

VOLUNTARY RECALL CAMPAIGN

 Classification:
 Reference:
 Date:

 AT22-007
 NTB22-064
 July 28, 2022

VOLUNTARY SAFETY RECALL CAMPAIGN 2020-2022 FRONTIER, TITAN/TITAN XD 4WD; TRANSMISSION PARKING PAWL PIN

CAMPAIGN ID #: R22A1

APPLIED VEHICLES: 2020-2021 Frontier (D40) 4WD

2022 Frontier (D41) 4WD

2020-2022 Titan and Titan XD (A61) 4WD

Check Service COMM or Dealer Business Systems (DBS) National Service History to confirm campaign eligibility.

INTRODUCTION

Nissan is conducting this voluntary safety recall campaign on certain specific model year 2020-2022 Frontier, Titan, and Titan XD 4WD vehicles, to replace the Transmission Parking Pawl Pin. This service will be performed at no charge to the customer for parts or labor.

IDENTIFICATION NUMBER

Nissan has assigned identification number R22A1 to this campaign. This number must appear on all communication and documentation of any nature dealing with this campaign.

DEALER RESPONSIBILITY

It is the dealer's responsibility to check Service COMM or Dealer Business Systems (DBS) National Service History for the campaign status on each vehicle falling within the range of this voluntary safety recall which for any reason enters the service department. This includes vehicles purchased from private parties or presented by transient (tourist) owners and vehicles in a dealer's inventory. Federal law requires that new vehicles in dealer inventory which are the subject of a safety recall must be corrected prior to sale. Failure to do so can result in civil penalties by the National Highway Traffic Safety Administration. While federal law applies only to new vehicles, Nissan strongly encourages dealers to correct any used vehicles in their inventory before they are retailed.

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.

SERVICE PROCEDURE

AWARNING

To avoid the risk of death or serious personal injury:

- Use caution when performing repairs near Transmission and Exhaust components as they will be hot just after the Engine stops.
- Use two people when removing the Transfer Assembly (Transfer Case).
- Do not spill A/T fluid on heat generating parts.

NOTICE

To avoid the risk of damage to the Transmission:

- Do not reuse gaskets.
- Use only recommended A/T fluid and do not mix with other A/T fluid.
- Do not use A/T fluid other than the recommended as this will cause deterioration in drivability and A/T durability, and may damage the Transmission which is not covered by the Nissan new vehicle limited warranty.
- 1. Place the vehicle on a lift.
- 2. Remove the Front Propeller Shaft to Transfer Assembly fasteners.
 - Place a matching mark on the Front Propeller Shaft Flange Yoke and the Transfer Assembly companion flange.
 - It is not necessary to remove the Front Propeller Shaft to Front Final Drive fasteners.

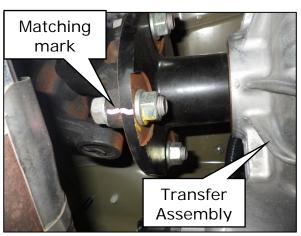


Figure 1

3. Separate the Front Propeller Shaft from the Transfer Assembly.

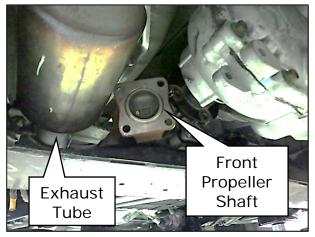


Figure 2

 Secure the Front Propeller Shaft to the driver (LH) side Exhaust Tube using a suitable strap.

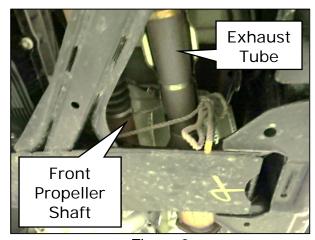


Figure 3

- On Frontier and Long Wheel Base (LWB) Titan models, skip to step 5 on page 4.
- o On Medium Wheel Base (MWB) Titan models, continue to step 4.
- 4. On Medium Wheel Base (MWB) Titan models, remove the Rear Propeller Shaft.
 - Refer to the ESM: TRANSMISSION & DRIVELINE > DRIVELINE > REAR PROPELLER SHAFT: 2S1410 > UNIT REMOVAL AND INSTALLATION > REAR PROPELLER SHAFT > Removal and Installation
 - Skip to step 8 on page 5.

 On Frontier and Long Wheel Base (LWB) Titan models, remove the Rear Propeller Shaft Center Support Bearing Bracket nuts.

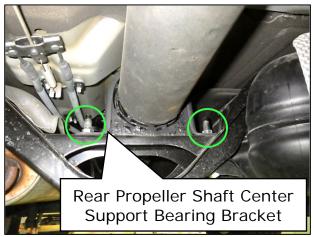


Figure 4

 Lift the Rear Propeller Shaft Center Support Bearing Bracket off of the studs and move it to passenger (RH) side of the studs.



