



INSTALLATION GUIDE

Part Number 113049

Last Updated 03/22/2023

GRIMMSPEED FA24 TOP MOUNT INTERCOOLER INSTALL GUIDE



FITMENTS:

- Subaru WRX (Base, Limited, Premium, GT) - 2022-2023
- Subaru Ascent (Base, Limited, Touring, Onyx) - 2019-2023
- Subaru Legacy XT (Sport, Touring) - 2020-2023
- Subaru Outback XT (Base, Limited, Touring) - 2020-2023
- Subaru Outback Wilderness - 2021-2023

TOOLS NEEDED:

- Ratcheting wrench or light-duty impact driver
- Flat head screwdriver
- 12mm socket with extension
- 7mm socket (*optional*)

THINGS TO NOTE:

- This is a fairly basic installation and should only take 20-30 minutes to complete
- Be sure to follow recommended torque specs during the install.
- All of the bolts we will be touching for this install are identical, so you don't need to worry about keeping them sorted neatly.
- No ECU tuning or re-calibration is required after installation.

PRODUCT DISCLAIMER:

United States 48 State Compliant:

California/New York Residents please see Prop 65.

This is a Race Only product that is to be used solely for competition, it cannot be used on vehicles that are operated on public streets, roads or highways. Its use is limited to closed-course and open-course racing that is formally sanctioned by a recognized racing organization. Any other use including recreational use could be in violation of local, state and federal laws.

GrimmSpeed is not responsible for any vehicle damage or personal injury that may occur due to an installation error, product misuse, or removal of GrimmSpeed products. GrimmSpeed highly suggests that a trained professional conduct the installation on all products. GrimmSpeed is not responsible for damaged products due to incorrect installation.



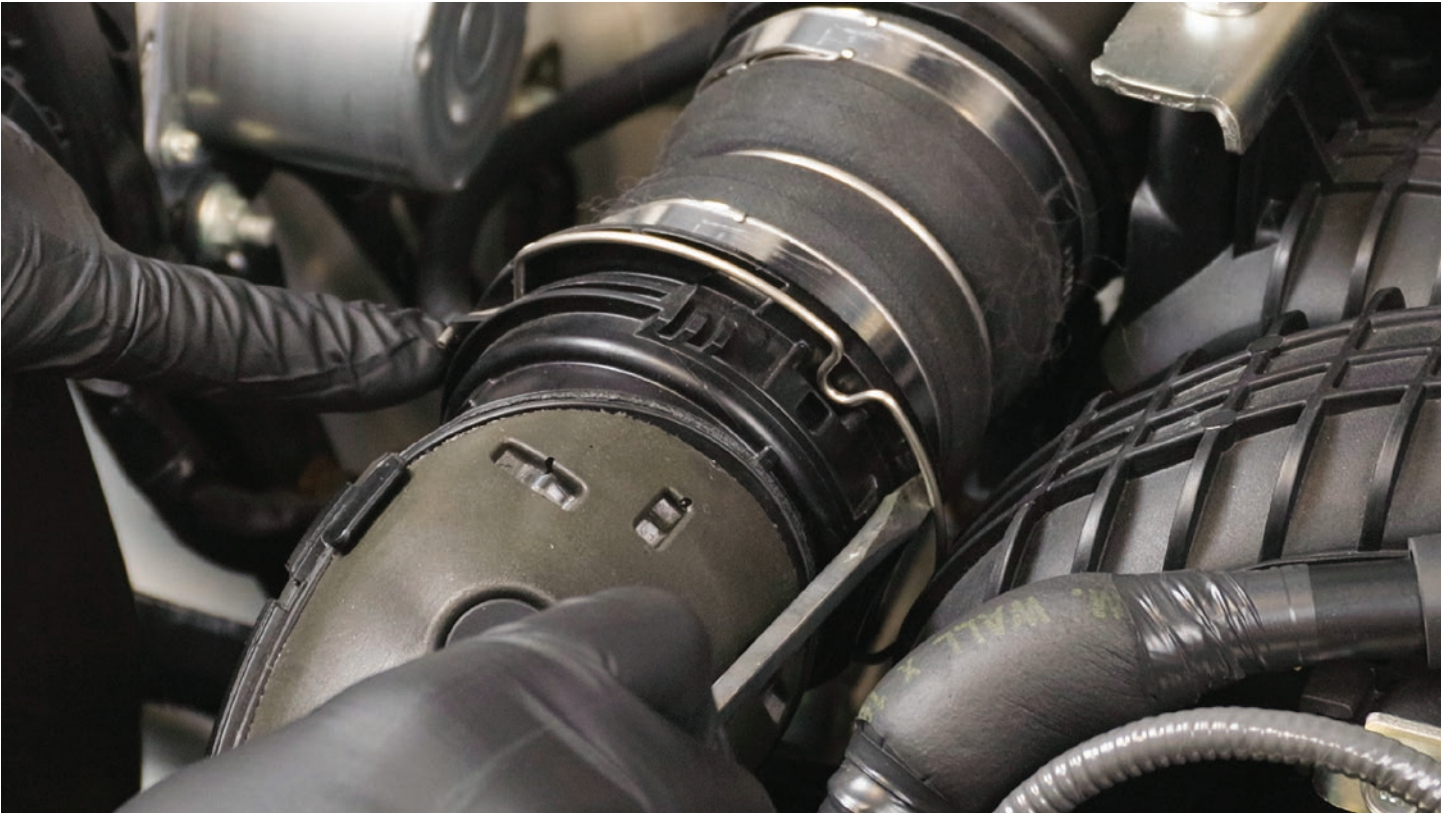
COMPONENTS INCLUDED:

