

480 E. Easy St. Unit #4 Simi Valley, Ca. 93065

Instruction Guide: 2009 – 2021 Nissan 370Z Oil Cooler Kit

Technical support:
(805) 522-3278
Monday- Friday 9a.m.- 3 p.m. PST



<u>Pre-Installation Note:</u> Although it is not required, it is recommended to perform this installation in conjunction with an oil change.

INSTALLATION ACCESSORIES INCLUDED:

1 - Setrab Series 6 34 Row Oil Cooler

2 - Setrab "O Ring" AN -8 fitting

1 - Oil Filter Sandwich Adapter

1 - Setrab Lower Mounting Bracket

2 - Setrab Steel Backing Plates (Threaded M6-1)

4 - Setrab M6-1 x 14 Steel Button Head Cap Screws

2 - FI Inc. -8 Stainless Steel Braided Lines

1 - FI Inc. Upper Mounting Bracket

5 - M6-1 x 20 Hex Head Flange Bolt

5 - M6-1 Flange Nuts

2 - Adel Clamps w/Tech Screws

4- Large Zip Ties

4 - Washer Shims (NISMO)

ADDITIONAL PARTS INCLUDED 2012+ ONLY:

1 - Nissan Oil Stud 1 - (22-1/2") Black hose (Coolant "loop" line)

SAFETY WARNING: Having your car on a lift in the air is ideal however this installation can be performed with your vehicle on jack stands. Always use extreme caution while raising and lowering your car. Improperly raised vehicles can fall, causing serious injury and/or death! Always make sure that your vehicle is on level ground before lifting. Lift your vehicle from a safe jacking point.

- **1)** Raise the hood of your vehicle. Now, remove the stock engine splash guard "aka" Belly pan. There are 10mm bolts and various plastic clips holding this on. Use the flathead screwdriver to gently pop the clips up. Once the center is popped up, they should come straight out.
- **2)** Remove the plastic clips on the front of your inner fender wells. They are located in the front, about halfway up, in the center. Once removed, you can gently pull the bumper wide enough so that you can get the edge of the inner fender well on the outside of it.
- **3)** At the top outer edge of the bumper (where it meets the fender) remove the 10mm bolt on each side.
- **4)** Top Side: Remove the 14 plastic clips holding the fascia radiator guide in as well as the front fascia on.

NOTE: 2013+ you will need to unplug your daytime running lights from your front fascia before moving on to Step 5.

5) Your front fascia is ready to come off. On each side (where the fascia meets the fender) very gently pull outwards, away from the car. You will release the fascia from the clips that hold it in place, directly under each headlight.

6) Remove the foam from your factory tow bar.

NOTE: If your vehicle is a NISMO model, you will need to use pliers to unclip your wiring harness as well as "horn" wires that are attached to the crash beam. This is a piece of black sheet metal that is riveted to your crash beam. Once you verify that all the clips are separated from the sheet metal, you can proceed to Step 7.

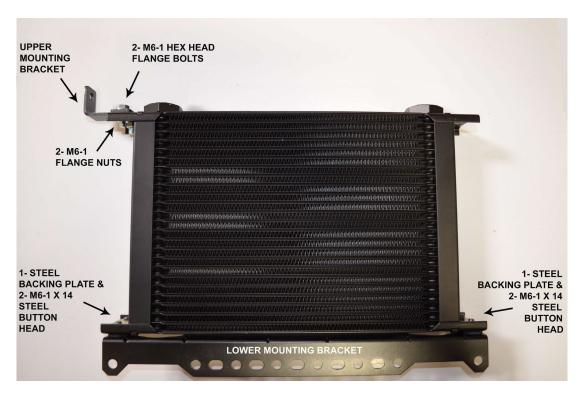
7) To make for an easier installation, remove your factory crash beam. There are 4, 14mm bolts on each side holding it on.

NOTE: If your vehicle is a NISMO EDITION you will need to trim the sheet metal attached to your factory tow bar, but only on the driver/left side where the sheet metal would come in contact with the with top of the oil cooler. (See picture below which illustrates how it should look after it has been trimmed.)

If you DO NOT have a NISMO EDITION, you may proceed to Step 8.

