



## CZP Q50/Q60 Heat Exchanger Installation Guide



Thank you for your purchase of the CZP by CSF Q50/Q60 Upgraded Heat Exchanger!

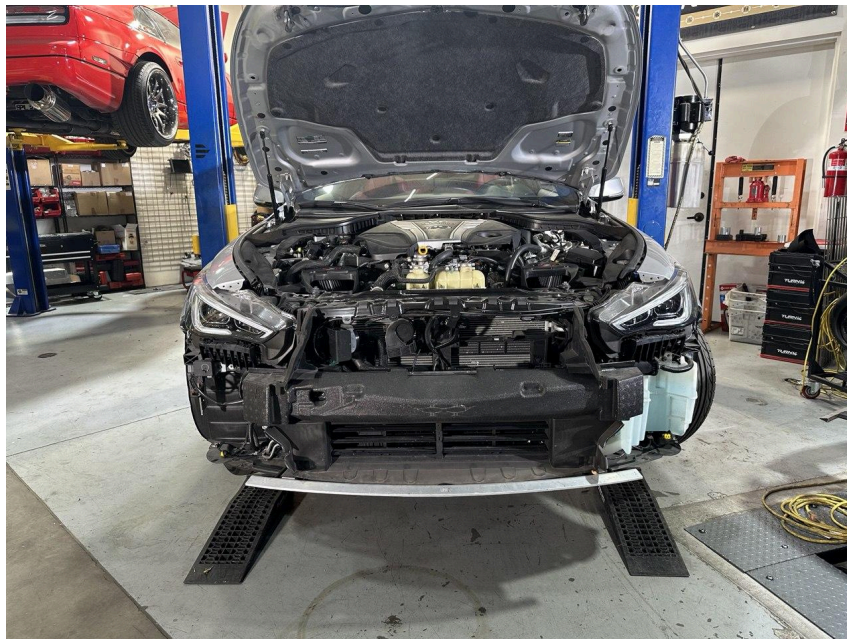
All mention of direction (left, right, front, back) will be oriented as if you were sitting in the driver's seat looking out of the front windshield.



1. Jack up and support the car, and remove your engine splash shield from underneath the car using a 10mm socket and driver.
2. Remove your front bumper. We have a video on our YouTube channel (linked below), or if you prefer, here is the Infiniti FSM for front bumper removal:  
[https://www.youtube.com/watch?v=AM1ttis7K1o&ab\\_channel=ConceptZPerformance](https://www.youtube.com/watch?v=AM1ttis7K1o&ab_channel=ConceptZPerformance)  
<https://conceptzperformance.com/items/75610/docs/Front%20Bumper%20Removal%20FSM.pdf>
3. Remove the Phillips head coolant drain plug from the fitting just in front of the passenger front wheel and drain all of the coolant from the intercooler heat exchanger system.



4. Remove the two small plastic upper air dams by removing 2 pop clips from each guide, as well as the foam crash support pad, which just has two pegs that slot into the crash beam.



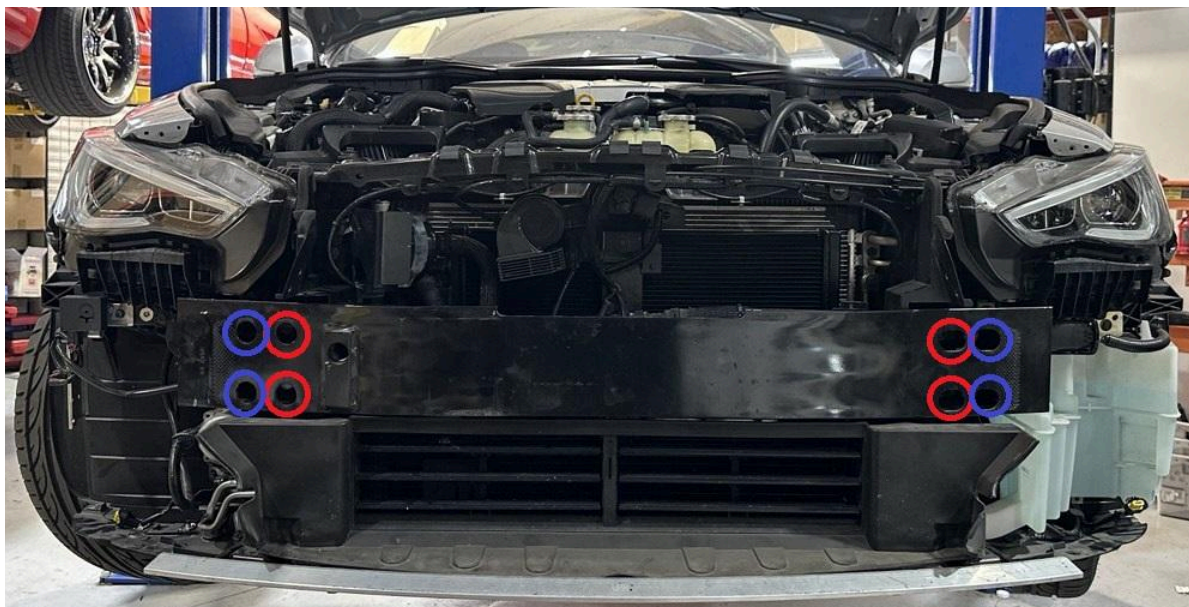
5. For Q50 and Q60 models with Intelligent Cruise Control (ICC), unplug the radar module on the front right lower leg of the crash support structure on equipped cars.



