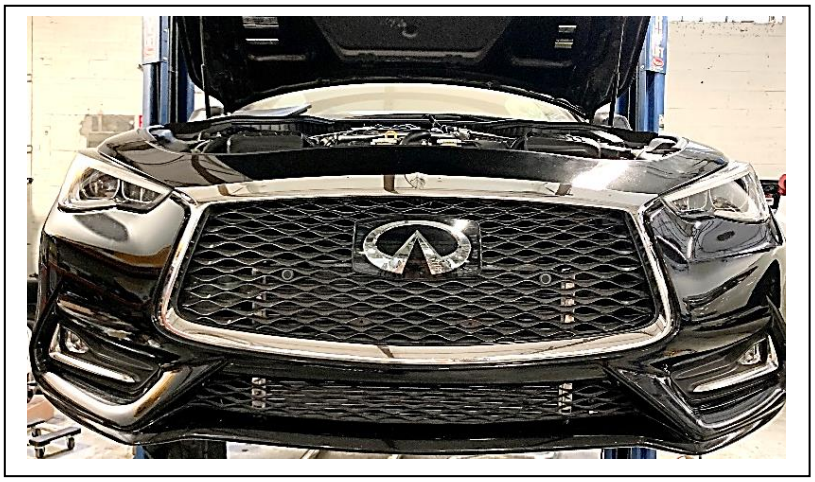
AAM Competition Q50/Q60 Front Mount Heat Exchanger



INSTALLATION INSTRUCTIONS

(DESIGNED FOR ONLINE USE AND COLOR PRINTING)

*****WARNING: PRODUCT(S) ARE DESIGNED FOR OFF-ROAD / COMPETITION USE ONLY*****

Read all directions before attempting installation. This product requires above average mechanical ability to install properly, professional installation recommended. Installation requires appropriate tools for proper installation of this kit. As with all mechanical projects, take appropriate precautions for your personal safety and for the proper care and treatment of the vehicle being serviced. AAM Competition, LLC offers no warranty and accepts no liability caused by improper installation, modification and/or use of this product. Installation may void factory's manufacturer's warranty. Contact AAM Competition LLC or an authorized Dealer with questions or problems regarding this product. When removing Stock/OEM parts read and follow the factory service manual for proper procedures.

Tools Needed:

- Ratchet
- Ratchet extensions
- Swivel sockets or swivel attachment (optional)
- Socket set (8mm, 10mm, 12mm, 13mm)
- 3mm hex wrench
- Trim clip removal tool
- Lug wrench or lug nut removal tool and socket
- Air Lift/Vacuum Venturi system
- Pick tools
- Pliers
- Zip ties
- Drain pan
- 3M double-sided tape
- Handsaw

WARNING: USE OF POWER TOOLS DURING INSTALLATION MAY CAUSE DAMAGE. WE RECOMMEND THE USE OF HAND TOOLS ONLY DURING INSTALLATION.

Note: “Left Side” and “Right Side” of vehicle is from the perspective of sitting in the driver seat of the vehicle and looking forward

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Installation

Important Information:

This installation permanently modifies portions of the vehicle. Fitment of this kit on Q50S/Q60S and Q50/Q60 Red Sport models requires the Zero-lift front splitter to be removed. Doing so will cause an engine code that must be reset by a mechanic or dealership.

