



INSTALLATION GUIDE

2020+ EXPLORER ST FRONT MOUNT INTERCOOLER KIT

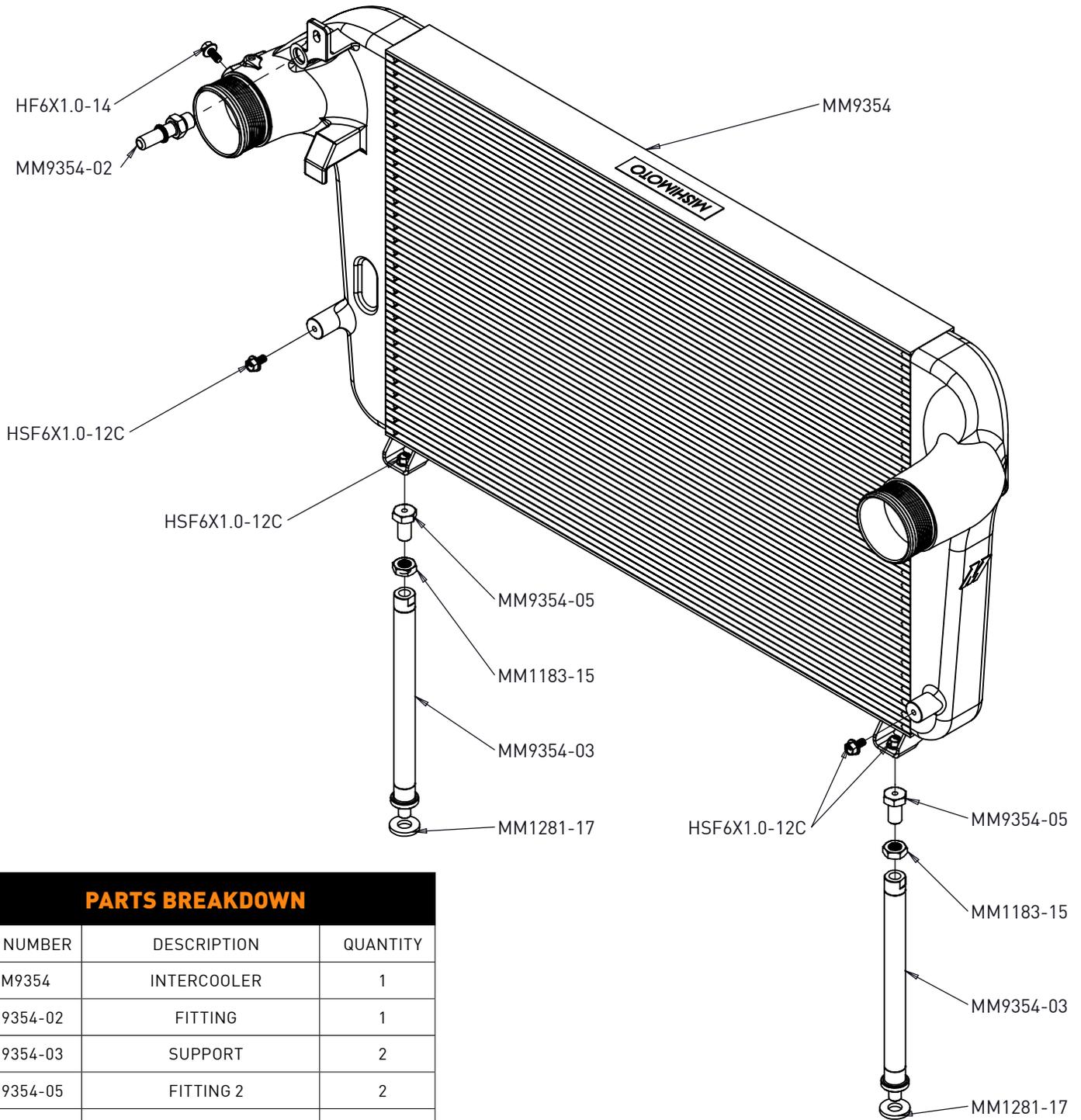
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RESOURCES & CONTACT

-  **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


PARTS BREAKDOWN

PART NUMBER	DESCRIPTION	QUANTITY
MM9354	INTERCOOLER	1
MM9354-02	FITTING	1
MM9354-03	SUPPORT	2
MM9354-05	FITTING 2	2
MM1281-17	GROMMET	2
MM1183-15	LOCK NUT	2
HF6X1.0-14	M6 BOLT - 14mm LENGTH	1
HSF6X1.0-12C	M6 BOLT - 12mm LENGTH	4

