



INSTALLATION GUIDE

Transmission Cooler, Fits 2010–2012 Dodge Ram 2500/3500 6.7L Cummins
SKU: MMTC-RAM-10

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RESOURCES & CONTACT

-  **CALL 1-877-GOMISHI**
CUSTOMER SERVICE HOURS: MON-FRI 8:30AM-5:00PM EST
-  **MISHIMOTO**
-  **GOMISHIMOTO**
-  **MISHIMOTO**
-  **WEBSITE**
WWW.MISHIMOTO.COM
-  **ENGINEERING BLOG**
WWW.MISHIMOTO.COM/ENGINEERING

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-GOMISHI

SUPPLIED PARTS

- (1) MISHIMOTO TRANSMISSION COOLER
- (2) MOUNTING BRACKETS
- (2) TRANSMISSION LINES
- (4) M6 HEX HEAD FLANGED BOLTS, 10MM LONG
- (2) M6 HEX HEAD FLANGED BOLTS, 16MM LONG
- (1) M6 HEX HEAD FLANGED BOLT, 20MM LONG
- (2) WORM GEAR CLAMPS

OPTIONAL LINE KIT TO BYPASS THE STOCK TRANSMISSION COOLER (SOLD SEPARATELY) INCLUDES:

- (2) TRANSMISSION LINES
- (2) HOSE CLAMPS

REQUIRED TOOLS

- SOCKET DRIVER
- 10MM SOCKET
- FLAT HEAD SCREWDRIVER
- PICK TOOL
- DRILL
- 3/4" DRILL BIT OR HOLE SAW

- OPTIONAL TOOLS:**
- TRIM CLIP REMOVAL TOOL
 - TRANSMISSION LINE DISCONNECT TOOL

INSTALL TIME: 1 HOUR

INSTALL DIFFICULTY: 

INSTALLATION INSTRUCTIONS

1. Remove the four (4) trim clips securing the upper radiator shroud to the engine bay and remove the shroud from the vehicle.



2. Using a 10mm socket, remove the four (4) bolts securing the grille to the frame. Then, remove the grille from the vehicle by pulling the bottom of the grille straight out.



3. Remove the hood release cable from the plastic clip, remove the two (2) trim clips securing the plastic shroud to the frame, and slide the shroud out of the way.



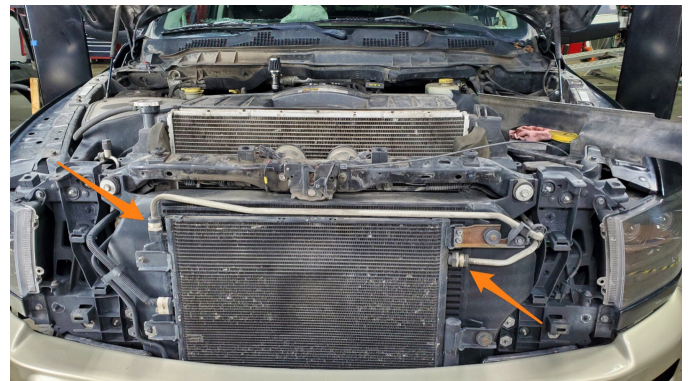
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4. Using a pick tool or transmission line disconnect tool, disconnect the transmission line from the fitting on the passenger-side of the stock transmission cooler. Then, disconnect the other end of this line from the stock line and remove it from the vehicle. Place rags below the connections before removing the lines from the fittings to catch the fluid that will leak out. If the Mishimoto transmission cooler is being installed in addition to the stock transmission cooler, this is the only stock transmission line that needs to be removed. The line connected to the fitting on the driver-side of the stock cooler should remain in place.

