

# 2016+ CAMARO SS AUXILIARY RADIATORS PARTS LIST AND INSTALLATION GUIDE



## PARTS LIST

1 PC | ALUMINUM RADIATOR

MOUNTING HARDWARE

## TOOLS NEEDED

PICK TOOL	1/4", 3/8"	CHANNELLOCK
PANEL TOOL	DRIVE EXTENSION	PLIERS
FLATHEAD	13MM SOCKET	POP-CLIP PLIERS
SCREWDRIVER	3/8" DRIVE RATCHET	MASKING TAPE
T15 TORX SOCKET	1/2" DRIVE	DRAIN PAN
E5 TORX SOCKET	BREAKER BAR	MISHIMOTO
7MM, 10MM, 22MM SOCKET	1/2" TORQUE WRENCH	LIQUID CHILL®
1/4" DRIVE RATCHET	10MM WRENCH	

**INSTALLATION TIME** 2-3 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.

**CAUTION:** Never work on the cooling system when it is hot. The coolant temperature in the radiator can be considerably higher than boiling, and the system may be under pressure. Opening a cooling system that is hot or under pressure can result in serious injury. Always wait until the system has cooled completely before servicing it in any way.

**NOTE:** 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.

## INSTALLATION INSTRUCTIONS

01. Remove the two pop-clips that secure the upper edge of the front bumper. (2x pop-clips)
02. Remove the six screws that secure the upper edge of the front bumper. Do not remove the screws that secure the black plastic alignment tabs. (6x T15 Torx screws)



03. Remove the five screws that secure the air diverter to the driverside of the vehicle and remove the air diverter. Repeat this process on the passengerside. (10x 7mm screws)



04. Remove the eight screws that secure the lower edge of the bumper. (8x 7mm screws)



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- 05.** Remove the four screws and six bolts that secure the splash panel to the underside of the vehicle. Then remove the splash panel. (4x 7mm screws, 6x 10mm bolts)



- 06.** If equipped, remove the four nuts that secure the stock HD oil cooler to the underside of the vehicle. Slide the oil cooler off of the studs in order nuts)



- 07.** Place a drain bucket underneath the petcock on the radiator and use a pair of pliers to open the petcock. Remove the pressure cap from the expansion tank to expedite the draining process. Close the petcock on the radiator once all of the coolant has drained.



- 08.** If equipped, reinstall the stock HD cooler and secure it with the four nuts you removed earlier. (4x 10mm nuts)
- 09.** Remove the front wheels from the vehicle. It is possible to perform this install without removing the wheels, but it makes accessing everything much easier. (10x lug nuts)

- 10.** Remove the seven screws and one pop-clip that secure the driver-side fender liner to the vehicle. (7x T15 screws, 1x pop-clip)

- 11.** Unseat the liner from the fender and pull it back to expose the front of the wheel well.



- 12.** Remove the four screws that secure the bumper to the front edge of the fender. (4x 7mm screws)



- 13.** Remove the two screws that secure the bumper to the fender and loosen the inner screw. (3x 7mm screws)



- 14.** Pull the upper corner of the bumper away from the fender to release it from the vehicle.

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15. Release the two tree-clips that secure the lighting harness to the vehicle. Then release the harness connector from the body and disconnect it. To release this connector, slide the red lock tab out of the connector and depress the black tab. (2x tree-clips)



16. Remove the seven screws and one pop-clip that secure the passenger-side fender liner to the vehicle. (7x T15 screws, 1x pop-clip)
17. Unseat the liner from the fender and pull it back to expose the front of the wheel well.
18. Remove the two screws that secure the bumper to the fender and loosen the inner screw. (3x 7mm screws)
19. Remove the four screws that secure the bumper to the front edge of the fender. (4x 7mm screws)
20. Pull the upper corner of the bumper away from the fender to release it from the vehicle.
21. Lift the top edge of the bumper to free it from the alignment tabs.
22. Remove the front bumper by sliding it forward off the nose of the vehicle.
23. Place a drain bucket under the driver side auxiliary (aux) radiator. Cut the zip tie that secures the protective sleeve to the inner hose. Compress the clamp that secures this hose and move the clamp down the hose. Remove the hose from the radiator. (1x spring-clamp)



24. Compress the clamp that secures the outer hose to the radiator and slide the clamp down the hose. Remove the outer hose from the radiator. (1x spring-clamp)



