

REFERENCE:	Nova Bus Manuals
SECTION:	05: Rear Axle
RS N°:	MQR 7621-2254
EFFECTIVE IN PROD.:	LD39 (2020OC)

APPLICATION DEADLINE: 2022JN06  
CLAIM REFERENCE NUMBER: WB-5037

SUBJECT:	ZF Rear Axle AV133
JUSTIFICATION:	Quality issue identified by ZF on 20 screws used for rear axle flange shaft connection. The rework shall be done within next scheduled maintenance or service work.

LEVEL	DESCRIPTION	DIRECT CHARGES		TIME
		LABOUR	MATERIAL	
1	Change the 20 potentially defect screws on the flange shaft connection.	Nova Bus	Nova Bus	1.5 h
2	–	–	–	–

#### MATERIAL

QTY	PART N°	REV.	DESCRIPTION	REPLACES PART N°
<b>LEVEL 1</b>				
20	N8904440	na	TORX SCREW M18 x 1.50 x 45.0	–
<b>LEVEL 2</b>				
–	–	–	–	–

Materials will be available within 63 days once your order has been placed. To order, please contact Prevost Parts by phone at 1-800-771-6682 or by email at [prevostparts.commandes@volvo.com](mailto:prevostparts.commandes@volvo.com). Specify document number, quantity of parts required and shipping address.

#### DISPOSAL OF PARTS

REMOVED PARTS ARE:	DISCARDED *	RETAINED	* Dispose of the unused parts and the defective parts in accordance with local environmental standards in effect.
	Yes	–	

#### REVISION HISTORY

REV.	DATE	CHANGE DESCRIPTION	WRITTEN BY
NR	2021MR05	Initial release	Annie St-Jacques

APPROVED BY:

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CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
Ann Arbor Area Transportation Authority Michigan - AAATA	LD05	2000	2000	L82J9L9777669	L82J9L9777669	1
Brampton Ontario	LD18	2007	2010	L82J5L3752614	L82J5L3752617	4
Brampton Ontario	LD18	2014	2024	L82J5L3752621	L82J5L3752631	11
Cape Breton Nova Scotia	LD22	N/A	N/A	L82J7L3752632	L82J7L3752632	1
CHARM city Baltimore - Maryland	LD37	1910234	1910239	L82JXL9777745	L82J3L9777750	6
Grand River Transit Ontario - GRT	LD19	22001	22031	L82J9L3752633	L82JXL3752723	31
Maryland Transit Authority - MTA	LC27	20011	20011	L82JXL9777639	L82J4L9777639	1
Maryland Transit Authority - MTA	LC28	20032	20036	S92J5L9777628	S92J3L9777662	5
Maryland Transit Authority - MTA	LC28	20038	20055	S92J5L9777664	S92J3L9777683	18
Maryland Transit Authority - MTA	LC28	20057	20062	S92J5L9777685	S92J3L9777690	6
Maryland Transit Authority - MTA	LC28	20069	20069	S92J5L9777709	S92J3L9777709	1
Ottawa - Carleton Regional Transit Co. - O.C. - metrolinx	LD21	4776	4830	L82J5L3752662	L82J3L3752756	55
Ottawa - Carleton Regional Transit Co. - O.C. - metrolinx	LD51	4831	4841	L82J4L9777711	L82J1L9777721	11
Ottawa - Carleton Regional Transit Co. - O.C. - metrolinx	LD51	4847	4847	L82J4L9777727	L82J1L9777727	1
Ottawa - Carleton Regional Transit Co. - O.C. - metrolinx	LD51	4849	4849	L82J4L9777729	L82J1L9777729	1
RMA World wide chauffeured Transportation	LC98	N/A	N/A	L82J6L9777693	L82J7L9777704	12
Strathcona County Transit Edmonton Alberta	LD20	2031	2035	L82J3L3752742	L82J0L3752746	5
Whitehorse Yukon	LD31	N/A	N/A	L82J2L3752747	L82J4L3752748	2

