

Z1 370Z / G37 RACE COLD AIR INTAKE KIT INSTALLATION MANUAL



This Installation Manual is intended for the following models:		
2009-2020 Nissan 370Z		
2008-2013	Infiniti G37	
2014-2015	Infiniti Q40	
2014-2016	Infiniti Q60	

NOTICE:

The following kit has been developed and tested with US Model 370Zs. Repositioning, modification, and/or removal of front-end components may be required when used on a Nismo Edition Model 370Z or other models.

PROLOGUE:

Study these instructions completely before proceeding to assemble. 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 Race Cold Air Intake Kit, consult with a Professional Mechanic or contact Z1 Motorsports for more information.

Parts Included:

Item	Quantity	Description	
1	2	Silicone Reducer Hose, 2-3/4" to 2-1/2"	
2	2	Silicone Reducer, 3" to 2-1/2"	
3	1	Air Intake Pipe – Driver Side	
4	1	Air Intake Pipe – Passenger Side	
5	1	Silicone L-Hose – Driver Side	
6	1	Silicone L-Hose – Passenger Side	
7	2	2.5" Union/Joiner	
8	2	3" Union/Joiner	
9	1	PCV Breather Hose – Driver Side	
10	1	PCV Breather Hose – Passenger Side	
11	2	Bolt, M6-1.0 x 10mm	
12	2	1/4" Washer	
13	4	Constant Tension Clamp	
14	2	3" Pop Charger Filter Element with Clamp	
15	4	Hose Clamp, 2-13/16" to 3-3/4"	
16	12	Hose Clamp, 2-1/3" to 3-1/4"	
17	1	Carb E.O. Sticker	

TOOLS REQUIRED:

- Ratchet
- Ratchet Extension
- Hydraulic Jack
- (2) 2-Ton (or greater) Jack Stands
- Wheel Chock
- Pliers
- Needle Nose Pliers

- 8mm Nut Driver
- 10mm Wrench/Socket
- 14mm Wrench/Socket
- Silicone Spray
- Flat-head Screwdriver
- Phillips-head Screwdriver
- Gloves

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 Race Cold Air Intake Kit and verify that ALL necessary hardware is present.

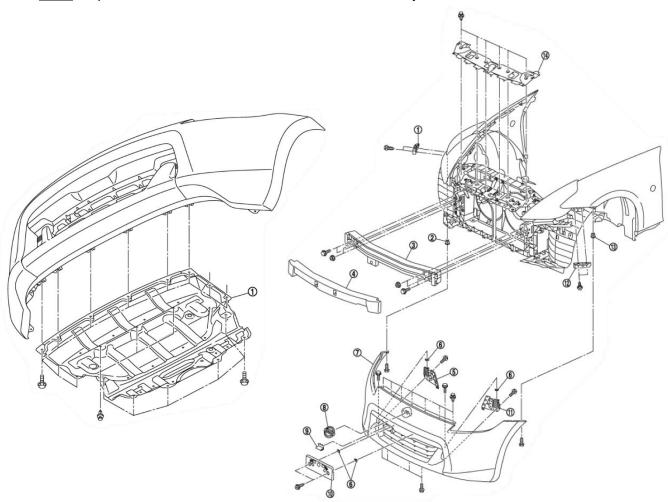
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PROCEDURE:

- 1. Assure the car's ignition is in the OFF position and the NEGATIVE (-) battery terminal is disconnected.
- 2. Place the transmissions 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.

Use the diagram below as reference for the following steps.

Note: Steps 5-9 refer to 370Z models. Please refer to Factory Service Manual for other models.



- 5. Remove the lower engine splash shield (undershroud). Fasteners will be an assortment of 10mm screws and plastic panel clips. Use a flat blade screwdriver to gently pry up the pop clips.
- 6. Remove plastic clips and peel back front wheel liner to reveal (1) mounting screw at each side of vehicle which mounts corner of bumper fascia to the vehicle. Remove mounting screw on each side.

