

2022+ SUBARU WRX FMIC & CHARGE PIPES

INSTALL INSTRUCTIONS

Introduction ///

The goal of AMS Performance is to provide the highest quality, best performing products available. By utilizing research and development, and rigorous testing programs AMS Performance will never compromise the quality or performance of our products. In addition, AMS Performance will only provide the finest customer service offering only parts and advice that are in the best interests of the customer. AMS Performance was built on a foundation of integrity. This is who we are. This is what you can count on.

A vehicle modified by the use of performance parts and tuning may not meet the legal requirements for use on public roads. AMS Performance makes no claims of compliance unless otherwise stated on a per-product basis. Use or installation of performance parts and tuning may adversely affect the drivability and reliability of your vehicle, and may also affect or eliminate your insurance coverage, factory warranty and new OEM part warranty. There is no stated or implied guarantee by AMS of continued OEM vehicle warranty, insurance coverage, or emissions compliance, due to the stress placed on your vehicle by performance parts and our inability to monitor its use, tuning or modification.

These instructions are not intended to be a comprehensive guide for installation as there are many variables that may affect your particular vehicle, including but not limited to model year differences, sub-model/trim/optional equipment differences, the presence of non-OEM parts, or other modifications that may have previously been completed. A basic understanding of automotive parts and systems and novice mechanical skills should be all that is necessary for installation, but certain circumstances may necessitate professional installation.

AMS Performance is committed to providing quality support for our products. If you are in need of technical support, installation help, or a replacement component, our Customer Service Team is available directly via telephone at 847-709-0530, or digitally via the contact form linked here: amsperformance.com/support

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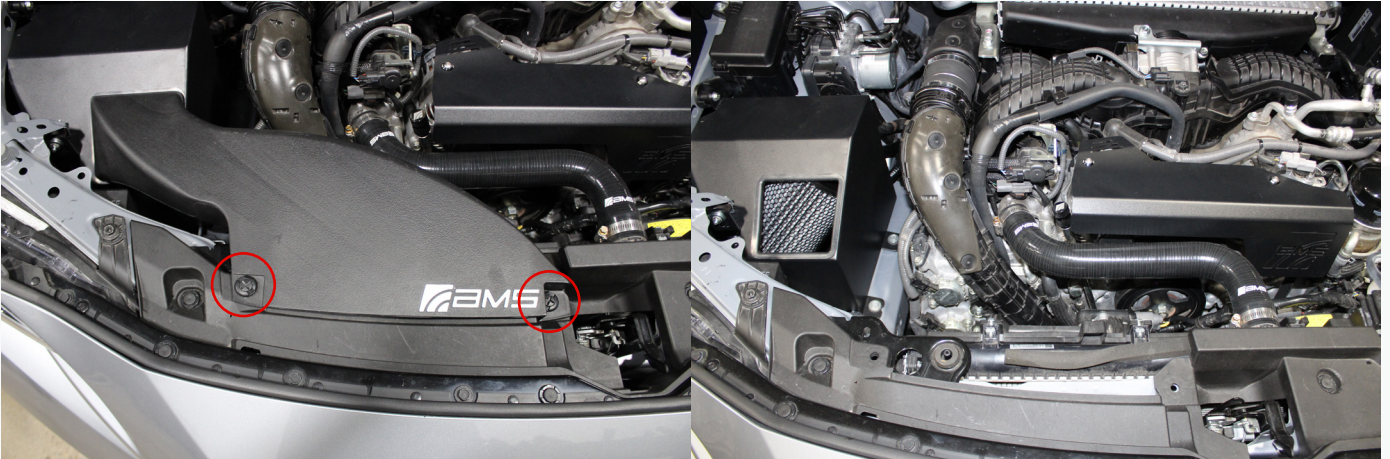
02 | Disassembly

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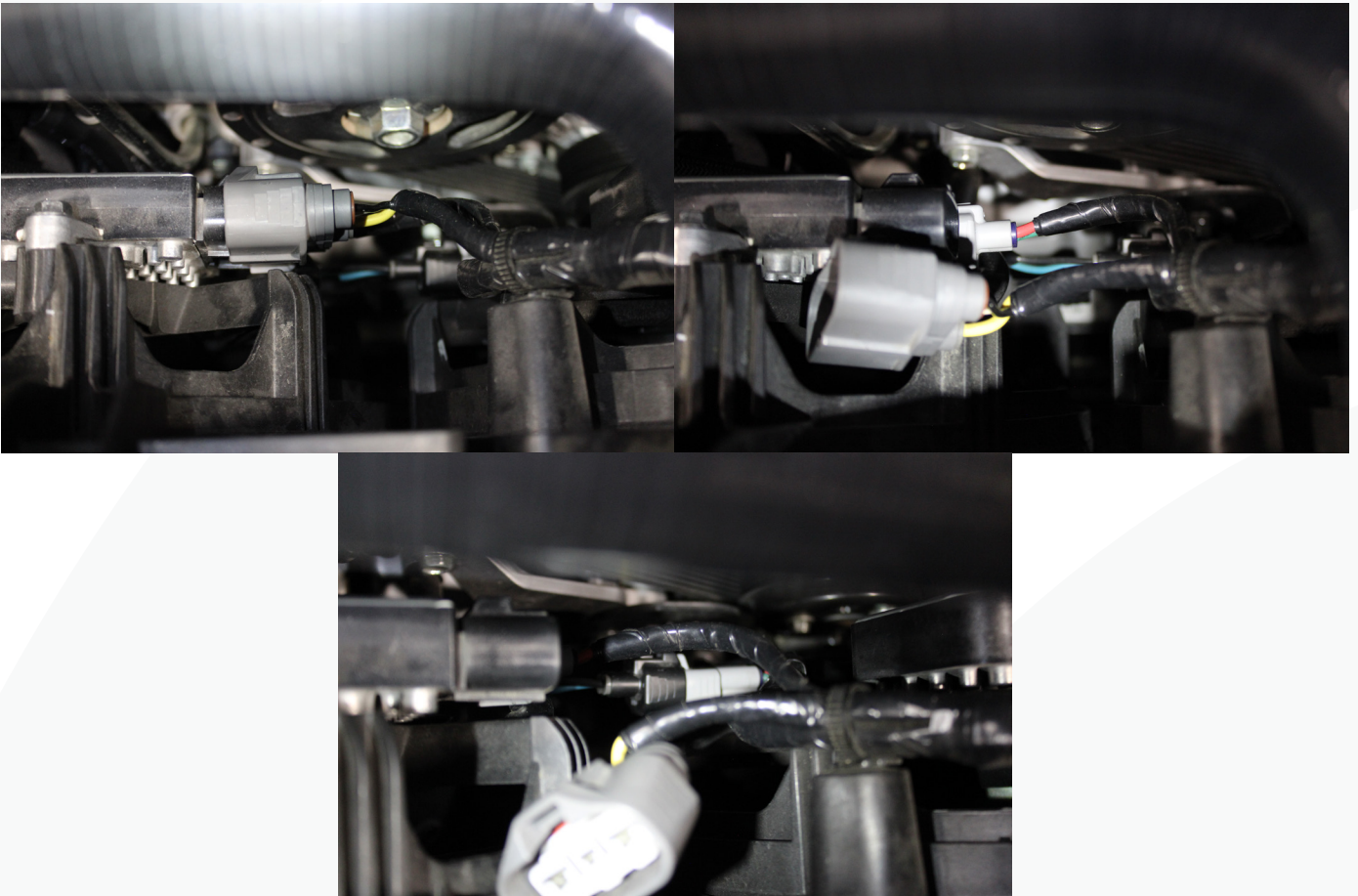
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DISASSEMBLY:

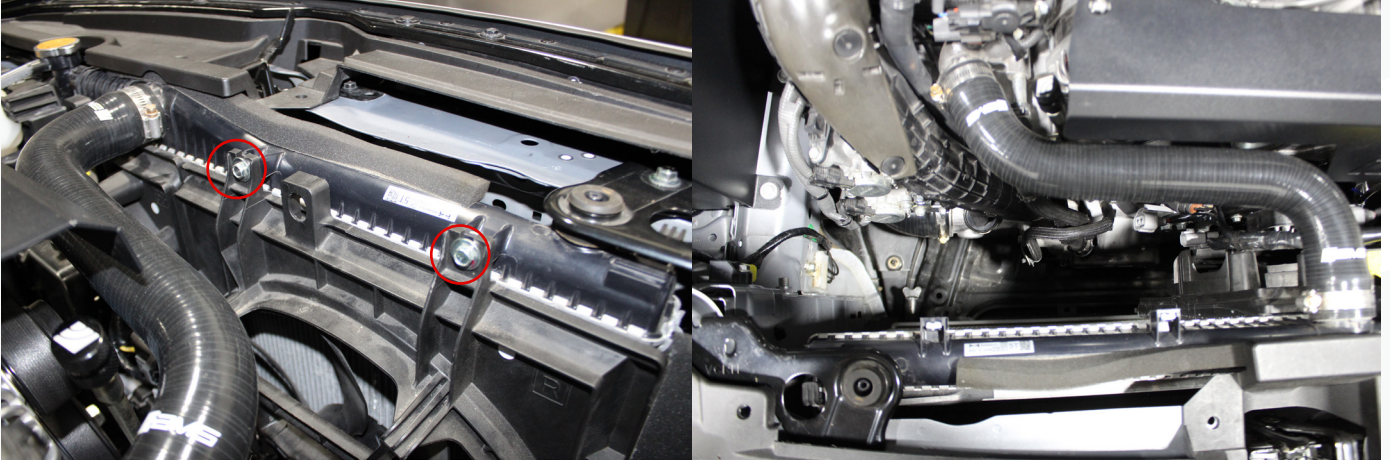
1. Remove the intake duct by removing the two plastic clips.



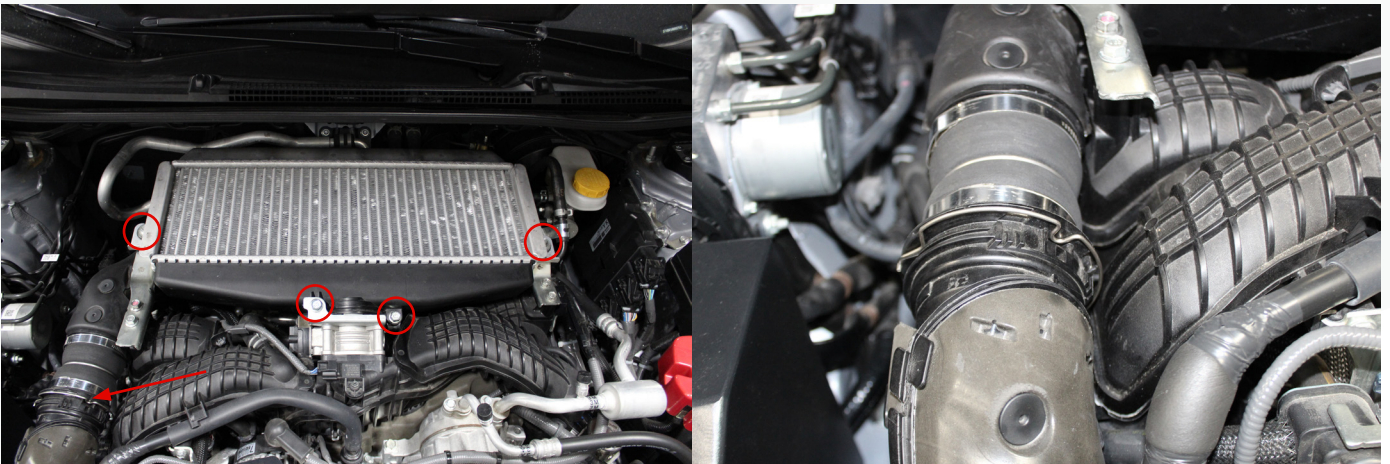
2. Disconnect the three electrical connections on the radiator fan.



