

VNRe Ground Stud Update

Service Category Service

Section Function Group 311

Technician Skill Level A

Market North America

Applicability

VOLVO

Years	Models
2020-2023	VNRE

Introduction

Volvo Trucks has determined that certain VNRE model vehicles have been built with chassis ground studs that have insufficient contact to the frame rail that could cause a loss of ground connection. To resolve this issue, Volvo Trucks has developed an updated stud. Follow the repair instruction to replace the affected studs.

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
Volvo	BEV	EM-ZE	16-April-2019	12-August-2022

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
3100-09-01-06	Low Voltage Decommissioning	0.3
3100-09-01-05	Low Voltage Commissioning	0.3
17-20-16-09-01	Campaign, General (0.1x25)	2.5
Labor Code	If stud relocation is needed	Hours
17-20-16-09-01	Campaign, General (0.1x39)	3.9
Causal Part	60113900	
SCC Authorization Code	S3851	
Expiration Date	July 29, 2026	

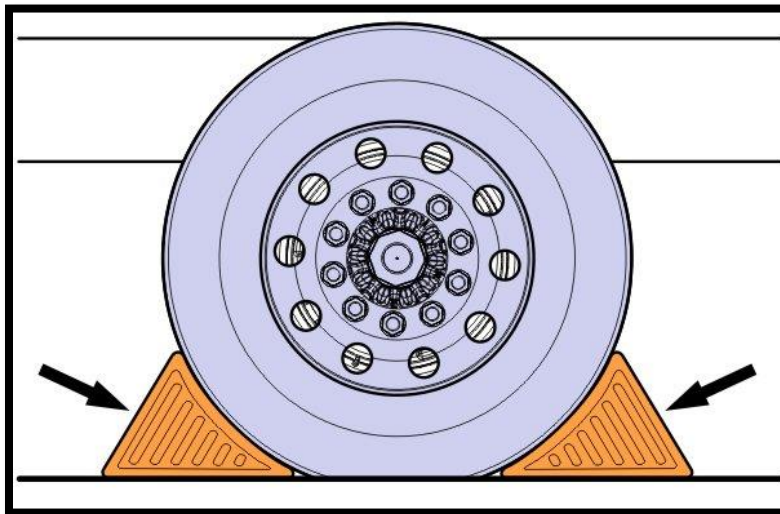
VNRe Ground Stud Update

Parts Information

Part Numbers	Part Names	Quantity
60112719	Ground Stud	4
If stud relocation is needed		
Part Numbers	Part Names	Quantity
994522	14mm Nut	1

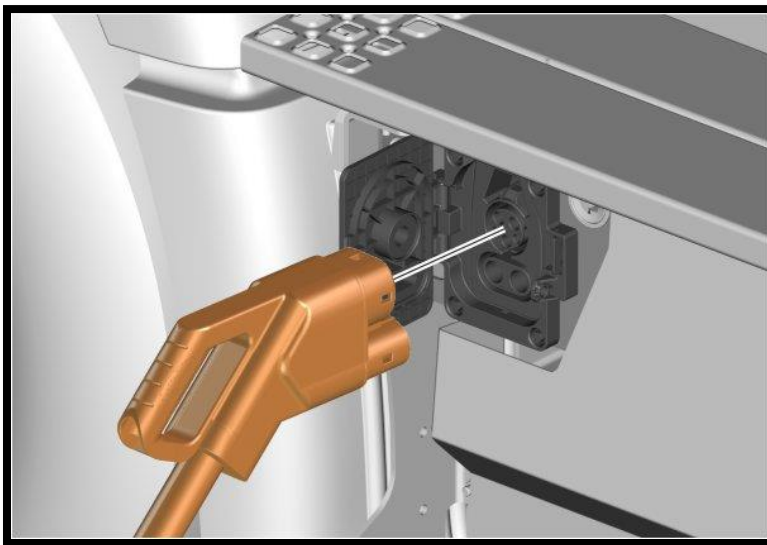
Repair Procedure

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.

