

Safety Recall

Volvo Trucks North America

Greensboro, NC USA

VOLVO

Release Date	Number	Release	Page
06.2023	RVXX2306	01	1(3)

VNRE Electric Heater Relay Torque

RECALL INFORMATION

Volvo Trucks has determined that certain 2020-2023 VNR Electric model vehicles have the risk of the Energy Storage System (ESS), Electric Heater Relays power cables having insufficient torque. Insufficient torque on the power cables to relays may result in a relay failure which could continue to power the cabin heater. Relay failure and overheating could result in a vehicle fire.

Volvo Trucks has not received any complaints or reports of vehicle crashes because of this safety issue; therefore, Volvo considers this as a proactive measure to protect the public and Volvo's customers from the potential risk associated with this defect.

To ensure that these vehicles meet Volvo's stringent quality requirements, follow the instructions outlined below to check and confirm that the ESS electric heater relays power cables torque is to specification.

VEHICLES AFFECTED

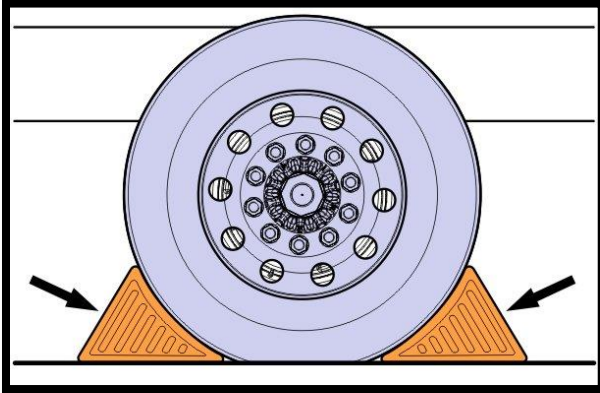
Certain Volvo North America vehicles manufactured between June 29, 2018, through October 19, 2022.

VEHICLE QUANTITY

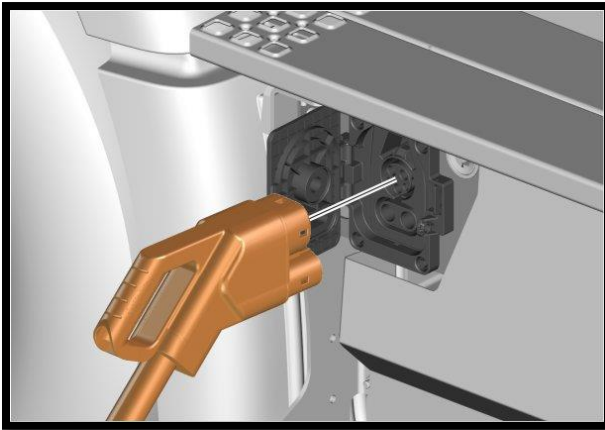
There are 246 vehicles affected by this recall (243 U.S, 3 Canada).

Repair Instructions

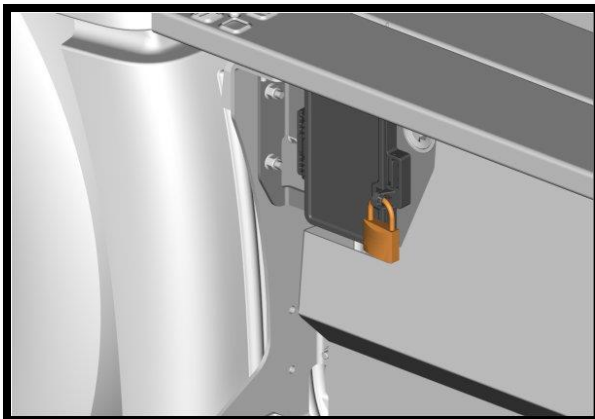
1. Park the vehicle on level surface.
2. Apply parking brake.
3. Place the transmission in park or neutral.
4. Turn off ignition.
5. Install wheel chocks.



