



DODGE 5.9/6.7 OIL BYPASS FILTRATION SYSTEM INSTALLATION INSTRUCTIONS

A: Getting Started:

1. Check contents of package for missing/damaged items.
2. Source the recommended tools for installation.

Tool's you'll need:

9/16" Wrench, 1/2" Wrench, 15mm Wrench, 9/16" socket, 1/2" socket, 13mm socket, 15mm Socket, 3/8 Ratchet, 3/8 x 6" Socket Extension

3. We HIGHLY recommend draining the entire engine oil at this point following the factory specified procedures.

Installation pictures are of 5.9. 6.7 installation is similar.

B: Installing Bypass Filter Mount and Head:

MOUNT REMOTE FILTER

1. Locate the mounting point on the forward surface of the cylinder head just in front of the air intake horn.



2. Using the 13mm socket, 3/8 ratchet and socket extension, remove the factory retaining wire clamp. You will reuse this bolt and clamp later.
 3. Install the remote filter mount utilizing the factory threaded holes in the cylinder head. Reinstall the factory retaining wire clamp in its original position.
- 6.7 uses spacers to clear egr tube.



C: Oil Return Cap

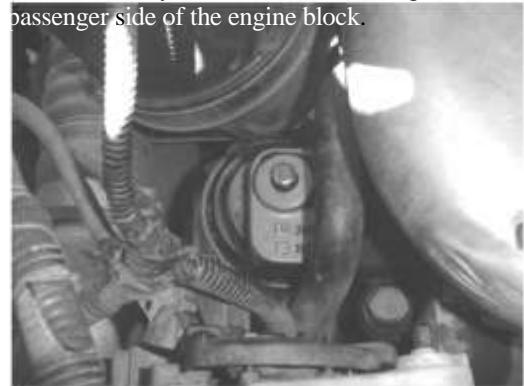
1. Remove factory oil fill cap and replace with the supplied oil fill/return cap.



D: Installing Supply Lines:

SUPPLY LINE

1. Locate the factory full flow filter housing located on the passenger side of the engine block.



2. Using the 1/2" socket, 3/8 ratchet and socket extension, remove the factory oil plug located on the top of the full flow oil filter housing.
3. Install the supplied hose adapter fitting into the factory full flow oil filter housing



E: Installation of oil supply line

1. Using the 9/16 wrench, install the 42" stainless steel braided oil supply line on to the hose adapter fitting installed on to the full flow oil filter housing.
NOTE: DO NOT OVERTIGHTEN the 4an hose end fittings. 14.5 ft/lb torque is the maximum recommended. Over tightening the hose ends will damage the 37 degree seats causing the fitting to fail and leak.



2. Using the 9/16 wrench install the other end of the 42" stainless steel braided supply line to the "in" side of the remote bypass filter housing. Route the line away from exhaust heat sources. We recommend routing and securing the line with upper radiator hose.



F: Installation of oil return line

1. Using the 9/16 wrench, attach the end of the 24" stainless steel braided oil return line to the "out" side of the remote bypass oil filter housing.



2. Using the 9/16 wrench, attach the other end of the 24" stainless steel braided oil return line to the oil return cap.



G: Initial start-up procedures:

1. If oil was drained before installation process, **VERIFY OIL HAS BEEN ADDED TO ENGINE.**
The bypass filtration kit will require an addition of 1 quart of oil to be added for proper fluid levels.
2. Check that all fittings, brackets and hoses are securely attached and that the hoses are routed properly.
3. Set vehicle parking brake. With transmission in park/neutral, start the engine. After allowing a couple of seconds to pass, verify that the engine has proper running oil pressure.
4. Check engine compartment for possible oil/fuel leaks or interfering lines. If leaks are discovered, stop engine immediately and repair leaks before restarting vehicle.
5. After engine reaches operating temperature, shut off vehicle and check oil fluid level following the manufactures procedure. Add additional oil if necessary.
6. Record vehicle mileage and installation date for future reference.

H: Service and Oil Sampling Recommendations:

NUC Motorsports recommends changing engine oil no later than 15,000 miles using high quality conventional motor oil. Utilizing oil sampling through an independent oil analyst company and by using high quality synthetic motor oil, NUC Motorsports recommends oil sampling after the first 15,000 miles and every 5000 miles thereafter; adhering to the recommendations of the oil analyst company when to change the motor oil. The bypass oil filter should be changed every other oil service interval up to 60,000 miles. NUC Motorsports recommends to change OEM full flow filter at manufactures recommend service intervals.

We recommend Blackstone Laboratories for oil analyst. Contact Blackstone at <http://www.blackstone-labs.com/> or by calling them at 260/744-2380 (8-5 EST)

