

#### PARTS INCLUDED

1PC Mishimoto Tube-and-Fin Transmission Cooler

**2PC** Direct-Fit Mounting Brackets **Mounting Hardware** 

#### **TOOLS NEEDED**

8mm Socket 10mm Socket 1/4" Drive Ratchet & Extensions **Channellock Pliers** 4mm Allen Key **Pick Tool** 

### **INSTALL TIME 1 Hour**

### INSTALL DIFFICULTY 6000



#### **DISCLAIMER**

- Raise vehicle only on jack stands or on a vehicle lift.
- · Allow vehicle to cool completely prior to attempting installation.
- Do not run the engine or drive the vehicle while overheating; serious damage can occur.
- Please dispose of any liquids properly.
- · Mishimoto is not responsible for any vehicle damage or personal injury due to installation errors, misuse, or removal of Mishimoto products.
- · Mishimoto suggests that a trained professional install all Mishimoto products.

#### **INSTALL PROCEDURE**

1. Release the clips and screw on the intake duct to separate it from the radiator cover. Remove the intake duct once free. (2x pop-clips, 1x 8mm screw)



Release the clips that secure the corner panels. (2x pop-clips)



Release the clips that secure the radiator cover and remove it. (8x pop-clips)



Disengage the plastic covers that surround the headlights.



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# 2015+ FORD F-150/RAPTOR TRANSMISSION COOLER INSTALLATION GUIDE



 Separate the ducting that surrounds the radiator and connects to the upper support bar. (4x pop-clips)



6. Disconnect the grille shutter, camera, and washer fluid harnesses. These can be found in front of the hood latch connector.



- 7. Separate the wiring harness from the grille. (2x tree clips)
- 8. Remove the bolts that secure the top of the grille. (4x 10mm bolts)



9. Remove the bolts at the bottom of the grille.

These are located at the back of the grille and will be difficult to reach. (2x 8mm bolts)



- 10. Release the clips on each side of the grille. You will need to lift the grille to reach these clips.(2x tree clips)
- 11. Separate the radiator ducting from the radiator and cover. (8x pop-clips)
- 12. Remove the loose grille.
- 13. Compress the clamp that secures each hose to the transmission cooler. Slide the clamp down the hose and pull the hose off the cooler. Be prepared to catch any residual transmission fluid. (2x spring clamps)



- 14. Remove the bolts on the transmission cooler bracket. (2x 10mm bolts)
- 15. Identify the left bracket from the right bracket. Install both brackets, but do not fully tighten them down. Make sure the tips of the bolts do not come in contact with the radiator when you're installing the brackets. If this occurs, replace the OEM bolts with the two 16mm/M6 bolts provided in the kit. (2x 10mm bolts)

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# 2015+ FORD F-150/RAPTOR TRANSMISSION COOLER INSTALLATION GUIDE





16. Install the transmission cooler to the brackets. The transmission cooler can be installed in two orientations. For the F-150 2.7L & 3.5L EcoBoost, install the cooler with the inlet & outlet facing up, and relocate the tree clip on the hose to the riveted bracket on the bottom.

(4x 4mm Allen bolts, 8x washers)



- 17. Adjust the transmission cooler so that it is parallel with the condenser. Then fully tighten all hardware.
- 18. Attach both lines to the transmission cooler ports. Secure the lines with the clamps that are still on each hose. (2x spring clamps)
- 19. Reposition the radiator ducting and secure it to the radiator and cover. (8x pop-clips)
- 20. Reinstall the grille. (2x 8mm bolts)
- 21. Connect the radiator ducting to the grille. (4x pop-clips)
- 22. Secure the top of the grille. (4x 10mm bolts)
- 23. Reconnect the grille shutter, camera, and washer fluid harnesses. Clip the wiring back in place. (2x tree clips)

- 24. Reinstall the radiator cover and intake duct. (10x pop-clips, 1x 8mm screw)
- 25. Reconnect the plastic covers over the headlights.
- 26. Refill transmission fluid to the proper level.

Congratulations! You have finished installing the Mishimoto 2015+ Ford F-150/Raptor Transmission Cooler.

03