

REFERENCE:	Nova Bus Manuals
SECTION:	03: Wipers
RS N°:	MQR 7621-2828
EFFECTIVE IN PROD.:	2024JL
TC RECALL N°:	24v-519
NHTSA RECALL N°:	2024-396

**APPLICATION DEADLINES: N/A CLAIM
REFERENCE NUMBER: SR5616**

SUBJECT:	Windshield wipers
JUSTIFICATION:	The affected vehicles may have been built with wiper arms that are not properly aligned. With incorrectly aligned wipers activated at the highest speed setting, the wiper blades may collide and get damaged. Driving under certain meteorological conditions with damaged wiper blades or arms may impair the driver's visibility and could increase the risk of a crash.

LEVEL	DESCRIPTION	DIRECT CHARGES		TIME
		LABOUR	MATERIAL	
1	Verification of the windshield wipers alignment.	Nova Bus	Nova Bus	10 min
2	Adjust the windshield wipers. Replace damaged parts if necessary.	Nova Bus	Nova Bus	up to 45 min

MATERIAL REQUIRED PER VEHICLE

QTY	PART N°	REV.	DESCRIPTION
LEVEL 1			
-	-	-	-
LEVEL 2 (only if required**)			
1	N74151	A	WIPER ARM PASSENGER
1	N74153	A	WIPER ARM DRIVER
2	N70276	A	WIPER 4 SEASONS BLADE

Materials will be available within 162 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.

** The material identified in Level 2 is to be ordered only for vehicles that meet the criteria defined in Level 1.

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	2024SE10	Initial release	André Pelletier

APPROVED BY:

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
Academy Busline - New Jersey	LE57	2201	2225			25
Barrie - Ontario - Metrolinx	LE18	2201	2203			3
Barrie - Ontario - Metrolinx	LE46	2204	2206			3
Barrie - Ontario - Metrolinx	LF04	2301	2303			3
Belleville Transit - Ontario - Metrolinx	LE07	—	—			1
Brampton - Ontario	LD99	2101	2108			8
Brampton - Ontario	LE42	2201	2224			24
Brantford - Ontario - Metrolinx	LE09	102105	102109			5
Brantford - Ontario - Metrolinx	LE59	102201	102205			5
Brantford - Ontario - Metrolinx	LF05	102301	102303			3
Burlington - Ontario - Metrolinx	LD86	2101	2108			8
Burlington - Ontario - Metrolinx	LE48	72201	72207			7
Burlington - Ontario - Metrolinx	LE94	7-2301	7-2305			5
Burlington - Ontario - Metrolinx	LF32	7-2306	7-2309			4
Burlington - Ontario - Metrolinx	LF81	7-2104	7-2404			4
Burlington - Ontario - Metrolinx	LF81	7-2406	7-2406			1
Calgary Transit - Alberta	LE51	8465	8489			25
Calgary Transit - Alberta	LE82	8490	8521			32
Calgary Transit - Alberta	LF66	8522	8552			31
Calgary Transit - Alberta	LF66	8554	8565			12
Calgary Transit - Alberta	LF66	8567	8570			4
Calgary Transit - Alberta	LF66	8572	8575			4
Calgary Transit - Alberta	LF66	8578	8578			1
Calgary Transit - Alberta	LF66	8580	8580			1
Calgary Transit - Alberta	LF66	8582	8582			1
Calgary Transit - Alberta	LF66	8584	8584			1
Cape Breton - Nova Scotia	LD97	—	—			1
Cape Breton - Nova Scotia	LE10	—	—			1
Cape Breton - Nova Scotia	LE58	—	—			1
Cape Breton - Nova Scotia	LF34	—	—			1
CMBC (TransLink) - British Columbia	LE13	H22101	H22101			1
CMBC (TransLink) - British Columbia	LE14	H23202	H23208			7
CMBC (TransLink) - British Columbia	LF60	H24101	H24108			8
CMBC (TransLink) - British Columbia	LF60	H24111	H24111			1
CMBC (TransLink) - British Columbia	LF60	H24114	H24114			1
Cold Lake - Alberta	LE02	5017	5017			1
Cornwall - Ontario - Metrolinx	LE37	—	—			2
Cornwall - Ontario - Metrolinx	LE95	—	—			1

