

REFERENCE:	Nova Bus Manuals
SECTION:	16: Electrical system
RS N°:	MQR 7621-619
EFFECTIVE IN PROD.:	N/A

APPLICATION DEADLINE: 2018MA01
CLAIM REFERENCE NUMBER: WB-3046

SUBJECT:	N22759 protective cable sheathing
JUSTIFICATION:	The protective sheathing may be damaged and cause error codes on the diagnostic network.

LEVEL	DESCRIPTION	DIRECT CHARGES		TIME
		LABOUR	MATERIAL	
1	Cut and insulate damaged wires, and install connector sealing plugs and wire kit.	Nova Bus	Nova Bus	2.67 hrs
2	–	–	–	–

MATERIAL				
QTY	PART N°	REV.	DESCRIPTION	REPLACES PART N°
LEVEL 1				
1	N632000381	–	Wire kit	–
5	G5007996	–	Cable tie	–
0.1 RL	N27548-18 ¹	–	Heat shrink tubing	–
0.25	N82227-09 ¹	–	Glued heat shrink tubing (See Notes 1)	–
2	N18950 ¹	–	Splice connector (See Notes 1)	–
LEVEL 2				
–	–	–	–	–
Materials will be available within 35 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.				
Note 1: Only these part numbers will be delivered. Parts highlighted in gray above were delivered with the original order.				

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	2016JL20	Initial release	Bertrand Plouffe
R1	2017FE23	Modification to procedure and part list	Luc Carignan

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
CT Transit - Connecticut	L554	1041	1065	S92U1A4000139	S92U0A4000164	25
CT Transit - Connecticut	L571	1101	1110	S92YXB4000144	S92Y4B4000169	10

**WARNING**

Follow your internal safety procedures.

PROCEDURE

- 1.1. Open the battery compartment.
- 1.2. Disable the vehicle's electrical system by setting the main battery switch in the OFF position.
- 1.3. Open the engine compartment.
- 1.4. Locate the hydraulic fan control manifold in the engine compartment. See Figure 1.



Figure 1 - Location of the Hydraulic Fan Control Manifold

- 1.5. Locate the +EN-X64AN electrical connector on the hydraulic fan control manifold. See Figure 2.

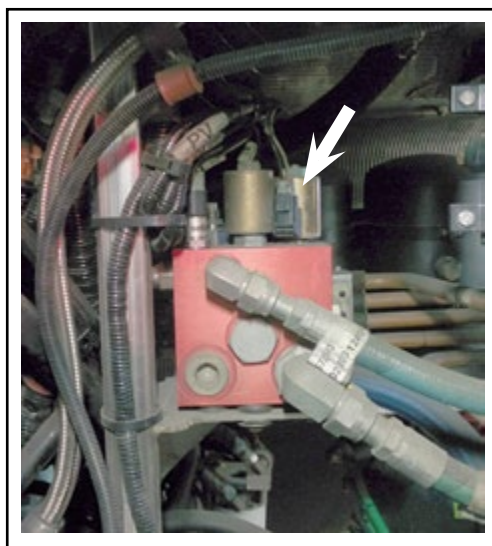


Figure 2 - Location of the +EN-X64AN Connector

- 1.6. Disconnect the +EN-X64AN electrical connector and cut the two wires from the CAB064BB cable close to the connector shell. See Figure 3. Discard the connector.

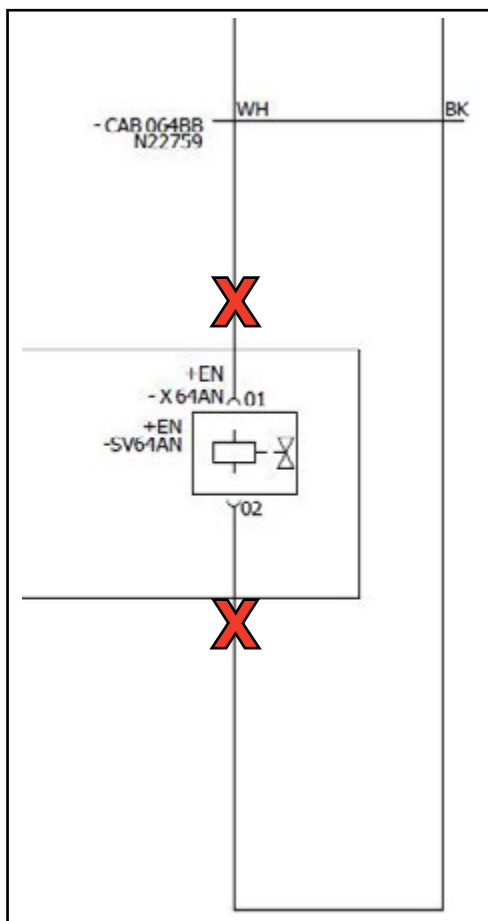


Figure 3 - Wires to be Cut and Insulated on the +EN-X64AN Connector

- 1.7. Cut two pieces of N27548-18 heat shrink tubing and install a piece on both cut wires to insulate them properly. See Figures 3 and 4.