6. For Q50 and Q60 Red Sport models equipped with the front active shutters, you can unplug the connector at the bottom on the left side of the unit (**circled in red**).



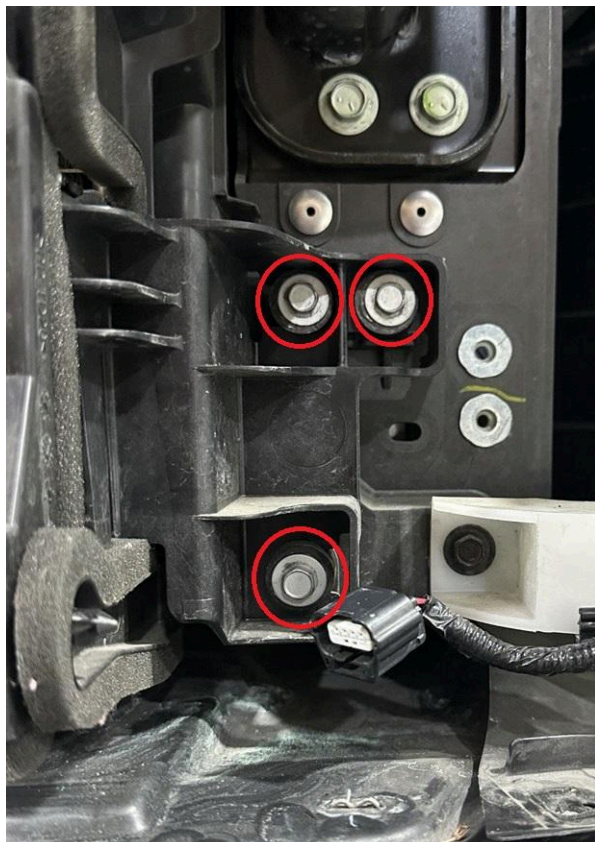
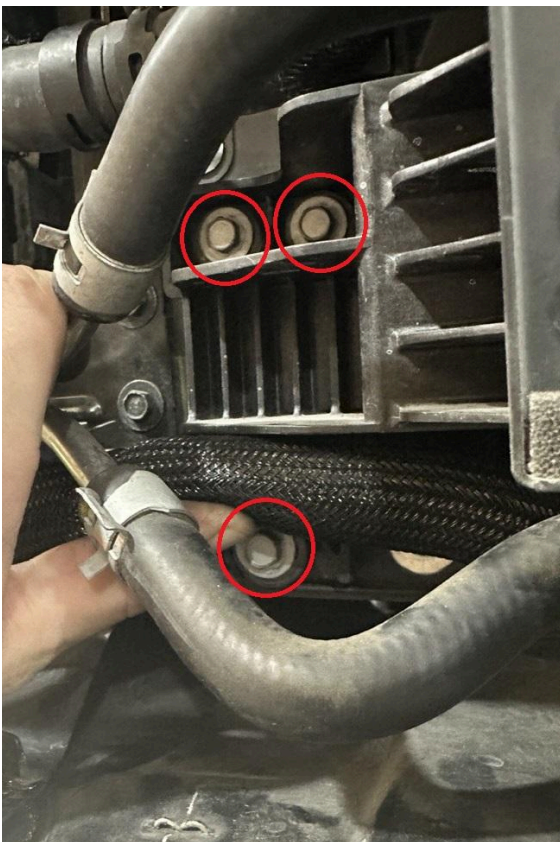
7. Now that the components attached to your crash beam are unplugged, we can proceed to removing the four 12mm head nuts (**circled in red**) and four 12mm head bolts (**circled in blue**) that are responsible for securing it to the car.



