

## FORD F-150 RAPTOR ECOBOOST OEM LOCATION INTERCOOLER

# 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](https://amsperformance.com/support)

### Table of contents ///

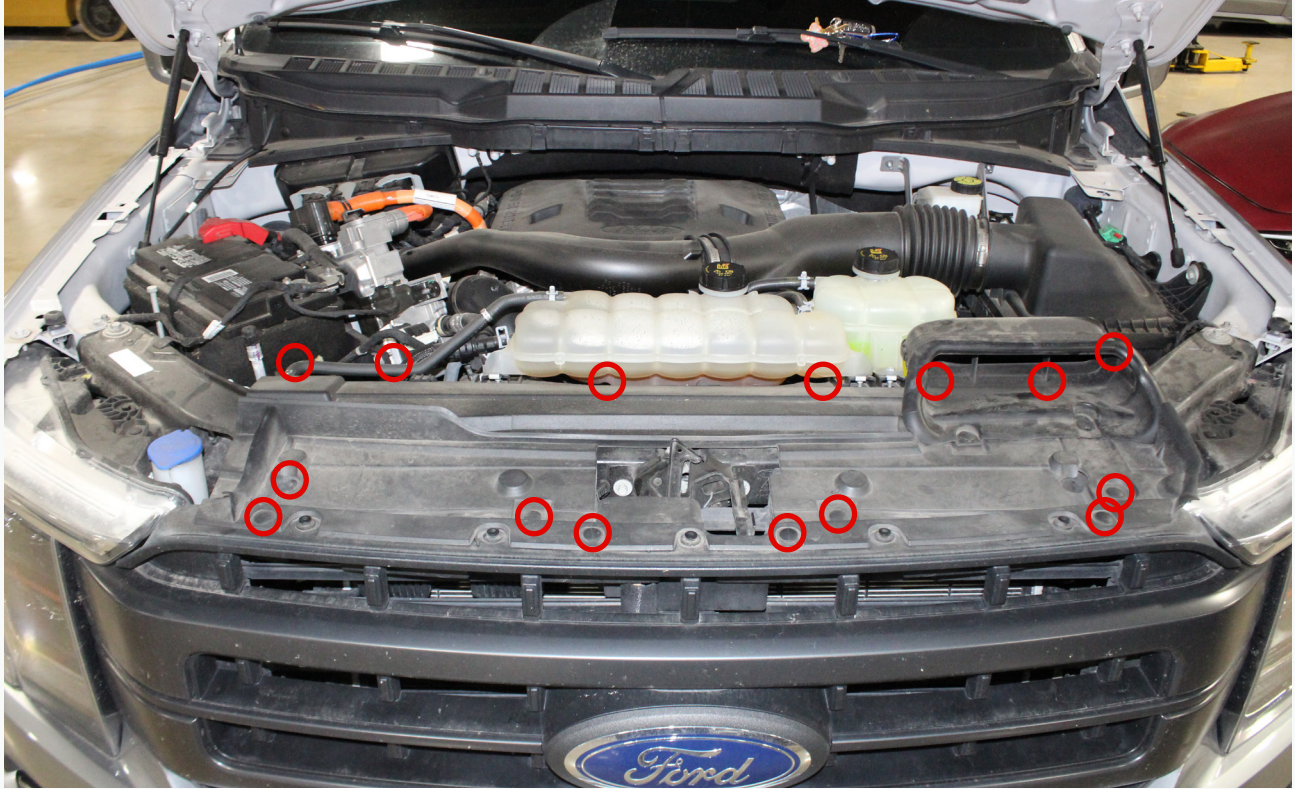
02 | Removal