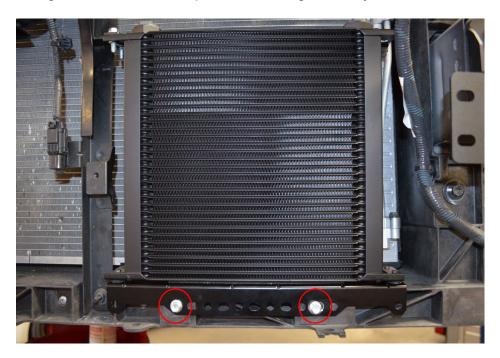


8) Assemble the oil cooler as shown in the picture below. Note: For the 2, M6-1 Hex-head flange bolts and flange nuts, only go hand tight. You will completely tighten down later on in the process.



NOTE: If your vehicle is a NISMO EDITION, you will need to remove your stock front damper. There are 2, 12mm bolts holding it on each side. You will re-install later. If you do not have a NISMO EDITION, you may proceed to Step 9.

9) Place the assembled oil cooler in mounting location on driver/left side of vertical support as shown in picture below. Insert the supplied 2, M6-1 X 20 Flange Bolts and Nuts in place. Hand tighten only.



- **10)** With a silver marker, mark a dot in the open hole of the upper mounting bracket where it meets the vertical support. Once this is completed, remove the mounting hardware circled in red (above) and set the oil cooler aside.
- **11)** Take a hammer and centering punch and drive a dimple into the center of your "silver mark" on the vertical support. Drill a 1/4" hole through your dimple. Clean, slag, and vacuum shavings.
- **12)** Mount the oil cooler back in its previous location. Tighten down the mounting hardware circled in red from the picture above.
- **13)** Insert the final remaining M6-1 x 20 Hex Head Flange Bolt and Nut into the upper mounting bracket in the mounting hole that you just created. Tighten all three bolts down in the upper mounting bracket. Your oil cooler should now be completely mounted and all hardware tight.
- **14)** Unscrew your engine oil-fill cap. Leave it on top of the filler neck to keep debris out. Now remove your oil filter. Most of what drains out is from your oil filter. Most of the oil will stay in your lower oil pan. DO NOT re-use the oil that came out during the removal of your oil filter. Dispose of the used oil properly.

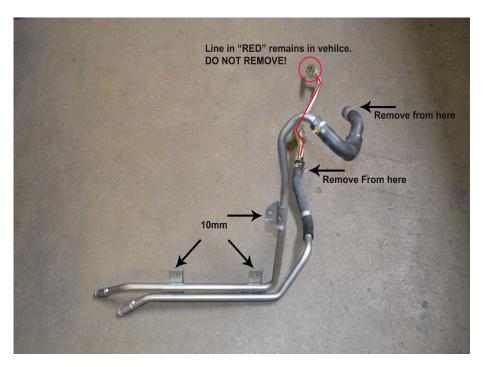
- 15) 2012+ WARNING: YOUR VEHICLE NEEDS TO BE COMPLETLEY COOLED DOWN TO PERFORM THIS NEXT STEP. FAILURE TO DO SO CAN CAUSE SERIOUS SKIN, EYE AND MOUTH BURNS DUE TO EXTREMLY HOT COOLANT THAT IS A PRESURIZED SYSTEM. Remove your Coolant Filler Neck Cap slowly and leave it on top of the Filler Neck. Remove your overflow coolant reservoir cap slowly while relieving the pressure. The pressure should be minimal as long as you followed the instructions and allowed your vehicle ample time to cool down.
 - a) Drain your engine coolant out of your radiator. Inside the radiator, on the passenger/right lower corner there is a "black plastic" Phillips tip drain plug. Unscrew the drain plug and allow your radiator to drain. (This can make a mess so use a container to catch the coolant). Once drained, reinstall and tighten the drain plug. Dispose of the used coolant properly.
 - **b)** Where you removed the oil filter, you will notice and "gold zinc plated" sandwich adapter as shown in the picture below. Remove the lines as shown in the picture below and drain remaining coolant.