Figure 4 - Typical Installation of Heat Shrink Tubing on a Cut Wire End

- 1.8. Connect the +EN-X64AN connector from the N632000381 wire kit to the hydraulic manifold.
- 1.9. Locate the +MT-X95K (ECM) electrical connector in the engine compartment. See Figure 5.

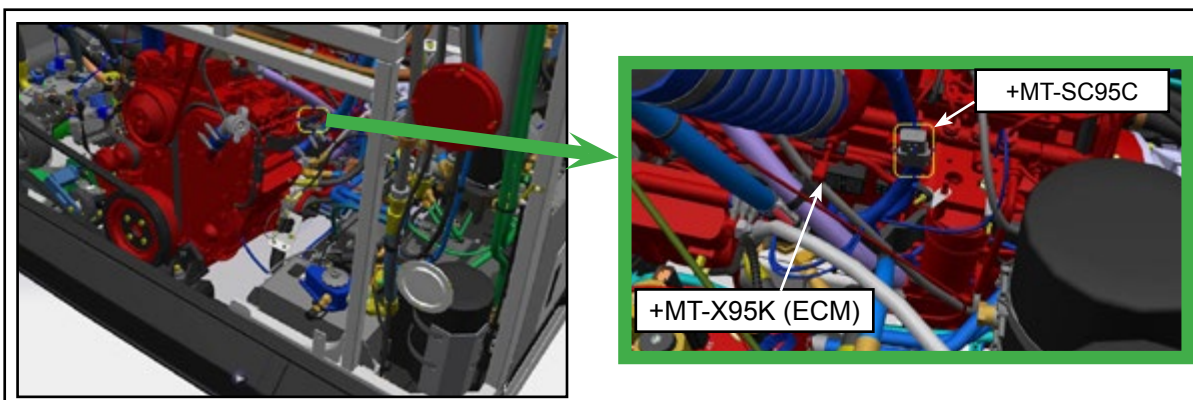


Figure 5 - Location of the +MT-X95K (ECM) and +MT-SC95C Connectors in the Engine Compartment

- 1.10. Cut the 16 WH wire of the CAB095Z cable connected to position #15 of the +MT-X95K connector. Skin and install a N18950 splice connector on the connector side of the cut wire. See Figure 6.
- 1.11. Cut the 16 BK wire of the CAB095Z cable connected to position #4 of the +MT-SC95C connector. Skin and install a N18950 splice connector on the connector side of the cut wire. See Figure 6.
- 1.12. Cut two lengths of N27548-18 heat shrink tubing and install them on the cut wires to insulate them properly. See Figures 4 and 6.

