the straight 3/8" barbed brass fitting will be installed on the left side. Both of the barbed fittings should point toward the front of the vehicle when installed properly. (Image 14)



Image 14

Step 21: Install the two 90° flare fittings onto the oil filter block. Angle the fittings slightly downward so that the lines clear the other fittings on the filter block assembly. (Image 15)



Image 15

Step 22: Using an 18mm deep socket, remove the two nuts on the frame under the passenger door. Install the filter block assembly to the frame and reinstall the nuts. (Image 16 & 17)



Image 16



Image 17

Step 23: Slide a small hose clamp over each of the coolant lines. Connect the tapped coolant supply line to the top of the coolant filter block. Cut any excess hose off before connecting the line. (Image 18)

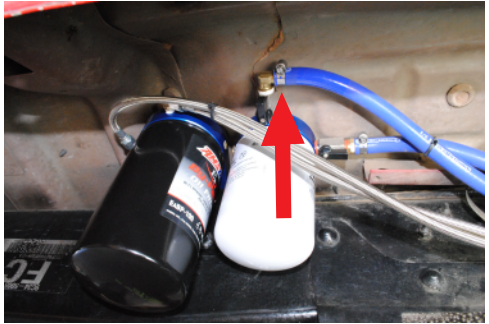


Image 18

Step 24: Connect the coolant return line to the side of the coolant filter block. (Image 19)

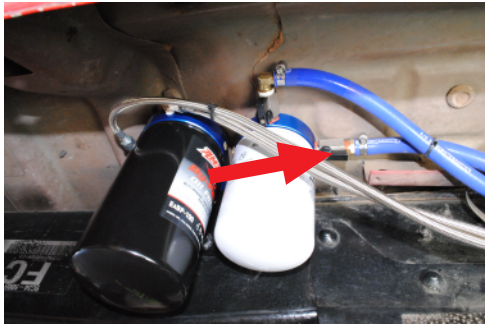


Image 19

Step 25: Connect tapped longer stainless braided line to the back side of the oil filter. This is the supply line that is connected to the Sinister Diesel Oil Filter Cap. (Image 20)



Image 20

Step 26: The return line will be connected from the oil fill cap to the top of the oil filter block. (Image 21)



Image 21

Step 27: Fill the oil filter with one full quart of motor oil. Lubricate the seal with a light coat of motor oil and install the oil filter onto the Sinister Diesel Oil Filter Block.

Step 28: Lightly coat the seal on the coolant filter with a petroleum based lubricant. Install the coolant filter on to the coolant filter block. Make sure the ball valves are in the open position. The handle of the ball valves should be parallel in line with the connections. (Image 22)

Step 29: Using the supplied zip ties, secure the lines in place. Make sure they are not coming in contact with any moving parts or the exhaust manifolds.

Step 30: Reinstall the intake filter box, tighten the hose clamp and connect the sensor plugs. (Image 23)

Step 31: Refill the coolant to factory specifications.

Step 32: Reconnect the batteries.

Step 33: Run the engine to cycle the coolant and oil for a minute or two and check the coolant and oil levels. Top off coolant and oil as necessary, and check levels after your first test drive and regularly after that.

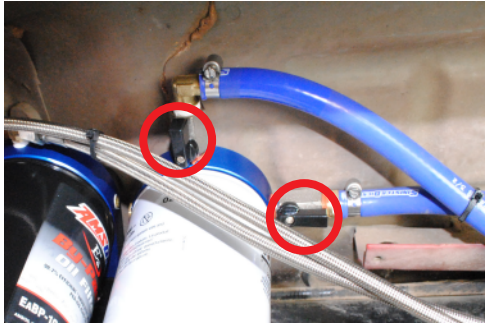


Image 22

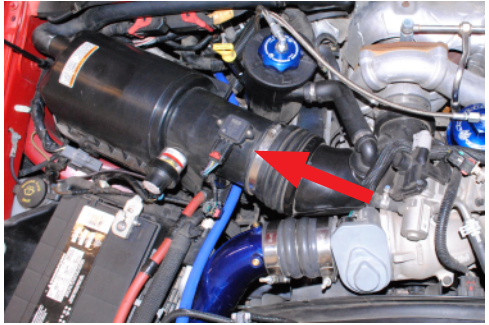


Image 23

Optional Protective Skid Plate
Using an 18mm socket, remove the two cross member nuts on the bottom of the frame. Hold the skid plate in place and reinstall the nuts. (Image 24)



Image 24

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