



INSTALLATION GUIDE

Performance Aluminum Radiator, Fits 2009-2024 Ram 1500 5.7L
SKU: MMRAD-RAM57-09

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RESOURCES & CONTACT



CALL 1.877.466.4744

CUSTOMER SERVICE HOURS: MON-FRI 9:00AM-7:00PM ET



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IMPORTANT SAFETY INFORMATION

- › Mishimoto recommends you use safety glasses and protective gloves during the installation of our products
- › 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
- › If you need any assistance while installing our products, reach out to our Customer Service Team at 1.877.466.4744

REQUIRED TOOLS

8MM, 10MM, 12MM, 13MM, 16MM, AND 19MM SOCKET	CONTAINER FOR DRAINING COOLANT
10MM WRENCH	¼ INCH RUBBER HOSE (OPTIONAL)
¼ INCH RATCHET WRENCH	EXTRA COOLANT
3/8 INCH RATCHET WRENCH	COOLANT VACUUM FILL TOOL (OPTIONAL)
SPRING CLAMP REMOVAL TOOL	PICK TOOL
PICK TOOL	JACK, JACKSTANDS, AND WHEEL CHOCKS
TRIM STICKS OR POP-CLIP REMOVAL TOOL	

INSTALL TIME: 3 HOURS

INSTALL DIFFICULTY:     

Note: This guide covers installation on a 2022 Ram 1500. For vehicles of other model years or trims some steps may be different.

INSTALLATION INSTRUCTIONS

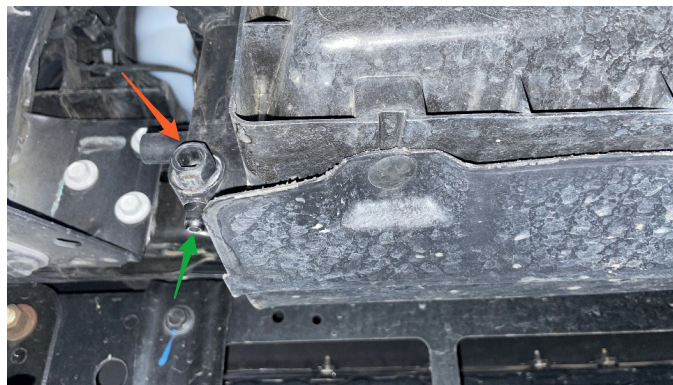
1. Ensure the vehicle is cool before beginning work.
2. If using a jack/jack stands, ensure the vehicle is on a flat, level surface, then place wheel chocks on one of the rear wheels to prevent rolling. Raise the vehicle and place on jack stands per the OEM procedure and lift points.
3. Using trim sticks or a pop clip removal tool remove the 12 plastic pop clips that secure the plastic radiator valence. Remove the valence and set aside.



4. Remove the radiator cap and set aside.



5. Place a drain pan below the drain plug and loosen the drain plug (orange arrow) to drain the cooling system. Optionally, attach a ¼ inch rubber hose onto the bung (green arrow) before loosening the drain plug to drain coolant neatly into the drain pan. Note: The drain plug does not need to be and should not be fully unscrewed to drain the coolant.



6. Using a trim stick or pop clip removal tool, remove the 5 pop clips that secure the lower duct to the fan shroud and frame. Leave the duct to hang in the vehicle. It will be removed from the vehicle in a later step.

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7. Using trim sticks or a pop-clip removal tool and a 10mm socket, remove the 2 pop-clips and 8 bolts that secure the upper grille trim piece. Remove the upper grille trim from the vehicle and set aside.



8. Using trim sticks or a pop-clip removal tool and an 8mm wrench, remove the 2 pop clips and 5 bolts that secure the fender liner. Pull back the fender liner to gain access to the bolt in the next step. Repeat this step on the passenger side. Driver's side pictured.



9. Using a 10mm wrench, loosen and remove the bolt that retains the

fascia trim panel. Then, depress the black tab while simultaneously pulling on the panel. Remove the panel by carefully pulling from the wheel well side to the grille side to remove. Be careful not to damage the tabs which hold the panel in place. Repeat this step on the passenger side, driver's side pictured.



10. Use a 10mm socket to remove the 3 lower grille bolts on the driver's side. Repeat this step on the passenger side.



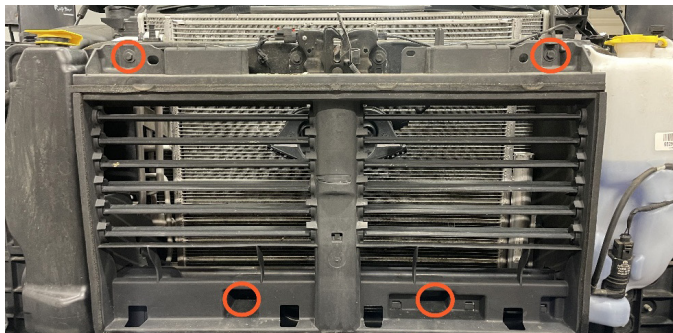
11. Using a 10mm socket remove the 4 upper grille bolts. Remove the grille from the vehicle and set aside.