- (1x) GrimmSpeed Top Mount Intercooler
- (1x) GrimmSpeed Silicone Coupler
- (2x) Throttle Body O-Rings
- (2x) Worm-Gear Clamps

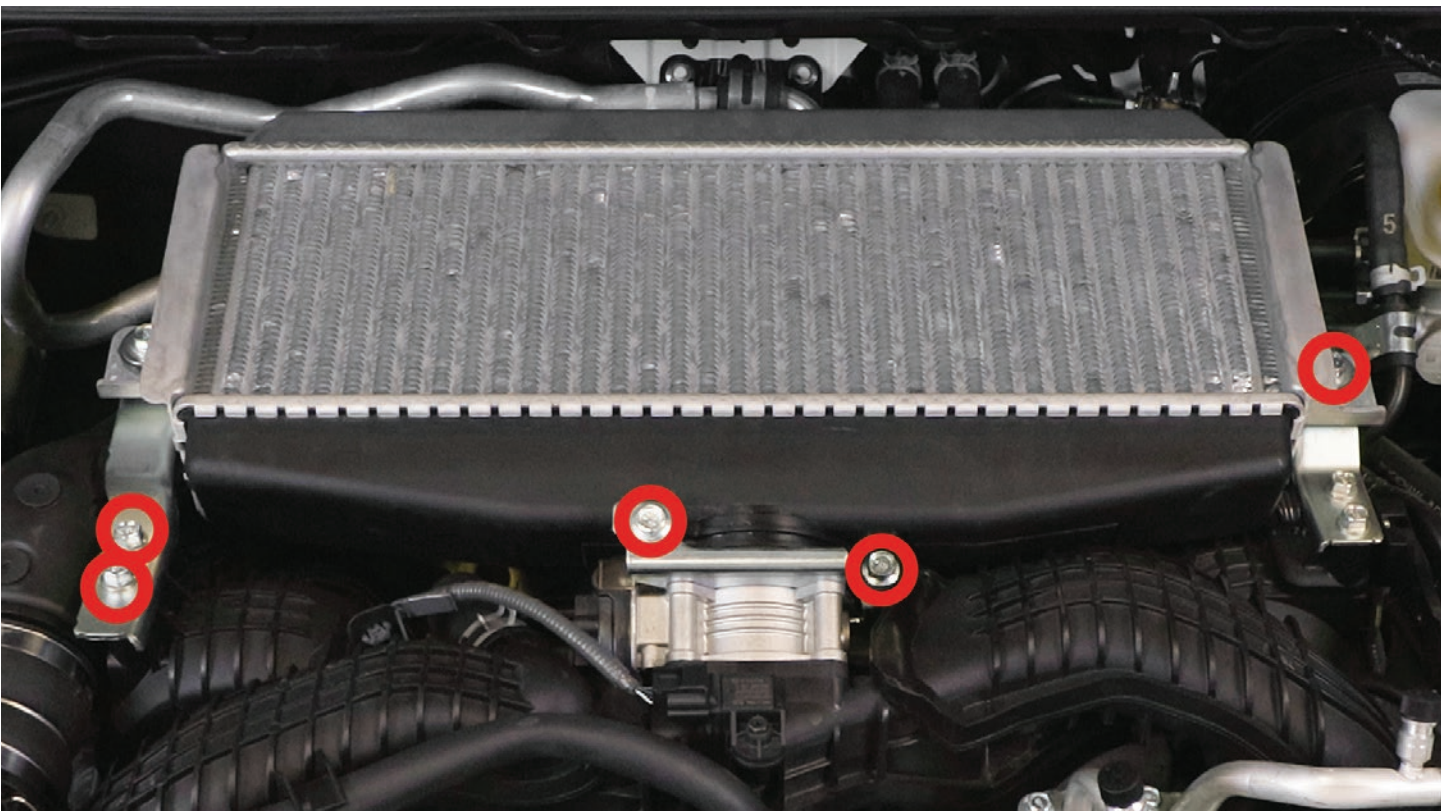
BEFORE YOU BEGIN:

Turn off the ignition. Loosen battery terminal and disconnect the negative battery terminal cable. Allow the vehicle to sit for a minimum of 5 minutes to drain any remaining charge from the charging system.

STEP 1 - Use a flat head screwdriver or pick tool to pop up the retaining ring on the chargepipe coupler up to the service position. The ends will lock in to the molded notches to keep the locking ring disengaged.



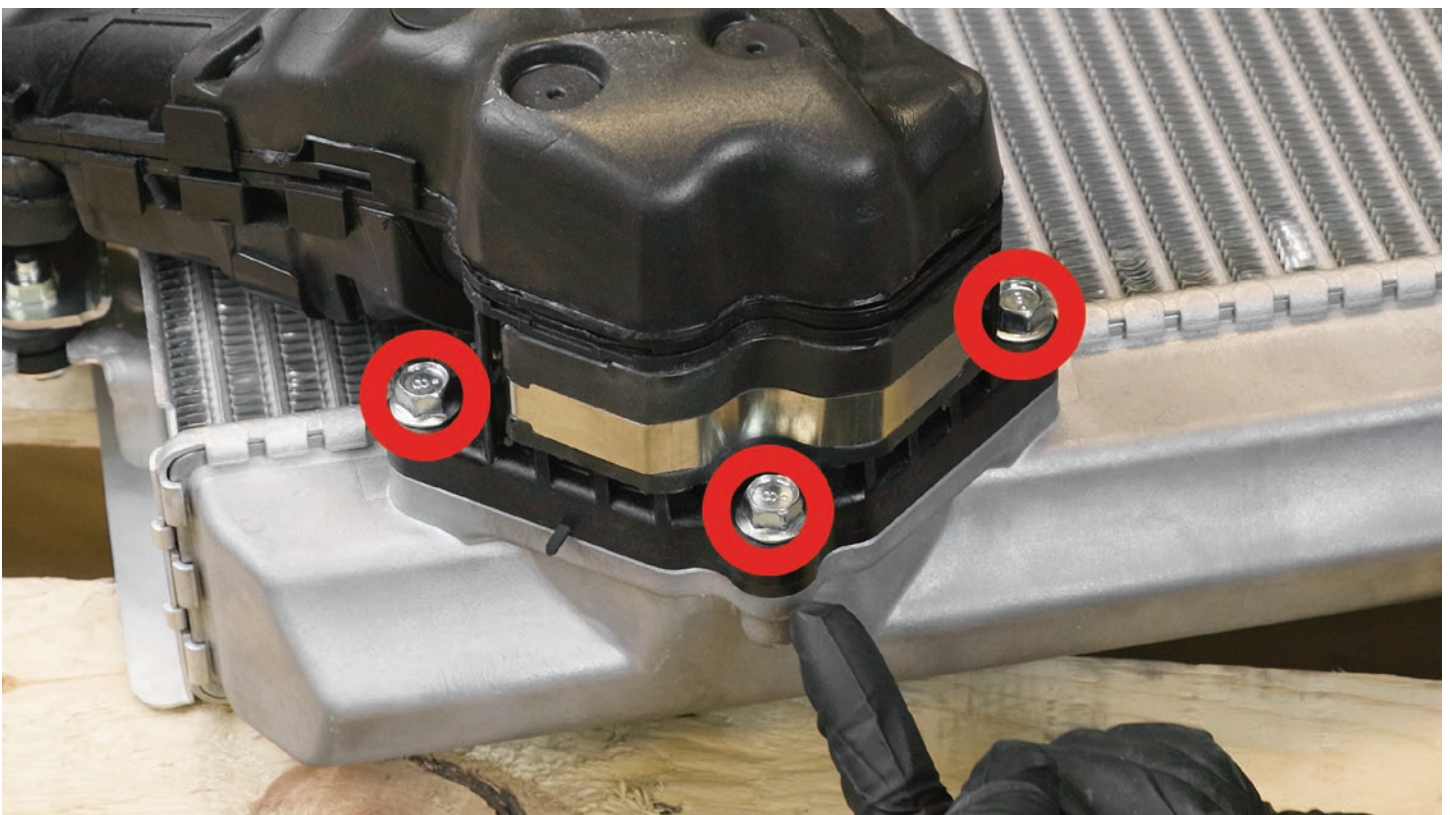
STEP 2 - With a 12mm socket, remove the 5 bolts indicated below (2 holding the passenger side support bracket to the intake manifold, 2 on the throttle body, and one mounting the intercooler to the driver's side support bracket)



