

Z1 370Z / G37 POWER STEERING OIL COOLER INSTALLATION MANUAL



This Installation Manual is intended for the following models:

2009-2020	Nissan 370Z
2008-2015	Infiniti G37

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 370Z / G37 Power Steering Oil Cooler, consult with a Professional Mechanic or contact Z1 Motorsports for more information.

PARTS INCLUDED:

Item	Quantity	Description
1	1	SETRAB Series 1 – 13 Row Oil Cooler Core
2	1	30" Oil Cooler Hose – Cut to fit
3	2	Z1 Custom Power Steering Cooler Bracket
4	6	M6-1.0 x 16mm Flange Head Bolt
5	4	M6 Split Locket Washers
6	4	1/4" Rubber Bonded Washers
7	4	M6 Hex Nuts
8	2	-6 AN Push-On Barb Fittings
9	2	-6 AN to M22 Port Fitting to fit Oil Cooler Core
10	2	M6-1.0 Threaded U-Clip
11	2	Zip Ties
Additional Parts Needed:		
1	1	Quart (1 Liter) Nissan Power Steering Fluid
2	2+	Additional Zip Ties

TOOLS REQUIRED:

- Hydraulic Jack
- (2) 2-Ton (or greater) Jack Stands
- Ratchet
- Ratchet Extension(s)
- Assorted Metric Wrenches (10mm-19mm)
- Assorted Metric Sockets (10mm-19mm)
- Assorted Metric Allen Head Bits
- Assorted Screwdrivers
- Torque Wrench
- Pliers
- Funnel

SAFETY REQUIREMENTS:

- Always wear safety glasses and any necessary protective garments. If using any fluids, chemicals, or solvents, a respirator is recommended.
- 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.

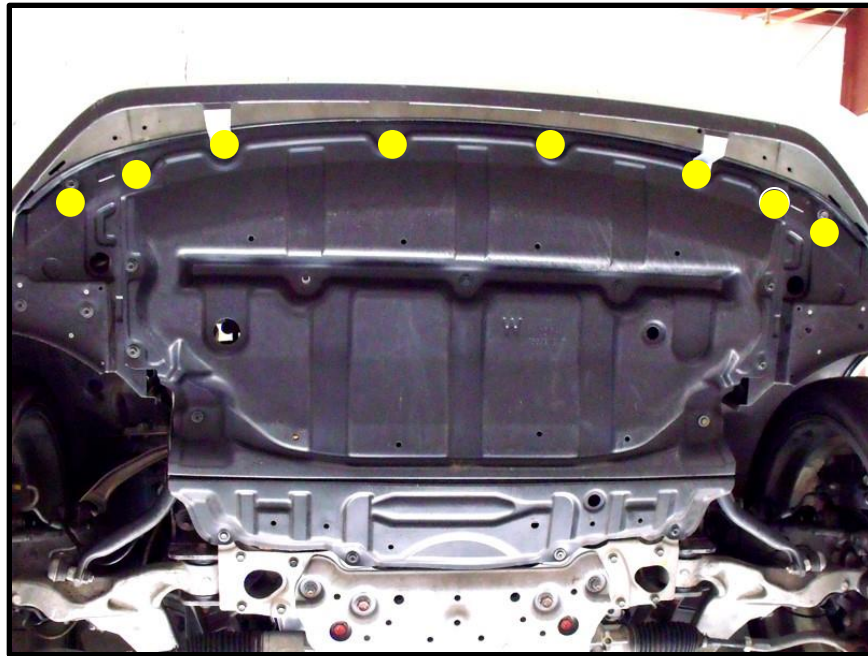
BEFORE YOU BEGIN:

Remove contents from the Z1 Motorsports 370Z / G37 Power Steering Oil Cooler and verify that ALL necessary hardware is present.

PROCEDURE:

1. Assure the car's ignition is in the OFF position and the NEGATIVE (-) battery terminal is disconnected.
2. Place the transmission in Park position (or in Reverse gear if equipped with a manual transmission). Apply the parking brake.

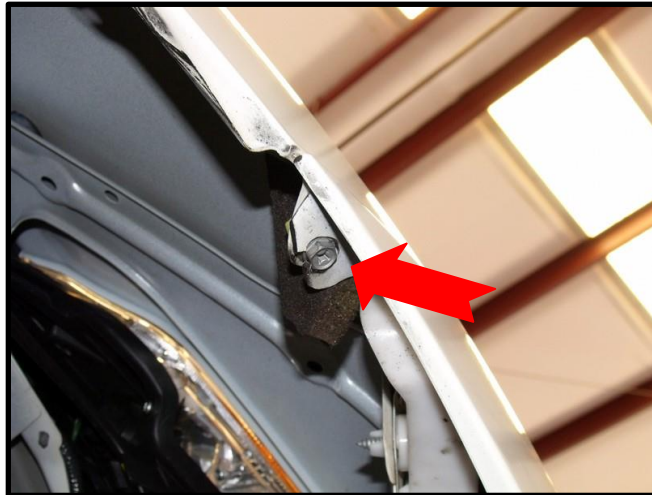
3. Locate proper jacking points on vehicle's chassis (refer to vehicle's Owner Manual). Raise and support vehicle using jack & jack stands.
4. Unlatch and raise vehicle's hood. Apply hood prop.
5. Disconnect the lower engine splash shield from the front fascia. Refer to the image below for the exact location of the fasteners. Fasteners will be 10mm screws.



