



TECHNICAL SERVICE BULLETIN

Classification:

RA23-003

Reference:

NTB24-007

Date:

January 22, 2024

DIAGNOSING REAR FINAL DRIVE ASSEMBLY LEAKS

APPLIED VEHICLES: 2016-2024 Titan (A61)
2016-2024 Titan XD (A61)

SERVICE INFORMATION

If a Rear Final Drive Assembly (rear solid axle) is found to be leaking from one, or more, of the locations listed below, the source(s) of the leak should first be identified and, if possible repaired before the Rear Final Drive Assembly is considered for replacement.

A Rear Final Drive Assembly should not be replaced unless bearing, gear, or other significant damage has occurred.

Possible points of fluid leaks:

- Front Oil Seal (Pinion Seal)
- Axle Tube Seal
- ABS Rear Wheel Sensor
- Rear Axle Wheel Bearing Seal
- Gear Carrier Cover Gasket
- Drain Plug

IMPORTANT: If a Rear Final Drive Assembly is found to have been replaced for a repairable leak and no internal damage is present, the claim will be charged back.

Refer to pages 2-5 for additional information that illustrates and/or describes some, but not all, possible points where fluid leaks can occur, as well as helpful service **HINTS**.

- This bulletin is only intended as a diagnostic reference and does not direct or imply repair.
- Refer to the ESM for any applicable repair procedures, if needed.

Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. **NOTE:** If you believe that a described condition may apply to a particular vehicle, DO NOT assume that it does. See your Nissan dealer to determine if this applies to your vehicle.