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

TOOLS NEEDED

1/4"-Drive Ratchet	17mm Wrench
3/8"-Drive Ratchet	19mm Wrench
7mm Socket	Pick Tool
8mm Socket	Drill & 1/4" Drill Bit (Required for 2021+ model-years only)
10mm Socket	Scissors
13mm Socket	
10mm Wrench	

INSTALLATION TIME **2-3 HOURS**

INSTALLATION DIFFICULTY

INSTALLATION INSTRUCTIONS

NOTE: These instructions are focused on the removal of factory intercooler and installation of Mishimoto intercooler. For details on removal and replacement of other factory parts, please refer to factory workshop manual or similar.

1. Disconnect the negative battery cable.
2. Remove front bumper cover and front undertray.
3. Remove upper grille panel and headlights.
4. Remove the upper and lower grille ducts by pulling straight forward.
5. Remove the 8x 13mm bolts securing the front crash bar to the vehicle and remove the front crash bar.
6. Disconnect 3x electrical connectors. One is on the passenger side near the ECU, one is on the outlet (driver's side) MAP sensor on the factory intercooler, and the last one is on the bottom corner of the grille shutter assembly, in front of the front driver-side wheel.



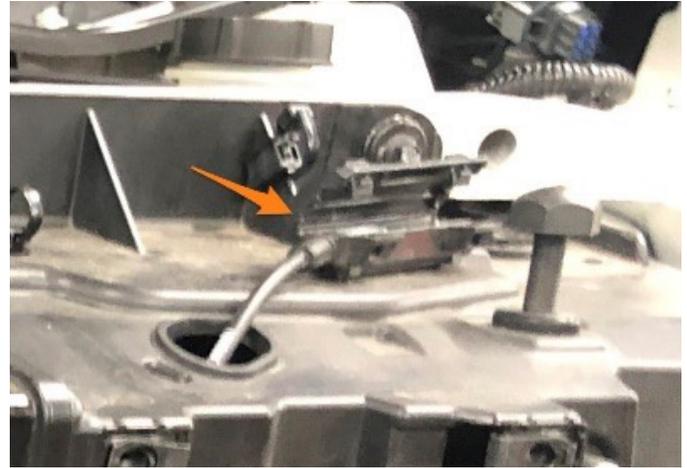
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7. Remove the fresh air duct from the grille shutter assembly by pulling apart at this junction.



8. Remove hood latch cable by un-clipping cover and removing the cable. Move the cable out of the way.



9. Remove the 4x 8mm bolts on the top of the grille shutter assembly.



10. Remove the 7x 10mm bolts holding the bottom of the grille shutter assembly to the vehicle. If you have a 2020+ model, there may be 6x aluminum rivets instead of the 7x bolts. Drill the 6x rivets out using a 1/4" or similar size drill bit.



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- 11.** Locate the two clips on top of either side of the grille shutter assembly holding it to the radiator. Push the clips in as shown and pull the grille shutter assembly towards the front of the vehicle. Remove the grille shutter assembly.



- 12.** Remove the EVAP vacuum line with the blue connector by pushing the two blue tabs toward the rear of the car and push down. Loosen the clamp on both the inlet and outlet of the factory intercooler. It maybe beneficial to use a pick tool to loosen the coupler.



- 13.** Remove 1x 8mm bolt securing the factory intercooler to the radiator.



- 14.** It may be helpful to use a pick tool or similar to start to remove the charge pipes from the intercooler so that the charge pipes come off the intercooler more easily when it is pulled away from the vehicle. Pinch the clip on the passenger side of the intercooler and pull the intercooler away from the vehicle. Then pull the intercooler up and away from the vehicle while removing the charge pipes.

