

Z1 G37X OIL COOLER INSTALLATION MANUAL



This Installation Manual is intended for the following models:

2008-2015

Infiniti G37X

PROLOGUE:

Study these instructions completely before proceeding to assembly. The installer must have a thorough knowledge of automotive systems operation. If unfamiliar with any of the concepts outlined in this instruction, we recommend the installation be completed by a qualified professional.

WARNING!

Extreme caution should be taken when performing maintenance or performance upgrades to your vehicle. Please observe and abide by any Warning or Caution labels placed on the various components and tools used when servicing your vehicle. If you have any questions regarding installation or the various components included with the Z1 Motorsports G37X Oil Cooler, consult with a Professional Mechanic, or contact Z1 Motorsports for more information.

PARTS INCLUDED:

Item	Quantity	Description
1	1	Oil Cooler Core
2	1	Sandwich Plate
3	2	Oil Cooler Line
4	1	Oil Cooler Bracket
5	1	Oil Cooler Hardware Kit
6	1	Sandwich Plate Supplement Kit

TOOLS REQUIRED:

- Hydraulic Jack
- (2) 2-Ton (or greater) Jack Stands
- Ratchet
- Ratchet Extension(s)
- Assorted Metric Wrenches
- Assorted Metric Sockets
- Torque Wrench
- -10 AN Wrench

SAFETY REQUIREMENTS:

- Always wear safety glasses and any necessary protective garments. If using any fluids, chemicals, or solvents, a respirator is recommended.
- Always turn the ignition to the OFF position and disconnect the NEGATIVE battery terminal.
- Always use properly rated jack stands when working under your vehicle.
- Always keep limbs and parts away from moving drivetrain parts.
- Only operate drivetrain in safe space and well-ventilated areas.

BEFORE YOU BEGIN:

Remove contents from the Z1 Motorsports G37X Oil Cooler and verify that ALL necessary hardware is present.

PROCEDURE:

1. Place the transmission in Park position (or in Reverse gear if equipped with a manual transmission). Apply the parking brake.
2. Locate the proper jacking points on the vehicle's chassis (refer to the Vehicle's Owner's Manual). Raise and support the vehicle using a jack and jack stands.
3. Raise and support the hood of the vehicle.

Use *Figure 1* below as a reference for *Steps 4-11* when removing the Front Bumper Fascia.

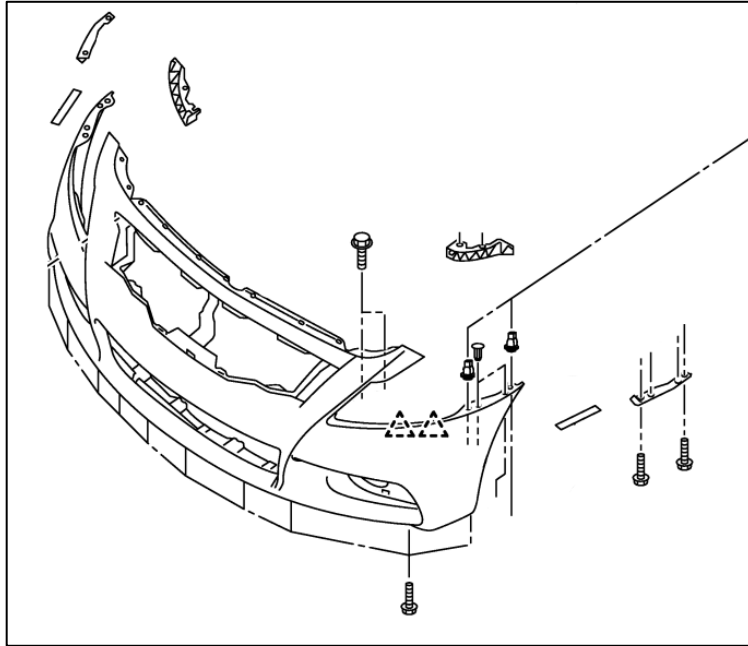


Figure 1

4. Remove the (6) six plastic clips securing the top of the Bumper Fascia to the vehicle and remove the Radiator Cover. *Figure 2.*