**WARNING**

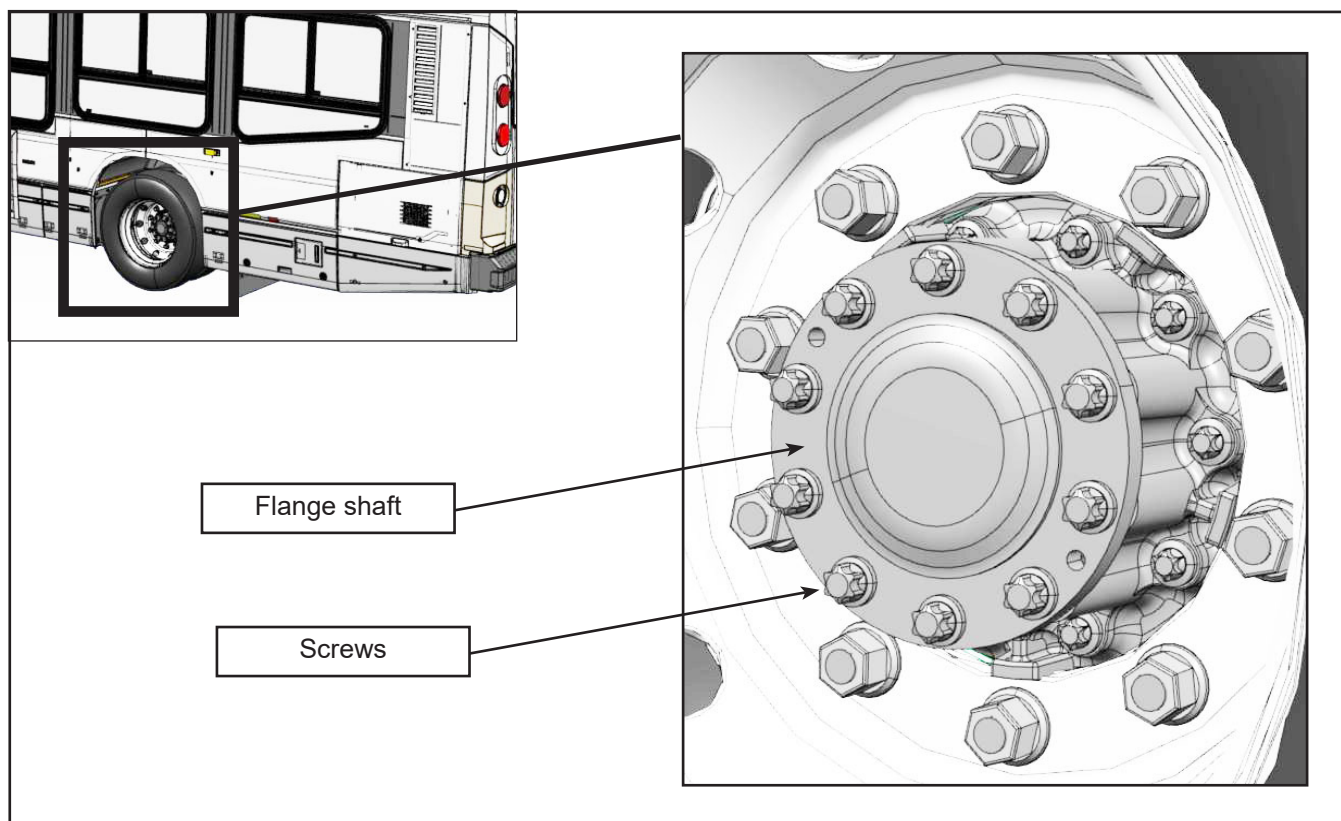
FOLLOW YOUR INTERNAL SAFETY PROCEDURES.

## PROCEDURE

**NOTE**

The following procedure is provided by ZF. Nova Bus cannot be held responsible for its content.

- 1.1. Locate the 20 screws installed on flange shaft connection (Figure 1). There are 10 screws per wheel.



*Figure 1 - Flange shaft screws location*

- 1.2. Loosen bolted connection of the flange shaft and remove the screws. **Note:** Do not pull flange shaft out of axle.
- 1.3. Install new Torx screws N8904440 and tighten to required torque of 325 ft-lb (440 N·m).
- 1.4. The vehicle can return in service. ❖

## ANNEX

## Torx screws potential issue at AV133 flange shaft connection

### Scope of rework

**Important: Observe safety related and work instructions as described in AV-133 repair manual no. 4472.751.101c**

#### Step 1:

To avoid shaft turning during removal or installation of the screws, lock the wheel head as described in repair manual. This is only necessary for axles not installed in the vehicle. For axles already installed in the vehicle, the weight of the vehicle is sufficient.



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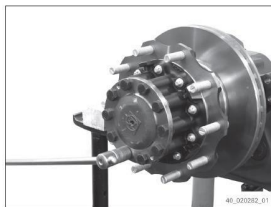
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## Torx screws potential issue at AV133 flange shaft connection

### Scope of rework

#### Step 2:

Loosen bolted connection of the flange shaft and remove the screws. **Note:** Do not pull flange shaft out of axle



#### Step 3:

Install new Torx screws and tighten to required torque of **440 Nm**



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