# 2015+ FORD MUSTANG ECOBOOST PERFORMANCE ALUMINUM RADIATOR PARTS LIST AND INSTALLATION GUIDE



#### **PARTS INCLUDED**

1PC | MISHIMOTO RADIATOR

1PC | MAGNETIC DRAIN PLUG

2PC | MOUNTING BRACKETS

2PC | MOUNTING HARDWARE

#### **TOOLS NEEDED**

2.5MM ALLEN KEY 1/4" DRIVE EXTENSIONS

T25 TORX BIT/SOCKET 1/4" DRIVE RATCHET

5.5MM SOCKET FLATHEAD SCREWDRIVER

7MM SOCKET HOSE PICK TOOL

8MM SOCKET HOSE-CLAMP TOOL

7MM SWIVEL SOCKET NEEDLENOSE PLIERS

10MM DEEP SOCKET

### INSTALL TIME 2 HOURS INSTALL DIFFICULTY (2) (2) (2) (2)

#### **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.

#### **CAUTION**

Never work on the cooling system when it is hot. The coolant temperature in the radiator can be considerably higher than boiling, and the system may be under pressure. Opening a cooling system that is hot or under pressure can result in serious injury. Always wait until the system has cooled completely before servicing it in any way.

#### **INSTALL PROCEDURE**

- O1. Set the vehicle on an automotive lift, or raise it with a jack and place it securely on jack stands. Refer to your owner's manual for safe lifting points if you are unsure.
- 02. Remove the fasteners that secure the undertray to the bottom of the vehicle, and then remove the undertray. (14x 7mm screws, 6x pop-clips, 2x 5.5mm screws)





03. Attach a hose to the petcock on the bottom of the stock radiator, and place the other end of the hose in a drain pan or bucket. Loosen the petcock on the radiator to drain the coolant until the expansion tank is empty. Remove the cap on the expansion tank to speed up the draining process.



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**INSTALLATION GUIDE** 

**04.** While the coolant is draining, lower the vehicle and remove the pop-clips that secure the air diversion panel over the radiator. Then remove the air diversion panel. (8x pop-clips)



**05.** Compress the spring clamp that secures the overflow hose to the driver-side corner of the radiator and slide the clamp up the hose. Then pull the hose off the radiator.



**06.** Compress the spring clamp that secures the rear coolant hose on the expansion tank and slide it down the hose. Then remove the hose from the expansion tank.



**07.** Remove the two 10mm bolts that secure the expansion tank to the fan shroud. (2x 10mm bolts)



- **08.** Lift the stock expansion tank off the fan shroud. Compress the spring clamp on the lower hose and slide it down the hose. Then remove the hose from the tank and set the tank out of the way.
- 09. Compress the clamp that secures the upper radiator hose to the radiator and slide it down the hose. Disconnect the hose from the radiator and move it out of the way.



 Disconnect the electrical harness for the cooling fan.
 The connector is located just below the upper radiator hose connection.



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**INSTALLATION GUIDE** 



 Remove the two 10mm bolts that secure the fan shroud to the radiator. (2x 10mm bolts)



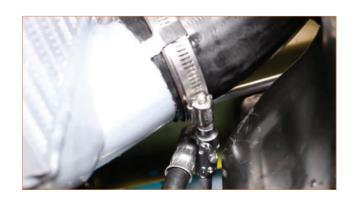
- 12. Remove the fan shroud by lifting it directly upward.
- 13. Place a drain pan or bucket under the lower radiator hose connection. Compress the clamp that secures the lower radiator hose to the radiator and slide it down the hose. Disconnect the lower radiator hose from the radiator, and allow the excess coolant to drain from the radiator.



Unbolt the radiator stays and remove them from the vehicle.
 (4x 10mm bolts)



15. Loosen the clamps that secure the intercooler couplers to the intercooler. Then separate the intercooler couplers from the intercooler.



- Disconnect the electrical harness from the MAP sensor, located on the driver-side end tank of the intercooler.
- 17. Push the top of the radiator back toward the engine and unseat the condenser. There is a clip on either side of the radiator that holds the condenser in place. Bend back the clips and slide the condenser up, off of the radiator. Then lower the condenser back to its original location while holding the radiator back toward the engine.



- Remove the radiator/intercooler assembly from the vehicle by lifting it directly upward.
- 19. Remove the 10mm bolt that secures the passenger side of the intercooler to the radiator. (1x 10mm bolt)



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**MISHIMOTO** 

**INSTALLATION GUIDE** 

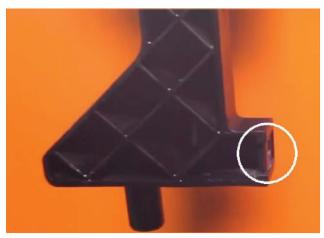
20. Separate the driver side of the intercooler from the radiator by pulling back on the tab under the clip. Tilt the radiator and remove the intercooler completely.



21. Remove four clip-nuts from the stock radiator and transfer them to the Mishimoto radiator. (4x clip-nuts)



**22.** Transfer the final clip-nut from the mounting post on the stock radiator to the Mishimoto mounting post.



23. Install the Mishimoto mounting posts onto the Mishimoto radiator using the supplied hardware. Snug these bolts, but do not fully tighten them. (4x 10mm bolts)



- 24. Snug the drain bolt on the Mishimoto radiator.
- 25. Install the intercooler to the Mishimoto radiator. Secure the intercooler on the driver side with the original clip; secure it on the passenger side with the original 10mm bolt. (1x 2.5mm Allen bolt, 1x 10mm bolt)
- 26. Install the radiator/intercooler assembly by lowering it down into the vehicle. Lift the AC condenser and seat the condenser tabs into the brackets on the Mishimoto radiator.
- Slip the intercooler couplers over the intercooler and secure them with the worm-gear clamps.
- 28. Connect the electrical harness to the MAP sensor.
- Fully tighten the bolts that secure the mounting brackets to the radiator.
- Install the lower radiator hose onto the Mishimoto radiator and secure it with the original spring clamp.
- **31.** Install the fan shroud onto the radiator and secure it with the original hardware. (2x 10mm bolts)
- 32. Connect the electrical harness to the cooling fan.
- **33.** Install the upper radiator hose to the radiator and secure it with the original spring clamp. (1x spring clamp)
- 34. Install the radiator stays and secure them with the original hardware. (4x 10mm bolts)

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- **35.** Slip the bottom port on the expansion tank into the lower coolant hose and secure it with the original spring clamp.
- **36.** Connect the overflow hose to the overflow nipple on the radiator and secure it with the original spring clamp.
- **37.** Install the rear coolant hose to the expansion tank and secure it with the original spring clamp.
- Install the undertray to the bottom of the vehicle and secure it with the original hardware. (14x 7mm screws, 6x pop-clips, 2x 5.5mm screws)
- 39. Fill the system with premixed, Ford-approved coolant through the expansion tank filler neck. Start the engine, and allow it to idle with the cap off. Turn the heater control valve on the vehicle's HVAC unit to full hot, and put the fan on low. Monitor the engine temperature and coolant level

in the reservoir. Add coolant as needed to maintain proper level in the reservoir, and check your connections for leaks. If the vehicle begins to overheat or coolant starts to overflow from the reservoir, shut off the engine and allow it to cool before continuing. Once the vehicle is fully warmed up and the coolant level has stabilized, allow the vehicle to cool off completely, and then top off the coolant level.

 Coolant level should be checked once more after putting in some miles.

Congrats! You just finished installing the 2015+ Ford Mustang EcoBoost Performance Aluminum Radiator.



