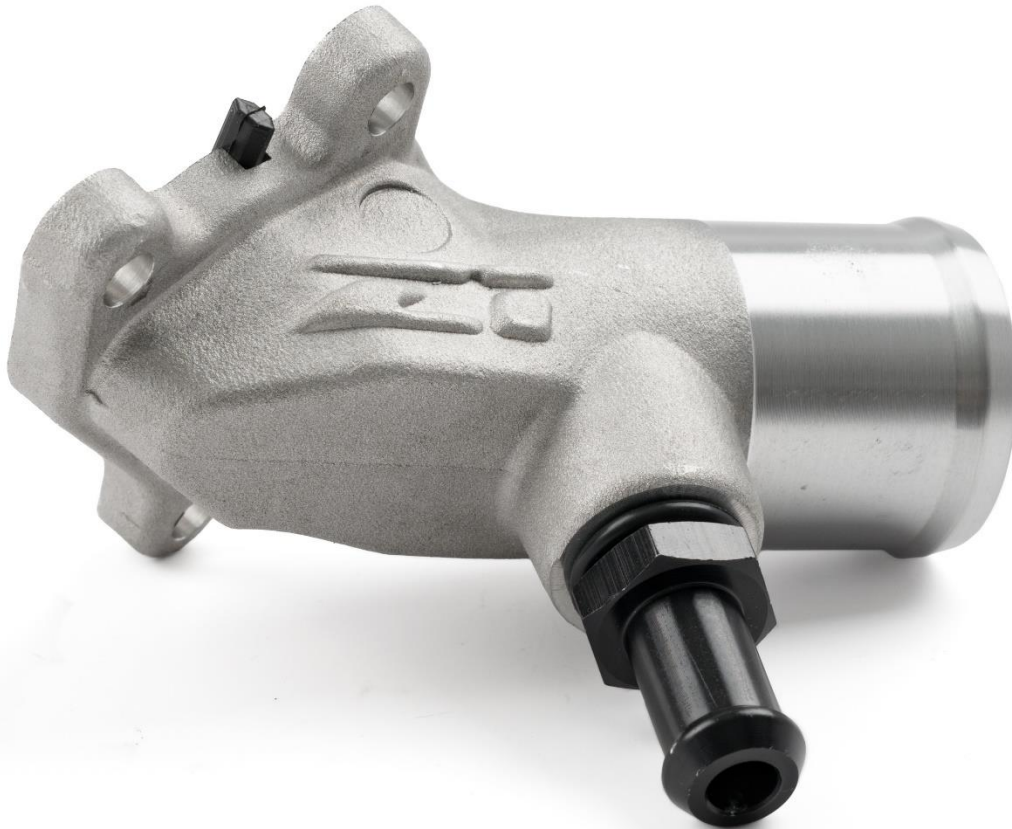


Z1 VR30 3.0T ALUMINUM LOWER WATER NECK INSTALLATION MANUAL



This Installation Manual is intended for the following models:	
2016+	Infiniti Q50 (VR30)
2017+	Infiniti Q60 (VR30)
2023+	Nissan Z

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 VR30 3.0t Aluminum Lower Water Neck, consult with a Professional Mechanic or contact Z1 Motorsports for more information.

PARTS INCLUDED:

Item	Quantity	Description
1	1	Z1 Cast Coolant Neck
2	1	Gasket
3	1	ORB Barb Fitting

TOOLS REQUIRED:

- Hydraulic Jack
- (2) 2-Ton (or greater) Jack Stands
- Ratchet
- Ratchet Extension(s)
- 10mm Socket/Wrench
- Inch-Lb. Torque Wrench
- Pliers
- Vacuum Bleeder or [Z1 Elite Diagnostic Scan Tool](#)
- Flathead Screwdriver
- Funnel

SAFETY REQUIREMENTS:

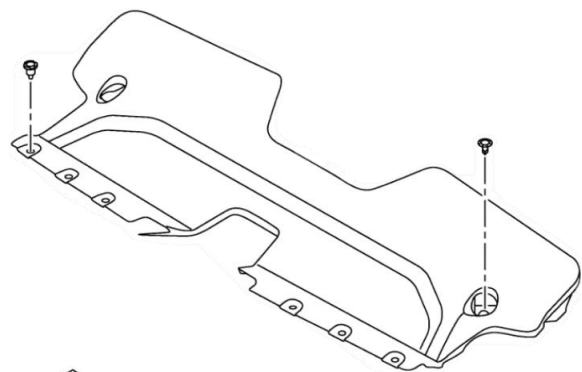
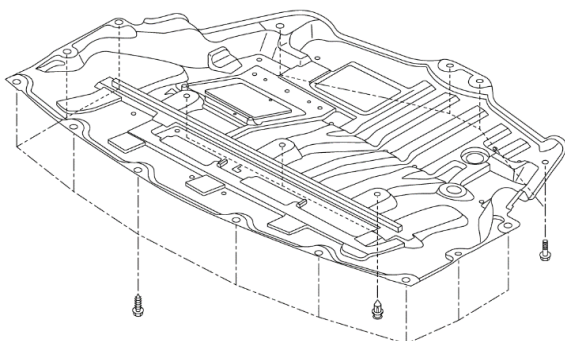
- Always wear safety glasses and any necessary protective garments. If using any fluids, chemicals, or solvents, a respirator is recommended.
- Always turn the ignition to the OFF position and disconnect the NEGATIVE battery terminal.
- Always use properly rated jack stands when working under your vehicle.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

BEFORE YOU BEGIN:

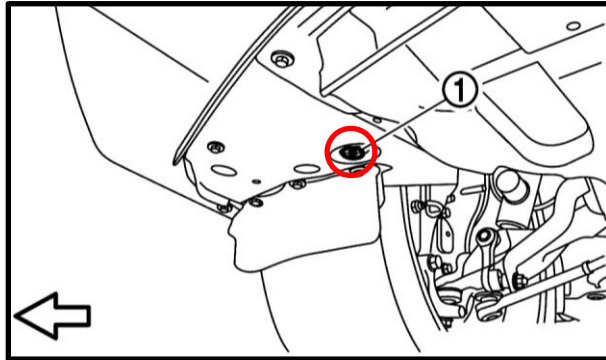
Remove contents from the Z1 Motorsports VR30 3.0t Aluminum Lower Water Neck and verify that ALL necessary hardware is present.

PROCEDURE:

1. Place the transmission in Park position (or in Reverse gear if equipped with a manual transmission). Apply the parking brake.
2. Unlatch and raise vehicle's hood. Apply hood prop.
3. Remove the lower engine splash shield. Fasteners will be an assortment of 10mm screws and plastic panel pop clips. Use a flat head screwdriver to gently pry the pop clips up.
4. Remove the (8) plastic panel pop clips securing the air duct at the top of the front bumper fascia. Remove air duct and set aside.



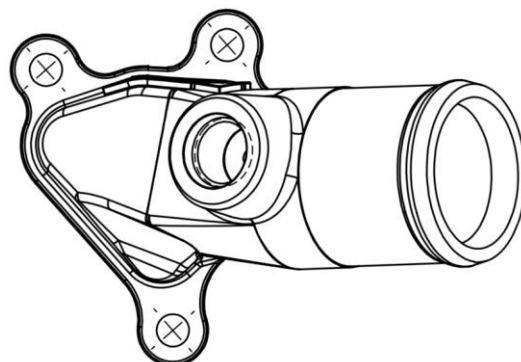
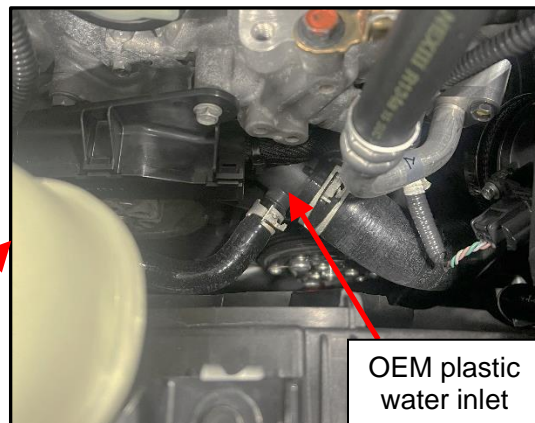
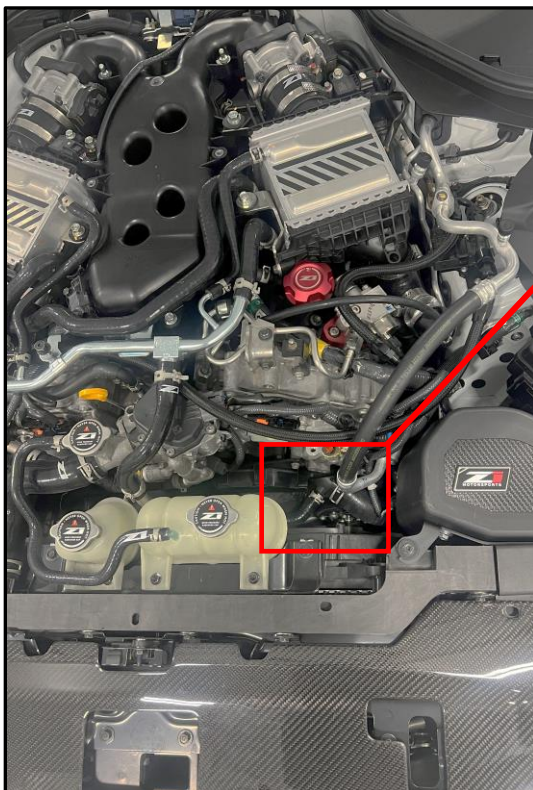
5. To prevent excessive coolant from spilling, you can either drain the coolant, or use (2) pinch clamps to squeeze shut the hoses attached to the OEM plastic water inlet. Pinching the hoses shut will make the bleeding process later easier. Use the images at the bottom of this page for reference to locate the OEM water inlet.
 - a. If you choose to drain the coolant, remove the drain plug just in front of the passenger front wheel well (circled below), then remove the reservoir tank cap. Replace plug and cap once the coolant has drained.