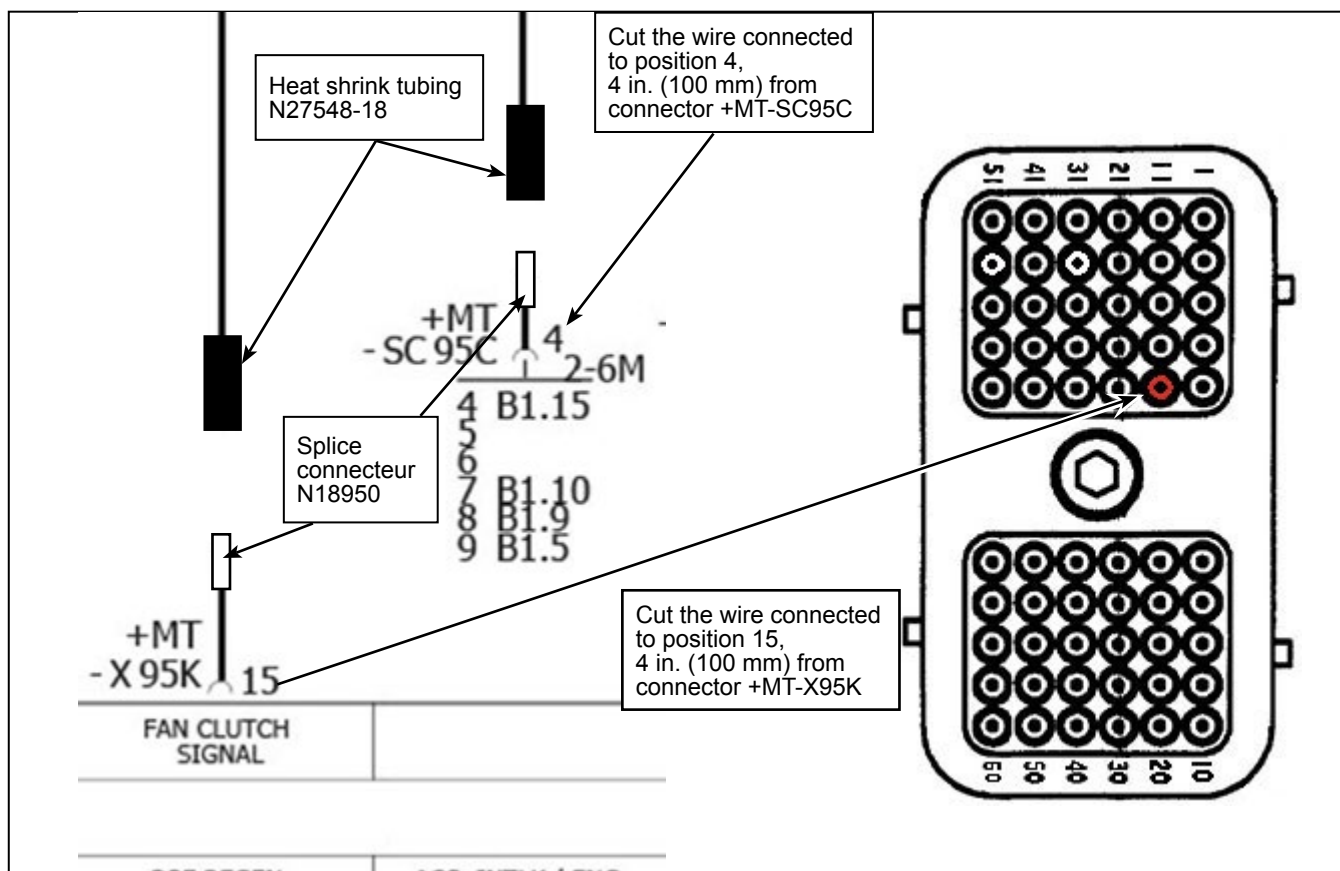


Figure 6 - Wires to be Cut and Insulated on the +MT-X95K and +MT-SC95C Connectors

- 1.13. On the N632000381 wire kit, cut the wire terminals at the extreimities tagged +MT-SC95C and +MT-X95K. See Figure 7.
- 1.14. Skin 1 in. (6 mm) from the end of each wire cut in the previous step. See Figure 7.
- 1.15. Cut two 6 in. (150 mm) lengths of of N82227-09 heat shrink tubing and install them on the wires cut in step 1.13 . See Figures 4 and 7.

