

Z1 370Z / G37 TRANSMISSION MOUNT INSTALLATION MANUAL



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

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 Transmission Mount, consult with a Professional Mechanic or contact Z1 Motorsports for more information.

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PARTS INCLUDED:

Item	Quantity	Description
1	1	Z1 Transmission Mount

TOOLS REQUIRED:

- Hydraulic Jack
- (2) 2-Ton (or greater) Jack Stands
- Ratchet
- Ratchet Extension(s)

- Assorted Metric Sockets (up to 21mm)
- Assorted Metric Wrenches (up to 21mm)
- Assorted Metric Allen Wrenches
- Torque 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 370Z / G37 Transmission Mount and verify that ALL necessary hardware is present.

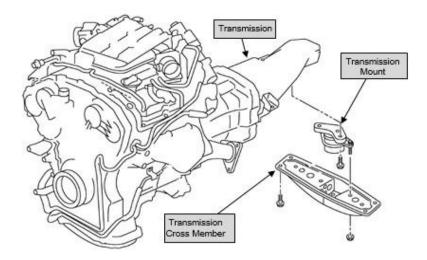
PROCEDURE:

- 1. Place the transmission in Park position (or in Reverse gear if equipped with a manual transmission). Apply the parking brake.
- 2. Locate proper jacking points on vehicle's chassis (refer to vehicle's Owner Manual). Raise and support vehicle using jack & jack stands.
- 3. Unlatch and raise vehicles hood. Apply hood prop.
- 4. Remove (4) bolts securing the transmission cross member to the chassis.





5. Remove (2) nuts securing the transmission cross member to the OEM transmission Mount.



Note: Take note of the orientation of the OEM transmission mount.

- 6. Remove (2) bolts securing the OEM transmission mount to the transmission.
- 7. Locate the Z1 Transmission Mount.
- 8. Orient the Z1 mount the same as the OEM mount. Attach Z1 mount to transmission reusing the OEM hardware removed in step #6. Torque bolts to <u>36ft-lbs</u>.
- 9. Reattach the transmission cross member to chassis reusing the OEM hardware removed in step #4. Do not fully tighten the bolts at this time. Be sure to pay attention to the directional arrow stamped on the cross member. The arrow should be pointing towards the front of the vehicle once installed
- 10. Align the holes of the cross member with the holes of the Z1 mount's lower body. Twist the lower body by hand if necessary. Secure with OEM hardware removed in step #5. Torque all nuts and bolts on cross member to 36ft-lbs.

Servicing and Adjustment Instructions:

The Z1 370Z Transmission Mount has been updated to improve serviceability and no longer uses an adjuster plate. The instructions below and diagrams show the old version (sliver) with the adjuster plate. If you have a new version (black) you can ignore the steps about the adjuster plate and set screw and just replace the bushings and reassemble.

Disassembly of Solid Bushings Mount:

Each of the Z1 Transmission Bushings are threaded. You will need to firmly grasp or secure the lower body before disassembly.

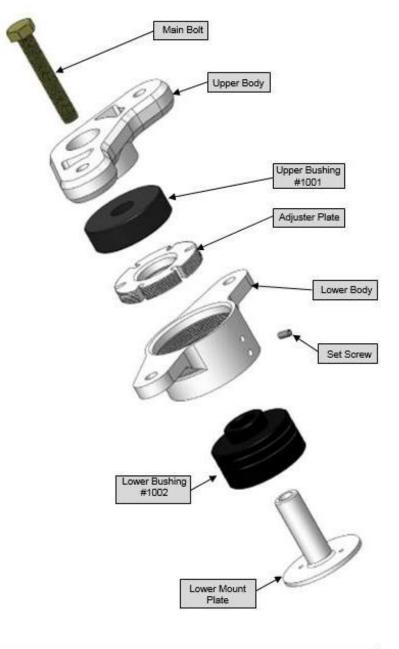
- 1. Use a suitable tool to grasp the lower aluminum bushing, unscrew from main bolt. A punch can also be used to break the bushing free.
- 2. Once the lower bushing has been removed, you should be able to take a hammer and lightly tap the end of the main bolt to remove the inner assembly from the transmission mount's lower body.
- 3. Use a suitable tool to grasp the upper aluminum bushing, unscrew from main bolt. A punch can also be used to break the bushing free.

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Assembly:

If you are switching from the Z1 Solid Aluminum Transmission Mount to the Z1 Transmission Mount, please follow the below reassembly instructions. If you are switching from urethane to aluminum bushings follow the steps on the following page.