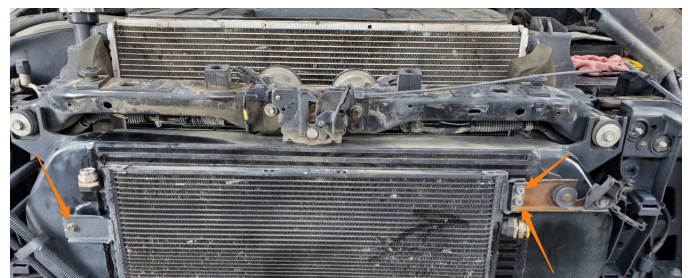
If the Mishimoto transmission cooler is being installed in addition to the stock transmission cooler, skip to Step 6.



5. If the Mishimoto transmission cooler is being installed to replace the stock cooler (with the optional bypass line kit, sold separately), using a pick tool or transmission line disconnect tool, remove both stock transmission lines from the cooler. Then, disconnect the other end of both lines from the stock transmission lines and remove them from the vehicle. Place rags below the connections before removing the lines from the fittings to catch the fluid that will leak out. Completely drain or cap the stock transmission cooler, as it will no longer be used.



6. Using a 10mm socket remove the three (3) bolts securing the stock transmission cooler to the intercooler.



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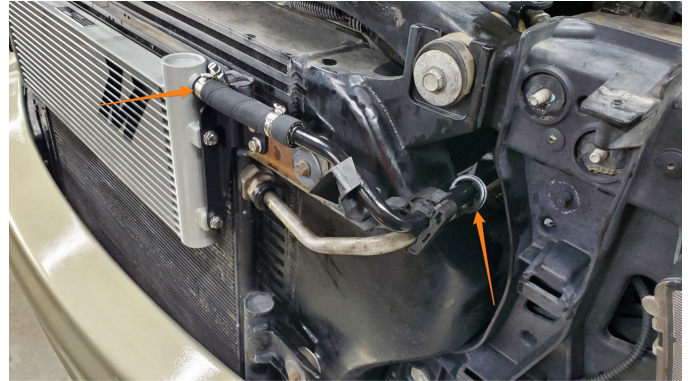
7. Install the supplied passenger-side mounting bracket with the supplied 20mm long M6 hex head flanged bolt and the supplied driver-side mounting bracket with the two (2) supplied 16mm long M6 bolts, as shown in the photo below. Leave the bolts loose for now.



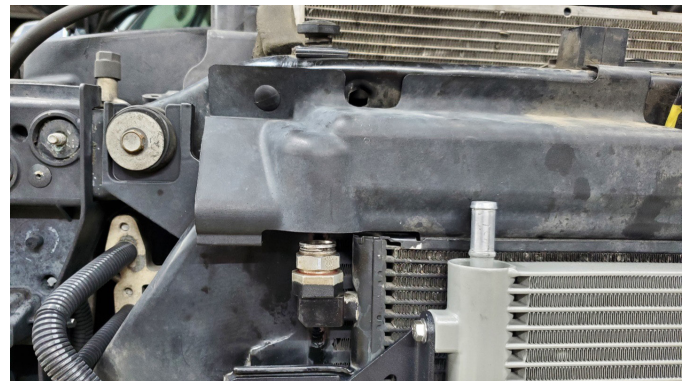
8. Attach the Mishimoto transmission cooler to the mounting brackets with the four (4) supplied 10mm long M6 hex head flanged bolts. Then tighten the bolts securing the mounting brackets to the vehicle. If the Mishimoto transmission cooler is being installed to replace the stock cooler (with the optional bypass line kit, sold separately), skip to Step 15.



9. If the Mishimoto transmission cooler is being installed in addition to the stock transmission cooler, transfer one of the dust caps from the stock transmission line onto the longer of the two supplied transmission lines. Then, install the longer of the two supplied transmission lines to the driver-side port on the Mishimoto cooler and, using a flathead screwdriver, secure it with one (1) of the supplied worm gear clamps. (Image on top right)

