

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-3047

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	2.83 hrs
2	–	–	–	–

MATERIAL				
QTY	PART N°	REV.	DESCRIPTION	REPLACES PART N°
LEVEL 1				
1	N632000451	–	Wire kit	–
5	G5007996	–	Cable tie	–
2	12059168	–	Sealing plug	–
0.1 RL	N27548-18 ¹	–	Heat shrink tubing (See note 1)	–
0.25	N82227-09 ¹	–	Glued heat shrink tubing (See note 1)	–
2	N18950 ¹	–	Splice connector (See note 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	Material list (highlighted in gray) and procedure modification	Luc Carignan

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
Walt Disney World - Florida	L535	1204	1213	L82UXA4000003	L82U0A4000012	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 battery main 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-X61AN electrical connector on the hydraulic fan control manifold. See Figure 2.

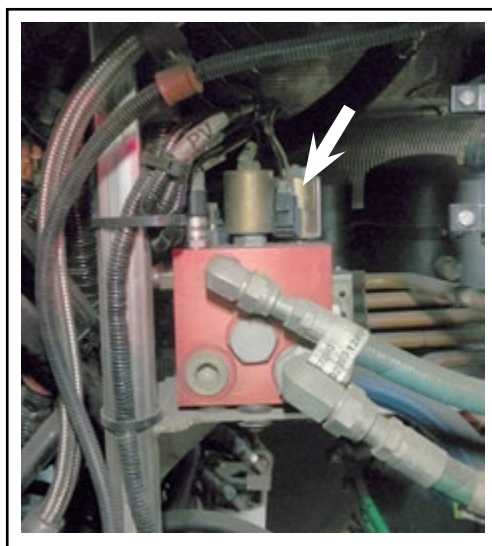


Figure 2 - Location of the +EN-X61AN Connector

- 1.6. Disconnect electrical connector +EN-X61AN and cut the two wires from the CAB061BB cable close to the connector shell. See Figure 3. Discard the connector.

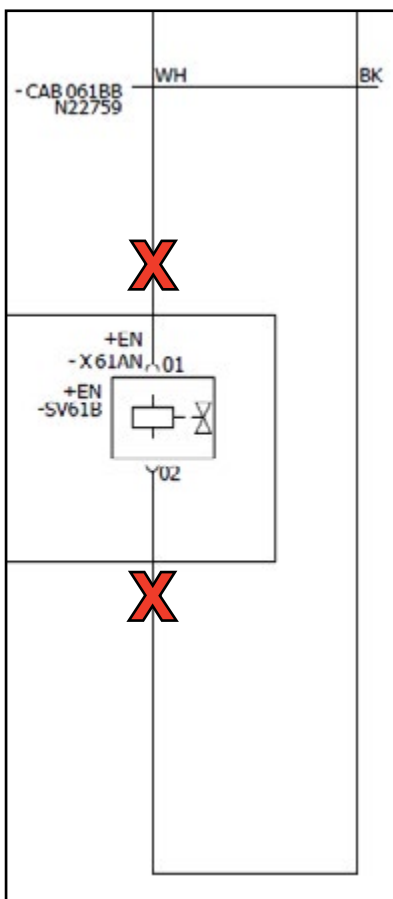


Figure 3 - Wires to be Cut and Insulated on the +EN-X61AN Connector

- 1.7. Cut two lengths 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 N632000451 wire kit to the hydraulic manifold.
- 1.9. Locate the +MT-X95G (ECM) electrical connector in the engine compartment. See Figure 5.

