



TECHNICAL SERVICE BULLETIN

Classification:	Reference:	Date:
BT22-023	NTB22-104	December 12, 2022

DIAGNOSING DOOR LOCK OPERATION

- APPLIED VEHICLES:** 2021-2023 Altima (L34)
2022-2023 Frontier (D41)
2022-2023 Pathfinder (R53)
2021-2023 Rogue (T33)
2021-2022 Sentra (B18)
- APPLIED DATES:** 2021 Altima built after April 2021
2022-2023 Altima All
2022-2023 Frontier All
2022-2023 Pathfinder All
2021 Rogue built after June 2021
2022-2023 Rogue All
2021 Sentra built after January 2021
2022 Sentra All

SERVICE INFORMATION

If a customer describes a concern of a door not opening and/or unlocking properly, on any of the **APPLIED VEHICLES**, use the **Questions for the Customer** below to help reproduce the concern, and then follow the **SERVICE PROCEDURE** starting on page 2 to determine if the Door Lock should be replaced.

- Do not replace a Door Lock unless instructed to by the **SERVICE PROCEDURE**.

Questions for the Customer:

- When did you first notice the issue?
- Is it consistent or intermittent?
- Under what conditions does it occur?
- Does it seem more likely to happen to a specific passenger/person in your family?
- Has there been any change to the issue since it first began?

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: Please follow the complete **SERVICE PROCEDURE**, below, to confirm and diagnose Door Lock concerns.

Door Sticking, Will Not Open, or Will Not Close

1. Confirm the concern and document it on the repair order.
 - Door will not open
 - Door will not close
 - Door sticks in half-lock position
 - Other concern
2. Confirm if the concern affects the operation of both the inside and the outside handles of the affected door, or just one (1) handle.
3. Check the position of the "manual" Inside Lock Knob located on the Inside Handle of the affected door, and take a photo.
 - If the Inside Lock Knob is positioned somewhere between fully locked and fully unlocked, it can result in the door becoming stuck in the half-lock position, and cause the power lock to be unresponsive.
 - o This can be caused by contact with the Inside Lock Knob as the Inside Handle is actuated to open the door from inside the vehicle and is not a defect. Do not replace the Door Lock as it can happen just as easily with the replacement Door Lock.
 - o Demonstrate to the customer what is believed to be causing their concern.
 - a. Show that it is possible to inadvertently move the Inside Lock Knob with the heel of your hand when pulling the Inside Handle to exit the vehicle.



Figure 1

- b. If the concern happens again, ask the customer to confirm if the Inside Lock Knob is partially or fully locked. The concern should be resolved by manually unlocking the door with the Inside Lock Knob.
 - If this concern is confirmed, a slightly altered approach to opening the door can be used to avoid inadvertent contact with the Inside Lock Knob.
- c. If the issue persists and it is confirmed that the Inside Lock Knob was not moved, proceed to step 4.

The Concern is Present Despite The Inside Lock Knob Position

4. Confirm if the concern is due to poor door fit.
 - Adjust the Front Door Striker as needed, and then retest for correct operation.
5. Confirm that the Front Door Lock is installed properly, fully secured and properly aligned in the door opening.
 - Take a photo of any concerns found for documentation.
 - Resolve concerns as needed, and then retest for correct operation.
6. Carefully remove the Front Door Finisher.
 - a. Does the door now function properly with the Front Door Finisher removed?
 - o Inspect the Inside Handle base for anything that could cause the concern.
 - Replace any suspected components as needed, and then retest for correct operation (these components may be collected).
 - b. Confirm that the Front Door Lock cables are correctly routed and attached.
 - o Document any abnormal cable concerns found.
 - o Correctly route and/or reattach the cables as needed, and then retest for correct operation.
 - c. Confirm that the cables are not bent or kinked.
 - o Take a photo of any concerns found for documentation.
 - o If bent or kinked, replace the Front Door Lock and then confirm correct operation.
 - d. If the concerns in steps 6a-6c were not present and the concern is still present, replace the Front Door Lock, and then retest for correct operation.
 - o Make note of any concerns found for documentation.

One or More Power Door Locks Seem to Have an Electrical Concern

7. Confirm if the concern is present in only a single door or in multiple doors, and if the condition is consistent or intermittent.
 - a. Confirm if the inoperative actuator is making any sound when lock/unlock is requested.
 - b. Check the position of the "manual" Inside Lock Knob located on the Inside Handle of the door with the concern, and then take a photo.
 - o If the Inside Lock Knob is positioned somewhere between fully locked and fully unlocked, it can result in the door becoming stuck in the half-lock position, and cause the power lock to be unresponsive.
 - See step 3 on pages 2 and 3 for more detail.
8. Confirm that the Inside Lock Knob of the affected door operates correctly.
 - If the affected Inside Lock Knob has a noticeably higher resistance, as compared to the other doors' Inside Lock Knobs, document it on the repair order and then proceed to step 9.
9. Remove the affected Door Finisher, but do not detach the Door Lock's cable yet.
 - Does the Door Lock now work correctly after removing the Door Finisher?
 - o There may be resistance within the lock cable that was relieved by altering the cable routing. Reposition the cable as needed, and then retest for correct operation.
 - o If the concern can be duplicated, document the occurrence with photos and/or video (see footnote 1 on page 5).
10. Confirm that the affected Door Lock cables are correctly routed and attached.
 - Document any abnormal cable concerns found.
 - Correctly route and/or reattach the cables as needed, and then retest for correct operation.
11. Confirm that the affected door's wiring harness connector is fully engaged to the Door Lock actuator.
 - Reengage as needed, and then retest for correct operation.
12. Does the Door Lock work after slightly repositioning or wiggling the door wiring harness, or after disconnecting it for several seconds and then reconnecting it?
 - If so, this could be a connectivity issue of the wiring harness connector or in the wiring harness. If the concern can be duplicated, document the occurrence with photos and/or video (see footnote 1 on page 5).
 - If a wiring harness/connectivity issue is confirmed, replace the Door Lock actuator and associated wiring harness, and then retest for correct operation (see footnote 2 on page 5).

If The Concern Persists Despite Cable and Harness Position Adjustment

13. Carefully detach the Door Lock cable from the Inside Handle, taking note of the orientation of the cable end after it is detached.
 - Confirm the orientation of the cable end after it is detached.
 - o Did the cable end spin or unwind when released? If so, which way? Document anything found on the repair order.

HINT: Is it possible that the cable was wound in a direction that bound it?
 14. Does the Door Lock operate correctly with the end of the lock cable detached from the Inside Handle?
 - **Yes:** Reattach the Door Lock cable to the Inside Handle, reassemble the Door Finisher and then retest for correct operation.
 - **No:** Replace the Door Lock actuator and the door wiring harness (unless the issue is clearly unrelated to the Door wiring harness), and then retest for correct operation (see footnote 2, below).
- (1) Photos/videos can be taken with personal devices (photos/videos may be helpful to Engineering staff following up on the concern, but are not required). Please plan to retain any photos/videos for a period of three (3) weeks if possible. Please include a note or reference to available photos/videos in repair order documentation.
 - (2) For any part(s) replacement required, please refer to standard work instruction(s) for the respective part(s).

AMENDMENT HISTORY

PUBLISHED DATE	REFERENCE	DESCRIPTION
December 12, 2022	NTB22-104	Original bulletin published