Figure 5

- 6. Remove the Rear Propeller Shaft to Transfer Assembly fasteners.
 - Place a matching mark on the Rear Propeller Shaft Flange Yoke and the Transfer Assembly companion flange.

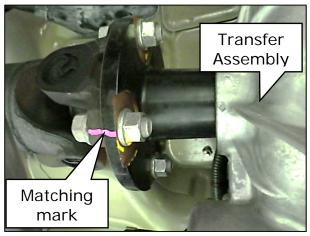


Figure 6

- 7. Separate the Rear Propeller Shaft from the Transfer Assembly.
 - Secure the Rear Propeller Shaft to the Exhaust on the passenger (RH) side of the vehicle using a suitable strap.

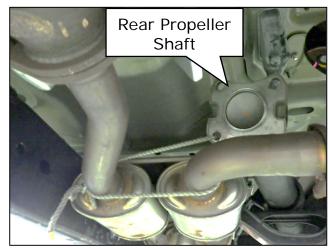


Figure 7

- 8. Remove the Transfer Assembly.
 - Refer to the ESM: TRANSMISSION & DRIVELINE > DRIVELINE > TRANSFER:
 TX91A > UNIT REMOVAL AND INSTALLATION > TRANSFER ASSEMBLY >
 Removal and Installation

To avoid damage to the Transmission Assembly, do NOT support or lift the Transmission with the Transmission Pan.

 If it is necessary to support the Transmission Assembly during this procedure, use a suitable jack and a block of wood at the jacking point shown in Figure 8.

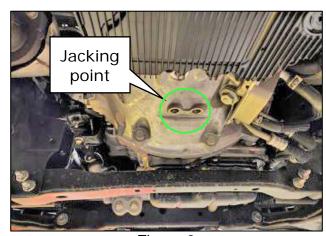


Figure 8

To avoid damage to the Transmission Parking Pawl Pin, use care when handling it. If the Transmission Parking Pawl Pin is dropped or it sustains an impact, it **cannot** be used.

- 9. Prepare the replacement Parking Pawl Pin.
 - Apply a small amount of transmission fluid onto the NEW Parking Pawl Pin.
 - The new Parking Pawl Pin has a circle engraved on one end for identification.

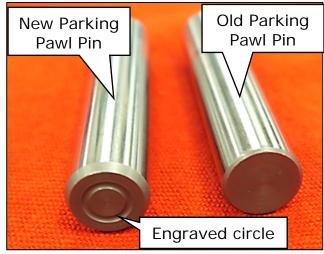


Figure 9

10. Adjust the transmission jack so that the Transmission Pan is in a level position to minimize the amount of fluid loss during Parking Pawl Pin replacement.

IMPORTANT:

To help prevent the Parking Pawl from moving out of position after performing step 11, do **NOT** move the Output Shaft after seating the Parking Pawl to the Parking Gear.

11. Rotate the Output Shaft **clockwise** to seat the Parking Pawl against the Parking Gear.

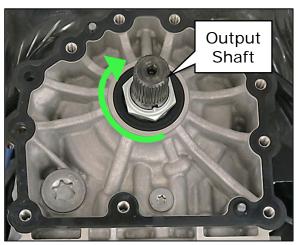


Figure 10

12. Position a suitable drain pan under the rear of the Transmission.

To prevent sealant entry and possible damage to the Transmission, ensure to remove **ALL** residual sealant from the Transmission Case threads after removing the Transmission Plug in step 13.

- 13. Remove the Transmission Plug shown in Figure 11.
 - During removal, loosen and tighten the Transmission Plug several times to remove sealant from the Transmission Case threads.
 - Discard the removed Transmission Plug.
 - Using a clean shop towel, remove the residual sealant from the Transmission Case threads.

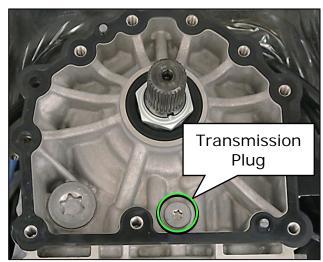


Figure 11

IMPORTANT:

To help prevent the Parking Pawl from moving out of position, do **NOT** move the Output Shaft after seating the Parking Pawl to the Parking Gear.

- 14. Remove the Parking Pawl Pin.
 - Using a magnetic rod, remove the Parking Pawl Pin from the Transmission.

HINT:

If the Transmission is in a level position, there should be little to no fluid lost during the Parking Pawl Pin replacement.