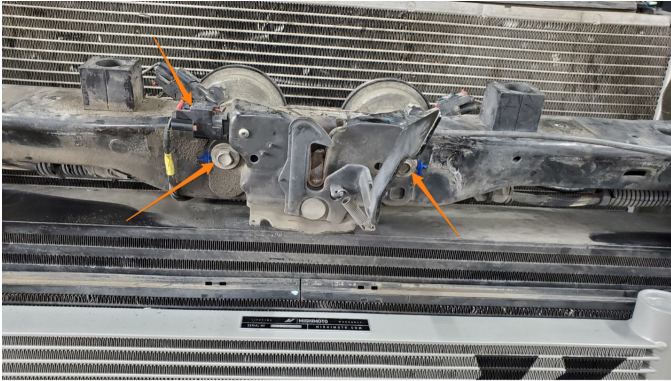


10. Position the plastic shroud that was slid out of the way in Step 3 back into place. Then, make a mark on the shroud directly above the fitting on the passenger-side of the stock transmission cooler.



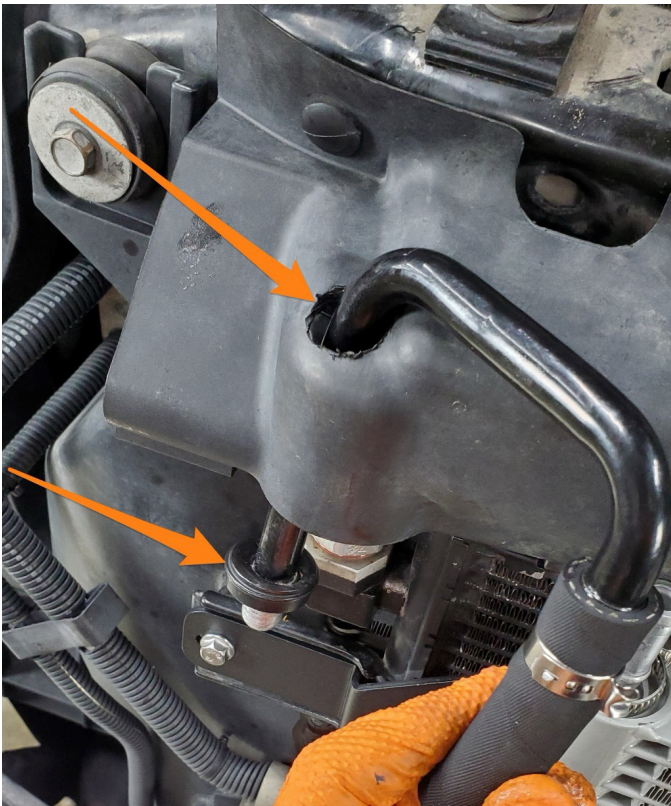
11. After making the mark, remove the shroud from the vehicle to be drilled by removing the plug from the hood latch. Then, using a 10mm socket, remove the two (2) bolts securing the hood latch to the frame so the shroud can be slid off the hood release cable. Marking the position of the latch on the frame before removing it will help to reinstall it in the correct position. (Image on next page)

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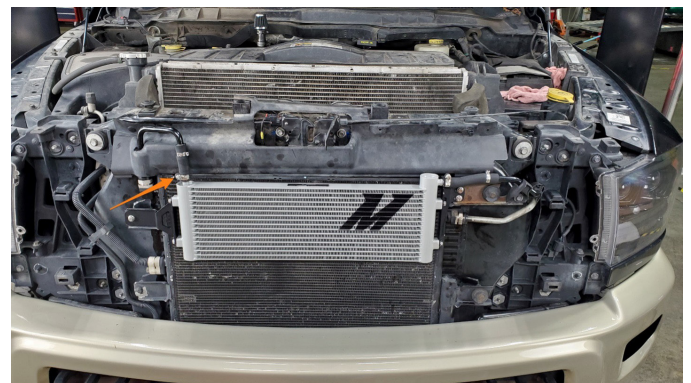
12. Drill a $\frac{3}{4}$ " hole through the shroud on the mark that was made in Step 10. Then, reinstall the shroud and hood latch. Check that the hood closes and latches properly. Adjust the position of the hood latch if necessary.

13. Insert the end of the shorter of the two supplied transmission lines through the hole that was just drilled in the shroud. Then transfer the remaining dust cap from the stock line onto the Mishimoto line.