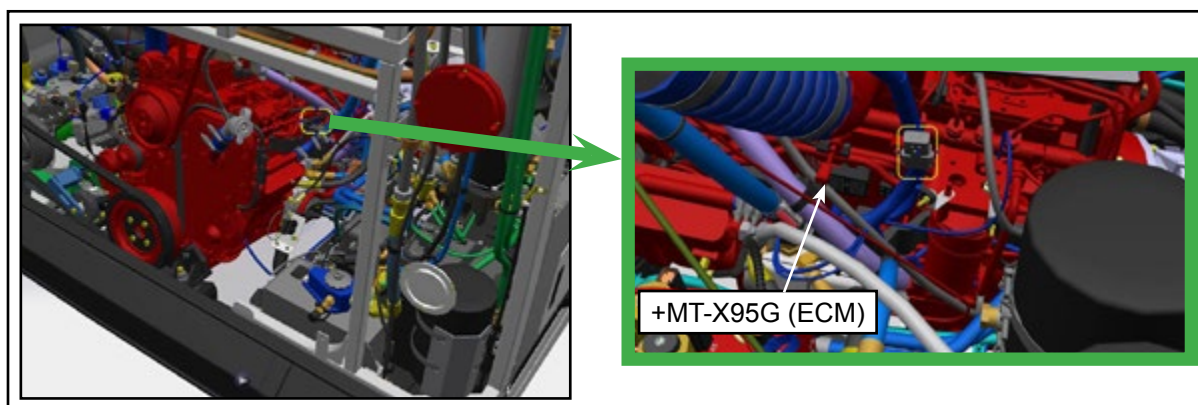


Figure 5 - Location of the +MT-X95G (ECM) Connector in the Engine Compartment

- 1.10. On the CAB095Y cable cut the WH wire (pos. 52) 3 in. (75 mm) and the BK wire 4 in. (100 mm) from the +MT-X95G connector. See Figure 6.
- 1.11. On the +MT-X95G connector strip 1/4 in. (6 mm) from the end of the WH and BK wires and crimp an N18950 splice connector on both wires. See Figure 6.
- 1.12. Cut two lengths of N27548-18 heat shrink tubing and install a length on both wire ends on the harness side to insulate them properly. See Figures 6.