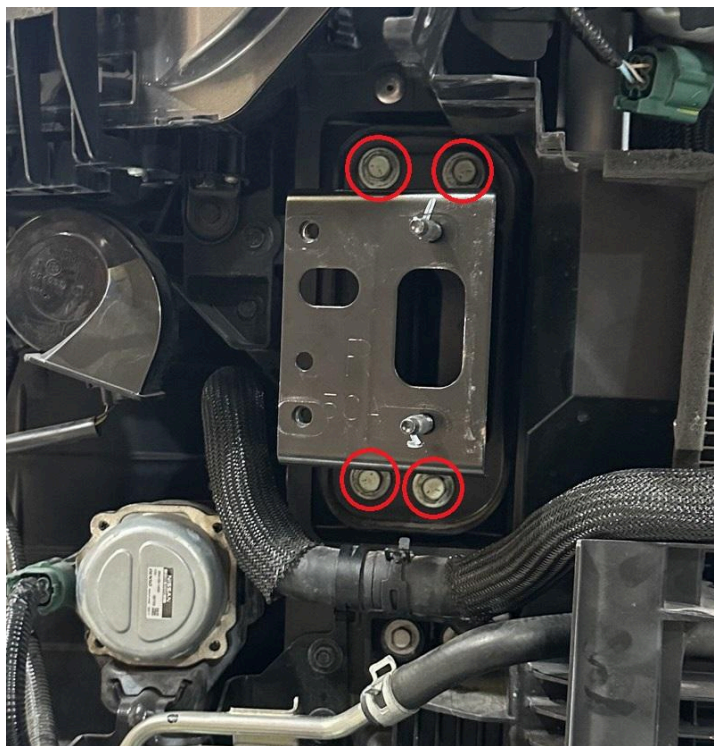
8. The crash beam and any parts attached to it can now be removed and set aside.



9. Proceed to remove the two small oil cooler air guides secured with two pop clips each, then unbolt the six 10mm head bolts securing the oil cooler (circled in red). It may also be helpful to remove the single 10mm head hex bolt securing the oil hardlines. You don't need to remove the oil lines, just swing the cooler off to the side, making sure to support it and not put too much tension on the two lines.

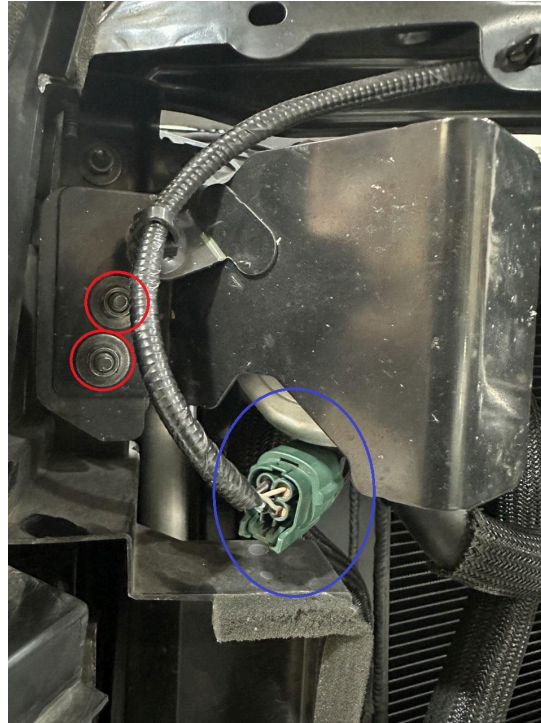


10. Remove the passenger side crash support leg. This is held on by four 13mm head hex bolts (circled in red). Remove the leg and set it aside.