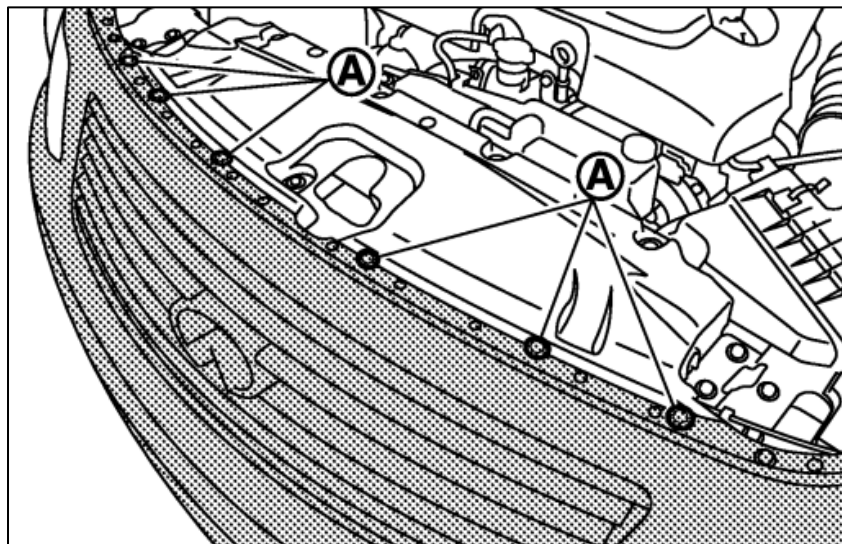


Figure 2

5. Remove the (2) two plastic clips on each side of the vehicle and remove the Hood Seal Assembly. *Figure 3.*

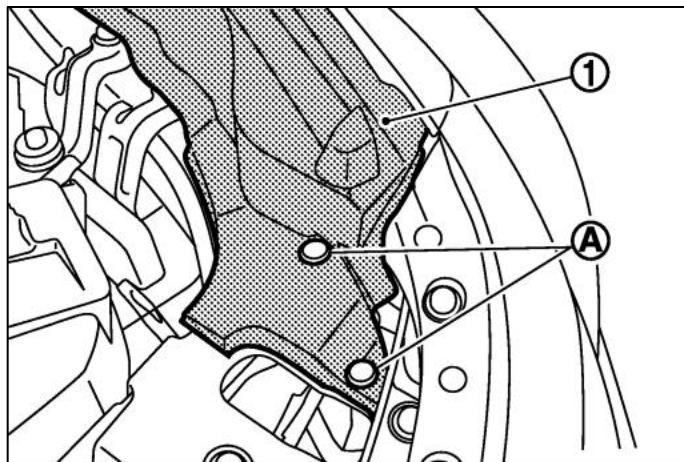


Figure 3

6. Remove the bolts securing the Front Bumper to the Front Fender on both sides of the vehicle. *Figure 4.*

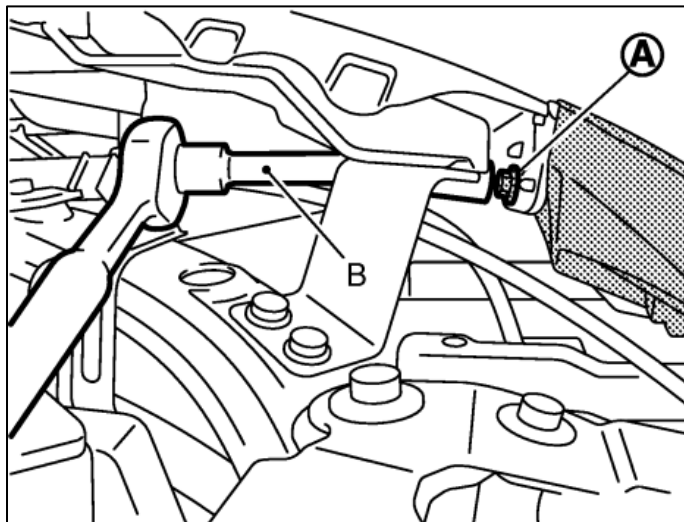


Figure 4

7. Remove the Engine Splash Shield/Undershroud, it is held on by an assortment of clips/bolts. *Figure 5.*

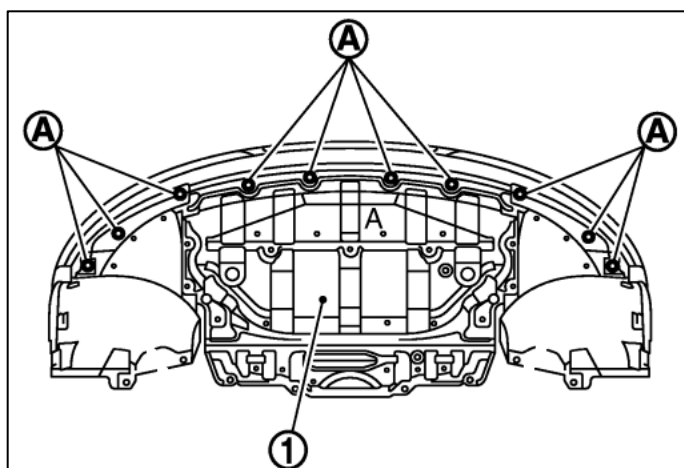


Figure 5

- Remove the front Fender Liner bolts/clips and pull it back to access the (2) two screws securing the Front Bumper Fascia to the Front Fender. Remove these screws. *Figure 6.*

