

REFERENCE:	Nova Bus Manuals
SECTION:	09: Engine cooling package MKIII
RS N°:	MQR 7621-810
EFFECTIVE IN PROD.:	L937 (2016FE)

APPLICATION DEADLINE: 2017DE30
CLAIM REFERENCE NUMBER: WB-3866

SUBJECT:	Radiator coolant level sensor
JUSTIFICATION:	Cummins coolant sensors equipped with EPC connectors fail in service due to water infiltration.

LEVEL	DESCRIPTION	DIRECT CHARGES		TIME
		LABOUR	MATERIAL	
1	Contact your Cummins dealer to schedule the amended Campaign C1744 repair procedure to be performed on your affected vehicles.	Cummins	Cummins	–
2	Install a new wire kit, support bracket, VBEA programming and Actia programming on affected vehicles.	Nova Bus	Nova Bus	1.5h

* The cost of the material will be reimbursed when claiming for this service document.

MATERIAL

QTY	PART N°	REV.	DESCRIPTION	REPLACES PART N°
LEVEL 1				
–	–	–	–	–
LEVEL 2				
1	N632000466	–	Wire harness	–
1	N84881	–	Support bracket	–
10	G50077996	–	Tie wrap	–
1	N75417	–	Heavy duty tie mount	–
1	N44886-02	C	M10 bolt	–
2	N38593	–	M6 Nylon lock flanged nut	–
1	N40492	A	M6 X 20 bolt	–
2	N57040	A	Stud-mounted high heat tie mount	–
1	N44881-03	A	M6 X 30 bolt	–
2	N84511-01	–	Deutsch connector holder clip	–

Materials will be available within 30 days. To order, please contact Prevost Parts by phone at 1-800-771-6682, by fax at 1-888-668-2555 or by email at prevostparts.commandes@volvo.com. 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.

**PARTS ORDERED UNDER FT3752 CANNOT BE REORDERED UNDER BS3866E.
LABOR CHARGES HAVE TO BE CLAIMED UNDER BULLETIN BS3866E.**

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	2016DE08	Initial release	Luc Carignan

APPROVED BY:

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
SEPTA - Pennsylvania	L728			L82W7D4500335	L82W7D4500335	1
SEPTA - Pennsylvania	L749	7302	7354	S92Y7D4500409	S92L2E4500470	53
SEPTA - Pennsylvania	L743	—	—	S92L1E4500489	S92L2E4500503	15
SEPTA - Pennsylvania	L741	—	—	S92L4E4500504	S92L4E4500504	1
SEPTA - Pennsylvania	L744	—	—	L82L7E4500570	L82LXE4500661	89
SEPTA - Pennsylvania	L742	7371	7414	S92L6E4500729	S92L7E4500772	44
SEPTA - Pennsylvania	L745	7415	7415	S92L0F4500873	S92L0F4500873	1
SEPTA - Pennsylvania	L746	7416	7454	S92L7F4500952	S92L8F4501012	39
SEPTA - Pennsylvania	L861	7300	7484	S92L5G9775188	S92L8G9775220	32

**WARNING**

Follow your internal safety procedures.

PROCEDURE

LEVEL 1: CUMMINS CAMPAIGN C1744

- 1.1. Cummins is to perform amended campaign C1744, which includes
 - 1.1.1. Replacement of the mid and lower coolant sensors by new N84555 sensors. See Figure 1.
 - 1.1.2. Modification of the radiator electric harness by installing a wire splice kit to replace the two PKC-type connectors. See Figure 1.

