

## PARTS INCLUDED

- 1PC** Mishimoto Performance Heat Exchanger
- 1PC** Hose Extension
- 1PC** Threaded Fitting
- 1PC** Mounting Hardware Pack

## TOOLS NEEDED

- 8mm Socket
- 10mm Socket
- 12mm Socket
- 13mm Socket
- 22mm Wrench
- Torque Wrench
- 1/4" Drive Ratchet
- 1/4" Extension
- Pop-Clip Removal Tool
- Air Lift System
- Pick Tool
- Pliers

**INSTALL TIME** 3 Hours

**INSTALL DIFFICULTY** 

## 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. Lift the cover off the engine.
2. Press the tabs on each battery cover to remove them.
3. Release the clips that secure the battery trim pieces. Then remove the trim. (8x pop-clips)



4. Remove the trim pieces along the sides of the engine bay. (2x pop-clips)



5. Remove the undertray from the vehicle. (3x pop-clips, 18x 10mm bolts)



6. Separate the trim piece within each wheel well. (6x pop-clips)

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7. Remove the liners from within the wheel well on each side of the vehicle. (8x pop-clips)



8. Disconnect the electrical harnesses from the bumper.  
9. Remove bolt within each wheel well that holds the fender to the bumper.



10. Remove the bumper retainers. (2x 10mm bolts)



11. Release the clips along the top edge of the bumper. (2x pop-clips)  
12. Slide the bumper off the front of the vehicle.  
13. Separate the foam piece attached to the crash beam.  
14. Disconnect the ICC unit and unclip its wiring harness.



15. Disassemble the trim shrouding that is around the crash beam. (8x pop-clips)



16. Loosen the four bolts on each side of the crash beam. Only fully remove three on each side, leaving one still loosely screwed in to keep the crash beam stable. (4x 12mm nuts, 4x 12mm bolts)



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- 17. Prop and secure the crash beam before lifting it from the front of the vehicle. Once you have something under the crash beam, remove the last bolt from each side and pull off the beam.
- 18. Remove the bolts that secure the oil cooler, and zip tie the cooler so it is out of the way. (7x 10mm bolts)



- 19. Remove the drain plug from the drain port. Unscrew the cap to expedite the draining process.



- 20. Remove the crash beam support on the passenger side. (4x 13mm bolts)



- 21. Separate the horn and position it so it is out of the way of the other components. (1x 10mm bolt)

- 22. Disconnect the secondary pump electrical harness. Take off the bracket that holds the pump. (2x 10mm nuts)



- 23. Clear the cooling stack of the two remaining shroud pieces.
- 24. Remove the passenger-side headlight. There are a total of four bolts, two on the top and one on the side and bottom. Disconnect the harness before pulling the headlight all the way out.
- 25. Remove the bolts that secure the intake airboxes. (4x 10mm bolts)



- 26. Remove the bolts that secure the radiator support. (2x 12mm bolts, 2x 10mm bolts)



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27. Compress the clamp on each coolant hose and slide the clamp down the hose. Then pull the coolant hoses off their respective ports.  
(4x spring clamps)



28. Remove the bolts on the heat exchanger and condenser. This includes the bracket on the driver side. Once loose, slide the bracket out, and then slide the heat exchanger out from the front of the condenser. (3x 10mm bolts, 2x 10mm nuts)  
29. Transfer the grommets on the stock heat exchanger to the Mishimoto heat exchanger.  
30. Lift the radiator, one side at a time, and push the lower pegs out from where they're seated.



31. Push the radiator and condenser backwards to gain space.  
32. Slide the Mishimoto heat exchanger in front of the condenser.  
33. Reinstall the support bar to the passenger side of the condenser. (2x 10mm nuts, 2x washers)  
34. Secure the heat exchanger to the support bracket as well as to the condenser on the driver side. (3x 10mm bolts)  
35. Insert the provided adapter between the lower and upper coolant hose sections.  
(2x spring clamps)



36. Reconnect the coolant hose to the radiator. (1x spring clamp)  
37. Set the shrouding back around the coolant stack.  
38. Reinstall the oil cooler. (7x 10mm bolts)  
39. Secure the airboxes with the original hardware. (4x 10mm bolts)  
40. Reinstall the passenger-side headlight and reconnect its electrical harness. (4x 10mm bolts)  
41. Return the crash beam support. Position it as shown here. Torque the bolts to 18 ft-lb. (4x 10mm bolts)



42. Replace the bracket on the back of your secondary water pump with the one provided in your kit. (2x 10mm nuts, 2x 10mm bolts)



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43. Secure the secondary water pump back in its original location. Then reconnect the water pump harness. (2x10mm nuts)
44. Install the provided Mishimoto fitting to the heat exchanger. Snug down the fitting with a 22mm wrench.



45. Reinstall the inlet hose. (2x spring clamps)



46. Prop the crash beam so it aligns with the support. Then reinstall the crash beam. Torque the bolts to 18 ft-lb. (4x 12mm nuts, 4x 12mm bolts)
47. Reattach the lower and upper shrouding pieces around the crash beam. (8x pop-clips)
48. Reconnect the ICC unit.
49. Reattach the foam piece to the crash beam.
50. Refill your cooling system. You will need to use an air lift system to carry out this step.

## CAUTION:

After a short test drive, let the vehicle cool down completely. Check the CAC coolant reservoir and top it off if needed. Attempting to refill the CAC system without an air lift tool and/or using an improper bleeding procedure may cause serious damage to the electric water pumps.

51. Slide the front bumper onto the vehicle and secure its top edge. (2x pop-clips)
52. Reinstall the bumper retainers. (2x 10mm bolts)
53. Secure the bumper to the fender. (2x 10mm bolts)
54. Reconnect all the electrical harnesses within the bumper. These are accessed within the wheel well.
55. Reinstall the wheel well liners. (8x pop-clips)
56. Reattach the trim piece within each wheel well. (6x pop-clips)
57. Reinstall the undertray. (3x pop-clips, 18x 10mm bolts)
58. Place the radiator cover back over the radiator and secure it with the original clips. (6x pop-clips)
59. Reinstall the battery trim and side trim pieces. (10x pop-clips)
60. Reattach the covers for the batteries and the engine.

**Congratulations! You have finished installing the Mishimoto 2016+ Q50/Q60 3.0T Performance Heat Exchanger.**