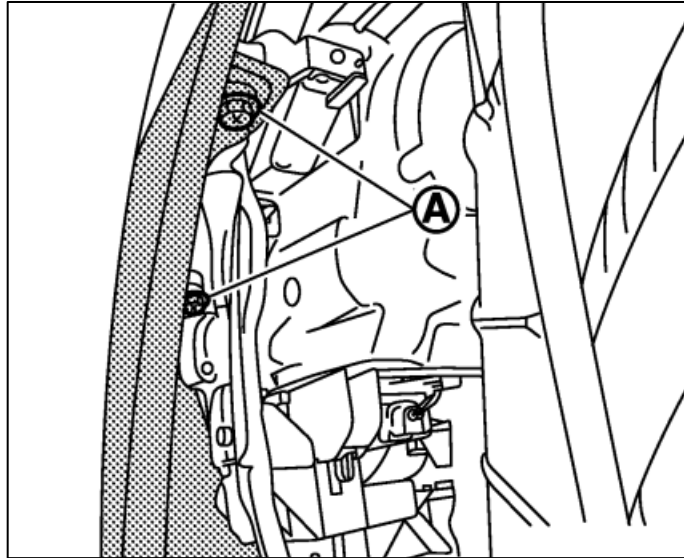


Figure 6

- Pull the sides of the Front Bumper Fascia away from the vehicle to disconnect it from the vehicle.
- Disconnect the Fog Light electrical connectors.
- Fully remove the Front Bumper Fascia from the vehicle.
- Optionally you can remove the Crash Bar from the vehicle to allow more access for install, but it is not necessary.
- Locate the Oil Cooler, Oil Cooler Bracket and Oil Cooler Hardware Kit. Attach the Oil Cooler Bracket to the bottom of the Procooler using (4) four M6 Bolts, M6 Nuts and Rubber Bonded Washers. *Figure 7.*