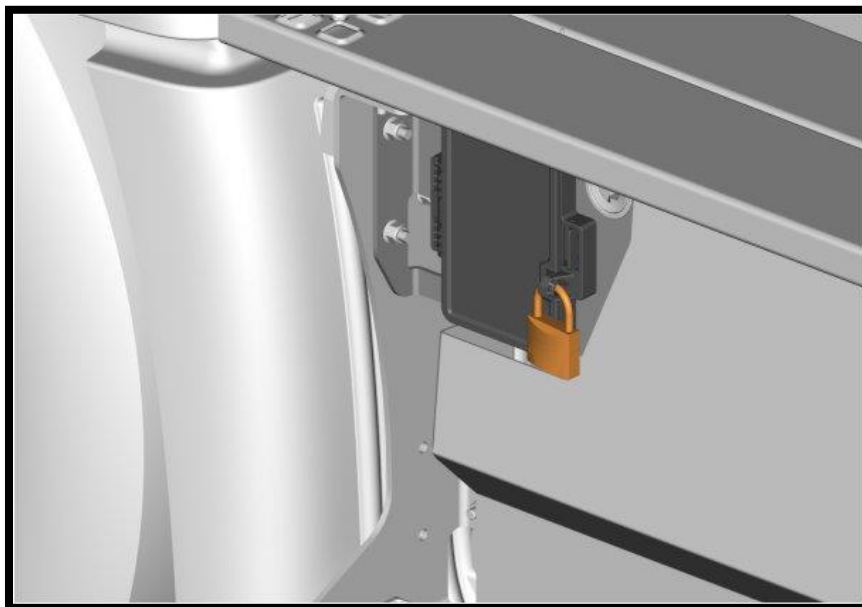


VNRe Ground Stud Update

6. Disconnect all external power supply or charging devices.



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



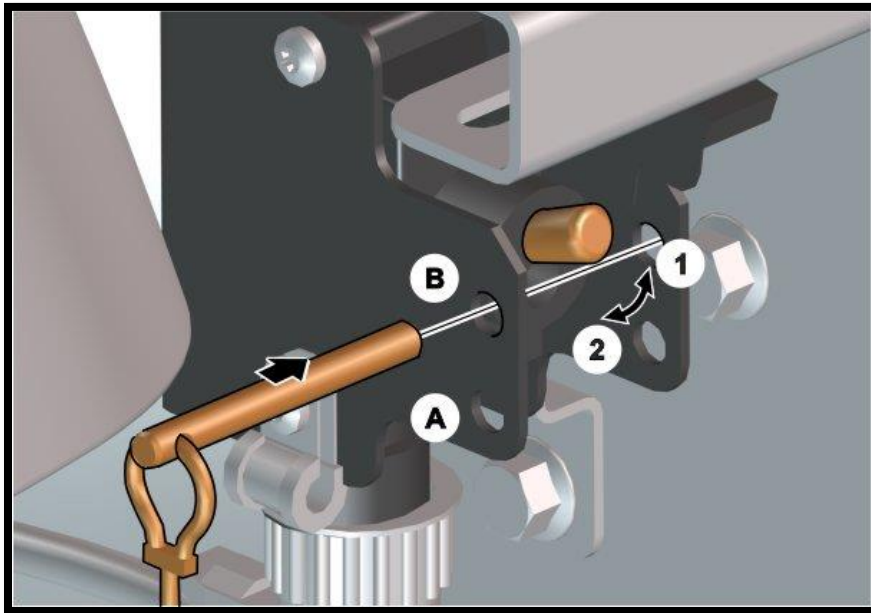
VNRe Ground Stud Update

