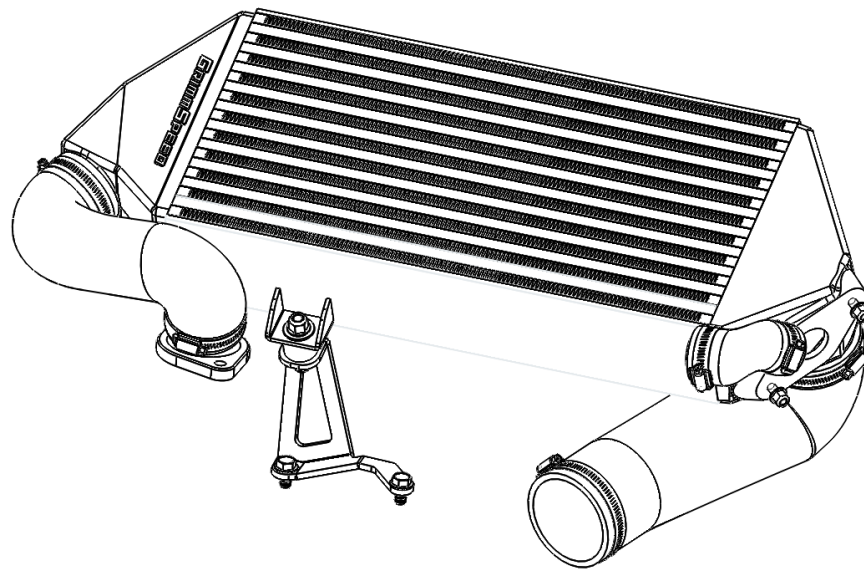




**GrimmSpeed Install Guide Series**  
**Installing the GrimmSpeed Top Mount Intercooler**  
**Subaru 2008 - 2014 WRX and 2005 - 2009 Legacy GT**  
**Updated 1/20/15**



**Introduction:** This guide will illustrate the installation of the GrimmSpeed Top Mount Intercooler. The difficulty here is **medium**, so take your time and enjoy the job! Expect to spend **60-120min**, depending on level of experience.

**Tools:** The tools listed below are suggested for this task. Optional tools are noted.

- Flathead and phillips screwdrivers
- 3/8in ratchet, extension, 13mm and 12mm sockets
- 1/4in ratchet, extension, 10mm and 8mm sockets
- 10mm wrench
- 3mm allen wrench

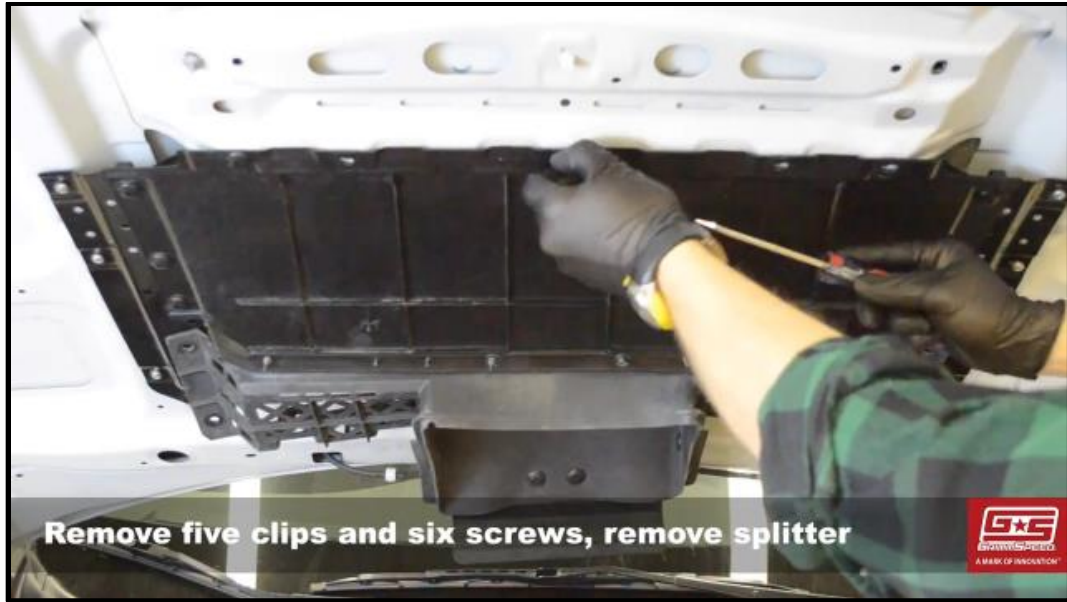
**Tips:** Take care to ensure that nothing is dropped into the compressor housing after you've removed your factory intercooler. A piece of plastic or tape in your socket will keep bolts from dropping into your engine bay when working in tight areas.