- b. If you choose to use pinch clamps, pinch both hoses connected to the OEM plastic water inlet.



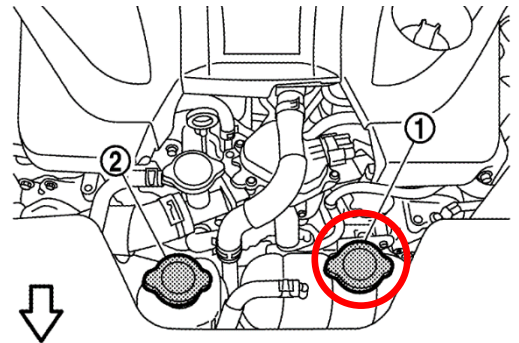
6. Loosen the hose clamps and remove both hoses from the OEM plastic water inlet and drain excess coolant into bucket below.
7. Remove the (3) bolts securing the OEM plastic water inlet to the engine, there are (2) bolts on top and (1) on the bottom, then remove the OEM inlet. Use the images below as reference for the location of the OEM plastic water inlet and bolts.



8. Locate the Z1 VR30 3.0t Aluminum Lower Water Neck, ORB fitting, and gasket. Assemble ORB fitting and gasket onto Z1 coolant neck.
9. Using brake parts cleaner or another degreaser, clean and wipe down the inside and sealing surfaces of Z1 coolant neck.
10. Install Z1 assembled coolant neck onto engine using the (3) bolts that were removed in step # 7. Torque bolts to 80in-lbs.
11. Reattach the (2) coolant hoses that were removed in step # 6 and secure with the factory clamps.
12. It is now time to refill and bleed the system. It is highly recommended to use a vacuum bleeder or the Z1 Elite Diagnostic Scan tool. Follow the instructions from your vacuum bleeder manufacturer, general instructions are listed below in the following steps.



13. Open the coolant reservoir tank cap (circled at right). Using a vacuum bleeder, suck out as much air as possible.
14. Using the vacuum bleeder, draw coolant back into the system. Make sure the feed hose of the vacuum bleeder is submerged in coolant/water.
15. If you do not have access to a vacuum bleeder, you can use the Z1 Elite Diagnostic Scan Tool. Open the coolant reservoir tank cap and fill with coolant until it reaches the MAX line.



16. Using the [Z1 scan tool](#), open the thermostat using the “ENGINE COOLANT BYPASS VALVE” special function under the engine section. It is recommended to squeeze the upper radiator hose to try and clear some air bubbles and feel if the coolant is flowing.
17. Watch the reservoir tank, as the coolant level drops, fill it back up to the MAX line.
18. When coolant level stops dropping, turn off water pump(s).
19. Once the system is bled, reinstall the reservoir tank cap.
20. Check vehicle for loose tools/items.
21. Properly lower vehicle from jack stands.
22. 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