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

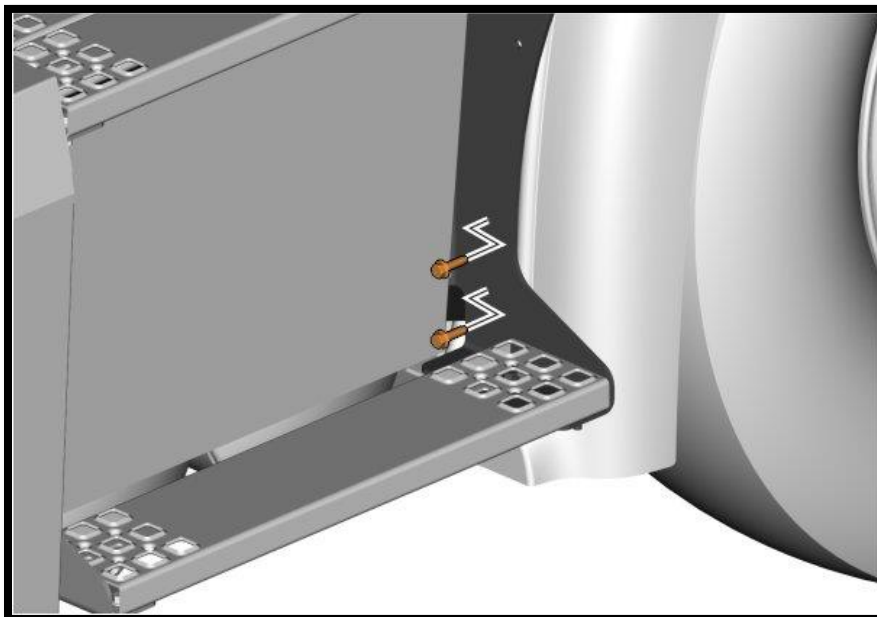
Switch, position

Position	Status
1	OFF
2	ON

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

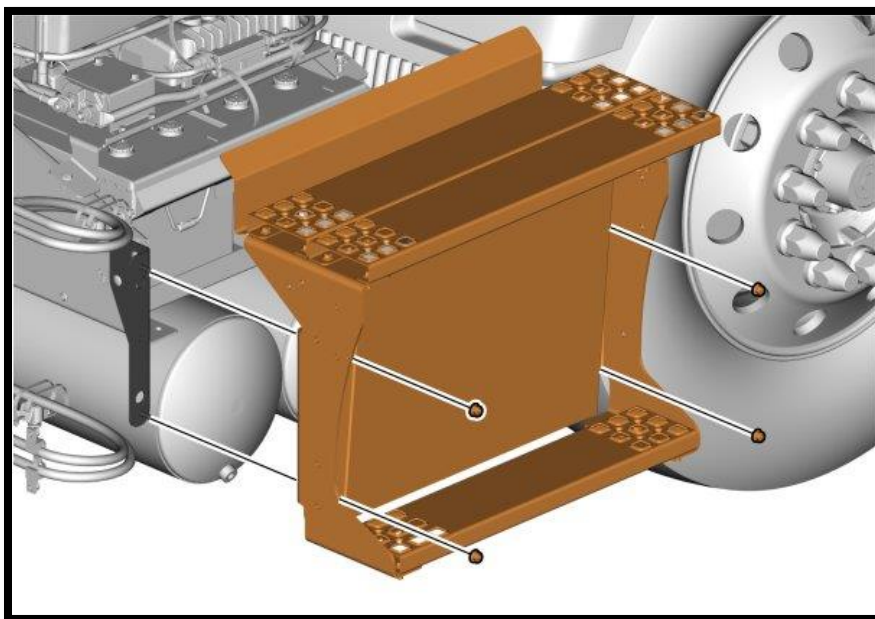


10. Remove battery cover bolts.