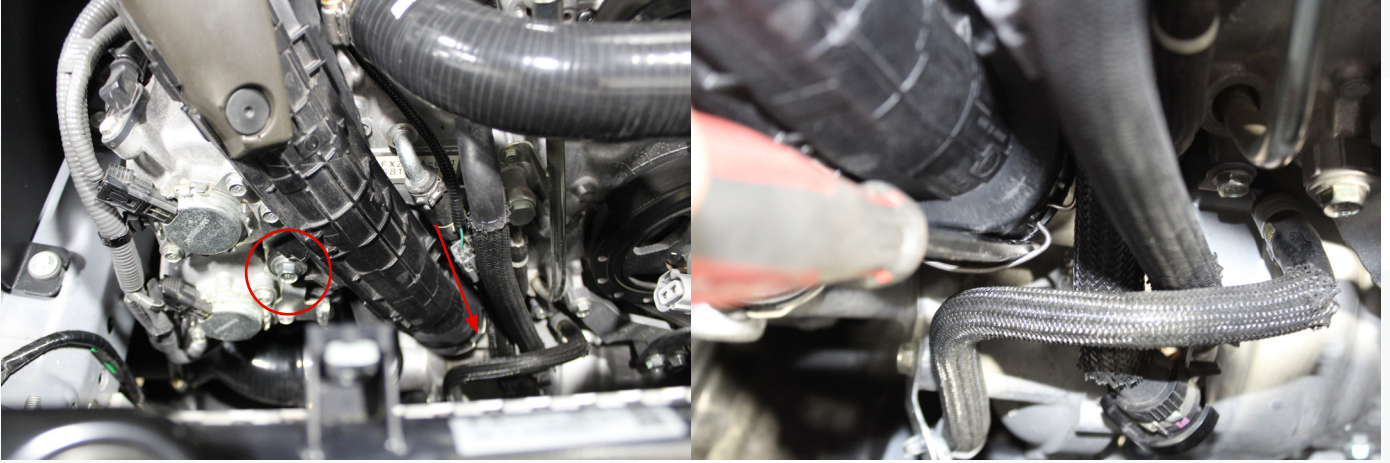
3. Remove the two bolts at the top of the radiator fan then remove the fan assembly.



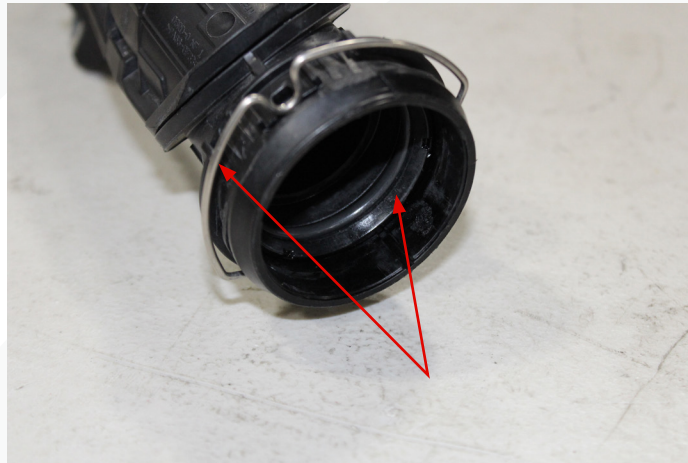
4. Remove the four bolts (circled) and the metal retaining ring (arrow) that hold the TMIC and charge pipe in place.



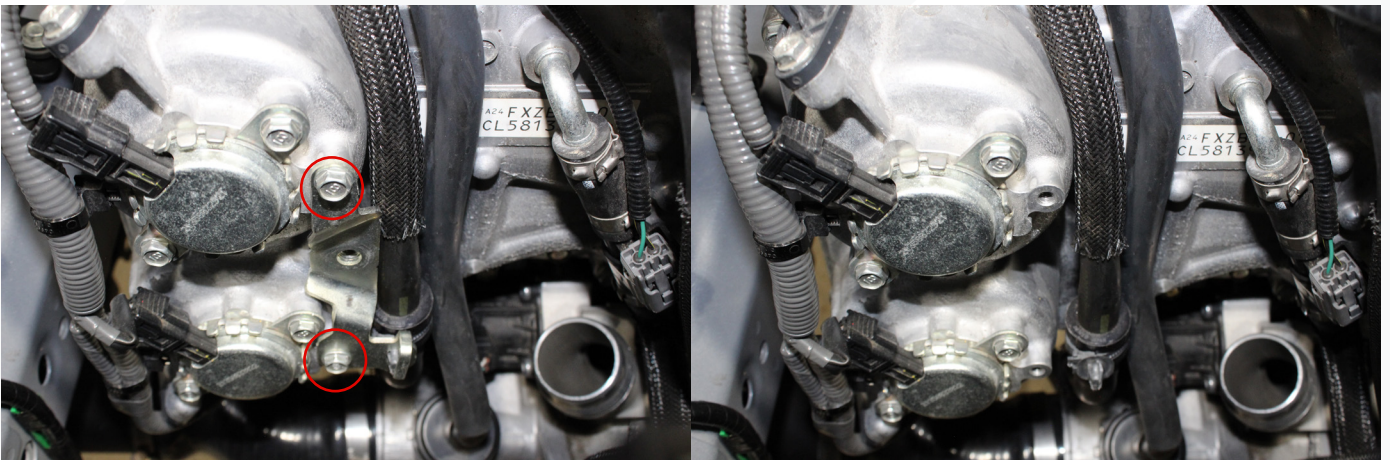
5. Remove the bolt securing the charge pipe to the engine(circled). Then using a screwdriver, release the retaining ring and pull the charge pipe out(arrow).



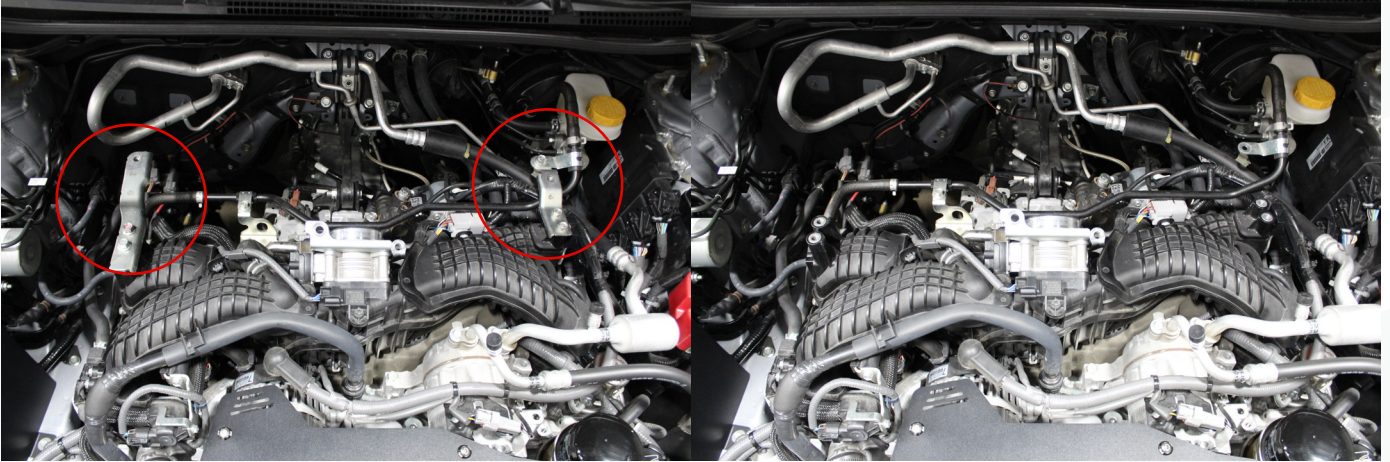
6. Remove the charge pipe retaining ring and o-ring from the oem charge pipe and set it aside as it will be reused in a later step.



7. Remove the (2) M6 bolts holding the lower charge pipe mounting bracket. This will not be reused.



8. Remove the (2) intercooler brackets from the intake manifold.

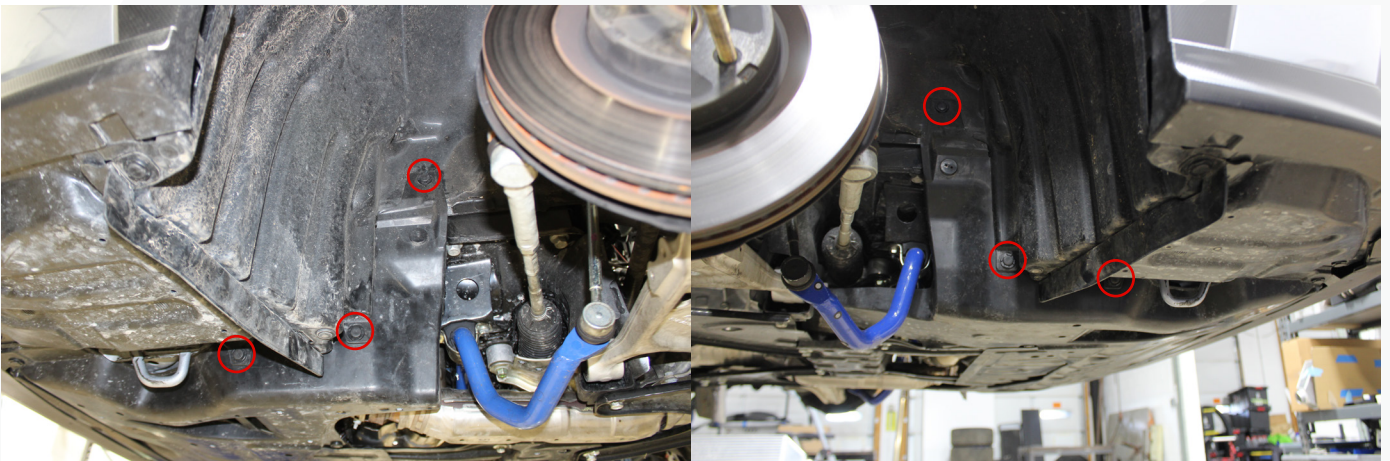


9. Remove the clip holding the washer fluid filler neck to the body. Be sure the washer fluid level is below the filler neck, so it does not spill and remove it.

