



VOLUNTARY RECALL CAMPAIGN

Classification: AT22-007A	Reference: NTB22-064A	Date: February 9, 2023
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VOLUNTARY SAFETY RECALL CAMPAIGN 2020-2022 FRONTIER, TITAN/TITAN XD 4WD; 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 #: 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

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.

Transfer Case Removal

WARNING

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.

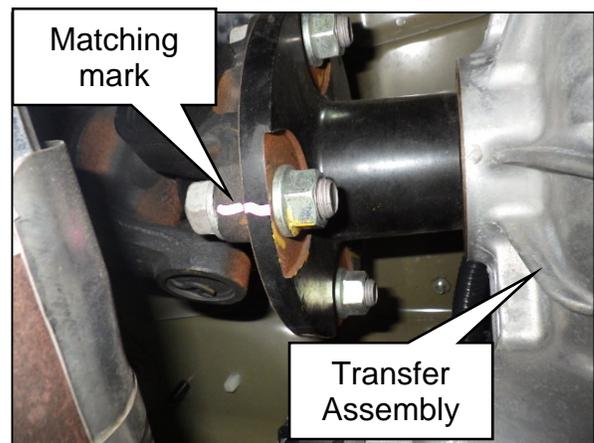


Figure 1

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

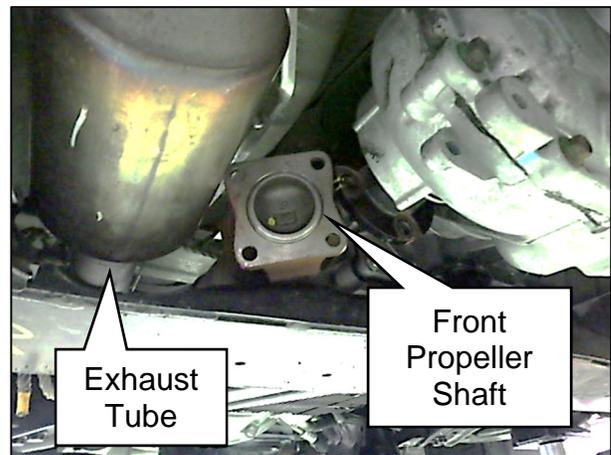


Figure 2

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

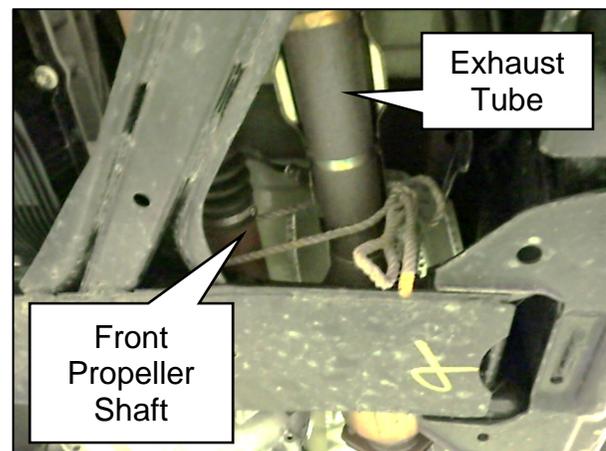


Figure 3

- On Frontier and Long Wheel Base (LWB) Titan models, skip to step 5 on page 4.
 - 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.

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

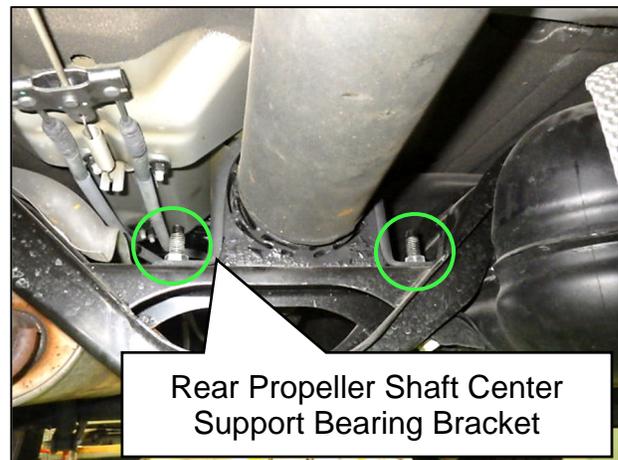


Figure 4

- 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.

