

REFERENCE:	Nova Bus Manuals
SECTION:	10: Transmission and Controls
RS N°:	MQR 7621-2666
EFFECTIVE IN PROD.:	N/A
TC RECALL N°:	2023-387
NHTSA RECALL N°:	23V482

APPLICATION DEADLINES: N/A
CLAIM REFERENCE NUMBER: SR5498

SUBJECT:	Allison Transmission Output Yoke
JUSTIFICATION:	Certain affected 60' vehicles may have an Allison B500R transmission whose yoke can separate, which may lead to a sudden loss of drive and immobilization of the vehicle. While the final remedy is being evaluated, to reduce the risk on your vehicle, this interim remedy should be applied.

LEVEL	DESCRIPTION	DIRECT CHARGES		TIME
		LABOUR	MATERIAL	
1	Validate the existing torque on the yolk bolt on the Allison B500R transmission.	Nova Bus	Nova Bus	1 h
2	–	–	–	–

MATERIAL REQUIRED PER VEHICLE

QTY	PART N°	REV.	DESCRIPTION
LEVEL 1			
1	N33666	–	Straps and Bolts Kit
LEVEL 2			
–	–	–	–

Materials will be available within 14 days once your order has been placed.

To order, please contact novabus.parts@volvo.com

Or by phone for CANADA 1-800-771-6682, for USA 1-877-999-8808

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	2023DE19	Initial release	Annie St-Jacques
R1	2024AL22	Vehicle added in Client List	Annie St-Jacques

APPROVED BY:

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NQF705003 VERSION 5

Eric Charest

Signature numérique de Eric
Charest

Date : 2024.04.24 08:26:50 -04'00'

Symbol	Meaning
Empty Field	No changes, the procedure applies
+	Contract added, the procedure applies
-	Contract removed, the procedure does not apply

SYM	CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
			FROM	TO	FROM	TO	
	Ames Transportation Agency - Iowa	LE35	6149	6149	S92J2M9	S92J2M9	1
	Ames Transportation Agency - Iowa	LE80	6150	6150	S92J0N9	S92J0N9	1
	Capital Area Transportation Authority Michigan - CATA	LC07	6012	6015	S92J5K9	S92J5K9	4
	Capital Area Transportation Authority Michigan - CATA	LC75	—	—	S92J4K9	S92J4K9	1
	Capital Area Transportation Authority Michigan - CATA	LD35	6016	6018	S92J3L9	S92J7L9	3
	Capital Area Transportation Authority Michigan - CATA	LE05	6020	6019	S92JXN9	S92J8N9	2
+	Capital Area Transportation Authority Michigan - CATA	LF63	6021	6021	S92J1P9	S92J1P9	1
	Maryland Transit Administration - MTA - Maryland	LB83	20031	20031	S92J9K9	S92J9K9	1
	Maryland Transit Administration - MTA - Maryland	LC28	20032	20070	S92J5L9	S92J3L9	39
	Montgomery County - Maryland	LC33	1946000D	1946000D	S92J1K9	S92J1K9	1
	Montgomery County - Maryland	LC34	1946001D	1946015D	S92J4L9	S92J2L9	15
	Niagara Transit Commission - Metrolinx	LD54	2140	2140	S92J8L9	S92J8L9	1
	Regina - Saskatchewan	LD78	—	—	S92J8M3	S92JXM3	2

**WARNING**

FOLLOW YOUR INTERNAL SAFETY PROCEDURES.

PROCEDURE

- 1.1. Park the vehicle on an even surface with the transmission on neutral.
- 1.2. Apply the parking brake and set the master control switch to the **stop** position.
- 1.3. Set the battery disconnect switch in the battery compartment to the **off** position.
- 1.4. Lift the vehicle to access driveline and transmission yoke output bolt.
- 1.5. Disconnect driveline from transmission output yoke. Discard U-joint straps and bolts.

**NOTE**

Do not disconnect from the drive axle (differential) end of drive shaft.

The removed U-joint straps and bolts CANNOT be reused and must be discarded.

- 1.6. Secure transmission end of the drive shaft away from the transmission output yoke.
- 1.7. Use paint marker to draw a continuous line from the top of the output yoke bolt head to the retaining plate as a reference line.
- 1.8. Use a pry bar or a yoke holding fixture to secure the yoke so it will not rotate (see an example at Figure 1).