Potential Fluid Leak Locations

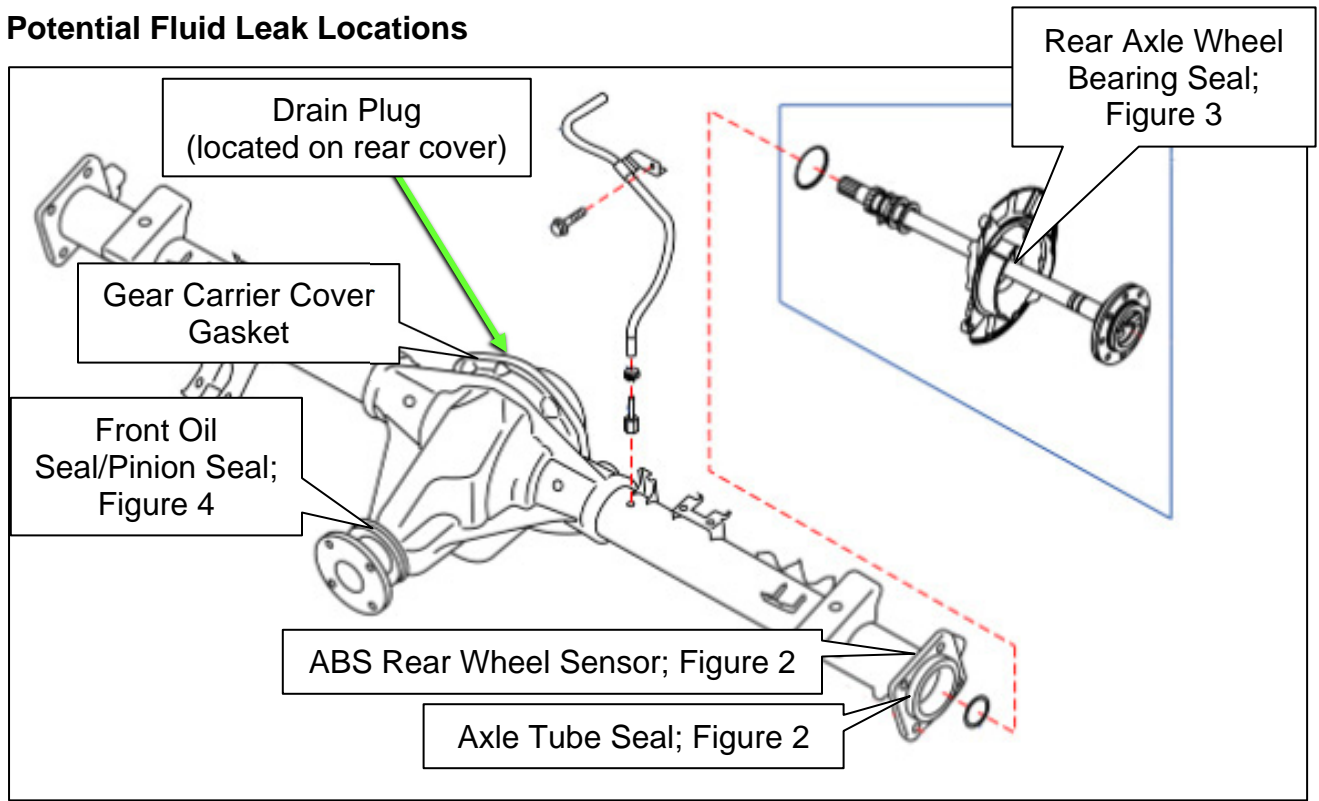


Figure 1

Axle Tube Seal Fluid Leak

- A fluid leak can occur at the flange where the internal axle assembly mounts to the axle tube. This is a single O-ring on the Titan, and an O-ring and Tube Seal on the Titan XD.

HINT: Make sure to clean the groove and take care during installation to not damage the seal(s).

ABS Rear Wheel Sensor Fluid Leak

- If an ABS Rear Wheel Sensor body is cracked for any reason, or its O-ring damaged, a leak can occur.

HINT: Replace the ABS Rear Wheel Sensor and clean the sealing surface well.

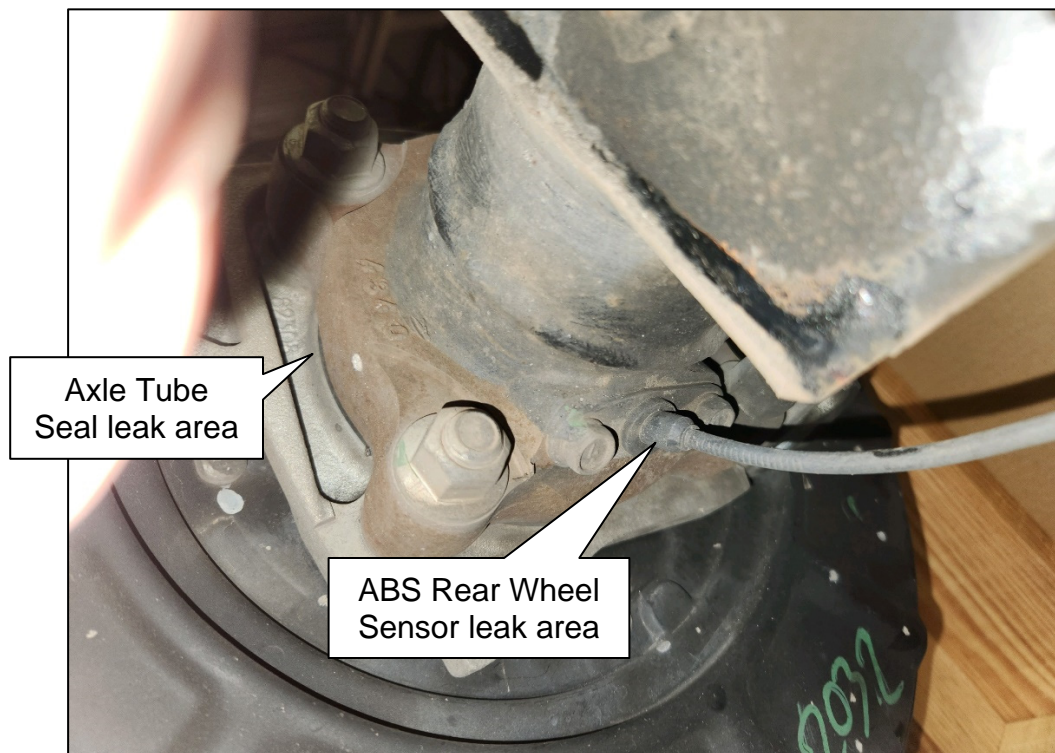


Figure 2

Rear Axle Wheel Bearing Seal Fluid Leak

- If a Rear Axle Wheel Bearing's seal is damaged for any reason, a fluid leak will appear behind the brake rotor, at the outer surface of the wheel/bearing hub assembly.