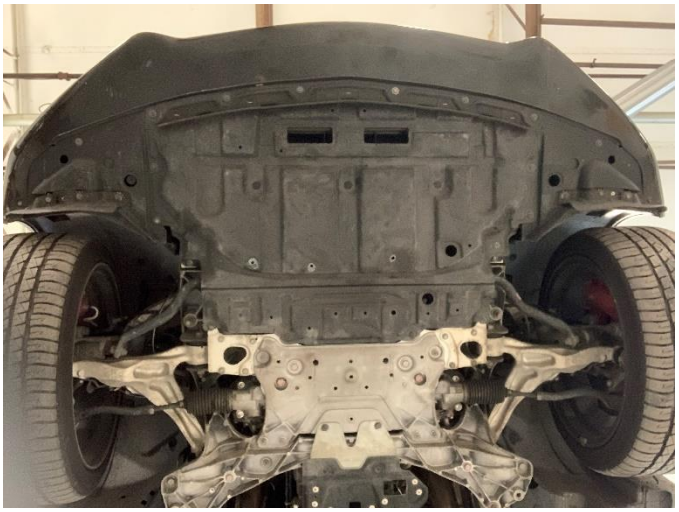
Bumper and crash beam disassembly:

Steps 1 and 2 Performed from Top of Engine Bay Under Hood

1. Disconnect the negative battery terminal.

Steps 2-7 Performed from Under Vehicle

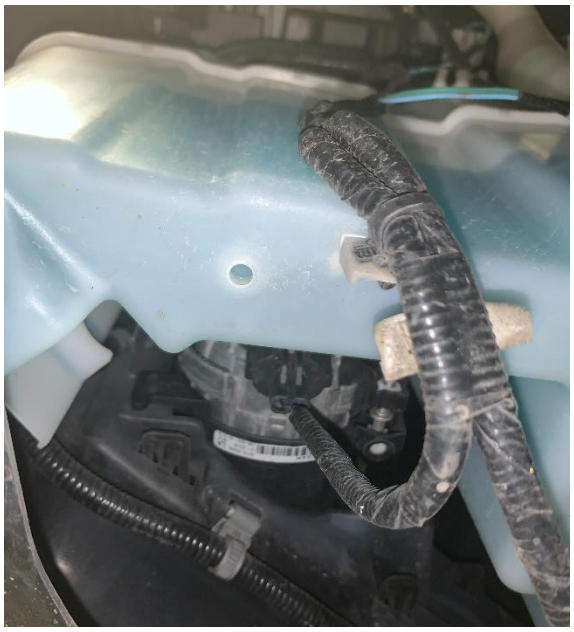
2. Remove the undertray by disconnecting the push clips and bolts (10mm).

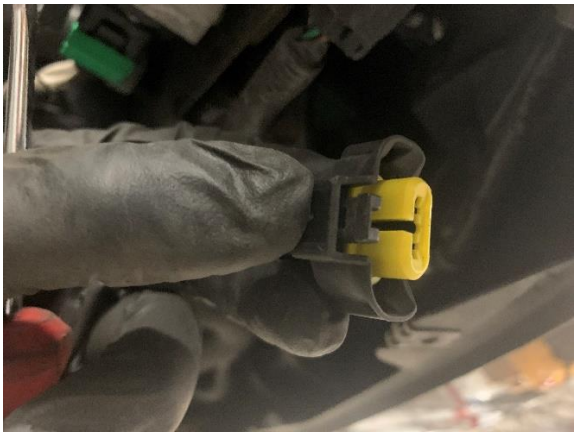


3. Remove front wheels from the vehicle using the proper wheel lug removal tool and socket for your model.

4. Remove the wheel well liners on each side by disconnecting all push clips.

5. Disconnect all electrical harnesses from the bumper. Note that some harnesses are hidden behind other parts of the car, such as the washer fluid reservoir.





6. Remove the bolt in each wheel well holding the trim to the bumper.

Steps 8-9 Performed from Top of Engine Bay

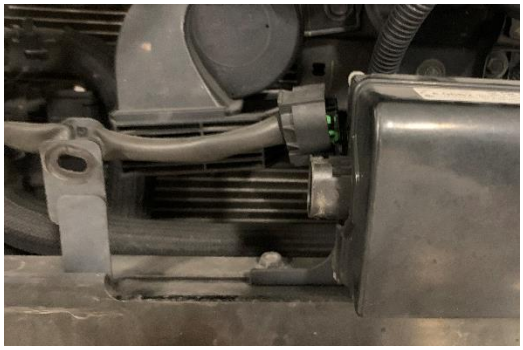
7. Remove the 10mm retaining bolts from the top of the bumper and disconnect the push clips.

