

GUIDE INTRODUCTION

The following guide is broken up into two portions. Each one provides the steps required to install the intercooler and the intercooler pipes. We recommend fully reading over both portions before beginning your install. This will give you a complete representation of how to carry out the install of both parts at once.

It may help to watch video of the install, which can be found on each product's web page:



FORD MUSTANG INTERCOOLER



FORD MUSTANG INTERCOOLER PIPE KIT



CONTENTS

GUIDE #1...2015+ Ford Mustang EcoBoost Performance Intercooler
6 total pages consisting of 42 steps

GUIDE #2...2015+ Ford Mustang EcoBoost Intercooler Pipe Kit
2 total pages consisting of 25 steps

INSTALL BEGINS ON FOLLOWING PAGE

FORD MUSTANG ECOBOOST INTERCOOLER, 2015+

PARTS LIST AND INSTALLATION GUIDE

PARTS LIST

- 1PC| MISHIMOTO INTERCOOLER
- 1PC| M6 X 1.0 X 20MM FLANGE BOLT
- 1PC| M4 X 0.7 X 12MM BUTTON-HEAD BOLT
- 1PC| M4 LOCK WASHER
- 1PC| MAP SENSOR O-RING
- 1PC| CARB EO STICKER

TOOLS NEEDED

- | | |
|-------------------|---------------------------|
| COOLANT | RATCHET |
| FUNNEL | RATCHET EXTENSION |
| LINEMAN'S PLIERS | 10MM SOCKET |
| NEEDLENOSE PLIERS | PHILLIPS HEAD SCREWDRIVER |
| FLUID DRAIN PAN | |

INSTALL TIME: 2 HOURS **INSTALL DIFFICULTY:** 3/5

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, as 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.

INSTALLATION INSTRUCTIONS

REMOVING THE FRONT BUMPER

1. Raise the vehicle and remove the undertray.
(14x 7mm bolts, 6x pop clips, 2x 5.5mm bolts)



2. Remove the eight pop clips that hold the plastic air diversion cover in place. Remove the cover.



3. Remove the bumper hardware, but do not fully remove the front bumper. (4x pop clips and 6x 8mm screws)



CONTINUED ON FOLLOWING PAGE →

FORD MUSTANG ECOBOOST INTERCOOLER, 2015+ INSTALLATION GUIDE

4. Pull the fender liner out and remove the two 7mm bolts (one on each side) that hold on the bumper.

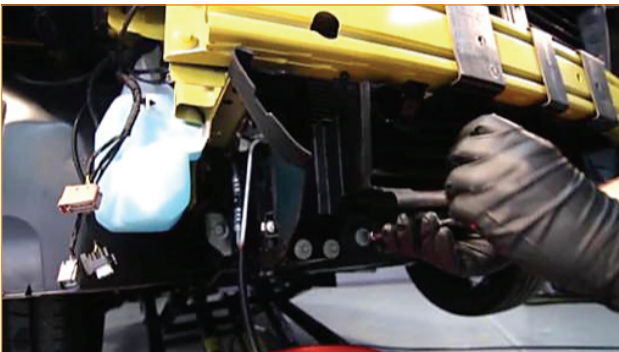


5. Unclip the bumper from the vehicle by pulling the side corners out first, and then lifting the top holes up off the pegs. Once the bumper is loose, unclip the six wire harnesses for the turn signals, headlights, and fog lights. Remove the bumper.



REMOVING THE STOCK INTERCOOLER

6. Remove the two pop clips and four 8mm bolts that hold the air dam in place.



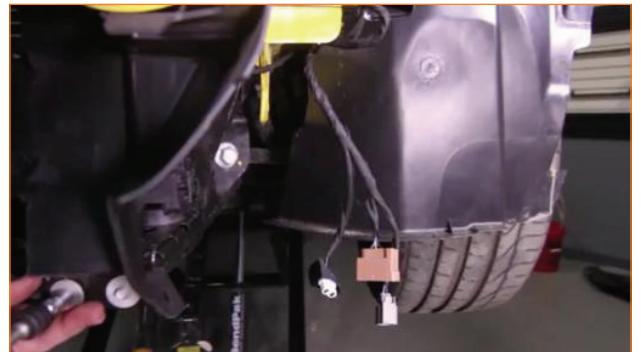
7. Separate the clip to free the air shutter arm.