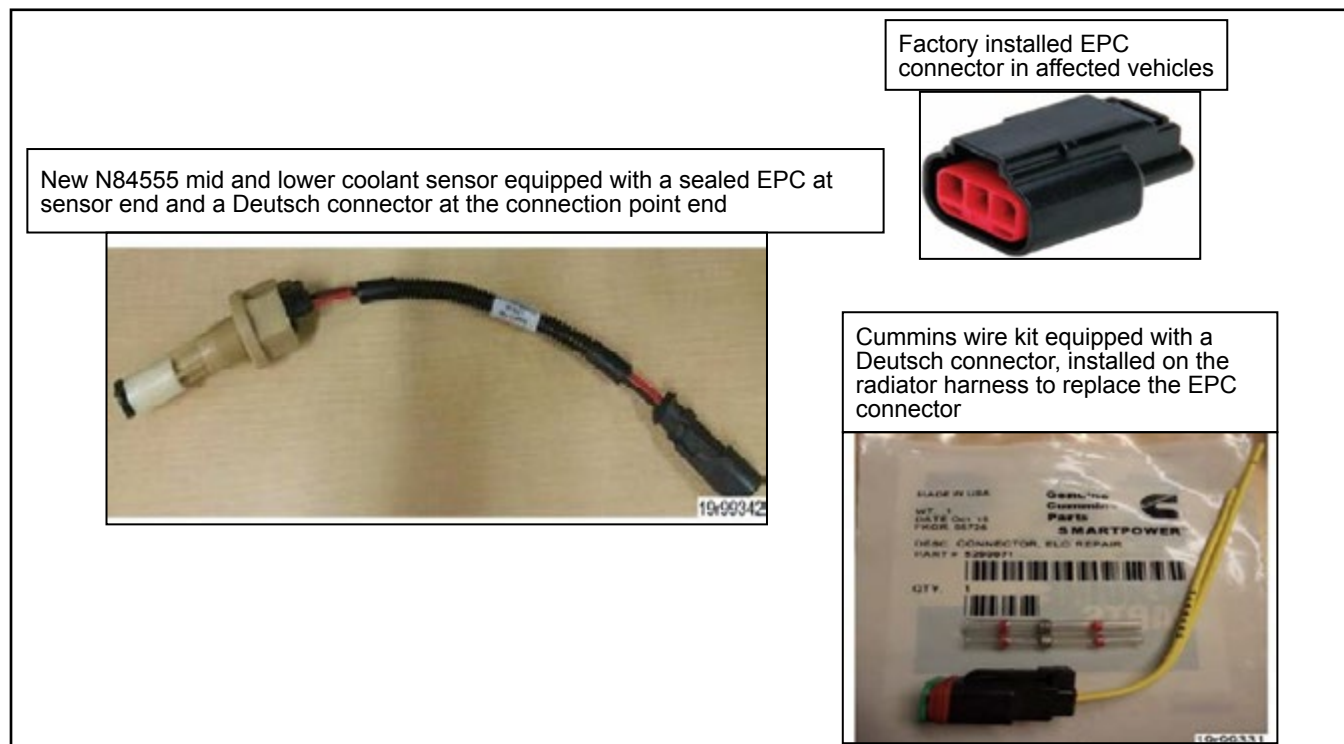


Figure 1 - Cummins Campaign C1744 Details

LEVEL 2: INSTALL

- 2.1. Build the N84881 support bracket sub-assembly. See Figure 2 for parts and details.
- 2.2. Open the radiator access door.
- 2.3. Install the N84881 support bracket and the heavy-duty tie mount on the radiator using the N44886-02 M10 bolt. See Figure 2.