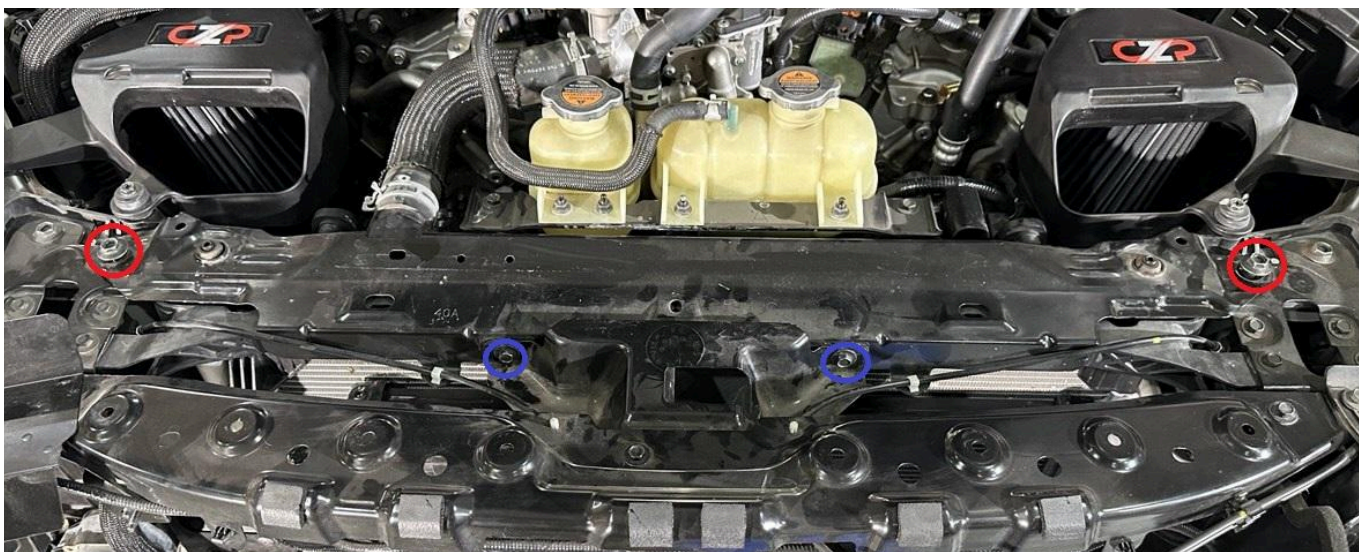




11. The last and largest plastic shield on the passenger side can now be removed by pulling its tabs out of the two holes in the front core support and sneaking it out of the way.
12. For Q50 and Q60 Red Sport models equipped with the secondary water pump, this pump must be unplugged (circled in blue) and unbolted by removing the two 10mm head nuts (circled in red). Once the pump is free, just remove it from the studs and drape it out of the way, there is **NO** need to disconnect the water lines from the pump.

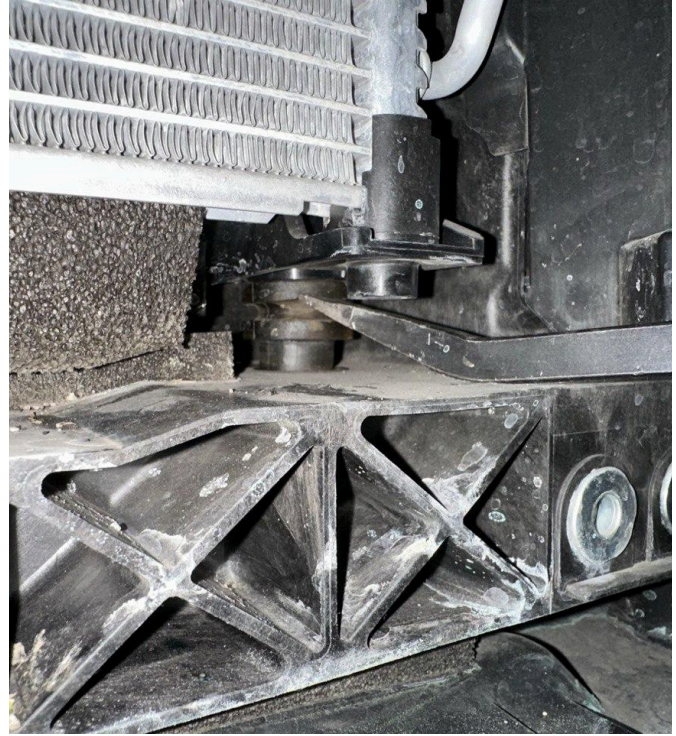
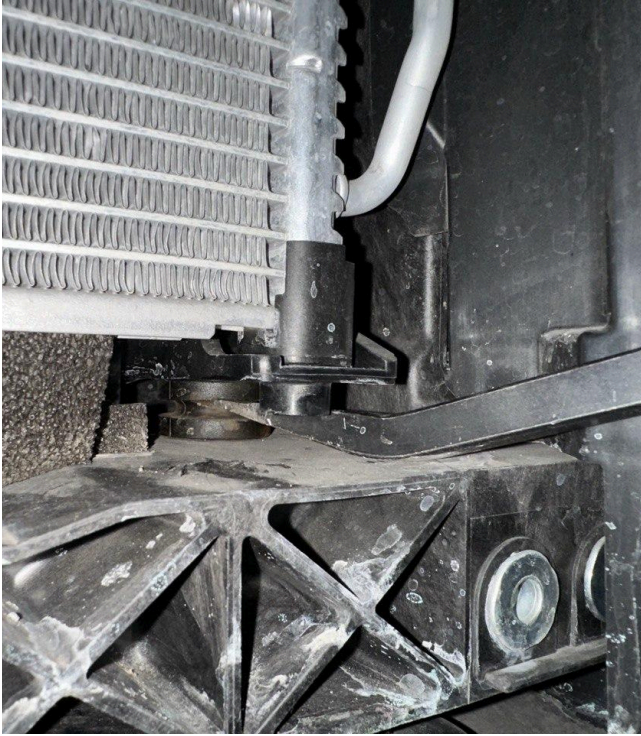


