

# 2003-2007 FORD 6.0L POWERSTROKE ALUMINUM RADIATOR

## PARTS LIST AND INSTALLATION GUIDE

### PARTS LIST

1PC | MISHIMOTO ALUMINUM RADIATOR

### TOOLS NEEDED

PICK TOOL	RATCHET
1" WRENCH	RATCHET EXTENSION
13MM WRENCH	8MM SOCKET
LONG FLATHEAD SCREWDRIVER	10MM SOCKET
SHORT FLATHEAD SCREWDRIVER	11MM SOCKET
LINEMAN'S PLIERS	13MM SOCKET
FORD 1/2" QUICK-CONNECT TRANSMISSION LINE DISCONNECT TOOL	9/32" SOCKET
POP-CLIP PLIERS	PICK TOOL
	COOLANT
	COOLANT FUNNEL

### DISCLAIMER

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

### INSTALLATION INSTRUCTIONS

#### 01 | REMOVING THE FACTORY RADIATOR

1. Locate the drain plug on the base of the radiator and drain the coolant.



2. Remove the nine pop clips that hold the upper fan shroud to the grill and radiator support. Once the pop clips have been removed, the upper shroud can be detached.
3. Loosen the clamp and remove the coolant overflow hose from the radiator.
4. Loosen the clamp and remove the upper coolant hose from the radiator.



5. Remove the two 8mm bolts that secure the fan shroud to the radiator.
6. Remove the four 8mm bolts that secure the upper radiator stays to the radiator support. Detach the radiator stays from the vehicle.
7. Remove the three pop clips that secure the wiring harness to the upper radiator support.
8. Remove the air intake box and intake tube. Be sure to disconnect the mass airflow sensor.
9. Loosen the clamp and remove the lower coolant hose from the radiator.



10. Use the Ford transmission line disconnect tool to detach both transmission lines from the radiator. Have a drain pan ready to collect any transmission fluid loss.
11. Remove the two 8mm bolts that secure the intercooler to the upper radiator support.

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12. Remove the two 8mm bolts that secure the AC condenser brackets to the upper radiator support.

13. Remove the pop clips that secure the air-duct flaps to the side of the radiator support.



14. Remove the radiator support beam, which is secured in place with eight 13mm bolts.

15. Remove the upper radiator support beam. Slide the beam to one side and lift the opposite end upward to detach it from the lower radiator support. The hood latch cable will still be attached to this component, so place the beam carefully on the top of the engine and out of the way.

16. Loosen the clamps on both the hot- and cold-side intercooler boots.

17. Pull the intercooler away from the radiator, separating the boots from the cooler. Once this is complete lift the intercooler up and remove it from the vehicle.

18. Lift upward on the radiator and remove it from the vehicle.



## 02 | PREPARING THE MISHIMOTO RADIATOR

1. Use a 1" wrench to remove the quick-disconnect transmission fittings from the factory radiator.

2. Wrap the threads of the transmission fittings with Teflon tape for a leak-free seal.

3. Install the factory transmission fittings into the Mishimoto radiator.

## 03 | INSTALLING THE MISHIMOTO RADIATOR

1. Place the Mishimoto radiator into position in the radiator support.

2. Reinstall the intercooler into the engine bay.

3. Reconnect the intercooler pipe couplers to the intercooler and tighten the clamps.

4. Reinstall the upper radiator support beam.



5. Loosely install the eight 13mm bolts for the upper radiator support beam until the beam is lined up with the factory location. Make sure the bolt heads line up with the paint marks from the factory installation. Once everything is lined up, fully tighten the upper radiator support bolts.

6. Reinstall the AC condenser brackets to the radiator support. The brackets are secured with two 8mm bolts.

7. Reinstall the pop clips that secure the rubber air-duct gaskets to the radiator support.

8. Reinstall the three pop clips securing the wire harness to the top of the radiator support.



9. Reinstall both upper radiator stays. Both are secured by two 8mm bolts.

10. Reinstall the two 8mm bolts that hold the intercooler to the radiator support.

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11. Reinstall the fan shroud on the radiator. It is held in place by two 8mm bolts.

12. Reinstall the coolant overflow hose on the Mishimoto radiator.

13. Reinstall the upper coolant hose on the radiator.



14. Reinstall the air box and intake hose.



15. Reconnect the mass airflow sensor.

16. Reinstall the upper radiator shroud, which is secured with eight pop clips.

17. Reconnect both transmission cooler lines to the radiator.



18. Reinstall the lower coolant hose to the radiator.

19. Refill the cooling system with a 50/50 mix of coolant and distilled water.



20. Start the vehicle and set the heat on high. Allow the vehicle to reach operating temperature so that any air from the cooling system will be purged. Be sure to inspect the cooling system for any leaks.



21. You have now successfully installed the Mishimoto Ford 6.0L Powerstroke Aluminum Radiator. Enjoy!