

FORD F-150 INTERCOOLER

We are extremely excited to introduce the next BIG thing in the AMS engineering and performance tradition, the AMS 3.5L EcoBoost Intercooler Kit.

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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 may not meet the legal requirements for use on public roads. Federal and state laws prohibit the removal, modification, or rendering inoperative of any part or element of design affecting emissions or safety on motor vehicles used for transporting persons or property on public streets or highways. Use or installation of performance parts may adversely affect the drivability and reliability of your vehicle, and may also affect or eliminate your insurance coverage, factory warranty, and/or new OEM part warranty. Performance parts are sold as-is without any warranty of any type. There is no warranty stated or implied due to the stresses placed on your vehicle by performance parts and our inability to monitor their use, tuning, or modification.

These instructions are provided as a guide only as there are many variables that cannot be accounted for concerning your particular vehicle, including but not limited to model year differences, model differences, the presence of non-OEM parts, and modifications that may already be or were previously installed. A basic knowledge of automotive parts and systems is helpful but a better understanding of the parts and systems on your particular vehicle may be required.

If you have any questions or issues at any time during the installation of your AMS Performance product(s) please call us for technical assistance. The AMS Performance tech line can be reached during business hours at 847-709-0530 for AMS Performance products only.

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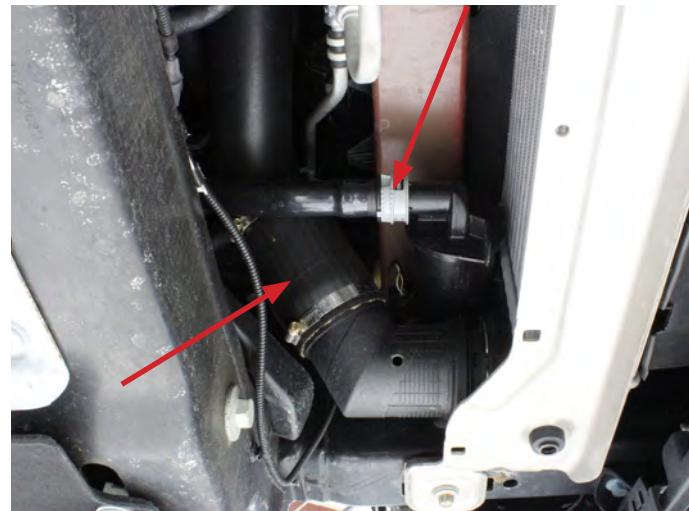
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Notes: The intercooler will be installed with out removing the front bumper.

- 01.** Raise the front of the vehicle in a safe manner, enough to be able to work underneath it. If installing the intercooler on a Raptor, remove the OEM skid plate..



- 02.** On the driver's side, disconnect the bypass valve hose connection from the intercooler. Turn the grey connector counter clockwise to release the connection. Next, remove the OEM rubber coupler from the intercooler outlet. The OEM coupler will not get reused.



- 03.** Remove the plastic elbow from the intercooler. Do so by releasing the metal retaining clip from the elbow.



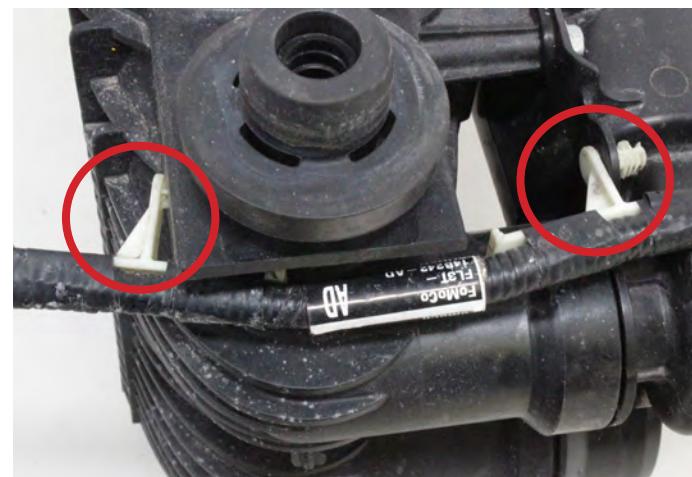
- 04.** On the passenger side, remove both OEM blue intercooler inlet couplers. Save these couplers as they will get reused during the AMS Intercooler install.



05. Disconnect the electronic bypass valve connector.



06. Unbolt the lower intercooler mount from both sides of the frame. Carefully lower the intercooler down to gain access to the bypass valve wiring harness. This harness may be a little tricky to remove. The harness is held in place by two fir tree style clips into the top of the intercooler. Release these clips and remove the intercooler. Below is a picture of the harness and intercooler removed from the truck to give you an idea of what is going on.