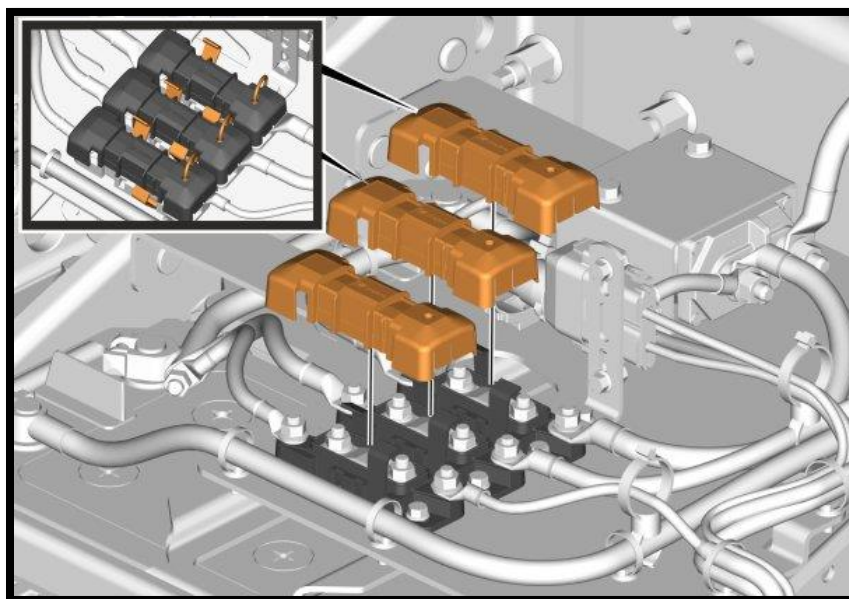


VNRe Ground Stud Update

11. Remove battery cover nuts and remove cover.

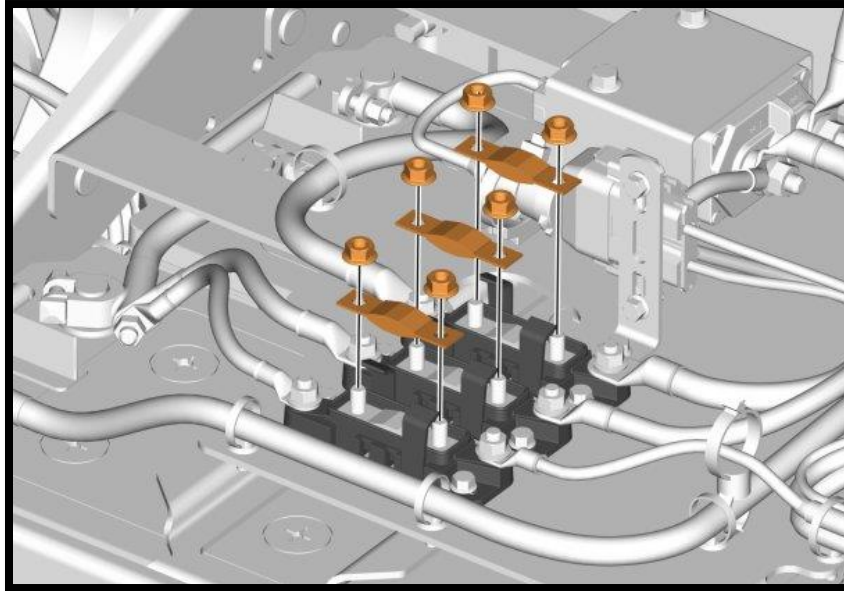


12. Remove fuse covers.

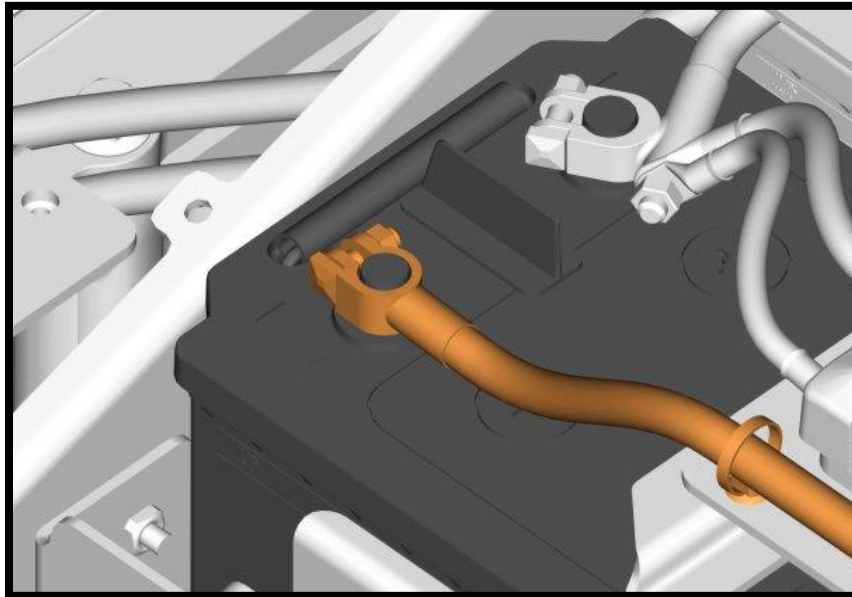


VNRe Ground Stud Update

