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# Z1 350Z / G35 URETHANE TRANSMISSION MOUNT INSTALLATION MANUAL



This Installation Man	ual is intended for the following models:
2003-2008	Nissan 350Z
2003-2006	Infiniti G35 Sedan
2003-2007	Infiniti G35 Coupe

#### 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 350Z / G35 Urethane Transmission Mount Kit, consult with a Professional Mechanic or contact Z1 Motorsports for more information.

	Dovt # 7101102		6/11/2021	4.5
Page 1	Part # 2191183	Revision A	6/14/2021	AB

### Parts Included:

Item	Quantity	Description
1	1	Z1 Urethane Transmission Mount

## TOOLS REQUIRED:

- Ratchet
- Metric Ratchet Wrenches
- Metric Sockets
- Metric Wrenches
- Gloves

# Torque WrenchRatchet Accessories (extensions)

- Hydraulic Jack
- (4) 2-Ton (or greater) Jack Stands

## **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 350Z / G35 Urethane Transmission Mount Kit and verify that ALL necessary hardware is present.

#### Please note:

This installation manual is intended to be used as a guide with the installation and servicing of the Z1 Motorsports 350Z / G35 Urethan Transmission mount ONLY. This manual does not include or offer any suggestions for either removing the exhaust system or any other component not directly related to the transmission mount.

## **DISASSEMBLY:**

- 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. IF NECESSARY, remove the mid-exhaust section (Y-pipe) located just after the catalytic converters. \*\*Due to the large variation of exhaust systems on the market, not all exhaust systems need to be removed in order to facilitate the removal of the transmission brace cross member and mount.

<u>Example</u>: The momentum single exhaust install on the Z1 Motorsports G35 Shop Car does not require the removal of the exhaust due to its routing around transmission cross member. See image at right:

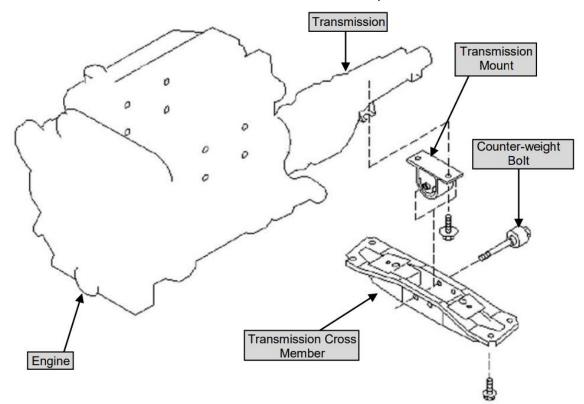


	Page   <b>2</b>	Part # Z191183	Revision A	6/14/2021	AB
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6. Using either a floor jack, transmission jack or other suitable supporting method, remove the weight of the transmission from the cross member slightly.



Using the below diagram as a parts guide, refer to this image for part reference in order to complete the removal of the OEM transmission mount as well as to install the Z1 Motorsports Urethane Transmission Mount.

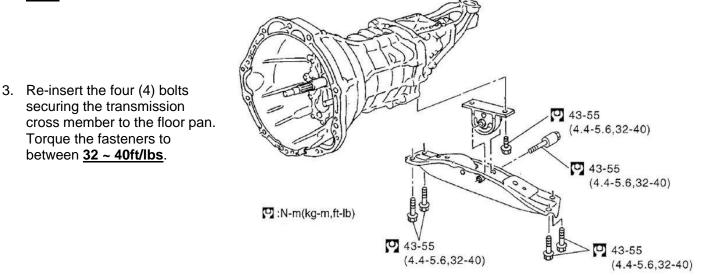


- 7. Remove the (4) bolts securing the transmission cross member to the floor pan of the vehicle. (DO NOT discard these bolts)
- 8. Remove the large counter-weight bolt securing the transmission cross member to the OEM transmission mount (DO NOT discard this bolt).
- 9. Remove the (2) bolts securing the OEM transmission mount to the transmission housing. (DO NOT discard these bolts)