- 1. Remove (2) Z1 Aluminum Transmission Mount bushings.
- Remove the set screw in the side of the lower body.
- Position the adjuster plate ~15.2mm from the bottom of the lower body. Reinstall set screw in the lower slot. You will likely not hit exactly 15.2mm due to the slots in the adjuster plate but get as close as possible.
- 4. Using two new energy suspension bushings, orient the bushings so that the #1002 bushing is ON BOTTOM and the #1001 bushing is on top of the adjuster screw. Use the diagram at right for reference.
- 5. Insert lower mount plate into lower bushing.
- 6. Place upper body on top of upper bushing. Use the image at the bottom of this manual to ensure it is in the correct orientation.
- 7. Apply red Loctite to main bolt. Re-insert main bolt into assembly. Hand tighten.
- 8. While securing the lower mount plate, torque main bolt to <u>80in-lbs</u>.
- 9. Reinstall transmission mount.
- 10. Perform a final test drive of the vehicle.



Please note that additional vibrations and noise should be expected following the installation of the Z1 Motorsports 370Z/G37 Solid Aluminum Transmission Mount. The increase in vibrations felt and noise heard is normal. This is the result of the Aluminum Bushings being completely solid and not allowing for ANY noise/vibration insulation.

Benefits of the Z1 Motorsports Solid Aluminum Transmission Mount over other, replacement non-OEM transmission mounts:

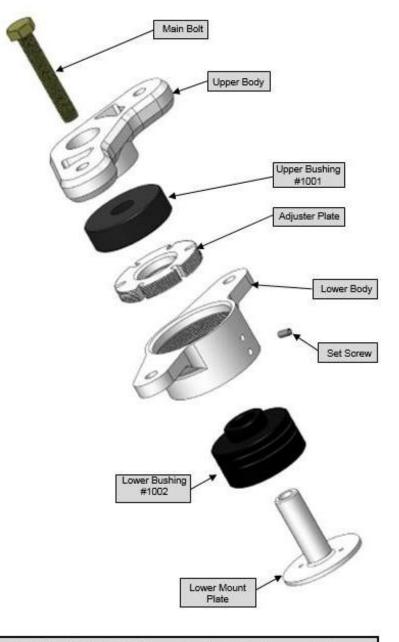
- 100% Solid Aluminum transmission mount. This will allow for complete transfer of torque to the rear wheels and no loss of energy through drivetrain movement.
- Uses 6061-T6 Aluminum construction shaves 1.05 lbs from overall vehicle weight.
- No servicing or maintenance required. Re-buildable design allows for interchanging of the Energy Suspension Urethane Bushings from the Z1 370Z/G37 Urethane Transmission Mount.
- Will fit both the Automatic and Manual Transmissions.

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If you are switching from the urethane bushings to the solid bushings, please follow the below reassembly instructions.

The diagram at right uses urethane bushings and a lower mount plate. For solid bushings follow the instructions below and simply replace the urethane bushings with the solid ones (after repositioning the adjuster plate) and replace the lower mount plate with the flange nut.

- 1. Remove (2) Z1 Aluminum Transmission Mount bushings.
- 2. Remove the set screw in the side of the lower body.
- 3. Position the adjuster plate all the way at the top against the shoulder of the lower body. Reinstall set screw in the upper hole.
- 4. Place the main bolt through the upper body and with a touch of Loctite, thread one of the solid bushings fully onto the bolt.
- Position the lower body and adjuster plate onto the main bolt. Use the image at the bottom of this manual to ensure it is in the correct orientation.
- 6. With a touch of Loctite thread the second lower solid bushing onto the main bolt under the lower body.
- 7. Apply red Loctite to the bottom flange nut.
- 8. Torque bottom nut to 25ft-lbs.
- 9. Reinstall transmission mount.
- 10. Perform a final test drive of the vehicle.



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- Uses 6061-T6 Aluminum construction shaves 1.05 lbs from overall vehicle weight.
- No servicing or maintenance required. Re-buildable design allows for interchanging of the Energy Suspension Urethane Bushings from the Z1 370Z/G37 Urethane Transmission Mount.
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The screw in the lower body will face where shown with the arrow in the image below.



END

Additional Technical Support:

Contact Z1 Motorsports at info@z1motorsports.com

Or call 770-838-7777 between 9am and 6pm ET

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