

VOLUNTARY RECALL CAMPAIGN

Classification: Reference: Date:

AT22-008A NTB22-065A February 9, 2023

VOLUNTARY SAFETY RECALL CAMPAIGN 2020-2022 FRONTIER, TITAN/TITAN XD 2WD; TRANSMISSION PARKING PAWL PIN

This bulletin has been amended. See AMENDMENT HISTORY on the last page.

Please discard previous versions of this bulletin.

CAMPAIGN ID #: R22A7

APPLIED VEHICLES: 2020-2021 Frontier (D40) 2WD

2022 Frontier (D41) 2WD

2020-2022 Titan and Titan XD (A61) 2WD

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 2WD 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 R22A7 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

Parking Pawl Pin Removal

IMPORTANT: The original Parking Pawl Pin may be difficult to remove and/or the new Parking Pawl Pin may be difficult to install if the Transmission temperature is below 20°C (68°F). If the Transmission temperature is at or below 20°C (68°F), start and idle the engine for 10 minutes before starting repairs.

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.
- 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. Ensure the parking brake is **NOT** set.
- 2. Place the vehicle on a lift.
- Remove the two (2) bolts securing the O2 sensor harness bracket to the Transmission.

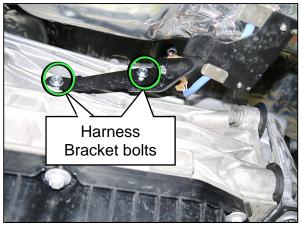


Figure 1

4. Remove the three (3) Insulator (Rear) nuts securing the Transmission to the Cross Member.

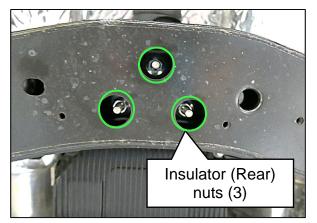


Figure 2

NOTICE

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

 Using a suitable jack and a block of wood, raise the Transmission Assembly approximately 10 mm (1/2") at the jacking point shown in Figure 3.

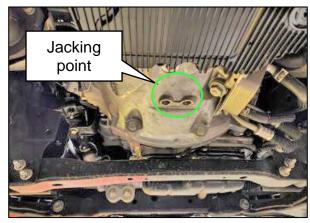


Figure 3

- 5. Remove the Transmission Mount Bracket and Insulator (Rear).
 - Step 5 continued on page 4.

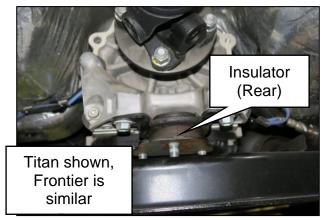


Figure 4

Step 5 continued.

 On Frontier models, completely loosen the two (2) bolts securing the Insulator (Rear) to the Transmission Mount Bracket (the bolts will not be able to be completely removed due to lack of space, and will be removed later in this step).

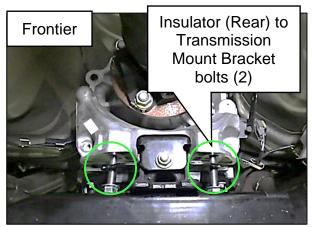


Figure 5

 On Titan models, remove the two (2) bolts securing the Insulator (Rear) to the Transmission Mount Bracket.

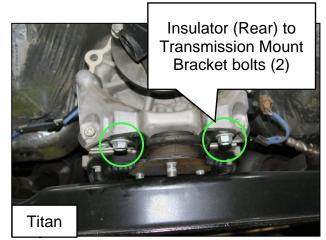


Figure 6

- On all models, remove the four (4)
 Transmission Mount Bracket bolts
 from the Transmission (Frontier shown, Titan is similar).
- Remove the Transmission Mount Bracket and the Insulator (Rear).
- The Transmission Mount Bracket bolts will not be reused.

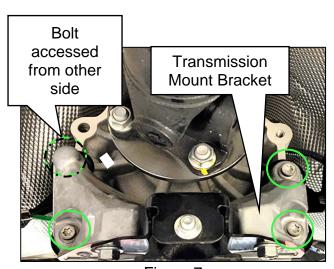


Figure 7

- 6. 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.
- 7. Rotate the Propeller Shaft **clockwise** to seat the Parking Pawl against the Parking Gear, and then release the propeller shaft.

IMPORTANT: To help prevent the Parking Pawl from moving out of position, do **NOT** touch or move the Propeller Shaft or rear wheels **AFTER** seating the Parking Pawl to the Parking Gear.