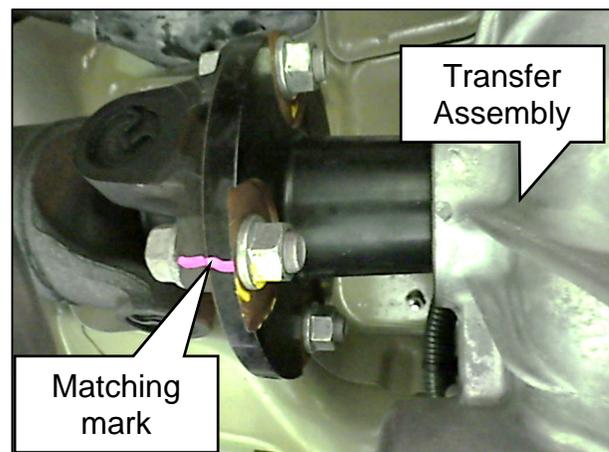


Figure 6

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.

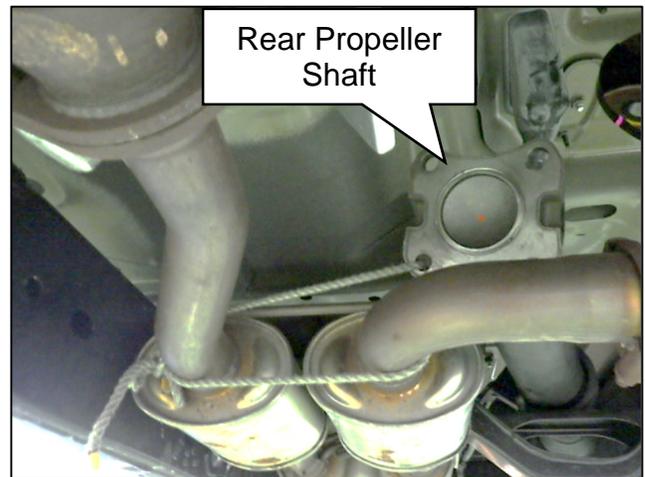


Figure 7

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

NOTICE

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.

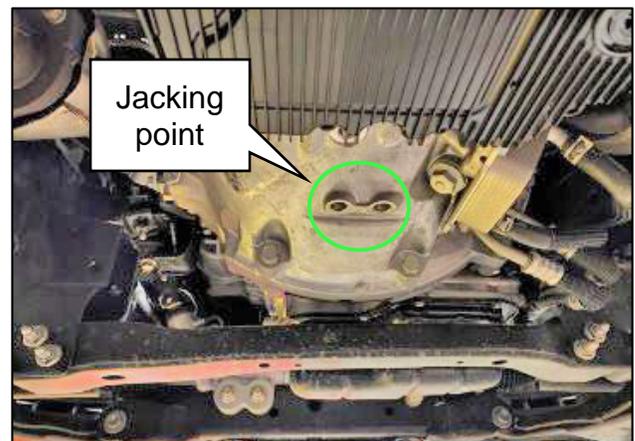


Figure 8

Parking Pawl Pin Removal

- 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.

- Rotate the Output Shaft **clockwise** to seat the Parking Pawl against the Parking Gear, then release the output shaft.

IMPORTANT: To help prevent the Parking Pawl from moving out of position after performing step 10, do **NOT** touch or move the Output Shaft **AFTER** removing the Parking Pawl Pin.

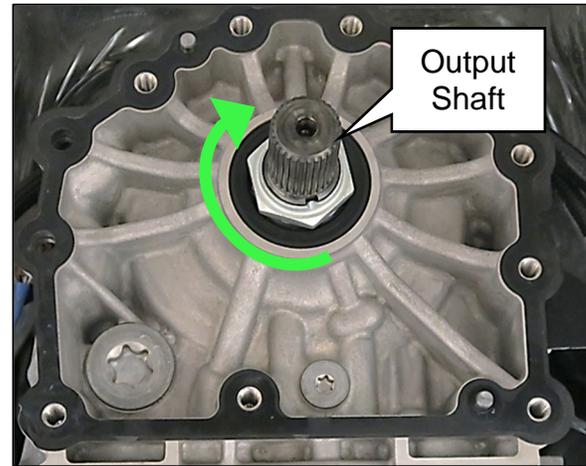


Figure 9

- 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 12.