STEP 3 - With those bolts removed and the chargepipe disconnected, you should be able to pop the intercooler off of the throttle body (towards the firewall) and remove it from the engine bay.



STEP 4 - With the intercooler off the car, turn it over and remove the 3 12mm bolts securing the chargepipe to the upper endtank.



STEP 5 - Remove the 12mm bolt securing the support bracket to the end of the factory intercooler.



STEP 6 - Use a flat head screwdriver to gently pry the metal sleeve out of the intercooler support bushing.



STEP 7 - Remove the rubber bushing from the factory intercooler by sliding it out of the cutout slot in the bracket. Repeat step 6-7 on the other side of the intercooler as well so both bushings and sleeve pairs are free.



STEP 8 - Using your flat head screwdriver or an 7mm socket, remove the clamps from the rubber coupler on the chargepipe.



STEP 9 - With the clamps loose, separate the chargepipe from the rubber coupler. Remove the quick release adapter from the factory coupler as well.



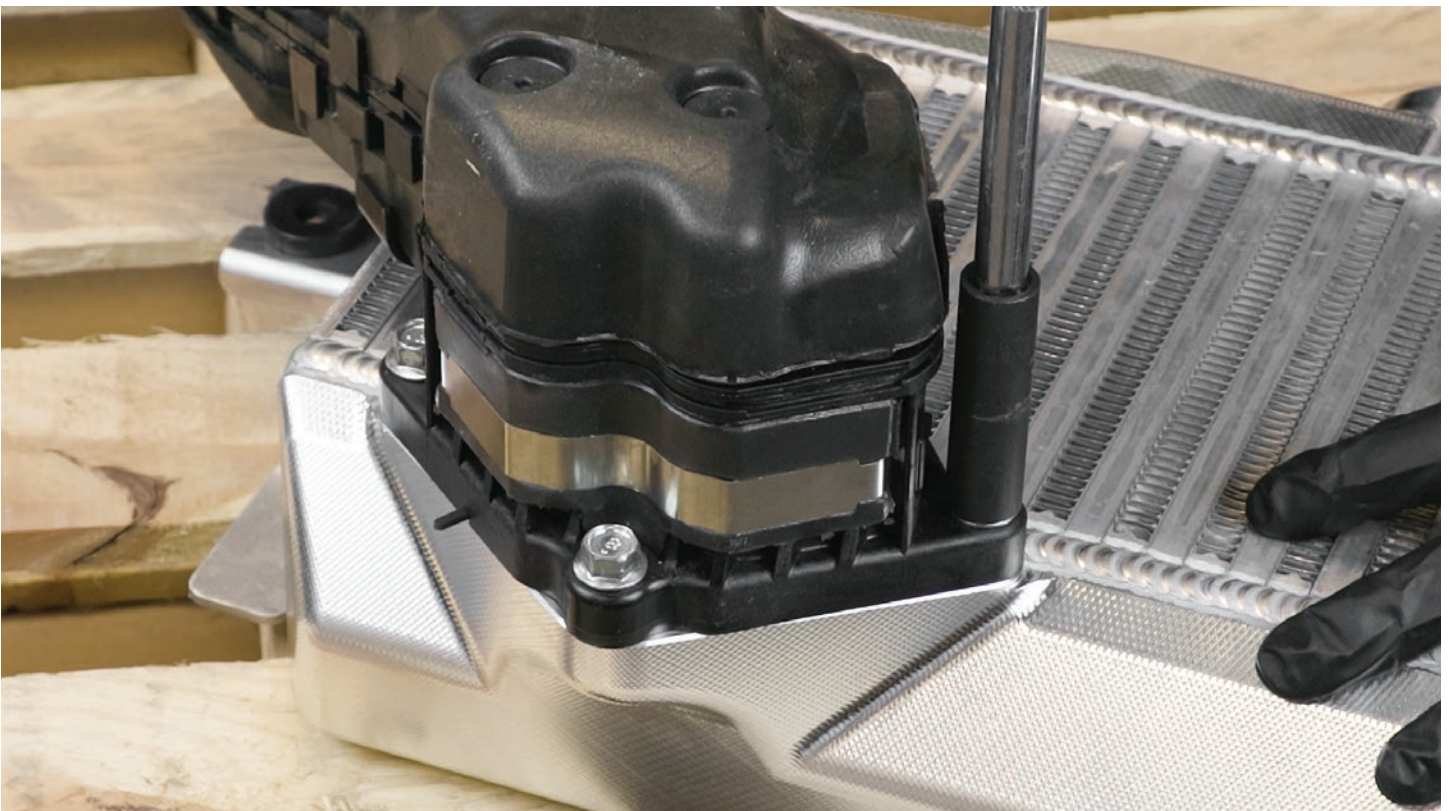
STEP 10 - Take the bushings and sleeves you removed in steps 6-7 and install them onto both ends of your GrimmSpeed intercooler. Ensure that the flat sides of the sleeves are facing the front (the side of the intercooler with the GrimmSpeed text).



STEP 11 - Ensure that the factory o-ring gasket on the chargepipe is still in place and free of any debris before bolting the chargepipe up to your GrimmSpeed Intercooler.



STEP 12 - Using 3 of the 12mm bolts you removed earlier, bolt the chargepipe onto the GrimmSpeed Intercooler, ensuring that the two dowel posts on the chargepipe are aligned with the pockets on the intercooler. Torque these bolts to 11.8 ft/lbs (16 Nm).



STEP 13 - Install the new GrimmSpeed silicone coupler onto the quick release side of the charge pipe in the orientation shows below (tapered side of the adapter pointing away from the coupler).



STEP 14 - Pop the other side of the coupler onto the top side of the charge pipe with the GrimmSpeed logo facing up. Slide the included clamps over the coupler, but don't tighten them quite yet in case you need to re-orient the coupler once the intercooler is on the car.



