

Z1 Z33, V35 SOLID STEERING RACK BUSHING KIT INSTALLATION MANUAL



This Installation Manual is intended for the following models:

2003-2008	Nissan 350Z
2003-2007	Infiniti G35 Coupe
2003-2008	Infiniti G35 Sedan

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 Z33, V35 Steering Rack Solid Bushing Kit, consult with a Professional Mechanic, or contact Z1 Motorsports for more information.

PARTS INCLUDED:

Item	Quantity	Description
1	1	Rack Half
2	1	Rack Clamp
3	2	Front Bushing
4	2	Rear Bushing
5	2	M10 x 1.25 Socket Head Screw, 30mm

TOOLS REQUIRED:

- Hydraulic Jack
- (2) 2-Ton (or greater) Jack Stands
- Ratchet
- Ratchet Extension(s)
- Assorted Metric Wrenches
- Assorted Metric Sockets
- Torque Wrench
- Hammer

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 Z33, V35 Steering Rack Solid Bushing Kit 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. Place your Front and Rear Bushings in a freezer. This will help ease Bushing installation in *Steps 14-15*.
4. Remove and set aside the Front Subframe Brace if applicable. G35 Sedans do not have one from the factory.

5. If the Front Subframe Brace was removed, reinstall the (2) two bolts from the Support Compression Rod Arms as a preventative measure. *Figure 1.*

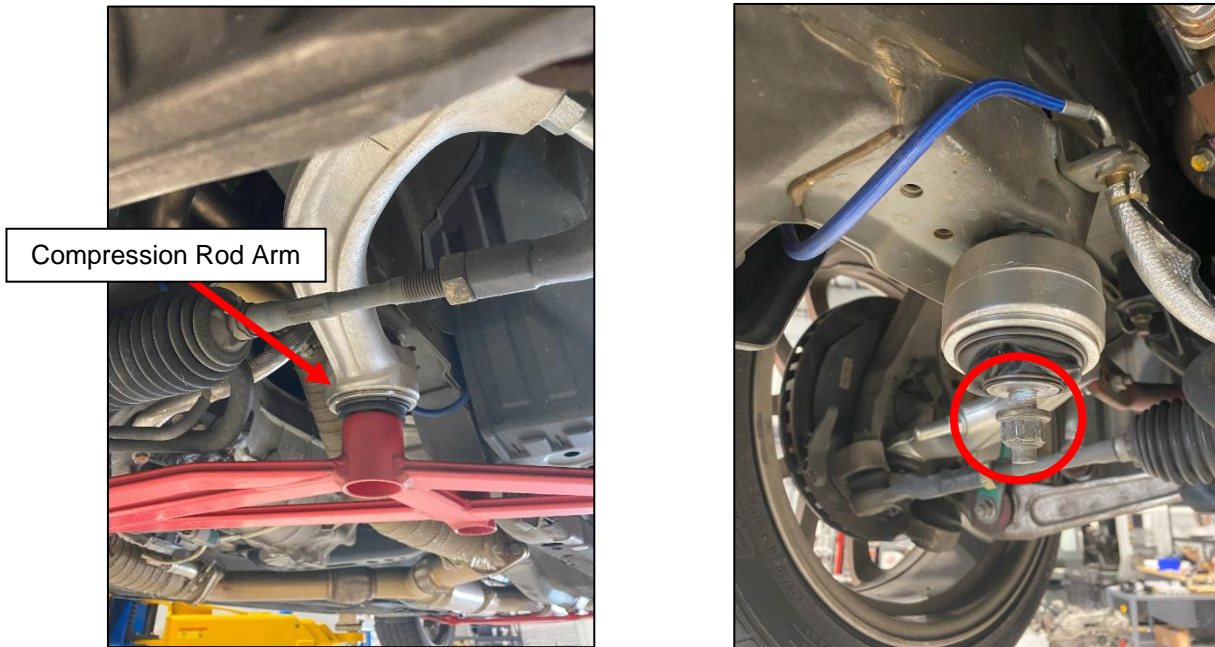


Figure 1

6. Remove the bolt securing the Power Steering Line Bracket to the Steering Rack. Retain this bolt, it will be reused. *Figure 2.*



Figure 2

7. The bolt securing the bracket to the Power Steering Lines can optionally be removed for easier installation later on, but is not necessary.