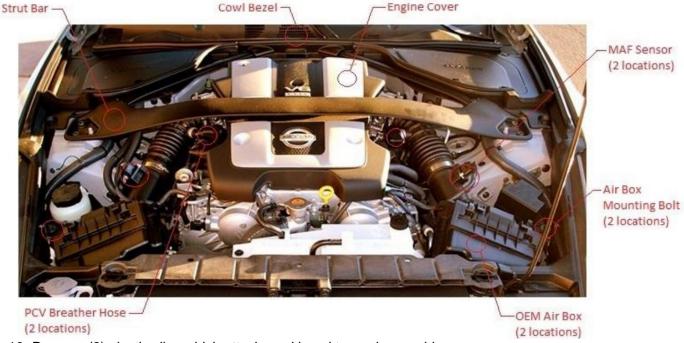
<u>Note:</u> Turn front wheels of vehicle to the inside of the side you are working on for increased accessibility.

7. Remove (7) plastic pop clips securing upper of bumper fascia to vehicle at radiator core support.

Page 13	Part # Z192643	Revision D	4/13/2023	AB

- 8. With a light pull motion, carefully disengage bumper fascia from clips on vehicle just below each headlight. Remove bumper fascia and set aside.
- 9. For extra visibility and accessibility, remove (8) plastic clips which attaches diversion panel to composite radiator core support. Set aside diversion panel.

Use the diagram below as reference for the following steps:



- 10. Remove (2) plastic clips which attach cowl bezel to cowl assembly.
- 11. Carefully pry loose backside of cowl bezel. Firmly pull cowl bezel and set aside.
- 12. Remove (4) bolts and (2) hex nuts which attach strut bar to chassis. Remove strut bar and set aside.
- 13. Locate and unplug (2) MAF sensor connectors as well as its plastic harness clips.
- 14. Remove (2) acorn nuts and (2) bolts which attaches engine cover to engine. Remove cover and set aside.
- 15. Remove (1) bolt which attaches passenger side Intake canister to plenum.
- 16. Using needle-nose pliers, loosen and pull OEM PCV Breather hoses at valve cover end.
- 17. Loosen hose clamp at each throttle body.
- 18. Remove bolt which mounts each OEM air box to chassis.
- 19. Remove plastic clip and bolt which attaches air intake duct to composite radiator core support near each OEM air box. Remove air intake ducts.
- 20. Using a light pull motion, loosen OEM air boxes from vehicle.
- 21. Completed OEM air intake assembly should be loose at this point. Remove intake boxes, hoses, and intake balancing hose from vehicle, as shown.



Page 4 Part # Z192643	Revision D	4/13/2023	AB
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- 22. Locate (2) 2.75"-2.5" reducers and (2) hose clamps. Position reducer and loose hose clamp over each throttle body. tighten hose clamps (as shown).
- 23. Locate (2) Z1 PCV breather hoses. Transfer (4) Clamps from OEM air intake assembly. Position hoses with clamps over each valve cover nipple.
- 24. Remove (2) bolts which mount each MAF sensor to the OEM air intake assembly. Transfer sensors and bolts to MAF sensor mounting boss of Z1 Air Intake Pipes. Tighten mounting bolts.

Note: Be sure to install MAF sensor onto air intake pipe facing the same direction removed from factory air intake box. There is an arrow on each MAF flange showing the direction of airflow.



25. Locate driver side air intake pipe and hose clamp. The MAF sensor should be on the bottom side of the air intake pipes, with the arrow showing the direction of airflow pointing towards the throttle bodies. Position loose clamp over throttle body reducer and slide in air intake pipe. Do not tighten hose clamp at reducer yet.

<u>Note:</u> Use of silicone spray or other dissolvable lubricant is recommended for all assembly which involves silicone reducers or hoses.

- 26. Position PCV breather hose over air intake pipe nipple. Slide and tighten OEM hose clamp over nipple.
- 27. Locate driver side silicone L-hose. To differentiate the driver and passenger L-hoses, when oriented with the Z1 logo on top, the longer side will have a slight bend towards the throttle bodies, the passenger side will form an "L" and the driver side will form a backwards "L". Insert hose through composite radiator core support at driver side.