### **Procedure:**

1. Begin by collecting your tools and popping your hood.
2. First, install the two provided lengths of gasket bulb onto the splitter as shown. Use care when rounding the corners. Gaskets are cut to length, but depending on how much you stretch it during install, you may find that the gasket needs trimming when you've reached the end.



3. Next, remove the OEM splitter from the hood of the vehicle by removing five (5) push clips along the top edge and three (3) phillips head screws on each side. You'll reuse this hardware, so set it aside. Legacy GT owners will have a slightly different hardware configuration, but the OEM splitter should be removed just the same. *(Note: If equipped, you may need to remove the sound deadening panel under your hood for this step.)*



4. With the splitter off the car, remove the OEM rubber portion of the splitter. This is done by releasing a series of push clips as well as small rubber plugs. Putting slight pressure on the plug and then feeding them back into the holes will keep them from breaking.



5. Next, maneuver the GrimmSpeed splitter into place. There are four (4) fasteners on the top and four (4) fasteners on the bottom. Insert the small 3mm allen head screws from the inside of the splitter and secure them with the provided 10mm nuts. Legacy GT owners will skip this step, as their splitter replaces the entire OEM unit.



6. Reinstall the updated splitter assembly onto the hood of the car using the six (6) Phillips head screws and five (5) push clips. Note that the rear of the splitter has two small tabs that slide into the hood and hold it in place. Be sure that these are in position before fastening the splitter.



7. **NOTE:** Legacy GT owners will simply install the GrimmSpeed splitter in place of the factory splitter. Because of the low profile of the LGT hood, it may be necessary to 'tuck' your washer fluid line into the hood rather than allowing it to run under the hood. Look for a 'how-to' video posted on our website for details.
8. Reinstall your factory sound deadening panel if desired and trim if necessary.



9. Remove your OEM engine cover by releasing the four (4) clips – one on each corner.



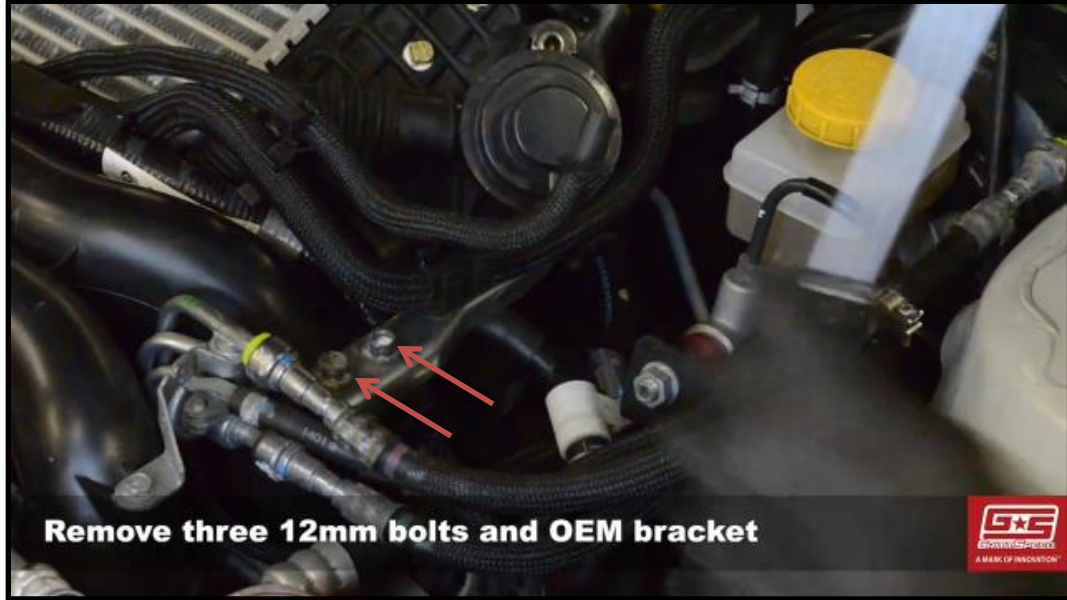
10. Disconnect the vacuum hose from your bypass valve and use a 10mm socket to remove the two (2) bolts securing it to your intercooler.