Figure 7

14. Attach the Support Bracket to the top Left-Hand corner of the Oil Cooler with the included Hardware. *Figure 5.*

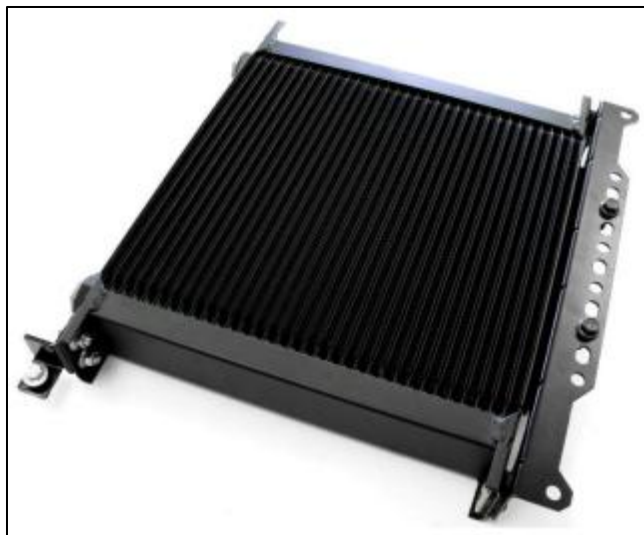
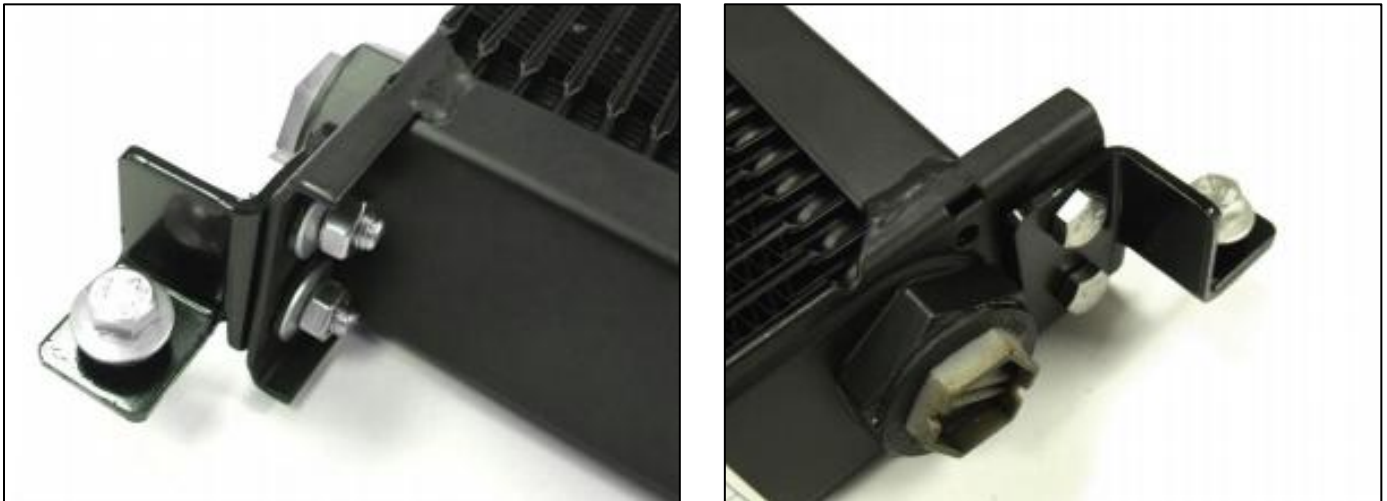


Figure 8

15. Locate (2) two M6 threaded U-Clips. Slide the (2) two U-Clips onto the lower driver side Core Support. There are (2) two blank spots where they can slide on. *Figure 9.*

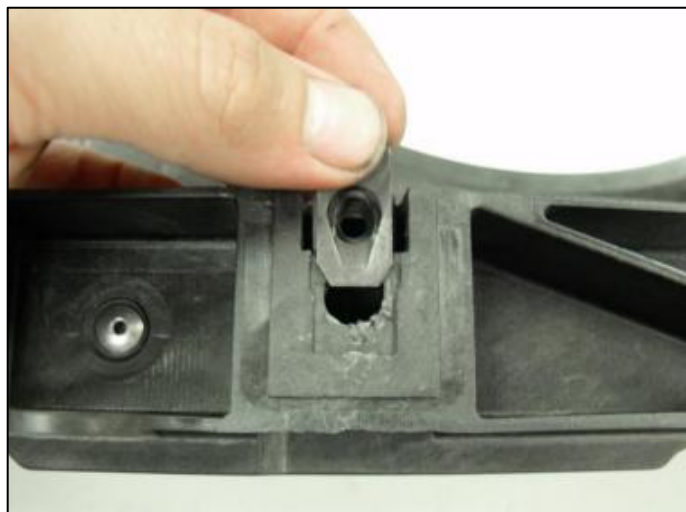


Figure 9

16. Temporarily position the Oil Cooler Core to the Core Support and over the U-Clips. The Upper Support Bracket should sit behind the Center Core Support Brace. Use (2) two M6 x 1.0 Flanged Head Bolts, 20mm to secure the Oil Cooler Bracket to the U-Clips. *Figure 9.*

NOTE: The Oil Cooler lines are already installed in the Figure below, you will install them in the upcoming steps.

