Service Campaign S4245 November 2024

Service Campaign

Mack MDE High Voltage Connection Torque

Expiration Date Revised to 06/30/2026

Service Category Service Department

Section Function Group 320

Technician Skill Level A **Market North America**

Applicability

Mack

Model Years	Models
2024	MDE6BE, MDE7BE

Introduction

Mack Trucks has identified that certain MDE model trucks may have inadequate torque at the high-voltage connections of the drive motor. Insufficient torque at these connections can lead to intermittent power loss and potential short circuits. Please follow the instructions in this document to inspect and torque the connections to the proper torque.

Production Change Information

This bulletin applies to vehicles built within the specified production changes below.

Brand	Engine	Emission Level	Starting Build Date	Ending Build Date
Mack	BEV	EM-ZE	22-June-2023	9-January-2024

Warranty Information

This repair is covered by an authorized Service Program. Reimbursement is obtained through the normal claim handling process.		
Claim Type (used only when uploading from the Dealer Bus. Sys.)		**B**
Main Labor Code	**Description**	**Hours**
1720-16-09-01	Campaign, General 0.1x7	**0.7**
3100-09-01-04	Traction Voltage Decommissioning	**0.3**
3100-09-01-03	Traction Voltage Commissioning	**0.3**
Causal Part	**24443593**	
SCC Authorization Code	**S4245**	
Expiration Date	**June 30, 2026**	

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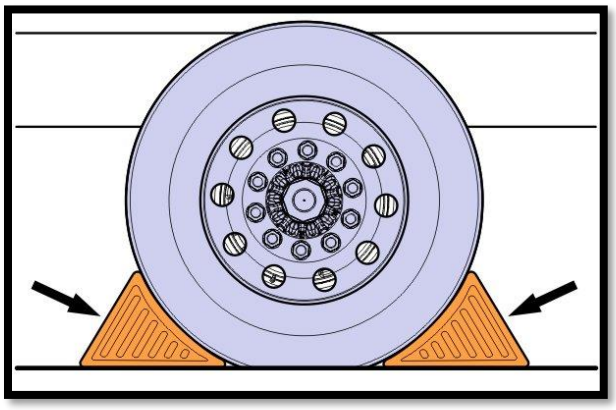
Required Tools & Equipment

- Multimeter
- Torque wrench cable of **27Nm / 20 lb-ft**.
- Torque wrench cable of **3.5Nm / 2.5 lb-ft / 30 lb-in**.

Repair Procedure

1. Park the vehicle on a level surface.
2. Apply parking brake.
3. Place the transmission in park or neutral.
4. Turn off the ignition.
5. Install wheel chocks.



6. Follow Impact Operation 3100-09-01-04 Traction Voltage Decommissioning.

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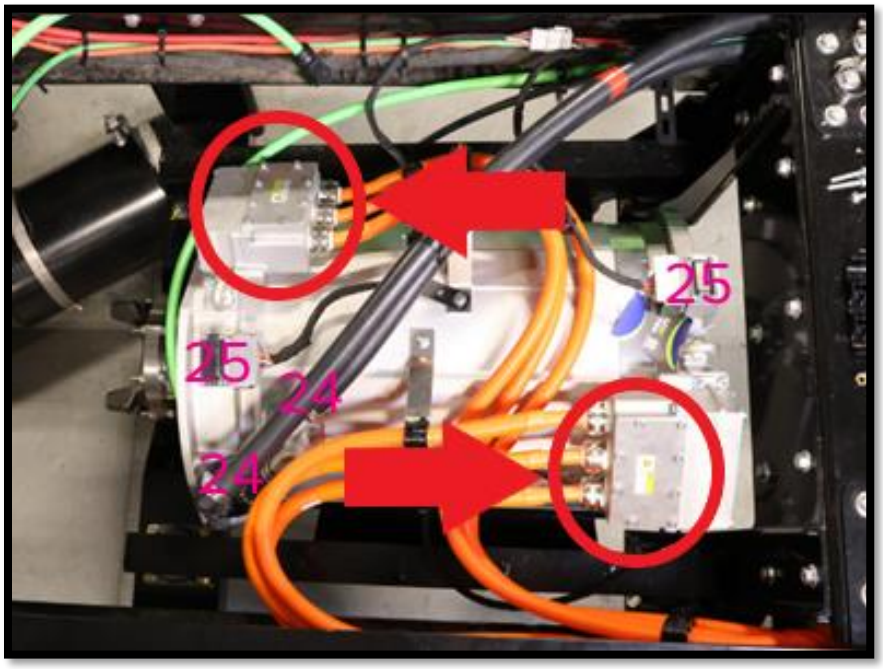
7. Locate the two high voltage junction boxes on the electric drive motor.