11. There are three (3) 12mm bolts on the driver's side of the vehicle securing the TMIC to the engine. Remove the first, which attached the TMIC to the support bracket and then remove the two that attach the bracket to the intake manifold. Disconnect any hoses from the bracket and set it aside. You will not be needing that bracket or that hardware with the GrimmSpeed intercooler.



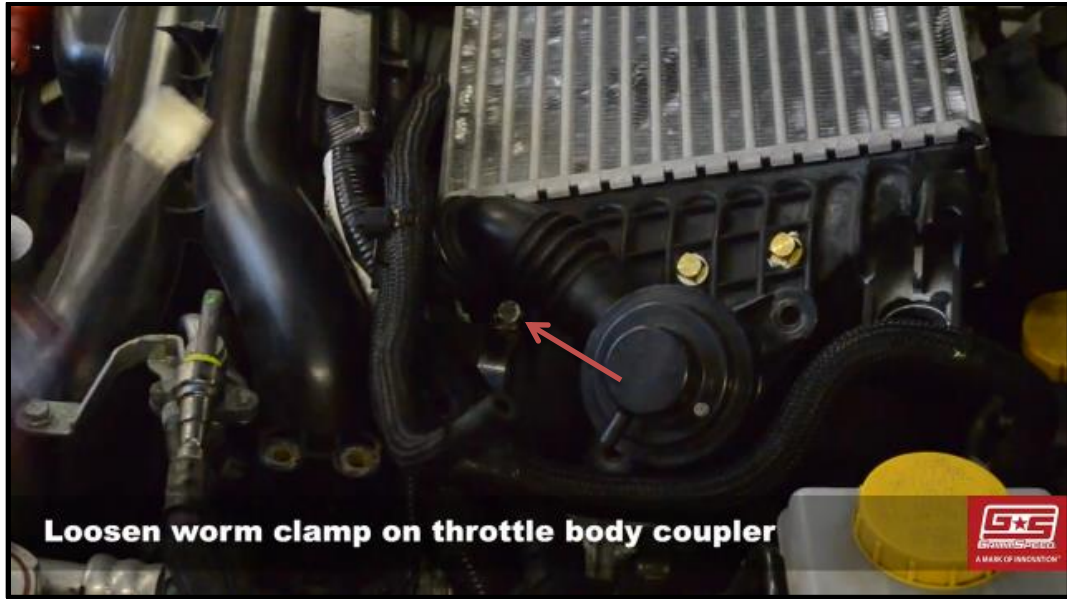


12. Remove the two (2) 12mm bolts securing the factory TMIC to the turbo. Set these aside as you'll be reusing them with the installation of the GrimmSpeed intercooler.



13. Next, loosen the worm clamp on the driver's side of the stock intercooler using a flat head screwdriver or 8mm socket. This will allow you to remove the intercooler completely.





**Loosen worm clamp on throttle body coupler**



**Carefully remove your OEM intercooler**

14. Next, loosen the worm gear clamp holding the stock throttle body coupler to the throttle body. You may need to remove the 10mm bolt securing the wiring harness to the intake manifold for easy access. Remove that hose and set it aside. You will not be needing it for the GrimmSpeed installation.





**Loosen worm gear clamp to remove throttle body hose**

15. Next, we'll prep the front and rear mounting brackets for installation. Beginning with the smaller rear bracket, identify the larger of the two holes and install the vibration isolator as shown. Tighten with a 13mm socket and repeat for the front bracket.



**Install rubber isolator onto front bracket, 13mm socket**



16. Next we'll install the rear bracket. Begin by removing the bolt that secures the AC line to the firewall. Next, set the GrimmSpeed bracket into place with the bend towards the firewall and install the provided 10mm bolt. Remove the nut and washer from the top of the bracket and set them aside.





17. Install the front mounting bracket using the two (2) 12mm bolts provided in the kit. Remove the nut and washer from the bracket and set them aside.