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
Durham Region Transit - Ontario	LF55	6130	6130			1
Durham Region Transit - Ontario - Metrolinx	LD91	7104	7117			14
Durham Region Transit - Ontario - Metrolinx	LD94	9106	9107			2
Durham Region Transit - Ontario - Metrolinx	LE20	7118	7122			5
Durham Region Transit - Ontario - Metrolinx	LE36	6120	6129			10
Durham Region Transit - Ontario - Metrolinx	LE96	7123	7124			2
Durham Region Transit - Ontario - Metrolinx	LF75	6136	6138			3
Durham Region Transit - Ontario - Metrolinx	LF75	6140	6149			10
Fredericton - New Brunswick	LE49	8221	8221			1
Fredericton - New Brunswick	LE79	8222	8223			2
Grand River Transit - GRT - Ontario	LE11	22101	22104			4
Grand River Transit - GRT - Ontario	LE71	22301	22301			1
Grand River Transit - GRT - Ontario	LE76	22201	22229			29
Grand River Transit - GRT - Ontario	LF08	22312	22318			7
Grand River Transit - GRT - Ontario	LF56	22307	22311			5
Guelph - Ontario	LE69	285	288			4
Guelph - Ontario	LF45	289	290			2
Guelph - Ontario	LF45	292	295			4
Halifax - Nova Scotia	LE08	1370	1406			37
Halifax - Nova Scotia	LE78	1407	1413			7
Halifax - Nova Scotia	LE91	2301	2301			1
Halifax - Nova Scotia	LF31	2001	2049			12
Hamilton - Ontario - Metrolinx	LE55	2101	2120			20
Hamilton - Ontario - Metrolinx	LE86	2201	2231			31
Hamilton - Ontario - Metrolinx	LF27	2251	2292			42
Milton - Ontario - Metrolinx	LE97	2201	2205			5
Moncton (Codiac) - New Brunswick	LF47	—	—			1
Moncton (Codiac) - New Brunswick	LF67	—	—			4
Moose Jaw - Saskatchewan	LF44	18	18			1
Moose Jaw - Saskatchewan	LF68	20	24			2
Niagara Transit Commission - Metrolinx	LD67	2101	2112			12
Niagara Transit Commission - Metrolinx	LE19	—	—			3
Niagara Transit Commission - Metrolinx	LE22	—	—			2
Niagara Transit Commission - Metrolinx	LE24	2201	2209			9
Niagara Transit Commission - Metrolinx	LE34	2339	2340			2
Niagara Transit Commission - Metrolinx	LE38	—	—			1
Niagara Transit Commission - Metrolinx	LF01	2301	2308			8
North Bay - Ontario - Metrolinx	LE98	795	795			1
Regina - Saskatchewan	LE40	2201	2202			2
Regina - Saskatchewan	LE45	2301	2303			3
Sarnia - Ontario - Metrolinx	LE23	211	212			2
Sarnia - Ontario - Metrolinx	LE99	221	222			2
Saskatoon - Saskatchewan	LF64	2410	2411			2