07. Part of the louvered air duct needs to be removed. This duct is clipped into place. Carefully unclip this duct extension and remove it from the truck.



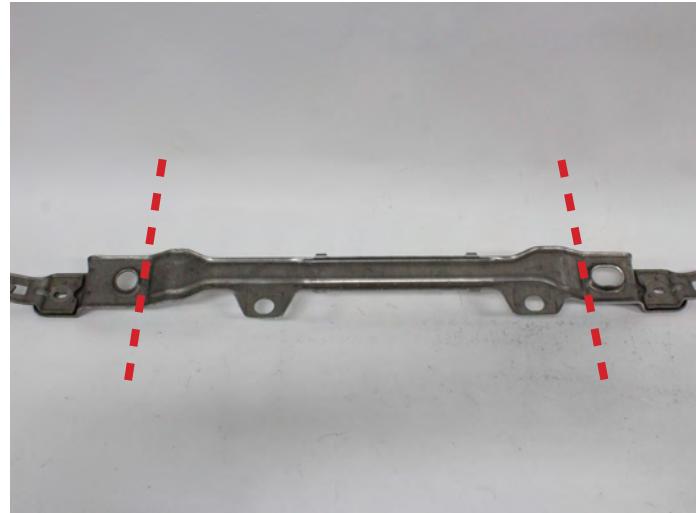
FORD F-150 Model (Step 8)

08. Remove the two bolts holding the top intercooler support plate to the top of the frame. Use the supplied longer M8 bolts and spacers to move this brace upwards as shown.



FORD F-150 Raptor Model (Step 9 & 10)

- 09.** Remove the upper intercooler support plate. The center of the plate needs to be cut out as shown leaving the ends to support the intercooler. Since the radiator on the Raptor model is larger, the center of the support plate interferes with the radiator when spaced upwards.



- 10.** Discard the center part of the upper intercooler support. Reinstall the two ends using the supplied longer bolts and spacers.



NOTE: The fans on the Raptor model will not be reused.

- 11.** Remove the OEM bypass valve and transfer it to the AMS Intercooler using the supplied M6 bolts. Do not reuse the OEM screws, as you will damage the AMS Intercooler.



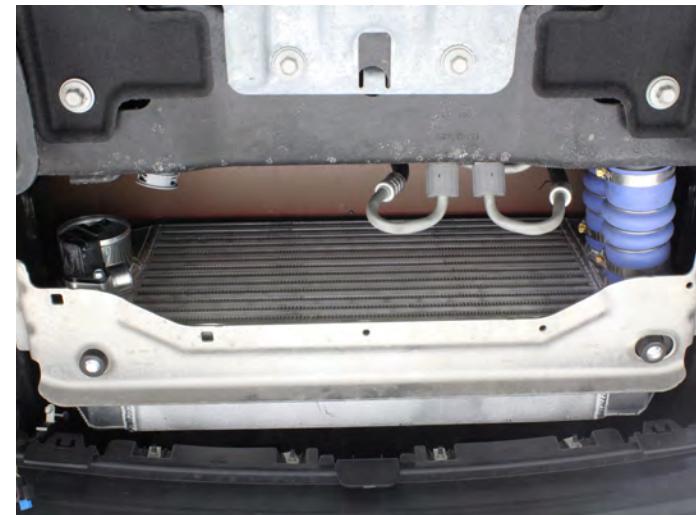
- 12.** Remove the four rubber intercooler mounts from the OEM intercooler and transfer them to the AMS Intercooler.



13. Install the AMS intercooler. The new AMS Intercooler is much larger and heavier than the OEM unit, so a second set of hands here is recommended. Reinstall the lower intercooler support plate using the OEM hardware.



14. Reinstall the OEM blue intercooler inlet couplers.



15. Install the new intercooler outlet coupler using the provided hose clamps. The outlet coupler will only install in one direction. The outlet on the intercooler and the OEM charge pipe are different sizes.



16. Remove the grey clip from the bypass valve recirculation tube. Release the tabs by turning the gray retainer in the direction you did to remove it. Slide it off the tube. Clean the surface on the end of the tube.



- 17.** Install the new bypass valve coupler using the provided hose clamps as shown. Be careful not to overtighten the clamp on the OEM bypass recirculation tube. Route the bypass valve harness and plug the connector in.



- 18.** Double check all your connections. Reinstall the skid plate if you have a Raptor.

- 19.** Enjoy!

RAPTOR MODEL OPTION:

Since the fans are not reused on the Raptor, the plug will be left open ended. Four 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 at a later date.

- 20.** 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.



- 21.** Insert the four terminal plugs into the rear of the connector.



22. Connect the dummy plug to the harness connector and tie it away.



23. This will protect the harness connector just in case you wish to return the truck back to stock.

24. Enjoy!