8. Remove the cover plate from both junction boxes.

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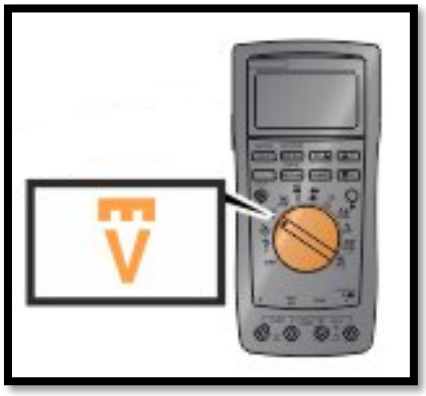
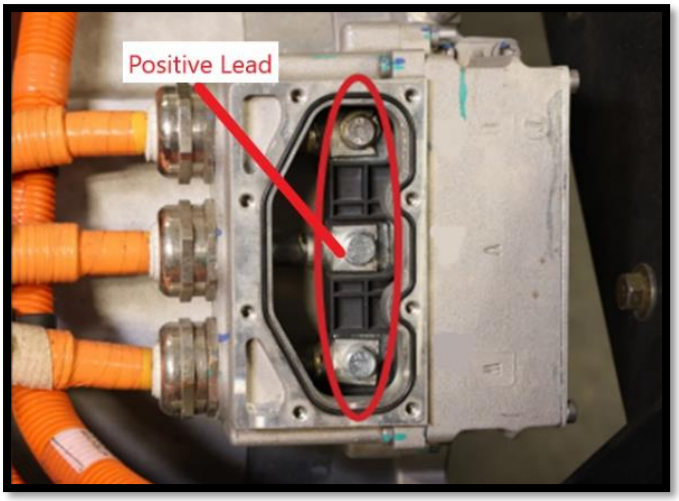
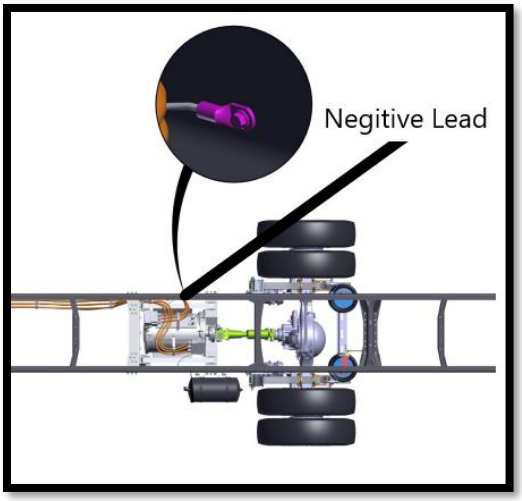
9. Set Multimeter to position Volt Direct Current (VDC).



10. Place the multimeters positive lead on the electric motor high voltage connection, and the negative lead on the chassis ground. Ensure the voltage reading is **0 ±24 VDC**.

Important Note
If voltage higher than **0 ±24 VDC** is recorded, **STOP** and contact eService.