<u>Note:</u> Silicone hose will conform to profile of through hole, however removing material from composite radiator core support is advised for optimal performance.

- 28. Once through core support, position loose hose clamp over silicone hose and fit onto air intake pipe. Do not tighten clamp yet.
- 29. Install 2.5" metal union at the end of silicone L-hose and secure with hose clamp.
- 30. Install 3"-2.5" silicone reducer onto metal air filter union at end of silicone L-hose, secure with clamp.
- 31. Install 3" metal union at the end of the 3" reducer and secure with hose clamp.
- 32. Re-orient reducers, air intake pipe, and silicone L-hose to relieve any structural stresses. Once complete, tighten hose clamps located at throttle body and at silicone L-Hose & air intake pipe.
- 33. Plug MAF sensor harness back onto MAF sensor.
- 34. Repeat steps #25 through #31 for passenger side air intake pipe.
- 35. Reference the Factory Service Manual for removal of the OEM Crash Bar.

Note: Refer to diagram on pg. 3 to assist.



Page 5	Part # Z192643	Revision D	4/13/2023	AB

36. Install modified crash bar.

Note: See images provided at the end of this manual for specifications on how to modify the OEM Front Crash Bar. Z1 also offers a modification service with 10 day lead time. Do NOT drive your vehicle without a front crash bar.

- 37. Locate Z1 Air Filters.
- 38. With a clamp, slide filters onto 3" air filter union and tighten clamp.



<u>Note:</u> Passenger side horn may interfere with air filter assembly. To resolve this issue, simply bend horn mounting bracket towards the radiator until horn is clear of the air filter.

39. Locate (2) M6 10mm bolts and (2) 1/4" washers. Replace OEM bolts circled in picture below. Replacement bolts are shorter than OEM and should remedy interference with silicone hoses.



Note: Image above is shown with 3" intakes installed. The circled bolts in the image above should still be replaced when installing the 2.5" Race Cold Air Intake Kit.

- 40. Follow steps #5 through #9 in reverse order to reinstall front bumper fascia.
- 41. Re-Install engine cover (if desired). Re-Install strut bar and cowl bezel.
- 42. Properly lower vehicle from jack stands.
- 43. Inspect vehicle for loose tools/items.
- 44. Start vehicle. While at idle, check for leaks or faulty operation of Air Intake Kit.

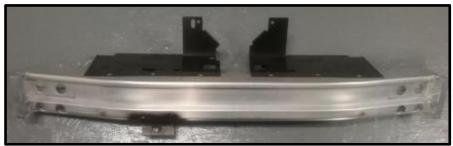
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- 45. Locate the C.A.R.B. exemption sticker. The sticker must be readily visible under the hood in order for an emissions inspector to easily see it when the vehicle is required to be tested for emissions. It is NOT recommended to affix the label to any equipment that is easily removable from the vehicle.
- 46. Select a suitable location (strut tower, underside of hood, radiator shroud or core support, etc.). Clean the area to remove all debris and dust. Apply the sticker to vehicle.
- 47. Lower hood of vehicle.
- 48. Perform a final test drive of the vehicle.



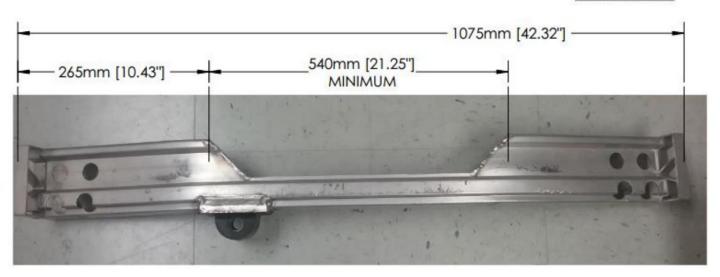
370Z Crash Bar Modification Specifications

<u>Note</u>: Nismo model vehicles have a plate riveted to the crash bar (as shown). To utilize the Z1 Air Intake Kit, this plate will need to be modified or removed.





WELDING DETAIL



END

Additional Technical Support:

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

Page 7 Part a	# Z192643 Revision D	4/13/2023	AB
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