

2003-2009 DODGE RAM 5.9L/6.7L CUMMINS TRANSMISSION COOLER PARTS LIST & INSTALLATION GUIDE



PARTS INCLUDED

- 1PC Mishimoto Stacked-Plate Transmission Cooler
- 2PC High-Pressure Transmission Cooler Lines
- 1PC Removable Thermostat
- 1PC Removable Thermostat Bypass
- 2PC CNC-Machined Stainless Steel Barbed Fittings
- 2PC CNC-Machined Aluminum 3/4"-16 ORB to Hose Barb Fittings
- 6PC Worm Gear Clamps

TOOLS NEEDED

- 7mm Socket
- 10mm Socket
- 13mm Socket
- 1/4" Drive & Extensions
- Hose Cutting Tool

For optional bypass plug:
27mm Socket

INSTALL TIME 1.5 Hours

INSTALL DIFFICULTY

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 NOTE

The Mishimoto transmission cooler comes with a 140°F (60°C) thermostat installed that allows for transmission fluid to bypass the cooler to aid in quicker warmup times and better temperature control. Mishimoto does

include a bypass for this thermostat for full flow through the cooler at all times. There is a possibility with the bypass installed for the fluid to remain below normal operating temperature in colder climates, which may result in poor performance of the fluid. We strongly recommend configuring your transmission cooler to best suit the optimal operating temperature for the fluid and application, as well as consulting your transmission builder for non-stock applications to best match our cooler to your truck.

INSTALL PROCEDURE

1. Remove the bolts that secure the AC condenser. (4x 10mm bolts)



2. Lift the AC condenser up and out from behind the front bumper. Then softly lower it and let it rest so that it is out of the way of the intercooler.
3. Loosen the clamps on the intercooler end tank connections. (2x T-bolt clamps)



4. Remove the bolts on the upper brackets that secure the intercooler. (2x 10mm bolts)

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5. Lift the intercooler and remove it from the vehicle. See that both pipes are off the end tanks. You may need to jiggle the intercooler as you remove it to get the pipes off.
6. Loosen the clamp on the cold-side pipe and remove the pipe. (1x t-bolt clamp)



7. Mark the transmission cooler hoses. It's recommended that the mark be five inches back from the hump. Once done, cut the hoses on your mark.



8. Remove the bolts that secure the transmission cooler. Then remove the cooler. You will need to lift it slightly to clear the brackets on the bottom. (2x 13mm bolts)



9. Install the stainless-steel hose barbs provided in your kit to the transmission cooler hoses. (2x worm gear clamps)



10. Install your Mishimoto transmission cooler. Engage the tabs at the bottom with the brackets on the radiator. (2x 13mm bolts)
11. Install one of the provided hoses to the feed (top) line. (1x worm gear clamp)
12. Connect the feed line to the transmission cooler's top port. (1x worm gear clamp)



13. Install the other provided hose to the second transmission cooler line. (1x worm gear clamp)
14. Then connect the hose to the transmission cooler's bottom port. (1x worm gear clamp)

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15. Reinstall the cold-side pipe. (1x t-bolt clamp)
16. Reinstall the intercooler and reattach the pipes to the end tanks. (2x worm gear clamps)
17. Secure the top brackets on the intercooler. (2x 10mm bolts)
18. Put the AC condenser back into position. Secure the brackets on both sides. (4x 10mm bolts)
19. Check the transmission fluid level. Add fluid as needed.

NOTE: *The optional steps that follow are for swapping out the cooler's thermostat to replace it with the bypass plug.*

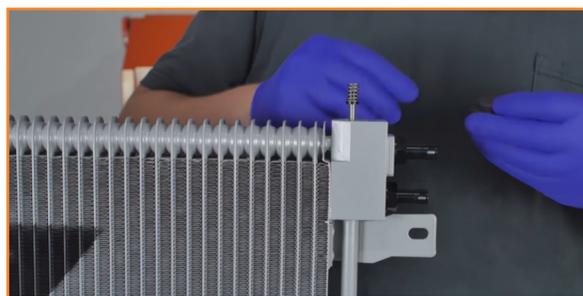
20. Unscrew the fitting at the top.
21. Remove the inner components.
22. Organize all the components. The bypass plug will replace these two thermostat pieces.



23. Place the bottom spring in first.



24. Lower your bypass plug into the recess opening.
25. Position the black aluminum piece at the top of the bypass plug.



26. Place the top spring on the black aluminum piece.
27. Seal the opening with the original fitting.

Congratulations! You have finished installing the Mishimoto 2003-2009 Dodge Ram 5.9L/6.7L Cummins Transmission Cooler.