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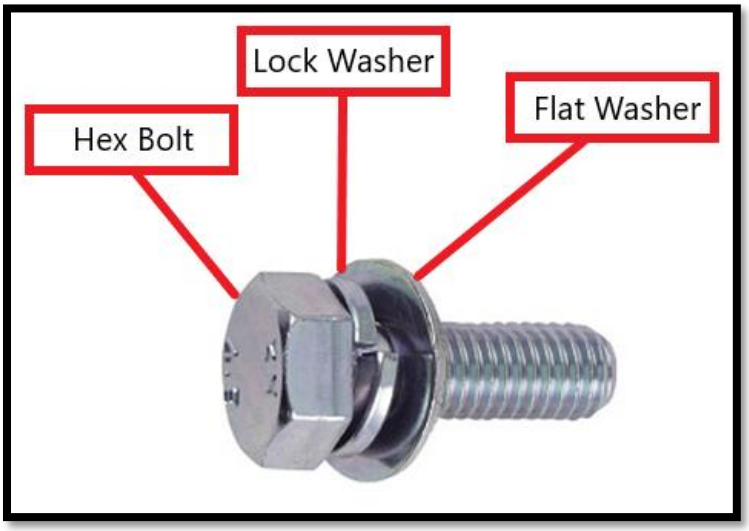
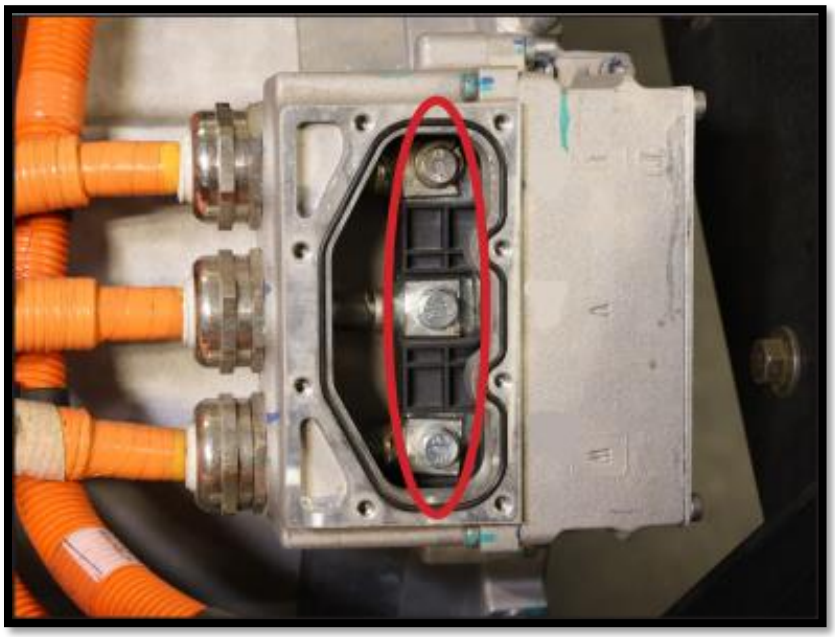
11. Inspect the six high voltage connection points (Three Per Box) for the following.
    - Missing or loose hardware. There should be a hex bolt, lock washer, and flat washer in the order as pictured.
    - Visible arcing.
    - Discoloration.
    - Damaged wires or terminals.



12. Refer to the chart below to assess your inspection results.

Missing Hardware	**Damaged cables, terminals, or hardware**	**NO damaged or missing hardware found**
Send an email to campaign@volvo.com to receive replacement hardware. Please include the campaign number and VIN number in the email.	Cerate eService case under eMobility Technical Support. Please include pictures and a description of the damage in the case. Await instructions before proceeding further.	Proceed to next step

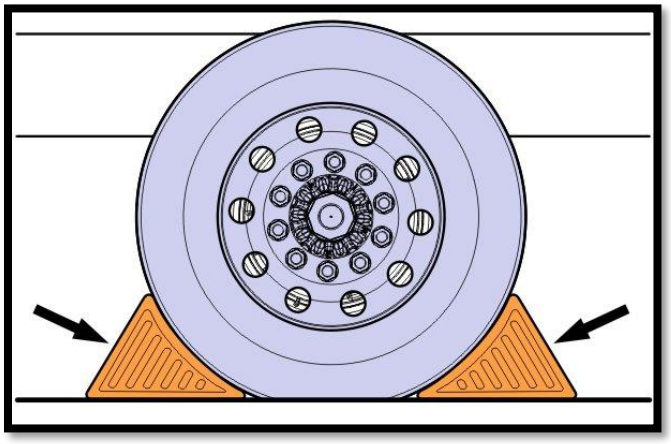
13. Torque all six connection bolts in both junction box to **27Nm / 20 lb-ft**.



14. Install cover plates and mounting bolts on both junction boxes. Torque bolts to **3.5Nm / 2.5 lb-ft / 30 lb-in**.

Note
Ensure the cover plate seal is seated and undamaged before installing the cover.

15. Follow Impact Operation 3100-09-01-03 Traction Voltage Commissioning.
16. Remove wheel chocks.



17. Release the truck.