6. Disconnect all external power supply or charging devices.



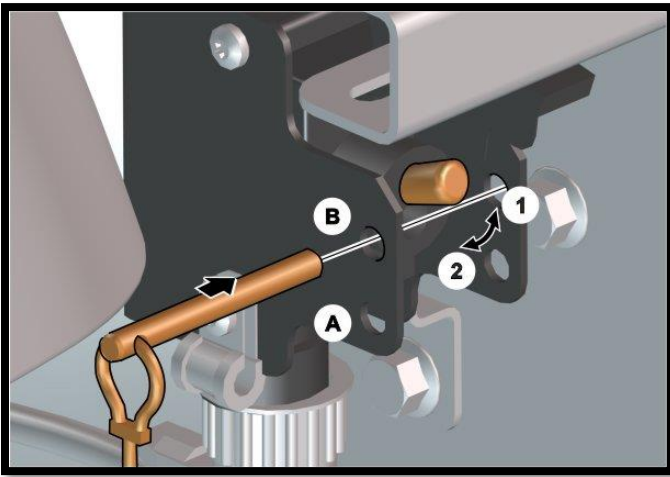
7. Lock the access to the CCS (Combined Charging System).



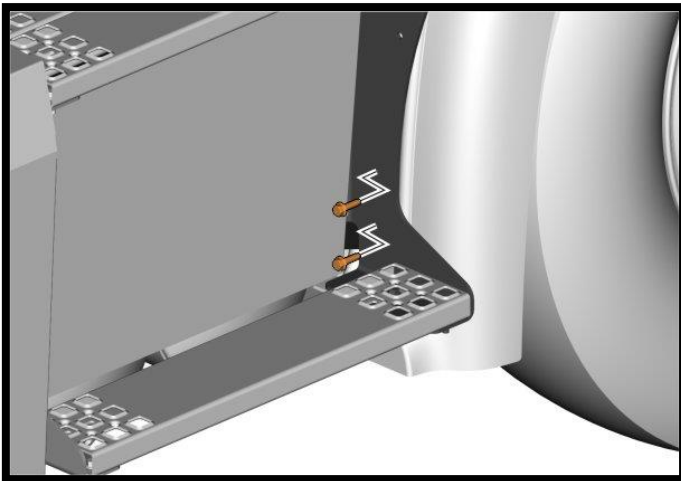
8. Set the chassis switch to position (1).
Switch, position

Position	Status
1	OFF
2	ON

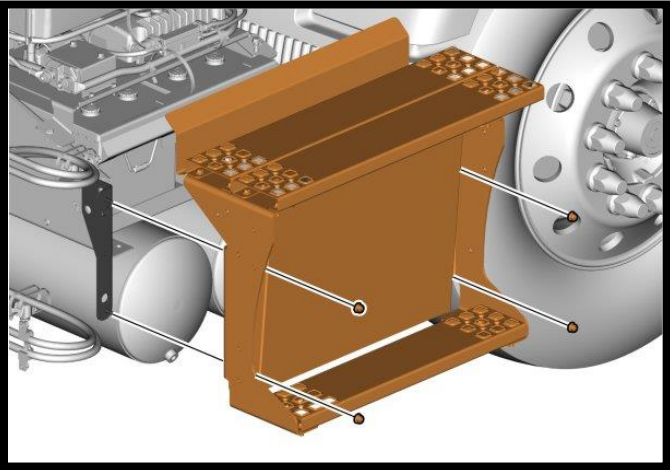
9. Remove the safety pin from the slot (A) and install in the slot (B).



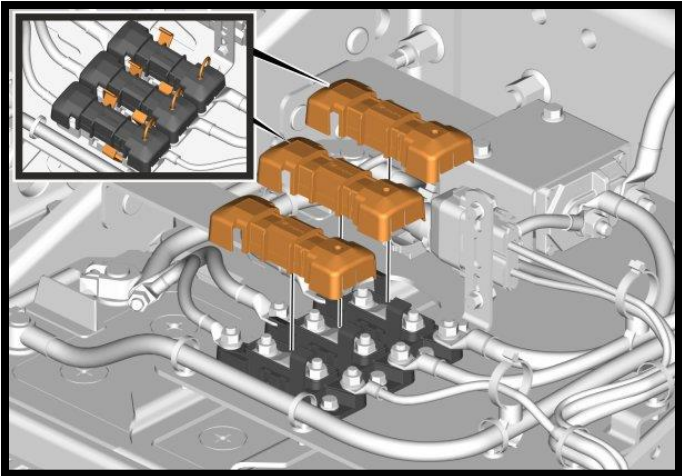
10. Remove battery cover bolts.