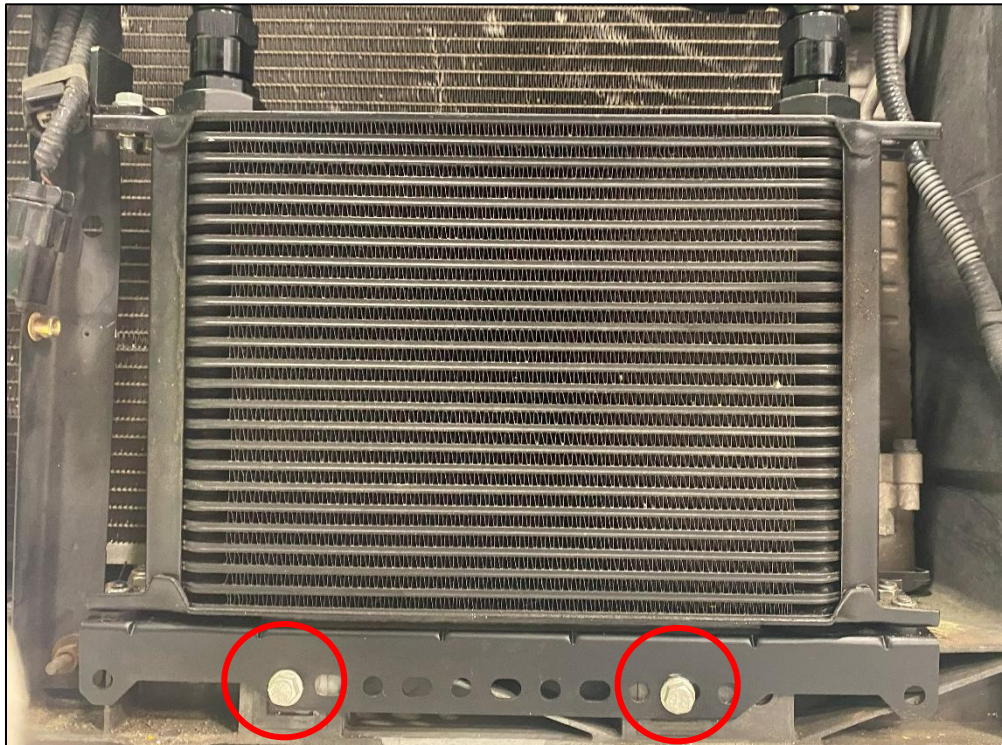


Figure 10

17. With the Cooler in place, mark the location of the hole on the Support Bracket on the Center Core Support Brace. *Figure 11.*

