

# TECHNICAL SERVICE BULLETIN

|                 |            |                   |
|-----------------|------------|-------------------|
| Classification: | Reference: | Date:             |
| TF16-001G       | NTB17-003G | December 10, 2024 |

## FLUID LEAK CAUSED BY TRANSFER ASSEMBLY RIGHT SIDE DRIVE SHAFT OIL SEAL

This bulletin has been amended. See AMENDMENT HISTORY on the last page.  
Please discard previous versions of this bulletin.

|                          |                               |                               |
|--------------------------|-------------------------------|-------------------------------|
| <b>APPLIED VEHICLES:</b> | 2019-2024 Altima (L34)        | 2014-2020 Rogue (T32)         |
|                          | 2015-2024 Murano (Z52)        | 2021-2023 Rogue (T33)         |
|                          | 2016 Murano Hybrid (Z52H)     | 2017-2019 Rogue Hybrid (T32H) |
|                          | 2013-2020 Pathfinder (R52)    | 2017-2022 Rogue Sport (J11)   |
|                          | 2014 Pathfinder Hybrid (R52H) |                               |

**APPLIED DRIVELINES:** AWD only

**HINT:** This bulletin does not apply to S35 series Rogue/Rogue Select.

### SERVICE INFORMATION

**IMPORTANT:** Do not remove the Transfer Assembly for the following Service Procedure.

If fluid is leaking from the front passenger (RH) side of the Transfer Assembly, refer to the information in this bulletin.

- The fluid leak is NOT caused by the dust seal shown in Figure 1.
- This repair does NOT require Transfer Assembly removal from the vehicle.

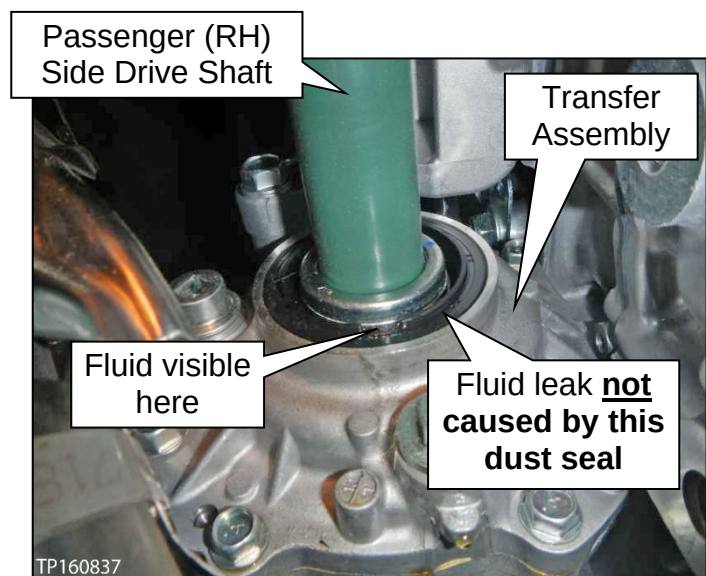


Figure 1

1. **DO NOT REPLACE** the Transfer Assembly.
2. Replace the drive shaft oil seal and the dust seal.
  - Refer to NTB21-094 for drive shaft oil seal and dust seal replacement.

Nissan 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. **HINT:** 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.

## REQUIRED SPECIAL TOOL(S)

New or replacement Essential Tools are available from Tech•Mate online: [www.techmatetools.com](http://www.techmatetools.com), or by phone: 1-833-397-3493.

When ordering, keep in mind that the tool part number prefix has changed from “J” to “NI”. For example, **J**-52469-1 is now **NI**-52469-1.



Figure 2



Figure 3



Figure 4



Figure 5

## Typical TY21C Transfer Assembly – Exploded View for Reference Only

**IMPORTANT:** No part of the Transfer Assembly should be disassembled or removed from the vehicle to perform the seal replacements described in this Service Information.

- Refer to page 5 for additional information.