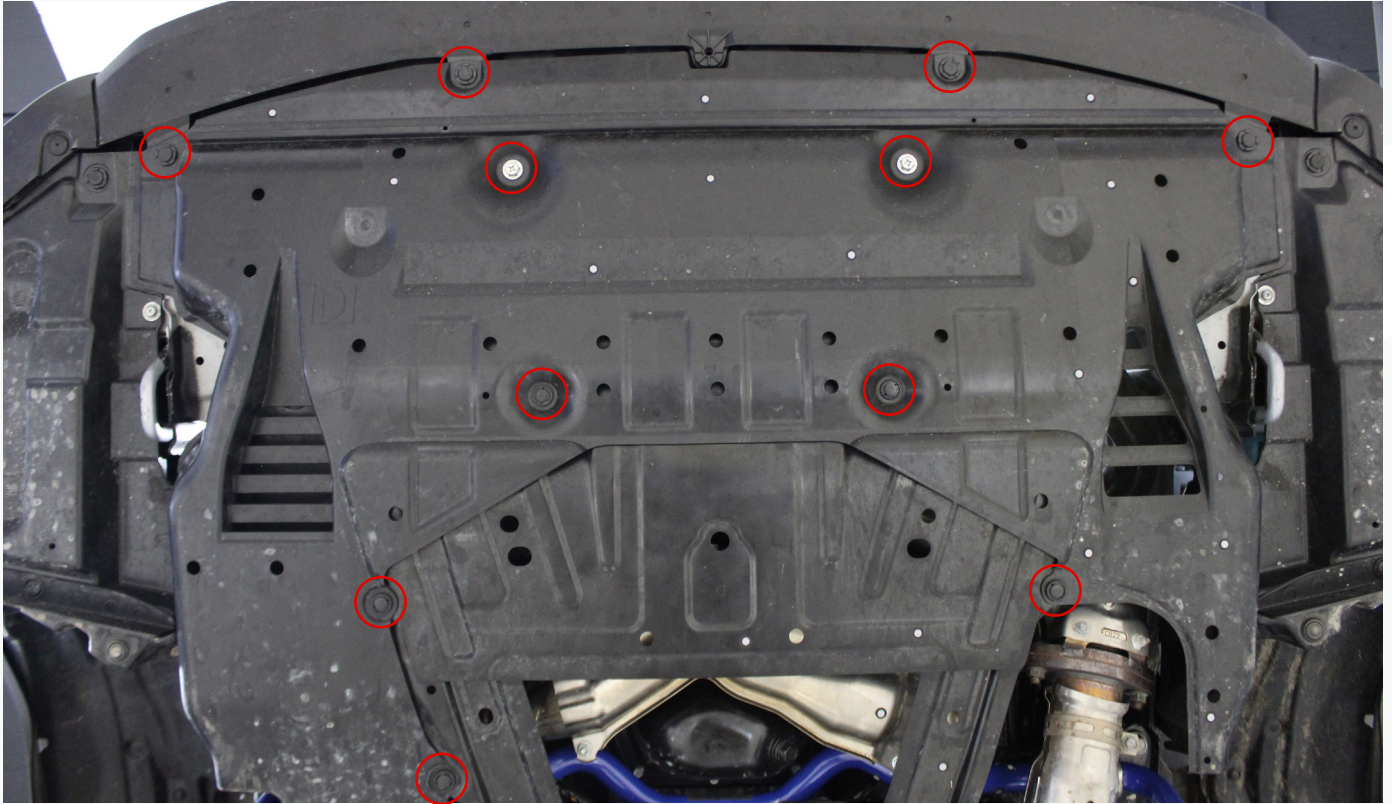


10. Safely raise the vehicle on a lift and remove the front wheels.

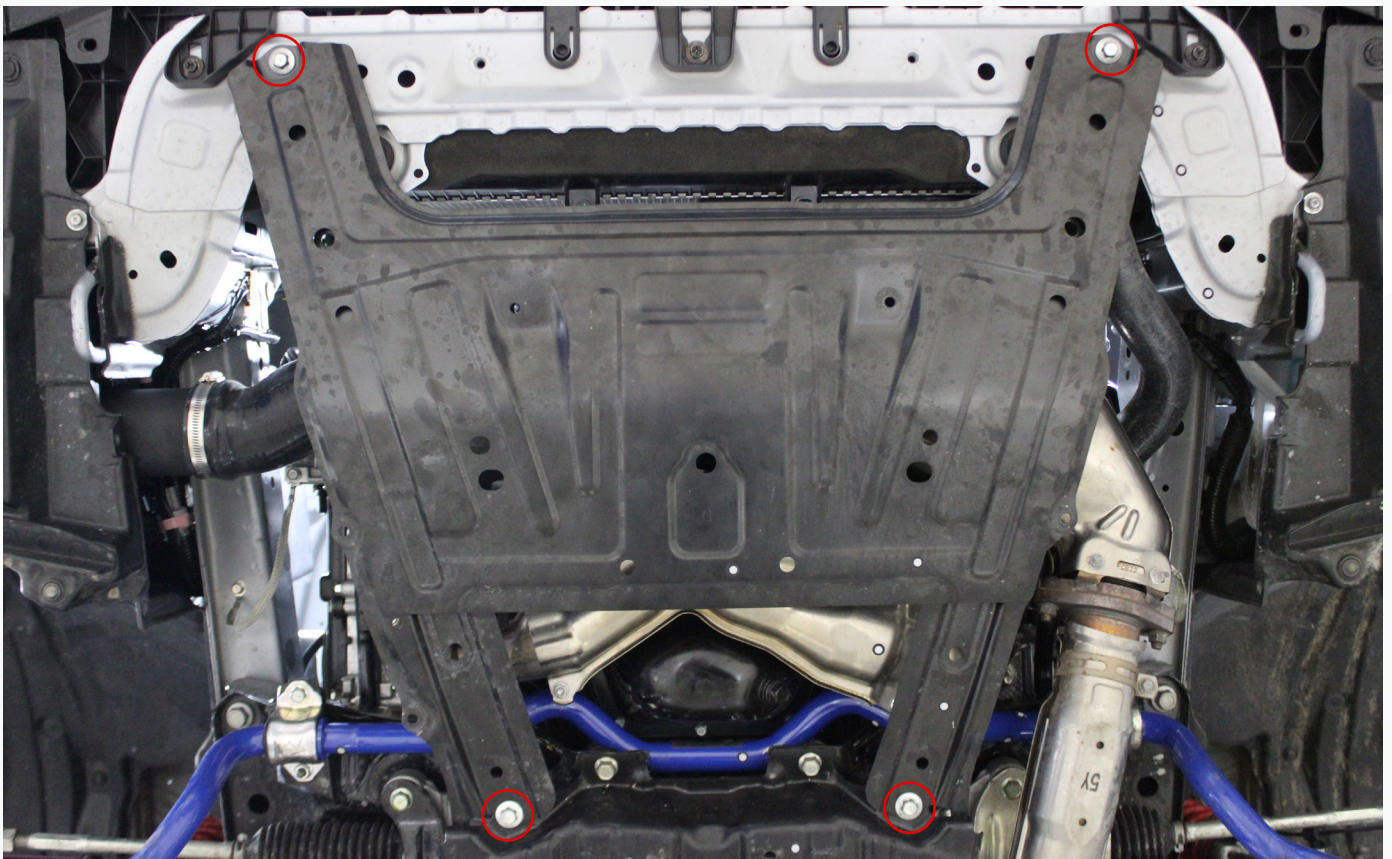
11. Remove the (3) clips in each fender well for the under tray.



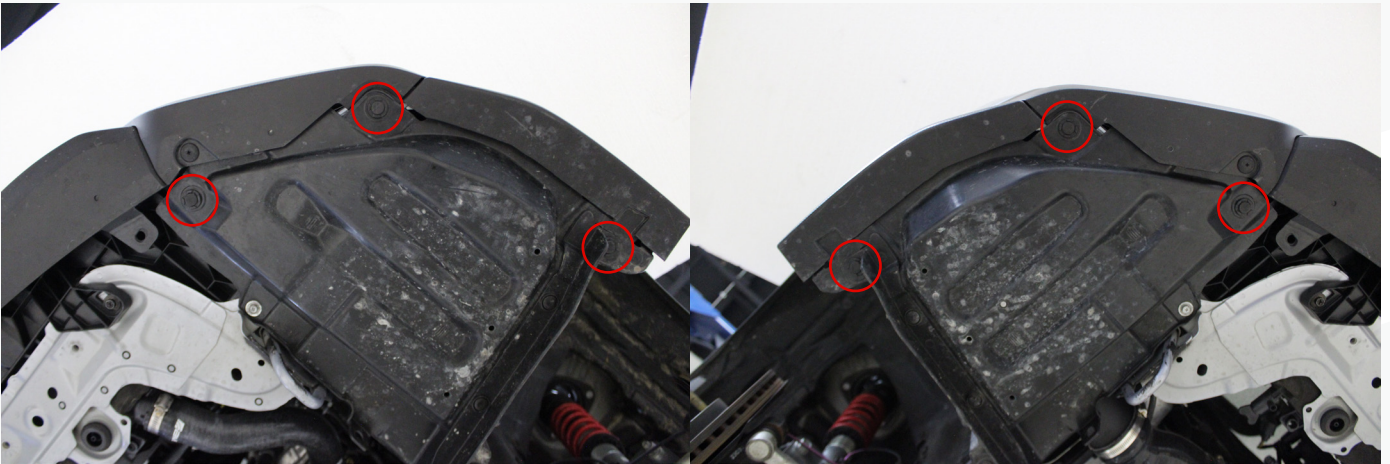
12. Remove (5) 8mm clips, (4) 10mm clips and (2) M8 bolts holding the undertray.



