Technical Bulletin



RECALL CAMPAIGN BULLETIN

 Classification:
 Reference:
 Date:

 FA21-004
 NTB21-059
 July 6, 2021

VOLUNTARY SAFETY RECALL CAMPAIGN 2020 MURANO; REAR SUSPENSION KNUCKLE INSPECTION

CAMPAIGN ID #: R21A4

APPLIED VEHICLES: 2020 Murano (Z52)

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 Murano vehicles to inspect, and if necessary replace, the rear suspension knuckles. This service will be performed at no charge to the customer for parts or labor.

IDENTIFICATION NUMBER

Nissan has assigned identification number R21A4 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.

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. **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 severe personal injury, do not reuse single use parts noted in this TSB. Reusing a single use part may induce risk that it, or the component that it secures, may become loose.

Remove Both Sides of the Rear Suspension Knuckle Assembly

The following procedure will be performed on both sides, one at a time.

- 1. Place the vehicle on a lift and remove the rear wheels.
- Remove the rear wheel sensor bolt (10 mm) from the rear suspension knuckle (rear knuckle).
 - Separate the rear wheel sensor harness grommets from the brackets.
 - Separate the wheel sensor from the rear knuckle.

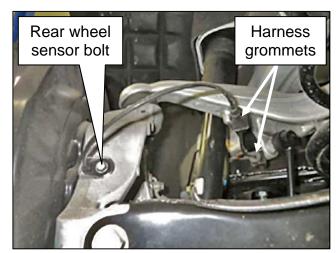


Figure 1

- 3. Put an alignment mark on the disc brake rotor and a corresponding mark on the wheel hub.
 - 2WD shown. AWD is similar.

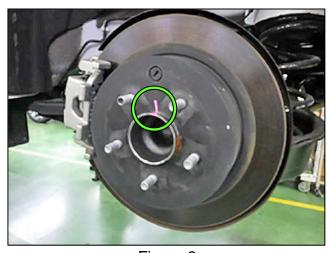


Figure 2

- Remove the rear brake caliper assembly bolts, and then separate the brake caliper assembly from the rear knuckle.
- 5. Remove the disc brake rotor.

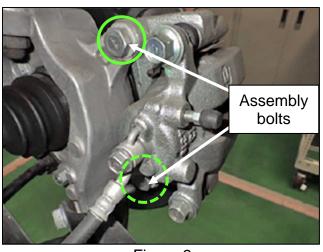


Figure 3

NOTE: Steps 6-8 are applicable to AWD vehicles only. For 2WD vehicles, skip to step 9.

6. Remove the cotter pin from the drive shaft, and then loosen the lock nut (32 mm).

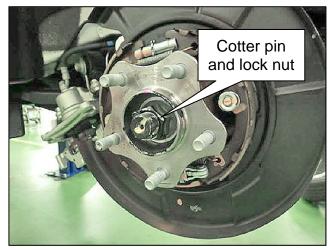


Figure 4

- 7. Using a piece of wood and suitable tool (Figure 5), tap on the lock nut to disengage the drive shaft from the wheel hub.
 - Do not reuse the cotter pin.
- 8. Remove the lock nut from the shaft.