06 | Install

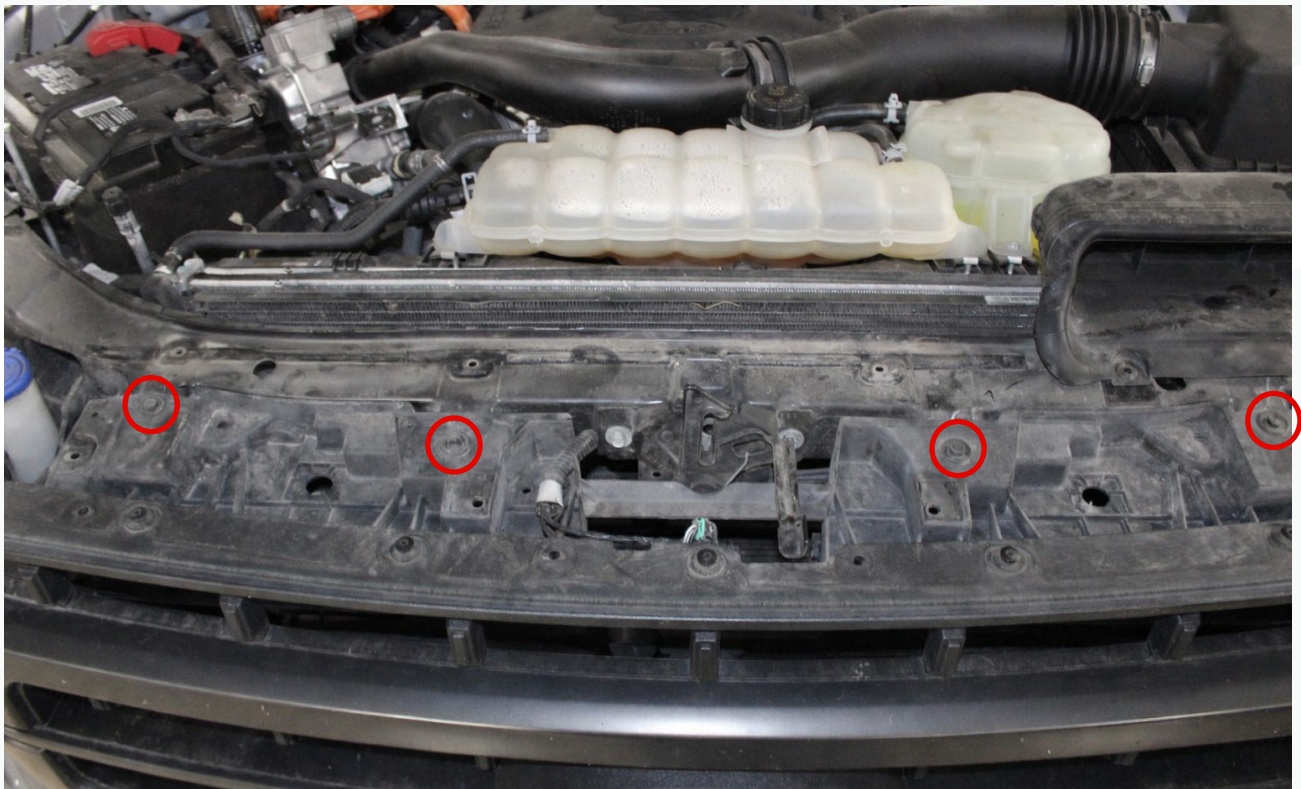
## REMOVAL

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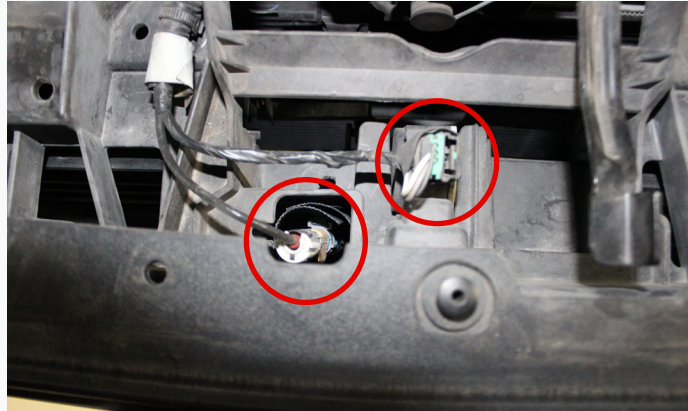
1. Remove the push retainers from the upper grille cover and then remove the cover.