13. Remove the (4) M8 bolts securing the metal brace.

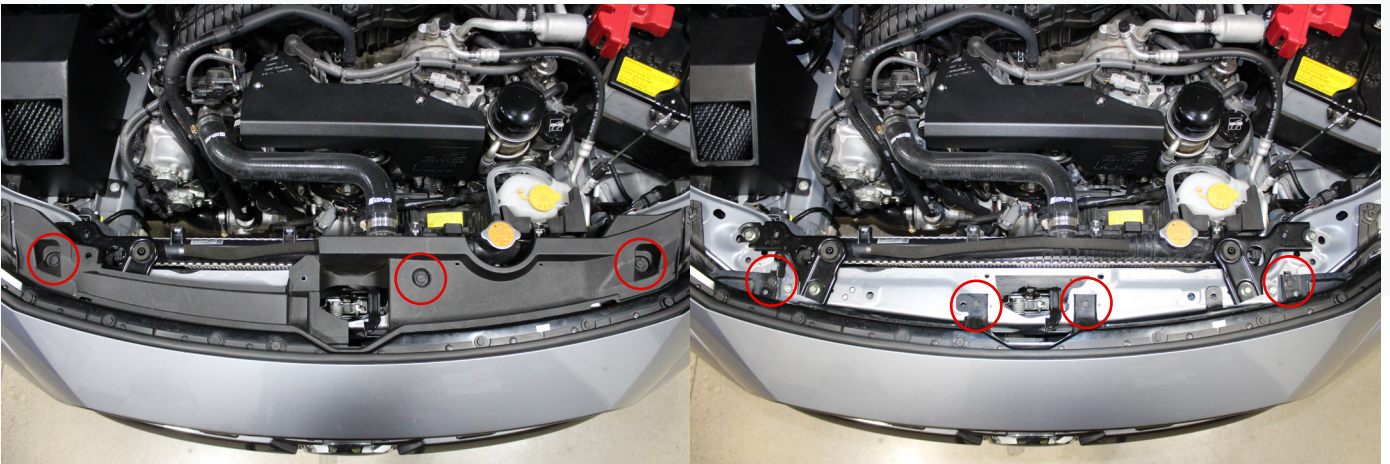


14. Remove the (3) clips and 1x screw on each side securing the fender liners to the front bumper.

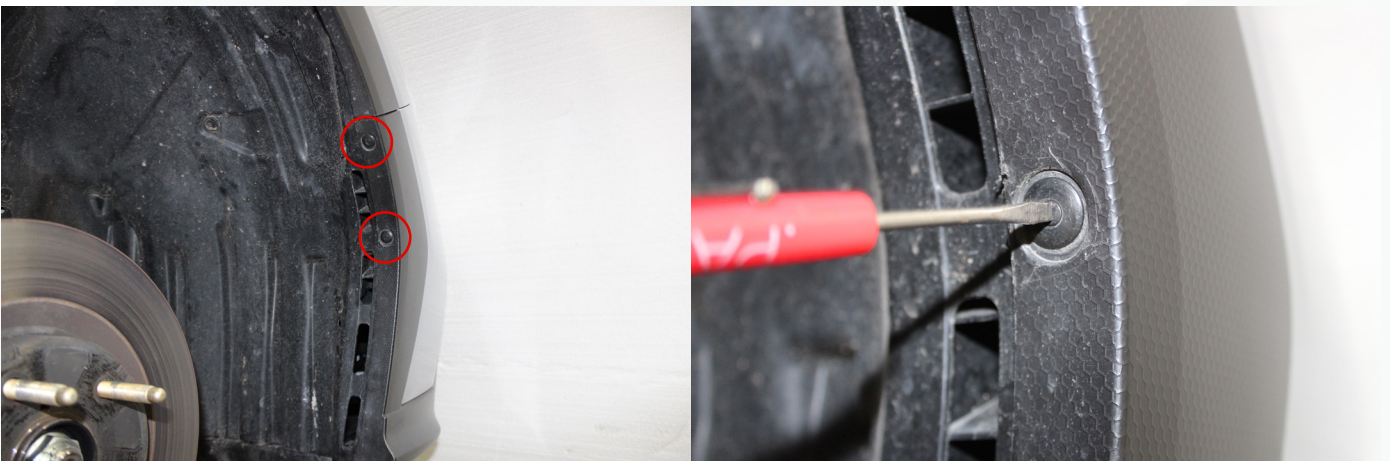


15. Pull back each liner and unplug the fog lights (if equipped).

16. Remove the (3) clips securing the plastic radiator cover. Then the (4) M6 bolts securing the front bumper.



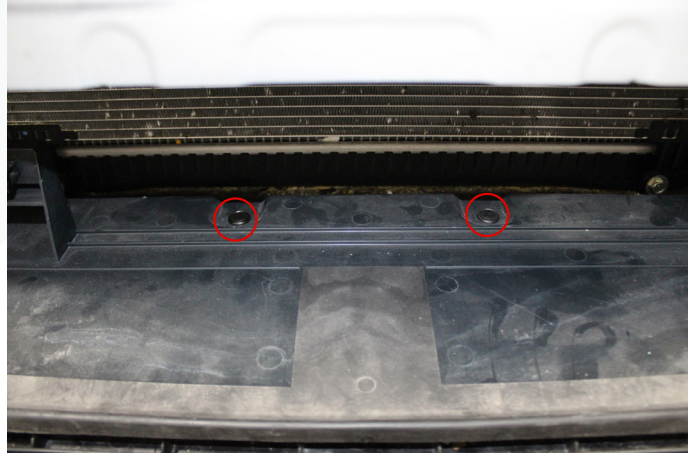
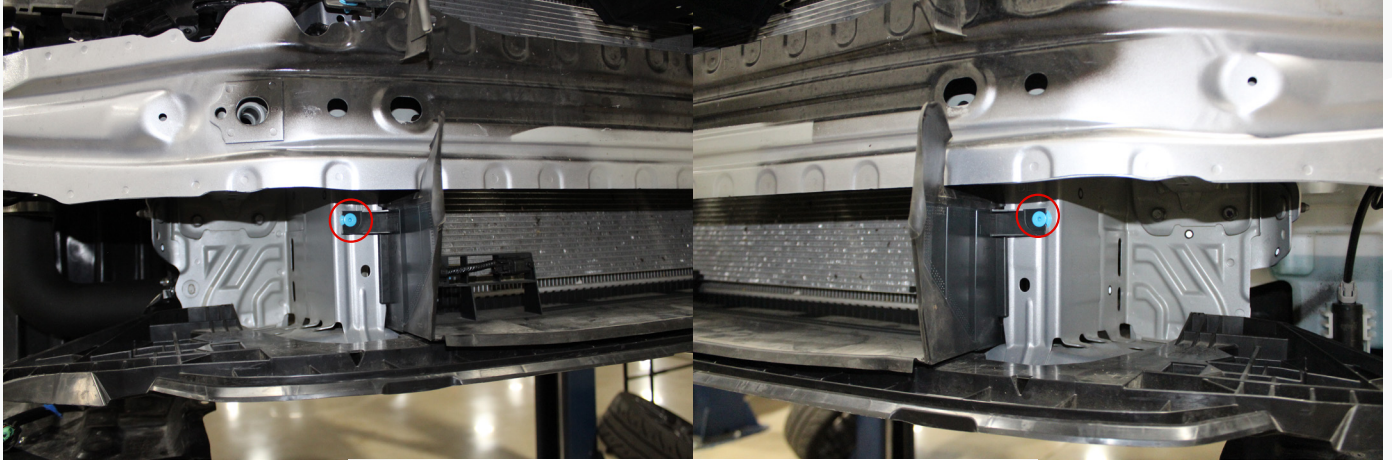
17. Remove the (2) clips on each wheel arch securing the bumper. Push the center in to release the clip.



18. Pull out on the bumper to release the fender clips on each side. Then remove the front bumper, and foam bumper insert.



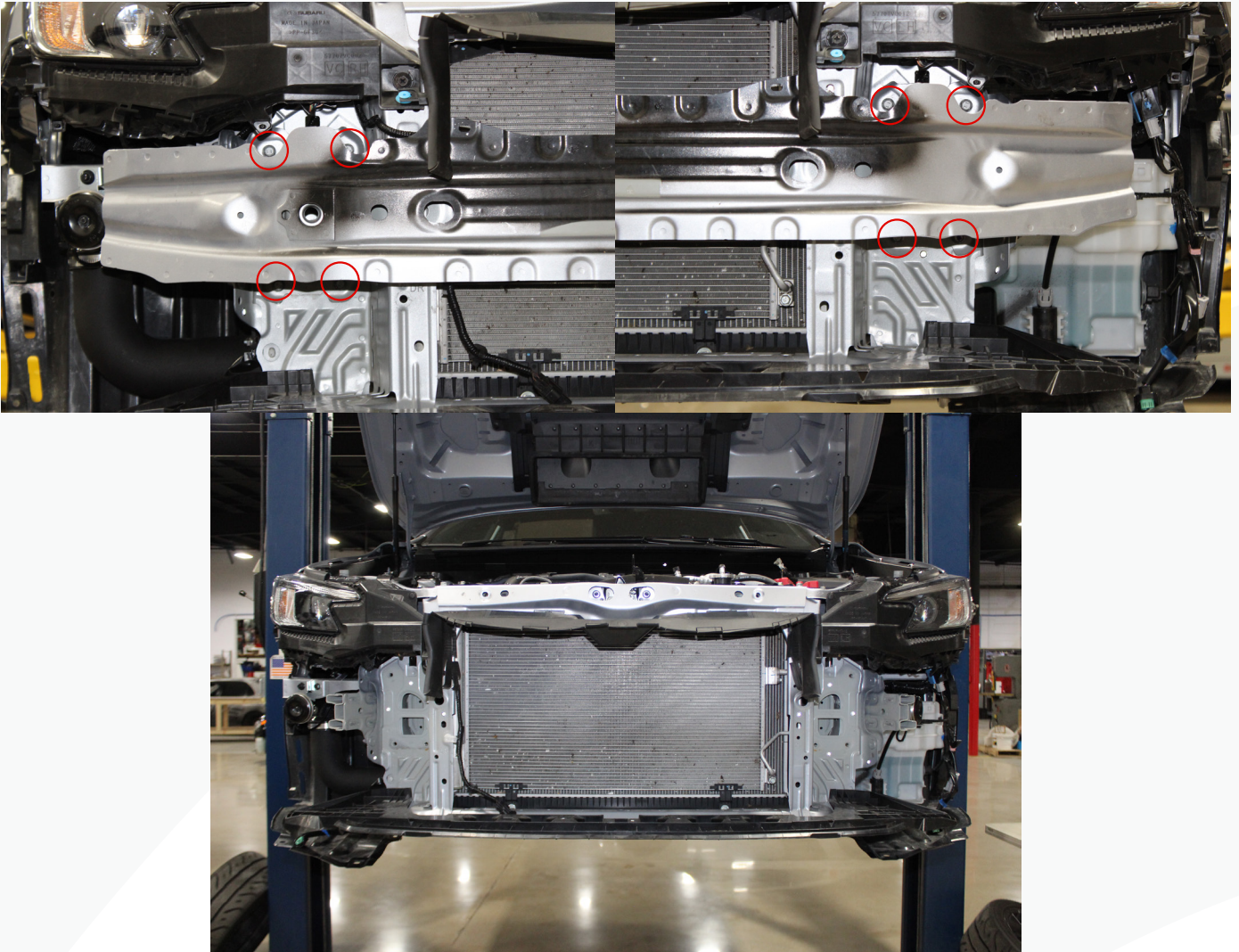
19. Locate and remove the (2) blue clips on the side of the duct and the two small clips in the middle.