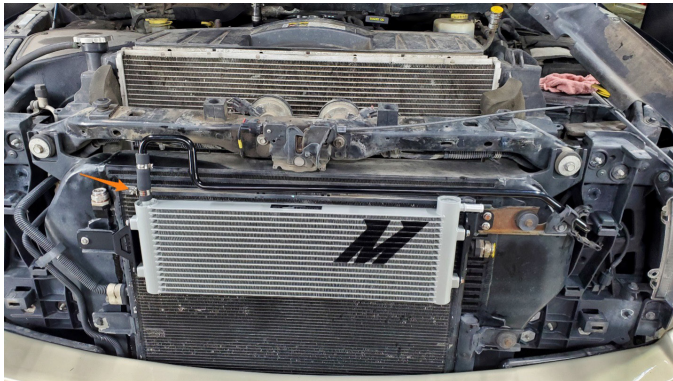
14. Install the line into the fitting on the passenger-side of the stock cooler. Ensure the line is fully seated in the fitting and secured with the spring clip, then install the dust cap over the connection. To aid in installation, the end of the line can be coated in clean transmission fluid. Next, remove the bolt securing the passenger-side mounting bracket to the vehicle and loosen the bolts on the driver side so the Mishimoto cooler can be lowered to install the other end of the line onto the port. Place the remaining worm gear clamp over the port, then install the Mishimoto cooler into the Mishimoto transmission line. Reinstall the bolt to secure the passenger-side mounting bracket to the vehicle and re-tighten the bolts on the driver-side. Then, using a flathead screwdriver, tighten the worm gear clamp to secure the line to the cooler.

If the Mishimoto transmission cooler is being installed in addition to the stock transmission cooler, skip to Step 19.

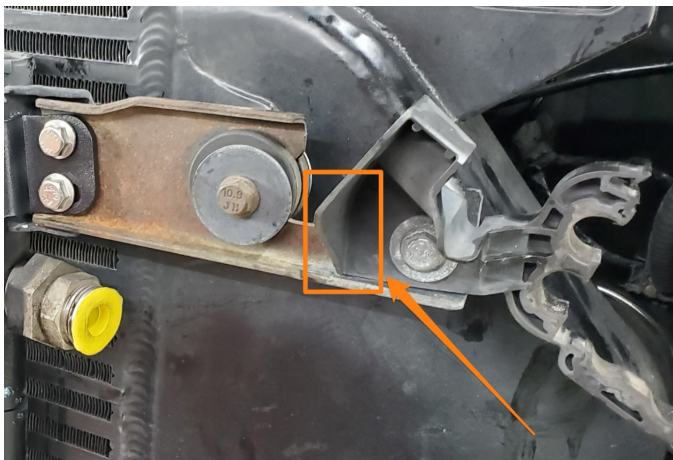


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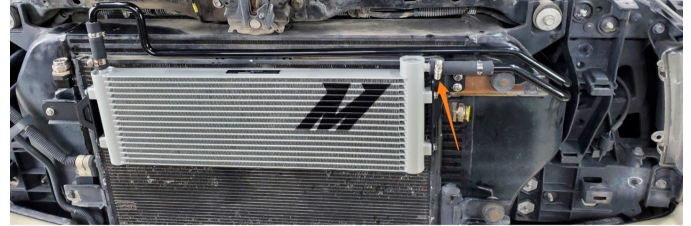
15. If the Mishimoto transmission cooler is being installed to replace the stock cooler (with the optional bypass line kit, sold separately), install the longer of the two Mishimoto transmission lines to the port on the passenger-side of the Mishimoto transmission cooler and, using a flathead screwdriver, secure it with one (1) of the supplied worm gear clamps.