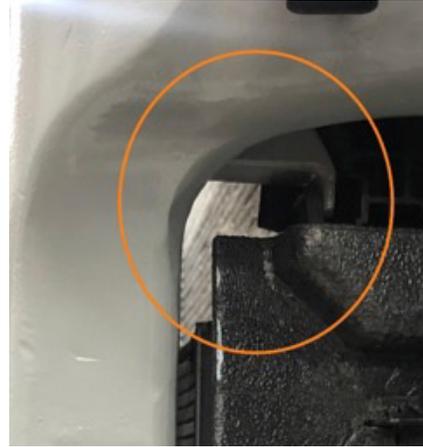


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- 15.** Remove the foam shrouds on each side of the radiator. On the passenger side, the shroud will have to be cut around the A/C condenser lines as shown. There are two clips on each side that need to be removed with a pick tool. (4x clips total)

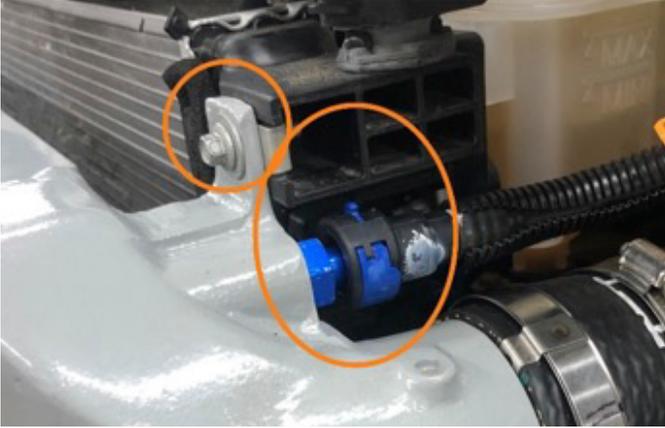


- 16.** It may be helpful to have a second set of hands to complete this step as the intercooler is heavy and hard to maneuver. If the intercooler does not easily slide into place, it may help to align the hooks on the rear of the intercooler and slide the intercooler from the side. At the same time, line up and connect the charge pipes to the inlet and outlet of the cooler. The hooks are only needed to hold up the intercooler during installation and will not be supporting the weight of the intercooler.

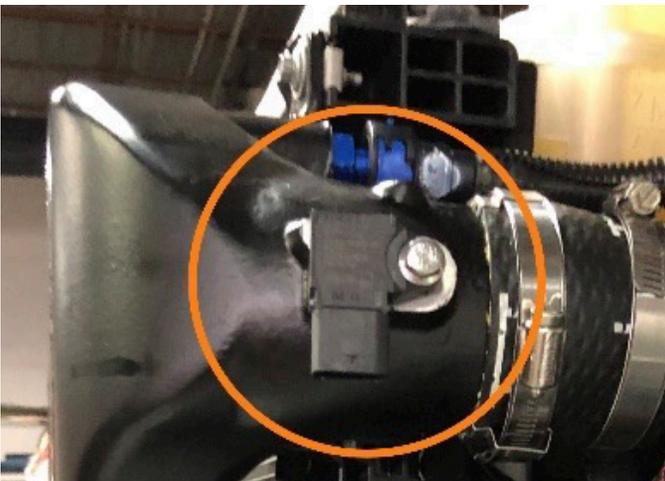


- 17.** Install the factory 8mm M6 bolt into the upper driver-side corner of the intercooler. Leave the bolt loose as the intercooler may still need some adjustment. Install the included blue fitting onto the backside of the intercooler as shown. Tighten with a 19mm wrench to approx. 12 lb-ft and reinstall EVAP fitting with blue connector. It may be helpful to put a light coating of silicone lubricant on the fitting before reinstalling the fitting to ensure the internal o-ring does not get damaged.

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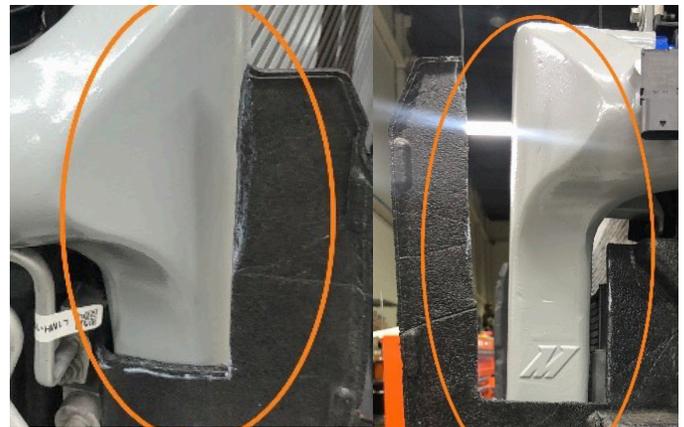
18. Install the MAP sensor and tighten with included 14mm long bolt (the longest of the 5 included bolts). Torque to approx. 89in-lbs.