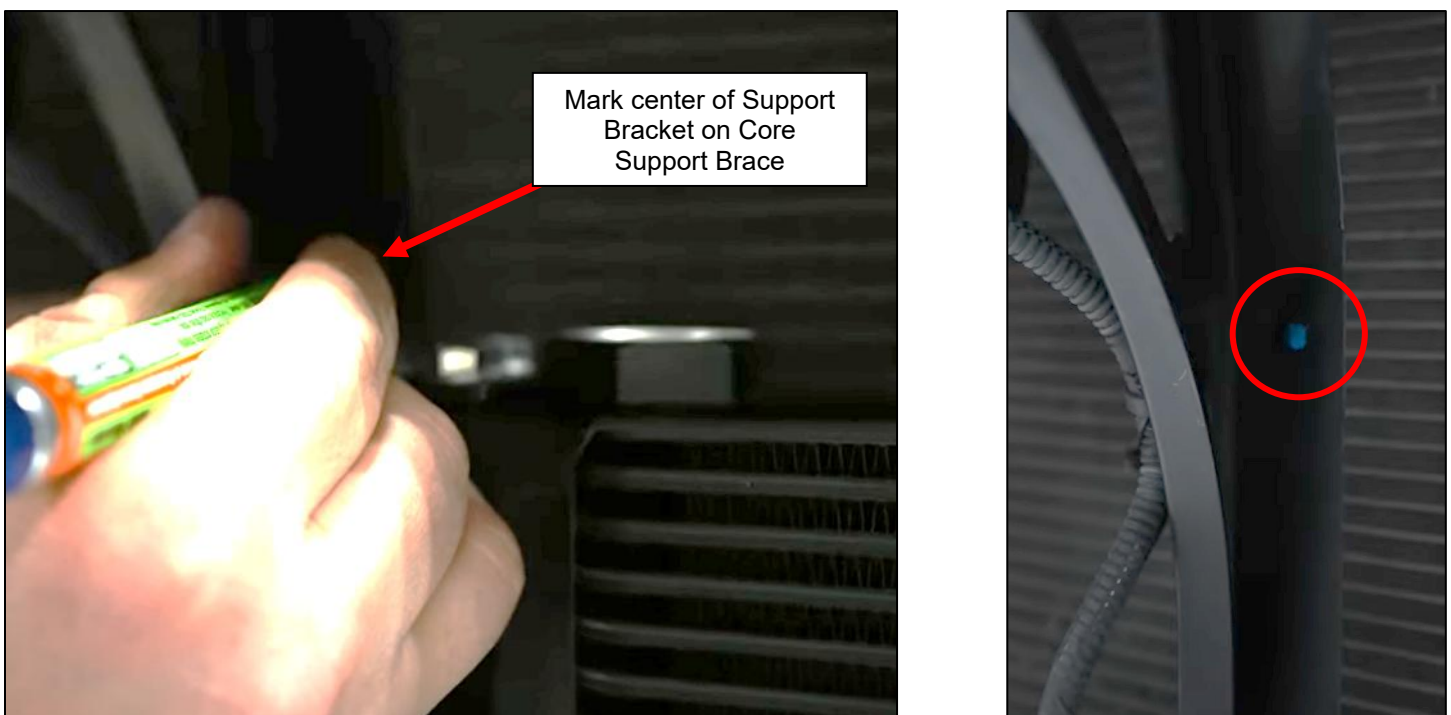


Figure 11

18. Remove the Oil Cooler from the Core Support.

19. Place a wood block behind the Center Core Support Brace to protect the Radiator. Drill through the hole marked in *Step 17*, be careful not to drill too much and puncture the Radiator. *Figure 12*.



Figure 12

20. Position the Oil Cooler onto the Core Support and check the fitment of the Upper Bracket to the Center Core Support Brace, but do not secure it yet. *Figure 13*.

