## 2003-2009 DODGE 5.9L/6.7L CUMMINS ALUMINUM RADIATOR

PARTS LIST AND INSTALLATION GUIDE

### **PARTS LIST**

1PC | MISHIMOTO ALUMINUM RADIATOR

#### **TOOLS NEEDED**

10MM SOCKET NEEDLENOSE PLIERS
11MM SOCKET LINEMANS PLIERS

13MM SOCKET FLATHEAD SCREWDRIVER

T30 TORX SOCKET PICK TOOL

1/4" DRIVE RATCHET COOLANT

1/4" DRIVE EXTENSION 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 OEM RADIATOR

- 1. Disconnect the negative terminal on both batteries.
- 2. Locate the drain plug on the base of the radiator and allow all coolant to drain from the radiator.
- 3. Disconnect the mass airflow sensor.
- **4.** Loosen the hose clamps on the intake pipe and remove the air box from the vehicle.
- **5.** Use a 10mm socket and ratchet to loosen the clamp and separate the boot that connects the hotside intercooler pipe to the intercooler.



- **6.** Use a 10mm wrench to loosen the clamp on the boot that connects the cold-side intercooler pipe to the intercooler.
- **7.** Remove the four 13mm bolts that secure the AC condenser to the intercooler.



- **8.** Remove the two T30 Torx bolts that secure the intercooler to the upper radiator support.
- **9.** Carefully move the AC condenser to the passenger side of the vehicle, away from the working area.
- 10. Lift upward and out to remove the intercooler from the vehicle.
- 11. Use lineman's pliers to loosen the clamps on the upper coolant hose. Once the clamps are moved to the center of the hose, the hose can be removed from the vehicle.
- 12. Disconnect the lower coolant hose from the radiator.
- **13.** Remove the two 13mm bolts that secure the transmission cooler to the front of the radiator.
- 14. Disconnect the coolant overflow hose from the radiator fill neck.



- 15. Remove the overflow line from the clips holding it in place on the radiator shroud.
- **16.** Remove the single 13mm bolt that secures the coolant reservoir. Once the bolt is removed, pull upward on the reservoir to remove it.
- 17. Disconnect the power steering cooler from the front of the radiator.

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INSTALLATION GUIDE

This cooler is secured with two 13mm bolts.

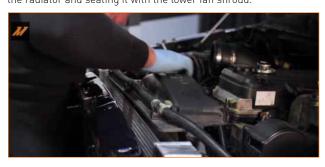
- **18.** Remove the 13mm bolt holding the fan shroud to the radiator.
- **19.** Remove the two 10mm bolts that hold the radiator to the radiator support.
- 20. Separate the transmission cooler from the front of the radiator.



- **21.** Remove the upper fan shroud. Lift upward on the shroud and push it toward the engine to unclip it from the lower shroud.
- 22. Unbolt the two 13mm bolts that secure the washer fluid tank.
- **23.** Unplug the two electrical connectors from the washer fluid tank and remove the tank from the vehicle.
- 24. Lift the radiator upward and remove it from the vehicle.

## 02 | INSTALLING THE MISHIMOTO ALUMINUM RADIATOR

- 1. Transfer the two upper mounting grommets from the factory radiator to the Mishimoto unit.
- 2. Transfer the lower mounting grommets from the factory radiator to the Mishimoto intercooler.
- 3. Install the Mishimoto radiator, making sure that the lower mounting pegs are oriented correctly so they can slide into place.
- **4.** Reinstall the upper radiator fan shroud by pulling it back toward the radiator and seating it with the lower fan shroud.



- **5.** Using two 13mm bolts, reinstall the transmission cooler to the front of the radiator.
- **6.** Using two 13mm bolts, reinstall the power steering cooler to the front of the radiator.
- ${\bf 7.}$  Reconnect the radiator to the upper radiator support using two 10mm bolts.



- **8.** Reinstall the washer fluid reservoir. Reconnect the two electrical connections and secure the tank in place with two 13mm bolts.
- **9.** Reinstall the coolant reservoir tank to its proper position on the radiator and secure it with one 13mm bolt.
- **10.** Reconnect the upper fan shroud to the radiator with one 13mm bolt.
- 11. Reconnect the coolant overflow hose to the fill neck on the Mishimoto radiator. Tighten the hose clamp securing this hose, and clip the hose back into position across the fan shroud.
- 12. Reconnect the lower coolant hose to the radiator and secure the clamp.
- 13. Reconnect the upper hose to the radiator and secure the clamp.
- **14.** Reinstall the intercooler into position. The inlet and outlet of the intercooler should slide into the boots for the hot-side and cold-side piping.



 ${f 15.}$  Move the AC condenser back to its proper position in front of the intercooler.

## 2003-2009 DODGE 5.9L/6.7L CUMMINS ALUMINUM RADIATOR

**NSTALLATION GUIDE** 

- **16.** Reinstall the two T30 Torx bolts that secure the intercooler to the radiator support.
- 17. Bolt the AC condenser brackets to the intercooler, using four 11mm bolts.



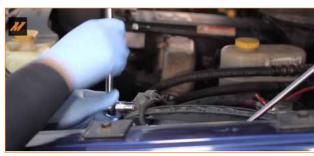
- **18.** Reconnect the cold-side intercooler pipe and boot to the intercooler. Tighten the clamp once the boot is seated properly on the intercooler.
- **19.** Reconnect the hot-side intercooler pipe and boot to the intercooler. Tighten the clamp once the boot is seated properly on the intercooler.



20. Reinstall the air box and reconnect the mass airflow sensor.



 $\textbf{21.} \ \mathsf{Reconnect} \ \mathsf{the} \ \mathsf{negative} \ \mathsf{terminals} \ \mathsf{on} \ \mathsf{both} \ \mathsf{batteries}.$ 



- ${\bf 22.}$  Refill the cooling system with a 50/50 mix of coolant and distilled water.
- **23.** Start the vehicle and set the heat to high to purge any air from the cooling system. Allow the vehicle to reach operating temperature and check for any leaks in the system
- **24.** You have now successfully installed the Mishimoto Dodge Cummins Aluminum Radiator. Enjoy!