

Z1 DIFFERENTIAL BREATHER VENT KIT INSTALLATION MANUAL



This Installation Manual is intended for the following models:	
2005-2015	Nissan Xterra
2005+	Nissan Frontier
2005-2015	Nissan Titan

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 Differential Breather Vent Kit, consult with a Professional Mechanic or contact Z1 Off-Road for more information.

PARTS INCLUDED:

Item	Quantity	Description
1	1	Stainless Steel Barb Fitting
2	1	Breather
3	2	Clamp
4	6'	5/16 Hose
5	2	Zip Ties

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

SAFETY REQUIREMENTS:

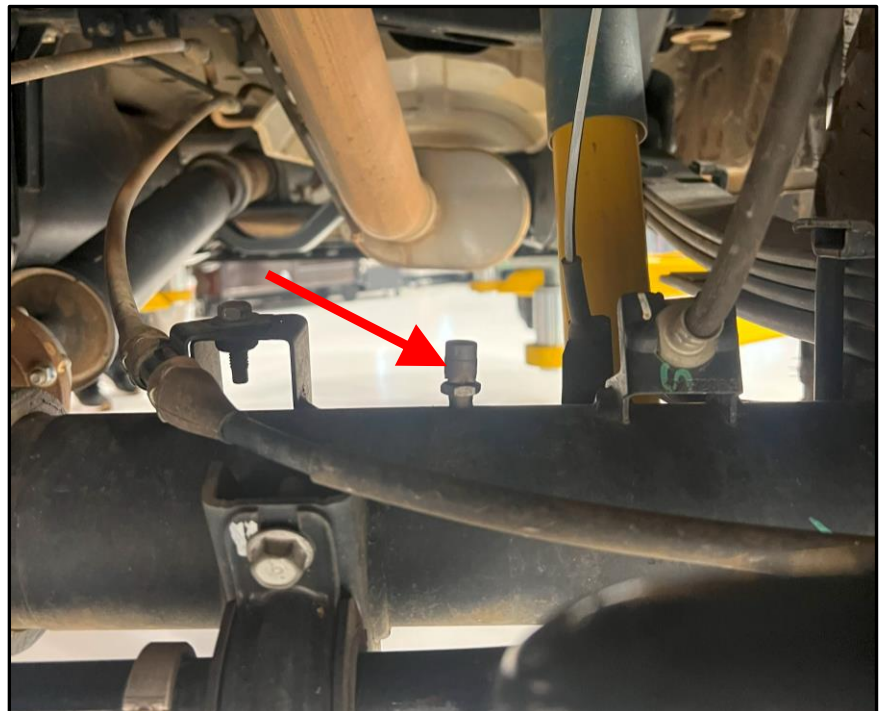
- Always wear safety glasses and any necessary protective garments. If using any fluids, chemicals, or solvents, a respirator is recommended.
- Always use properly rated jack stands when working under your vehicle.
- Always keep limbs and parts away from moving drivetrain parts.
- Always turn the ignition to the OFF position and disconnect the NEGATIVE battery terminal.
- Only operate drivetrain in safe space and well-ventilated areas.

BEFORE YOU BEGIN:

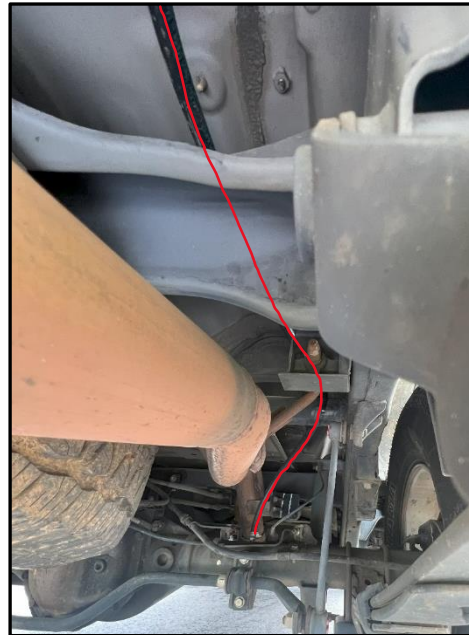
Remove contents from the Z1 Off-Road Differential Breather Vent Kit and verify that ALL necessary hardware is present.

PROCEDURE:

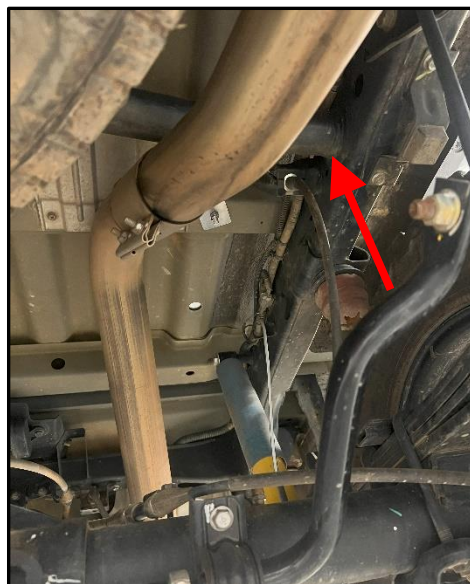
1. Place the transmission in Park position (or in Reverse gear if equipped with a manual transmission). Apply the parking brake.
2. It is recommended to install this kit with the rear suspension in the air. While not necessary, this will guarantee the hose isn't under tension when at full droop. Raise and support the rear of the vehicle on jackstands.
3. Using a 14mm wrench, remove the OE differential breather located on the top of the rear axle tube.



4. Install the new Z1 Off-Road barb fitting into the axle tube. The threads are tapered to provide a seal, but you can add thread sealant if desired. The Factory Service Manual does not provide a torque spec for this location. Since the threads are tapered it will not thread completely into the axle tube, there will likely still be some threads remaining once tight.
5. With a clamp, attach one end of the provided hose to the barb fitting.
6. With a clamp, install the Dorman breather onto the other end of the hose.
7. Run the breather end of the hose up away from the axle, and secure in a safe location. Secure with zip ties where necessary. If the vehicle is not on jackstands with the suspension at full droop, make sure you leave some slack in the hose.
 - a. For Xterra owners a common spot is behind the passenger taillight. Open the trunk and then remove the (2) 10mm screws holding the taillight in place. Then gently pry the taillight towards the rear to disengage the two plastic clips. Run the hose up and along the frame rail, then up behind the passenger tail light. Secure with zip ties where necessary.



- b. For truck owners a common spot is up and over the passenger frame rail and into the rear passenger wheel well, you can zip tie the hose to the round cross brace on the frame.



8. Once the hose is securely zip tied away from the exhaust and moving parts, reattach any components previously removed.
9. Properly lower the vehicle from jackstands.

END

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