20. Unclip the ambient temp sensor and harness from the duct assembly.



21. Remove the (4) M8 bumper beam bolts from each side and remove the bumper beam.



22. Disconnect the electrical connector from the left horn and remove the bolt holding the horn to the bumper beam reinforcement. Then remove the (2) M10 bolts and (2) M10 nuts securing each bumper beam reinforcement to the chassis.



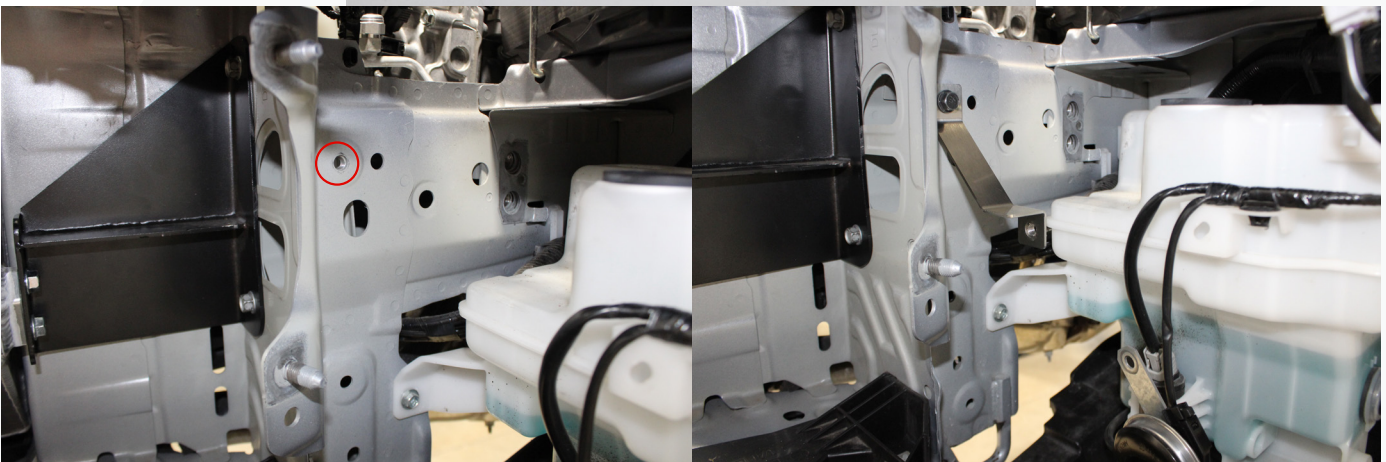
23. Flip the horn over, loosen the nut on the back and turn the bracket 90 degrees clockwise and re-tighten the nut.



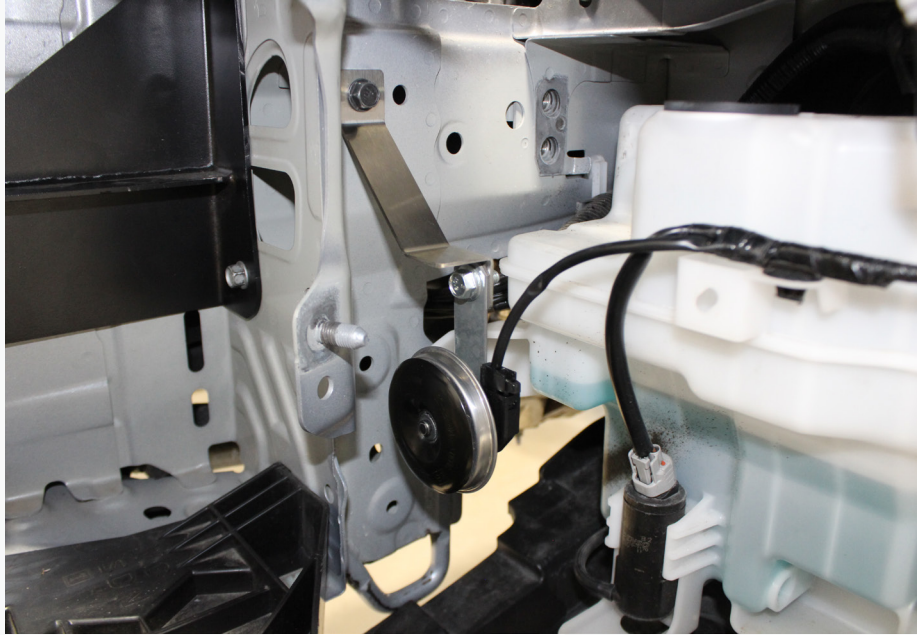
INSTALLATION:

24. Locate the provided Horn Relocation Bracket and (1) M8 x 16mm bolts. Reuse the OEM grounding bolt to mount the bracket to the chassis as shown below.

Note: It is important to use the grounding bolt to mount the bracket because it is designed to clear any paint that might be in the threads in order to make a proper ground connection for the horn to work.



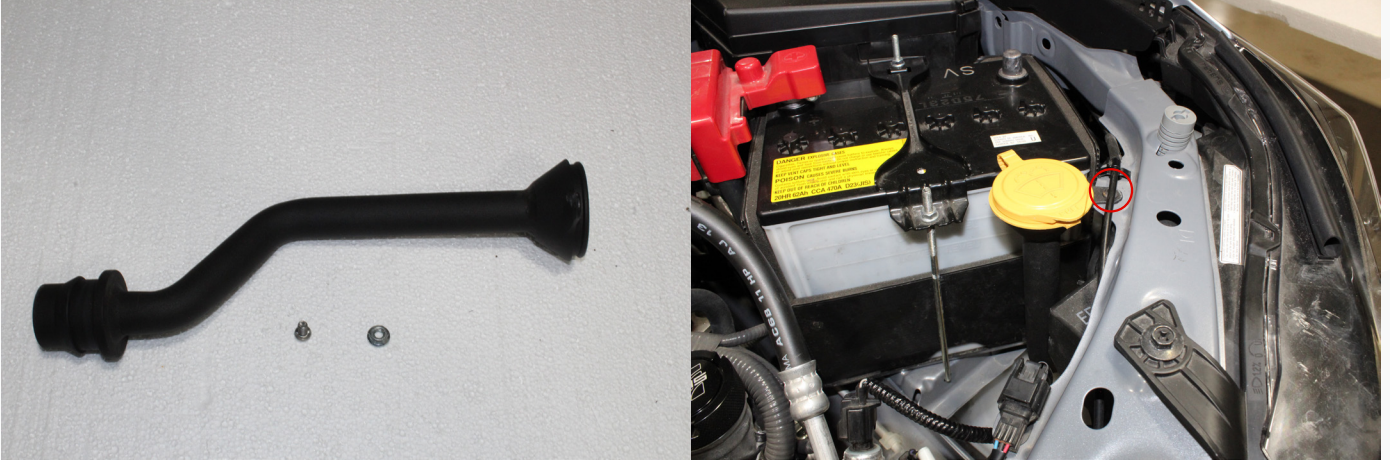
25. Mount the horn to the bracket and plug in the electrical connector.



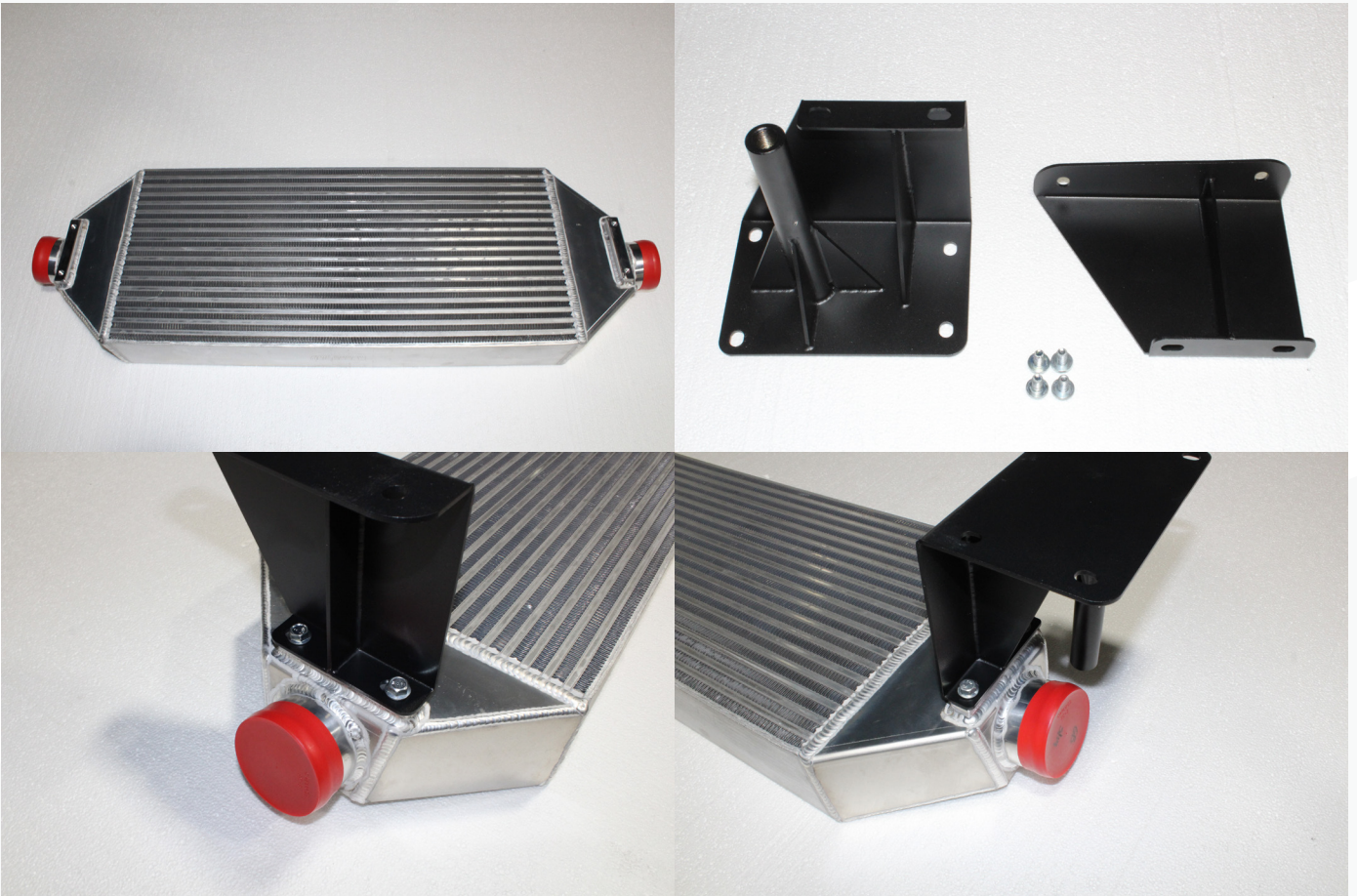
26. Mount the provided Ambient Temp Sensor mounting bracket to the vehicle stud. Remove the harness clips and reroute the harness along the radiator support and clip the sensor into the front of the bracket.



