

# FORD 6.4L POWERSTROKE COOLANT FILTER KIT, 2008–2010

## PARTS LIST AND INSTALLATION GUIDE

### PARTS LIST

- 1PC** APPLICATION-SPECIFIC MOUNTING BRACKET
- 1PC** SILVER, ANODIZED 6061 ALUMINUM FILTER MOUNT
- 1PC** COOLANT FILTER
- 2PC** SILICONE HOSES
- 2PC** BRASS BALL VALVES
- 8PC** WORM-GEAR CLAMPS
- 2PC** PLASTIC BARBED TEE FITTINGS
- MOUNTING HARDWARE

### TOOLS NEEDED

- |                    |                      |
|--------------------|----------------------|
| 8MM SOCKET         | FLATHEAD SCREWDRIVER |
| 1/4" DRIVE RATCHET | NEEDLENOSE PLIERS    |
| 5MM ALLEN KEY      | 2 VICE GRIPS         |
| 13MM SOCKET        | HOSE CUTTER          |
| 3/8" DRIVE RATCHET | TEFLON™ TAPE         |
| 20MM WRENCH        | COOLANT              |

**INSTALLATION TIME:** 45 MINUTES

**DIFFICULTY LEVEL:** 2/5

### DISCLAIMER

- Raise vehicle only on jack stands or on a vehicle lift.
- Allow vehicle to cool completely prior to attempting installation.
- Do not run the engine or drive the vehicle while overheating, as serious damage can occur.
- Please dispose of any liquids properly.
- Mishimoto is not responsible for any vehicle damage or personal injury due to installation errors, misuse, or removal of Mishimoto products.
- Mishimoto suggests that a trained professional install all Mishimoto products.

### INSTALLATION INSTRUCTIONS

1. Wrap the threads for both ball valves with Teflon™ tape in the direction that the valve will thread into the housing.



2. Thread the ball valves into the housing and tighten until they are seated properly. Do not overtorque the valves. (2x ball valves, 20mm wrench)



3. Attach the mounting bracket to the housing. (3x 5mm Allen bolts)



CONTINUED ON FOLLOWING PAGE →

01

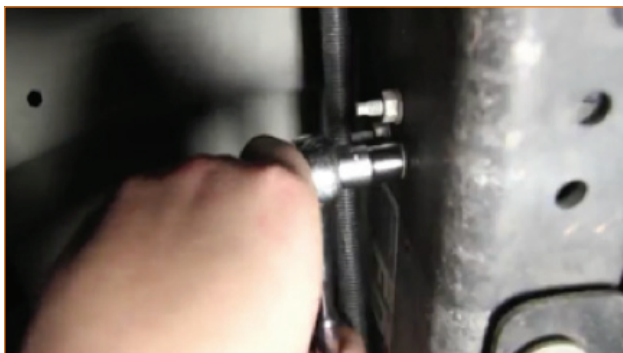
# FORD 6.4L POWERSTROKE COOLANT FILTER KIT, 2008–2010

## INSTALLATION GUIDE

4. Attach the WIX filter to the housing. Do not overtighten the filter.



5. Remove the two 13mm nuts underneath your truck on the passenger side of the frame.



6. Remove the two 13mm bolts that connect the shield on the bottom of the frame rail.



7. Slide the mounting bracket between the frame rail and the shield.



8. Reinstall and tighten the two 13mm bolts you previously removed.

9. Tighten the two 13mm nuts on the upper side of the frame rail.



10. Attach a worm-gear clamp to the shorter Mishimoto silicone hose. Install this hose on the inlet marked "IN" on the filter housing.



CONTINUED ON FOLLOWING PAGE →

# 02

# FORD 6.4L POWERSTROKE COOLANT FILTER KIT, 2008–2010

## INSTALLATION GUIDE

11. Attach a worm-gear clamp to the longer Mishimoto silicone hose, and install this hose on the outlet marked "OUT" on the filter housing.