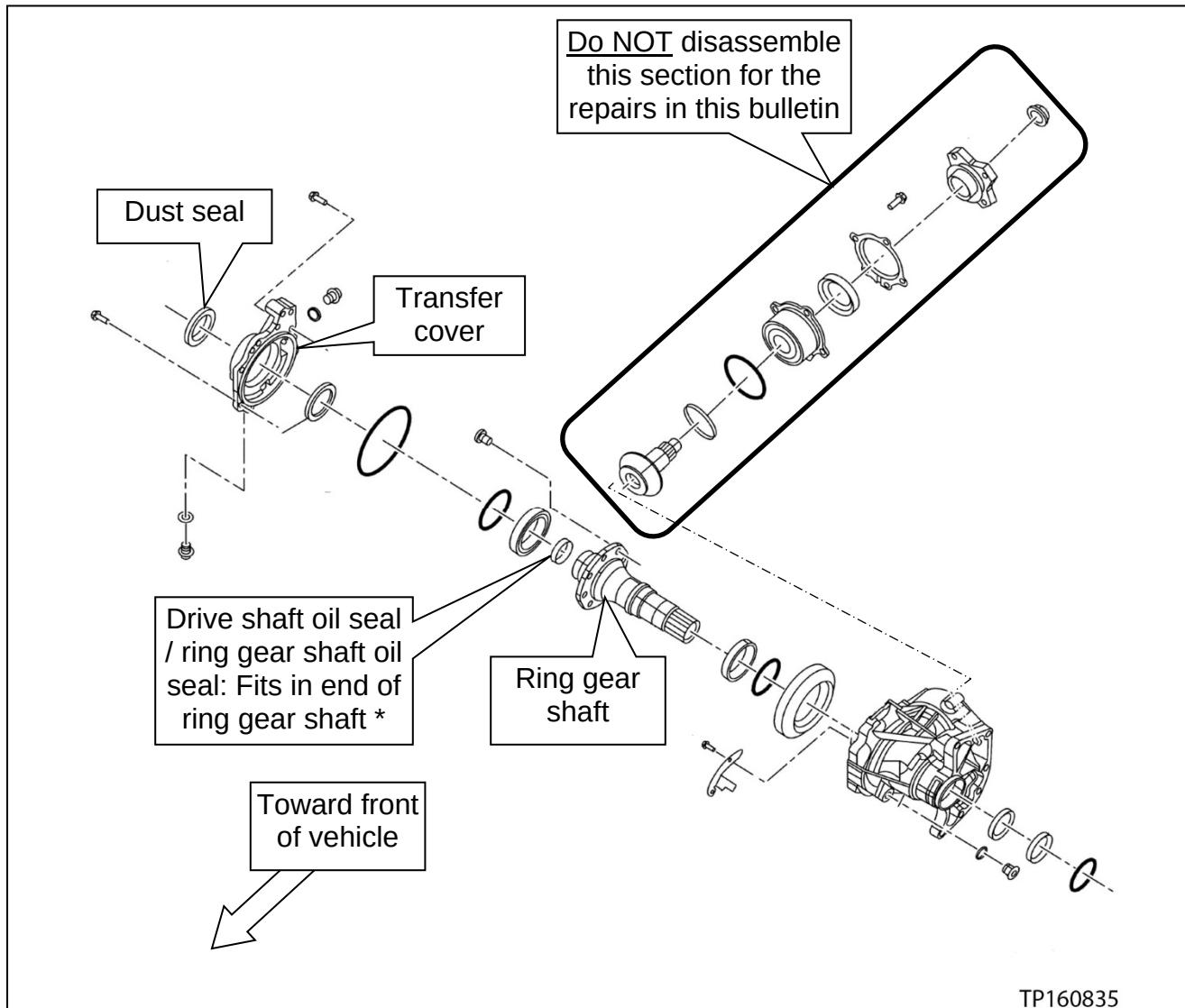


Figure 6

\* The seal causing the leak is called "Drive shaft oil seal" in the ESM for all applied models except Rogue, Rogue Hybrid, Rogue Sport, and Altima. For these vehicles, it is called "Ring gear shaft oil seal".

## NOTICE

To avoid damage to the Transfer Assembly and the new seals, use an appropriate seal installer and seal protector during the repair.