6. Remove the front fascia radiator air guide. This is done by using a flat blade screw driver and gently popping out the center section of the 7 plastic pop clips located under the hood. The air guide will simply slide up and out from beneath the front fascia. Refer to the image below for the location of the plastic pop clips.
7. You will also need to remove the 7 additional plastic pop clips securing the front fascia. Again, refer to the image below for the location of the plastic pop clips.



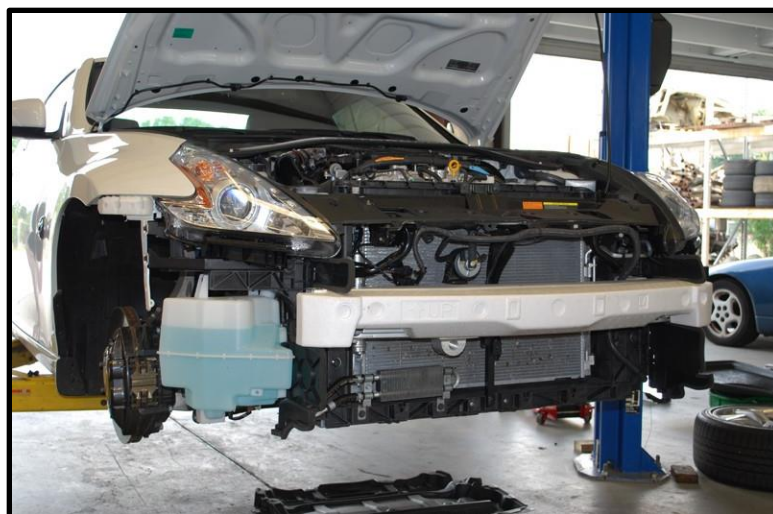
8. Remove the two 10mm plastic screws securing the corners of the fascia to the fenders. There is one screw per side. These can be accessed by gently pulling the front fender liners back from the fascia.



9. Gripping the sides of fascia (circled below) pull the fascia towards you. This part of the fascia snaps in place and will pop loose when a limited amount of force is applied. Once free, carefully remove the fascia from the chassis and set aside.



You should see something similar to the image below.



10. Drain and remove the factory power steering cooler.

A: Remove the four metal hose clamps securing the factory rubber oil cooler lines to the factory metal lines and cooler. Discard the factory rubber hose; **HOWEVER DO NOT DISCARD THE FACTORY HOSE CLAMPS** as these will be reused later.

B: Remove the two 10mm bolts securing the factory oil cooler to the core support. These will be reused during reinstallation of the Z1 SETRAB Core.

C: Remove the factory power steering cooler from the chassis.

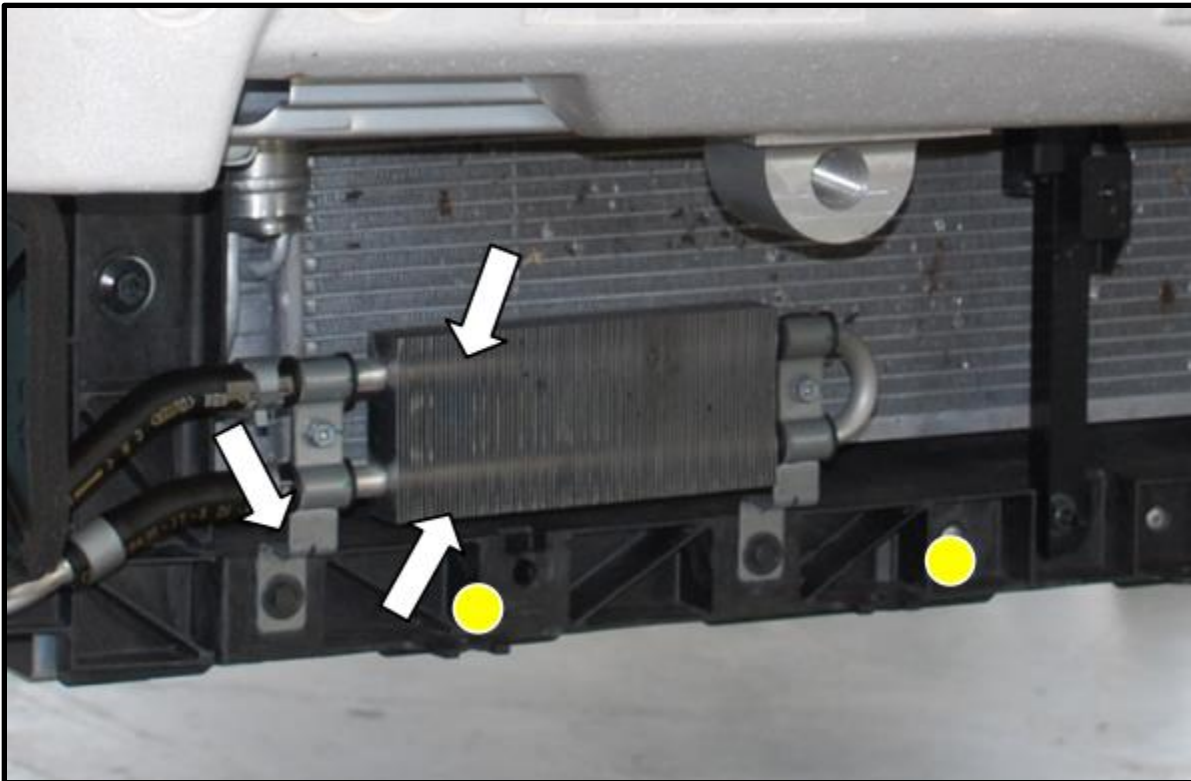
11. Using the supplied hardware, attach the SETRAB core to the Z1 Custom Power Steering Cooler Bracket as shown below.