- **c)** Remove the gold-zinc plated sandwich adapter. To do this, remove the stud that is circled in yellow in the previous picture.
- **d)** Install the supplied Nissan OEM oil filter stud. Insert the stud hand tight. Using a 12mm Allen Wrench, tighten the stud 1/8 turn clockwise.

e) Remove the factory coolant crossover assembly. The picture below will show you what size and where each mounting bolt is located. Remove the belt off the A/C compressor. To do so, insert a 3/8" ratchet into the tensioner and turn counterclockwise until you can slide the belt off the A/C compressor. Once the assembly (pictured below) is removed, repeat that same process with the tensioner to re-install the belt.

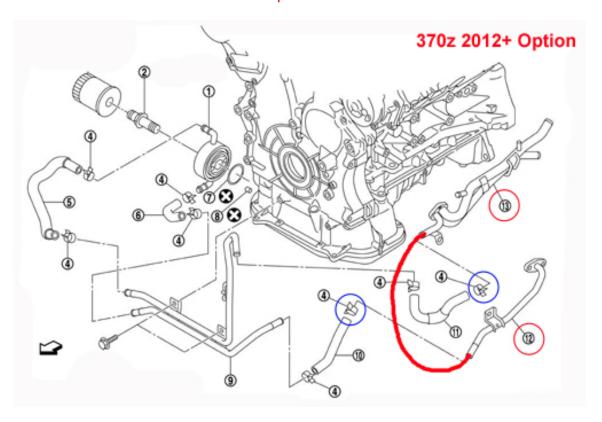
WARNING: When re-installing, ensure the belt is properly routed over all the engine pulleys.



NOTE: For this next step you will need to remove the driver/left side air intake "box" assembly.

f) Shown in the diagram below, line no. 12 and line no. 13 stay on the car. Install the supplied 22-1/2" coolant "loop" line as shown in the diagram and clamp down on each end with the OEM tension clamps which are circled in blue.

WARNING: Zip tie the coolant line to the lower radiator hose to ensure it does not come in contact with the serpentine belt.



16) Put a thin film of oil on the gasket sealing surface of the sandwich adapter and install it to the side of your engine's upper oil pan, as shown in the picture below. Tighten down from the center stud. Take note of the rotation in relation to the lower oil pan. You will also need to turn the harness clip around to the opposite side of the bracket, also shown in the picture.

NOTE: The 2, 8 AN fittings in the sandwich adapter are pre-tightened.



17) On the oil cooler assembly, remove the two dust covers from the top. Put a thin film of oil on the O-ring that is around the 2, Setrab supplied 8 AN fittings. This will ensure that, as you tighten the fittings in place, the O-ring does not bind on either surface and creates a good seal. You may now install and tighten down the 2, Setrab supplied 8 AN fittings. The wrench size is 1-1/16".

NOTE: A wrench that size (1-1/16") has a lot of torque and leverage due to its length, so you can over tighten the fittings very easily. The recommended method of tightening is to insert hand tight, then using the wrench, turn slowly with light-to-medium pressure until the fitting stops.

NOTE: If your vehicle is a NISMO EDITION you will need to reinstall your stock front damper support. There are 2 x 12mm bolts holding it on each side. Use the supplied washers to shim the damper out. Flip the damper over so the thicker side is now on the passenger/right side. You may need to slightly bend your power steering cooler forward so to create an air gap between the damper and fins on the power steering cooler. If installed properly you should have a 1/8-1/4" air gap between the front of the oil cooler and the thin side of the damper. Installed, it should look like the picture below. If you do not have a NISMO EDITION, please skip to Step 18.

18) Connect the 2, 8 stainless steel braided lines to the 2, 8 AN fittings located on the top of the oil cooler. Hand tighten only. Set the rotation of the fitting/hose so the hose is not resting on the vertical support or radiator. You may now tighten the fitting down for good. Repeat this same process for the other hose. Please refer to the previous picture and pictures below for routing and location.