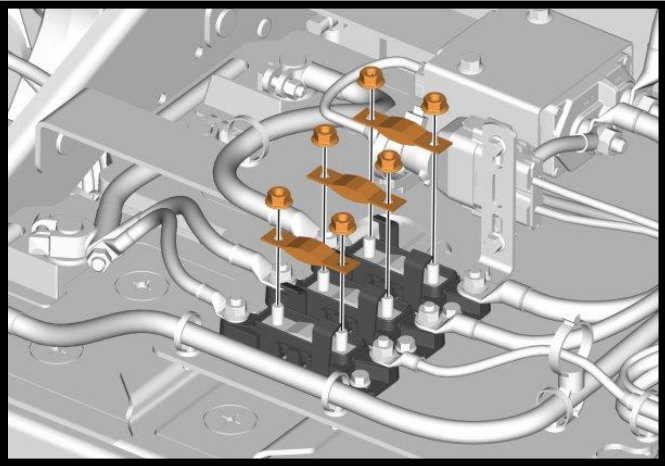
11. Remove battery cover nuts and remove cover.



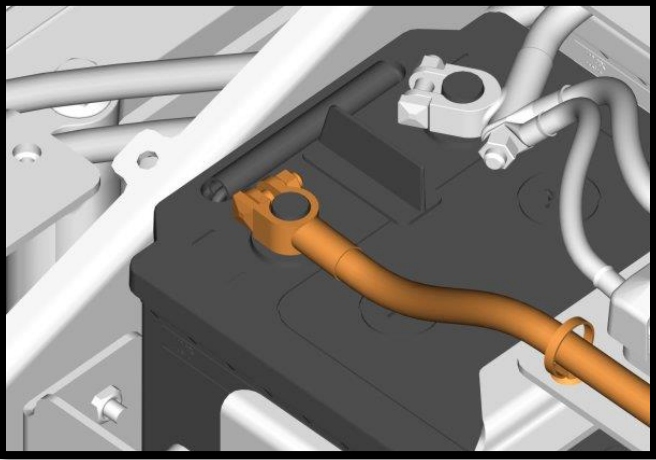
12. Remove fuse covers



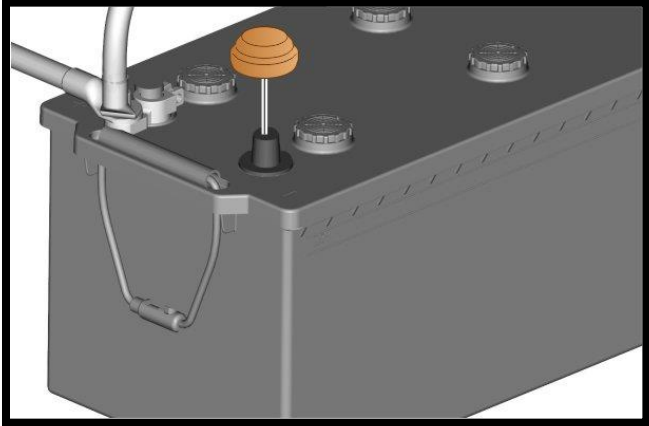
13. Remove Fuses.