- Remove the Transmission Plug shown in Figure 10.

- 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.

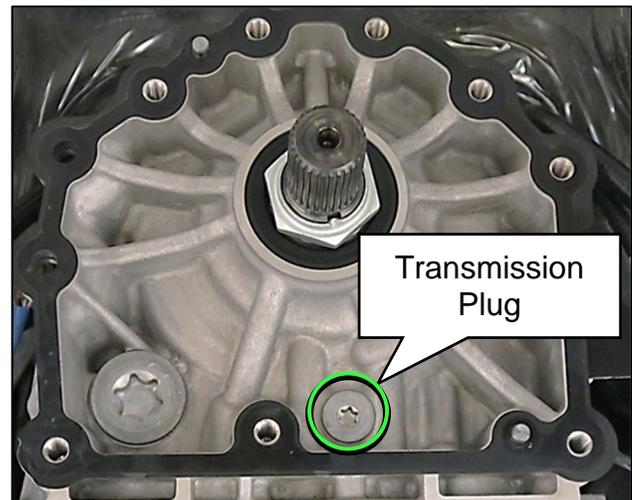


Figure 10

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

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

13. 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 23 on page 12 to contact FQA and provide **ALL** requested details.



Figure 11

Parking Pawl Position Inspection

14. Inspect the position of the Parking Pawl.

- If the Parking Pawl hole is fully visible as shown in Figure 12, skip to step 21 on page 12 for **Parking Pawl Pin Installation**.



Figure 12

- If the Parking Pawl hole is partially visible as shown in Figure 13, the Parking Pawl may have moved out of position. Continue to step 16 on page 9 for **Parking Pawl Position Alignment**.

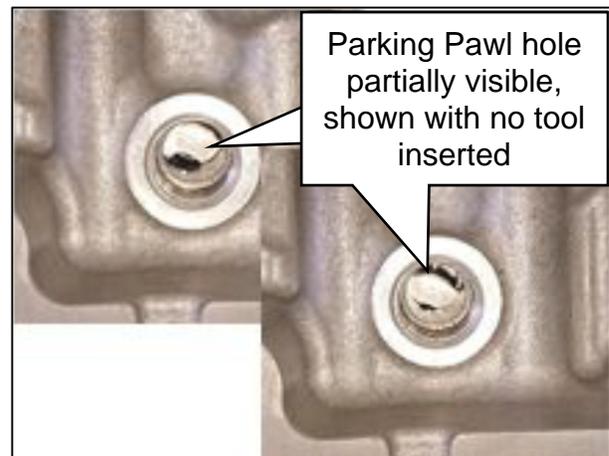


Figure 13

- If the Parking Pawl hole is **NOT** visible as shown in Figure 14, the Parking Pawl may have moved out of position. Continue to step 15 on page 9 for **Parking Pawl Position Alignment**.



Figure 14

Parking Pawl Position Alignment

15. 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 16.
 - If the Parking Pawl hole is NOT visible after multiple attempts, skip to 17 on page 10 for **Parking Pawl Position Recovery**.

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



Figure 15

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



Figure 16

- Remove the Phillips head screwdriver and verify the Parking Pawl and the Transmission Case holes are aligned, as shown in Figure 17.
- If the Parking Pawl and the Transmission Case holes are aligned, as shown in Figure 17, skip to step 21 on page 12 for **Parking Pawl Pin Installation**.
- If the Parking Pawl and the Transmission Case holes are NOT aligned, as shown in Figure 13 and Figure 14 on page 8, continue to step 17 for **Parking Pawl Position Recovery**.