13. Our next step is to remove the upper radiator retainer. Remove the two 12mm head hex bolts (circled in red) and two 10mm head hex bolts (circled in blue), then gently pull up and slip the retainer out making sure the upper bushings stay in place on the radiator. There is no need to disconnect all the clips connected to it. The Q60 and Q50 retainers vary slightly (pictures shown are of a Q60).





14. The radiator assembly must now be shifted towards the engine slightly to allow clearance for removal and installation of the heat exchanger. This is done by inserting a pry bar into the groove present on the lower radiator bushings and prying up on the bushing, making sure the bar only comes in contact with the rubber as we dont want to damage the fragile plastic end tanks of the radiator (the process is shown in the images below). Once the radiator is lifted around 1/2" or approximately 12mm the lower leg and bushing will pop out of the hole in the core support, and can be pushed and shifted toward the rear of the vehicle very slightly. This has to be done on each side as there are two lower mounts, one on each side of the radiator. This small amount of additional clearance is all we need for the next steps.

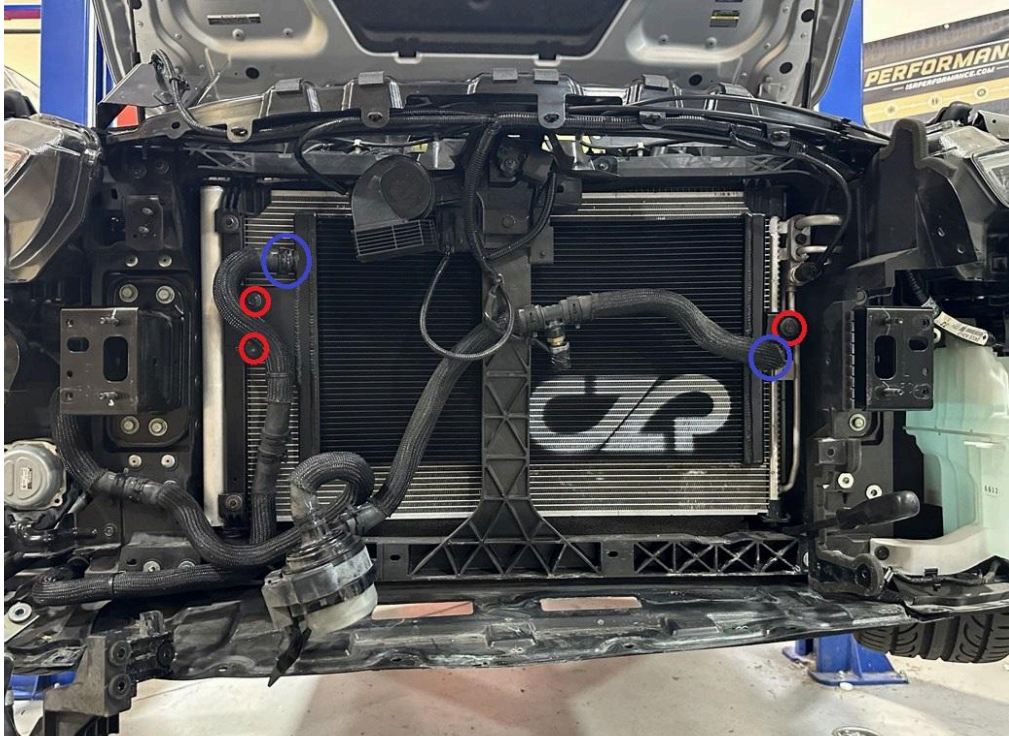


15. Now that we have the clearance necessary, we can finally remove the stock heat exchanger. Start by taking a pair of pliers and removing the clamps securing the hoses to each side of the stock cooler. A small amount of additional coolant will come out, so be prepared with a drip pan.