8. Disconnect the wire harness for the air shutter motor.

9. Remove the two tree clips for the ambient temperature sensor and set the sensor off to the side.

10. Remove the four 8mm bolts that hold the brace to the vehicle.



11. Remove the 10mm bolt on the passenger side of the intercooler.



CONTINUED ON FOLLOWING PAGE →

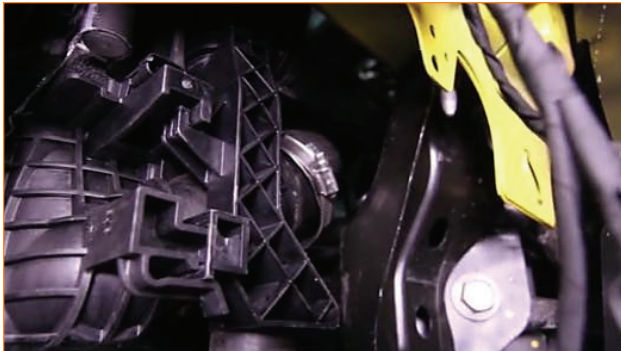
FORD MUSTANG ECOBOOST INTERCOOLER, 2015+

INSTALLATION GUIDE

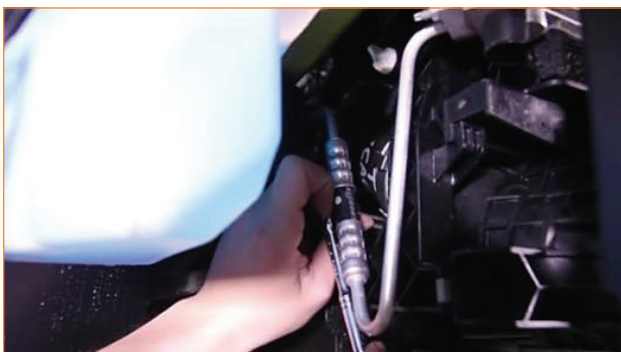
12. Remove the electrical clip for the manifold absolute pressure (MAP) sensor on the driver side of the intercooler and set aside.



13. Loosen the worm-gear clamp on the cold-side pipe connecting to the intercooler. (7mm socket, 7mm socket wrench, or flathead screwdriver)



14. Loosen the worm-gear clamp on the hot-side pipe connecting to the intercooler. (7mm socket, 7mm socket wrench, or flathead screwdriver)



15. Detach the cold-side pipe from the intercooler.



16. Remove the plastic cover from the side of the intercooler and rotate to the side.



17. Remove the radiator stays. (4x 10mm bolts)

18. Lift up the A/C condenser from the radiator to create room above the intercooler. The condenser is held to the radiator with two tabs.



CONTINUED ON FOLLOWING PAGE →

FORD MUSTANG ECOBOOST INTERCOOLER, 2015+

INSTALLATION GUIDE

19. On the cold side of the intercooler, pull the lower tab and rotate the bottom of the intercooler forward.



20. Lift the intercooler hangers up while pulling forward toward the front of the vehicle.



21. Once lifted out of the radiator mounts, remove the hot-side coupler while wiggling the intercooler forward. Remove the intercooler.



22. Remove the MAP sensor from the stock intercooler. (T25 torx bit)



INSTALLING THE MISHIMOTO INTERCOOLER

23. Transfer the MAP sensor to the Mishimoto intercooler. If needed, replace the stock O-ring with the Mishimoto-supplied O-ring. (1x M6 x 1.0 x 20mm flange bolt, 10mm socket)

24. Lift the intercooler up and into the vehicle. It is easiest to insert one side first and then the other.

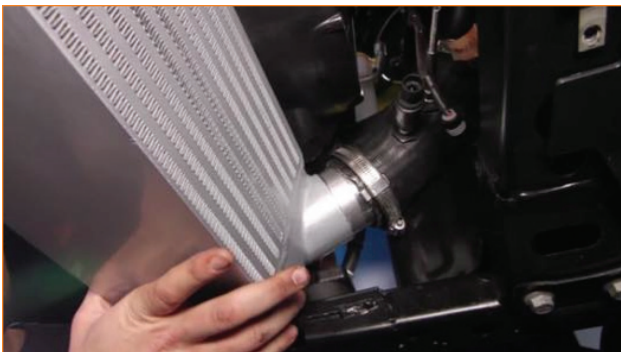


CONTINUED ON FOLLOWING PAGE →

FORD MUSTANG ECOBOOST INTERCOOLER, 2015+

INSTALLATION GUIDE

25. Install the intercooler onto the hanger mounts. Make sure that the hot-side pipe is lined up with the intercooler. Lifting up on the A/C condenser assembly may be required to allow room for everything to fit.



