

# Z1 OFFROAD REAR SUBFRAME DROP KIT INSTALLATION MANUAL



This Installation Manual is intended for the following models:	
2004-2009	Infiniti QX56 (JA60)
2010-2023	Infiniti QX80 (Z62)
2003-2015	Nissan Armada (TA60)
2004-2011	Nissan Pathfinder (R51)

## 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 Off-Road Rear Subframe Drop Kit, consult with a Professional Mechanic, or contact Z1 Off-Road for more information.

## **PARTS INCLUDED:**

Item	Quantity	Description
1	2	Forward Spacer
2	2	Rear Spacer
3	6	M14 x 1.5 Flange Bolt, 140mm
4	1	Stainless Steel Brake Lines

## **TOOLS REQUIRED:**

- Hydraulic Jack
- (4) 2-Ton (or greater) Jack Stands
- Ratchet
- Ratchet Extension(s)
- Assorted Metric Sockets
- Assorted Metric 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 use properly rated jack stands when working under your vehicle.
- Always keep limbs and parts away from moving drivetrain parts.
- Always turn the ignition to the OFF position and disconnect the NEGATIVE battery terminal.
- Only operate drivetrain in safe space and well-ventilated areas.

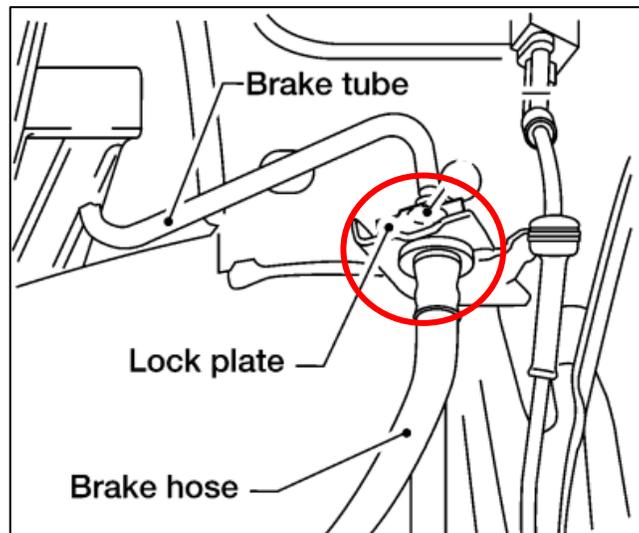
## **BEFORE YOU BEGIN:**

Remove contents from the Z1 Off-Road Rear Subframe Drop Kit and verify that ALL necessary hardware is present.

Extended shocks are required for this installation.

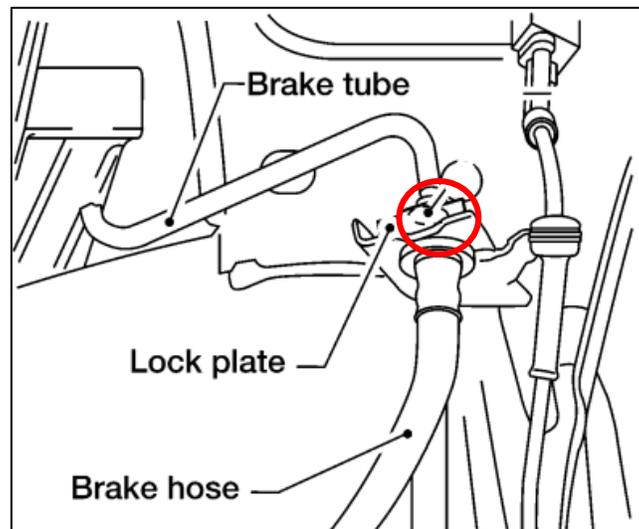
## **PROCEDURE:**

1. Place the transmission in Park position (or in Reverse gear if equipped with a manual transmission). Apply the parking brake.
2. Loosen the Lug Nuts on the Rear Wheels.
3. Raise and support the vehicle using a jack and jack stands. Make sure the Rear Subframe is not one of the jacking points as it will need to be lowered in the upcoming steps.
4. Remove the Rear Wheels and Lug Nuts from the vehicle.
5. Support the Rear Lower Control arm with a Jack and remove the Rear Shocks from the vehicle. Each is held on by (2) two bolts.
6. Disconnect the Rear Brake Lines from the Calipers and the Hard Brake Line:
  - a. Remove Lock Plate from Brake Hard Line and Brake Hose with pliers. *Figure 1.*