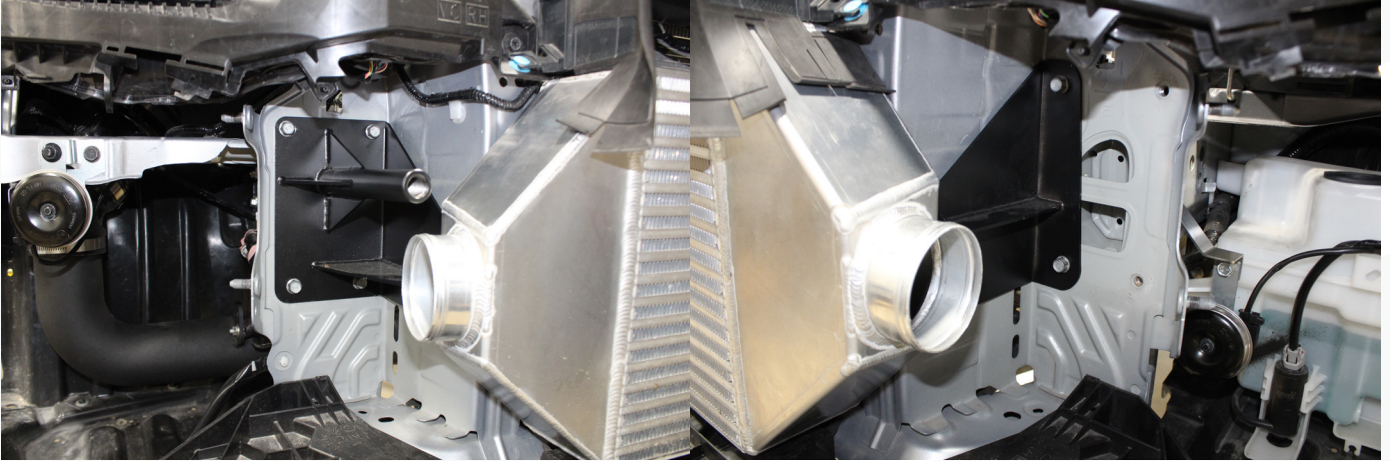
27. Using the provided M6 button head bolt and nut, install the AMS washer fluid filler neck into the reservoir and attach the tab to the frame. Reuse the factory washer fluid cap.



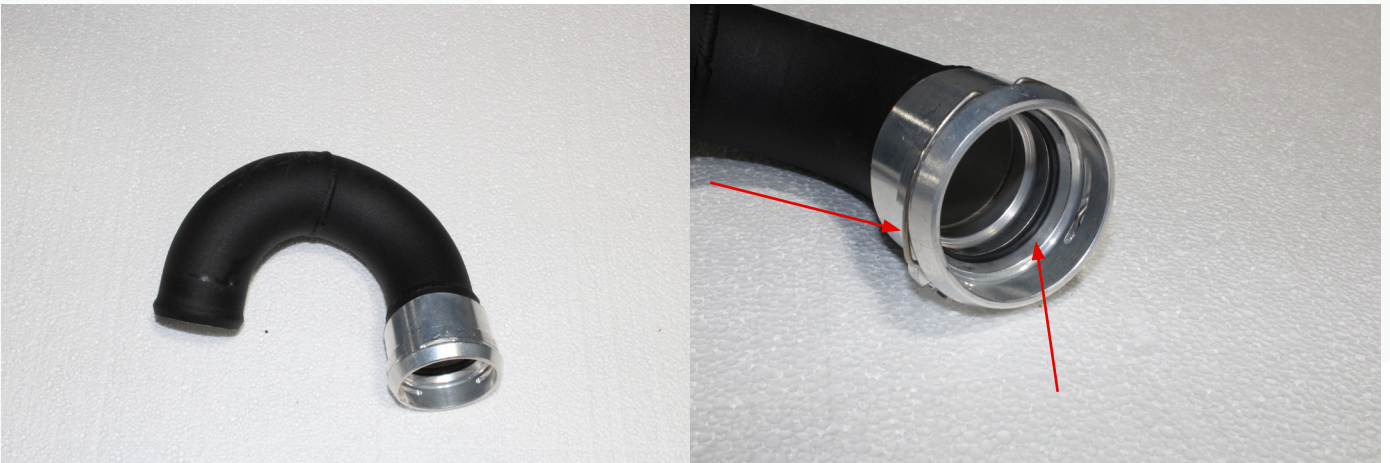
28. Place the intercooler with logo facing down and at the bottom. Using (4) M8 x 16mm long bolts, install the intercooler mounting brackets to the core as shown below.



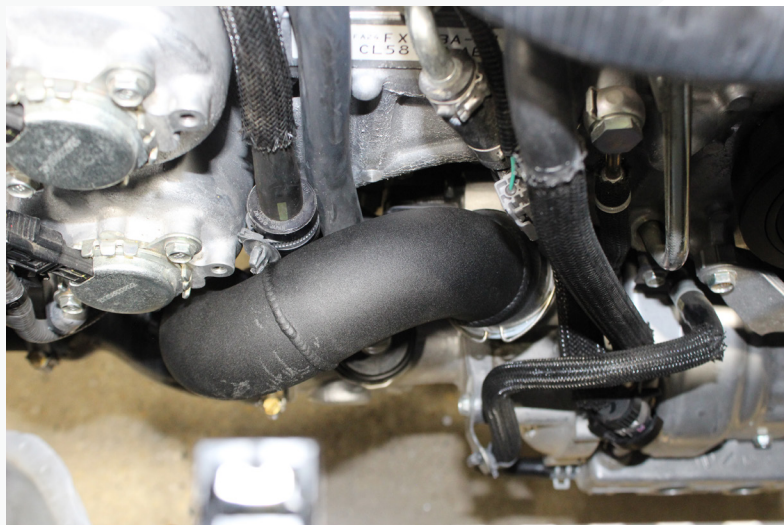
29. Set the intercooler in place in front of the radiator and re-use (6) of the factory crash beam bolts to mount the intercooler. Use the slots in the bracket to adjust as needed.



30. Install the metal retaining clip and o ring from step 6 onto the C shaped charge pipe.



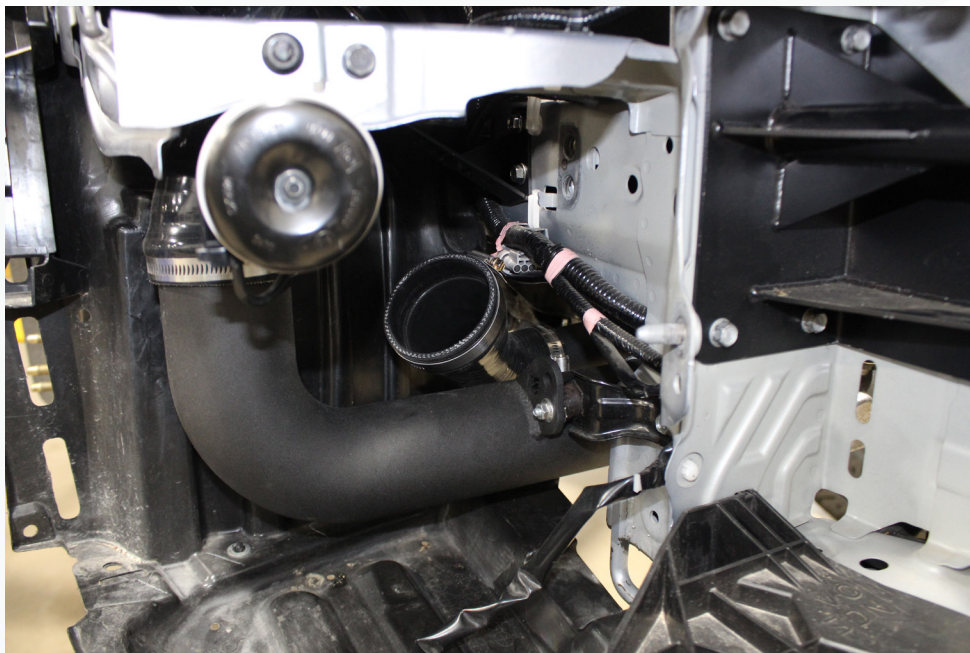
31. Apply some silicone spray or similar lubricant on the o ring and install the tube to the turbo outlet. Make sure the clip is fully seated.



32. Locate the (2) silicone, angled pipe, (3) #32 and (1) #48 clamps. Install the small silicone onto the side closest to the bend. Then install it onto the turbo outlet pipe from the previous step. Leave clamps loose for adjustment.



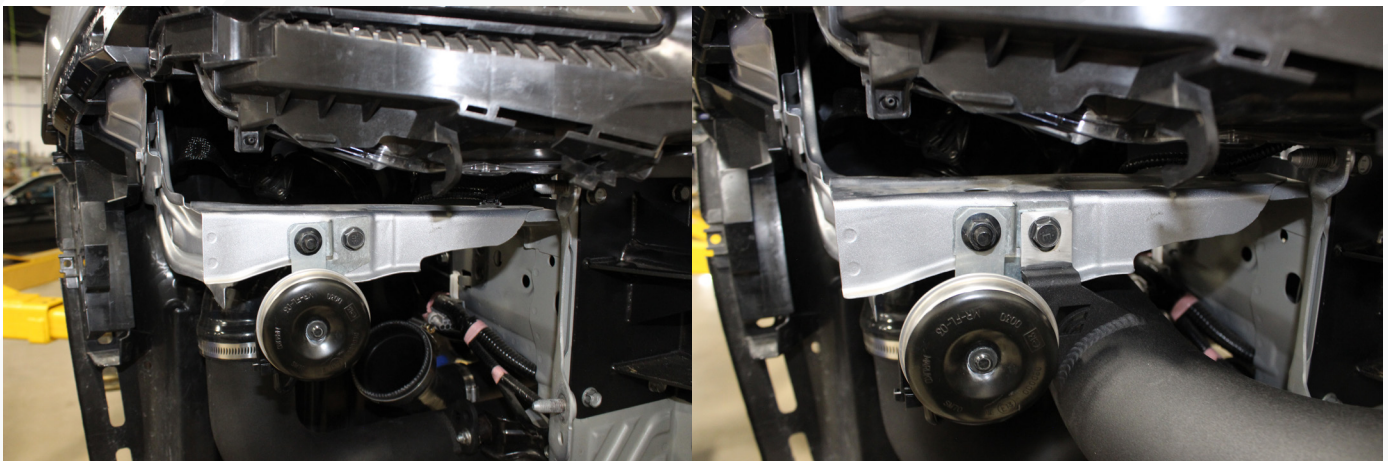
33. Install the adapter silicone to the end of the pipe and position it as shown below.