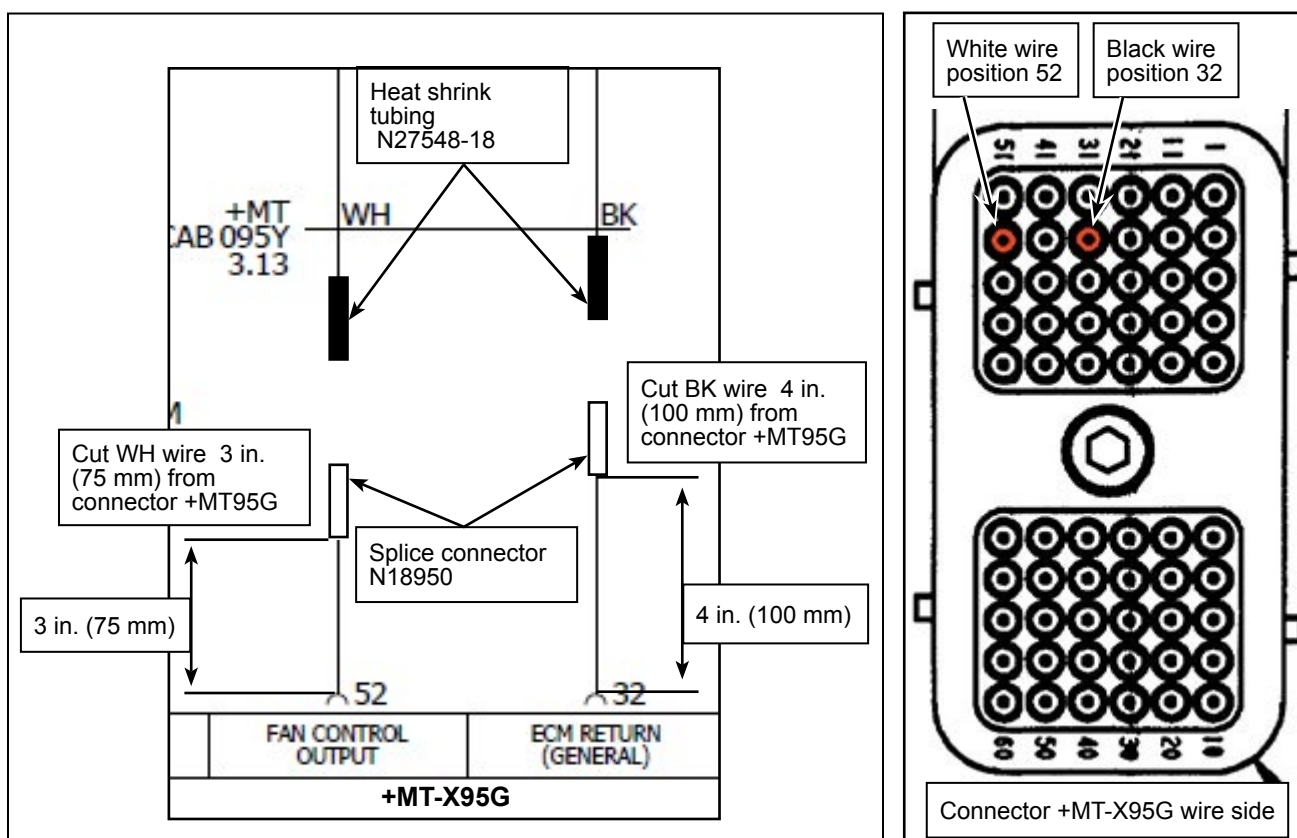


Figure 6 - Wires to be Cut and Insulated on the +MT-X95G Connector

- 1.13. On the +MT-X95G connector side of wire kit N632000451, cut terminals on the black and white wires. Cut the black wire need 1 in. (25 mm) shorter than the white wire. See Figure 7.
- 1.14. Strip 1/4 in. (6 mm) of sheathing at the cut end of the black and white wires.
- 1.15. Cut two 6 in. (150 mm) lengths of of N82227-09 heat shrink tubing and slide a length on the black and white wires of wire kit N632000451.

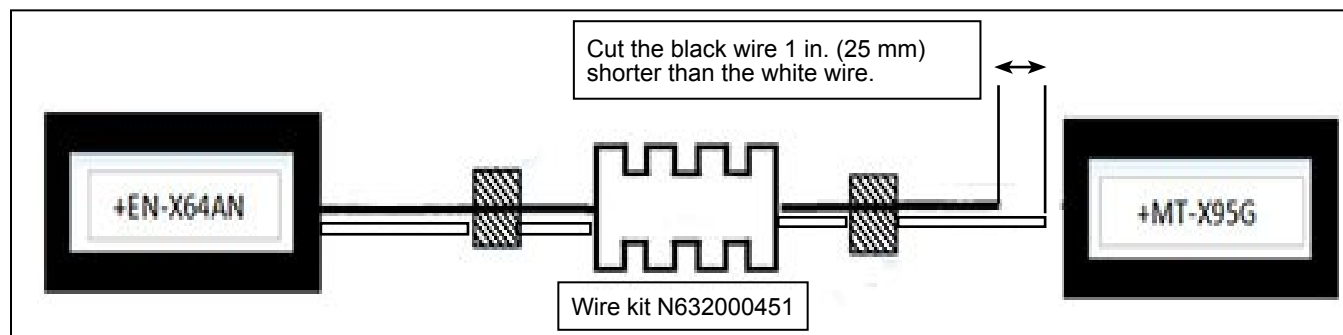


Figure 7 - N632000451 Wire Kit Modification

- 1.16. Route the new N632000451 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 8. Secure the wire kit with G5007996 cable ties.
- 1.17. Crimp the black and white wires of the N632000451 wire kit on the N18950 splice connector installed on the cut wires of the +MT-X95G connector.
- 1.18. Position and heat the heat shrink tubing in a way to cover the splice connectors and the black and white wires up to the +MT-X95G connector.

