

Z1 HIGH-CAPACITY DIFFERENTIAL COVER INSTALLATION MANUAL



This Installation Man	ual is intended for the following models:
2003-2008	Nissan 350Z
2009-2020	Nissan 370Z
2003-2007	Infiniti G35
2007-2015	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 High Capacity Differential Cover Kit, consult with a Professional Mechanic or contact Z1 Motorsports for more information.

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Parts Included:

Item	Quantity	Description
1	1	Differential Cover, Casting
2	1	Permatex Ultra Grey, 3.5oz
3	1	Vent Tube
4	1	Mounting Stud
5	1	Z1 Return Plug
6	3	Sealing Washer
7	1	Loctite 271, 0.5ml

TOOLS REQUIRED:

- Hydraulic Jack
- (2) 2-Ton (or greater) Jack Stands
- Wheel Chock
- Ratchet
- 12mm Socket
- M8 Allen Key
- M10 Allen Key

- Chemical Cleaner
- Cloth
- Material Scrapper Tool (or pneumatic wire wheel)
- RTV Silicone
- Hammer
- Punch

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 High Capacity Differential Cover Kit and verify that ALL necessary hardware is present.

PREPARATION:

- 1. Locate Z1 High-Capacity Differential Cover with hardware.
- 2. Apply liberal amount of Loctite to mounting stud
- 3. Thread mounting stud into differential cover.
- 4. Clean mating surface of differential cover with chemical cleaner, clot, and/or pneumatic wire wheel, if needed.
- 5. Install vent tube onto differential cover.

Note: It is recommended to freeze vent tube, then lightly tap into differential cover with punch & hammer

<u>Warning</u>: Use of excess force to install vent tube will result in damage to vent tube and/or differential casting.

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6. Wipe inside and outside of differential cover assembly clean with chemical cleaner and cloth.

INSTALLATION:

- 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. Please refer to Nissan Factory Service Manual (FSM) for differential assembly removal procedure.
- 5. Place differential assembly onto workbench.
- 6. Drain differential assembly of gear oil. Remove (1) OEM fill plug and (1) OEM magnetic drain plug from cover. Set aside for later use. Dispose of used sealing washers.
- 7. Remove (8) bolts which attach differential cover to differential assembly. Remove differential cover from differential assembly.
- 8. Clean matin surface of differential assembly with material scrapping tool, chemical cleaner, and/or pneumatic wire wheel.

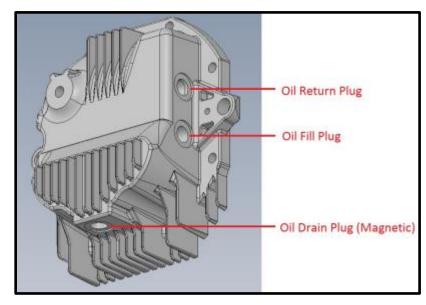
Note: Assure that differential assembly internals are clean of debris.

9. Apply thick bead of RTV silicone to mating surface of differential assembly.

Note: Do NOT apple silicone into threaded holes.

- 10. Place Z1 High-Capacity Differential Cover onto differential assembly. Assure that bolt holes are aligned with threads.
- 11. Thread (8) bolts through differential cover, and into differential assembly. Torque to 32ft-lbs.
- 12. Locate (1) OEM fill plug, (1) OEM magnetic drain plug, and (1) Z1 Return Plug. Clean with chemical cleaner and cloth.
- 13. Place (1) new sealing washer provided onto each plug.
- 14. Insert OEM magnetic drain plug into lower threaded hole of differential cover. Torque to <u>25ft-lbs</u>.
- Insert Z1 Return Plug into uppermost threaded hole of differential cover. Torque to <u>25ft-lbs</u>.
- 16. Fill differential assembly with gear oil until level with remaining open (middle) threaded hole.

Note: Z1 High-Capacity
Differential Cover results in total
fluid capacity of (2) liters.



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- 17. Insert OEM drain/fill plug into middle threaded hole of differential cover. Torque to 25ft-lbs.
- 18. Inspect differential assembly for leaking.
- 19. Please refer to FSM for differential assembly installation procedure.

<u>Note</u>: Due to various exhaust manufactures and configurations, exhaust piping may interfere with cooling fins of differential cover. For this reason, cooling fins may need to be cut/filed short to clear.

- 20. Carefully lower vehicle.
- 21. Perform a final test drive of vehicle.

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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