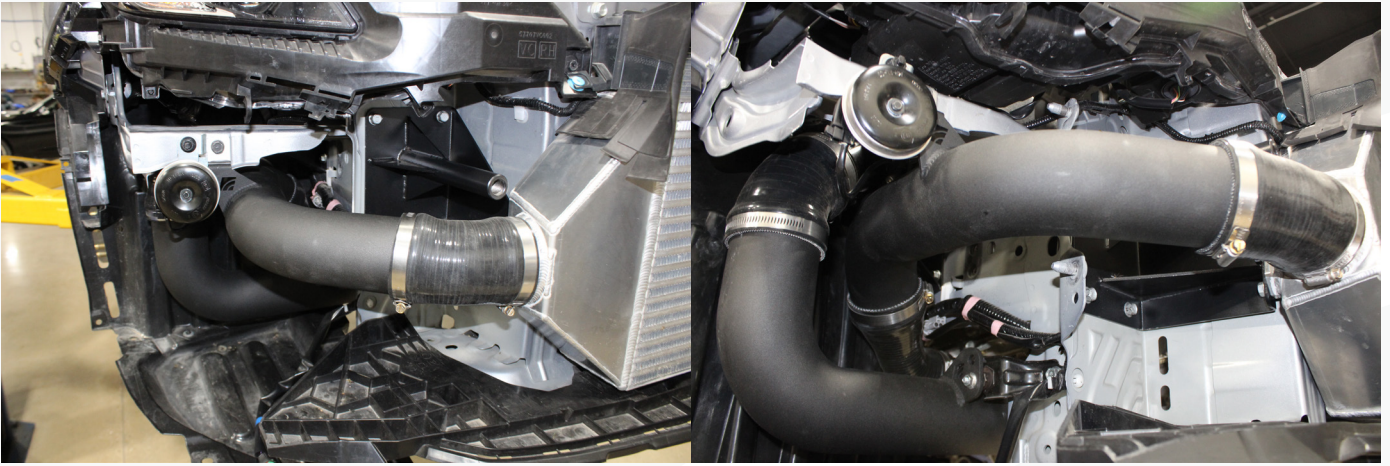
34. Layout both the intercooler inlet and outlet pipes with silicones and (4) #48 clamps. The silicone to intercooler connection has a slightly longer leg on each side.



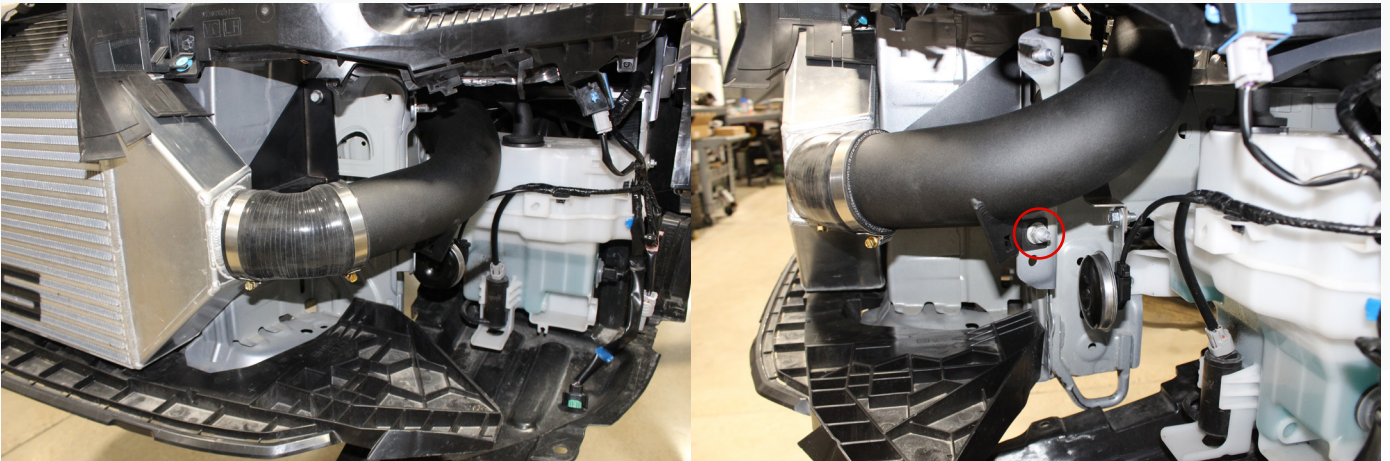
35. On the passenger side, remove the bolt securing the horn mount and connect the piping to the silicone from the previous step and to the intercooler inlet. Then re-secure the horn and intercooler pipe with the bolt. The horn bracket should be under the intercooler pipe.



36. Starting at the intercooler, adjust the silicones as needed and tighten the clamps working your way backwards towards the turbo.



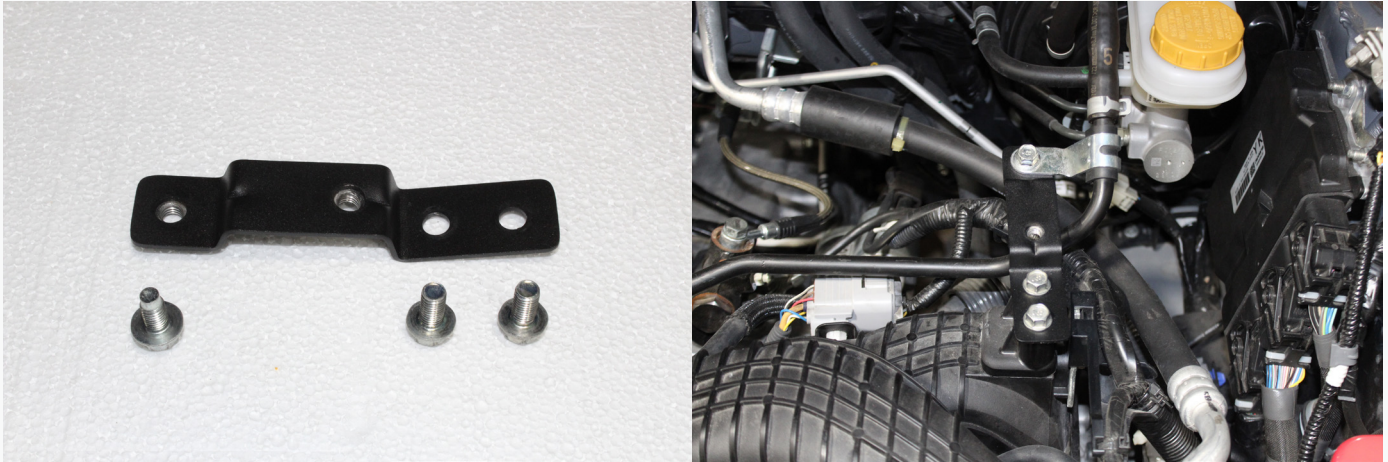
37. Connect the drivers side charge pipe and silicone. Reuse the crash beam nut to mount the charge pipe to the stud.



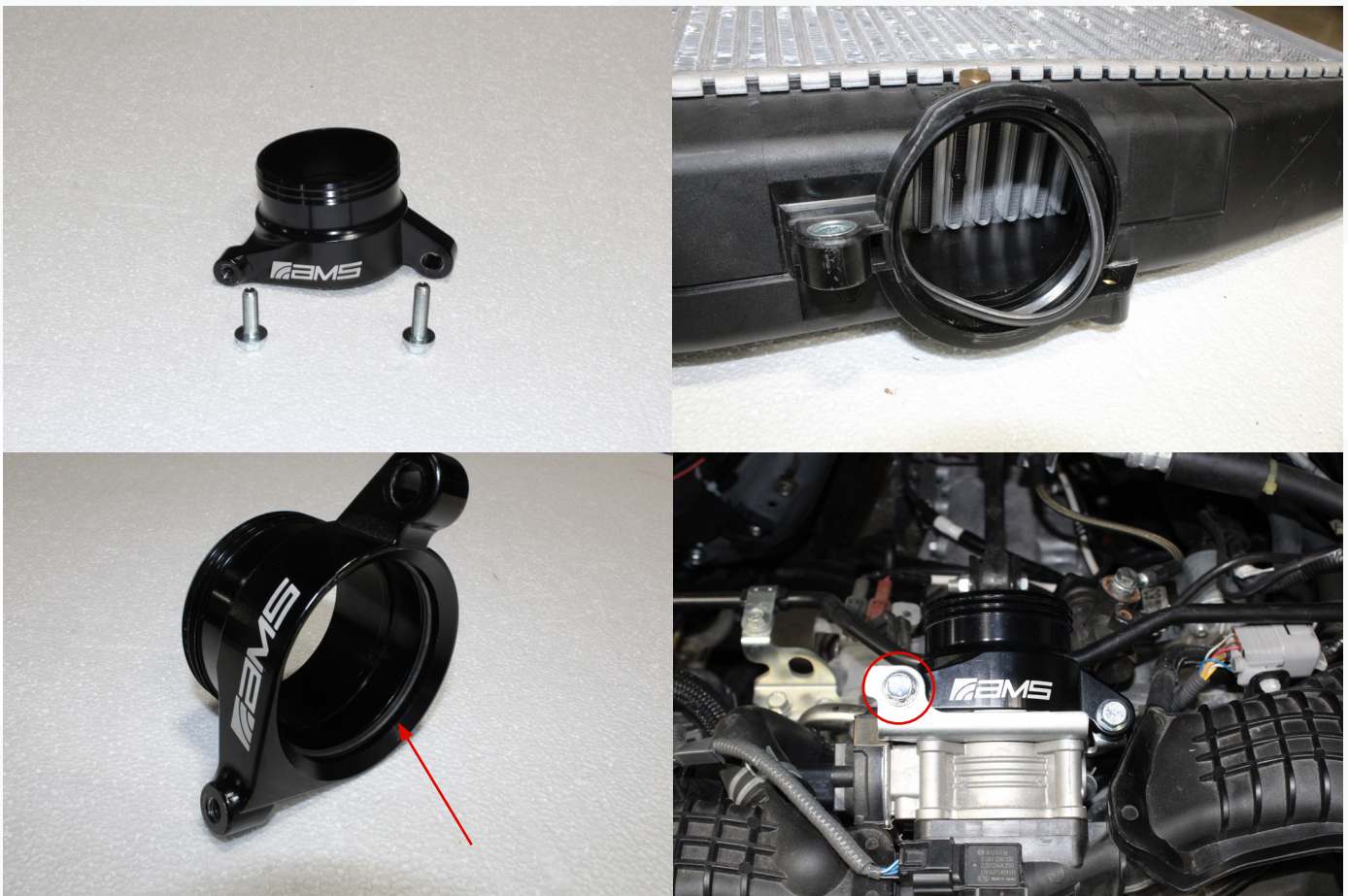
38. Install the straight hump silicone with (2) #48 clamps onto the charge pipe near the battery. Line up the groove on the inside of the silicone with the tube and tighten the lower clamp.



39. Reuse the intercooler bracket hardware from step 8 to mount the new charge pipe mounting bracket. Secure the brake booster line to the bracket.



