

### PARTS LIST

#### MMHOSE-MUS8-15L:

- 4 PC | SILICONE HOSES
- 8 PC | CLAMPS
- **1 PC** | STAINLESS STEEL ADAPTER

#### MMHOSE-MUS8-15U:

- 1 PC | SILICONE HOSE
- **1 PC |** QUICK-DISCONNECT FITTING
- 1 PC | CLAMP

#### MMHOSE-MUS8-15ANC:

3 PC | SILICONE HOSES 6 PC | CLAMPS

### **TOOLS NEEDED**

7MM SOCKET	CHANNELLOCK PLIERS
10MM SOCKET	NEEDLENOSE PLIERS
1/4" DRIVE RATCHET	POP-CLIP PLIERS
1/4" DRIVER	SMALL PICK
1/4" DRIVE EXTENSION	HOSE PICK TOOL
FLATHEAD SCREWDRIVER	

# INSTALLATION TIME 1.5 HOURS INSTALL DIFFICULTY O O O

### 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

**Note:** This guide covers the installation of our upper, lower and ancillary hose kits for your 2015-2017 Mustang GT. These components are all sold separately. If you are not installing the full set, you may be able to omit some steps from the process.

- **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 16 screws that secure the splash panel. (16x 7mm screws)
- 03. Remove the six pop-clips that secure the splash panel to the underside of the vehicle. Then slide the splash panel toward the rear of the vehicle to remove it. (6x pop-clips)



- 04. Remove the four screws that secure the rear splash panel to the vehicle. Take note of the two tabs at the front of the splash panel for reinstallation, and then remove the rear splash panel. (4x 7mm screws)
- **05.** Locate the radiator drain on the passenger side of the vehicle. Loosen the petcock to drain the coolant from the vehicle.



06. Remove the pressure cap from the expansion tank to accelerate the draining process.





**07.** Compress the clamp that secures the sound generator hose to the intake pipe and pull the hose off the pipe.



**08.** Remove the front hose from the intake pipe by depressing the black tab and sliding the hose off the pipe.



- **09.** Remove the rear hose from the intake pipe using the same process.
- Remove the crankcase breather hose from the intake pipe. Release this connection by sliding the gray tab over and then pulling on the hose.



- **11.** Loosen the clamp that secures the intake pipe to the throttle body. (1x worm-gear clamp)
- 12. Loosen the clamp that secures the intake pipe to the airbox.(1x worm-gear clamp)
- 13. Remove the intake pipe from the vehicle.
- 14. Compress the clamp that secures the overflow hose to the expansion tank, and then separate the hose from the tank. (1x spring-clamp)



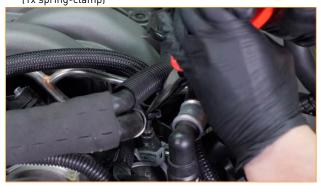
- 15. Compress the clamp that secures the overflow hose to the radiator and then remove the hose from the vehicle. (1x spring-clamp)
- 16. Remove the two bolts that secure the expansion tank to the radiator support. Then lift the tank upward to gain access to the coolant bypass hose located on the rear of the tank. (2x 10mm bolts)
- 17. Compress the clamp that secures the coolant bypass hose to the back of the expansion tank and then separate the hose from the tank. (1x spring-clamp)







 Follow the bypass hose back to where it terminates at the intake manifold. Compress the clamp that secures the hose, and then separate it from the intake manifold. (1x spring-clamp)



19. Lift the expansion tank up to expose the hose attached to the bottom. Compress the clamp on this hose and then separate it from the tank. Now remove the tank from the vehicle. (1x spring-clamp)



20. Locate the Mishimoto coolant bypass hose in your ancillary hose kit. Install a worm-gear clamp over each end of this hose and attach it to the intake manifold. Then lead it under the electrical harness behind the throttle body. Now tighten the worm-gear clamp that secures the hose to the intake manifold. (2x worm-gear clamp)



**21.** Compress the clamp that secures the coolant hose to the pipe on the driver side of the throttle body, then remove the hose from the vehicle. (1x spring-clamp)



22. Locate the matching Mishimoto hose in your ancillary hose kit. Install a pair of worm-gear clamps over this hose and install it to the pipe. Orient the hose as shown here and then tighten the clamps to secure it. (2x worm-gear clamps)



23. Compress the clamp that secures the upper radiator hose to the radiator and then separate the hose from the radiator. (1x spring-clamp)

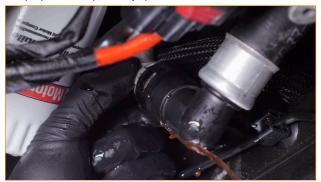




24. Remove the locking circlip from the quick-disconnect fitting on the other end of the upper radiator hose. Insert a small screwdriver under the corner of the circlip and twist to dislodge the clip before removing it by hand. Then separate the quick-disconnect fitting and remove the upper radiator hose from the vehicle. (1x circlip)



- 24. Compress the clamp that secures the lower radiator hose to the thermostat housing and separate the hose from the housing. Insert a shop towel into the thermostat housing to reduce coolant spillage while you continue working. (1x spring-clamp)
- The coolant should be well drained by now. Close the petcock on the radiator.
- 27. Compress the clamp that secures the lower radiator hose to the radiator and separate the hose from the radiator. (1x spring-clamp)
- 28. Follow the lower radiator hose up to the junction where it splits. Locate the two quick-disconnect fittings where the hose attaches to the oil cooler. Separate each connection by depressing the tabs at the end of the connector and then sliding the connector off the tabs. The plastic retainers will remain on the oil cooler when you take the hose off. There will be residual coolant trapped in the cooler and hoses, so be prepared to capture any spills.