Page   <b>3</b>	Part # Z191183	Revision A	6/14/2021	AB

## **INSTALLATION:**

- Install the Z1 Motorsports 350Z/G35 Urethane Transmission Mount onto the transmission housing using the two (2) previously removed bolts. The Z1 Motorsports Urethane Transmission Mount can be installed in either direction. The slotted body allows for this as well as for some adjustment in the event that the motor has been lowered or chassis deflection. Torque the fasteners to between <u>32 ~ 40 ft/lbs</u>.
- Re-install the transmission cross member. Be sure to pay close attention to the proper orientation of the cross member in order to facilitate proper alignment. Use the counter-weight bolt to secure the transmission cross member to the Z1 Motorsports Urethane Transmission Mount. Torque the bolt to between <u>32 ~ 40</u> <u>ft/lbs</u>.



- 4. Remove the Transmission Jack from the vehicle.
- 5. Re-install any exhaust components previously removed (if required).
- 6. Remove vehicle from Jack Stands and re-install any other previously removed hardware.
- 7. Perform a final Test Drive of the vehicle.

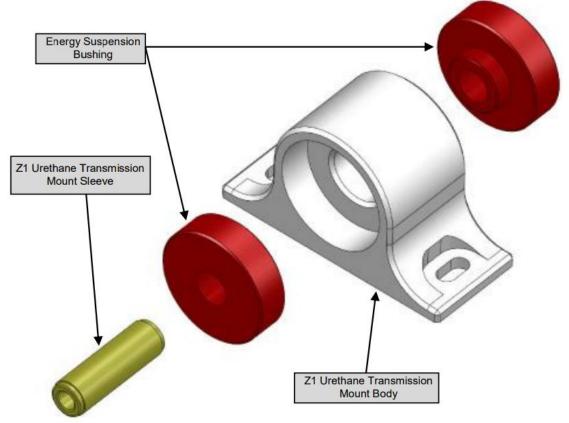
Please note that additional vibrations and noise should be expected following the installation of the Z1 Motorsports 350Z/G35 Urethane Transmission Mount. The increase in vibrations felt and noise heard is normal. This is the result of the Urethane Bushings being much firmer than the soft, weak OEM Transmission Mount.

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

- Semi-solid and will not transmit AS MUCH noise and vibration as a true solid aluminum transmission mount.
- Uses Energy Suspension bushings custom made for Z1 Motorsports.
- No servicing or maintenance required.
- Re-buildable design allows for replacement of the Energy Suspension Urethane Bushings IF NEEDED!
- By using Polyurethane bushings, the proper amount of give and movement is allowed to prevent damage to critical transmission components when subjected to extreme driving and hard launches.
- Will fit both the Automatic and Manual Transmissions.

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#### Z1 Motorsports 350Z / G35 Urethane Transmission Mount Bushing Replacement Instructions:



#### **Disassembly:**

- 1. Press out the Z1 Urethane Transmission Mount Sleeve from assembly.
- 2. Pry out one or both of the Energy Suspension Urethane Bushings. One bushing can be pried out with a flat blade screwdriver. The remaining bushing can be pressed out by placing a socket inside of the Z1 Urethane Transmission Mount Body.
- 3. Using Brake Cleaner or another suitable solvent, clean the inner bore of the Z1 Urethane Transmission Mount Body.

#### Assembly:

- 1. Using two new Energy Suspension Urethane Bushings, orient the bushings so that the inner cylinder is facing one another as shown above. Place the newly created assembly in a press and gentle press the bushings into the body. Make sure even pressure is applied. The bushings will stick out past the Z1 Urethane Transmission Mount Body just slightly.
- 2. Press the Z1 Urethane Transmission Mount Sleeve into the assembly using a hydraulic press. Be sure to watch the Energy Suspension bushings and ensure that they do not press out during this final step of assembly.

### <u>END</u>

#### Additional Technical Support:

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

	Page   <b>5</b>	Part # Z191183	Revision A	6/14/2021	AB
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