2. Remove the (4) 10mm bolts holding the top of the grille in place.



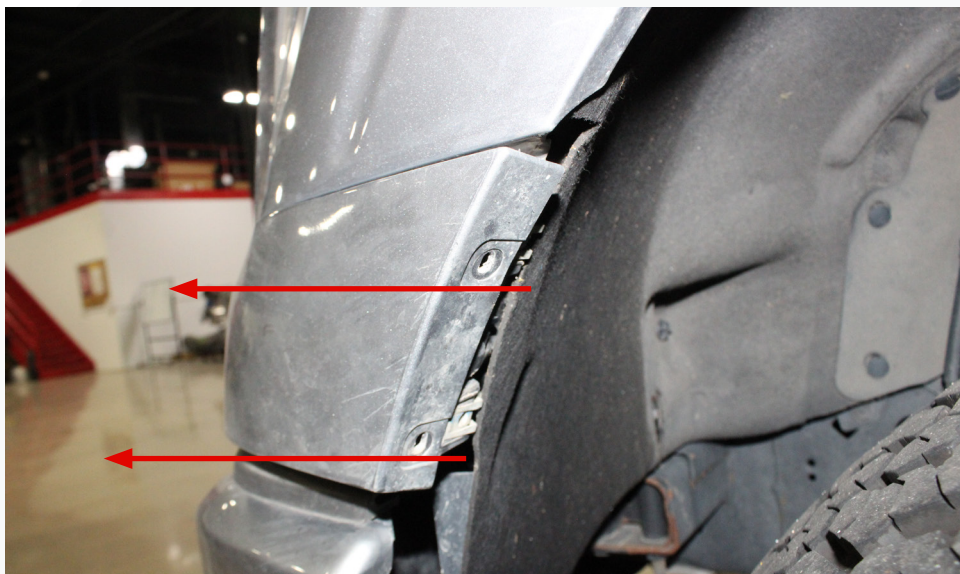
3. Disconnect the connections at the top of the grille. Depending on the trim package of the truck there may be more/less connectors than pictured.



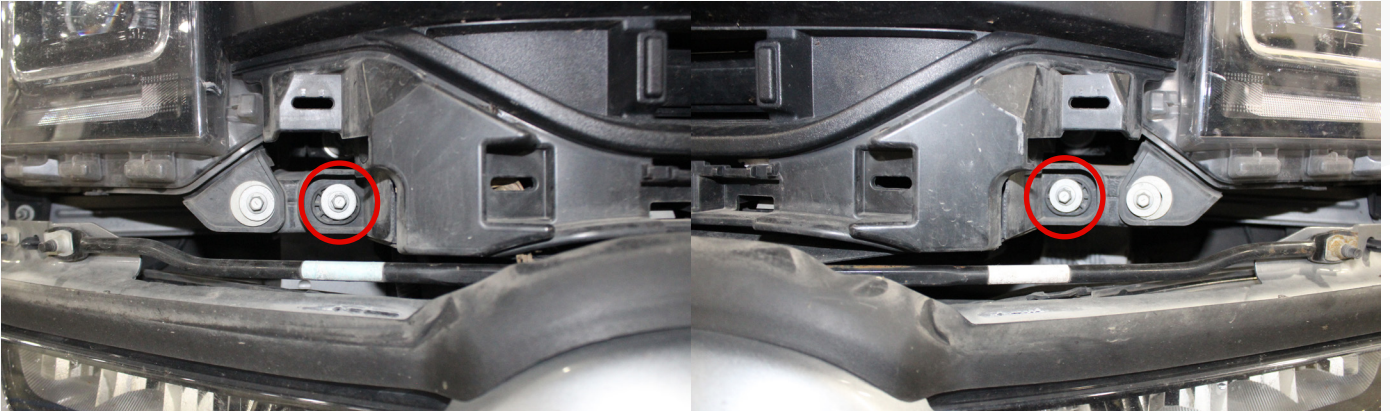
4. Remove the (2) 7mm bolts in each wheel well. These secure the grille lower cover.



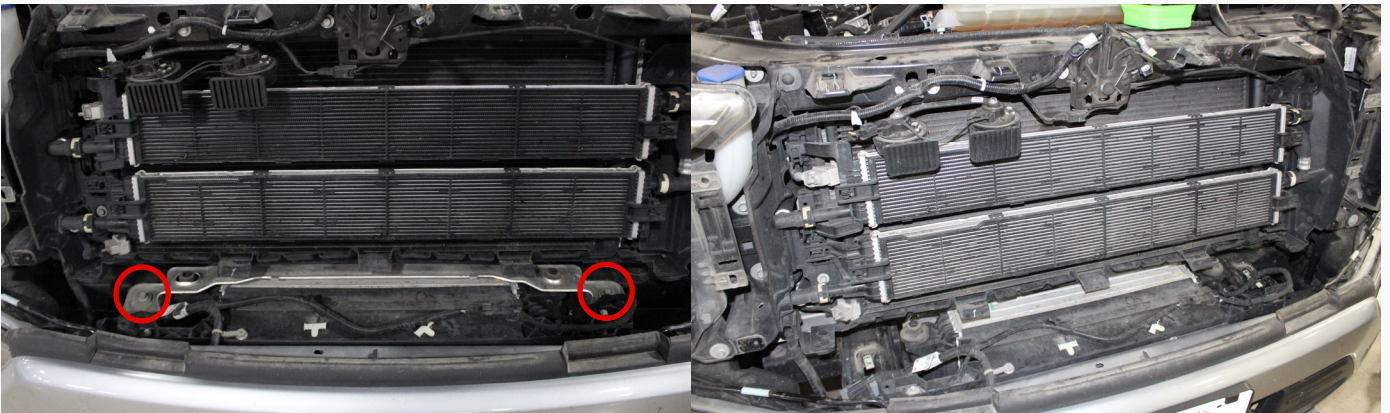
5. The lower cover will come off with a little bit of force. Pull out and away and remove the lower cover.