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12. Using a 10mm socket, remove the bolts that secure the active grille shutter assembly to the vehicle. Tilt the top of the assembly forward.

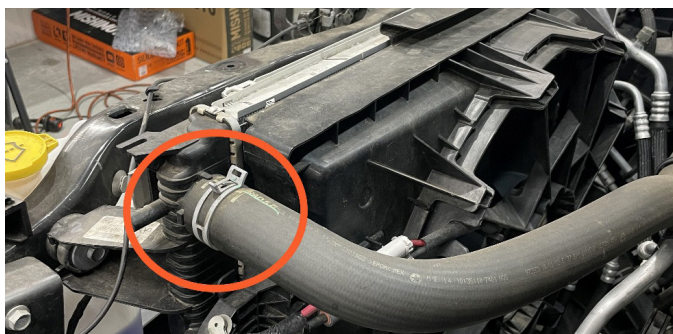
Note: The ducts attached to the shutter assembly can remain attached to the shutters.



13. Remove the wire from the three hooks on the shutter assembly. Remove the pop clip from the shutter assembly using a trim stick. Then, disconnect the electrical connector to the grille shutter motor. Remove the grille shutters from the vehicle and set aside. **Note:** The lower duct which was disconnected from the fan shroud in Step 6 should be removed with this assembly.



14. Using hose clamp pliers, loosen the hose clamp and remove the radiator inlet hose from the radiator. Position the end of the hose aside.

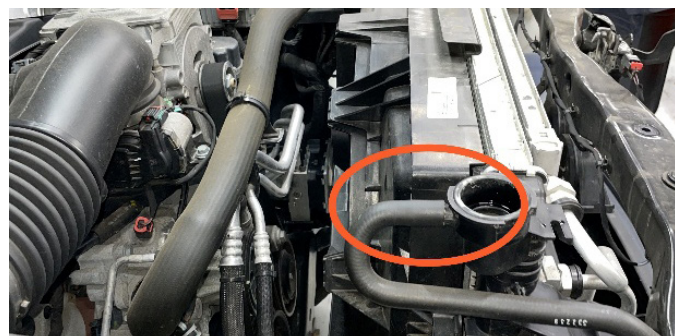


15. Using spring clamp pliers, loosen the hose clamp and remove the radiator outlet hose from the radiator. Position the end of the hose aside.

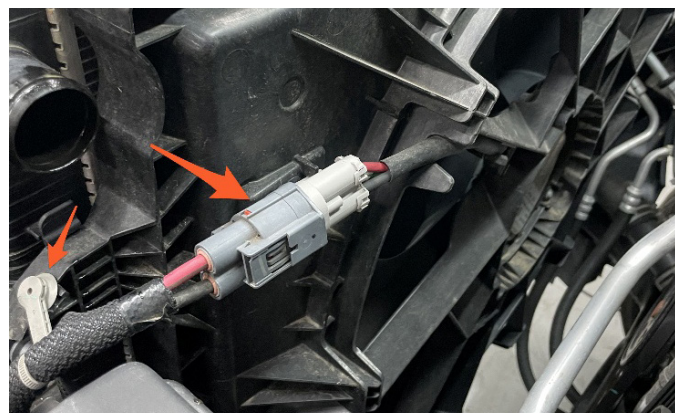
Note: This hose may still have coolant in it, position a drain pan to catch the fluid before removal.