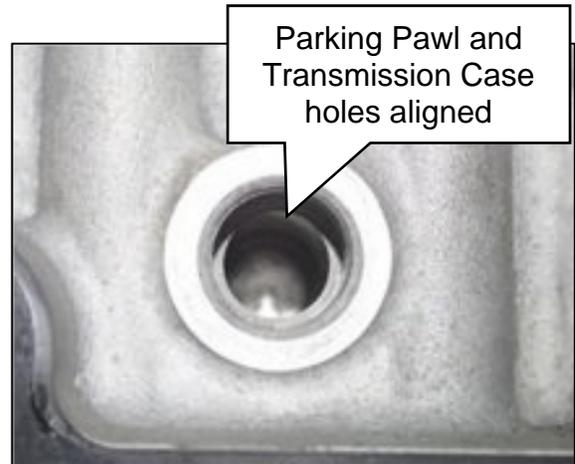


Figure 17

Parking Pawl Position Recovery

17. Remove the Transmission Pan.

- Refer to the **ESM: TRANSMISSION & DRIVELINE > TRANSAXLE & TRANSMISSION > 9AT: GE9R01A > REMOVAL AND INSTALLATION > OIL PAN > Removal and Installation**

18. Locate the Parking Pawl.

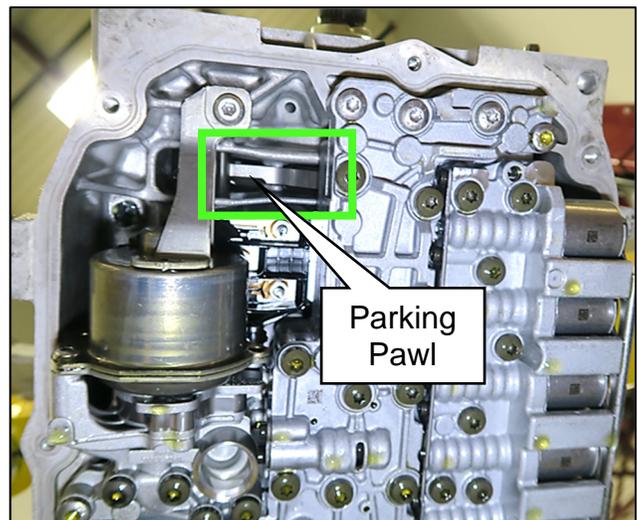


Figure 18

19. Push upward on the Parking Pawl at the location shown in Figure 19.

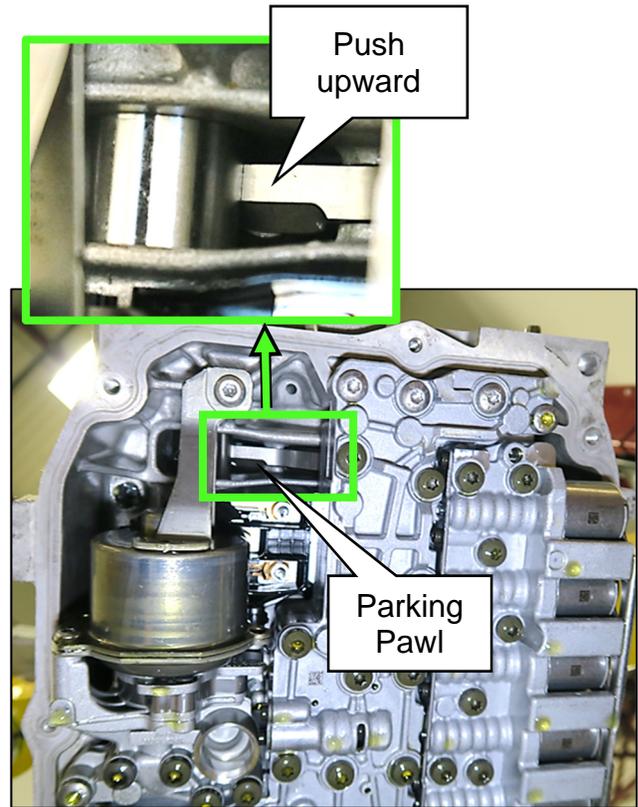


Figure 19

20. While holding the Parking Pawl upward, slowly rotate the Output Shaft **clockwise** until the Parking Pawl and Transmission Case holes are aligned (Figure 20 shown with Transmission removed from vehicle and is for reference only).



Figure 20

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.

21. 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.