8. Remove the (2) two bolts that secure the OE Rack Mounting Bracket onto the Steering Rack. *Figure 3.*

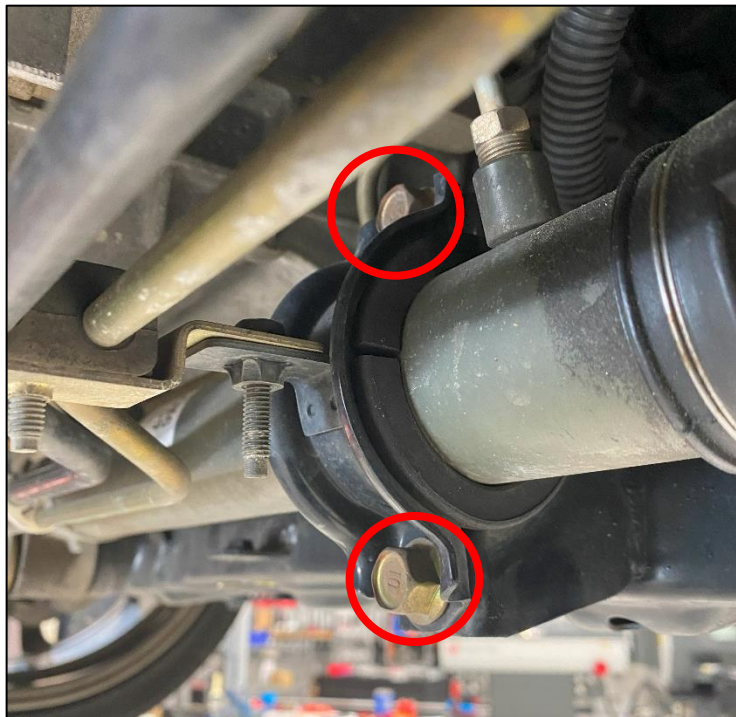


Figure 3

9. Remove the (2) two bolts that secure the Steering Rack to the subframe. Save this hardware as it will be reused. *Figure 4.*

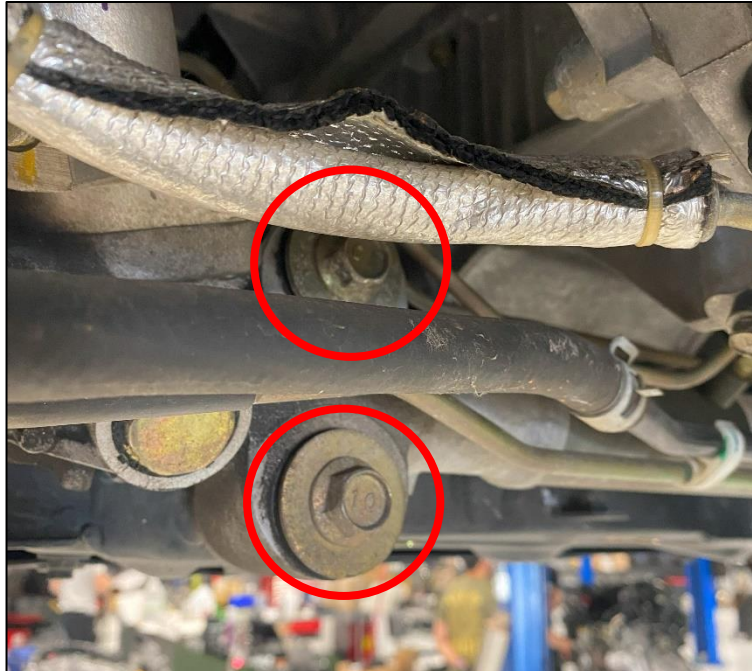


Figure 4

10. Remove and support the Steering Rack with either a pole jack, jack stand, or jack.

11. Remove the OE Rack Mounting Isolator from the Passenger Side of the Steering Rack, shown below in *Figure 5*.



Figure 5

12. Remove the OE Rubber Bushings in the Steering Rack on the Driver's Side. There are multiple ways to go about this, we used a socket and hammer to hammer out our bushings. A C-clamp or Bushing Removal tool will work as well. *Figure 6*.

