

#### **PARTS INCLUDED**

- 1PC Mishimoto Radiator
- **1PC** Mishimoto Radiator Cap
- 1PC O-Ring
- 1PC Mishimoto Magnetic Drain Plug Mounting Hardware

#### **TOOLS NEEDED**

8mm Socket
10mm Socket
13mm Socket
19mm Wrench
1/4" Drive Ratchet & Extension
4mm Allen Key
Flat Head Screwdriver
Pop-Clip Removal Tool
Pliers
Hose Clamp (optional)

### **INSTALL TIME 2 Hours**

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#### **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 that secure the upper radiator shrouding. (4x pop-clips)



- Disconnect the negative and positive terminals on the battery.
- 3. Loosen the clamp on each end of the intake pipe. (2x worm gear clamps)
- 4. Slide the two small hoses off the intake pipe. Then disconnect the temperature sensor. Depress the black tab at the center and slide the connector off the pipe.



- With all connections to the pipe free, remove your intake pipe.
- 6. Remove the bolts that secure the fuse box's brackets. (4x 10mm bolts)



7. Release the clips that secure the nearby wiring to the fan. (2x tree clips)

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- Release the petcock on the radiator to drain the coolant from the system. Have a bucket ready to prevent spillage. Removing the cap from your expansion tank will expedite the draining process.
- 9. Compress the clamp on the upper radiator hose and slide it down the hose. Then slide the hose off the radiator. (1x spring clamp)



- 10. Remove the bolts that secure the fan shroud to the radiator. (2x 8mm bolts)
- 11. Depress the tabs at the center of the fan shroud electrical harnesses to disconnect them from the fan shroud. Release the wiring and move it out of the way. (1x tree clip)
- 12. Remove the fan sroud from your vehicle.
- 13. Release the clip on the lower radiator hose and separate the hose from the radiator.(1x spring clip)



14. Compress the clamp on the overflow hose and slide the clamp down the hose. Then slide the overflow hose off the radiator. (1x spring clamp)



15. Release the shrouding connected to the driver side of the radiator. (2x pop-clips)



16. Optional Step: Using a hose clamp, pinch the upper transmission line.



17. Remove the upper and lower transmission lines from the raidator. (2x spring clamps)



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18. Loosen the bolts that seucre the radiator to the vehicle. (2x 13mm bolts)



- 19. Separate the shrouding from the passenger side of the radiator. (4x pop-clips)
- 20. Disengage the tabs on each side of the radiator that secure the AC condenser.



- 21. With the radiator free, lift it out of the vehicle.
- 22. Transfer the grommets to the Mishimoto radiator. Depending on the model of your vehicle, your radiator may look a little different. The installation is still the same regardless.



- 23. Using a 19mm wrench, tighten the drain plug on the Mishimoto radiator.
- 24. Lower the radiator into the vehicle. Once the raidator is set, be sure to place the AC condenser

tabs within the brackets on your radiator.



25. Using the two provided brackets, secure the passenger side of the AC condenser. (4x 4mm Allen screws)



- 26. Attach the upper and lower transmission lines to the radiator. (2x spring clamps)
- 27. Attach the overflow hose to the radiator. (1x spring clamp)
- 28. Connect the lower radiator hose to the radiator. Replace the O-ring with the one provided in your kit. (1x spring clip, 1x O-ring)
- 29. Secure the upper radiator brackets. (2x 13mm bolts)
- 30. Reinstall the fan shroud to the radiator and reconnect its electrical harnesses. Be sure to secure the loose wiring.(2x 8mm bolts, 3x tree clips)
- 31. Secure the fuxe box wiring. (2x tree clips)
- 32. Attach the upper radiator hose to the radiator. (1x spring clamp)
- 33. Secure the fuse box brackets. (4x 10mm bolts)
- 34. Reattach the shrouding on both sides of the radiator. (6x pop-clips)

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- 35. Reinstall the upper radiator shrouding. (4x pop-clips)
- 36. Reinstall the intake, which includes the two small hoses and temperature sensor. (2x worm gear clamps)
- 37. Reconnect the positive and negative terminals to the battery.
- 38. Refill your coolant to the proper level.

Congratulations! You have finished installing the Mishimoto 2011–2014 Ford F-150 Performance Aluminum Radiator.

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