

### **PARTS INCLUDED**

**1PC** Mishimoto Aluminum Radiator**1PC** Mounting Hardware

# **TOOLS NEEDED**

Flat Head Screwdriver 7MM Socket 8MM Socket 10MM Socket 13MM Socket 14" Drive Ratchet 14" Drive Extensions Spring Clamp Tool Pick Tool

### INSTALL TIME 2 Hours INSTALL DIFFICULTY 2222

### 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; 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.

# **INSTALL BRIEFING**

Bumper removal steps vary from vehicle to vehicle. The steps included in this guide cover those needed to remove the bumper on the 2006 Dodge Magnum SRT-8 6.1L V8. Mishimoto has created bumper removal guides to match other models these two radiators fit.

# **INSTALL PROCEDURE**

- 1. Remove the eight pop-clips that secure the upper edge of the front bumper. (8x pop-clips)
- Remove the three screws and pop-clip that secure the passenger-side fender liner to the vehicle. Pull back the liner to reveal the inside of the wheel well. (3x 7mm screws, 1x pop-clip)
- 3. Release the electrical harness by pressing in on the two red tabs on each side of the connector. Then release the fog light harness by pulling back the black tab on the face of the connector.Some vehicles may be different and if you don't have fog lights you won't have any electrical components to disconnect as part of the front bumper removal.
- 4. Remove the two bolts that secure the bumper to the fender. (2x 10mm bolts)
- 5. Repeat the last three steps on the driver-side wheel well.
  - (3x 7mm screws, 1x pop-clip, 2x 10mm bolts)
- 6. Remove the seven screws that secure the splash panel to the bumper. (7x 7mm screws)
- Remove the four bolts and washers, along with the pop-clips in each wheel well, that secure the front splash panel to the underside of the vehicle. Then remove the splash panel. (4x 10mm bolts and washers, 2x pop-clips)
- Pull the two bottom corners of the bumper away from the fender to release them from the vehicle.
- Lift the top edges of the bumper to free it from the alignment tabs.
- 10. Remove the front bumper by sliding it forward off the nose of the vehicle.
- 11. Remove the two pop-clips that secure the front shrouding to the radiator. Then release the two tree-clips connecting the temp sensor wiring to the shrouding, and remove the shrouding from the vehicle. Be sure to clear the crash bar upon removal. Do the same on the opposite side of the radiator, minus the tree clips since there is no sensor. (4x pop-clips, 2x tree clips)







- 12. Place a drain bucket underneath the petcock and radiator, and then loosen the petcock to drain the coolant. Remove the radiator cap to expedite the draining process.
- 13. Remove the two bolts and washers that secure the radiator. Note the L-shaped bracket on the bottom connection of the driver side. You will need to reinstall that bracket later in the installation. (4x 10mm bolts and washers)



14. Remove the bolts that secure the AC condenser to the radiator, which includes the two radiator stays located on the top brackets. (4x 10mm bolts)



15. Separate the MAF sensor and induction hose from their connections on the intake pipe.



16. Loosen the clamps on each end of the intake pipe where it connects to the throttle body and filter. Our loaner vehicle had an aftermarket intake installed. Expect that yours will look different compared to the one shown here. (2x worm gear clamps)



- 17. Loosen the clamp on the filter within the housing, and then separate the filter from the pipe.(1x worm gear clamp)
- 18. Pull the filter out of the airbox, and then remove the intake pipe from the vehicle.
- Compress the clamp on the upper radiator hose and move it down the hose. Then separate the hose from the thermostat housing on the engine. (1x spring clamp)



20. Compress the clamp on the upper radiator hose and move it down the hose. Then separate the hose from the radiator. (1x spring clamp)







21. Disconnect the electrical harness at the back of the fan shroud.



- 22. Remove the two bolts that secure the fan shroud to the radiator. (2x 10mm bolts)
- 23. Lift the fan shroud out of the engine bay.



