



# INSTALLATION GUIDE

Intercooler, Fits 2024+ Toyota Tacoma SKU: MMINT-TAC-24



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# **RESOURCES & CONTACT**



CALL 1.877.466.4744

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



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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-GOMISHI

## REQUIRED TOOLS

1/4" DRIVE RATCHETING WRENCH PUSH CLIP PLIERS 1/4" DRIVE EXTENSIONS (3" & 6") 1/4" DRIVE 7MM, 8MM,

10MM SOCKETS 1/4" DRIVE TORQUE WRENCH 3/8" DRIVE RATCHETING WRENCH 3/8" DRIVE EXTENSIONS (3" & 6") 3/8" DRIVE 10MM, 12MM, 14MM, 15MM, 17MM & 19MM SOCKETS 3/8" DRIVE TORQUE WRENCH

HOSE CLAMP PLIERS PICK TOOLS

PHILLIPS HEAD SCREW DRIVER

BUCKET OR OTHER RECEPTACLE TO COLLECT COOLANT

HOSE PINCH-OFF PLIERS (OR 10MM BOLT TO PLUG TRANSMISSION LINES)

**ENGINE COOLANT (CAPACITY IS** APPROX. 3 GALLONS)

COOLANT VACUUM FILL TOOL (OPTIONAL)

PAINTERS TAPE (OPTIONAL)

**INSTALL TIME: 4-5 HOURS** 

INSTALL DIFFICULTY: (2) (2) (2) (2)

### INSTALLATION INSTRUCTIONS

- 1. Allow the vehicle to cool completely as this installation requires the removal of the radiator and draining of the cooling system. While the installation can be done with the vehicle on the ground, it will be helpful to have the vehicle on the lift to gain better access to the underside of the vehicle.
- 2. Remove the engine undertray by removing the 4x 12mm undertray bolts. Depending on the trim level and modifications, this undertray may be slightly different or have different attachment points.



3. Place a bucket underneath the driver's side of the radiator and begin draining the coolant from the radiator by loosening the drain valve. Once the coolant starts to flow, remove the coolant reservoir cap from the reservoir to allow the coolant to flow freely. (Mishimoto Reservoir shown). The drain valve will be slightly higher on the radiator end tank on the hybrid models.





**4.** Remove the 8x push clips holding the radiator support panel to the bumper and radiator. Remove the 4x push clips holding the intake duct to the vehicle and remove both parts from the vehicle.



5. Remove the 3x 10mm bumper bolts at the top of the bumper. Then, disconnect the 2x electrical connectors on the passenger side of the bumper. Vehicles with a front bumper camera will also have another electrical connector on the driver's side of the bumper which also must be disconnected.





6. (Optional) Place painter's tape where the bumper meets the headlight and where the fender flares meet the fender and bumper to prevent scratches in future steps. 7. From the wheel well, remove the 2x plastic push clip and 2x 10mm screws holding the fender flare to the bumper, and then remove the next 2 or 3x 10mm screws holding the fender flares to the wheel well. Then, starting at the bottom of the bumper, carefully pull the fender flare away from the bumper until the junction between the bumper and fender is exposed. It may be necessary to reach behind the wheel well liner to manipulate the clips holding the fender flare to the bumper. Repeat for the other side.





**8.** Remove the 6X 10mm bolts securing the bottom of the bumper, then move the felt wheel well liners out of the way and remove the final 2X 10mm bolts that secure the bumper to the vehicle.





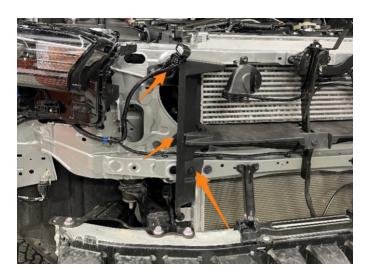


**9.** Remove the 2x (1 per side) Phillips head screws that secure the bumper to the vehicle underneath the headlight and carefully pull the bumper away from the vehicle from the wheel well. Repeat on the other side.