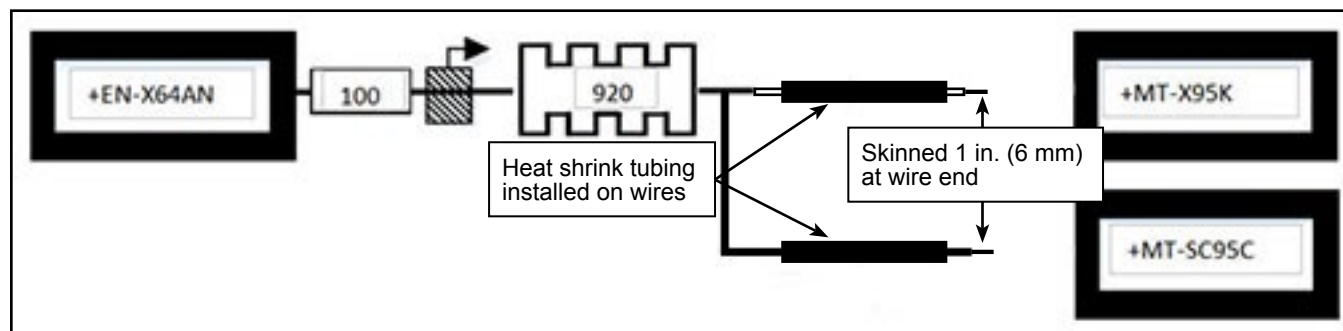


Figure 7 - N632000481 Wire Kit Modification

- 1.16. Route the new N632000381 wire kit with a loop. Attach it to the metal structure, go under the +MT-X9564A/61A connector and follow the other vehicle wiring up to the +MT-SC95C connector. See Figure 7. Secure the wire kit with G5007996 cable ties.
- 1.17. Crimp the 16 BK wire on the splice connector installed on the wire at position #4 of the +MT-SC95C connector.
- 1.18. Position the heat shrink tubing in such a way as to cover the 16 BK wire from the connector to the splice connector. Heat the shrink tubing until it perfectly seals the wire.
- 1.19. Route the N632000381 cable's last wire (16 WH) by following the other vehicle wiring up to the +MT-X95K connector. See Figure 7.
- 1.20. Crimp the 16 WH wire on the splice connector installed on the wire at position #15 of the +MT-X95K connector. See Figure 6.
- 1.21. Position the heat shrink tubing in such a way as to cover the 16 WH wire from the connector to the splice connector. Heat the shrink tubing until it perfectly seals the wire.

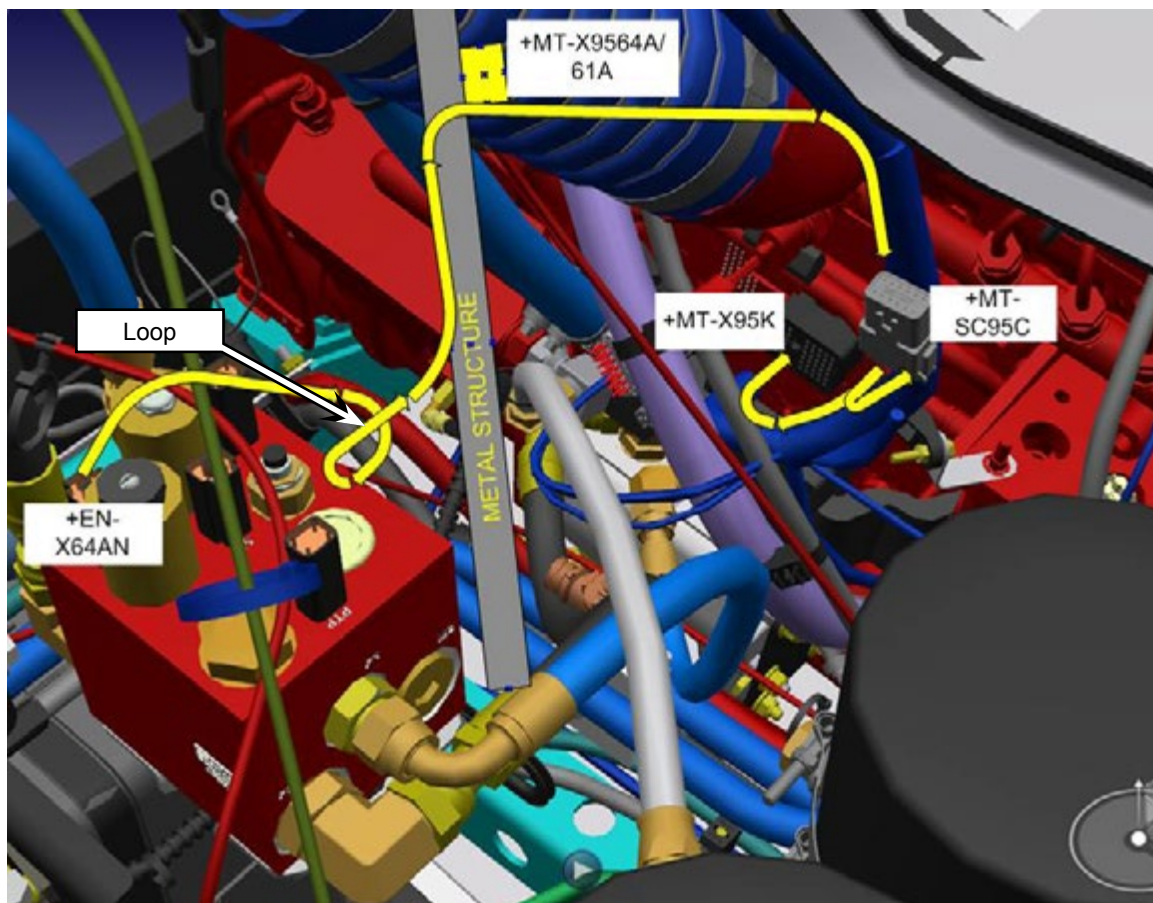
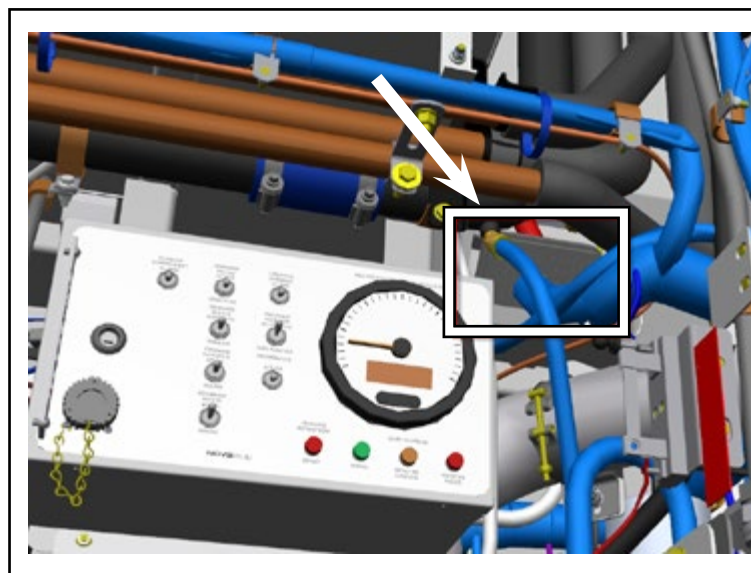