24. Compress the clamp that secures the outer hose to the radiator and slide it down the hose. Separate the lower radiator hose from the radiator. These connections are often tight so you may need to use a pick to separate the hose, but be careful not to cause any damage.(1x spring clamp)

(1x spring clamp)



- 25. Drain the residual coolant remaining in the hose.
- 26. Remove the bolts and washers that secure the radiator support. Then remove the radiator

support. Be careful when removing the radiator support as the heavier components will become loose. It would be best to have someone else help in holding up the bar as you remove the last couple of bolts. (4x 13mm bolts and washers)



- 27. Lower the radiator from the vehicle. Due to the radiator's size and the position of the AC condenser, it will be useful to have someone else on hand to help with this step.
- 28. Transfer the rubber mounting isolators on the stock radiator to the Mishimoto radiator.



- 29. If you are installing MMRAD-SRT-09, you might need to attach the provided bracket, two bolts, two washers, and one spacer depending on your AC condenser. This attaches to the top right of the radiator when looking at it from the front. For the MMRAD-SRT-15, you may need to attach the bracket, two bolts, two washers, and long bolt included in your kit depending on your AC condenser. These hardware pieces attach to the upper right of the radiator when looking at it from the front.
- 30. Install the Mishimoto radiator into the vehicle.
- 31. Reinstall the radiator support while holding the Mishimoto radiator in place. This step will go





smoothly with help. Align the holes on the bottom of the radiator support with the rubber isolators and secure it with the original hardware. (4x 13mm bolts and washers)

- 32. Attach the lower radiator hose to the port on the Mishimoto radiator. Secure the connection with the original clamp. (1x spring clamp)
- Reinstall the fan shroud behind the Mishimoto radiator. Use the clips and bolts included in your kit to secure the fan shroud to the radiator. Slide nut-clips over the brackets on the radiator before bolting the fan shroud into place. (2x nut-clips, 2x 10mm bolts)
- 34. Reconnect the fan's electrical harness.
- 35. Attach the upper radiator hose to the port on the Mishimoto radiator. Secure the connection with the original clamp. (1x spring clamp)
- 36. Re-attach the upper radiator hose to the thermostat housing, and secure the connection with the original clamp, making sure the clamp passes the bead roll on the port. (1x spring clamp)
- 37. Install the nut-clips included in your kit onto the passenger-side brackets of the of the Mishimoto radiator. Use the original hardware to secure the AC condenser to the radiator.(2x 10mm bolts, 2x nut-clips)



 Use the two bolts included in your kit to secure the driver side of the AC condenser to the radiator. On the bottom connection, reinstall the L-shaped bracket you removed earlier. (4x 10mm bolts)



- 39. Connect the radiator stays to the Mishimoto radiator and secure them to the vehicle's frame using the original hardware.(2x 10mm bolts and washers)
- 40. Reinstall the passenger-side ducting using the original hardware. Then do the same with the driver-side ducting while remembering to reattach the tree-clips you removed earlier. (4x pop-clips, 2x tree clips)
- 41. Re-attach the front bumper. Press down at the top corners to engage them with the alignment tabs. Then use the original pop-clips to secure the rest of the top edge of the bumper. (8x pop-clips)
- 42. Reinstall the front splash panel with the original hardware.(7x 7mm screws, 4x 10mm bolts and washers, 2x pop-clips)
- 43. Reconnect the electrical harnesses stationed within both wheel wells. Then, secure the lower front bumper to the fender on both the driver side and passenger side using the original hardware. (4x 10mm bolts)
- 44. Install the intake pipe, connecting it at the throttle body. Secure the connection with the available worm gear clamp. (1x worm gear clamp)
- 45. Lower the filter back into the airbox and connect it to the intake pipe. Secure the two by tightening the available worm gear clamps. (2x worm gear clamps)
- 46. Connect the MAF sensor and induction hose to their respective ports on the intake pipe.
- 47. Fill the cooling system with premixed, MOPAR-approved coolant through the reservoir filler neck, start the engine, and allow it to idle with the cap off. Turn the heat to full hot, and put the fan on low. Monitor the engine temperature and coolant level in the reservoir. Add coolant as needed to maintain proper level in the reservoir, and check your connections for leaks. If the vehicle begins to overheat or coolant starts to overflow from the reservoir, shut the engine off and allow it to cool before continuing. Once the





vehicle is fully warmed up and the coolant level has stabilized, allow the vehicle to cool off completely, and then top off the coolant level. Coolant level should be checked once more after putting in some miles.

Congratulations! You have finished installing the Mishimoto MMRAD-SRT-09/MMRAD-SRT-15 Performance Aluminum Radiator.