16. Remove the overflow hose from the radiator fill neck and position aside.

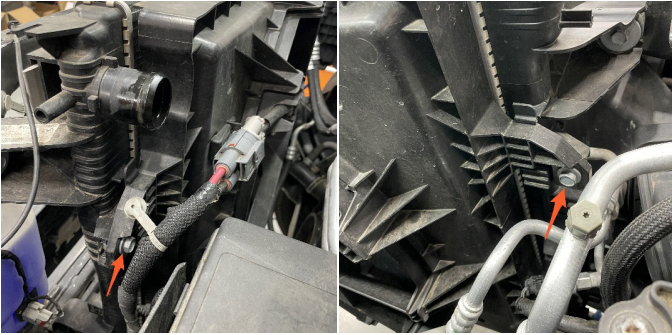


17. Remove the pop-clip zip tie from the fan shroud. Then, disconnect the fan harness from the fan and position aside.

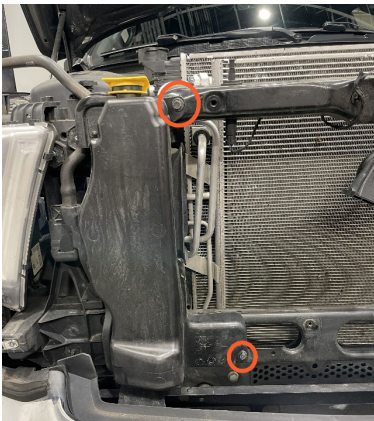


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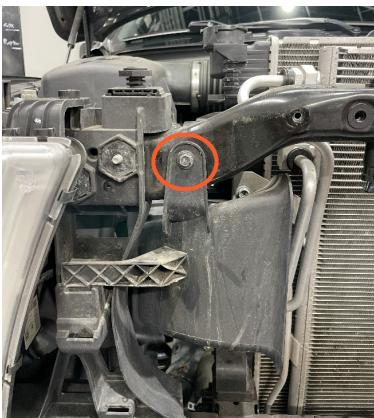
18. Using a 13mm socket, remove the 2 bolts that secure the fan shroud to the radiator. Depress the retaining tabs while lifting the fan shroud upwards. Remove the fan shroud from the vehicle and position aside.



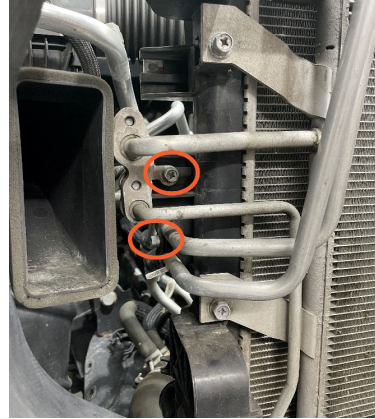
19. Using a 10mm socket, remove the 2 bolts that secure the coolant overflow tank to the vehicle. Remove the tank and set it aside.



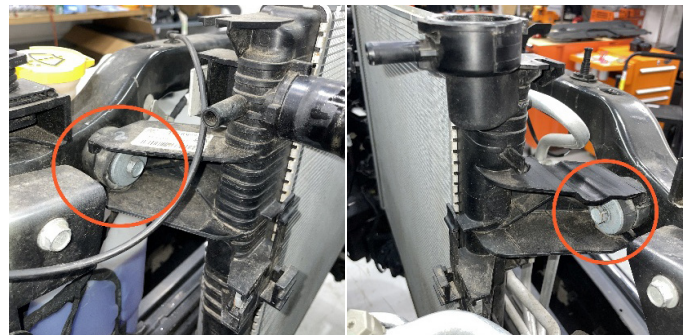
20. Using a 10mm socket, remove the bolt that secures the intake duct to the vehicle. Remove the intake duct and position aside.



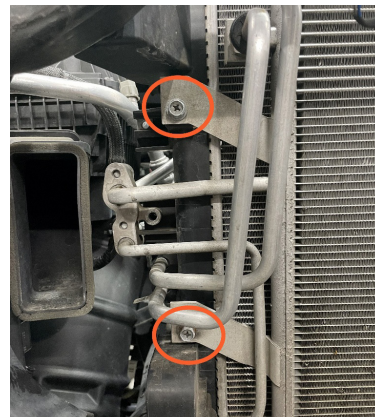
21. Remove the two 10mm bolts that secure the A/C condenser lines and transmission cooler lines to the side of the radiator.



22. Using a 13mm socket, remove the 2 upper radiator bolts. The radiator can now be leaned backwards for better access during the following steps.

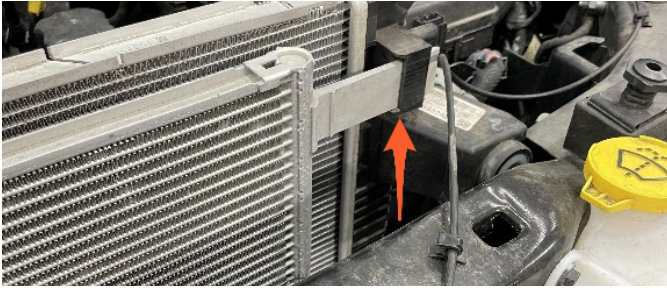


23. Using a 12mm socket, remove the 2 bolts that hold the passenger side of the transmission cooler and A/C condenser to the radiator. **Note:** The cooler/condenser will stay in the vehicle after the radiator is removed.