16. With the heat exchanger disconnected, we can remove the four pop clips securing the tiny duct and the air guide to the heat exchanger and slip them out of the way.





17. Our last step in disassembly is removing the three 10mm head hex bolts securing the stock heat exchanger and carefully sliding it towards the passenger side and out of the vehicle. Depending on the vehicle it may be helpful to remove the one 10mm head hex bolt holding the passenger side horn and its bracket.
18. Unbox the new upgraded heat exchanger and swap the rubber grommet from the end tank of the stock core to the new core.
19. Carefully slide the new heat exchanger into the small gap between the condenser and the center brace of the core support, and secure it with the three 10mm head hex bolts we removed from the stock core (circled in red) (torque spec is 4 lb-ft or 5.5 N-m). Then reconnect the two hoses going to the heat exchanger core, as well as their clamps (circled in blue).

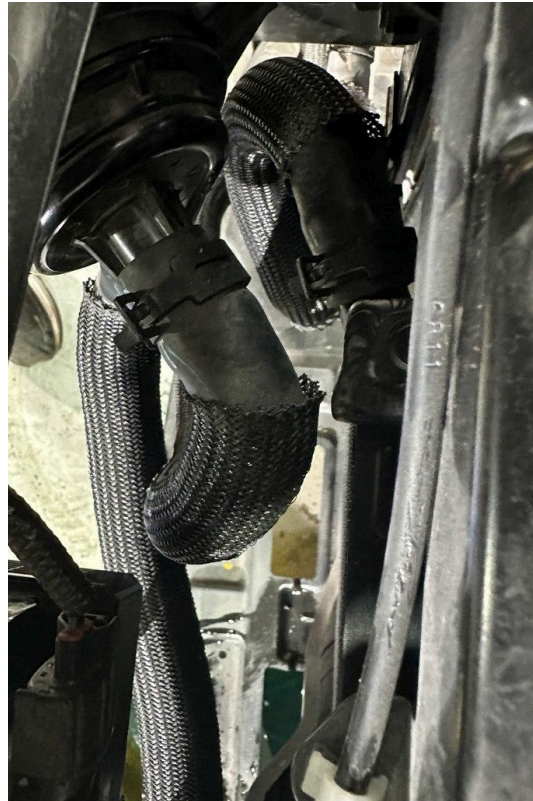


20. We can now shift and slide the radiator assembly back into its holes in the core support, as we shifted it up in Step 14. Usually prying is not necessary, but if it is for you, please only pry on the bushings to avoid damaging the radiator assembly.
21. The upper radiator retainer is next to be slotted back into place and secured with the two 12mm head hex bolts (Torque spec is 27 lb-ft or 36.5 N-m) and two 10mm head hex bolts (Torque spec is 4 lb-ft or 5.5 N-m).