Figure 12

To prevent damage to the Transmission, do NOT strike the new Parking Pawl Pin with any tools during installation.

- 15. Install the new Parking Pawl Pin into the Transmission.
 - Inspect the position of the Parking Pawl.
 - If the Parking Pawl hole is fully visible as shown in Figure 13, the new Parking Pawl Pin should slide fully into the Transmission.
 - If the Parking Pawl Pin installed fully into the Transmission, skip to step 22 on page 11.
 - If the Parking Pawl Pin did NOT install fully into the Transmission, the Parking Pawl may have moved out of position. Continue to step 16 on page 9 for Parking Pawl Position Recovery.

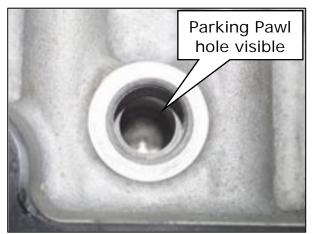


Figure 13

Parking Pawl Position Recovery

16. If the hole for the Parking Pawl is partially visible through the Transmission Case hole as shown in Figure 14, skip to step 19 on page 10.

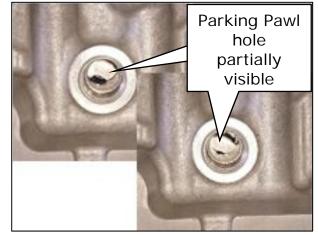


Figure 14

- 17. If the hole for the Parking Pawl is **NOT** visible through the Transmission Case hole as shown in Figure 15, use a small magnetic rod to raise the Parking Pawl until the hole is visible.
 - If the Parking Pawl raised and the hole is visible as shown in Figure 14, skip to step 19 on page 10.
 - If the Parking Pawl cannot be raised, continue to step 18.



Figure 15

 Send an email with the below information to: <u>FQA Inspection Support@nissan-usa.com</u>.
 A response will be provided within 48 business hours.

Email subject line: R22A1 Parking Pawl

Dealer Code:

Dealer Name:

Contact Name:

Contact Email address:

Contact Phone Number:

19. Using a clean, straight pick or similar tool, lift the Parking Pawl upward.



Figure 16

 Insert a Phillips head screwdriver into the hole and remove the pick.



Figure 17

- 20. Align the Parking Pawl and the Transmission Case holes.
 - Remove the Phillips head screwdriver and verify the Parking Pawl and the Transmission Case holes are aligned as shown in Figure 18.

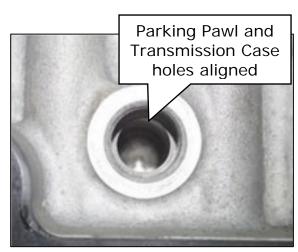


Figure 18

21. Install the new Parking Pawl Pin.

To prevent sealant entry and possible damage to the Transmission, ensure to remove **ALL** residual sealant from the Transmission Case threads before installing the new Transmission Plug in step 22.

- 22. Install the new Transmission Plug.
 - Transmission Plug torque 22.0 N•m (2.2 kg-m, **16 ft-lb**)
- 23. Clean any spilled residual fluid from the Transmission using a suitable cleaner and a shop rag.
- 24. To reinstall the Transfer Assembly, refer to the specific model below:
 - On Long Wheel Base (LWB) Titan models, continue to step 25 for reassembly.
 - On Medium Wheel Base (MWB) Titan models, skip to step 26 on page 12 for reassembly.
 - On all Frontier models, skip to step 27 on page 12 for reassembly.
- 25. On Long Wheel Base (LWB) Titan models, reinstall the Transfer Assembly.
 - Refer to the ESM: TRANSMISSION & DRIVELINE > DRIVELINE > TRANSFER:
 TX91A > UNIT REMOVAL AND INSTALLATION > TRANSFER ASSEMBLY >
 Removal and Installation
 - During reinstallation, be sure to use the new Transfer Assembly to Transmission gasket, new mounting bolts, and new propeller shaft fasteners that are provided in the kit.
 - o Torque the eleven (11) Transmission to Transfer Assembly mounting bolts to 11.0 N•m (1.1 kg-m, **8 ft-lb**), then tighten an additional 90° 110°.
 - o Torque the three (3) nuts of the Transmission Insulator (Rear) to 88.0 N•m (9.0 kg-m, 65 ft-lb).
 - Torque the Transmission Cross Member bolts to 100.0 N•m (10.0 kg-m, 74 ft-lb).
 - If equipped, torque the Transmission diagonal Cross Member bolts to 130.0 N•m (13.0 kg-m, 96 ft-lb).
 - Reinstall and torque the Front Propeller Shaft (rear joint) bolts to 80.0 N•m (8.2 kg-m, 59 ft-lb).
 - Reinstall and torque the Rear Propeller Shaft (front joint) bolts to 105.0 N•m (10.7 kg-m, 77 ft-lb).
 - Reinstall and torque the Rear Propeller Shaft Center Support Bearing nuts to 49.0 N•m (5.0 kg-m, 36 ft-lb).