6. Remove (2) 8mm bolts holding the lower grille onto the truck near each headlight.



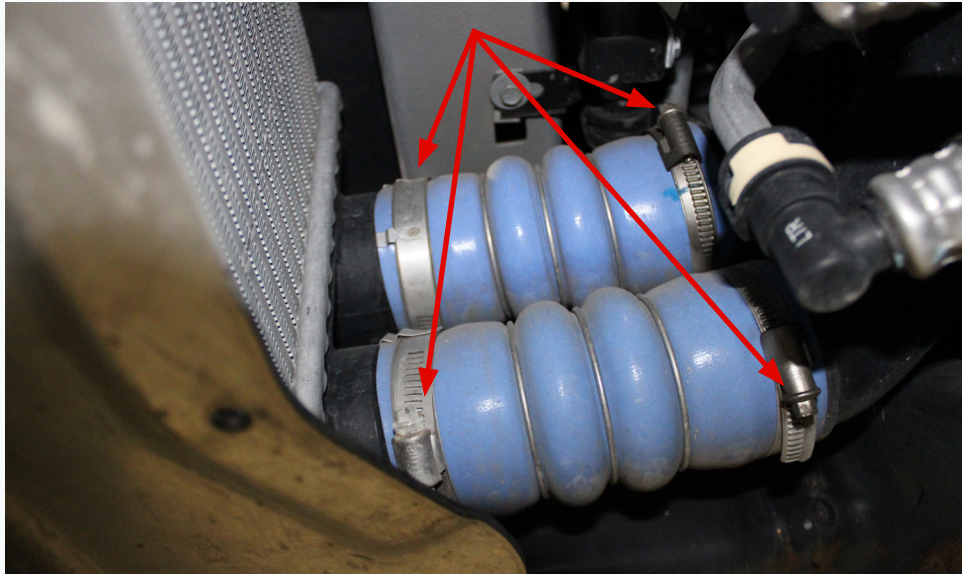
7. Remove the grille and (2) 13mm bolts holding the upper intercooler support bracket



8. Raptor/Tremor models only: Remove the lower skid plate under the vehicle.



9. Under the truck, loosen the (4) 7mm clamps and then remove the (2) blue silicone couplers on the right side of the intercooler.

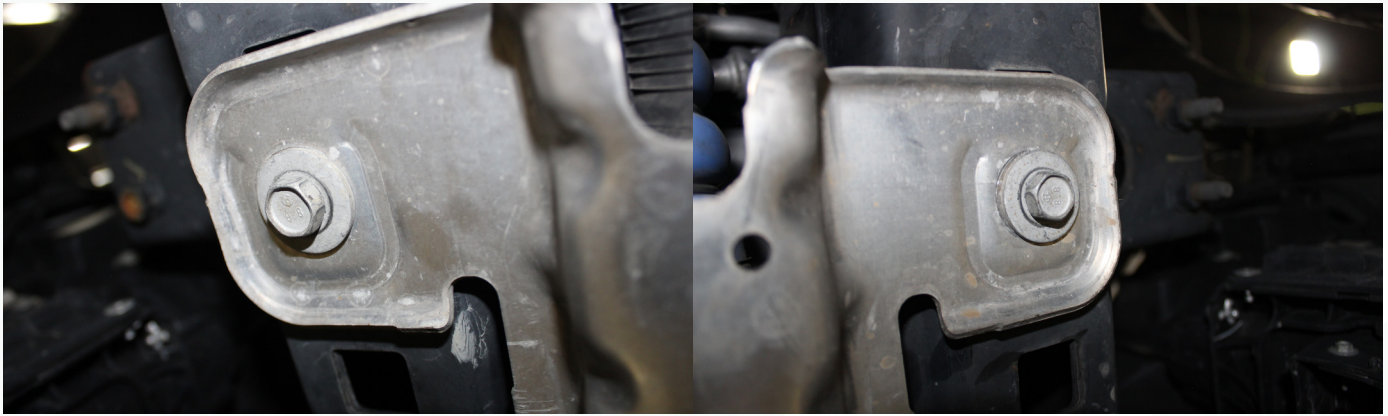


10. On the left side of the intercooler, remove the spring clip on the plastic elbow (1). Disconnect the BOV recirculation tube (2) and disconnect the BOV electrical connector (3). The recirculation tube is a quarter turn to the left and pull out.