40. Locate the throttle body adapter and the provided M8 hardware. Install the o-ring from the TMIC into the throttle body adapter and install the adapter onto the throttle body. The shorter M8 bolt should be used on the threaded adapter hole (circled below).



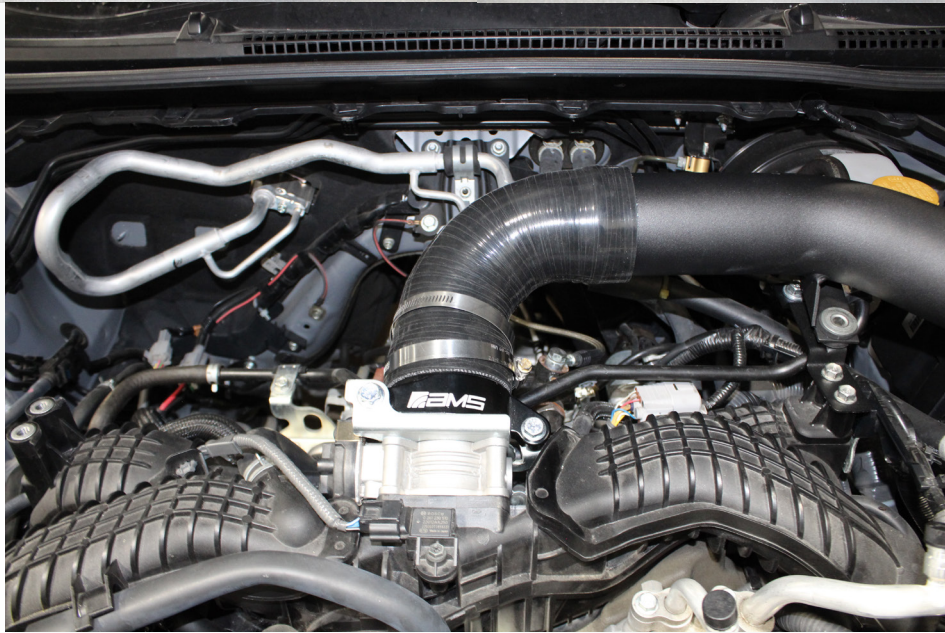
41. Take one of the rubber grommets from the TMIC and install it onto the upper charge pipe bracket as shown below.



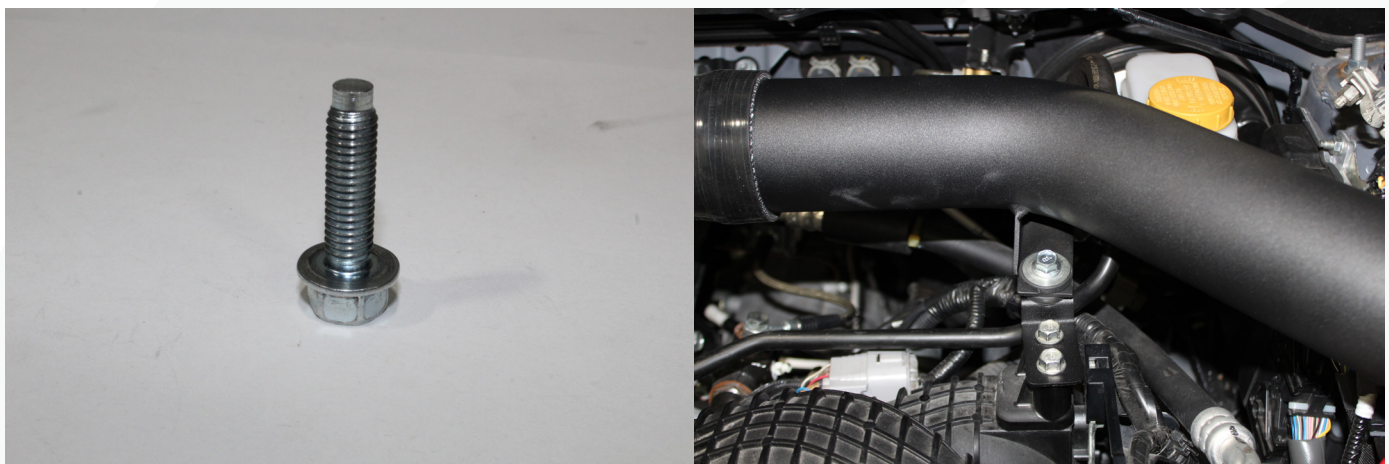
42. Install the charge pipe into the silicone near the battery and route it near the throttle body resting on the intake manifold bracket installed in step 39. Leave everything loose for final adjustment.



43. Locate the 90-degree silicone and (2) #48 clamps. The longer/upper leg is installed onto the charge pipe, see photos below.

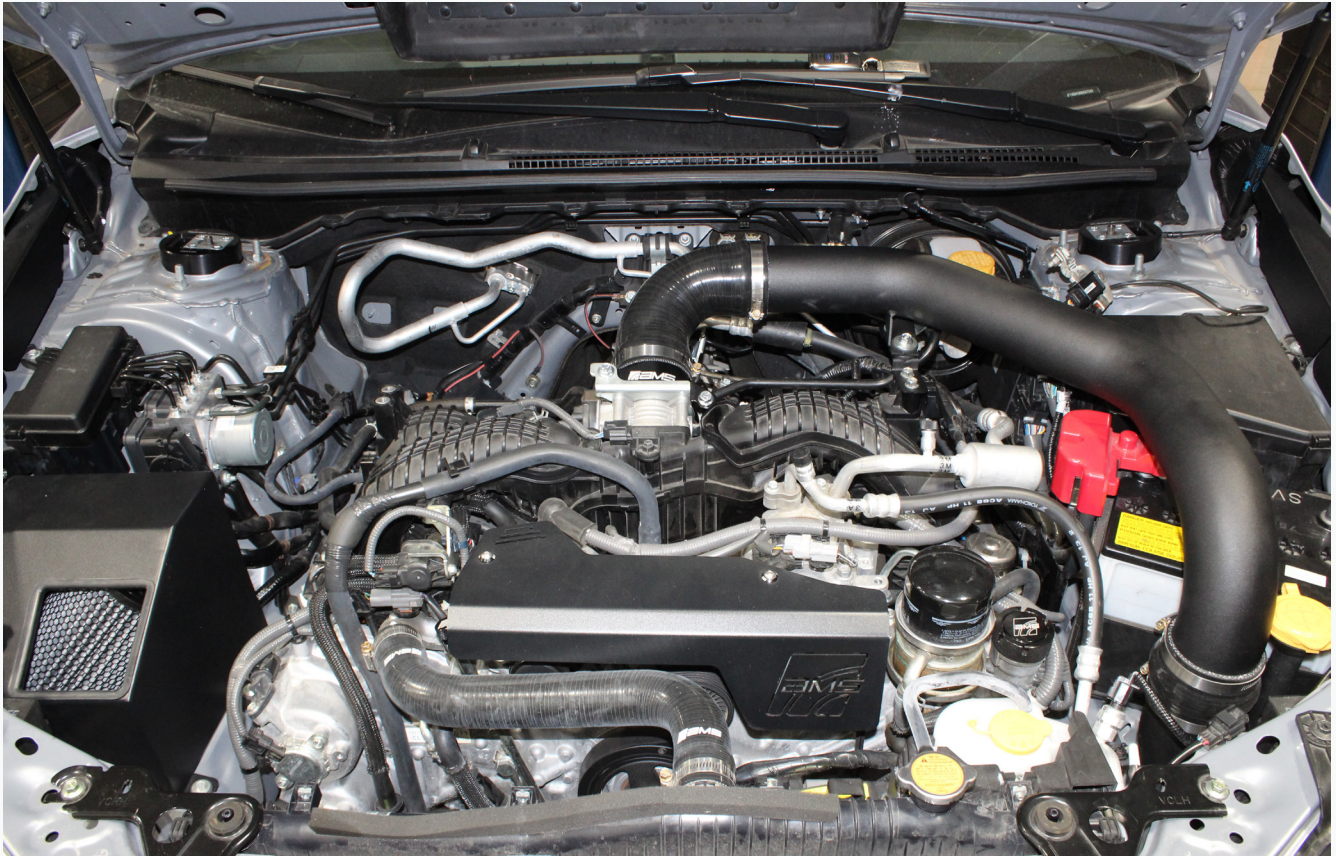


44. Reusing (1) intercooler mounting bolt, mount the charge pipe to the bracket.



REASSEMBLY:

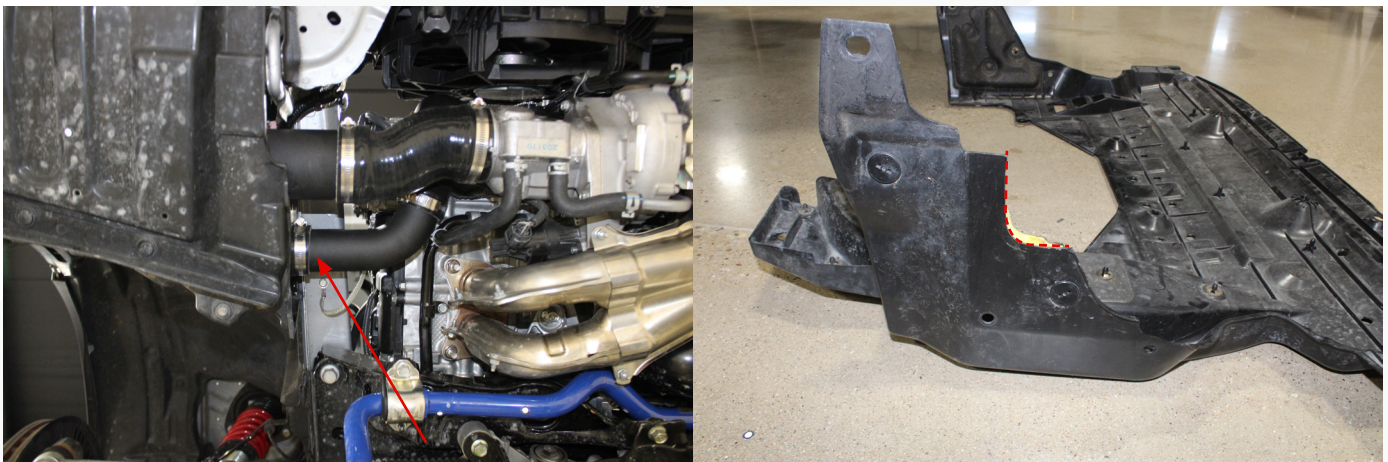
45. Adjust each silicone connection for best fitment and tighten all the clamps.



46. Double check all silicone connections before reassembly.

47. Reassemble all removed parts.

48. The plastic undertray will need to be trimmed slightly to clear one of the charge pipes.



Thank you for purchasing an AMS Performance WRX Front Mount Intercooler, Enjoy!