8. There are two hidden bolts where the trim meets the bumper on both sides. Remove them and the brackets they hold in place. Carefully slide the bumper off of the vehicle.

Steps 10-30 Performed from Front of Bumper

9. Slide out the foam piece attached to the crash beam on the car. Place both the bumper and foam in a safe area.

10. Disconnect the ICC unit and unclip its wiring harness.



11. Disassemble the trim shrouding near the crash beam by disconnecting the push clips.

12. Use a 12mm socket and a 12mm wrench to remove the fasteners on each side of the crash beam, leaving one per side to keep the beam steady.

13. **Sport and Red Sport Models Only:** Disconnect the wiring harness connected to the Zero-lift front splitter and remove the two 10mm bolts on each side (four bolts total), then slide off the front splitter. This will not be reinstalled.

14. Prop up the crash beam so that it will not fall, then remove the last bolts from each side. Store in a safe place.

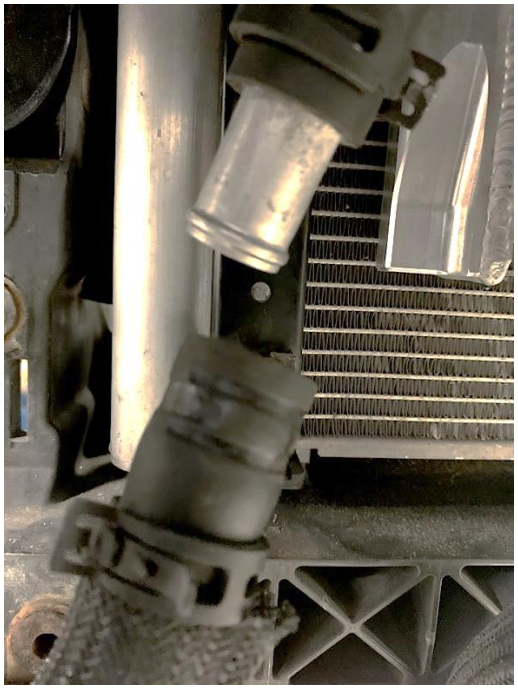
15. Remove the bolts from the oil cooler, then use zip ties to keep it out of the way.

IMPORTANT: Step 17 drains the OEM heat exchanger. Use caution when draining fluids, and use the proper safety equipment. Safety glasses and gloves are strongly recommended. Fluid may be hot.

16. Place a drain pan under the drain plug, then carefully remove the plug. Open the cap on top to allow air to enter into the OEM exchanger. Let the exchanger drain completely before continuing.

Installation of your AAM Competition Front Mount Heat Exchanger

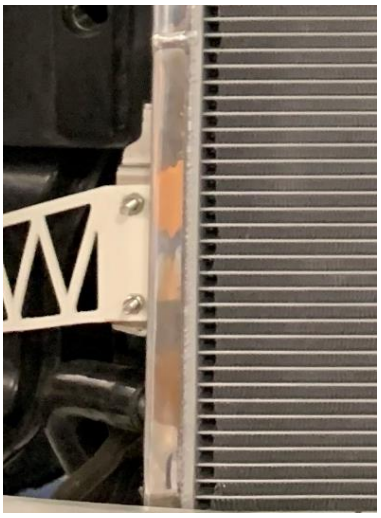
17. Disconnect the return hose from the straight junction as shown below, using pliers to slide the clamp downwards. Make sure the metal fitting stays inside the upper portion of hose which connects to the first heat exchanger. The clamp will be reused. **For Redsport models or vehicles with a second auxiliary fluid pump**, use the hose on the outlet side of the secondary pump, which utilizes a similar fitting with a sensor.



18. Disconnect the return hose from the next T-fitting, using pliers to slide the clamp up the hose. Make sure the T-fitting does not come out of the other hose. The clamp will be reused.