25. Remove the two clips that secure the rear duct to the radiator. Then remove the rear duct. (1x pop-clip, 1x tree clip)



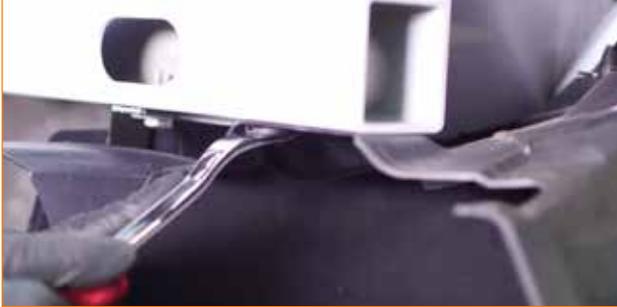
26. Remove the brake cooling duct from the vehicle.



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- 27.** Remove the pop-clip that secures the front duct to the crash bar. (1x pop-clip)

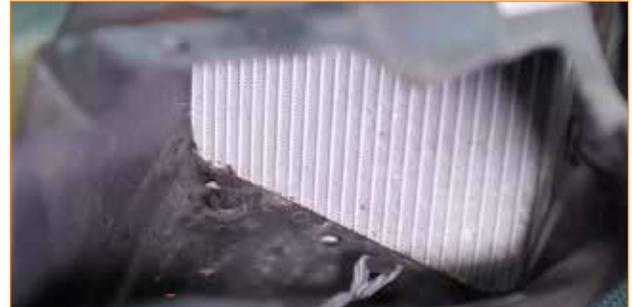


- 28.** Remove the nut and two bolts that secure the auxiliary radiator assembly to the vehicle. Then remove the assembly from the vehicle and drain the excess coolant from the radiator. (1x 13mm nut, 2x 13mm bolts)



- 29.** Place a drain bucket under the passenger-side aux radiator. Compress the clamp that secures the outer coolant hose to the radiator and slide the clamp down the hose. Then remove the hose from the radiator.
- 30.** Compress the clamp that secures the inner hose to the radiator and slide the clamp down the hose. Then remove the hose from the radiator.
- 31.** Remove the two clips that secure the rear duct to the radiator. Then remove the rear duct. (1x pop-clip, 1x tree-clip)
- 32.** Remove the brake cooling duct from the vehicle.
- 33.** Remove the pop-clip that secures the front duct to the crash bar. (1x pop-clip)
- 34.** Remove the nut and two bolts that secure the auxiliary radiator assembly to the vehicle. Then remove the assembly from the vehicle and drain the excess coolant from the radiator. (1x 13mm nut, 2x 13mm bolts)

- 35.** Remove the two pop-clips that secure the bottom edge of the front duct to the auxiliary radiator mounting bracket. (2x pop-clips)



- 36.** Remove the two nuts that secure the auxiliary radiator to the bracket. Use an E5 torx socket or wrench to hold the stud while you turn the nut. If you don't hold the stud, it will back itself out of the radiator and the nut will still be attached. (2x 10mm nuts)



- 37.** Remove the two bolts that secure the top of the radiator bracket. (2x 10mm bolts)



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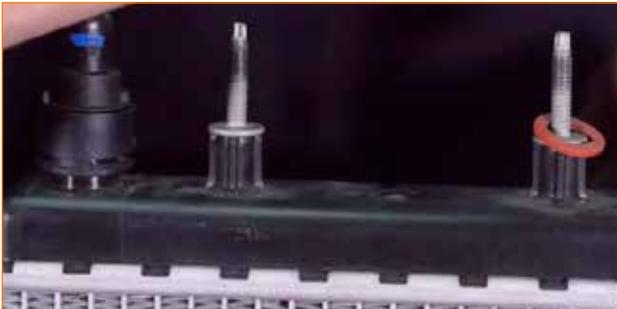
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- 38.** Turn the fittings on the radiator so they point backwards. Lift the front duct so it clears the upper end tank of the radiator, then remove the upper section of the radiator bracket and the front duct as one unit.