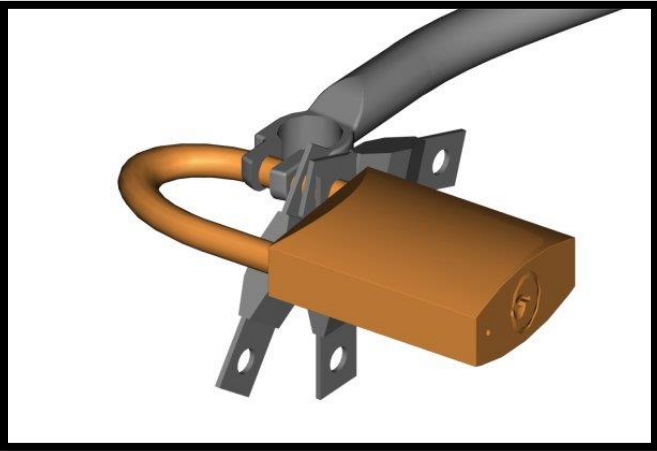
14. Disconnect the cable from the negative terminal.



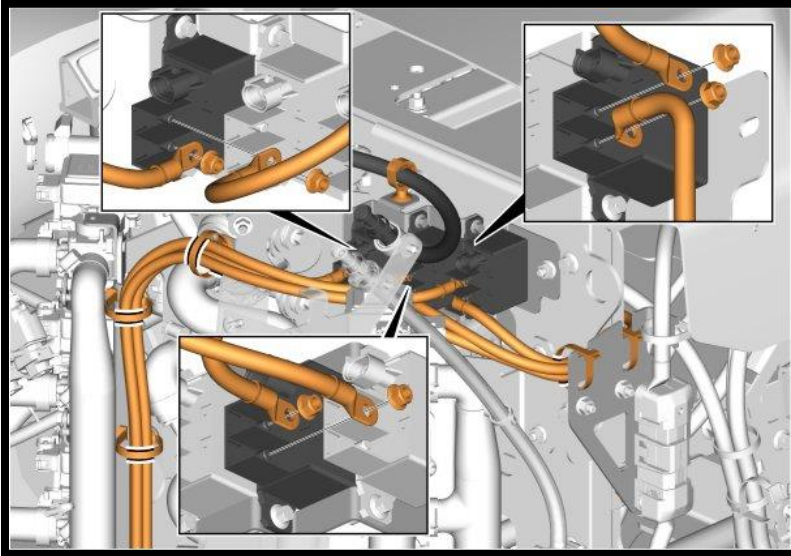
15. Cover negative battery post.