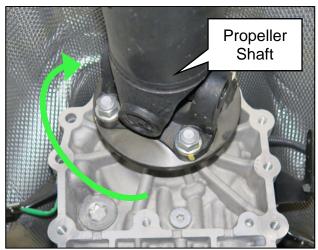


Figure 8

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

NOTICE

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 9.

- 9. Remove the Transmission Plug shown in Figure 9.
 - 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.

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

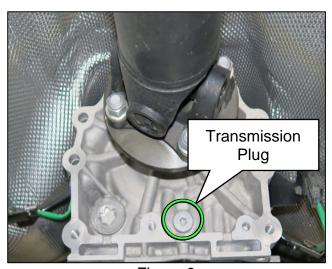


Figure 9

IMPORTANT: To help prevent the Parking Pawl from moving out of position, **do NOT** touch or move the Propeller Shaft or Rear Wheels AFTER removing the Parking Pawl Pin.

- 10. Remove the Parking Pawl Pin.
 - Using a magnetic rod, remove the Parking Pawl Pin from the Transmission.
 - If the original Parking Pawl Pin cannot be removed after multiple attempts, skip to step 20 on page 11 to contact FQA and provide <u>ALL</u> requested details.

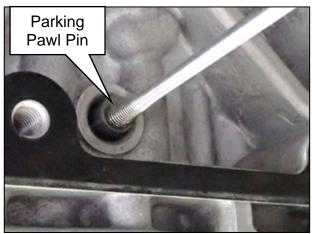


Figure 10

Parking Pawl Position Inspection

- 11. Inspect the position of the Parking Pawl.
 - If the Parking Pawl hole is fully visible as shown in Figure 11, skip to step 18 on page 11 for Parking Pawl Pin Installation.

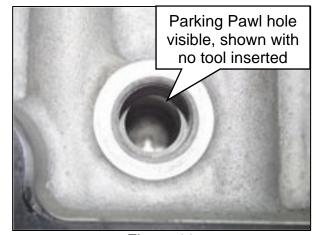


Figure 11

 If the Parking Pawl hole is partially visible as shown in Figure 12, the Parking Pawl may have moved out of position. Continue to step 13 on page 8 for Parking Pawl Position Alignment.

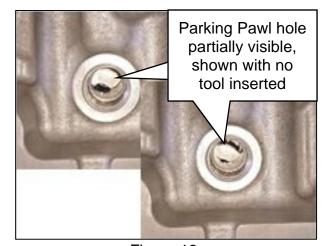


Figure 12

 If the Parking Pawl hole is NOT visible as shown in Figure 13, the Parking Pawl may have moved out of position. Continue to step 12 on page 8 for Parking Pawl Position Alignment.



Figure 13

Parking Pawl Position Alignment

- 12. Use a small magnetic rod to raise the Parking Pawl until the Parking Pawl hole is visible.
 - If the Parking Pawl hole is visible after raising it with a magnetic rod, continue to step 13.
 - If the Parking Pawl hole is NOT visible after multiple attempts, skip to step 14 on page 9 for Parking Pawl Position Recovery.

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



Figure 14

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



Figure 15

- Remove the Phillips head screwdriver and verify the Parking Pawl and the Transmission Case holes are aligned as shown in Figure 16.
 - If the Parking Pawl and the Transmission Case holes are aligned as shown in Figure 16, skip to step 18 on page 11 for Parking Pawl Pin Installation.
 - If the Parking Pawl and the Transmission Case holes are NOT aligned as shown in Figure 12 and Figure 13 on page 7, continue to step 14 for Parking Pawl Position Recovery.

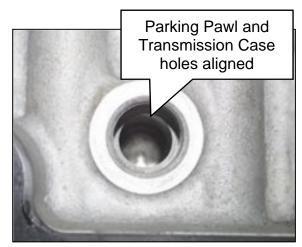


Figure 16

Parking Pawl Position Recovery

- 14. Remove the Transmission Pan.
 - Refer to the ESM: TRANSMISSION & DRIVELINE > TRANSAXLE &
 TRANSMISSION > 9AT: GE9R01A > REMOVAL AND INSTALLATION > OIL
 PAN > Removal and Installation
- 15. Locate the Parking Pawl.

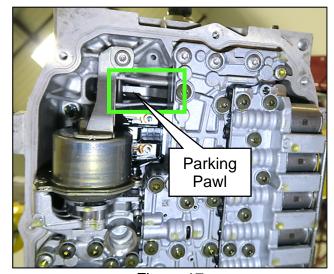


Figure 17

Push upward

Parking Pawl

16. Push upward on the Parking Pawl at the location shown in Figure 18.

Figure 18

17. While holding the Parking Pawl upward, slowly rotate the Output Shaft clockwise until the Parking Pawl and Transmission Case holes are aligned (Figure 19 shown with Transmission removed from vehicle and is for reference only).