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
Sault Ste. Marie - Ontario - Metrolinx	LE56	—	—			3
Stratford - Ontario - Metrolinx	LE41	—	—			2
Strathcona County Transit - Alberta	LE15	2034	2037			4
Sudbury - Ontario - Metrolinx	LD71	916	916			1
Sudbury - Ontario - Metrolinx	LD71	918	919			2
Sudbury - Ontario - Metrolinx	LE25	921	927			7
Sudbury - Ontario - Metrolinx	LF02	931	936			6
Thunder Bay - Ontario	LE47	239	240			2
Thunder Bay - Ontario	LE93	241	242			2
Timmins - Ontario - Metrolinx	LF10	22-107	22-107			1
Toronto Transit Commission - TTC - Ontario	LE65	7000	7114			115
Toronto Transit Commission - TTC - Ontario	LE65	7116	7123			8
Toronto Transit Commission - TTC - Ontario	LF42	7124	7132			9
University of Alabama - Alabama	LF40	7040	7048			9
Whitehorse - Yukon	LE43	—	—			2
Whitehorse - Yukon	LF24	—	—			2
Windsor - Ontario - Metrolinx	LE44	8046	8069			24
Windsor - Ontario - Metrolinx	LE61	8070	8071			2
Woodstock - Ontario	LE60	2201	2202			2
York Regional Transit - Ontario	LE85	2270	2270			26

**WARNING**

FOLLOW YOUR INTERNAL SAFETY PROCEDURES.

PROCEDURE

LEVEL 1: VERIFICATION OF THE WIPERS ADJUSTMENT

- 1.1. Park the vehicle on an even surface with the transmission on neutral.
- 1.2. Apply the parking brake.