Figure 5

9. Remove the adjuster and return spring from the parking brake shoe.

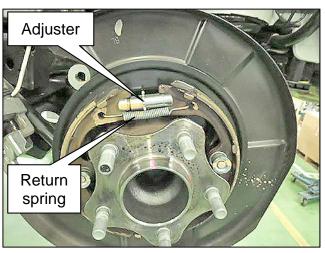


Figure 6

10. Remove the anti-rattle pins from the front and rear parking brake shoes.

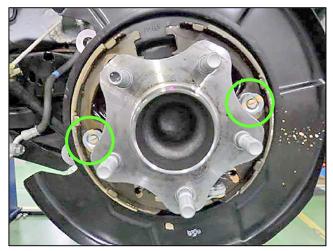


Figure 7

11. Remove the parking brake shoes from the splash guard.

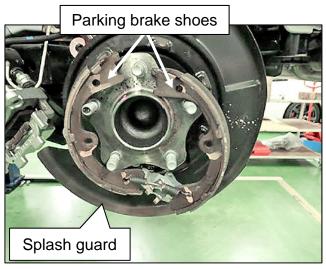


Figure 8

12. Remove the pin and then separate the toggle lever from the parking brake cable.

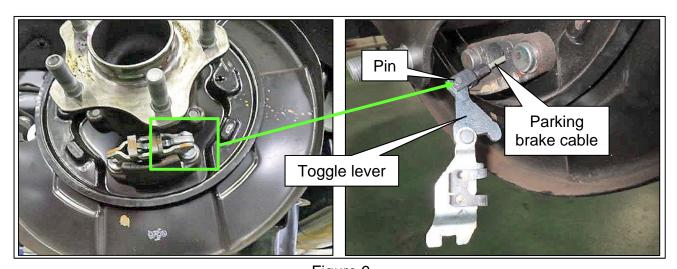


Figure 9

- 13. Remove the parking brake cable bolt (16 mm).
- 14. Separate the parking brake cable from the rear knuckle.

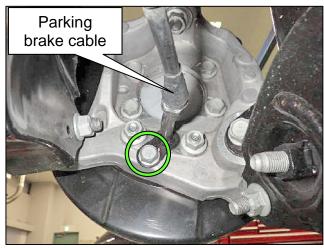


Figure 10

- 15. Remove the cotter pin from the suspension arm ball joint nut.
- 16. Loosen the suspension arm ball joint nut (22 mm), but <u>do not</u> remove it completely.
 - Do not reuse the cotter pin.

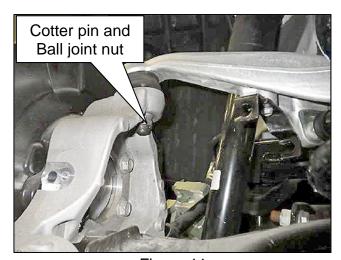


Figure 11

- 17. Remove the nut of the radius rod (18 mm) from the rear knuckle.
 - Do not remove the bolt.
 - Do not reuse the nut.

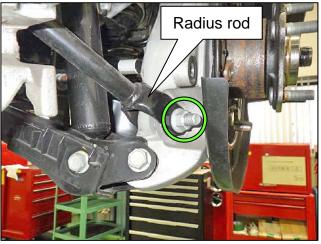


Figure 12

- 18. Remove the front and rear lower link nuts (18 mm) from the rear knuckle (see Figure 13).
 - Do not remove the bolt.
 - Do not reuse the nut.

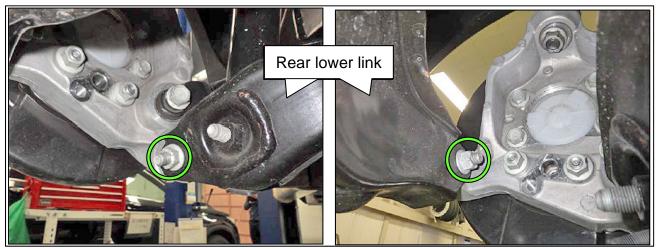


Figure 13

- 19. Remove the stabilizer connecting rod nut (18 mm) from the suspension arm.
 - Do not reuse the nut.

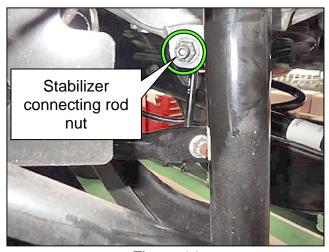
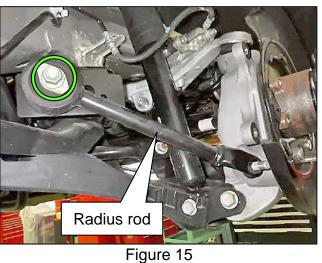


Figure 14

20. Remove both of the radius rod bolts (18 mm) from the vehicle, and then remove the radius rod.



- 21. Set a suitable jack under the rear lower link.
 - Place a piece of wood or rubber insulator between the rear lower link and jack.