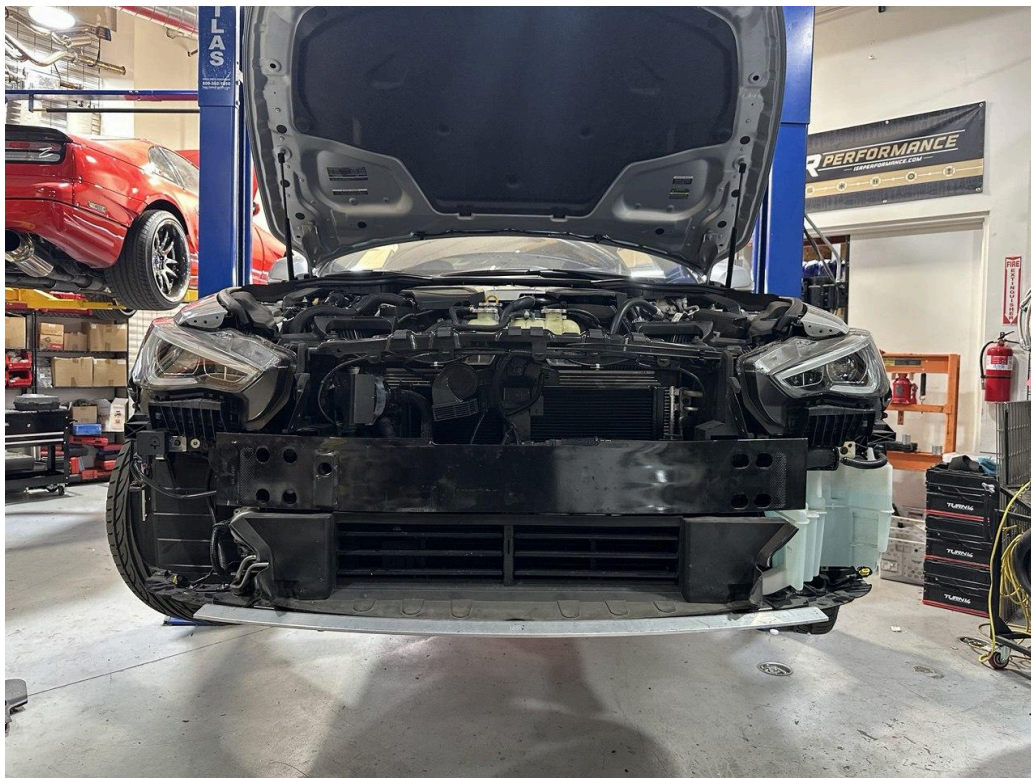
22. For Q50 and Q60 Red Sport models equipped with the secondary water pump, the pump (unmounted in Step 12) can be mounted back in its original location with the two 10mm head nuts, and plugged back in (**torque spec is 4 lb-ft or 5.5 N-m**). Depending on clearances between the rear facing hose and the core, it may be necessary to either bend the bracket securing the secondary water pump or if you would prefer to avoid this, you can remove the hose and trim off 1/2" or approximately 12mm from the end of the hose. When the hose is then reattached and secured with the clamp, it will then have plenty of additional clearance between it and the core (before and after images below). There should be at least 1/8" or approximately 3mm of clearance between the core and hose.



23. Clip back in the large plastic shield on the passenger side using its two tabs (removed in Step 11).
24. The crash brace support leg can now be reinstalled using the four 13mm head hex bolts (**torque spec is 18 lb-ft or 25 N-m**).
25. The engine oil cooler can now be lifted into place and secured using the six 10mm head hex bolts we removed from it earlier (**torque spec is 4 lb-ft or 5.5 N-m**). Take the time to reinstall the two small air dams on each side of the cooler with their respective pop clips.
26. The crash beam can now be swung up into place and secured using the four 12mm head nuts and four 12mm head bolts that were removed earlier (**torque spec is 18 lb-ft or 25 N-m**). Any components, including the active shutters (Step 5) or radar cruise control unit (Step 6) that were unplugged to facilitate its removal, can now be reconnected.
27. Reinstall the foam crash support pad, as well as the two small plastic upper air dams, with their pop clips.
28. Thread back in and tighten the Phillips head coolant drain plug for the heat exchanger system.



29. We will now refill the system with coolant. Our recommended method for this is a vacuum fill system where compressed air is used to draw a vacuum from the system, therefore reducing or even eliminating the need to bleed the system. These systems are available from many tool manufacturers for prices ranging from around fifty dollars all the way up to hundreds of dollars if you go for a big name kit. Nissan/Infiniti refills the system using CONSULT to power the auxiliary water pumps and circulate coolant through the system as you top it off periodically. Either way works, but the vacuum system tends to be more effective in avoiding air bubbles trapped in the system. If you are using CONSULT or a similar system, you will have to crack the bleed screw located on the top right side of the core and let any air trapped in the top of the core out after filling the system, you may have to do this a few times to get all of the trapped air out.



30. Reinstall the front bumper in the reverse order of installation.

<https://conceptzperformance.com/items/75610/docs/Front%20Bumper%20Removal%20FSM.pdf>

31. Reinstall the splash shield with the factory 10mm head hex bolts and plastic retaining clips.

This completes the install of your upgraded Q50/Q60 heat exchanger! If you have any questions, please reach out to us at [info@myczp.com](mailto:info@myczp.com), and we will assist you as best we can.