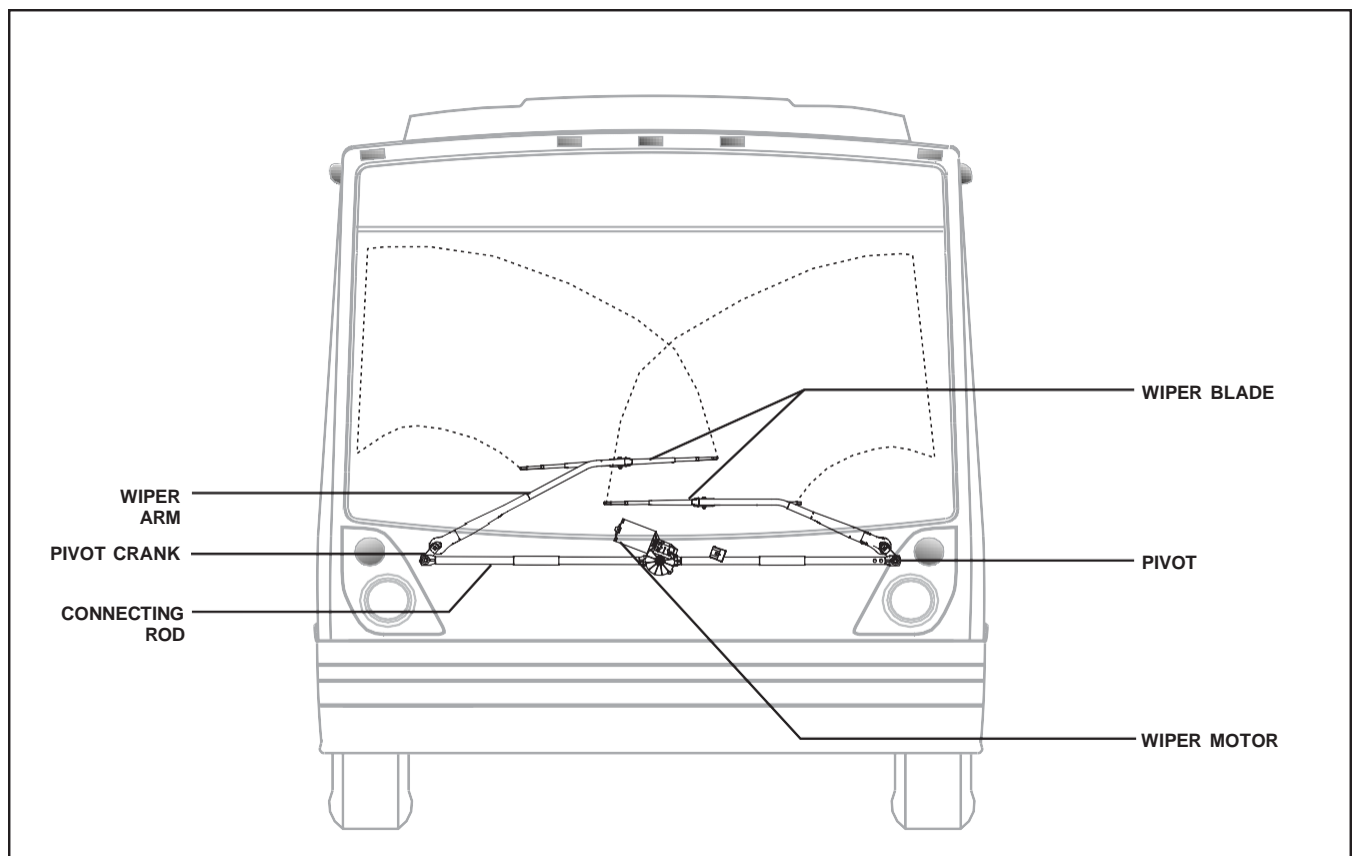


Figure 1 - Wipers Components

**NOTE**

Inspect the wipers and the wipers arms, if damaged, see the level 2 material list and the level 2 procedure.

- 1.3. Ensure the wiper control knob is at the **stop** position.
- 1.4. Make a mark with a grease pencil 1 to 1.5 in. (25 to 40 mm) from the rubber edge of the windshield, or use a 1-in. (25 mm) wide piece of masking tape stuck on the rubber windshield liner. See next figure.



Figure 2 - Windshield Wiper Indicators

- 1.5. Ensure the windshield wipers conform to the shape of the windshield.
- 1.6. Wet the windshield with windshield washer fluid by pressing on the wiper control knob.
- 1.7. Activate the windshield wipers by turning the wiper control knob.
- 1.8. Check whether the windshield wipers reach, but do not exceed, the pencil marks, or the masking tape.
- 1.9. If the windshield wipers do not reach, or if they surpass the pencil marks or the masking tape, readjust the wiper arms by repositioning the arms on the pivots, see level 2 procedure on the next page, and restart the verification procedures.
- 1.10. If the wipers adjustment is acceptable, the vehicle can return into service.

LEVEL 2: WINDSHIELD WIPER ARMS ADJUSTMENT OR REPLACEMENT

- 2.1. Disconnect the windshield washer hose from the front shell connector. See next figure.

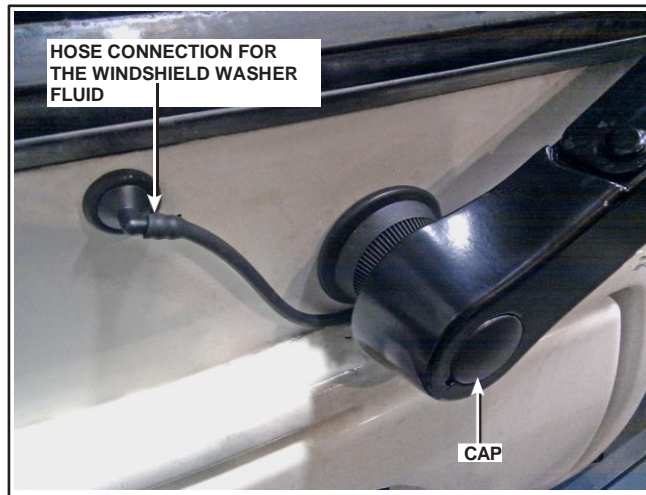


Figure 3 - Hose Connection for Windshield Washer Fluid

- 2.2. Withdraw the pivot cap from the windshield wiper arm. See the previous figure.
- 2.3. Loosen the wiper arm pivot nut.
- 2.4. Raise the mobile part of the arm and slide the feet of the arm installation tool under the ends of the hinge in the back of the arm. This step retains the mobile part of the arm parallel to the hinge. See next figure.