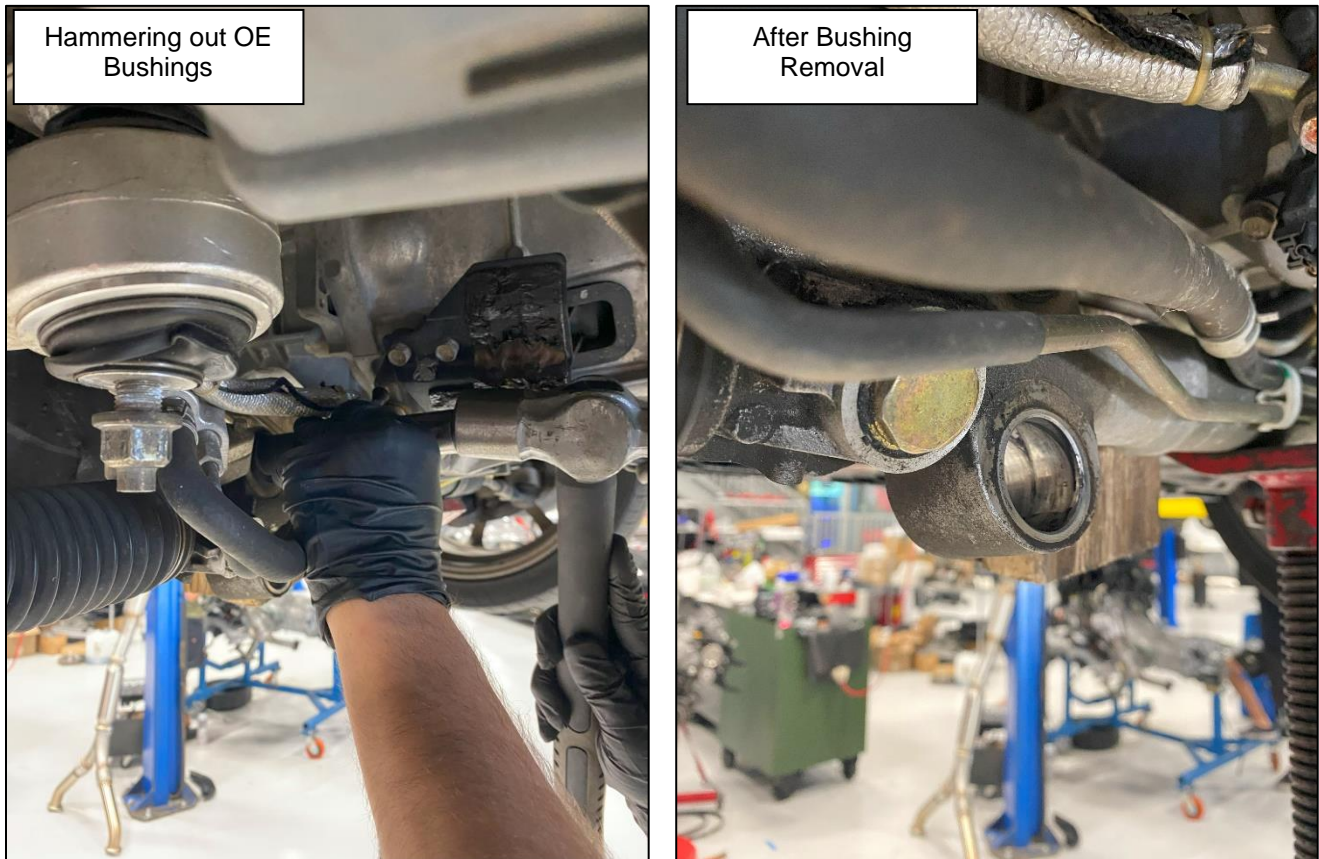


Figure 6

13. Thoroughly clean the inside mating surface of the Steering Rack. The new Solid Bushings will be a press fit and must be installed on a clean surface.
14. Remove your Rear Bushings from the freezer. Install them into the back of the Steering Rack (facing the back of the car). They can be pressed in by hand, or tapped in with a hammer if necessary. The Rear Bushings do not have the lip on the outside surface, as shown in *Figure 7*.