- **29.** Remove the plastic retainers from the coolant pipes on the oil cooler. Use a small pick to lift the tabs over the bead roll on the pipe to release them. (2x plastic retainers)
- **30.** Lead the two oil cooler hoses over the front crossmember, and then remove the lower radiator hose from the vehicle.
- 31. Locate the Mishimoto lower hose components and included clamps. Install the oil cooler hoses to the splitter first. Identify the end that will attach to the oil cooler by the internal ridge at the end of the hose. This ridge must engage the bead roll on the oil cooler pipes to form a proper seal. Install a hose clamp over each oil cooler hose and attach them as shown here. Lubricate the inside of the hose clamp over the wide end of the short hose and attach it to the splitter. Repeat this process on the last hose. Use the stock hose as a guide to orient the hoses on the splitter and then tighten the clamps to secure them. (2x hose clamps)



 When fully assembled, The Mishimoto lower hose should look like this.



33. Move the lower radiator hose into position and lead the oil cooler lines in front of the stabilizer bar. Slip a worm-gear clamp over the upper end of the hose and install the hose to the thermostat housing. Leave the clamp loose for now. (1x worm-gear clamp)





- **34.** From underneath the vehicle, lead the oil cooler hoses over the front crossmember. Then slip a worm-gear clamp over the lower end of the hose and install it to the radiator. Leave the clamp loose for now. (1x worm-gear clamp)
- **35.** Install a worm-gear clamp over each of the oil cooler hoses and install them over the oil cooler pipes. Lubricate the inner lip of each hose to aid with installation. You should feel the internal ridge lock onto the bead roll on the pipe. This is essential for a good seal. If you are having trouble getting the hose over the lip, try lubricating it with more coolant, and use a hose pick to lift the edge of the hose. Once the hoses are seated on the pipes, tighten the clamps over the bead rolls.





- 36. Inspect the hose assembly for kinks and adjust their position on the splitter as needed. Then go back and tighten the clamps on the upper and lower ends.
- **37.** Install the Mishimoto upper radiator hose. Slip a worm-gear clamp over the open end of the hose and install it to the radiator. Then unlock the circlip on the quick-disconnect fitting. Attach the hose to the engine and engage the circlip to lock the connection. Now go back and tighten the clamp that secures the hose to the radiator. [1x worm-gear clamp]

- 38. Locate the overflow hose in your ancillary hose kit. Slip a worm-gear clamp over both ends and install the hose to the overflow nipple on the radiator. Lay the body of the hose along the upper edge of the radiator and tighten the clamp to secure the hose. (1x worm-gear clamp)
- **39.** Lower the expansion tank into place and connect the lower hose to the tank. Then tighten the clamp to secure the hose.
- **40.** Slip the peg on the bottom of the expansion tank into the slot on the radiator support.
- **41.** Attach the coolant bypass hose to the nipple on the back of the tank and secure it with the clamp you installed earlier.
- **42.** Attach the overflow hose to the side of the tank and secure it with the clamp you installed earlier.
- 43. Secure the expansion tank with the two original bolts. (2x 10mm bolts)
- 44. Install the air intake pipe to the airbox and the throttle body. Then tighten the integrated clamps to secure the pipe. (2x worm-gear clamps)
- **45.** Compress the clamp on the sound generator hose and reconnect it to the intake pipe.
- **46.** Reconnect the other three hoses to the intake pipe. Just push them on until they click into place.
- 47. Fill the cooling system with premixed, Ford-approved coolant through the expansion tank filler neck, start the engine, and allow it to idle with the cap off. Turn the heater control valve on the vehicle's HVAC unit to full hot, and put the fan on low. Monitor the engine temperature and coolant level in the reservoir. Add coolant as needed to maintain proper level in the reservoir, and check your connections for leaks. If the vehicle begins to overheat or coolant starts to overflow from the reservoir, shut off the engine and allow it to cool before continuing. Once the vehicle is fully warmed up and the coolant level has stabilized, allow the vehicle to cool off completely, and then top off the coolant and reinstall the pressure cap. Coolant level should be checked once more after putting in some miles.
- **48.** Reinstall the engine cover and push it down to engage the pegs and grommets.
- 49. Align the tabs on the front edge of the rear splash shield, and slip them into place on the subframe. Then secure the splash shield with the four original screws. [4x 7mm screws]
- 50. Slip the front splash shield into place and secure it with the six pop-clips and 16 screws. (6x pop-clips, 16x 7mm screws)

Congrats! You just inished installing the 2015-2017 Mustang GT Radiator Hoses (Upper/Lower and Ancillary)