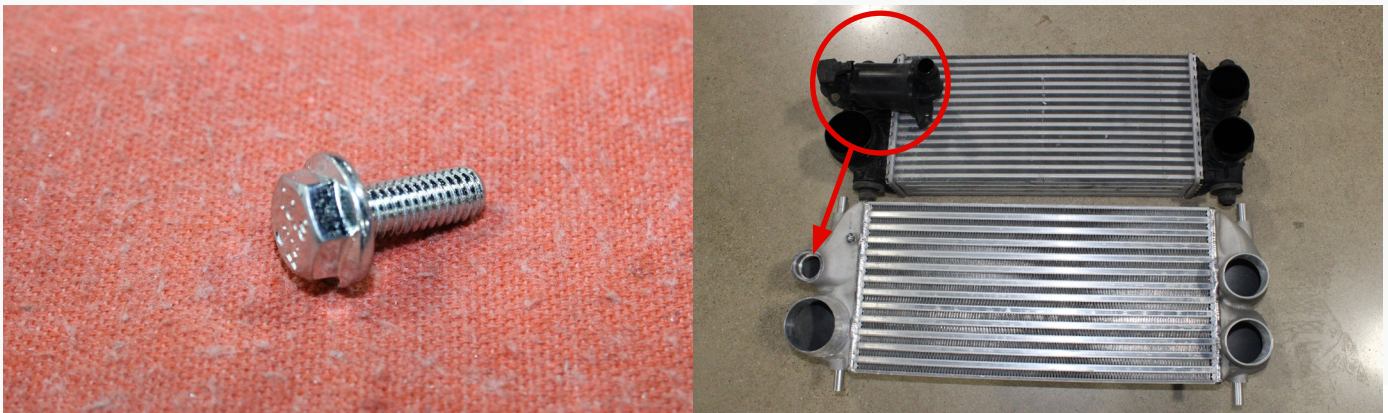
**Note:** Some models may be equipped with an intercooler fan assembly. You will need to disconnect that connector as well. The fan assembly will not be re-installed



11. Remove the (2) 15mm bolts holding the lower intercooler support bracket and remove the intercooler.



12. Lay the OEM and AMS intercoolers next to each other. Remove the screw from the BOV and rotate it counterclockwise to remove. Transfer the (4) rubber grommets and BOV to the AMS intercooler and secure with the provided M6 bolt.



## INSTALL

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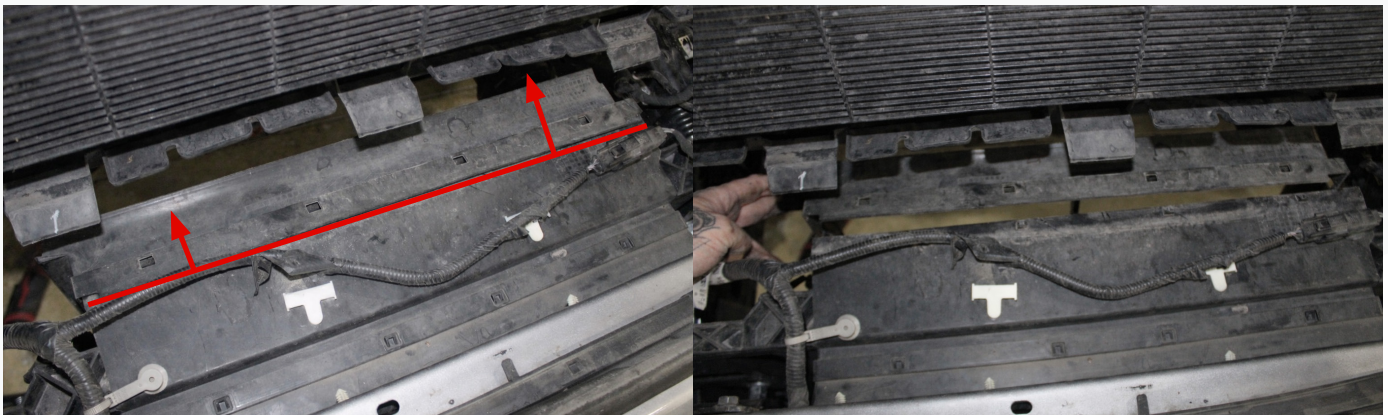
13. Lubricate and install the 6 AN plug in the bottom of the intercooler.