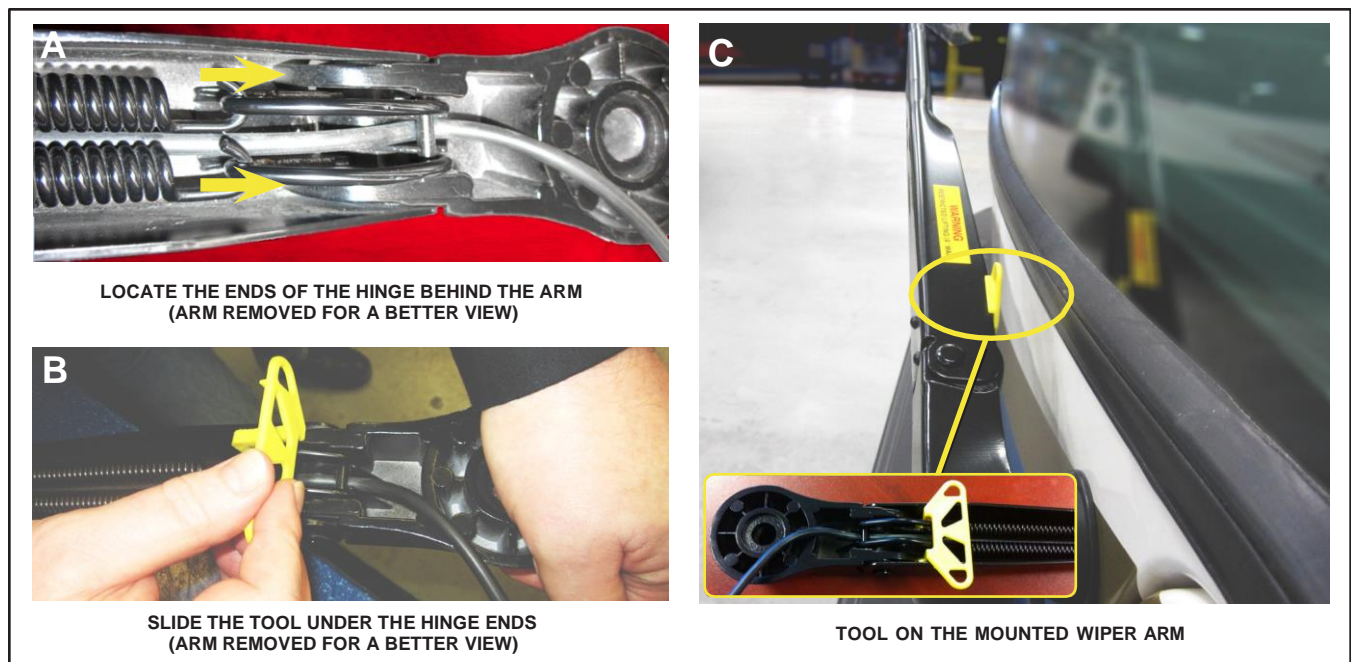


Figure 4 - Placing the Installation Tool Before Installing the Arm

- 2.5. Remove the windshield wiper arm from the pivot using an extractor. See next figure.

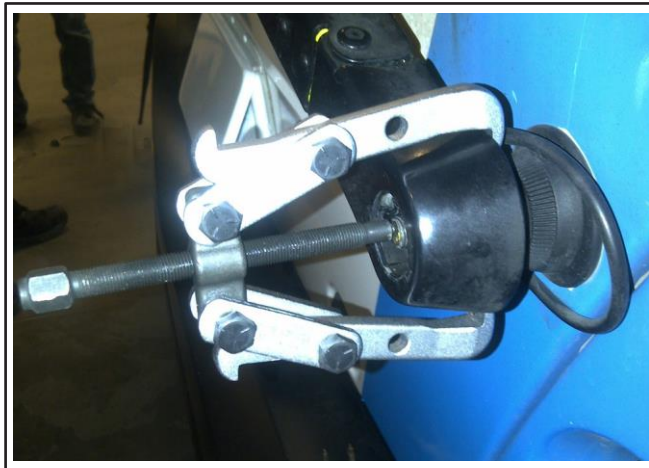


Figure 5 - Removal of Arm with an Extractor (Typical)