Figure 19

Parking Pawl Pin Installation

NOTICE

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. Do NOT strike the Parking Pawl Pin with any tools during installation.

- 18. Prepare the replacement Parking Pawl Pin.
 - Ensure the NEW Parking Pawl Pin is clean and free of any debris.
 - 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.

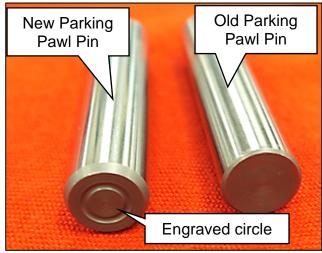


Figure 20

19. Install the new Parking Pawl Pin.

HINT: Ensure the Transmission Case Parking Pawl hole and the new Parking Pawl Pin are clean and free of any debris before attempting installation.

- If the new Parking Pawl Pin installed successfully, skip to step 21 on page 12.
- If the new Parking Pawl Pin will not install, place it in the freezer for 20 minutes, then reattempt installation.
 - If the new Parking Pawl Pin will still not install, continue to step 20 to contact FQA and provide <u>ALL</u> requested details.
- 20. Send an email with the below information to: FQA_Inspection_Support@nissan-usa.com. A response will be provided within 48 business hours.

Email subject line: R22A7 Parking Pawl	

Dealer Code:

VIN:

Contact Name:

Contact Email address:

Contact Phone Number:

- 21. If the Transmission Pan was **NOT** removed for **Parking Pawl Position Recovery**, continue to step 22. If the Transmission Pan was removed for **Parking Pawl Position Recovery**, reinstall the Transmission Pan.
 - Refer to the ESM: TRANSMISSION & DRIVELINE > TRANSAXLE &
 TRANSMISSION > 9AT: GE9R01A > REMOVAL AND INSTALLATION > OIL
 PAN > Removal and Installation

NOTICE

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.
- Reinstall the Transmission Mount Bracket and the Insulator (Rear).
 - During reinstallation, be sure to use the new Transmission Mount Bracket bolts and gaskets provided in the kit.
 - Torque the four (4) Transmission Mount Bracket bolts to 11.0 N•m (1.1 kg-m, 97 in-lb), then tighten an additional 90°.
 - Torque the two (2) Insulator (Rear) to Transmission Mount Bracket bolts to 87.5 N•m (8.9 kg-m, **65 ft-lb**).
 - Torque the three (3) Insulator (Rear) nuts securing the Transmission to the Cross Member to 87.5 N•m (8.9 kg-m, **65 ft-lb**).

A/T Fluid Adjustment

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

- 25. Set the transmission fluid level.
 - Refer to the ESM: TRANSMISSION & DRIVELINE > TRANSAXLE &
 TRANSMISSION > 9AT: GE9R01A > PERIODIC MAINTENANCE > A/T FLUID >
 Adjustment

PARTS INFORMATION

Parking Pawl Pin Replacement (Required Parts)

DESCRIPTION	PART NUMBER	QUANTITY
SHAFT KIT – PARKING PAWL	C1986-X280B	1
Matic P Transmission Fluid	999MP-MTP10P	As needed

Additional Required Parts When Parking Pawl Recovery Is Performed

DESCRIPTION	PART NUMBER	QUANTITY
BOLT (Transmission Pan Bolt)	31377-X280C	10
GASKET – OIL PAN	31397-X280A	1
SEAL – O RING	31526-X282B	1
SEAL – O RING	31526-X282C	1

CLAIMS INFORMATION

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

CAMPAIGN ("CM") ID	DESCRIPTION	OP CODE	FRT
D0047	Replace Parking Pawl Pin (Titan 2WD)	R22A70	1.0
	Replace Parking Pawl Pin (Titan 2WD), Recover Parking Pawl By Transmission Pan Removal	R22A71	1.4
R22A7	Replace Parking Pawl Pin (Frontier 2WD)	R22A72	1.1
	Replace Parking Pawl Pin (Frontier 2WD), Recover Parking Pawl By Transmission Pan Removal	R22A73	1.5

AMENDMENT HISTORY

PUBLISHED DATE	REFERENCE	DESCRIPTION
July 28, 2022	NTB22-065	Original bulletin published
February 9, 2023	NTB22-065A	IMPORTANT statement added on page 2, Parking Pawl Pin Removal, Parking Pawl Position Inspection and Parking Pawl Position Alignment revised