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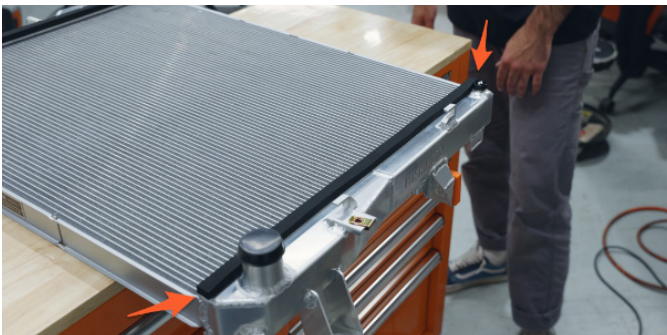
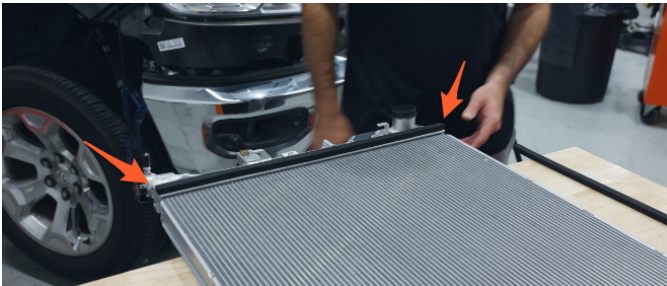
24. Lift the radiator out of the vehicle. As you lift the radiator you will need to slide it towards the driver's side so that the transmission cooler slides out of the tabs which support it on the driver's side. There are two tabs, one at the top and one at the bottom.



25. Transfer the upper grommets from the stock radiator to the upper mounts of the Mishimoto radiator.

26. Ensure the drain plug on the Mishimoto radiator is tightened using a 19mm socket.

27. Install the provided foam strips onto the Mishimoto radiator as shown.



28. Lower the Mishimoto radiator into the engine bay while sliding the tabs on the cooler condenser into the radiator. Ensure the lower grommets are sitting in their mounting points

29. Secure the passenger side of the cooler/condenser to the radiator using the two provided M8 hex bolts and flat washers.

30. Secure the transmission cooler line bracket to the radiator using the provided 30mm M6 flanged hex bolt.

31. Secure the A/C lines to the radiator using the provided 25mm M6 flanged hex bolt.

32. Tilt the top of the radiator forward and install and tighten the two upper mount bolts.

33. Install the fan shroud onto the radiator. Ensure all four tabs on the fan shroud are properly engaged in their respective hooks on the radiator. Secure the fan shroud using the two provided M8 flanged hex bolts. Re-connect the fan shroud harness.

34. Re-install the air intake duct.

35. Re-install the coolant overflow tank.

36. Install the upper and lower coolant hoses. Ensure the hose clamps are tight and seated properly on the hoses. Install the coolant overflow hose onto the overflow bung on the radiator fill neck.

37. Re-install the active grill shutter assembly on the vehicle. Be sure to re-connect the harness for the shutter motor and secure the wire in the hooks on the shutter assembly. Ensure the ducts are seated correctly between the radiator and front crossmember.

38. Reattach the 5 pop-clips that secure the lower duct to the front crossmember and the fan shroud.

39. Reinstall the grill. Install the four upper bolts first, then tighten the 6 lower bolts.

40. Reinstall the fascia trim panels. Install the side closest to the grille first and work towards the fender. Reinstall the bolt.

41. Reinstall the fender liners.

42. Install the upper grille trim piece.

43. Install the plastic radiator valence.

44. Mishimoto recommends using a vacuum bleeder to fill the system with coolant. If a vacuum bleeder is not available: Fill the radiator with coolant and run the engine until the engine reaches operating temperature. Shut the engine off and add coolant. Repeat this process until the coolant level does not change. Install the radiator cap onto the radiator.

DISPOSAL INSTRUCTIONS

- › Do not dispose of any product as unsorted municipal waste. Use separate collection facilities. Contact your local authority for information regarding the collection systems available.
- › Never improperly dispose of any coolant, oil, or other chemicals

WARRANTY INFORMATION



This product is backed by Mishimoto's Lifetime Limited Warranty. Please visit mishimoto.com/lifetime-warranty to see the full warranty.

ACTIVATE YOUR WARRANTY

Scan the QR code to activate your warranty. Every Mishimoto product is covered by our Mishimoto Lifetime Warranty, which also includes accident protection. Registration is easy. Visit: mishimoto.com/register and save the receipt for your records.



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- › This product can expose you to chemicals which are known to the state of California to cause cancer. For more information visit: www.p65warnings.ca.gov