- 39.** Remove the stock radiator from the lower bracket.
- 40.** Remove the fittings from the stock radiator. Use a pick or small screwdriver to remove the circlip that retains the fitting, and then remove the fitting from the radiator. (2x circlips)



- 41.** Install the fittings to the Mishimoto radiator and reinstall the circlips to retain them. Make sure all three tabs on each circlip engage the slots in the fitting. (2x circlips)
- 42.** Position the Mishimoto radiator in the bracket. The two pegs on the bottom of the radiator must engage the grommets on the bracket.
- 43.** Position the fittings on the radiator so that they point away from the M logo. Reinstall the upper bracket by slipping it over the fittings. Make sure the tab on the upright slips into the slot on the upper bracket. Join the two sections of the bracket with the two original bolts, but don't tighten them yet. (2x 10mm bolts)



- 44.** Secure the radiator to the upper section of the bracket with the provided bolts and washers. Then go back and tighten the outer bolts that join the brackets. (2x 10mm bolts, 2x washers)



- 45.** Reinstall the pop-clips that secure the bottom of the duct to the bracket. (2x pop-clips)
- 46.** Repeat this process to install the other auxiliary radiator.
- 47.** Reinstall the passenger-side auxiliary radiator assembly. Attach the outer hose to the radiator and secure it with the spring-clamp. Slip the lower mounting hole on the radiator bracket over the stud on the body of the car and make sure the outer hose is clear of the body. Then reinstall the nut that secures the bottom of the radiator and the bolts that secure the top. (1x spring-clamp, 1x 13mm nut, 2x 13mm bolts)
- 48.** Attach the inner hose to the radiator and secure it with the spring-clamp. (1x spring-clamp)
- 49.** Reinstall the brake cooling duct by pressing it into the front section of the ducting.
- 50.** Reinstall the rear duct to the radiator and secure it with the plastic clips. (1x pop-clip, 1x tree-clip)
- 51.** Reinstall the pop-clip that secures the front duct to the crash bar. (1x pop-clip)
- 52.** Reinstall the driver-side auxiliary radiator assembly. Secure the assembly with the original nut and bolts. (2x 13mm bolts, 1x 13mm nut)
- 53.** Reinstall the brake cooling duct.
- 54.** Reinstall the rear duct to the radiator assembly and secure it with the original clips. (1x tree-clip, 1x pop-clip)
- 55.** Attach the coolant lines and secure them with the original spring-clamps. (2x spring-clamps)
- 56.** Reinstall the pop-clip that secures the front duct to the crash bar. (1x pop-clip)

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**57.** Fill the cooling system with premixed, GM-approved coolant through the reservoir filler neck. Start the engine, and allow it to idle with the cap off. Turn the heat 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 level. Coolant level should be checked once more after putting in some miles.

**58.** Apply painters tape to the bottom edge of the front fenders. This will protect the paint while you reinstall the front bumper.



**59.** Install the front bumper. Align the pins on the bumper with the holes in the fender as you slide the bumper over the nose of the vehicle. Lift the top edge of the bumper over the alignment tabs. Check the fender gap on both sides, and then remove the masking tape.

**60.** Install the eight screws that secure the bumper to the front edge of the fenders. (8x 7mm screws)

**61.** Install the screws that secure the bumper to the bottom of the fenders. (6x 7mm screws)

**62.** Reconnect the lighting harness, lock the connector with the red tab, and secure it to the vehicle with the integrated tree-clips. (3x tree-clips)

**63.** Push the driver-side fender liner back into place and make sure the edges are fully seated behind the ducting. Then secure the fender liner with the original hardware. Repeat this process on the passenger side. (14x T15 Torx screws, 2x pop-clips)

**64.** Install the pop-clips that secure the upper edge of the front bumper. (2x pop-clips)

**65.** Install the six screws that secure the upper edge of the bumper. (6x T15 Torx screws)

**66.** Install the splash panel to the underside of the vehicle and secure it with the original hardware. (8x 10mm bolts)

**67.** Install both air diverters and secure them with the original hardware. If you forgot which side is which, look on the underside of the diverters. The driver-side will be marked LH and the passenger-side will be marked RH. (10x 7mm screws)

**68.** Install the four screws that secure the splash panel to the fender liner. (4x 7mm screws)

**69.** Install the eight screws that secure the front edge of the bumper. (8x 7mm screws)

**70.** Reinstall the front wheels. Torque the lug nuts to 140 lb ft in a star pattern. (10x lug nuts)

**Congrats! You just finished installing the 2016+ Camaro SS Auxiliary Radiators.**