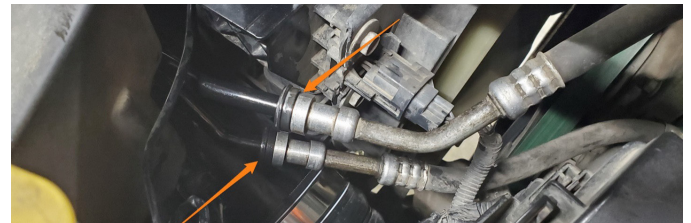
16. The bottom of the plastic mount will need to be trimmed to install the remaining Mishimoto transmission line. Position the line in place to mark where the mount will need to be trimmed.



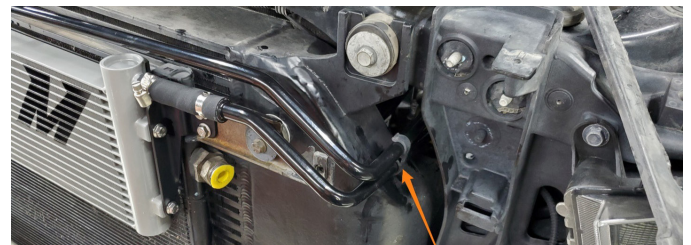
17. Install the remaining Mishimoto transmission line to the port on the driver-side of the Mishimoto transmission cooler and, using a flathead screwdriver, secure it with the remaining supplied worm gear clamp. (Image on top right)



18. Transfer one (1) dust cap from the stock transmission lines to each of the Mishimoto lines and connect the Mishimoto lines to the vehicle where the stock lines were disconnected and install the dust caps over the connections.



19. Transfer the plastic clip from the stock transmission lines onto the Mishimoto lines.



20. Using a 13mm socket, remove the upper fan shroud bolt and install the supplied line bracket in this location. Attach the supplied p-clip to the upper factory transmission line and secure it to the line bracket with the supplied M5 bolt and lock nut.



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21. Reinstall the plastic shroud with the two (2) trim clips that were removed in Step 3 and the hood release cable, if not done so already. Then, reinstall the grille and secure it with the four (4) bolts removed in Step 2. Next, reinstall the upper radiator shroud with the four (4) trim clips removed in Step 1.

22. Follow the vehicle manufacturer's instructions to check the transmission fluid level and top off if needed. Then, get the transmission fluid up to operating temperature and ensure the thermostat opens and the fluid is circulated through the cooler. Then, re-check the transmission fluid level and top off if needed. The Mishimoto cooler will add approximately 0.7qt of transmission fluid.

Congratulations you have completed the installation

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



- › All claims must be accompanied with a picture of the Mishimoto product showing the issue for which the claim is being submitted.
- › Mishimoto asks that the customer inspect their purchased item for any damage immediately upon arrival.
- › Any product deemed dead on arrival (DOA) must be claimed within 14 business days of delivery. Claims outside of this time frame will not be covered under the Mishimoto Lifetime Warranty.
- › This warranty does not include payment and/or reimbursement of the cost of labor in connection with the removal of any product returned pursuant to the warranty policy or in connection with the installation of any replacement items provided under the warranty policy.
- › Mishimoto has the right to refuse a claim at any time.

- › When Mishimoto accepts a claim, Mishimoto retains full discretion to choose if it will: (i) repair or replace purchaser's original Mishimoto product; (ii) replace purchaser's original Mishimoto product with the most current available model; or (iii) provide the purchaser with a gift card redeemable on Mishimoto.com in the amount of the original purchase price of the original Mishimoto product. The provision of a replacement of a Mishimoto product is subject to availability and Mishimoto retains the right to substitute any warranty claim item with a comparable item or credit at any time.
- › If Mishimoto determines that it will provide a replacement item in connection with a claim under this warranty policy, and such item is out of stock, Mishimoto will place the customer on backorder and ship the replacement product to the purchaser once it becomes available.
- › Mishimoto is not liable for incorrect shipments in connection with a claim if a claim form is completed incorrectly, or if a model number is not included in a claim.
- › If you have a vehicle equipped with an automatic transmission, please make sure to specify this within the text box on the claim form. Mishimoto is not responsible for incorrect replacement shipments if transmission type is not indicated.



WARNING
Cancer and
Reproductive Harm
www.P65Warnings.ca.gov

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