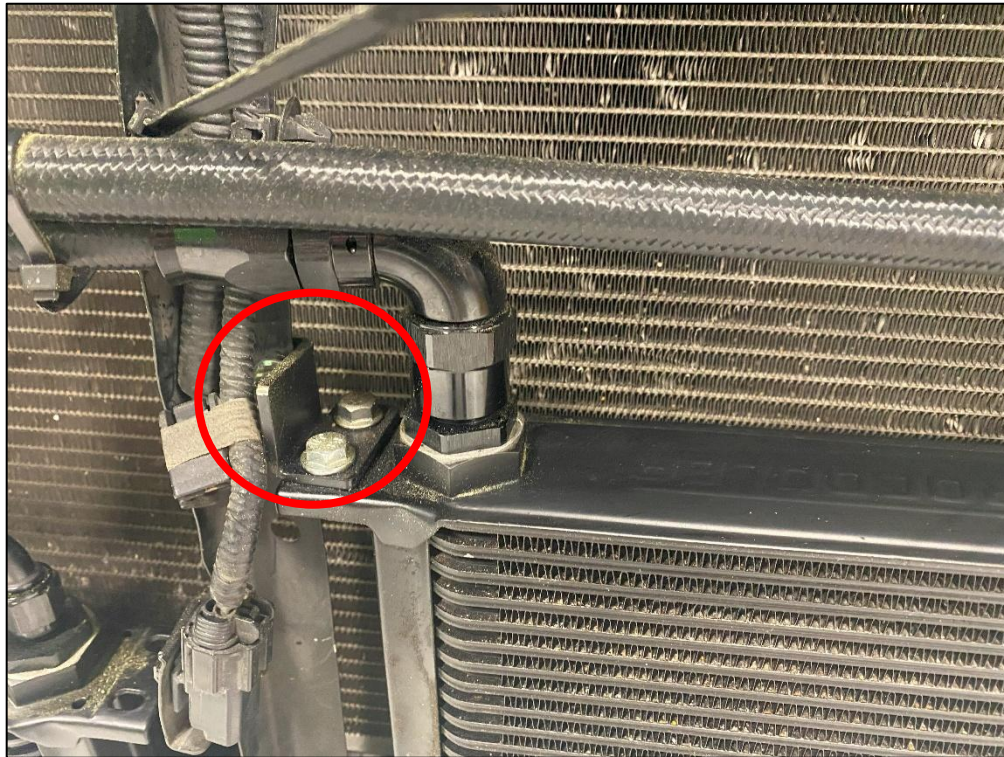


Figure 13

21. Locate (1) one Oil Cooler Fitting. Using a Silicone Based Lubricant, lubricate the threads and O-Ring on the Fitting.

22. Install the Oil Cooler Fitting into (1) one port of the Procooler and tighten the fitting. These fittings do need to be snug but overtightening them can destroy the threads or O-Rings and cause leaks.

23. Using fresh Engine Oil, prefill the Oil Cooler Core completely. It is **VERY** important to do this, as it will prevent the engine from running dry momentarily while oil is flowing through the Core and will help priming faster.
24. With the Core full of oil, repeat Steps 21-22 to install the other Cooler Fitting into the Core.
25. Carefully reinstall the Oil Cooler Core into the vehicle. Secure the bottom with the (2) two M6 x 1.0 Flanged Head Bolts, 20mm. Secure the Upper Bracket to the Center Core Support Brace with the remaining M6 Bolt and an M6 Nut. *Figure 14.*

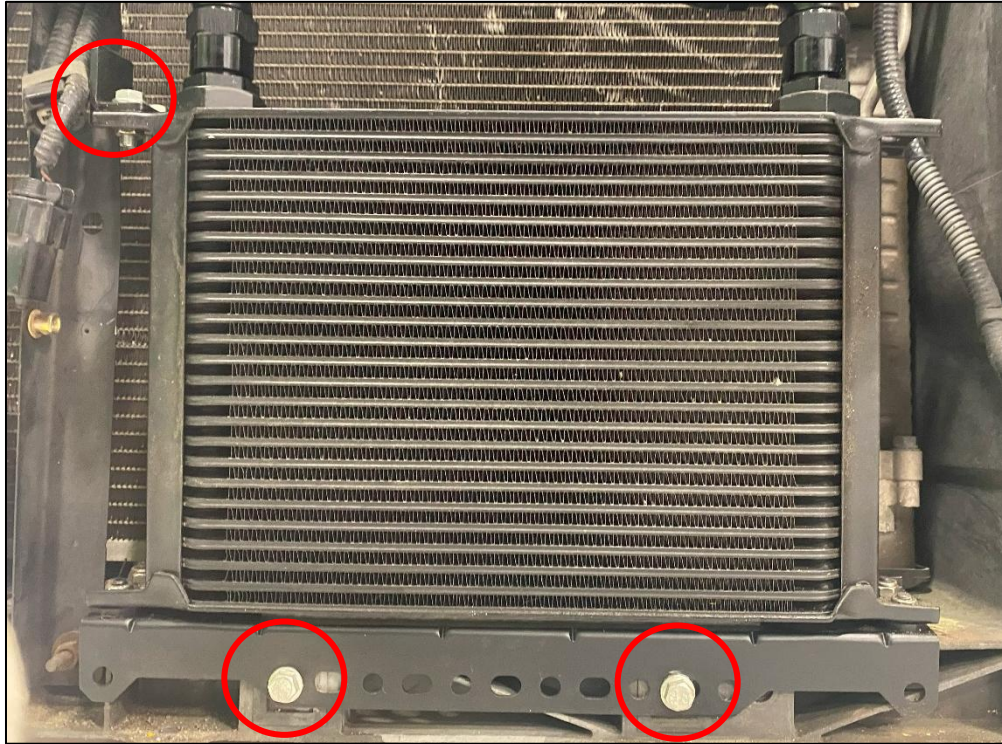


Figure 14

26. Locate the (2) two Oil Cooler Lines. Loosely connect the 90° Ends to each port of the Oil Cooler.

27. Run the lines across the front of the vehicle and down with the Power Steering Cooler lines. Check that the lines are not routed against any sharp corners. *Figure 15.*



Figure 15

28. Unbolt the bracket securing the Power Steering Cooler Lines to the passenger side frame rail. *Figure 16*
29. Route the Oil Cooler Lines between the Power Steering Cooler Lines and the frame rail. *Figure 16*.
30. Locate the 1" Plastic Spacer and M6 x 40mm Bolt. Insert the 1" Spacer between the Power Steering Bracket and the frame rail. Secure the bracket with the M6 Bolt. *Figure 16*.