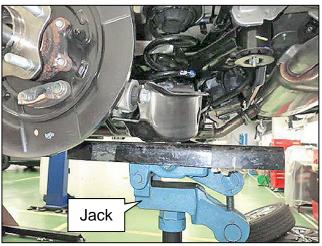


Figure 16

22. Remove the lower link bolts (18 mm) from the rear knuckle, and then separate the rear knuckle from the lower link (Figure 17).

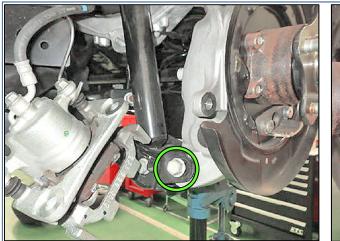




Figure 17

- 23. Remove the suspension arm ball joint nut from the rear knuckle, and then remove the rear knuckle.
 - Do not remove the jack.

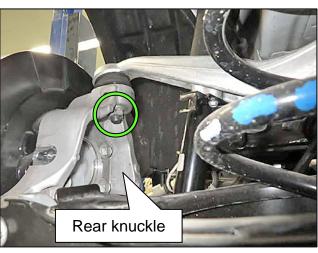


Figure 18

- 24. Clamp the rear knuckle in a vice.
- 25. Remove the wheel hub bolts (Figure 19) from the rear knuckle, and then separate the wheel hub from the rear knuckle.

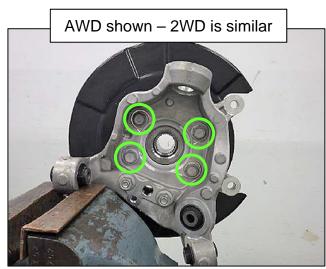
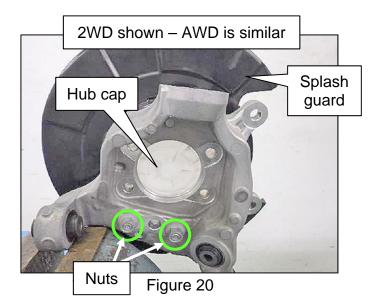


Figure 19

- 26. Remove the anchor block nuts (17 mm) from the rear knuckle, and then separate the anchor block and splash guard from the rear knuckle.
- 27. Separate the hub cap from the rear knuckle (Figure 20 and Figure 21).



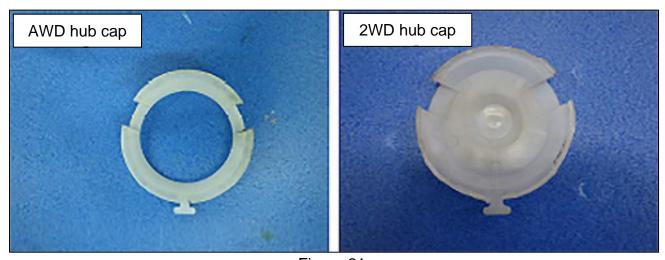


Figure 21

Confirm the Casting Stamp Date

The following Service Procedure uses an online form that <u>must be filled out</u> while performing the procedure.

28. Locate the casting stamp dates on each suspension knuckle, where indicated in Figure 22.

EXAMPLE:

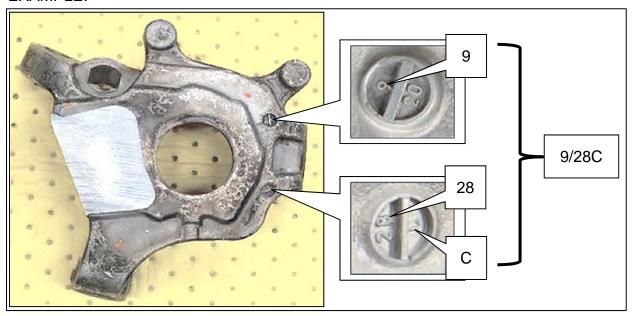


Figure 22

29. Open the ASIST form found at ASIST > Tech Support Info > Bulletin Support Items > R21A4 Murano Rear Knuckle Inspection (see Figure 23 and Figure 24).