- 2.6. Repeat for the other windshield wiper arm.
2.7. Cycle the electric motor one-time to reset it.
2.8. Place the streetside wiper arm on the pivot. Install the pivot nut and tighten manually.
2.9. Remove the windshield wiper installation tool that holds the mobile section of the arm parallel to the hinge, from the windshield wiper arms. To withdraw the tool, raise the mobile part of the arm and slide the feet of the tool away from the hinge.
2.10. Position the arm so that the blade of the windshield wiper is completely horizontal, then pivot the arm upward by 2°. See next figure.
2.11. While maintaining the windshield wiper arm in place, tighten the windshield wiper arm nut to the torque indicated in the next figure.

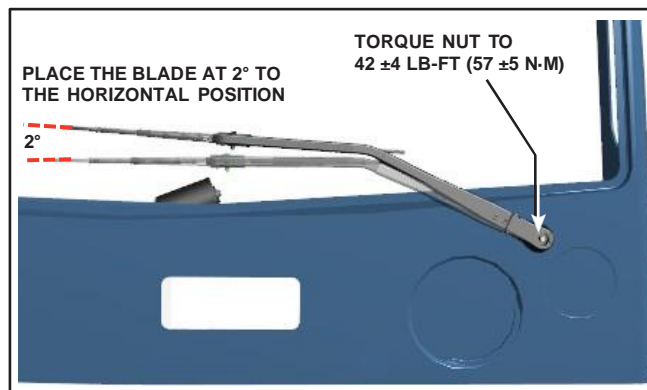


Figure 6 - Positioning of Street Side Wiper Arm



NOTE

Note that after tightening the nut, the windshield wiper blade will return to the horizontal position.

- 2.12. Place the curbside windshield wiper arm on the pivot. Install the pivot nut and tighten manually.
- 2.13. Remove the windshield wiper installation tool that holds the mobile section of the arm parallel to the hinge, from the windshield wiper arms. To withdraw the tool, raise the mobile part of the arm and slide the feet of the tool away from the hinge.
- 2.14. Place the arm so that the windshield wiper blade is at 1° to the horizontal position. See next figure.

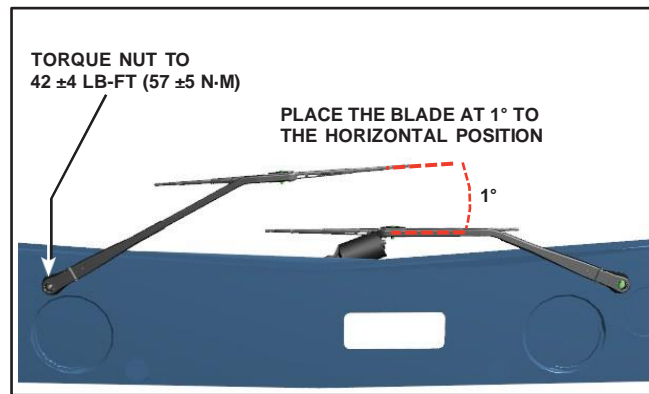


Figure 7 - Positioning of Curbside Wiper Arm

- 2.15. While maintaining the windshield wiper arm in place, tighten the windshield wiper arm nut to the torque indicated in Figure 7.
- 2.16. Install the end caps on the windshield wiper arms.
- 2.17. Connect the windshield washer fluid hose to the front shell connector. See Figure 3.
- 2.18. Turn the nozzles to the desired position.
- 2.19. Perform the level 1 : verification of the wipers adjustment.