16. Lock the negative terminal along with fuses.



17. Remove relay nuts and remove power cables.

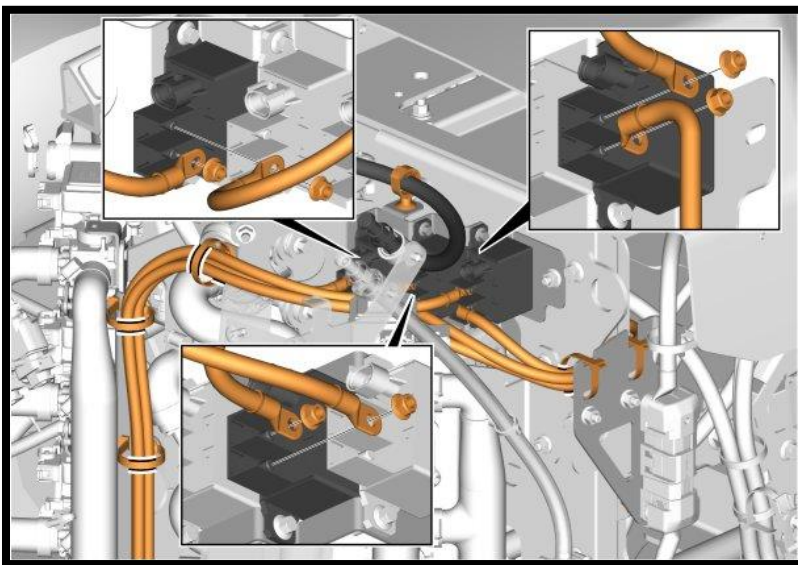


18. Inspect cable and mating surface to ensure and clean connection.

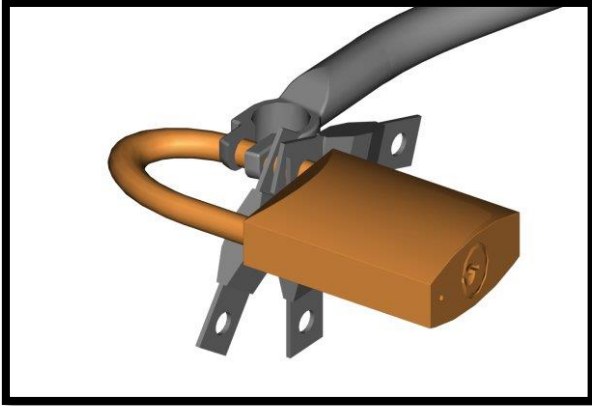
19. Reinstall relay power cables and nuts.

20. Torque relay power cable nuts to specification below.

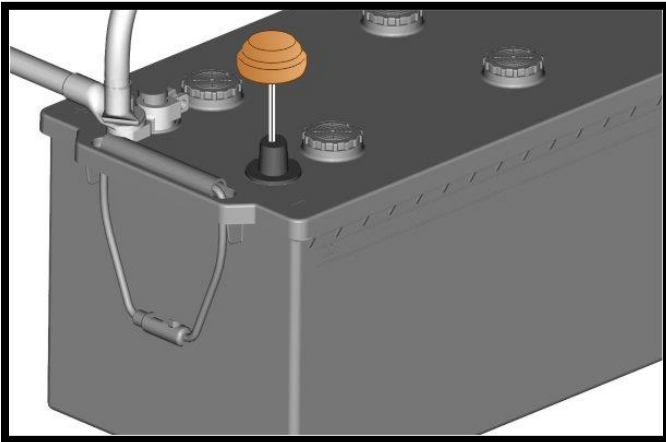
Tightening torque	
Cable terminal, relay, nut	7.5 ±0.5 Nm (6 ±0.4 lb _r ·ft)



21. Unlock the negative terminal and fuses.

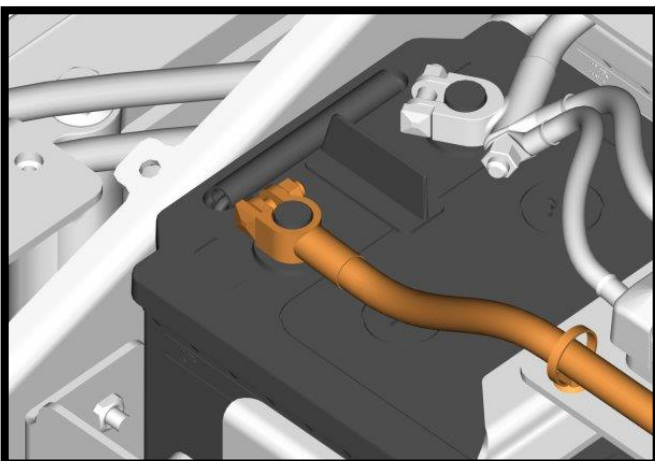


22. Remove negative battery post cover.



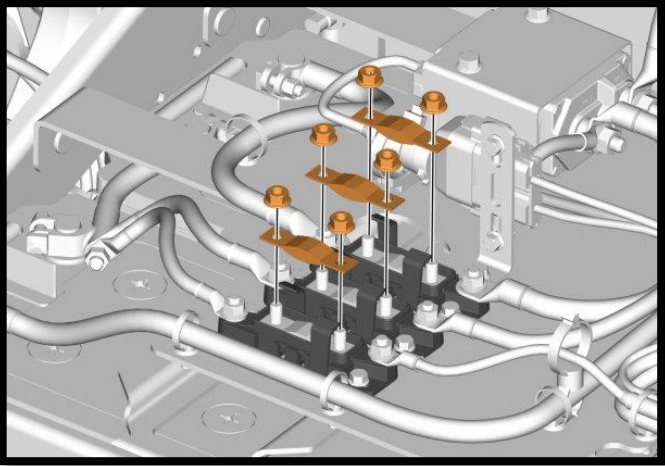
23. Connect the cable to the negative terminal.