14. Reinstall the lower intercooler bracket onto the grommets of the AMS intercooler.



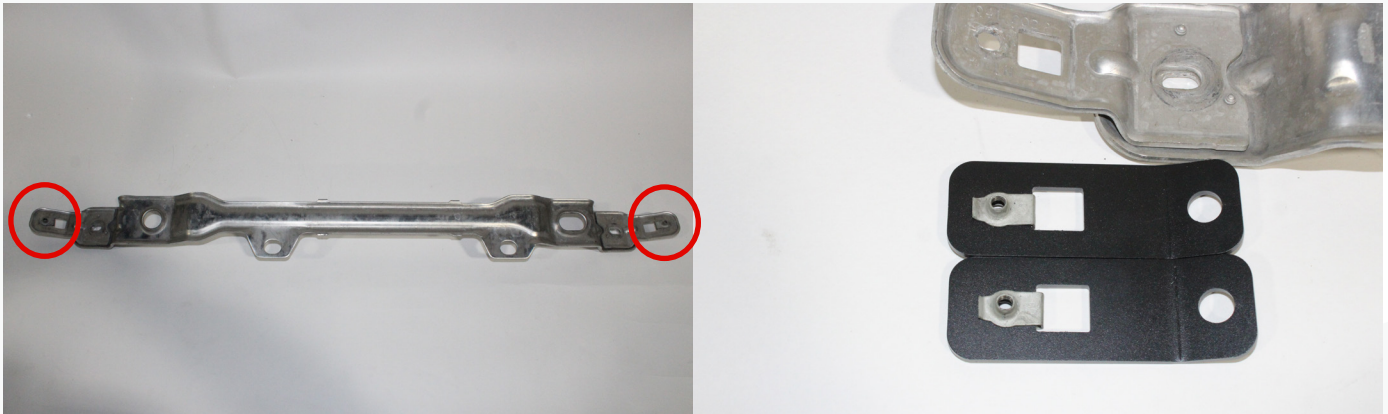
15. Release the clips holding the back half of the two-piece intercooler ducting and remove the duct. It will not be reinstated.



16. Locate and install the left and right upper support brackets included in the kit. Loosely install with the (2) 13mm bolt.



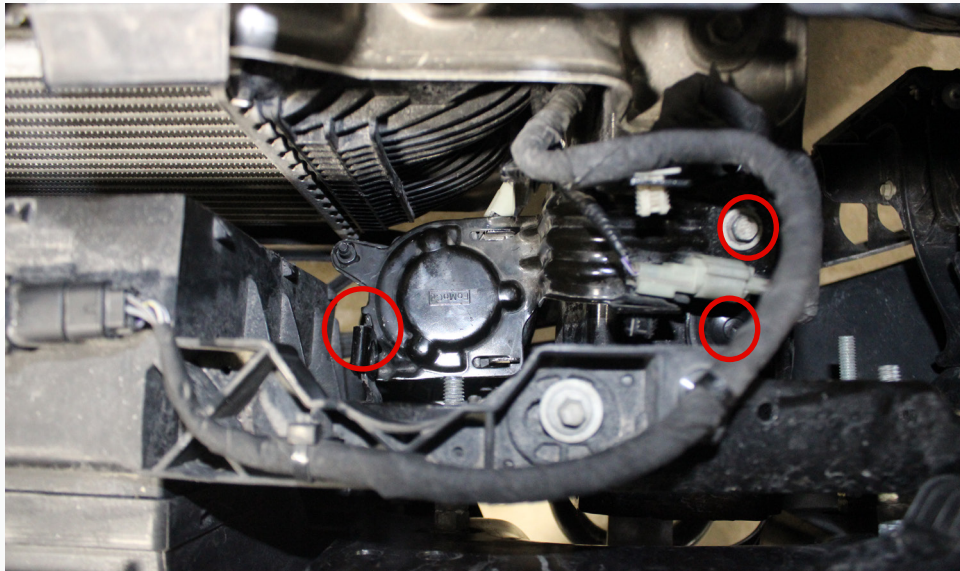
a. Raptor models will need to use the added support brackets to re-connect bumper support rods. Transfer the clip nuts over the new brackets.