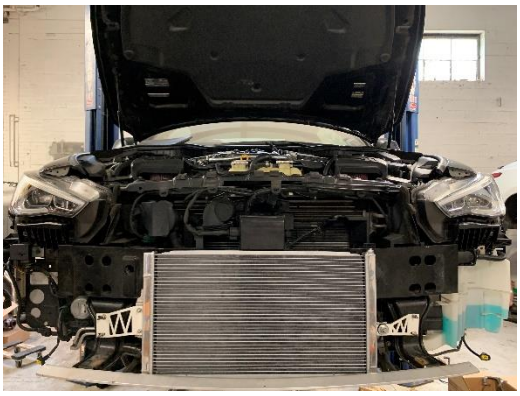
19. Replace the crash support.

20. Attach the right bracket to the heat exchanger using two sets of M6 hardware. Note that the brackets are painted white for visibility.

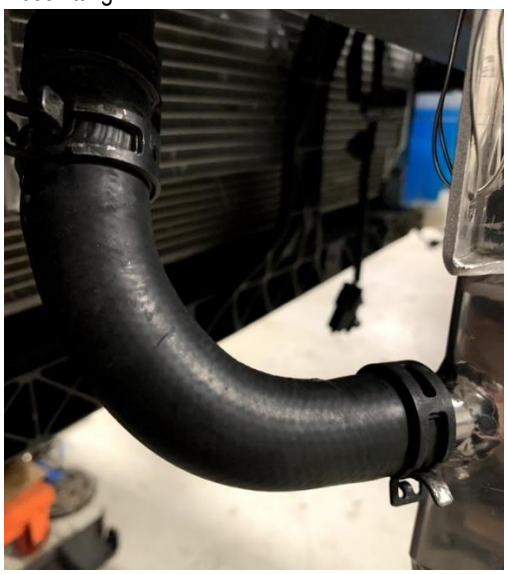


21. Attach the rubber grommet to the left bracket and heat exchanger.

22. Position the heat exchanger behind the aluminum bumper brace and in front of the crash support using the remaining M6 hardware for the mounts, and the M8 hardware through the grommet.



23. Attach the short 90° hose to the metal hose sleeve and the lower port of the AAM Competition Heat Exchanger using the OEM hose clamps. **For Redsport models or vehicles with a second auxiliary fluid pump**, use the hose on the outlet side of the pump, which can be rotated down and attached using the 90° hose fitting.



24. Attach the long hose to the T-fitting and to the driver's side port on the AAM Heat Exchanger.

25. Adjust your fitment, and tighten down all bolts.

Bleeding:

26. The use of an Air Lift/Vacuum Venturi System is required for this step. These systems are widely available online, at garages, or through your local automotive store. Failing to do so may result in system damage due to air getting into the intercooler pumps, preventing coolant circulation, and overheating the pump. Almost no extra bleeding is required after using these machines. Since each machine may differ slightly, please follow the machine manufacturer's instructions for proper use.

27. Test drive your vehicle and check the coolant level. Once the coolant has risen to a constant level, remove the reservoir cap and crack open the bleeder on the AAM Competition Front Mount Heat Exchanger. There should not be much air in the heat exchanger if properly bled, however it is possible for some air to be trapped inside. Close the bleeder and the reservoir, continue to test drive, and repeat this step until the coolant level is stable.

28. Reassemble the car by reversing the Bumper and Crash Beam Disassembly section (Steps 1-16).

Note: When placing the foam bumper support back on the car, the midsection must be cut. Line up the foam to the respective holes, and mark with a straight edge about 1/2" to each side of the heat exchanger, then cut with a handsaw. Use 3M double sided tape to resecure the foam to the bumper.

29. Once the bleeding process is finished, the car is ready to run!

Congratulations!

You have successfully installed the AAM Competition Q50/Q60 Front Mount Heat Exchanger! Enjoy!