HINT: If this type of leak occurs, the Axle Shaft Assembly including the O-ring and, if applicable, the tube seal must be replaced.

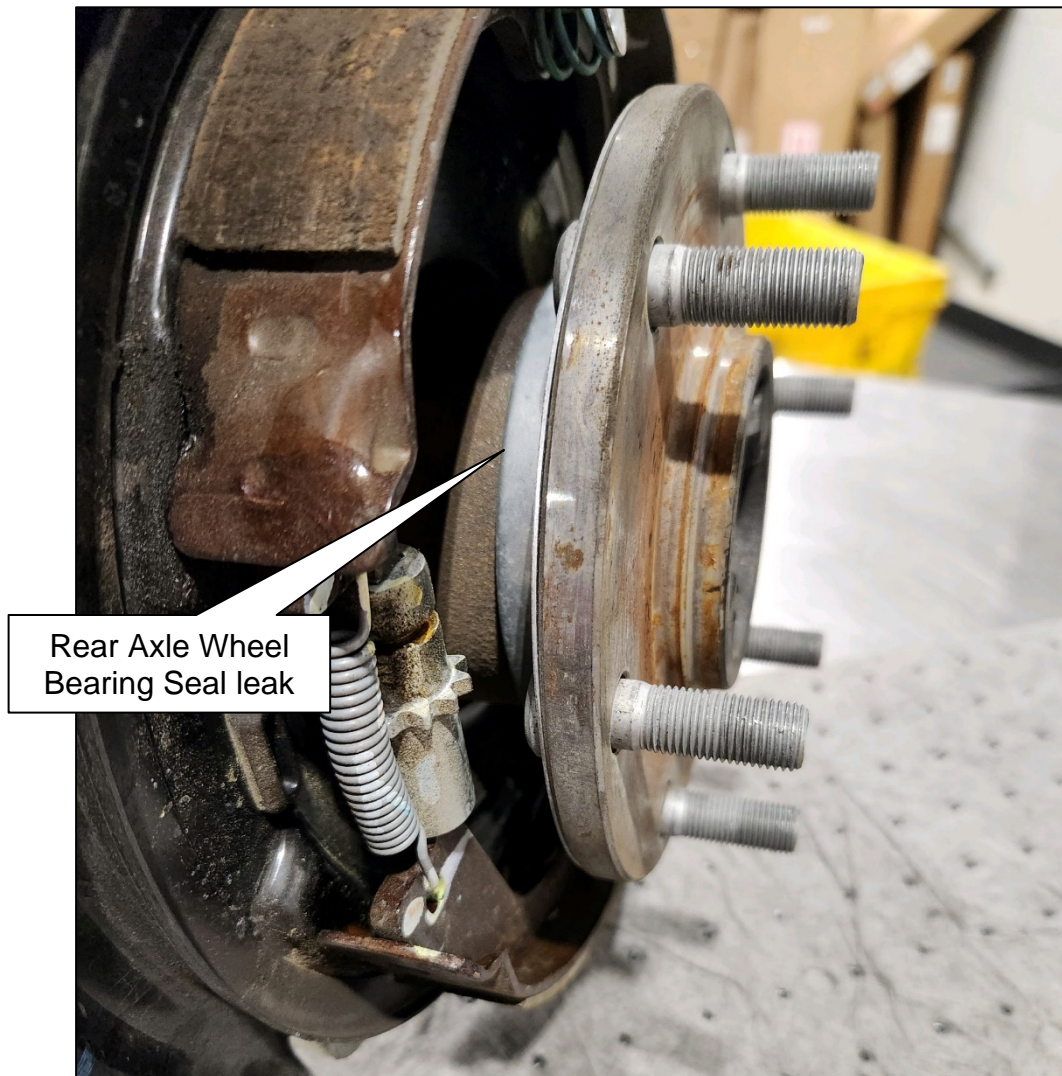


Figure 3

Front Oil Seal Fluid Leak (Pinion Seal)



Figure 4

Gear Carrier Cover Gasket Fluid Leak

HINT: The Titan Gear Carrier Cover uses a physical gasket, and does not use silicone RTV.

AMENDMENT HISTORY

PUBLISHED DATE	REFERENCE	DESCRIPTION
January 22, 2024	NTB24-007	Original bulletin published