**PowerBoost Models:** Requires Speaker Relocation Bracket (AMS.55.09.0001-5) - Sold separately. See steps 17 - 21.

17. Locate the Pedestrian Alert Speaker, located on the driver side inner frame rail in front of the intercooler.

18. Remove the (2) bolts on the bracket, (1) push clip, and the harness retainers from racket.



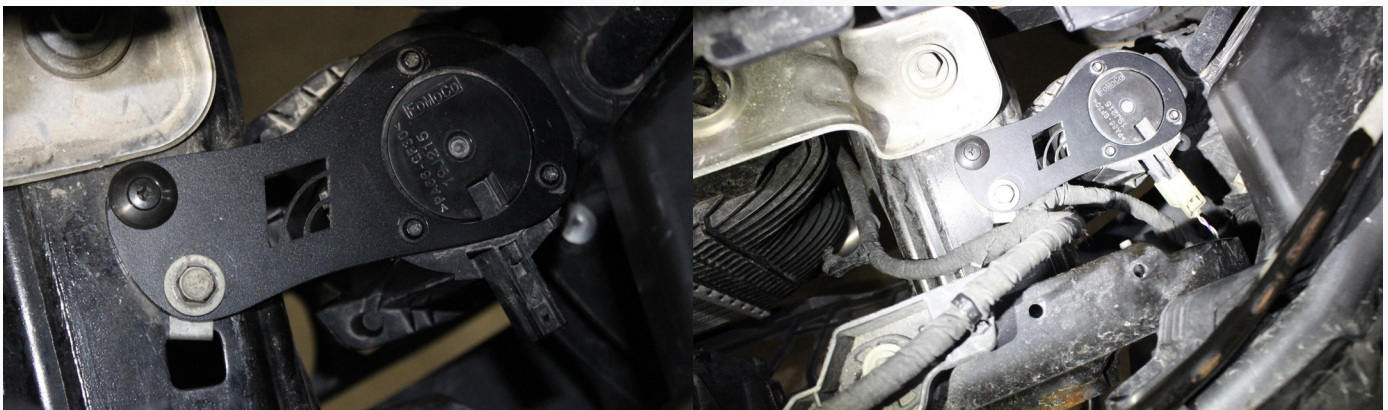
19. Once the speaker assembly is out, remove the (1) 10mm bolt and separate the speaker from bracket. There will be (3) torx bolts you will need to remove after this on the mounting bracket.



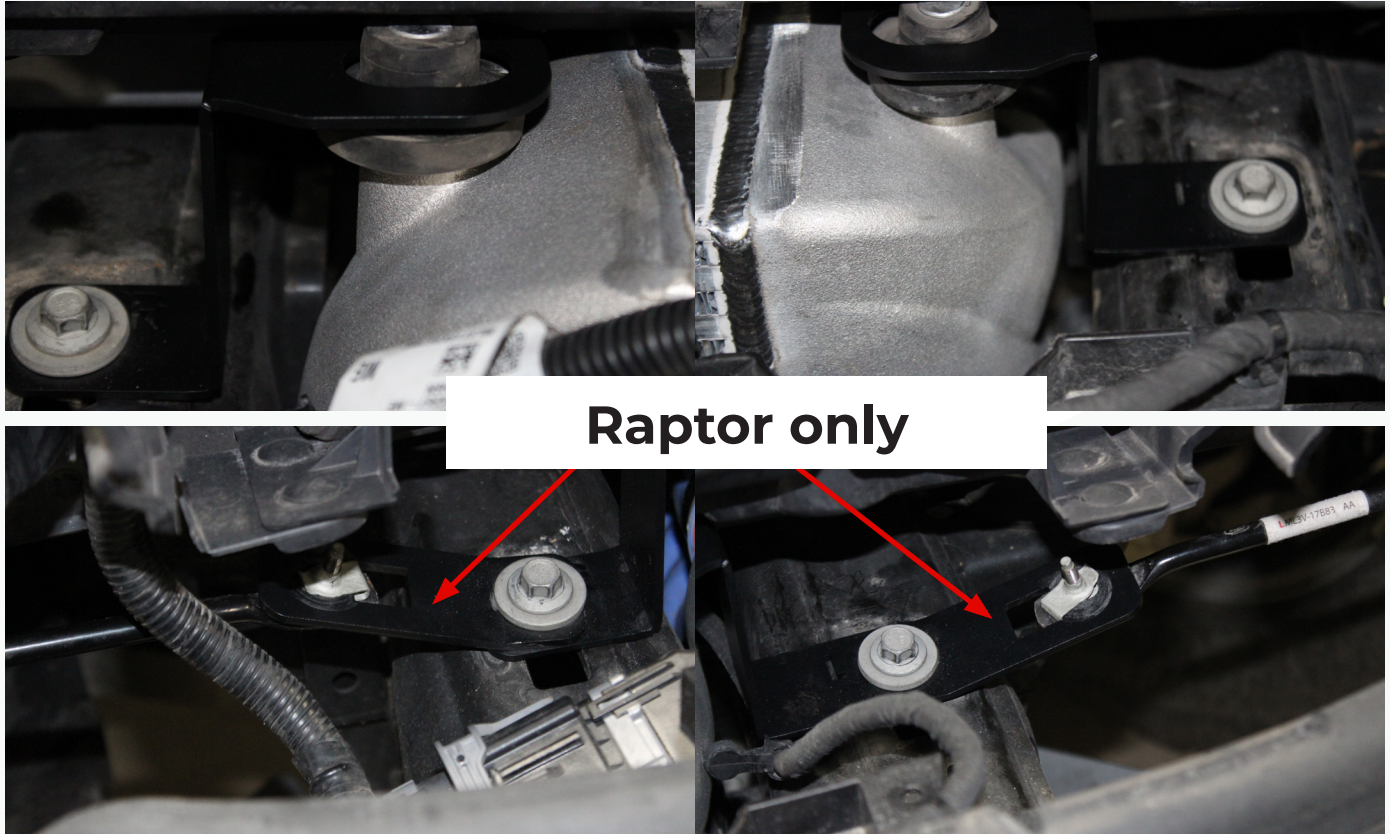
20. Install the AMS relocation bracket using the (3) torx bolts.



