# 2015-2020 BMW F8X M3/M4 PERFORMANCE HEAT EXCHANGER PARTS & INSTALLATION GUIDE



#### **PARTS INCLUDED**

1PC Performance Heat Exchanger

**1PC** Stone Guard

**1PC** Mounting Hardware Pack

#### **TOOLS NEEDED**

8mm Socket

13mm Socket

T20 Torx

T25 Torx

T30 Torx

T45 Torx

1/4" Drive Ratchet

1/4" Drive Extension

3/8" Drive Ratchet

Pick Tool

#### **INSTALL TIME 3 Hours**

### INSTALL DIFFICULTY 600000

#### **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. Unscrew the cap for the secondary coolant reservoir.

2. Peel off the rubber weather stripping running along the top edge of the bumper. Then remove the bolts along the top edge of the bumper. (2x T20, 6X T30 torx)



 Remove all the bolts on the lower splash shields and wheel well liners.
 (25x 8mm bolts, 2x 13mm bolts)





4. Pull back the wheel well liner to gain access behind it. Remove the bolts that secure the bumper to the edge of the fender. (4x 8mm bolts)

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With the liner back, separate the window washer quick-disconnect within the wheel well. Slide the black tab back to release the connection.



6. Disconnect the electrical harness within the wheel well.



- 7. Pull the bumper from the front of the vehicle.
- 8. Separate the quick-disconnect from the passenger-side auxiliary cooler in the wheel well. Have a bucket prepared for when coolant spills from the free line.



- 9. Release the foam cover from the crash beam.
- Remove the bolts that secure the crash beam.
  There are brackets under the crash beam. Be sure to hold on to these for later. With the beam free, pull it off the front of the vehicle.
  (4x 13mm bolts)



11. Release the lower ducting. (4x pop-clips)



12. Remove the bolts that secure the cross brace and slide it out from behind the upper ducting. (6x T45 torx)

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13. Separate the quick-disconnects along the passenger side of the heat exchanger.



14. Remove the bolts that secure the oil cooler. (3x 13mm bolts)



15. Remove the bolts on the lower part of the clam shell. (2x T25 plastic screws)



- 16. Release the heat exchanger and lower it out of the vehicle.
- 17. Should you choose to do so, remove the stone guard from the face of the heat exchanger at this time. (2x 2.5mm Allen screws)
- 18. Lift the Mishimoto heat exchanger into place.
- 19. Slide the quick-disconnects onto the ports of the heat exchanger.
- 20. Reinstall the bottom part of the clam shell to secure the heat exchanger. (2x T25 plastic screws)
- 21. Check that the drain plug on the heat exchanger is snug.
- 22. Reinstall the oil cooler. (3x 13mm bolts)
- 23. Reattach the quick-disconnect to the passenger-side auxiliary cooler. (1x spring clip)
- 24. Reinstall the cross brace. Secure it with the original bolts and provided washers. The washers go between the body and the cross brace. (6x T45 torx, 4x washers)



- 25. Reattach the lower ducting. (4x pop-clips)
- 26. Reinstall the crash beam, placing the rubber clip on the tab at the center. (4x 13mm bolts)
- 27. Connect the foam cover to the crash beam.
- 28. Slide the bumper back onto the front of the vehicle. See that the lower ducting goes into the groove at the bumper's bottom edge.
- 29. Reconnect the harness and window washer connector in the wheel well.
- 30. Secure the front bumper to the fender. (4x 8mm bolts)
- 31. Reinstall the lower splash shields and wheel well liners. (25x 8mm bolts, 2x 13mm bolts)

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- 32. Secure the top edge of the front bumper. (2x T20 torx, 6 T30 torx)
- 33. Reinstall the rubber weather stripping.
- 34. Refill the coolant in your system. Once full, start the car with the cap off. Let it idle to allow the coolant to circulate through the system. Continue to top off the coolant as there will be some bleed off. Close the tank and then take the car for a drive. Let the vehicle cool off when you return and top off the coolant again.

Congratulations! You have finished installing the Mishimoto 2015–2020 BMW F8X M3/M4 Performance Heat Exchanger.

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