18. Next, install the aluminum turbo adaptor with o-ring onto the turbo using the two (2) 12mm bolts that you removed earlier. Tight down both sides evenly, alternating between the two until secure. Snug is just fine, as the pressure tight seal comes from the compressor o-ring.





19. Place one of the large worm gear clamps onto the throttle body coupler such that the screw head can be accessed from the driver's side of the vehicle. Next, push the throttle body coupler onto the throttle body so that it's seated flat against the throttle body. Ensuring that the 'inlet' side of the coupler is point straight up, tighten the clamp. Remove your BPV at this time.



20. Repeat the process on the passenger side, installing the coupler such that when looking straight down at it, it appears thinner. Leave this clamp loose for the moment.



21. Prep the intercooler for installation by removing the three red sealing caps on each of the ports.



22. Finally, position the intercooler in the engine bay, lining up the tab in the rear with the rear bracket and then the front. It should drop into position nicely. Manipulate the intercooler and the silicone couplers so that the couplers are securely over each side of the intercooler. Tighten worm gear clamps.





**Install GrimmSpeed TMI**



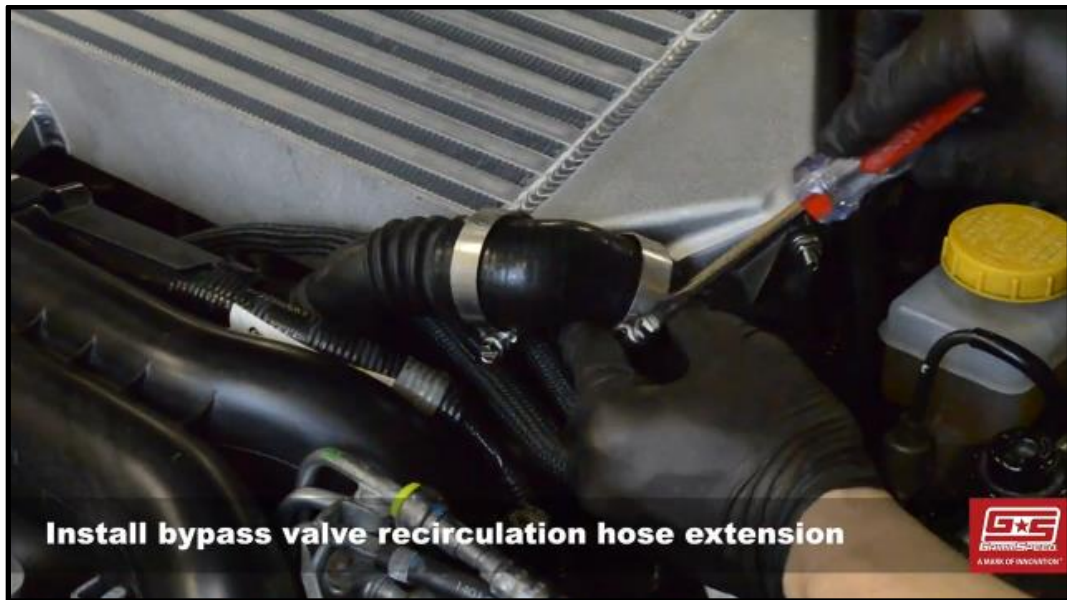
**Secure driver's side coupler and clamp**



23. Making sure that the rubber OEM gasket is still in place, reinstall your bypass valve using the supplied 10mm nuts. The studs are preinstalled with thread-locking compound, so there should be no need to adjust them. Reattach your bypass valve vacuum line at this time.



24. Next we'll install the BPV hose extension. If you have an aftermarket BPV hose, you should use the supplied aluminum tube as a coupler. If you have the stock hose in place, slide the aluminum tube into the stock hose as shown. A small plastic lip will stock it from dropping in. Next, install the GrimmSpeed silicone extension onto both the hose and the bypass valve using the supplied worm gear clamps.



25. Install the washer and nut onto both the front and rear mounts using a 13mm socket, securing the intercooler in place.





26. Finally, check all connections and clamps to be sure that things are snug and then start the car and check for boost leaks!

That's it! You should be all set to go. Check the assembly periodically to make sure everything is still snug. This intercooler works very well with no tuning, but to extract its full potential, tuning is always a great option.