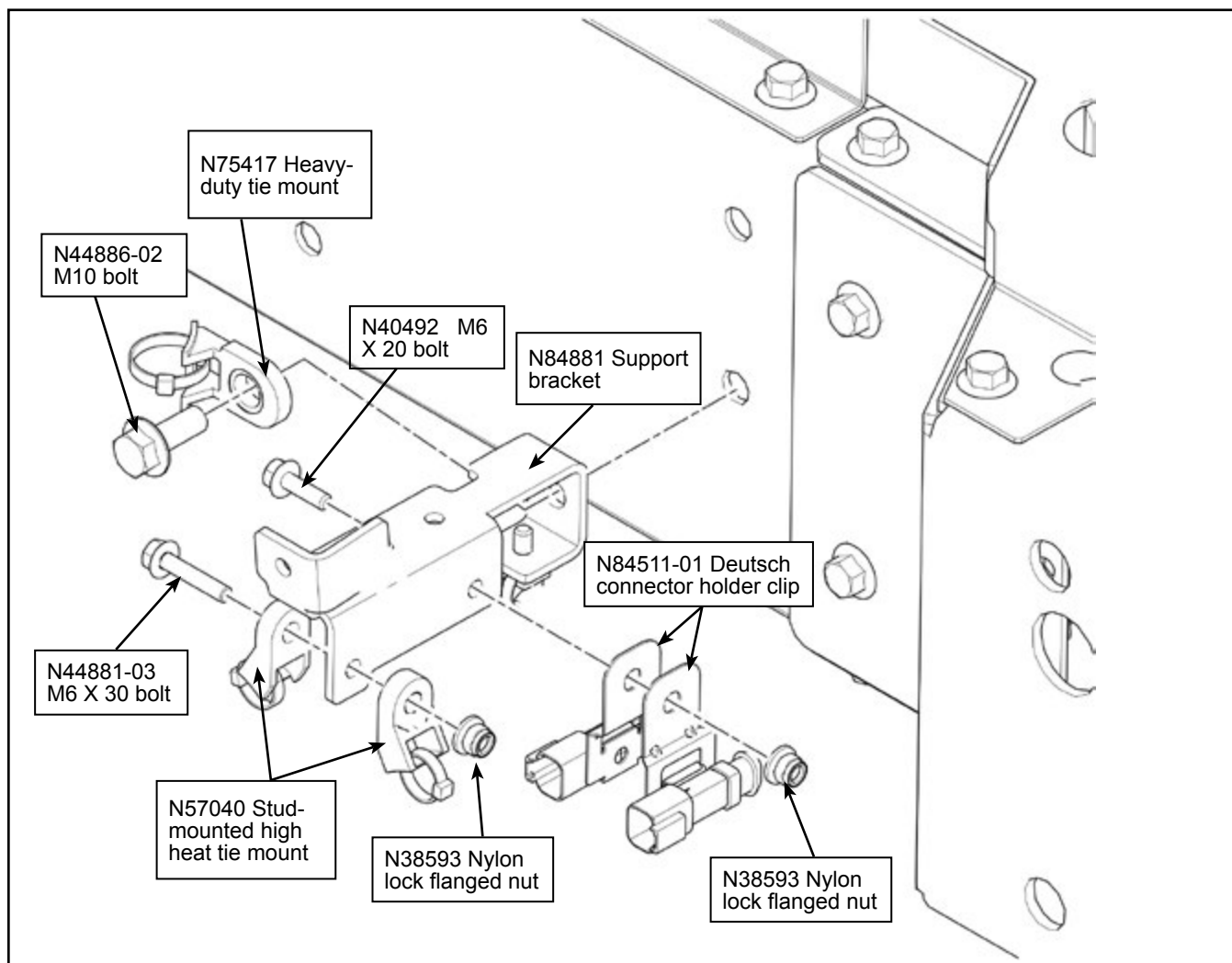


Figure 2 - Support Bracket Assembly

- 2.4. Disconnect radiator harness connectors **ER-X6475B**, **ER-X6475C**, **ER-X75SA** and **ER-X75WA**. Cut and tape back the wires of connectors **ER-X6475C**, **ER-X75SA** and **ER-X75WA** at their harness breakout point.
- 2.5. Remove, cut, and tape back the wires located in positions **1** and **3** on connector **ER-X6475B** of the radiator harness.
- 2.6. From the received N632000466 harness, connect the free white wire to position **1** on the radiator harness connector **ER-X6475B**. See Figure 3.
- 2.7. From the received N632000466 harness, connect the free black wire to position **3** on the radiator harness connector **ER-X6475B**. See Figure 3.