Insert Bolt through the Oil Cooler Core and Hardware in the following order:

- Oil Cooler Core
- Rubber Bonded Washer (Rubber towards mounting bracket)
- Mounting Bracket
- Split Lock Washer
- Hex Nut



12. You can now position the oil cooler core/bracket assembly on the core support of the vehicle. We choose to mount bracket with the cooler closest to the condenser in anticipation for an intercooler in the future although the bracket can be mounted in either direction. Using the factory power steering cooler's original mounting bolts and location (highlighted below), align the holes on the mounting bracket and reinstall the original M6 x 1.00mm screws removed earlier. (additional bolts & u-clips provided if necessary)



A: Locate the two SETRAB oil cooler core fittings.

B: Using a suitable lubricant (petroleum jelly, oil, etc.), apply a thin layer of lubricant to the threads of the fitting and O-rings. *Only install ONE fitting at this time.*

C: Using Fresh Power Steering Fluid (ATF), it is HIGHLY recommended that the oil cooler core be pre-filled completely. This will help to purge any air that may be present in the Power Steering System, ensure longer power steering rack & pump life, and allow for a much quicker completion of the power steering cooler kit.

D: With the oil cooler core pre-filled, you may now install the second SETRAB fitting onto the oil cooler core. Again, be sure to follow the steps detailed in 12-B.

13. Install the two -6 push-on fittings onto the oil cooler assembly. Again, use a suitable lubricant during assembly. Direct the fittings towards the passenger side of the vehicle (in the direction of factory power steering cooler hard lines) and tighten down the fittings.
14. Locate the supplied Oil Cooler Hose. This hose is specifically designed for power steering / transmission cooler applications. Carefully route the hose so that there are no kinks, bends or pinching of the lines. Enough line has been supplied to do BOTH lines. Be sure to reuse the 4 factory hose clamps that were removed during step 10-A.

Installation Note #1:

Do not use any lubricants or oil when installing the rubber power steering line set. Make sure that both the push-on fittings and the factory metal hard lines are completely dry when installing the hose.

Installation Note #2:

Use of supplied Nissan reusable zip ties is suggested in order to keep the rubber lines neat. Be careful not to over tighten the zip ties as the rubber hose could be pinched or could collapse. The Nissan zip ties can be removed in the event that service is needed.

15. Refill the power steering reservoir with fluid.
16. With the front wheels raised off the ground, start the engine and inspect for any leaks.
17. Once satisfied, begin cycling the steering wheel back and forth (lock to lock). The cyclic motion will purge the remaining air from the power steering system. This step will need to be performed repeatedly and fresh fluid will need to be added.

Installation Note #3:

If you are uncomfortable with running the engine with the front wheels raised. You may perform this operation with the car on the ground. However, the steering wheel will be very difficult to turn for the first few minutes. Having a friend around will help so that you can switch out to prevent from tiring prematurely.

18. Re-install any previously removed hardware, fascia and inner fender liners.
19. Properly lower vehicle from jack stands.
20. Inspect vehicle for loose tools/items
21. Start vehicle. While at idle, check for leaks or faulty operation of power steering cooler kit.
22. Lower hood of vehicle.
23. Perform a final test drive of vehicle.
24. Be sure to check to power steering fluid level after test driving.

END

Additional Technical Support:

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