- 10. Once the corners of the bumper are loose, pull the bumper directly forward and remove the bumper assembly from the vehicle, while being careful to make sure that no lines or electrical connectors remain connected to the bumper. It is helpful to pull from the lower grille as there are clips behind the grill that hold the bumper on.
- 11. Remove the 3x push clips holding the lower intercooler duct to the vehicle. Then remove the 6x (3x per side) holding the side ducts to the vehicle. Make sure to disconnect the clip holding the wiring harness to the passenger side duct.





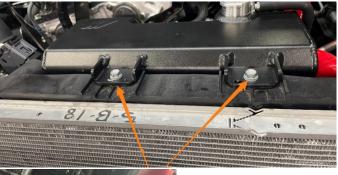
12. Remove both charge pipes from the vehicle, disconnect the quick disconnect ends by pushing the wire clip apart as shown, and pull away from the connection on the intercooler, turbo outlet, and throttle body.



**13.** Disconnect the smaller upper coolant reservoir hose from the radiator.



**14.** Remove the 2x 10mm coolant reservoir bolts that secure the reservoir to the fan shroud. As you remove the coolant reservoir, there will be one hose connected to the bottom of the reservoir, remove this hose from the reservoir and remove the reservoir from the vehicle.





**15.** Remove the fan shroud electrical connector as well as the map sensor electrical connector and disconnect the clips holding the wiring harness to the fan shroud and radiator.



**16.** Disconnect the small upper radiator hose from the radiator and the second coolant hose connected to the transmission cooler. (See image on the right)



17. Remove the 3x 10mm bolts securing the transmission cooler to the fan shroud. Set the cooler aside but do not completely remove it, as there will still be lines attached to it.



**18.** Clamp off the two transmission lines connected to the radiator and then remove the lines from the radiator. Be careful to clean up any transmission fluid that comes out. It is helpful to cap off the fittings on the radiator to prevent leakage during removal.





19. Remove the 2x main radiator lines from the radiator. The lower hose will have two white clamps connecting the hose to the fan shroud. Squeeze the clamps as shown to open. Make sure to disconnect the sensor on the upper hose. While removing the upper hose, disconnect the temperature sensor connector from the intercooler outlet. Disconnect the clip holding the wire harness to the radiator and move the harness out of the way.







- **20.** Hybrid models will have 2x extra hoses connected to the bottom of the radiator end tanks as well as 2x radiator hard lines connected to the fan shroud with 10mm bolts. Disconnect these hoses and remove the radiator hardlines from the fan shroud.
- 21. Remove the 2x hoses on the inlet of the intercooler and move out of the way. The smaller line is connected to a sensor on the fan shroud, so make sure it stays near the fan shroud which will be removed in the next step. The larger line is connected to the inlet on the turbocharger.



**22.** Remove the 4x 10mm (2x per side) fan shroud bolts securing the fan shroud to the radiator and lift it out of the vehicle.





23. Remove the 4x (2x bolts and 2x nuts) 10mm fasteners holding the A/C condenser to the radiator. In addition, remove the 1x 10mm bolt holding the A/C line to the core support to allow more movement in the A/C condenser. Carefully remove the A/C condenser from the radiator and let it sit on the lower core support or use bungee cords to support the A/C condenser during radiator removal.





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24. Remove the 6x 12mm bolts holding the radiator to the core support. Remove the 4x lower bolts first and then the 2x upper bolts. The radiator should be held up by hooks above the top bolts. Then, remove the radiator and intercooler assembly from the vehicle. Make sure that the radiator does not get stuck on the A/C line on the driver's side.







25. Remove the 4X 10mm bolts securing the intercooler to the radiator. Remove the 17mm temperature sensor from the outlet of the intercooler. Transfer the sensor to the Mishimoto intercooler with the new included crush washer and torque to 15 ft-lbs.