**NOTE**

Make sure not to damage the yoke U-joint cavity or other machined surfaces.



Figure 1 - Secure Yoke so it Will not Rotate (Example)

CHECK OF THE EXISTING TORQUE

**NOTE**

The results of this check must be recorded in the Table in Annex A and then sent to your Nova Bus Customer Service Representative.

- 1.9. Apply a torque of 25 lb-ft (34 N•m) to the output yoke bolt and, using the reference line, check if the screw has turned. *Write down the result in the table.*
 - If the screw has not turned, go to step 1.10.
 - If the screw has turned, go to step 1.12.
- 1.10. Apply a torque of 40 lb-ft (52 N•m) to the output yoke bolt and again, using the reference line, check if the screw has turned. *Write down the result in the table.*
 - If the screw has not turned, go to step 1.11.
 - If the screw has turned, go to step 1.12.
- 1.11. Apply a torque of 50 lb-ft (68 N•m) to the output yoke bolt and again, using the reference line, check if the screw has turned. *Write down the result in the table.*
 - In both cases, go to step 1.12.
- 1.12. Apply a torque of 65 lb-ft (88 N•m) to the output yoke bolt.
- 1.13. Clean all paint mark and apply torque seal on top of the output yoke bolt head and the retaining plate.
- 1.14. Install driveline and secure U-joints to transmission output yoke with new straps and bolts from kit N33666. See torque specification in Figure 2.
- 1.15. Prior to lowering the vehicle, mark transmission nameplate with a paint pen to indicate that the output yoke bolt torque has been verified.
- 1.16. The vehicle can return in service.
- 1.17. Send the results to your Nova Bus Customer Service Representative to fully complete this Safety Recall Campaign. ❖

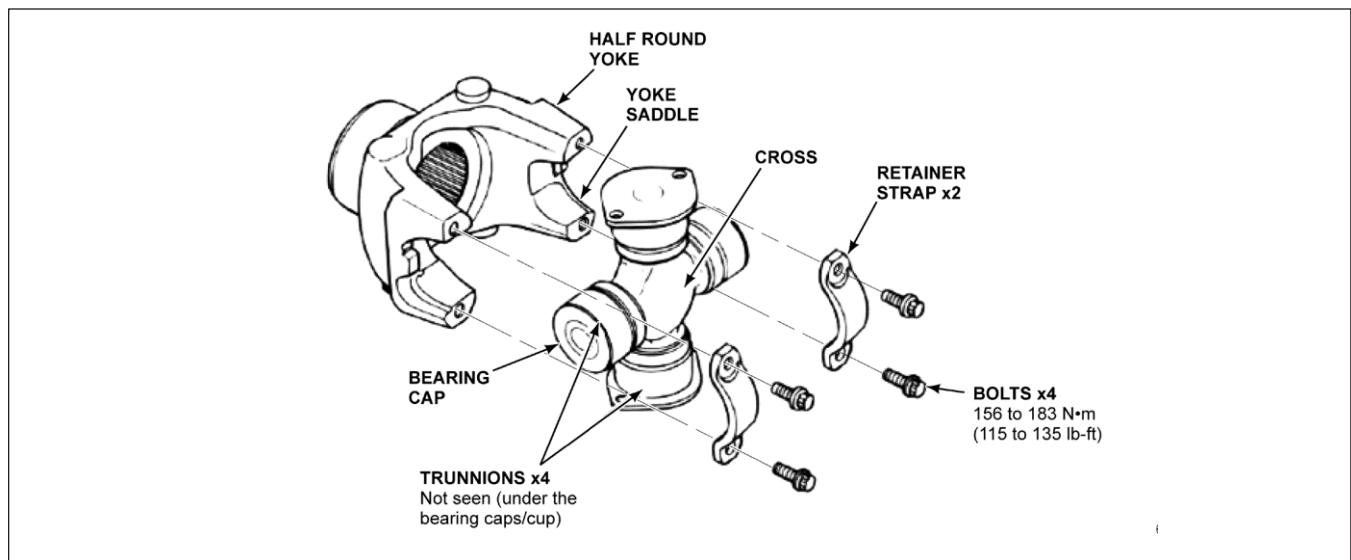


Figure 2 - Torque Specification for U-joint Straps and Bolts