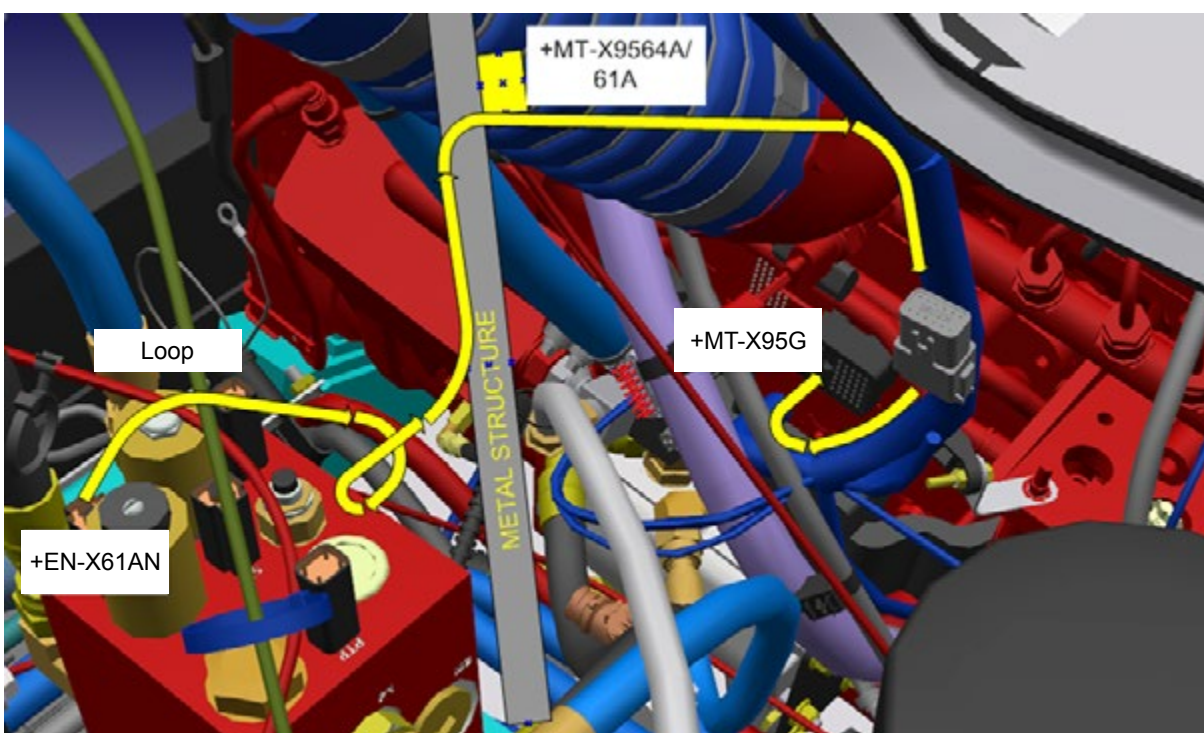


Figure 8 - Routing of the New N632000451

- 1.19. Locate the +MT-X9561A connector in the engine compartment. See Figure 8.
- 1.20. Remove the pins in positions E3 and E4 of the +MT-X9561A connector using a 682256 extractor tool or equivalent. See Figures 9 and 10.
- 1.21. Install the 12059168 sealing plug in positions E3 and E4 of the +MT-X9561A connector. See Figure 9.
- 1.22. Cut the pins on the two removed wires (positions E3 and E4 of the +MT-X9561A connector). See Figure 9.
- 1.23. Cut two lengths of N27548-18 heat shrink tubing and install a piece on both wire ends to insulate them properly. See Figures 4 and 9.

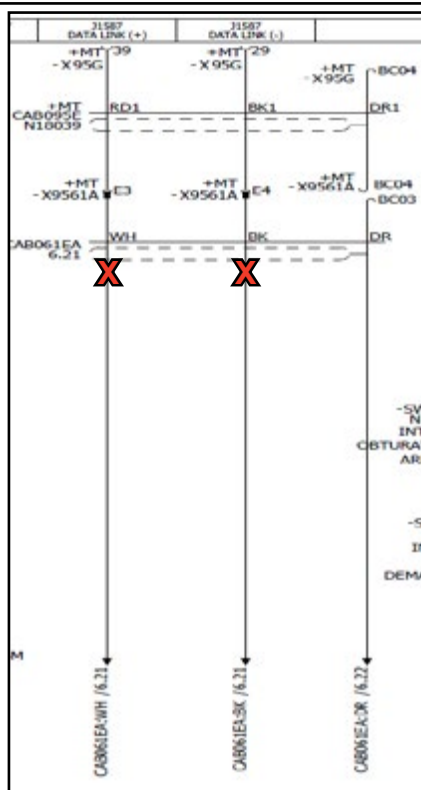
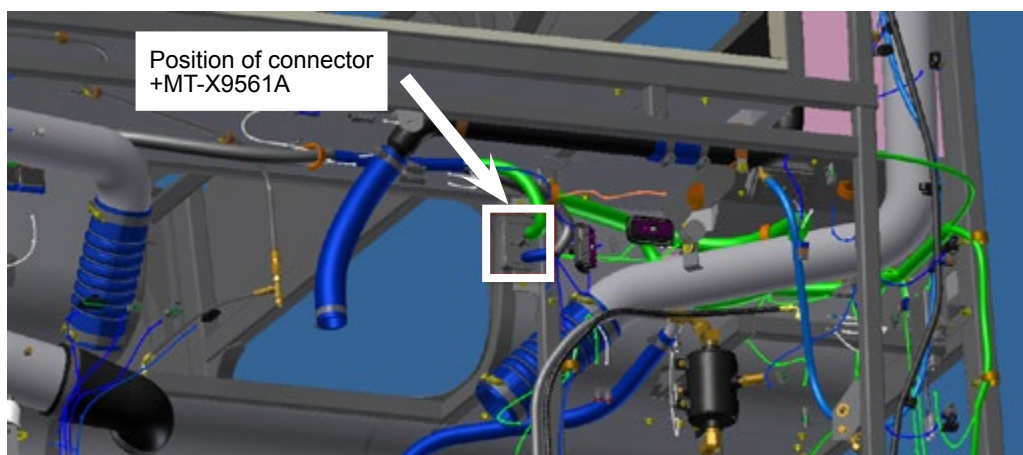