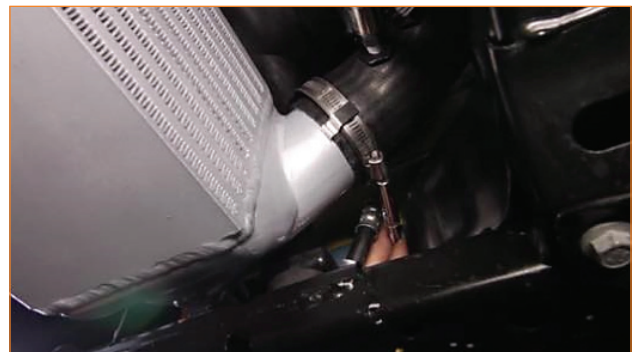
26. Tighten down the intercooler on the passenger side. (1x 10mm bolt)



27. Install the supplied set screw on the driver side. (1x M4 x 0.7 x 12mm button-head bolt, 1x M4 lock washer, 2.5mm Allen key)



28. Tighten the worm-gear clamp on the hot-side pipe. Make sure that the boot is seated all the way on the intercooler. (7mm socket, 7mm socket wrench, or flathead screwdriver)



29. Tighten the worm-gear clamp on the cold-side pipe. Make sure that the boot is seated all the way on the intercooler. (7mm socket, 7mm socket wrench, or flathead screwdriver)



CONTINUED ON FOLLOWING PAGE →

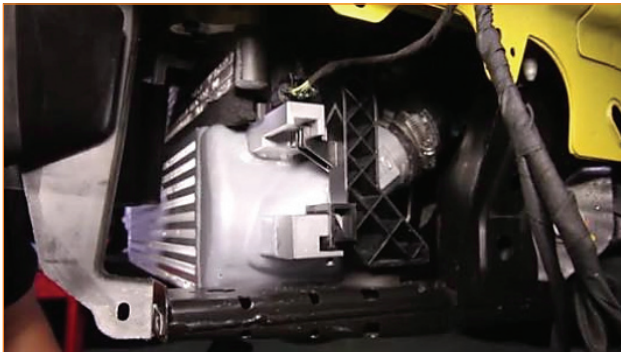
05

FORD MUSTANG ECOBOOST INTERCOOLER, 2015+ INSTALLATION GUIDE

30. If you adjusted the A/C condenser previously, make sure that the A/C condenser is clipped back into place.

31. Reinstall both radiator stays. (4x 10mm bolts)

32. On the driver side of the intercooler, plug in the MAP sensor.

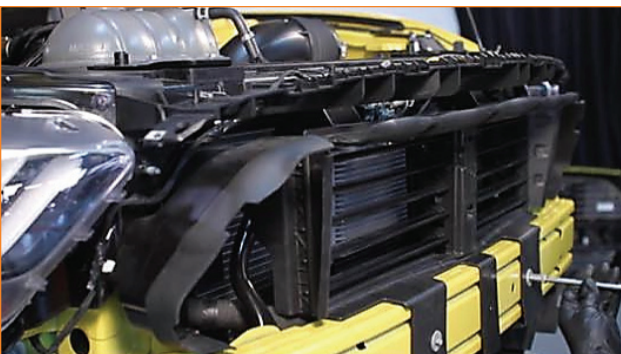


33. Put the plastic cover from the side of the intercooler back into place.

34. Reinstall the four 8mm bolts that hold the brace to the vehicle.



35. Reattach the air shutters. Make sure to route the air shutter arm around the front crash beam. The air shutter arm will reattach to the clip on the front air dam. (2x pop clips, 4x 8mm bolts)



36. Reattach the ambient temperature sensor.

37. Place the front bumper in front of the vehicle, and reconnect the six wire harnesses for the turn signals, headlights, and fog lights.

38. Reinstall the front bumper. Make sure that the bumper clips into the slots by the headlight housings.



39. Reinstall the two 7mm bolts that hold the front fender to the inner fender wall. There is one bolt on either side of the bumper.

40. Check for any pinched wires or plastic trim before reinstalling the bumper hardware. (4x pop clips and 6x 8mm screws)

41. Reattach the plastic air diversion cover. (8x pop clips)

42. Reattach the undertray. (14x 7mm bolts, 6x pop clips, 2x 5.5mm bolts)

43. Please place the included CARB EO sticker in a clean, visible location.

You have now successfully installed your new Ford Mustang EcoBoost Performance Intercooler. Enjoy!

2015+ MUSTANG ECOBOOST INTERCOOLER PIPE KIT

PARTS LIST AND INSTALLATION GUIDE



PARTS LIST

- 1 PC |** ALUMINUM PIPE W/ CNC-MACHINED NPT BUNG
- 1 PC |** ALUMINUM PIPE W/ CNC-MACHINED BPV FLANGE
- 4 PC |** SILICONE COUPLERS
- 1 PC |** 2.0" T-BOLT CLAMP
- 4 PC |** 2.75" T-BOLT CLAMPS
- 3 PC |** 3.0" T-BOLT CLAMPS
- 1 PC |** CARB EO STICKER

TOOLS NEEDED

- | | |
|------------------|----------------------|
| 5MM ALLEN KEY | 1/4" DRIVE EXTENSION |
| 5.5MM SOCKET | 1/4" DRIVE RATCHET |
| 7MM SOCKET | FLATHEAD SCREWDRIVER |
| 10MM DEEP SOCKET | CHANNELLOCK PLIERS |
| UNIVERSAL SWIVEL | |

INSTALLATION TIME **1 HOUR**

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.