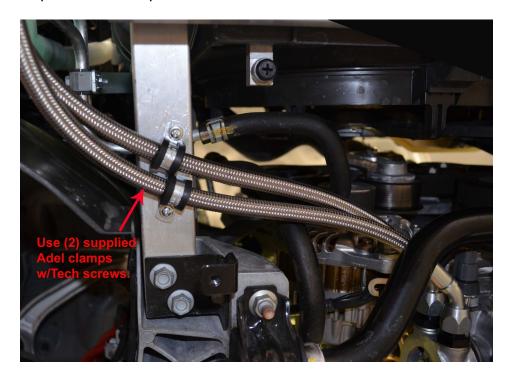
The 90-degree end of each hose attaches to the oil cooler. The 45-degree end of each hose attaches to the sandwich adapter.

WARNING: Do not over tighten the stainless-steel line fittings to the black AN fittings. Over tightening can cause damage to the fitting and potentially cause an oil leak.





19) Refer to the pictures above and below for this step. The longer of the two hoses connects to the bottom of the sandwich adapter and the shorter of the two hoses connects to the top of the Sandwich Adapter. Use the 3, supplied Zip Ties in a similar location as shown in the pictures above. Refer to the picture below for proper mounting of the 2, supplied Adel clamps and tech screws. Attach the top fitting first, hand tight only. Set the rotation of the fitting/hose so the hose is not resting on the sway bar. You may now tighten the fitting down for good. Repeat this same process for the other hose.



- **20)** Ensure that the outer sealing surface of the sandwich adapter is clean of fluids and is dry.
- **21)** Fill your new oil filter 3/4 full with oil. Put a thin film of oil on the gasket sealing surface. Carefully turn the oil filter on its side and install it to the sandwich adapter. We recommend that you only tighten the oil filter hand tight.

NOTE: 2012+ year models will need to follow Step 22. For models 2009-2011, skip to Step 23.

22) Located at the inside, top left of the radiator, remove the air relief plug located in the image below.

NOTE: Put a rag under this opening to catch the excess coolant as it will eventually flow out.



- **a)** Remove the coolant filler cap on the neck as well as the white overflow reservoir bottle.
- **b)** Slowly and steadily, fill the coolant filler neck with 50/50 coolant mixture until coolant starts to pour out of the air relief hole shown in the image above.

NOTE: As soon as the 50/50 coolant mixture pours out of the air relief, stop filling and screw the air relief cap back in.

c) At the white overflow reservoir bottle, fill the 50/50 coolant mixture up to the MAX line located on the back of the bottle. Once the fluid is at that line, cap both filler necks.

NOTE: You will add more 50/50 coolant mixture in a later step.

- **23)** Fill new oil until the dip stick shows the level halfway between the MIN and MAX line. Once this is achieved, reinstall your oil fill cap.
- **24)** You may now start your car. Check for oil leaks around all connection points. The sandwich adapter, sandwich adapter fittings, as well as the two fittings located on the top of the oil cooler. If you notice a leak, turn your car off immediately and eliminate the leak.

25) Once your vehicle has reached operating temperature, shut it off and wait 1 minute prior to checking your oil level. You will most likely need to add 1/2- 3/4 quarts of oil to get the oil level between the MIN-MAX line on the dip stick.

NOTE: 2012+ year models will need to follow Step 26. For models 2009-2011, please skip to Step 27.

26) WARNING: Make sure the vehicle is cooled down prior to removing the cap.

Slowly remove the white overflow reservoir bottle cap and add 50/50 coolant mixture accordingly and reinstall the filler cap. The optimal level is approx. halfway between the MIN and MAX lines.

- **27)** Install the factory tow bar and white foam. For the NISMO edition, clip the wiring harness back into the sheet metal shroud in its mounting locations and reconnect your horn.
- **28)** Install the front fascia. For 2013+ models, plug in your daytime running lights.
- **29)** Install the inner fender well plastic clips.
- **30)** Install the radiator guide.
- **31)** Install the bottom splash guard (also known as the "belly pan").
- **32)** Install driver/left side air intake box assembly.
- **33)** Review your install, ensure that everything looks correct, and that no step has been missed.
- **34)** Safely lower your car back to the ground.

Your Fast Intentions Oil Cooler Kit is now installed. You will now experience lower, and more consistent engine oil temperatures under all driving conditions. For any further questions, please do not hesitate to call us directly.

NOTE: After your installation, check your fluid levels again after driving 10-20 miles to ensure they are at the factory-recommended specifications.