## 2017+ FORD 6.7L POWERSTROKE ALUMINUM PRIMARY RADIATOR PARTS LIST & INSTALLATION GUIDE



### **PARTS INCLUDED**

**1PC** Mishimoto Radiator

1PC Magnetic Drain Plug w/ Dowty Seal

8PC M6 X 1.0 Clip Nuts

11PC M6 X 1.0 16mm Bolts Mounting Hardware

#### **TOOLS NEEDED**

8mm Socket & Wrench 10mm Socket & Wrench 13mm Socket 19mm Wrench 1/4" Drive Ratchet & Extension Flat Head Screwdriver Pop-Clip Removal Tool Pliers

### **INSTALL TIME 3 Hours**

### INSTALL DIFFICULTY 666

### **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. Disconnect both batteries.
- 2. Remove the plastic radiator cover. (14x pop-clips)



3. Remove the bolts at the top of the grille. Pull the grille off the front of the truck. Note the orange tabs on the inside for when you must reinstall the grille. (8x 10mm bolts)



- 4. Remove the bolts that secure the headlights. There is one bolt on top, two on the front, and one underneath. (6x 10mm bolts, 2x 8mm bolts)
- 5. Twist and pull the electrical harnesses from each headlight.
- 6. Remove the plastic screws from the back portion of the grille, and then remove the bolts on the side brackets. (4x 10mm screws, 4x 13mm bolts)



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- Remove all pop-clips on the shrouding around the radiator.
- 8. Disconnect the horn attached to the back portion of the grille. This will free the back of the grille and you can now lift it off the front of the truck.



- Detach all the components on the upper support bar. (4x 10mm bolts)
- 10. Remove the bolts that secure the upper support bar. (2x 13mm bolts)
- 11. Separate the upper support bar from the radiator's upper mounts. Two brackets on each end hold it in place. (4x 10mm bolts)



12. Separate the airbag sensor from the upper support bar. Simply remove the screw. DO NOT disconnect the harness. (1x 8mm bolts)



13. Release the petcock to drain the coolant from your primary and secondary radiators. Have a bucket ready to catch the released coolant. Unscrew the filler cap to expedite the draining process.



14. Release the power steering cooler and move it out of the way. (1x tree clip)



- 15. Remove the two brackets that secure the crossover coolant hose over the front of the AC condenser. (1x 10mm bolt)
- 16. Release the quick-disconnect on the driver side of the radiator. (1x spring clip)



17. Remove the two bolts that secure the AC condenser. (2x 10mm bolts)

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18. Remove the bolts that secure the secondary radiator to the passenger side of the radiator. (2x 10mm bolts)



- 19. Disconnect the shrouding from the radiator and secondary radiator.
- 20. Move the AC condenser to the side.
- 21. Compress the clamp that secures the overflow hose to the top port on the secondary radiator. Slide the clamp down the hose and pull the hose off the port. (1x spring clamp)



- 22. Release the quick-disconnect at the bottom of the secondary radiator. (1x spring clip)
- 23. Lift the secondary radiator out of the engine bay.
- 24. Separate the fan shroud from the radiator. (4x 10mm bolts)
- 25. Release the quick-disconnects from the top and bottom of the radiator. (2x spring clips)



- 26. Slide the overflow hose off the radiator. (1x spring clamp)
- 27. Lift the radiator out of the engine bay.
- 28. Transfer the upper and lower radiator bushings onto the Mishimoto radiator.
- 29. Place the radiator into position. Line up the brackets on the fan shroud with the nut clips on the radiator. Attach the fan shroud to the radiator. (4x 10mm bolts)
- 30. Transfer the lower shrouding to the bottom of the radiator. (5x pop-clips)



- 31. Connect the upper and lower radiator hoses to the radiator. (2x spring clips)
- 32. Place the secondary radiator back in front of the radiator.
- 33. Position the AC condenser back onto the secondary radiator.
- 34. Secure both the secondary radiator and AC condenser. (4x 10mm bolts)



- 35. Set the crossover coolant hose back in front of the AC condenser. (3x 10mm bolts)
- 36. Reconnect the overflow hoses to the radiator and secondary radiator. (2x spring clamps)

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- 37. Attach the quick-disconnect to the secondary radiator. (1x spring clip)
- 38. Secure the power steering cooler to the crossover coolant hose. (1x tree clip)
- 39. Reattach the shrouding along the side and bottom of each radiator.
- 40. Reinstall the upper support bar. Secure the bar to the radiator using the original hardware and brackets. (4x 10mm screws)
- 41. Secure the hood latch and power steering cooler to the support bar. (4x 10mm bolts)
- 42. Replace the airbag sensor behind the support bar. (1x 8mm screw)
- 43. Reattach all the shrouding to the upper support bar.
- 44. Reinstall the back portion of the grille.
- 45. Connect the loose shrouding sections to the back portion of the grille.
- 46. Secure both the support bar and back portion of the grille. (2x 13mm bolts, 4x 10mm bolts)
- 47. Reinstall both headlights. (6x 10mm bolts, 2x 8mm bolts)
- 48. Reconnect the horn and hood latch sensors.
- 49. Reinstall the grille. (8x 10mm bolts)
- 50. Secure the back portion of the grille. (4x 10mm plastic screws)
- 51. Reinstall the plastic radiator cover. (14x pop-clips)
- 52. Reconnect both batteries.
- 53. Fill both secondary and primary systems with coolant.

Congratulations! You have finished installing the Mishimoto 2017+ Ford 6.7L Powerstroke Aluminum Primary Radiator.