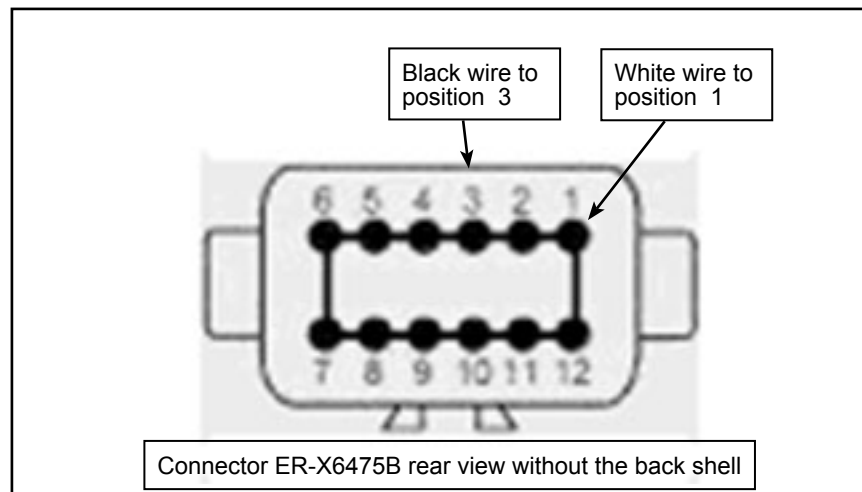


Figure 3 - ER-X6475B Back View Pin Out

- 2.8. Affix wire harness N632000466 to the original radiator harness using a G50077996 tie wrap.
- 2.9. Affix 2 wire pigtails to the heavy-duty tie mount on N84555 using a G50077996 tie wrap. See Figure 5.
- 2.10. Connect **ER-X75SA** to the mid coolant sensor connector affix the Deutsch connector to the holder clip, and affix the harness to the tie mount using tie wraps. See Figure 5.
- 2.11. Connect **ER-X75WA** to the low coolant sensor connector and affix the Deutsch connector to the holder clip, and affix the harness to the tie mount using tie wraps. See Figure 5.