- This repair does NOT require Transfer Assembly removal from the vehicle.
- This repair does NOT require transfer cover removal from the Transfer Assembly.
- Figure 7 only shows the Transfer Assembly removed for reference only.

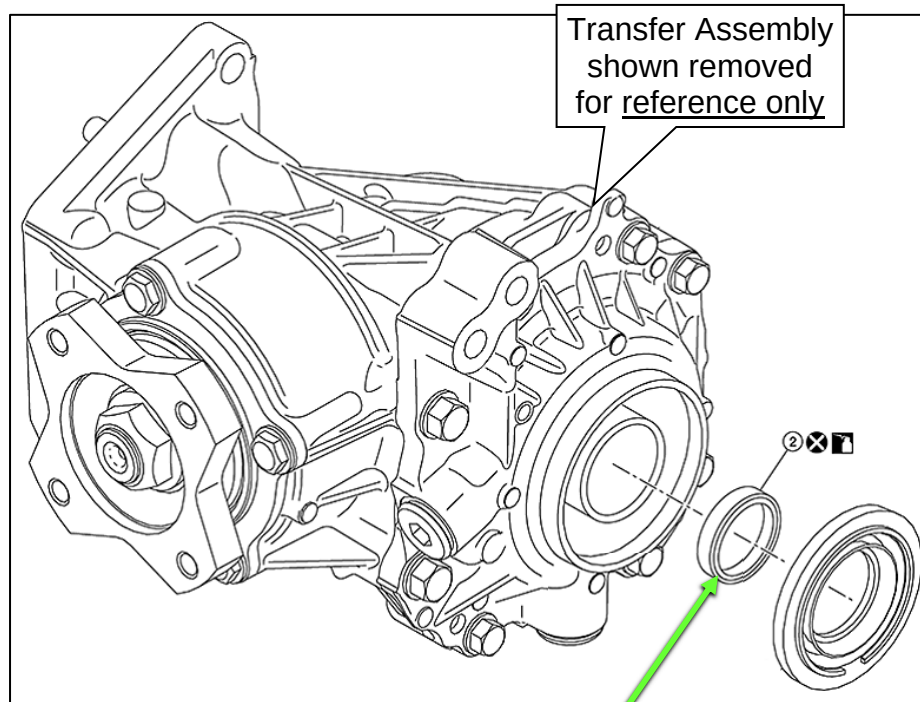


Figure 7

Fluid leak caused by this seal (33114-xxxxx);  
drive shaft oil seal / ring gear shaft oil seal