Tightening torque	
Cable terminal, nut	4.5 ±0.5 Nm (3 ±0.4 lb _r ·ft)

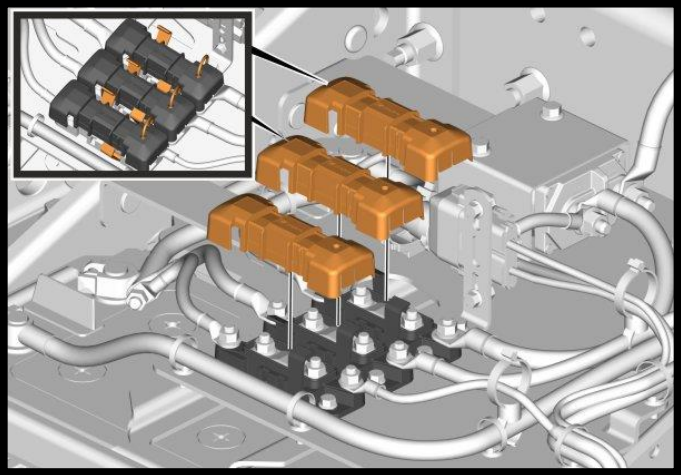


24. Install fuses.

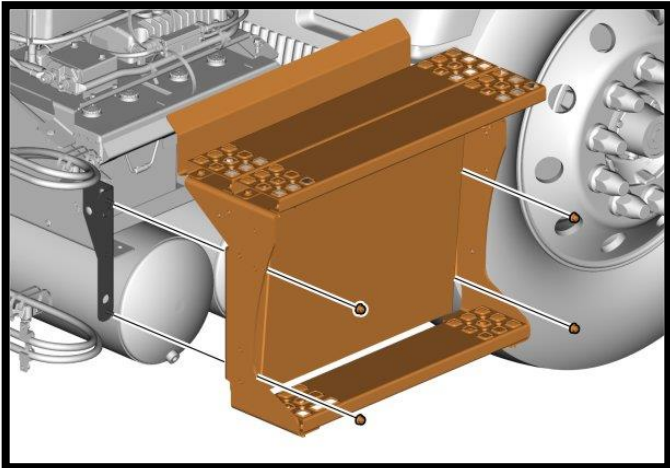
Tightening torque	
Fuse, nut	15 ±3 Nm (11 ±2 lb _r -ft)



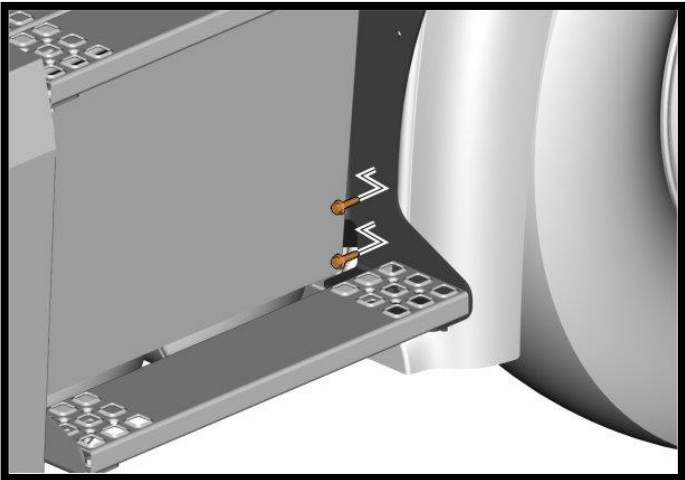
25. Install fuse covers.