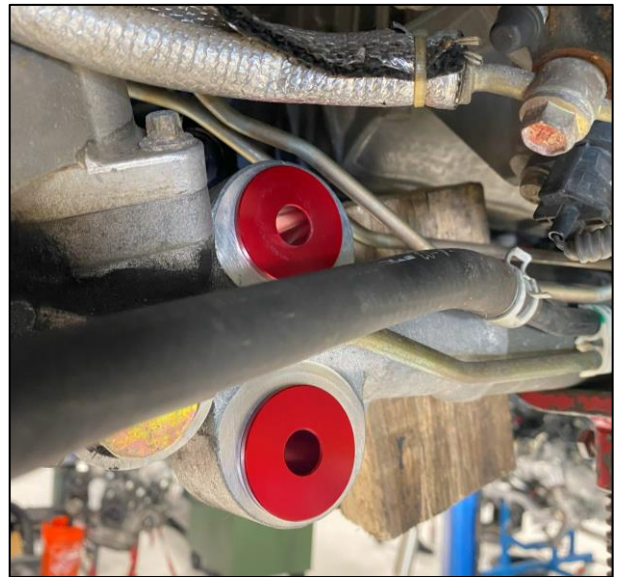


Figure 7

15. Remove your Front Bushings from the freezer. Install them into the front of the Steering Rack (facing the front of the car). They can be pressed in by hand, or tapped in with a hammer if necessary. The Front Bushings have a lip on the outside surface, as shown in *Figure 8*.

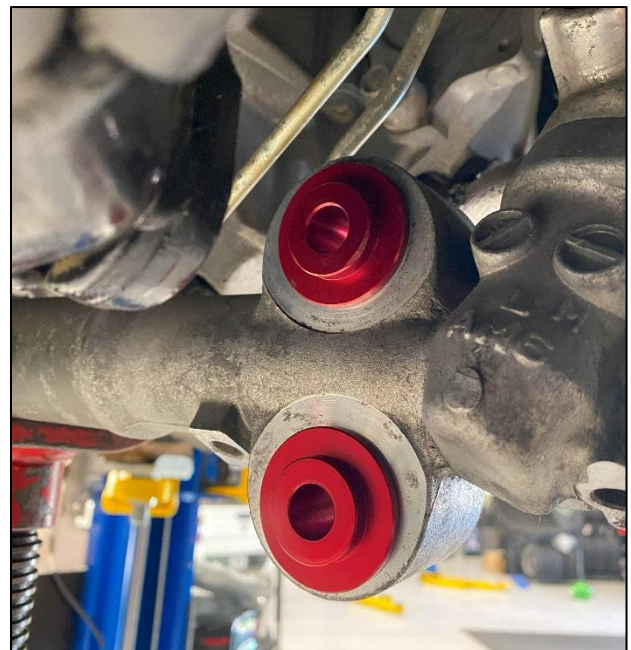


Figure 8

16. Slide the Z1 Rack Half into position behind the Steering Rack. *Figure 9.*



Figure 9

17. Using the bolts removed in *Step 9*, loosely secure the Steering Rack back into place.

18. Locate the Z1 Rack Clamp and the (2) two M10 x 1.25 Socket Head Screws. Place the Z1 Rack Clamp over the Steering Rack and line it up with the Z1 Rack Half. Using a Hex/Allen Key, loosely secure the Z1 Rack Clamp to the subframe with the M10 x 1.25 Socket Head Screws. *Figure 10.*