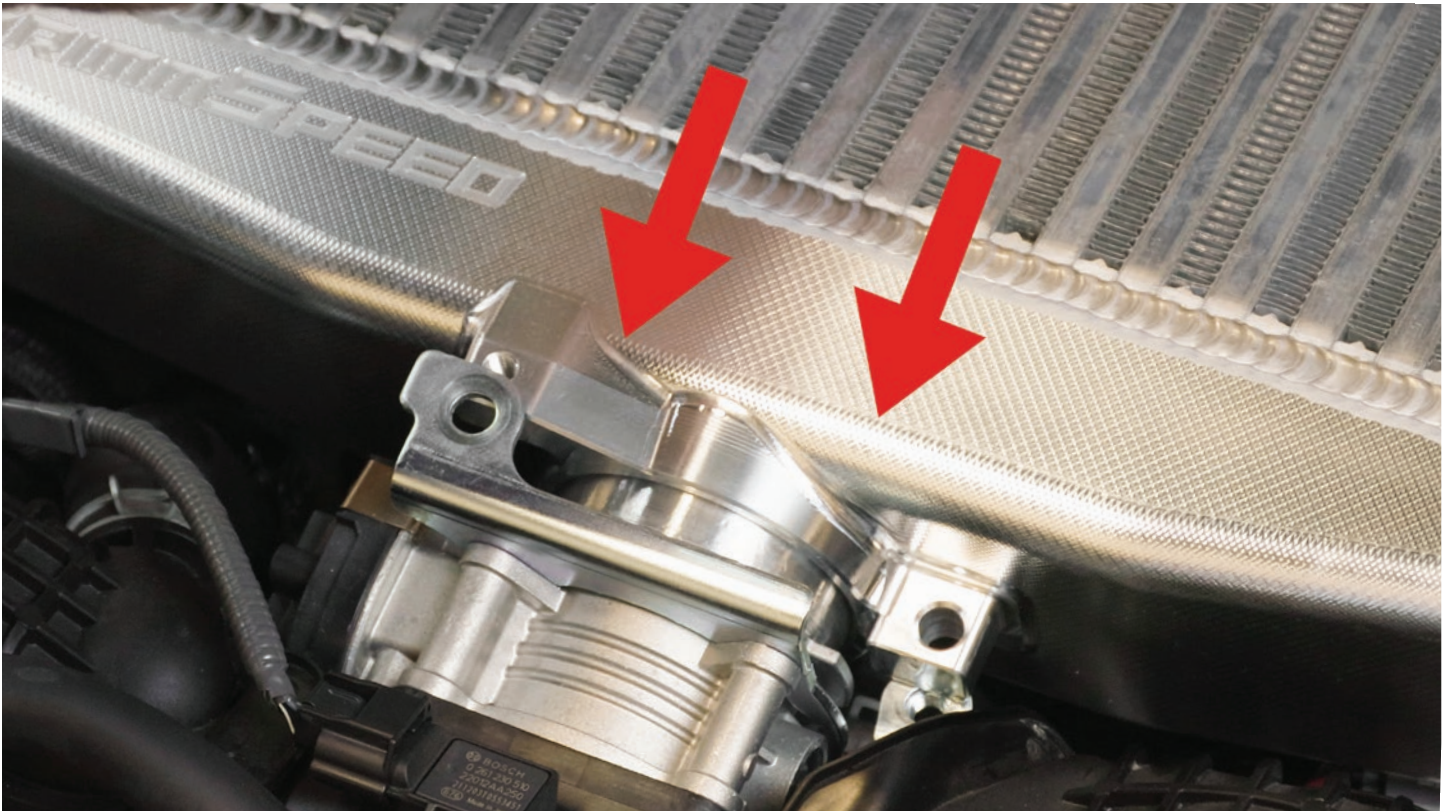
STEP 15 - Loosely install the passenger side bracket onto the GrimmSpeed TMIC using another one of the 12mm bolts from before. Finger tight is fine for now as the bracket will need to be loose to mount onto the intake manifold.



STEP 16 - Back under the hood, place the intercooler roughly in place on top of the engine. Ensure that the passenger side support bracket is roughly in place above the intake manifold.



STEP 17 - With the intercooler in place, slide the throttle body flange down over the throttle body. This should be a snug fit, so you will need to use a fair amount of force to get it fully seated so the bolt holes line up. **NOTE: If it's too tight or binding up, you may need to apply extra lubrication to the o-rings inside of the intercooler flange.**



