

# 2006-2014 VOLKSWAGEN GTI/GOLF R PERFORMANCE INTERCOOLER PARTS LIST & INSTALLATION GUIDE



## PARTS INCLUDED

- 1PC Mishimoto Performance Intercooler
- 9PC M6 Hex Head Flange Bolts
- 6PC M6 Plastic Washers
- 1PC Note Card
- 2PC Mishimoto Silicone Couplers
- 1PC CNC-Machined Intercooler Pipe Adapter
- 4PC High-Torque Worm Gear Clamps

## TOOLS NEEDED

- 8mm Socket
- 10mm Socket
- 16mm Socket
- T25 Torx
- T30 Torx
- 1/4" Drive Ratchet & Extensions
- 3/8" Drive Ratchet & Extensions
- Pick Tool

**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. Remove the bolts on the splash panel. Press the tabs at the front edge and slide it off the vehicle. (8x T25 torx bolts)



2. Remove the bolts that secure the bottom of the bumper. (8x T25 torx bolts)
3. Loosen the clamps on both ends of the cold-side coupler/hose, and then remove it. (2x worm gear clamp)



4. Loosen the clamp and release the clip from the hot-side coupler/hose, and then remove it. (1x worm gear clamp, 1x spring clip)



5. Remove the bolts in each wheel well that hold the bumper. (10x T25 torx bolts)

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6. Separate the grille. Remove the bolts along the top edge and disengage tabs at the grille's bottom. Once free, slide it off the front. (4x T25 torx bolts)



7. Pull the edges of the bumper to release them.



8. Remove the last two bolts securing the top of the bumper. (2x T25 torx)



9. Lean the top of the bumper back far enough to reach behind it. Pull out the blinker bulbs from inside the bumper.



10. Unplug the driving light harnesses. Depress the tab at the center to release each connector.



11. Disconnect the washer fluid hose. Have a bucket ready to prevent spillage. Plug the port once the hose is off.



12. With the bumper free, remove it from the front of the car.
13. Remove the foam crash bar cover. There are tabs at the top that latch to the crash bar. Lean the foam cover back to disengage them.

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14. Unplug the ambient temp sensor under the crash bar and free its wiring harness.



15. Disconnect the negative side of the battery.



16. Unplug the yellow and red crash sensors as well as the headlight. Slide the red tab down and pull the connector out of the harness.



17. Separate the hood latch connector found under the headlight support bar.



18. Remove the bolts at the side of each headlight. (6x T25 torx bolts)



19. Remove the bolts at the top of each headlight. (2x T25 torx bolts)

20. Prop the cooling stack to keep it from moving and adding unnecessary stress on the various connected hoses and lines.

21. Disconnect the fan shroud electrical harness. Slide the red locking tab down and pull the connector off the harness.

22. Loosen three of the four bolts on each side of the crash bar. Leave them in for now to hold it in place. (6x 16mm bolts)



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23. Now remove the three loose bolts on each side of the crash bar. (6x 16mm bolts)
24. Remove the bolts on each side of the cooling package. These are located inside a recess adjacent to the headlight. (2x T30 torx bolts)



25. With help, slide the front end off the vehicle. At the same time, remove the last bolts supporting the crash bar and avoid rubbing against the headlights.
26. Slide the isolator bushings off the cooling package.
27. Separate the AC condenser from the intercooler. This includes the small silver bracket at the bottom passenger side of the condenser. (5x T30 torx bolts)



28. Separate the intercooler from the radiator. There is a bolt at each corner of the radiator. (4x T30 torx bolts)



29. Remove the bolt that secures the horn. (1x 10mm bolt)



30. Slide the stock intercooler out from the middle of the cooling package.
31. Replace the stock intercooler with the Mishimoto intercooler.
32. Secure the intercooler to the radiator using provided hardware. Add washers between the mounts if the intercooler end tank comes into contact with the radiator. (4x 10mm bolts)



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- 33. Secure the AC condenser to the intercooler. (5x 10mm bolts)
- 34. Reinstall the horn. (1x 10mm bolt)
- 35. Transfer the isolator bushings onto the Mishimoto intercooler.



- 36. Lift the front end of the vehicle and secure it in place with bolts at the bottom of the crash bar.
- 37. Engage the pegs at the bottom of the intercooler into the grommets on the lock carrier.
- 38. Tighten the bottom bolts on the crash bar. (2x 16mm bolts)
- 39. Secure the rest of the crash bar. (6x 16mm bolts)
- 40. Secure the top and side of the headlights. (8x T25 torx bolts)
- 41. Connect the yellow and red crash sensors as well as the headlight.
- 42. Connect the fan shroud electrical harness.
- 43. Reinstall the hood latch connector. Tuck the connector under the headlight support bar and latch it to the tabs on the bar.

- 44. Transfer the O-ring from your stock coupler to the CNC adapter in your kit.



- 45. Install the retaining clip (previously removed) to the intercooler pipe.
- 46. Arrange the couplers in your kit. Notice the labeling opposite the side with a logo.
- 47. Install the CNC adapter to the hot-side coupler, on the side that is NOT labeled "INTERCOOLER IN" (1x worm gear clamp)



- 48. Install the hot-side coupler to the intercooler and pipe. Align the protrusions on the adapter with the notches on the pipe. Then tighten the clamps and make sure the clip engages the barbs on the adapter. (2x worm gear clamp, 1x spring clip)



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49. Install the cold-side coupler to the intercooler and pipe. (2x worm gear clamp)



50. Torque the bolts on the crash bar to 60 Nm.  
(8x 16mm bolts)
51. Attach the foam cover over the crash bar.
52. Prop the bumper up close to the front of the car.
53. Reconnect the washer fluid line. Have a bucket ready to catch any excess fluid.
54. Place the blinker lights back into the bumper.
55. Reconnect the electrical harnesses in the bumper.
56. Slide the bumper back onto the front of the car.
57. Secure the bumper to the front end.  
(2x T25 torx bolts)
58. Push the sides of the bumper to engage the tabs.
59. Secure the sides of the bumper to the wheel well liner. The bolt with a washer holds the top edge.  
(10x T25 torx bolts)
60. Secure the bottom edge of the bumper.  
(8x T25 torx bolts)
61. Reinstall the splash panel. (8x T25 torx bolts)
62. Reinstall the grille. (4x T25 torx bolts)

**Congratulations! You have finished installing the Mishimoto 2006-2014 Volkswagen GTI/Golf R Performance Intercooler.**