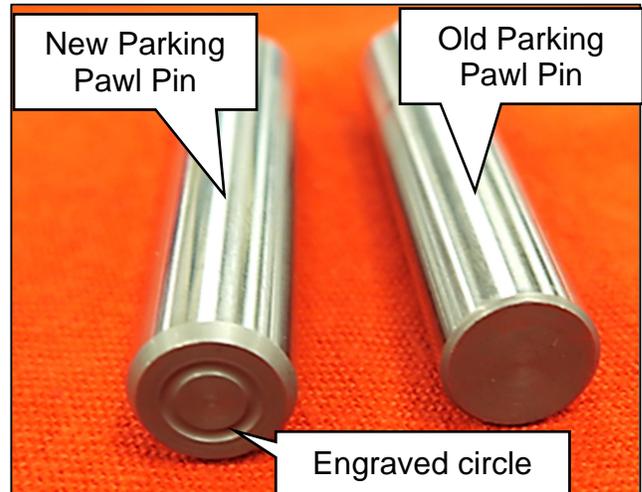


Figure 21

22. 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 debris before attempting installation.

- If the new Parking Pawl Pin installed successfully, skip to step 24 on page 13.
- 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 23 to contact FQA and provide **ALL** requested details.

23. 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: R22A1 Parking Pawl

Dealer Code:

VIN:

Concern:

Contact Name:

Contact Email address:

Contact Phone Number:

24. If the Transmission Pan was **NOT** removed for **Parking Pawl Position Recovery**, continue to step 25. 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 25.

25. Install the new Transmission Plug.
- Transmission Plug torque 22.0 N•m (2.2 kg-m, **16 ft-lb**)
26. Clean any spilled residual fluid from the Transmission using a suitable cleaner and a shop rag.

Transfer Case Installation

27. To reinstall the Transfer Assembly, refer to the specific model below:
- On Long Wheel Base (LWB) Titan models, continue to step 28 for reassembly.
 - On Medium Wheel Base (MWB) Titan models, skip to step 29 on page 15 for reassembly.
 - On all Frontier models, skip to step 30 on page 15 for reassembly.
28. 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.
 - 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 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**).

29. 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.
 - 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 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**).
 - 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**).
30. 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.
 - 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**).
 - 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**).
 - Reinstall and torque the Rear Propeller Shaft Center Support Bearing nuts to 49.0 N•m (5.0 kg-m, **36 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.

31. 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	MODEL	PART NUMBER	QUANTITY
SHAFT KIT – PARKING PAWL	All	C1K86-X280B	1
Single-Use Parts Kit	Frontier Long Wheel Base (7 th character of VIN “F”)	C7A20-5X00A	1
	Frontier Standard Wheel Base (7 th character of VIN “C” or “E”)	C7120-5X00A	1
	Titan Medium Wheel Base (7 th character of VIN “C” or “E”)	C7120-5X00A	1
	Titan Long Wheel Base (7 th character of VIN “F”)	C7120-5X05A	1
Seal	Titan Medium Wheel Base (7 th character of VIN “C” or “E”)	33142-4JA1A	1
Matic P Transmission Fluid	All	999MP-MTP10P	As needed

Additional Required Parts When Parking Pawl Recovery Is Performed

DESCRIPTION	MODEL	PART NUMBER	QUANTITY
GASKET – OIL PAN	All	31397-X280A	1
SEAL – O RING	All	31526-X282B	1
SEAL – O RING	All	31526-X282C	1
BOLT	All	31377-X280C	10

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 (Titan 4WD), Recover Parking Pawl By Transmission Pan Removal	R22A11	3.0
	Replace Parking Pawl Pin (Frontier 4WD)	R22A12	3.1
	Replace Parking Pawl Pin (Frontier 4WD), Recover Parking Pawl By Transmission Pan Removal	R22A13	3.5

AMENDMENT HISTORY

PUBLISHED DATE	REFERENCE	DESCRIPTION
July 28, 2022	NTB22-064	Original bulletin published
February 9, 2023	NTB22-064A	IMPORTANT statement added on page 2, Parking Pawl Pin Removal, Parking Pawl Position Inspection and Parking Pawl Position Alignment revised