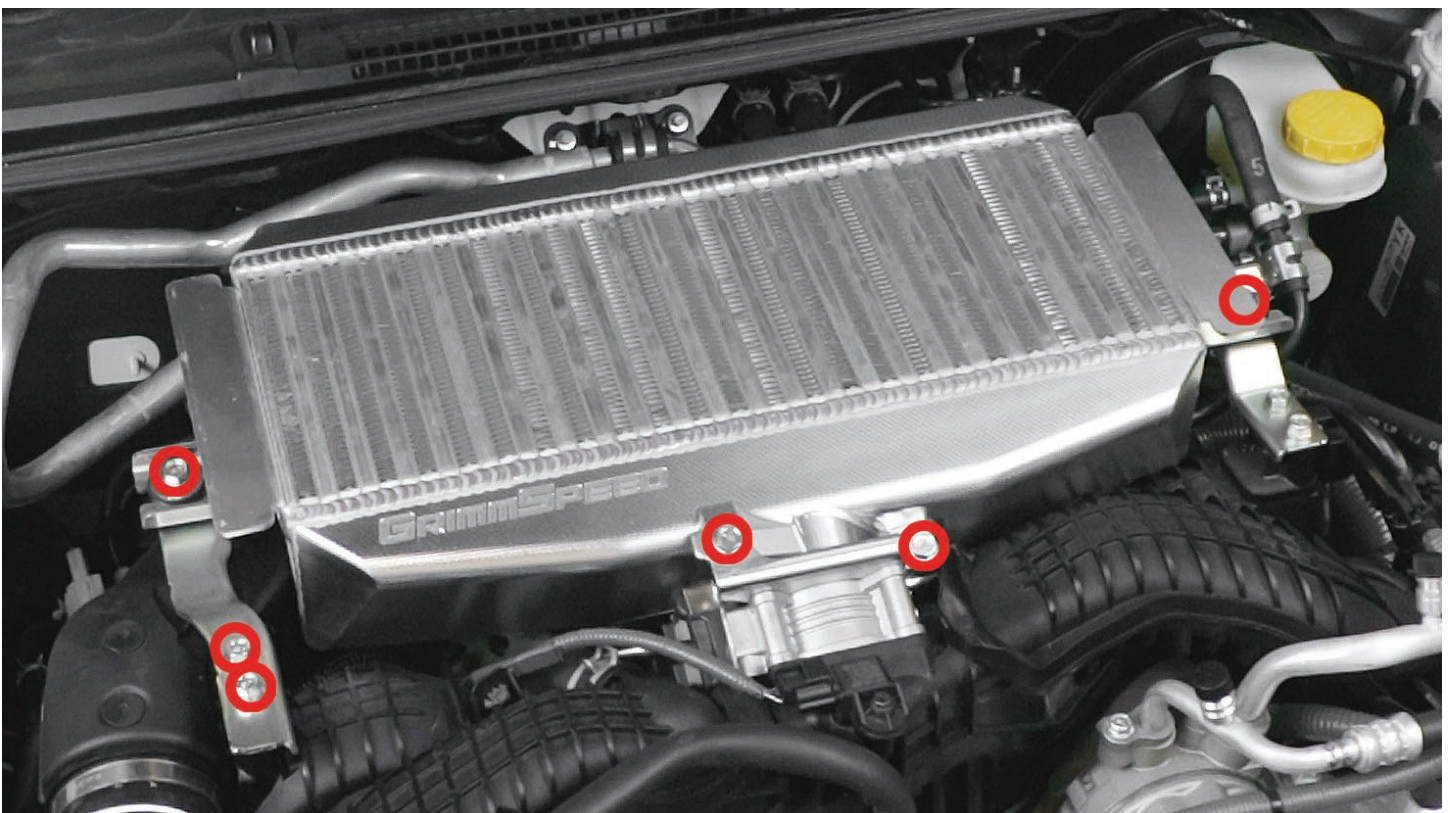
STEP 18 - Pop the chargepipe coupler back into place in the lower half of the charge pipe. Once it is seated, you can click the retaining ring back into operating position to secure the adapter. You should hear an audible click from each end of the clip as it engages.



STEP 19 - Take a moment to double check that the GrimmSpeed silicone coupler is oriented properly with the logo facing up and then align the clamps so 1/8-1/4" of the coupler is showing on the outside. Tighten the clamps down using a screwdriver or 7mm socket until they are snug. **DO NOT OVER TIGHTEN!**



STEP 20 - Go through and reinstall the 5 remaining 12mm bolts to secure the GrimmSpeed Intercooler into the car. Don't forget to fully tighten the bolt we installed loosely on to mount the passenger side bushing to the intake manifold bracket. Torque all of the bolts to 11.8 ft/lbs (16 nm)





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