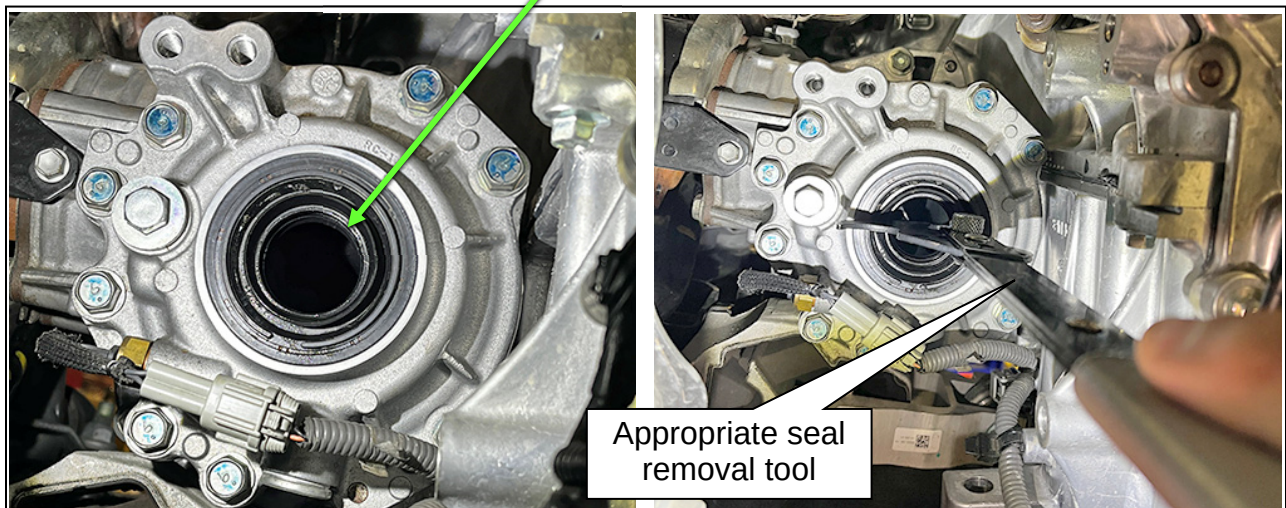


Figure 8

## Passenger (RH) Side Drive Shaft Oil Seal Replacement Recommendations

- For passenger (RH) side front drive shaft removal and installation, refer to the ESM: **TRANSMISSION & DRIVELINE > FRONT AXLE > REMOVAL AND INSTALLATION > FRONT DRIVE SHAFT > RH > AWD**
  - o When removing the passenger (RH) side drive shaft on a 2019-2024 Altima or on a 2021-2023 Rogue, and you are replacing the drive shaft oil seal and the dust seal, it is recommended to remove the drive shaft support bearing bracket for additional clearance.

### **NOTICE**

To avoid leak recurrence and damage to the Transfer Assembly and new seals, follow the sequence below on 2019-2024 Altima and 2021-2023 Rogue vehicles for drive shaft support bearing bracket reinstallation.

1. Place and hold the drive shaft support bearing bracket into position, ensuring it is flat against the engine block and transfer assembly, and loosely install the bolts (Figure 9).

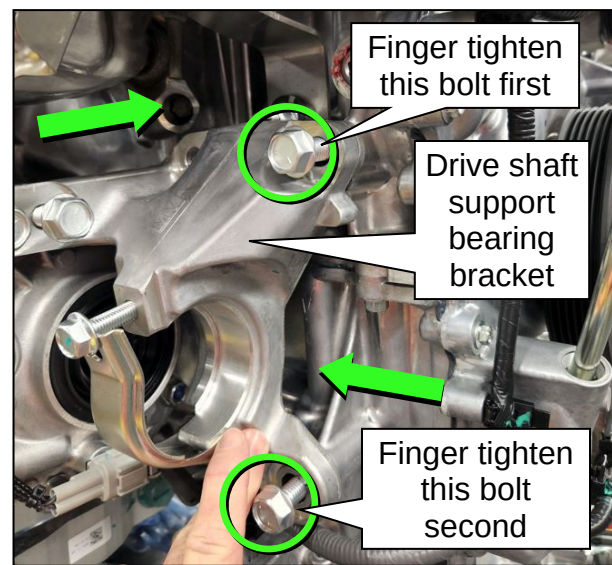


Figure 9

2. While continuing to hold the drive shaft support bearing bracket into position, finger tighten the top drive shaft support bearing bracket to engine block bolt first, and then finger tighten the lower drive shaft support bearing bracket to engine block bolt.
3. Finger tighten the drive shaft support bearing bracket to transfer assembly bolts.

4. While continuing to hold the drive shaft support bearing bracket into position, torque the top drive shaft support bearing bracket to engine block bolt to specification first, and then torque the lower drive shaft support bearing bracket to engine block bolt (Figure 10).
- Drive shaft support bearing bracket to engine block bolt torque:  
48.0 N•m (4.9 kg-m, **35 ft-lb**)