26. Make sure that the bushings are pre-installed onto the passenger side of the Mishimoto intercooler. If they are not, first install the rubber part of the bushing and then install the metal insert from the front ("M" logo side). Install the Mishimoto intercooler onto the radiator. There should be hooks on the top mounting points to hold the intercooler in place while installing the 4x factory 10mm bolts. Torque bolts to 53in-lbs. Then, install the included red metal fittings onto the two ports on the inlet side of the intercooler. The smaller fitting is 15mm (torque to 10 ft-lbs) and the larger fitting is 19mm (torque to 20 ft-lbs). Keep the yellow plastic caps on the inlet and outlet during installation to prevent damage to machined surfaces.



27. Raise the intercooler and radiator assembly into the vehicle. It may be necessary to have a second person help as the assembly will now be significantly heavier. Use the hooks on the radiator to hold the radiator in place and install the 2x top radiator bolts loosely and then install the 4x lower radiator bolts. Then, tighten all 6x 12mm radiator bolts to 13 ft-lbs.



28. Reinstall the 2x 10mm nuts and 2x 10mm bolts securing the A/C condenser to the radiator. Torque to 87in-lbs. Then, reinstall the 10mm bolt securing the A/C line to the core support.





**29.** Reinstall the 2X side ducts on the core support and install the 3x (6x total) push clips on each side.



**30.** Take the Mishimoto rubber duct and line it up with the 2x holes in the side ducts and the hole in the black middle bracket, then place the included flat bracket underneath the duct and thread in the included 4x 8mm bolts into the threaded holes on the bottom of the intercooler. Tighten each bolt hand tight and then tighten each bolt to approx. 50 in-lbs. Check to make sure that none of the bolts have become loose during this process as the rubber depresses causing the bolt to come loose.





- 31. Reinstall the fan shroud and tighten 4x 10mm bolts to 9 ft-lbs.
- 32. Reinstall the main upper and lower radiator hoses and clamps.
- 33. Reinstall the transmission oil cooler and lines. Retorque 3x 10mm bolts to 49in-lbs. Remember to also reconnect the transmission lines going into the radiator tank. For Hybrid vehicles, reconnect the coolant hard lines and lines going to the bottom of the radiator tanks on each side.
- **34.** Connect the vacuum lines to the red fittings on the inlet of the intercooler.



- **35.** Reconnect electrical connectors for the fan and map sensor and reattach clips that hold the wiring harness to the radiator. Re-connect the upper radiator hose temperature sensor and the air temperature sensor on the outlet of the intercooler.
- **36.** Reinstall the coolant reservoir. Remember to reconnect the hose at the bottom of the reservoir. Torque the 2x 10mm bolts to 71in-lbs.
- 37. Re-install the charge air pipes. Take special care installing the pipes onto the Mishimoto intercooler as the aluminum can easily be scratched and affect charge pipe sealing. Make sure to hear a positive click when the charge pipes are fully seated. The procedure is the same for stock or Mishimoto charge pipes. If using Mishimoto charge pipes, make sure the coupler is in the correct position to allow worm gear clamps to be behind the beadroll of the pipe while still on the coupler.
- **38.** Reinstall bumper and fender flares. The top 10mm bumper bolts should be torqued to 49in-lbs and the bottom bolts should be torqued to 7ft-lbs.



- **39.** Reinstall the upper radiator panel and intake air duct and reinstall all 12x push clips. Remember to reconnect all electrical connections on the bumper and remount the connectors where applicable.
- **40.** Using a coolant vacuum filler, refill the cooling system and check for leaks. Check transmission fluid level and add fluid if necessary. For hybrid vehicles, fill and bleed the inverter cooling system as well.
- **41.** Reinstall the lower undertray panel and torque bolts to 16 ft-lbs.



Congratulations, you've completed your 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.



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