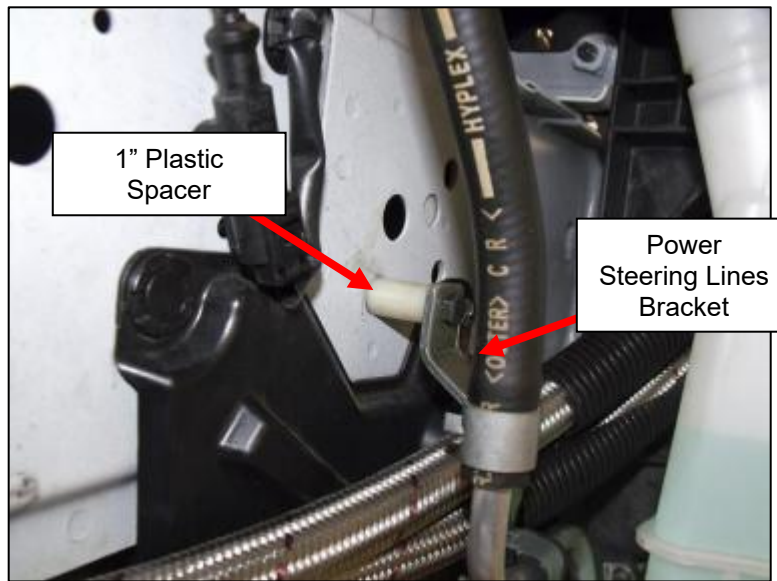


Figure 16

31. Route the Lines between the opening between the passenger side Frame Rail and the Front Subframe.
32. Remove the Oil Filter from the engine. Drain and collect any oil. If you are doing an oil change at the same point, drain the rest of the engine oil at this time.
33. Locate the Oil Cooler Sandwich Plate and the Sandwich Plate Center Bolt. Lubricate the O-Rings of the Sandwich Plate with fresh engine oil and place it onto the Oil Filter Stud. Loosely secure the Sandwich plate to the engine with the Sandwich Plate Center Bolt.

34. Route the Oil Cooler Lines to the Sandwich Plate. Loosely connect the Lines to the Plate, orient them so the bottom line faces towards the rear of the vehicle and the top line faces the front. Make sure the bends are as smooth as possible, and the lines do not kink. *Figure 17.*



Figure 17

35. Adjust the Sandwich Plate and Oil Cooler Lines as necessary to prevent kinking or rubbing of the lines. Once adjusted, tighten the Center Sandwich Plate Bolt to secure it to the vehicle. Torque to **25 ft-lbs.**
36. Tighten the Oil Cooler Line fittings at both the Sandwich Plate and Oil Cooler. Be careful not to overtighten the fittings, or damage to the Threads/O-Rings will occur and cause leaks.
37. Use the supplied zip-ties to secure the Oil Cooler lines together and away from sharp edges.
38. Install a fresh Oil Filter onto the Sandwich Plate.
39. Refill the Engine to specified quantity in the Factory Service Manual. When filling oil in the future, remember that the Oil Cooler does add fluid capacity and to check the Dipstick for proper fluid level.
40. Start the engine and inspect for any leaks. If you are using a Thermostatic Oil Sandwich Plate, allow the engine to reach a high enough temperature to allow the Thermostat to open and push oil through the Cooler. Tighten any AN Fittings as necessary.
41. Check Engine Oil level and add more if necessary.
42. Take the vehicle for a test drive. Check fluid level after driving.
43. Follow *Steps 3-12* in reverse order to reinstall the Front Bumper Fascia. When reinstalling, make sure the Oil Cooler Lines are not bulging out and pushing/rubbing any panels.

END

Additional Technical Support:

Contact Z1 Motorsports at info@z1motorsports.com
Or call 770-838-7777 between 9am and 6pm ET