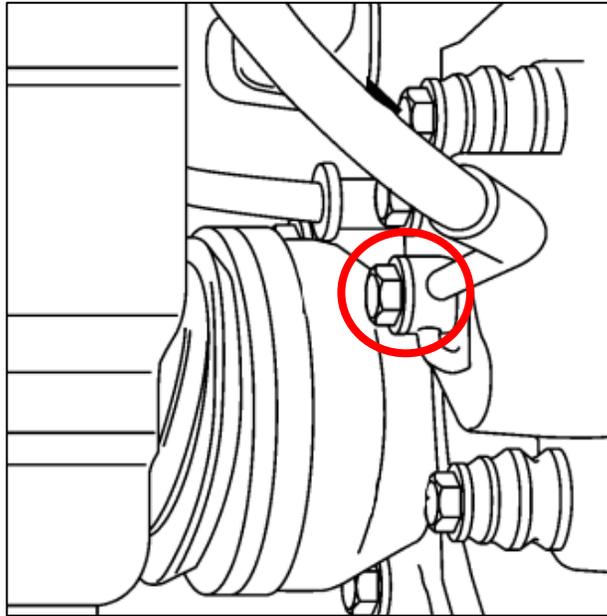
*Figure 1*

- b. Disconnect Brake Hose from Brake Hard Line. Brake Fluid will leak out so prepare a bottle to catch fluid. Clean up any spilled Brake Fluid immediately with Soapy Water as Brake Fluid will damage painted surfaces. *Figure 2.*



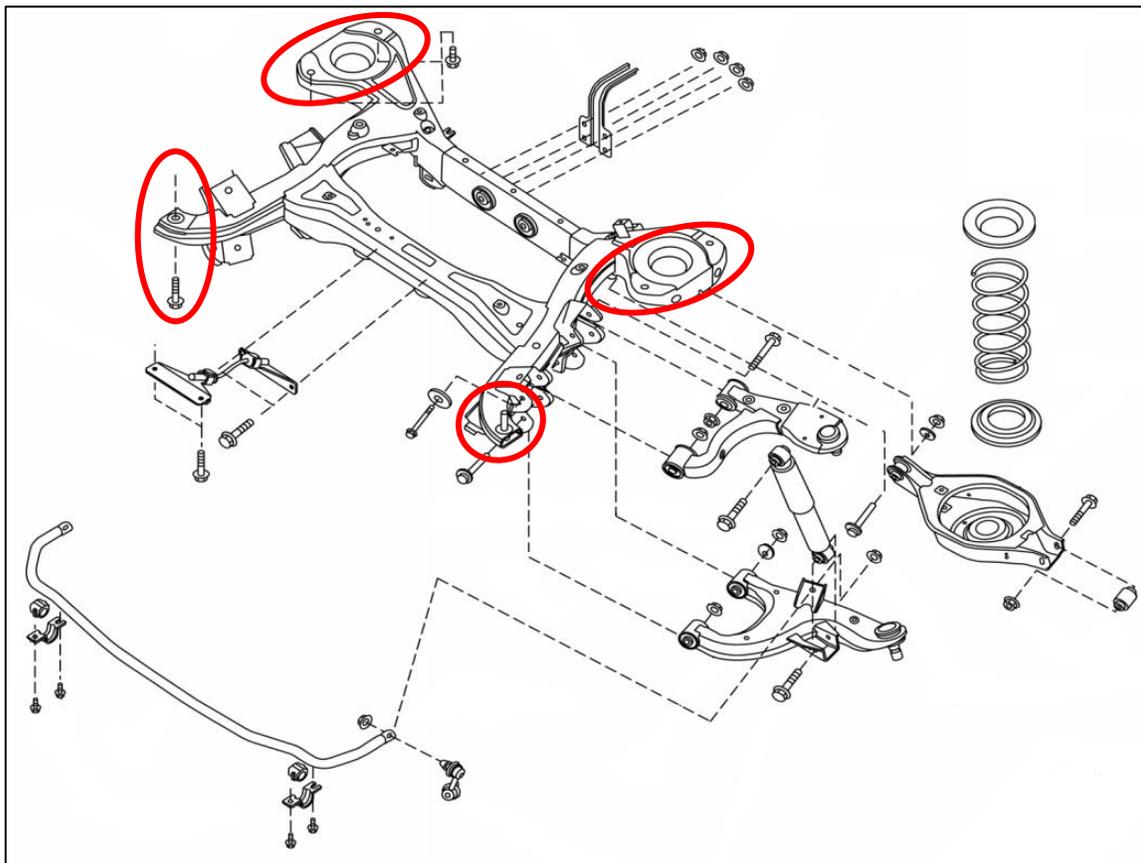
*Figure 2*

- c. Disconnect the Banjo Bolt from the Brake Caliper and remove the OE Brake Hose from the vehicle. Discard the used Copper Washers. Clean up any spilled Brake Fluid. *Figure 3.*