21. Install the speaker on the outside of the frame rail, using the same push clip and bolt you removed before. Once in position plug the harness back in to the speaker.



22. Install the AMS intercooler assembly from step 12 from the bottom and secure it with the original hardware. Check and adjust the upper brackets as necessary and fully secure the fasteners when satisfied with fitment.



23. Reconnect the BOV connector, attach the BOV bypass tube and reinstall the plastic elbow for the intercooler outlet. Be sure the intercooler outlet is fully seated.



24. Reinstall the OEM intercooler inlet silicones.



Models equipped with an intercooler fan assembly:

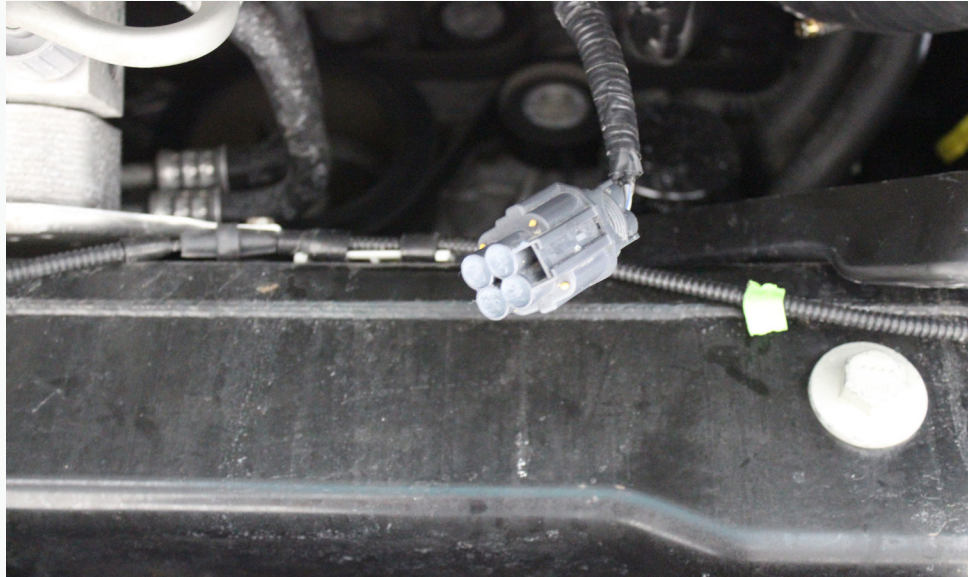
25. Since the fans are not reused on the AMS intercooler, the plug will be left open ended. (4) connector seal plugs have been provided so you can de-pin the connector from the fans and use it as a dummy plug. This will keep the harness connector clean so the truck may be returned to stock later.

26. Remove the white secondary lock from the inside of the connector to expose the terminal locks. Use a small pick or terminal tool and remove the terminals from the connector.



27. Insert the (4) connector plugs into the back of the plug.

28. Connect the dummy plug back into the harness and secure it up and out of the way.



Congratulations! The installation of your new AMS Performance F-150 OEM location intercooler is complete! Please ensure everything you removed during installation has been reinstalled (i.e. grille, lower radiator cover, upper radiator cover, etc.)