26. Install battery cover and install nuts.



27. Install bolts.

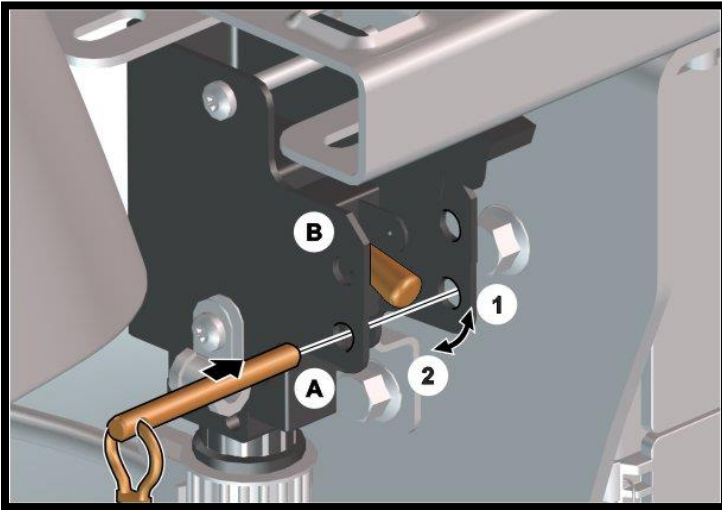


28. Remove the safety pin from slot (B) and install in slot (A).

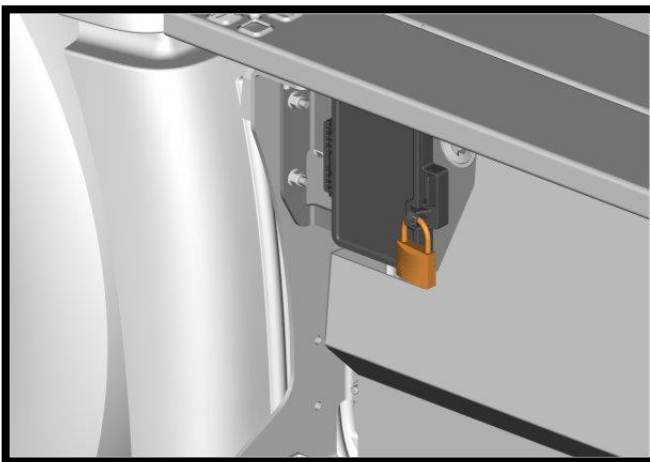
29. Set the chassis switch to position (2).

Switch, position

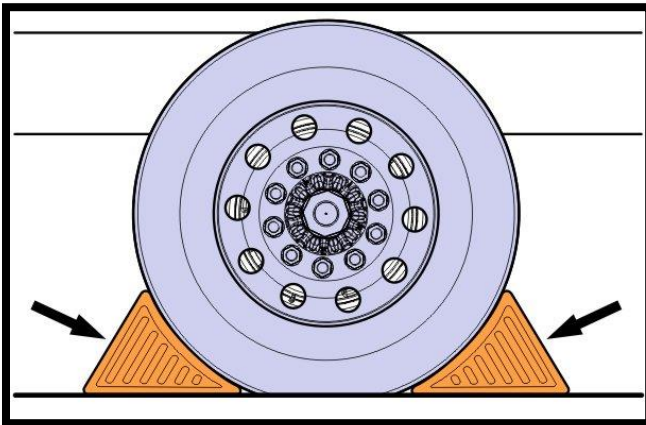
Position	Status
1	OFF
2	ON



30. Unlock the access to the CCS.



31. Remove wheel chocks.



32. Return truck to service.

REIMBURSEMENT

This repair is covered by an authorized safety recall. Reimbursement is obtained through the normal claim handling process.	
	UCHP Reimbursement
Claim Type (used only when uploading from the Dealer Business System)	40
Recall Status	
Vehicle repaired per instructions	1-Modified per instructions
Labor Codes	
3100-09-01-06 Low voltage system, Decommissioning	0.3
3100-09-01-05 Low voltage system, Commissioning	0.3
1720-16-09-01 Campaign, General x3	0.1
Causal Part	20709545
Authorization Number	C0299

Note: Dealers are to perform this Safety Recall Campaign on all subject vehicles at no charge to the vehicle owner regardless of mileage, age of vehicle or ownership (original purchaser or subsequent purchasers). Whenever vehicles are subject to a Safety Recall are brought to your dealership for service, or taken into your dealership vehicle inventory, it is strongly recommended that every effort be made to perform the recall correction before the vehicle is sold or released to the owner