12. Route the Mishimoto hoses toward the front of your truck and up through the inner wheel well on the passenger side.



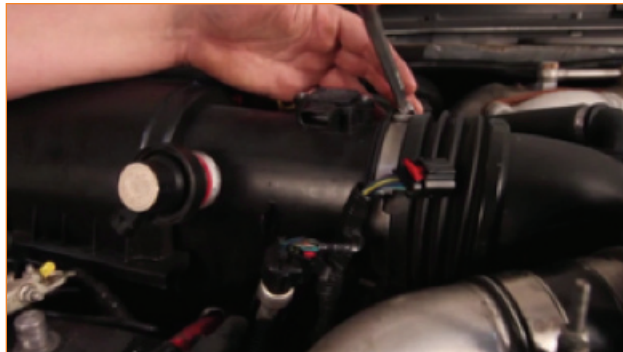
13. Detach the negative cables from both batteries. (8mm socket)

14. Disconnect the mass air flow (MAF) and filter flow sensors.

15. Remove the tree clip holding the electrical lines to the airbox.



16. Loosen the worm-gear clamp. (flathead screwdriver)



17. Remove the airbox.



18. Now you should be able to see the Mishimoto hoses you routed earlier (step 12). Reach down and pull them up.



CONTINUED ON FOLLOWING PAGE →

# 03



# FORD 6.4L POWERSTROKE COOLANT FILTER KIT, 2008–2010

## INSTALLATION GUIDE

**19.** Cut the factory lower heater line so that you are able to splice into it. (2x hose-clamp vice grips) If you are not using hose-clamp vice grips, we recommend draining a small amount of coolant from the radiator.



**20.** Attach a worm-gear clamp onto the shorter Mishimoto hose, connect the tee fitting, and tighten the worm-gear clamp. (flathead screwdriver)

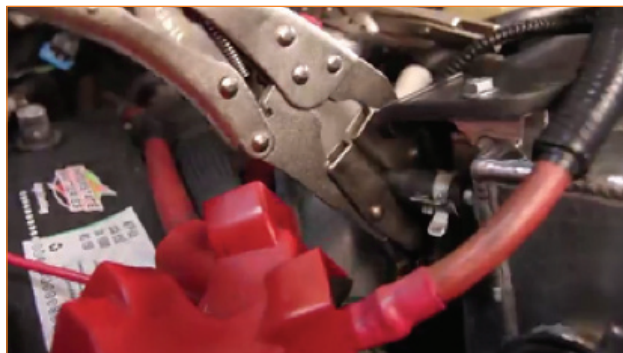


**21.** Install the tee fitting onto the factory lower heater hose you previously cut (step 19). Make sure the worm-gear clamps are already on the hose before installing the tee fitting. Tighten the worm-gear clamps. (flathead screwdriver)

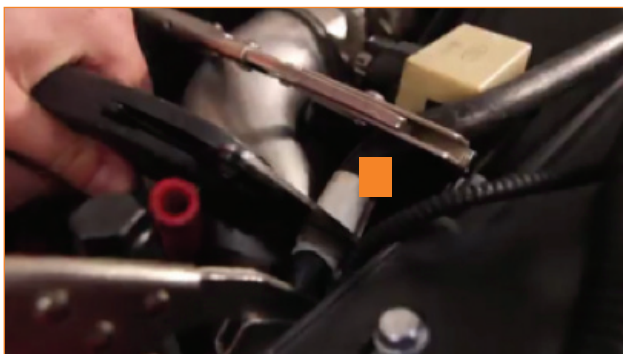


**22.** Route the longer Mishimoto hose toward the front of your truck.

**23.** Clamp down on the factory small coolant overflow line coming out of the radiator. (2x hose-clamp vice grips)



**24.** Cut the factory small coolant overflow line (hose cutters)



**25.** Attach a tee fitting to the Mishimoto hose. Make sure you have a worm-gear clamp already on the hose.



CONTINUED ON FOLLOWING PAGE →

# 04

# FORD 6.4L POWERSTROKE COOLANT FILTER KIT, 2008–2010

## INSTALLATION GUIDE

26. Insert the tee fitting into both ends of the small factory overflow hose you previously cut (step 13). Make sure you already have worm-gear clamps attached on either side of the line.



27. Tighten all worm-gear clamps. (flathead screwdriver)

28. Reinstall the airbox and tighten the worm-gear clamp.

29. Reconnect all electrical connections and the single tree clip.

30. Reconnect both negative battery terminals. (8mm socket)

31. Check the coolant reservoir and top off if needed.

32. Enjoy your new Ford 6.4L Powerstroke Coolant Filter Kit!

Mishimoto recommends changing the coolant filter after the first month, again after three months, and then every year after that, depending on driving conditions. Because each engine is cast differently, there will be different amounts of debris in each engine.