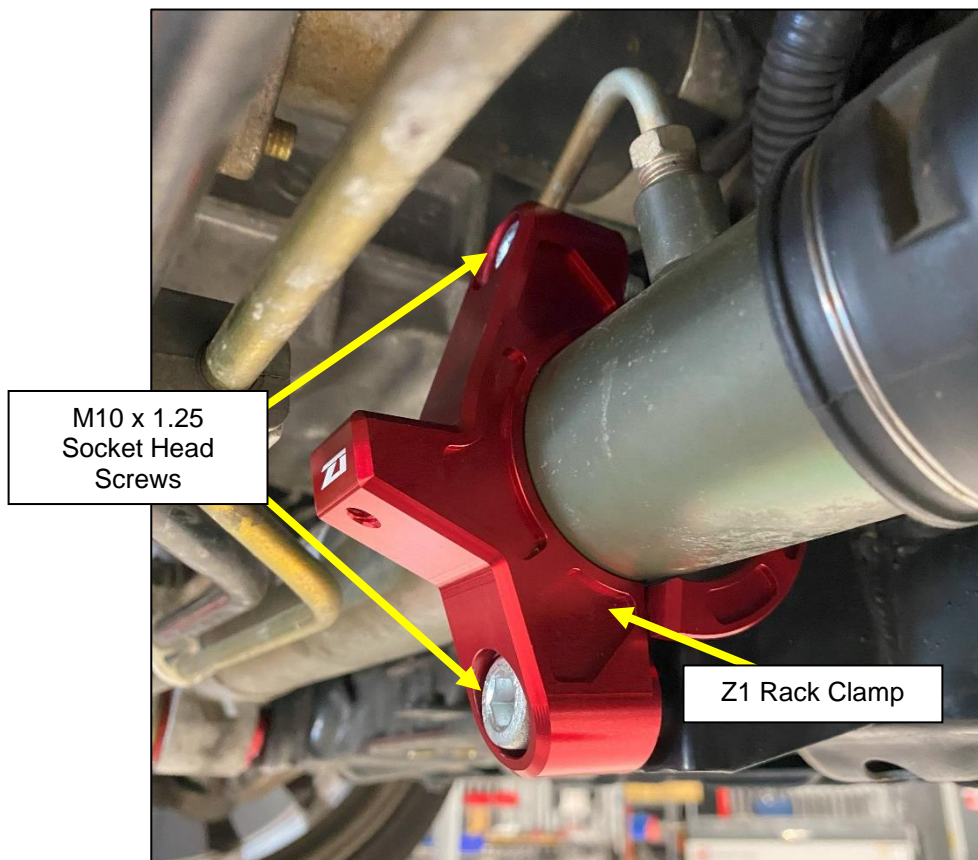


Figure 10

19. Tighten the (2) two OEM Bolts, and the (2) two M10 x 1.25 Socket Head Screws back and forth to evenly secure the Steering Rack to the subframe. Torque the (2) two OEM bolts to **96 ft-lbs.** Torque the (2) two M10 x 1.25 Socket Head Screws to **51 ft-lbs.** *Figure 11.*

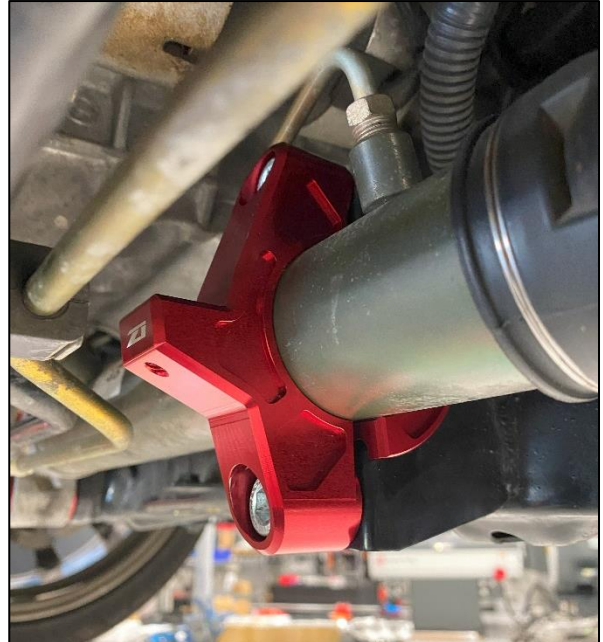
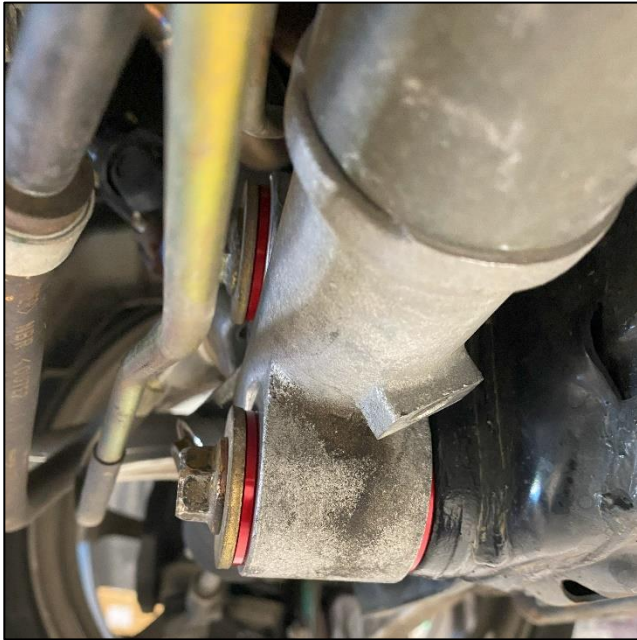


Figure 11

20. Reinstall the Power Steering Line Bracket to the Z1 Rack Clamp. *Figure 12.*



Figure 12

21. Reinstall the Front Subframe Brace if removed in *Step 4*.
22. Account for and remove tools.
23. Safely lower car off of jack stands.
24. Take your car for a test drive.

END

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