Figure 8 - Routing of the New N632000381 Wire Kit

- 1.22. Locate the +IB-X6499A connector in the engine compartment. See Figure 8.
- 1.23. Cut the +IB-X6499A connector wires located at positions 40 and 41. See Figure 9.
- 1.24. Cut four lengths of N27548-18 heat shrink tubing and install a length on each of the cut wires to isolate them properly. See Figure 9.



Cut 3 in. (75 mm) from the connector the wires connected to positions 40 and 41 of connector +IB-X6499A and install a length of heat shrink tubing on each of the cut wires to insulate them properly.

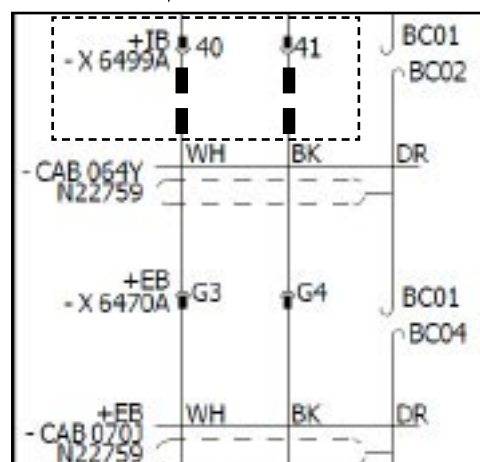
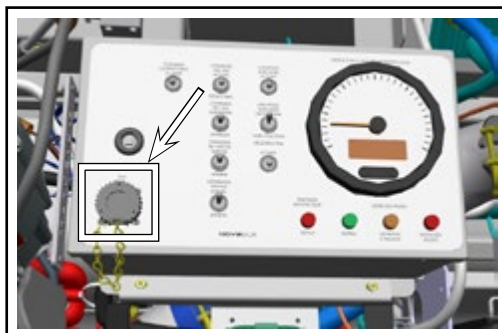


Figure 9 - Wires to be Cut and Insulated on +IB-X6499A Connector

- 1.25. Locate the +EB-X70A connector in the engine compartment. See Figure 11.
- 1.26. Cut the +EB-X70A connector wires located at positions F and G 3 in. (75 mm) from the connector. See Figure 10.
- 1.27. Cut four lengths of N27548-18 heat shrink tubing and install a length on each of the cut wires to isolate them properly. See Figure 9.



Cut 3 in. (75 mm) from the connector the wires connected to positions F and G of connector +EB-X70A and install a length of heat shrink tubing on each of the cut wires to insulate them properly.

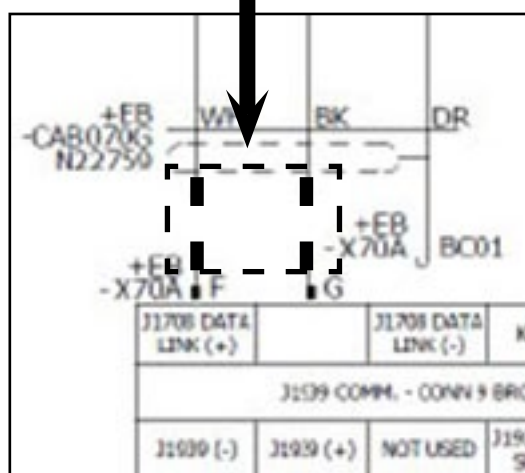


Figure 10 - Location of the +EB-X70A Connector on the Engine Control Module

- 1.28. Close the engine compartment.
- 1.29. Enable the vehicle's electrical system by setting the main battery switch in the ON position.
- 1.30. The vehicle may be returned to service. ❖