- 26. On Medium Wheel Base (MWB) Titan models, reinstall the Transfer Assembly.
 - Refer to the ESM: TRANSMISSION & DRIVELINE > DRIVELINE > TRANSFER: TX91A > UNIT REMOVAL AND INSTALLATION > TRANSFER ASSEMBLY > Removal and Installation
 - During reinstallation, be sure to use the new Transfer Assembly to Transmission gasket, new mounting bolts, and new propeller shaft fasteners that are provided in the kit.
 - o Torque the eleven (11) Transmission to Transfer Assembly mounting bolts to 11.0 N•m (1.1 kg-m, **8 ft-lb**), then tighten an additional 90° 110°.
 - o Torque the three (3) nuts of the Transmission Insulator (Rear) to 88.0 N•m (9.0 kg-m, **65 ft-lb**).
 - Torque the Transmission Cross Member bolts to 100.0 N•m (10.0 kg-m, 74 ft-lb).
 - o Torque the Transmission diagonal Cross Member bolts to 130.0 N•m (13.0 kg-m, **96 ft-lb**).
 - Reinstall and torque the Front Propeller Shaft (rear joint) bolts to 59.8 N•m (6.1 kg-m, 44 ft-lb).
 - Reinstall and torque the Rear Propeller Shaft (rear joint) bolts to 135.0 N•m (14.0 kg-m, 100 ft-lb).
- 27. On Frontier models, reinstall the Transfer Assembly.
 - Refer to the ESM: TRANSMISSION & DRIVELINE > DRIVELINE > TRANSFER: TX91A > UNIT REMOVAL AND INSTALLATION > TRANSFER ASSEMBLY > Removal and Installation
 - During reinstallation, be sure to use the new Transfer Assembly to Transmission gasket, new mounting bolts, and new propeller shaft fasteners that are provided in the kit.
 - o Torque the eleven (11) Transmission to Transfer Assembly mounting bolts to 11.0 N•m (1.1 kg-m, **8 ft-lb**), then tighten an additional 90° 110°.
 - Torque the two (2) bolts and three (3) nuts of the Transmission Insulator (Rear) to 88.0 N•m (9.0 kg-m, 65 ft-lb).
 - Torque the Transmission Cross Member bolts to 100.0 N•m (10.0 kg-m, 74 ft-lb).
 - o Torque the Transmission diagonal Cross Member bolts to 100.0 N•m (10.0 kg-m, **74 ft-lb**).
 - Reinstall and torque the Front Propeller Shaft (rear joint) bolts to 59.8 N•m (6.1 kg-m, 44 ft-lb).
 - Reinstall and torque the Rear Propeller Shaft (front joint) bolts to 105.0 N•m (11.0 kg-m, 77 ft-lb).
 - o Reinstall and torque the Rear Propeller Shaft Center Support Bearing nuts to 49.0 N•m (5.0 kg-m, **36 ft-lb**).

HINT: If **NO** fluid was lost during the Parking Pawl Pin replacement, it is not necessary to set the transmission fluid level.

28. Set the transmission fluid level.

Refer to the ESM: TRANSMISSION & DRIVELINE > TRANSAXLE &
 TRANSMISSION > 9AT: GE9R01A > PERIODIC MAINTENANCE > A/T FLUID >
 Adjustment

PARTS INFORMATION

DESCRIPTION	MODEL	PART NUMBER	QUANTITY
SHAFT KIT – PARKING PAWL	All	C1K86-X280B	1
	Frontier Long Wheel Base	C7A20-5X00A	1
Single-Use Parts Kit	Frontier Short Wheel Base Titan Medium Wheel Base	C7120-5X00A	1
	Titan Long Wheel Base	C7120-5X05A	1
Seal	Titan Medium Wheel Base	33142-4JA1A	1
Matic P Transmission Fluid	All	999MP-MTP10P	As needed (1)

⁽¹⁾ One (1) quart maximum.

CLAIMS INFORMATION

Submit a "CM" line claim using the following claims coding:

CAMPAIGN ("CM") ID	DESCRIPTION	OP CODE	FRT
R22A1	Replace Parking Pawl Pin (Titan 4WD)	R22A10	2.6
	Replace Parking Pawl Pin (Frontier 4WD)	R22A12	3.1

AMENDMENT HISTORY

PUBLISHED DATE	REFERENCE	DESCRIPTION
July 28, 2022	NTB22-064	Original bulletin published