Figure 9 - Wires to be Cut and Insulated, and Sealing Plugs to be Installed on the +MT-X9561A Connector

- 1.24. Locate the +IB-X6199A connector in the engine compartment. See Figure 10.
- 1.25. Cut the wires connected in positions 40 and 41 of +IB-X6199A 3 in. (75 mm) from the connector. See Figure 10.
- 1.26. Cut four lengths of N27548-18 heat shrink tubing and install a piece on each on of the cut wire ends to insulate them properly. See Figures 10.

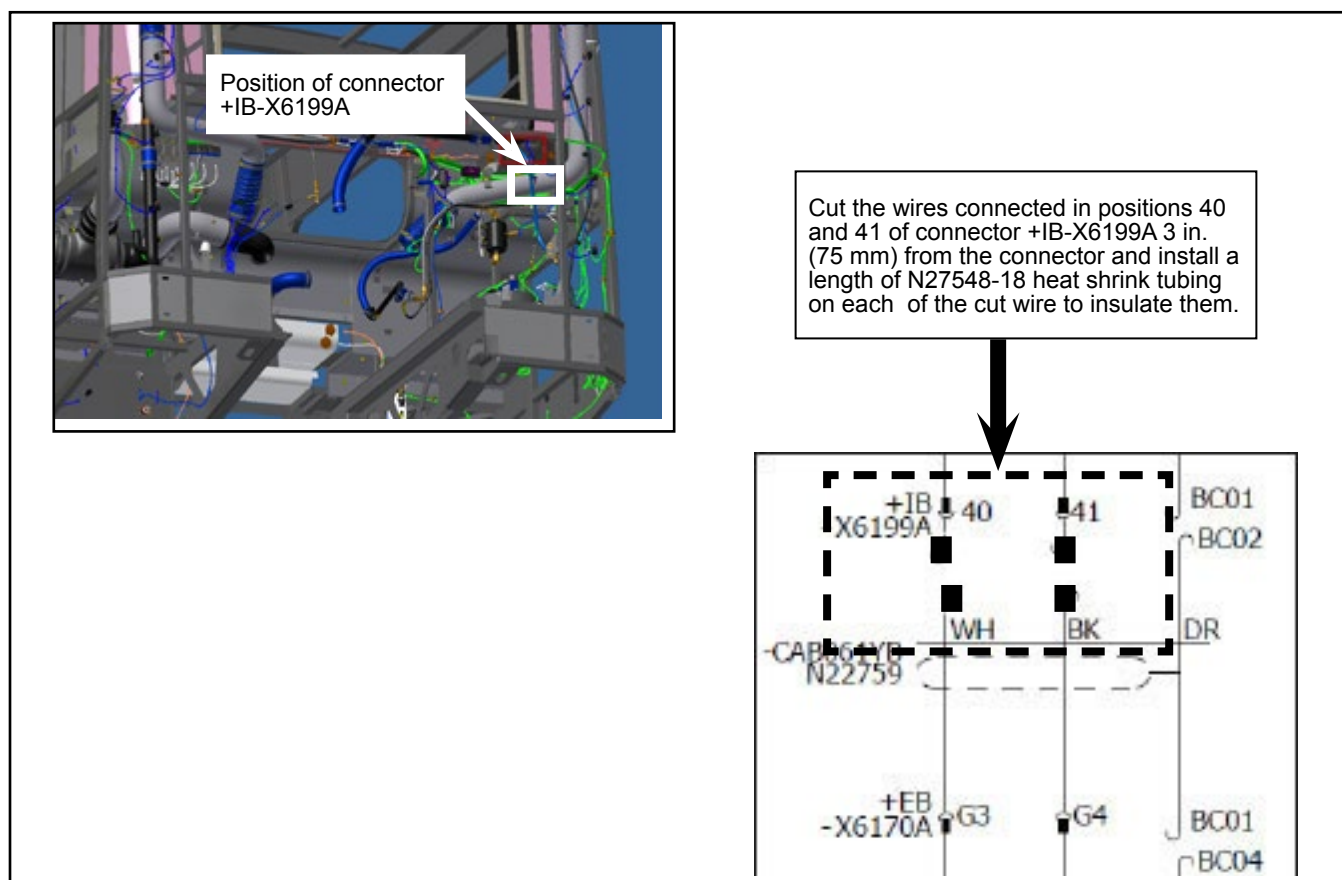


Figure 10 - Location and Modification of the +IB-X6199A Connector