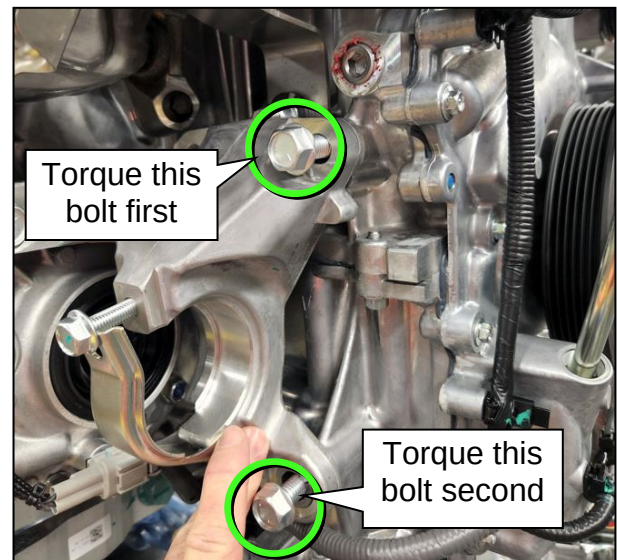


Figure 10

5. Torque the drive shaft support bearing bracket to transfer assembly bolts to specification.
- Drive shaft support bearing bracket to transfer assembly bolt torque: 48.0 N•m (4.9 kg-m, **35 ft-lb**)

## PARTS INFORMATION

| DESCRIPTION                                                               | PART # PREFIX (1) | QUANTITY |
|---------------------------------------------------------------------------|-------------------|----------|
| SEAL-OIL, DRIVE PINION<br>(Drive Shaft Oil Seal/Ring Gear Shaft Oil Seal) | 33114             | 1        |
| SEAL-OIL<br>(Dust Seal)                                                   | 33142             | 1        |
| PIN-COTTER (2)                                                            | 40073             | 1        |
| NUT-HEX (axle hub nut)                                                    | 40262             | 1        |
| NUT (lower strut nut)                                                     | 01223             | 2        |

(1) Refer to the Electronic Parts Catalog and use the VIN to determine the correct complete Part Numbers for the vehicle you are working on.

(2) All models except 2019-2024 Altima (L34) and 2021-2023 Rogue (T33).

## CLAIMS INFORMATION

Submit a Primary Part (PP) type line claim using the following claims coding:

| DESCRIPTION                   | MODEL                    | PFP | OP CODE | SYM | DIA | FRT |
|-------------------------------|--------------------------|-----|---------|-----|-----|-----|
| Replace RH<br>Front Axle Seal | Altima (L34)             | (1) | KX05AA  | ZR  | 53  | 2.2 |
|                               | Murano (Z52)             |     |         |     |     | 2.0 |
|                               | Murano Hybrid (Z52H)     |     |         |     |     | 1.8 |
|                               | Pathfinder (R52)         |     |         |     |     | 2.0 |
|                               | Pathfinder Hybrid (R52H) |     |         |     |     | 1.8 |
|                               | Rogue (T32)              |     |         |     |     | 1.0 |
|                               | Rogue (T33)              |     |         |     |     | 1.4 |
|                               | Rogue Hybrid (T32H)      |     |         |     |     | 1.1 |
|                               | Rogue Sport (J11)        |     |         |     |     | 1.7 |

(1) Refer to the Electronic Parts Catalog and use the Drive Pinion Seal part number (33114-\*\*\*\*\*) as the Primary Failed Part.

## AMENDMENT HISTORY

| PUBLISHED DATE    | REFERENCE  | DESCRIPTION                                                                                               |
|-------------------|------------|-----------------------------------------------------------------------------------------------------------|
| January 20, 2017  | NTB17-003  | Original bulletin published                                                                               |
| March 25, 2020    | NTB17-003A | APPLIED VEHICLES and PARTS INFORMATION revised                                                            |
| May 27, 2021      | NTB17-003B | APPLIED VEHICLES revised, and two changes made to the QUANTITY column on page 6                           |
| February 16, 2022 | NTB17-003C | Changes throughout                                                                                        |
| March 1, 2022     | NTB17-003D | <b>CLAIMS INFORMATION</b> updated                                                                         |
| June 17, 2022     | NTB17-003E | Changes throughout                                                                                        |
| December 13, 2023 | NTB17-003F | <b>APPLIED VEHICLES</b> and TechMate contact information revised, and “NOTE” references changed to “HINT” |
| December 10, 2024 | NTB17-003G | Added <b>IMPORTANT</b> statements to pages 1 and 4 and changed page 5 figures and layout                  |