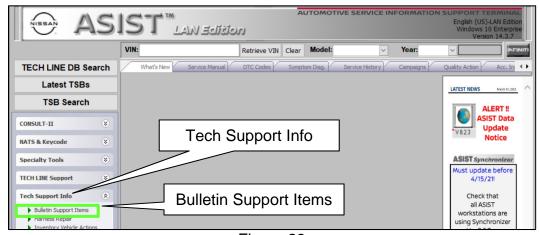


Figure 23

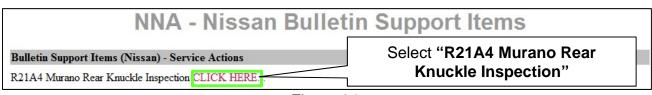


Figure 24

- 30. Enter the vehicle VIN and both casting stamp dates into the ASIST form, and then select **Submit** (Figure 25).
 - If the casting stamp date is OK (Figure 25), proceed to step 32 on page 11 and reassemble the original suspension knuckles.
 - If the casting stamp date is NG (Figure 26), proceed to step 31 on page 11 to replace the affected suspension knuckles with those in the PARTS INFORMATION.

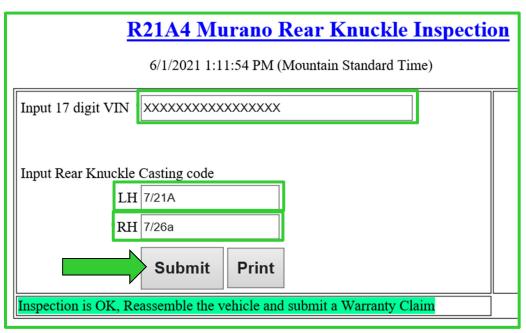


Figure 25

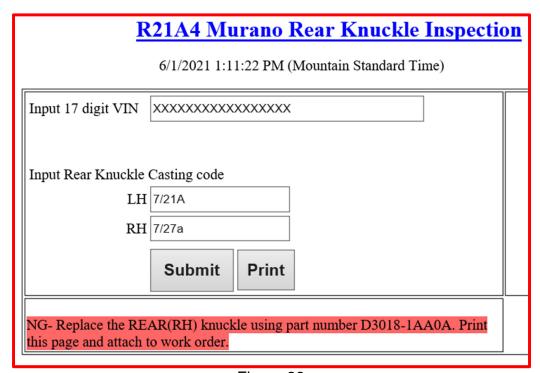
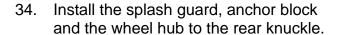
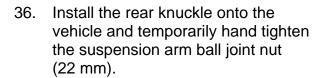


Figure 26

- 31. Clamp the new rear knuckle in a vice.
- 32. Clean the wheel hub, splash guard and the hub cap.
- 33. Install the hub cap, removed in step 27 on page 8, to the rear knuckle.
 - Plastic hub cap insert not shown.



- Temporarily hand tighten the 2 nuts that attach the anchor block and splash guard to the rear knuckle.
- Temporarily hand tighten the 4 bolts that attach the wheel hub to the rear knuckle.
- 35. Torque the 2 nuts and 4 bolts from step 34.
 - Tightening torque: 88.3 N•m (9.0 kg-m, 65 ft-lbs)



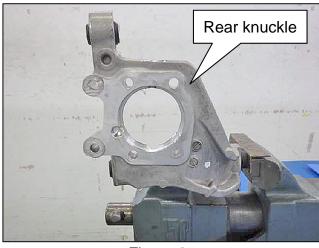


Figure 27

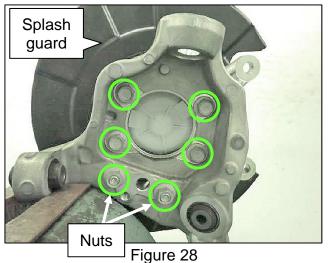




Figure 29

- 37. Insert the mount of the rear knuckle into the lower link.
- 38. Install the 2 mounting bolts (18 mm) of the lower link, without nuts.