- 1.27. Locate the +EB-X70A connector in the engine compartment. See Figure 11.
- 1.28. Cut the wires connected to positions F and G 3 in. (75 mm) from +EB-X70A connector. See Figure 11.
- 1.29. Cut four lengths of N27548-18 heat shrink tubing and install a piece on each on of the cut wire ends to insulate them properly. See Figure 11.

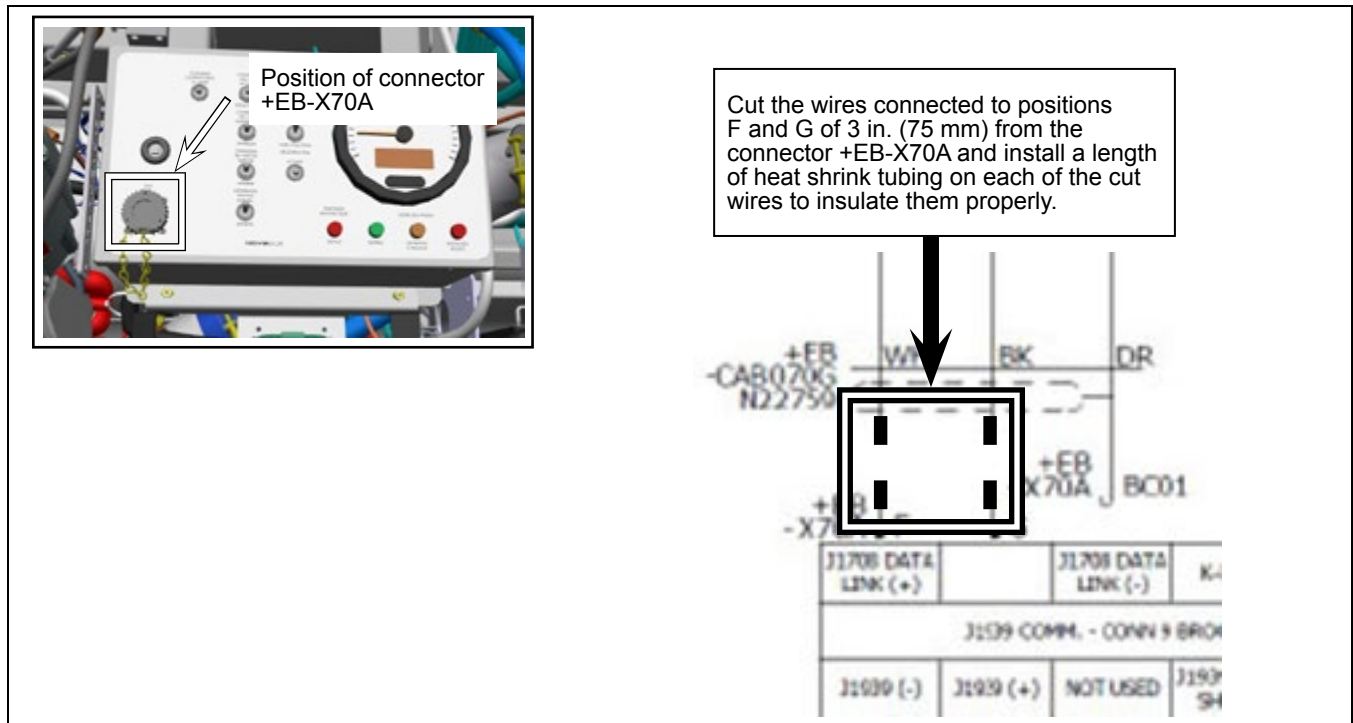


Figure 11 - Location and Modification of the +EB-X70A Connector on the Engine Control Module

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