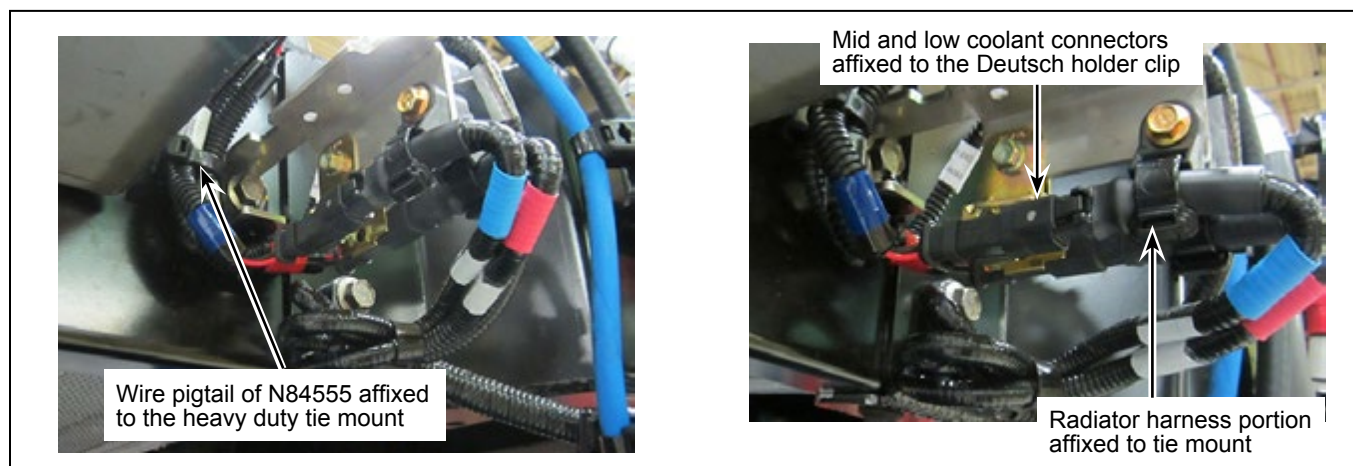


Figure 4 - Installation of Harnesses to the Support Bracket

- 2.12. Connect N632000466 wire harness connectors **ER-x6475B** and **ER-x6475C** to the vehicle harness.
- 2.13. Close the radiator access door.
- 2.14. Program the V-BEA system using the program and revision indicated in Annex A. See section 16: **V-BEA** (VOLVO BUS ELECTRONIC ARCHITECTURE) of the Nova LFS maintenance manual for the programming procedure.
- 2.15. Program the ACTIA system using the program and revision indicated in Annex B. See section 16: **V-BEA** (VOLVO BUS ELECTRONIC ARCHITECTURE) of the Nova LFS maintenance manual for the programming procedure. ❖

ANNEX A

LIST OF REQUIRED V-BEA PROGRAMS PER ORDER

INDICATED REVISIONS ARE THE MINIMUM REVISION REQUIREMENTS

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY	PROGRAM	REV.
		FROM	TO	FROM	TO			
SEPTA - Pennsylvania	L728			L82W7D4500335	L82W7D4500335	1	SEP4HE__00	G
SEPTA - Pennsylvania	L749	7302	7354	S92Y7D4500409	S92L2E4500470	53	SEP6HE__00	M
SEPTA - Pennsylvania	L743	—	—	S92L1E4500489	S92L2E4500503	15	SEP6HE__00	M
SEPTA - Pennsylvania	L741	—	—	S92L4E4500504	S92L4E4500504	1	SEP6HE__00	M
SEPTA - Pennsylvania	L744	—	—	L82L7E4500570	L82LXE4500661	89	SEP4HE__00	G
SEPTA - Pennsylvania	L742	7371	7414	S92L6E4500729	S92L7E4500772	44	SEP6HE__00	M
SEPTA - Pennsylvania	L745	7415	7415	S92L0F4500873	S92L0F4500873	1	SEP6HE__00	M
SEPTA - Pennsylvania	L746	7416	7454	S92L7F4500952	S92L8F4501012	39	SEP6HE__00	M
SEPTA - Pennsylvania	L861	7300	7484	S92L5G9775188	S92L8G9775220	32	SEP6HE__00	M

* To obtain the software revision, contact your after sales representative.

ANNEX B

LIST OF REQUIRED ACTIA PROGRAMS PER ORDER

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		FRONT ACTIA GAUGE PROGRAM	REAR ACTIA GAUGE PROGRAM
		FROM	TO	FROM	TO		
SEPTA - Pennsylvania	L728			L82W7D4500335	L82W7D4500335	116724v01__40	117130v01__09
SEPTA - Pennsylvania	L749	7302	7354	S92Y7D4500409	S92L2E4500470	116724v01__40	117130v01__09
SEPTA - Pennsylvania	L743	—	—	S92L1E4500489	S92L2E4500503	116724v01__40	117130v01__09
SEPTA - Pennsylvania	L741	—	—	S92L4E4500504	S92L4E4500504	116724v01__40	117130v01__09
SEPTA - Pennsylvania	L744	—	—	L82L7E4500570	L82LXE4500661	116724v01__40	117130v01__09
SEPTA - Pennsylvania	L742	7371	7414	S92L6E4500729	S92L7E4500772	116724v01__40	117130v01__09
SEPTA - Pennsylvania	L745	7415	7415	S92L0F4500873	S92L0F4500873	116724v01__40	117130v01__09
SEPTA - Pennsylvania	L746	7416	7454	S92L7F4500952	S92L8F4501012	116724v01__40	117130v01__09
SEPTA - Pennsylvania	L861	7300	7484	S92L5G9775188	S92L8G9775220	116724v01__40	117130v01__09

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