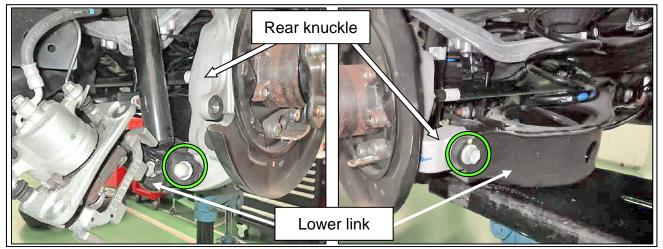


Figure 30

- 39. Lower the jack, but leave it in place for step 42.
- 40. Install the 2 mounting bolts (18 mm) of the radius rod, without nuts.

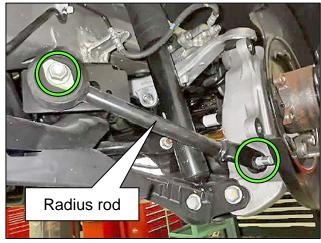


Figure 31

- 41. Install the stabilizer connecting rod with a new nut (18mm), and then torque.
 - Tightening torque: 90.0 N•m (9.2 kg-m, 66 ft-lbs)

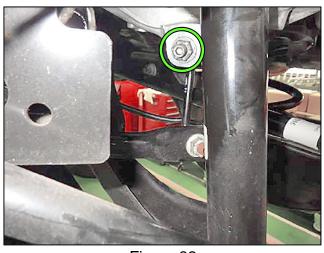


Figure 32

- 42. Raise the jack to approximate ride height.
- 43. Install 2 new nuts (18 mm) to the mounting bolts of the lower link (Figure 33), and then torque.
 - Tightening torque: 95.0 N•m (9.7 kg-m, **70 ft-lbs**)



Figure 33

- 44. Install a new nut (18mm) to the mounting bolt of the radius rod, and then torque both bolts.
 - Tightening torque: 105.0 N•m (11.0 kg-m, 77 ft-lbs)

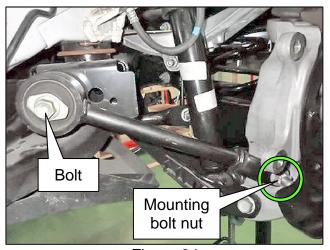


Figure 34

- 45. Torque the suspension arm ball joint nut (22 mm), and then install a new cotter pin.
 - Tightening torque: 155.0 N•m (16.0 kg-m, 65 ft-lbs)
- 46. Lower the jack.



Figure 35

- 47. Install the parking brake cable to the rear knuckle with bolt (16 mm), and then torque.
 - Tightening torque: 28.0 N•m (2.9 kg-m, 21 ft-lbs)

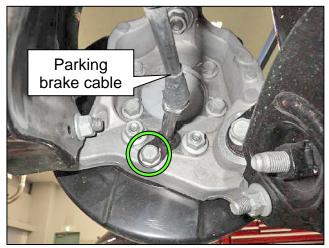


Figure 36

48. Clean the brake shoe contact points of the splash guard shown in Figure 37, and then apply PBC (Poly Butyl Cuprysil) grease, or silicone-based grease, to those points.



Figure 37

49. Install the toggle lever to the parking brake cable with pin.

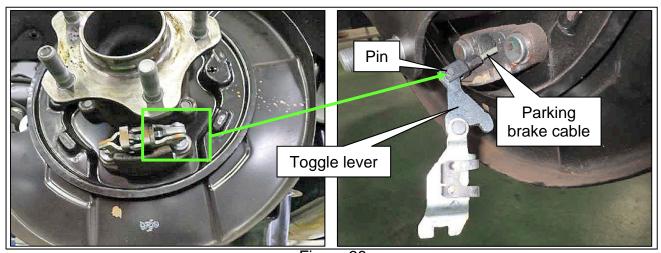


Figure 38

- 50. Loosely install the parking brake shoes to the splash guard.
- 51. Install the lower return spring and toggle lever to the parking brake shoes.