19. Install 2x included bolts through the holes in the a/c condenser into the bosses on the intercooler. It may be necessary to adjust the intercooler horizontally in order to get the bolts to line up. Tighten the bolts with a 10mm wrench. Then tighten the 8mm factory bolt at the top of the intercooler to 71 in-lbs. Make sure that the charge pipes are fully seated and tighten the factory worm gear clamps to 48 in-lbs.

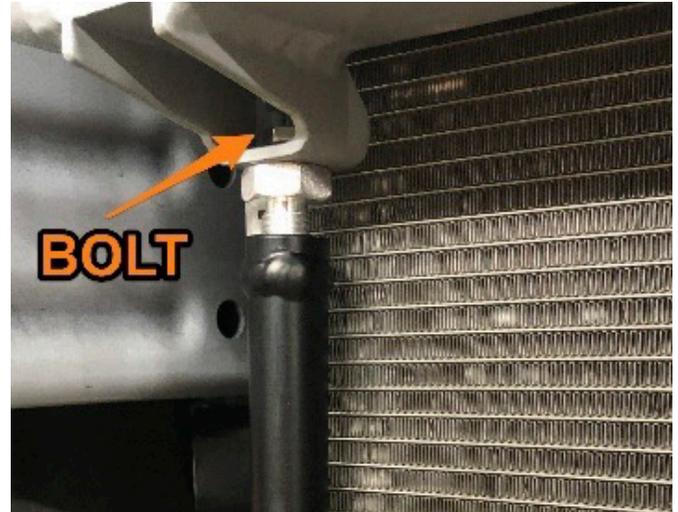
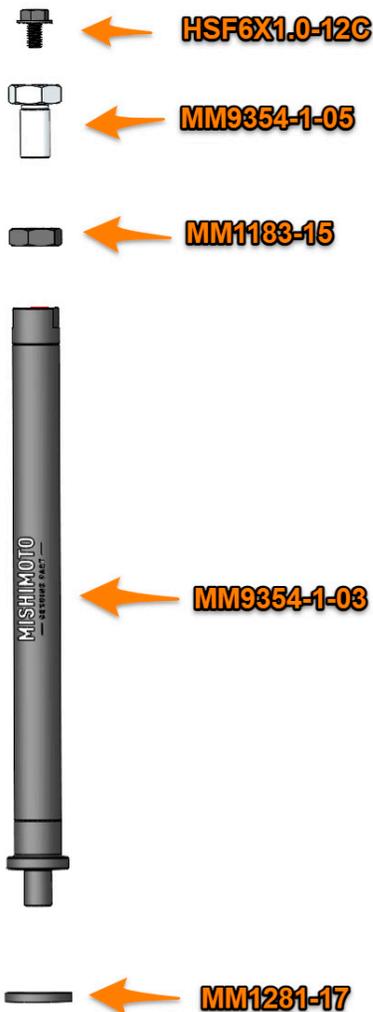


20. Trim the foam shrouds with scissors as shown to minimize contact with the Mishimoto intercooler and reinstall with factory clips.



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21. Assemble the 2x support rods as shown. Put the bottom peg in the hole in the frame below the intercooler. Thread one of the remaining M6 bolts through the bracket on the bottom of the intercooler and into the top of the support rod and tighten the 10mm M6 nut. Counter hold the top of the support rod with a 19mm wrench. Repeat for other support rod.



- 22.** While holding the 19mm top nut with a wrench, thread the support rod down counterclockwise to extend the assembly until the support rod starts pushing upwards on the bottom of the intercooler. Tighten the 19mm jam nut. Repeat for other support rod.
- 23.** Reinstall grille shutter assembly. Do not forget to re-connect the MAP sensor in the outlet of the intercooler. Make sure the foam shrouds do not get caught in the assembly. If you have a 2020+ model-year Explorer, use the 6x provided push clips to secure the bottom of the grille shutter assembly to the frame. Reconnect the 2x electrical connectors and reconnect hood latch cable.
- 24.** Reinstall front crash bar and torque 8x 13mm bolts to 35 lb-ft.
- 25.** Reinstall headlights and bumper.
- 26.** Reconnect battery.

Congratulations! You have 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.



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