INSTALLATION INSTRUCTIONS

- 01.** 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 airbox to access the cold-side intercooler pipe connection. Loosen the worm-gear clamp that connects the airbox to the rubber intake boot. Remove the bolt that holds the airbox to the inner wheel well. Disconnect the intake air temperature sensor's electrical connector. Remove the airbox by lifting up upward, and then tilt the airbox so the inlet duct will clear the radiator support. (1x 10mm bolt)
- 03.** Loosen the clamp that secures the cold-side intercooler pipe to the throttle body.
- 04.** Loosen the clamp that secures the hot-side intercooler pipe to the turbocharger outlet.
- 05.** Compress the clamp that holds the bypass hose to the bypass valve, and slide it up the hose. Then remove the hose from the bypass valve outlet.
- 06.** From underneath the vehicle, remove the fasteners that secure the undertray to the vehicle. Then remove the undertray. (14x 7mm bolts, 6x pop-clips, 2x 5.5mm bolts)
- 07.** Loosen the worm-gear clamp on the cold-side pipe where it connects to the intercooler.
- 08.** Loosen the worm-gear clamp on the hot-side pipe where it connects to the intercooler.
- 09.** Disconnect the electrical harness from the bypass valve and set it aside.
- 10.** Disconnect the two tree-clips that hold the wire harness onto the hot-side intercooler pipe. (2x tree-clips)
- 11.** Disconnect the hot-side intercooler pipe from the turbocharger, and then disconnect it from the intercooler. Remove the hot-side pipe by lifting it up and out of the engine bay.
- 12.** Disconnect the cold-side intercooler pipe from the throttle body, and then disconnect it from the intercooler. Remove the cold-side pipe from the vehicle by lifting it up and out of the engine bay.
- 13.** Remove the three Allen bolts that secure the bypass valve to the hot-side intercooler pipe. (3x 5mm Allen bolts)
- 14.** Transfer the bypass valve to the Mishimoto hot-side pipe, and secure it with the three Allen bolts you just removed. Orient the valve in the same direction as it was on the stock hot-side pipe. (3x 5mm Allen bolts)

CONTINUED ON FOLLOWING PAGE

01

2015+ MUSTANG ECOBOOST INTERCOOLER PIPE KIT INSTALLATION GUIDE



15. Attach the hot-side intercooler coupler to the intercooler. The shorter end of the coupler installs onto the intercooler. Slip two T-bolt clamps over the coupler, but don't tighten them yet. (2x T-bolt clamps)
16. Install the provided transition coupler to the Mishimoto hot-side pipe. The wider end installs over the pipe. Slip two T-bolt clamps over the transition coupler, but do not tighten them yet. (2x T-bolt clamps)
17. Install the hot-side pipe. Slip the bottom of the hot-side pipe into the coupler at the intercooler, and then install the pipe to the turbocharger.
18. Reinstall the bypass valve hose, and slide the spring clip back into place.
19. Connect the electrical harness to the bypass valve.
20. Make sure the clamps are positioned over the bead roll of the hot-side intercooler pipe, and then tighten all the clamps.
21. Install the cold-side intercooler coupler to the intercooler. Slip two T-bolt clamps over the coupler, but do not tighten them yet. (2x T-bolt clamps)
22. Locate the bung on the cold-side intercooler pipe, and install the throttle body coupler over this end. Slip two T-bolt clamps over the coupler, but do not tighten them yet. (2x T-bolt clamps)
23. Install the cold-side pipe. Slip the bottom of the pipe into the coupler at the intercooler, and then install the coupler over the throttle body. Position the clamps over the bead roll of the pipe, and then tighten them.
24. Reinstall the undertray and secure it with the original hardware. (14x 7mm bolts, 6x pop-clips, 2x 5.5mm bolts)
25. Lower the airbox into place, and slip the intake boot over the airbox outlet. Connect the intake air temperature sensor, and secure the airbox with the original bolt. Then tighten the clamp that secures the airbox to the intake boot. (1x 10mm)
26. Please place the included CARB EO sticker in a clean, visible location.

Congrats! You just finished installing the 2015+ Mustang EcoBoost Intercooler Pipe Kit.