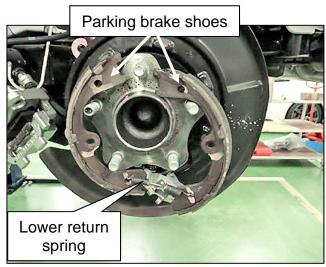


Figure 39

52. Attach parking brake shoes to the splash guard with the anti-rattle pins.

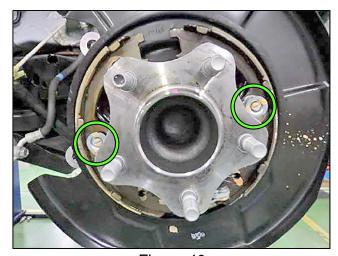


Figure 40

53. Install the adjuster and return spring to the parking brake shoe.



Figure 41

- 54. Align the disc rotor with the marks made in step 3 on page 2 and install onto the hub.
 - Temporarily hand tighten 1 wheel lug nut to secure the brake rotor.

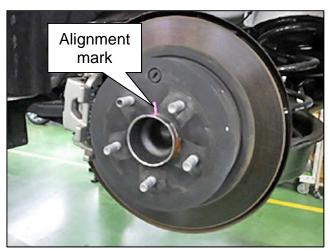


Figure 42

- 55. Install the brake caliper with 2 bolts (19 mm), and then torque.
 - Tightening torque: 84.3 N•m (8.6 kg-m, 62 ft-lbs)

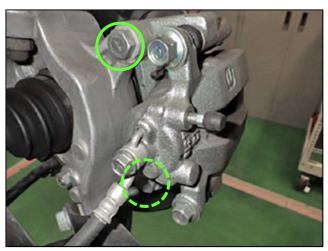


Figure 43

- 56. Install the wheel sensor to the rear knuckle with a bolt (10 mm), and then torque.
 - Tightening torque: 9.0 N•m (0.9 kg-m, 79 in-lbs)
- 57. Install the wheel sensor harness grommets to the brackets.

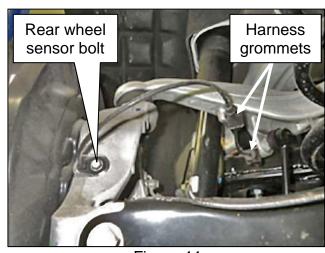


Figure 44

NOTE: Step 58 is for AWD vehicles only. Skip to step 59 for 2WD.

- 58. Install the drive shaft nut (32 mm) and torque, and then install a new cotter pin to the drive shaft.
 - Tightening torque: 140.0 N•m (14.0 kg-m, 103 ft-lbs)

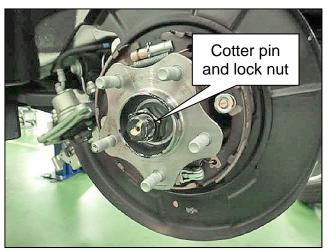


Figure 45

- 59. Remove and inspect the opposite suspension knuckle in the same order. See steps 2-58, and then proceed to step 60.
- 60. Install both rear wheel and tire assemblies.
 - Tightening torque: 113.0 N•m (12.0 kg-m, **83 ft-lbs**)
- 61. Check the wheel alignment.

PARTS INFORMATION

DESCRIPTION	PART NUMBER	QUANTITY
HOUSING-REAR AXLE,RH (Right Rear Knuckle)	D3018-1AA0A	1
HOUSING-REAR AXLE,LH (Left Rear Knuckle)	D3019-1AA0A	1
NUT-KNUCKLE SPINDLE	40262-JA000	6
PIN-COTTER	08921-3252A	2
NUT	01223-A2011	2
PIN-COTTER (AWD ONLY)	40073-0L700	2

CLAIMS INFORMATION

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

CAMPAIGN ("CM") ID	DESCRIPTION	OP CODE	FRT
R21A4	Inspect both steering knuckles. (2WD)	R21A4C	3.8 hrs
	Inspect both steering knuckles and replace one or both steering knuckles. (2WD)	R21A4D	3.8 hrs
	Inspect both steering knuckles. (AWD)	R21A4E	4.0 hrs
	Inspect both steering knuckles and replace one or both steering knuckles. (AWD)	R21A4F	4.0 hrs

AMENDMENT HISTORY

PUBLISHED DATE	REFERENCE	DESCRIPTION
July 6, 2021	NTB21-059	Original bulletin published