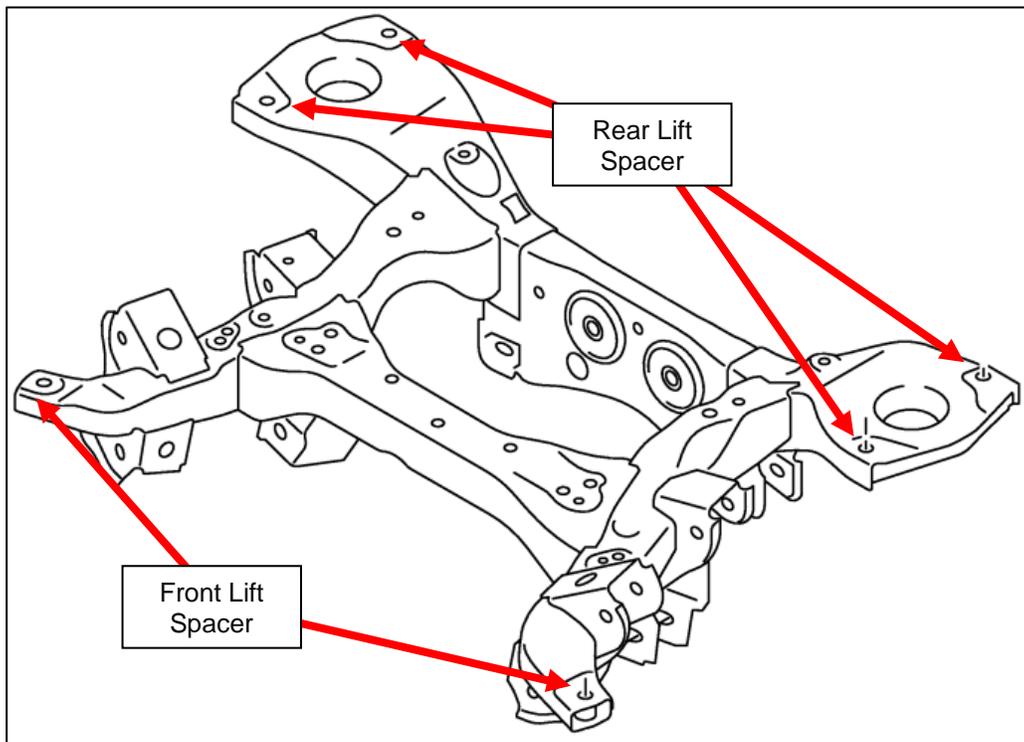
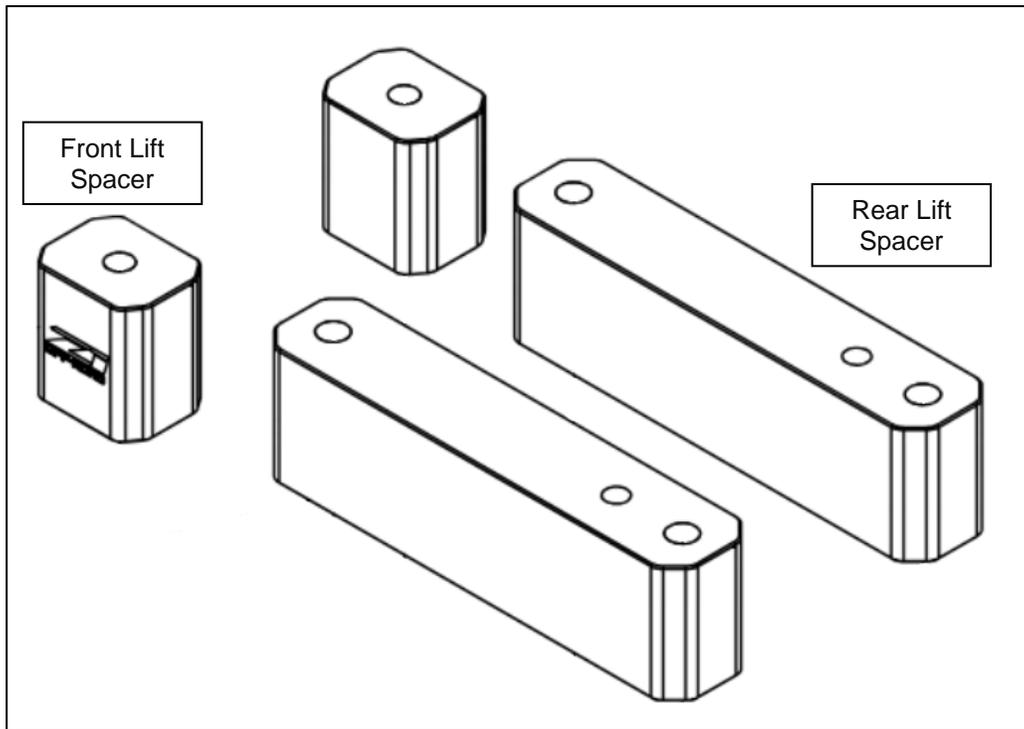
*Figure 3*

