

Z1 NISSAN FRONTIER TITAN SWAP KIT WITH OME BP-51 COILOVERS INSTALLATION MANUAL



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 Nissan Frontier Titan Swap Kit with OME BP-51 Coilovers, consult with a Professional Mechanic or contact Z1 Off-Road for more information.

PARTS INCLUDED:

Item	Quantity	Description
1	1	Z1 Titan FUCA (Driver), Assembled
2	1	Z1 Titan FUCA (Passenger), Assembled
3	2	Z1 Stage 1 Front Lift Spacer
4	4	M8x1.25 Rivet Nut
5	4	M8 x 30mm Flange Bolt
6	2	M10 x 35mm Flanged Bolt
7	4	M10 x 45mm Flanged Bolt
8	1	BP-51 Coilover - LH
9	1	BP-51 Coilover - RH
10	1	Outer Tie Rod - LH
11	1	Outer Tie Rod - RH
12	1	Lower Control Arm - LH
13	1	Lower Control Arm - RH
14	2	Inner Tie Rod End
15	1	BP-51 FIT KIT

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)
- Deep Wall
- Torque Wrench
- Hammer
- 17/32 or 13.5mm drill bit

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.

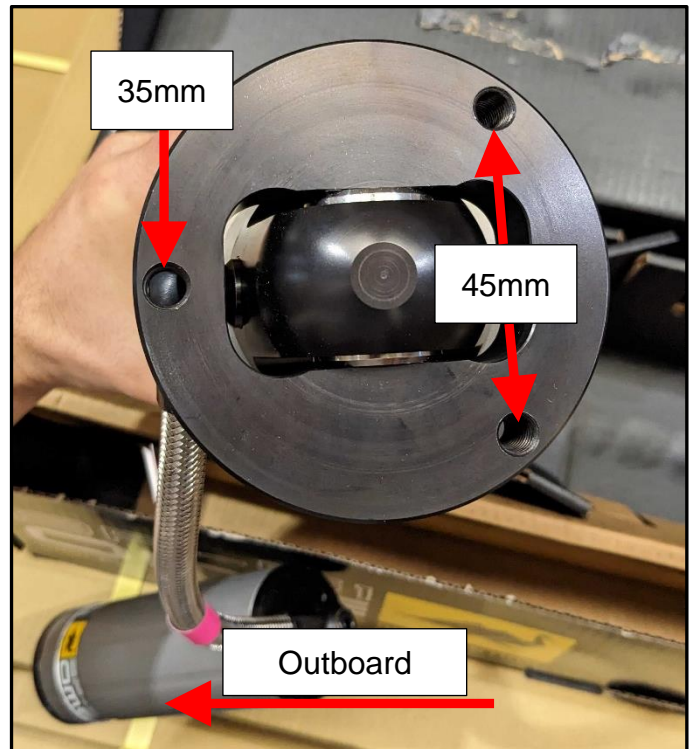
BEFORE YOU BEGIN:

Remove contents from the Z1 Off-Road Nissan Frontier Titan Swap Kit with OME BP-51 Coilovers 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. Loosen lug nuts on front wheels.

3. Locate proper jacking points on vehicle's chassis (refer to vehicle's Owner Manual). Raise and support vehicle using jack & jack stands.
4. Remove front lug nuts and wheels.
5. Fully remove OE brake lines.
6. Install new extended Z1 stainless steel brake lines ([install guide](#)).
7. Remove calipers and rotors.
8. Disconnect wheel speed sensor from knuckle
9. Remove both inner and outer tie rod
10. Remove sway bar and end links
11. Remove strut assembly
12. Remove upper control arm
13. Remove axles
14. Remove lower control arm
15. Install titan lower to frame and knuckle with the offset eccentric bolt lockout kit ([install guide](#))
16. Install larger axles into differential and knuckle
17. Install Z1 Titan upper control arm to frame and knuckle ([install guide](#)). Ignore step #16 in that guide and set the arm's length to XXmm.
18. Locate the OME BP-51 coilovers and Z1 lift spacers.
19. Position the lift spacers on top of the coilovers with the part number over the banjo bolt for the external reservoir.
20. With the reservoir towards the front of the vehicle and the reservoir's line facing out, position the coilover and spacer in place.
21. Secure the top with the provided M10 flange bolts. Start with the shorter 35mm bolts, which will be installed in the outboard hole directly above the banjo bolt. If you install the longer 45mm bolts there, you will permanently damage the coilover. Then install the longer 45mm bolts into the (2) rear holes.
22. Secure the bottom with OE lower strut mount bolts removed earlier.
23. Locate the included fit kit with brackets and hardware.



24. The reservoir will mount to a bracket that mounts to the outside of the frame rails. The driver and passenger side brackets are different. The driver side kit is shown fully installed at right. Install (2) small bolts into the top section of the main bracket. Loosely secure with nuts on the back.

25. Slide the reservoir into the clamp piece, so that the clamp is on the bottom third of the reservoir (as shown at right). Then slide the slots on the clamp piece over the head of the bolts installed in the previous step. Tighten nuts on backside of bracket.

26. Set the large driver side bracket onto the frame rail and mark the bracket for (2) holes to be drilled. Use the image at right as reference.