7. Support the Rear Subframe with a jack. If you have access to multiple jacks, use them as well.
8. Slowly remove the (6) six Subframe Bolts to allow the Rear Subframe to lower. The Spacers are 75mm or ~3" tall, so the Subframe will need to be lowered that much. Be careful not to let the Subframe completely fall and check for anything snagging when it is being lowered. *Figure 4.*



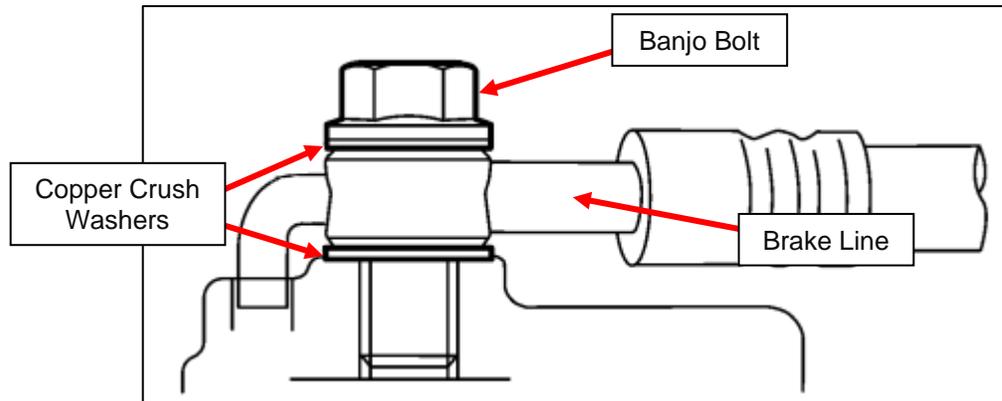
*Figure 4*

9. Position the Subframe Spacers on top of the Subframe. *Figure 5.*



*Figure 5*

10. Using the Jack(s), lift the Subframe back into position.
11. Use the supplied (6) six M14 x 1.5 Flanged Bolts, 140mm in place of the OE Bolts removed in *Step 8* to secure the Rear Subframe to the vehicle. On Armadas, torque the bolts to **188 ft-lbs**. On QX80s, torque the bolts to **177 ft-lbs**. On QX56, torque the front (2) two bolts to **166 ft-lbs**, and the rear (4) four bolts to **148 ft-lbs**.
12. Install the new extended shocks into the vehicle. Torque the lower Shock bolts to **129 ft-lbs**.
13. Locate the Extended Brake Lines. Place a new Copper Crush Washer on the Banjo Fitting and insert the Banjo Fitting through the angled end of the Brake Line. Install another Crush Washer onto the Banjo Fitting. *Figure 6*.



*Figure 6*

14. Install the Banjo Fitting and Brake Line into the rear Brake Caliper. Torque to **13 ft-lbs**.
15. Connect the Brake Hose to the Brake Hard Line. Secure with the OE Lock Plate removed in *Step 6a*.
16. Repeat *Steps 13-15* for the other side of the vehicle.
17. Install the extended Front Shocks in accordance with the Factory Service Manual (FSM).
18. Install the extended Front Brake Lines the Same as the rear Brake Lines.
19. Bleed the Brake System in accordance to the Factory Service Manual (FSM).
20. Reinstall the Rear Wheels and Lug Nuts.
21. Safely lower the vehicle from jack stands.

**END**

**Additional Technical Support:**  
Contact Z1 Off-Road at [info@z1offroad.com](mailto:info@z1offroad.com)  
Or call 678-839-8019 between 9am and 6pm ET