27. After marking the bracket, drill the holes out to 8mm or 21/64".

28. Position the drilled bracket back onto the frame rail and mark the frame rail.

29. Drill the frame rail out to 17/32 or 13.5mm.

30. Install (2) provided rivet nut into the drilled holes on the frame.

31. Install the bracket onto the frame and secure to rivet nuts with M8 x 30mm flange bolts.

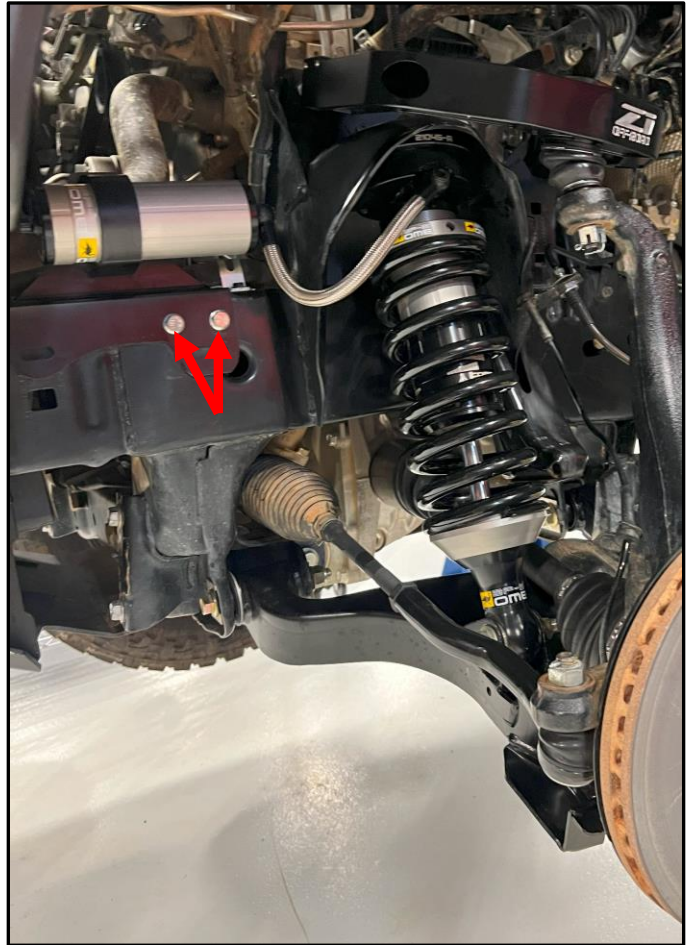
32. Repeat steps # 24-31 on passenger side of vehicle.

33. Install new outer and inner tie rods.

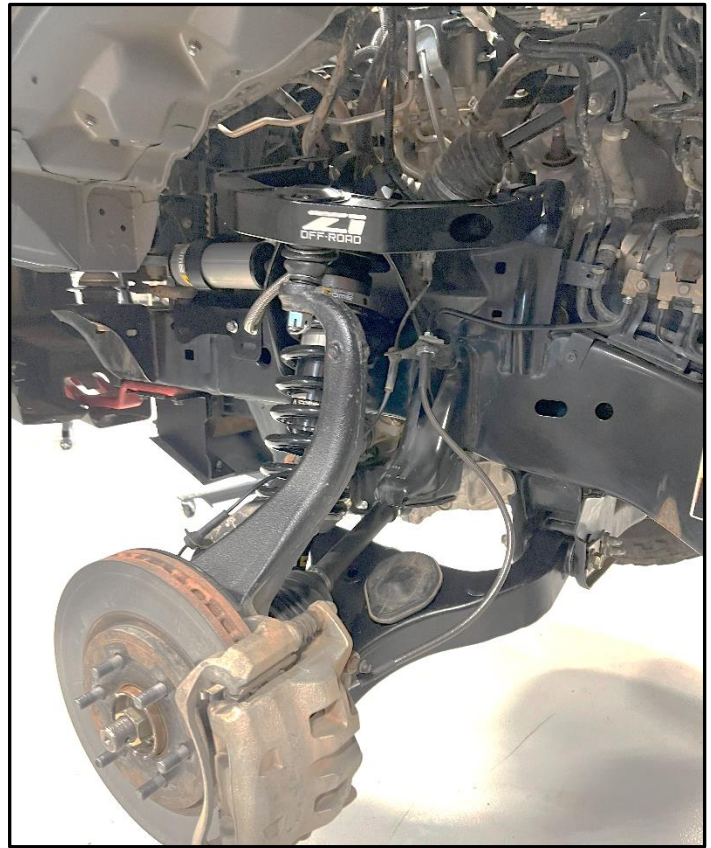
34. Using the included coilover adjustment wrench, adjust your coilovers to your desired settings. If you don't know what settings to run, start in the middle for each compression and rebound and adjust after driving if necessary.

Compression is essentially bump stiffness. This is the resistance setting for the damping when the shock is compressing.

Rebound is essentially the opposite. This is the resistance setting for the when your shock is extending. Softer rebound will allow the coilover to extend or rebound faster.



35. Reconnect wheel speed sensor to knuckle/axles and route the wiring harness.



36. Reinstall OE brake rotors and calipers.

37. Bleed the brakes if not completed earlier.

38. Reinstall wheels and lug nuts.

39. Properly lower vehicle from jack and jackstands.

40. Torque lug nuts to 98ft-lbs.

END

Additional Technical Support:

Contact Z1 Off-Road at info@z1offroad.com
Or call 678-839-8019 between 9am and 6pm ET