13. Remove Fuses.

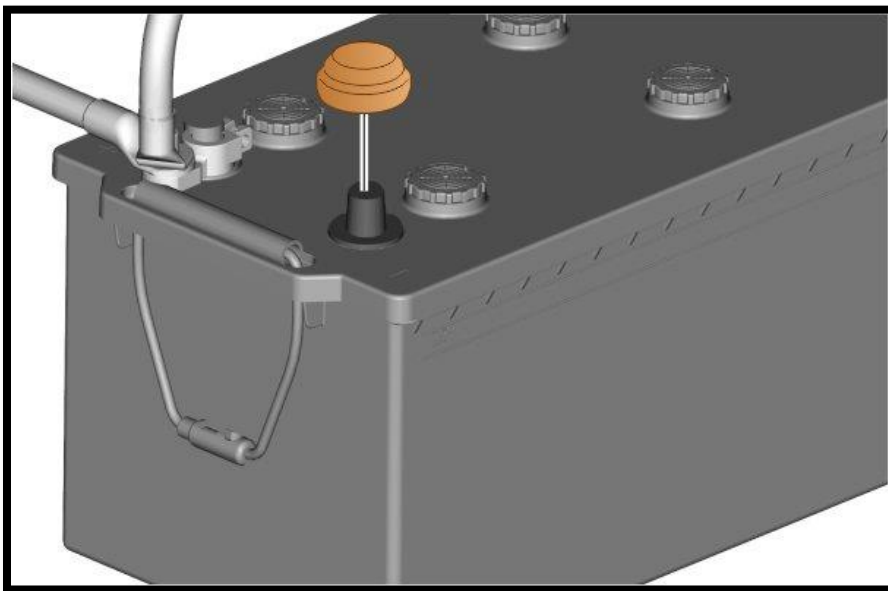


14. Disconnect the cable from the negative terminal.

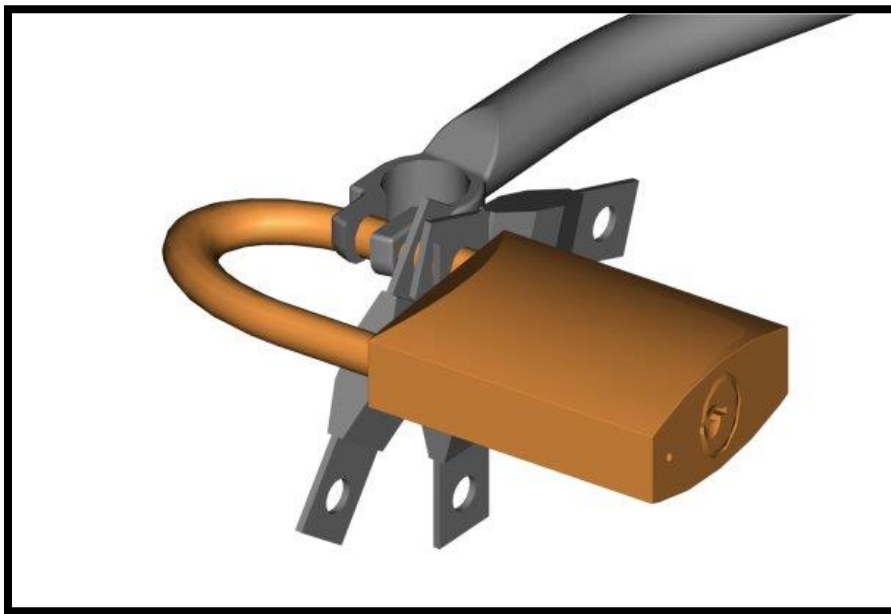


VNRe Ground Stud Update

15. Cover negative battery post.



16. Lock the negative terminal along with fuses.

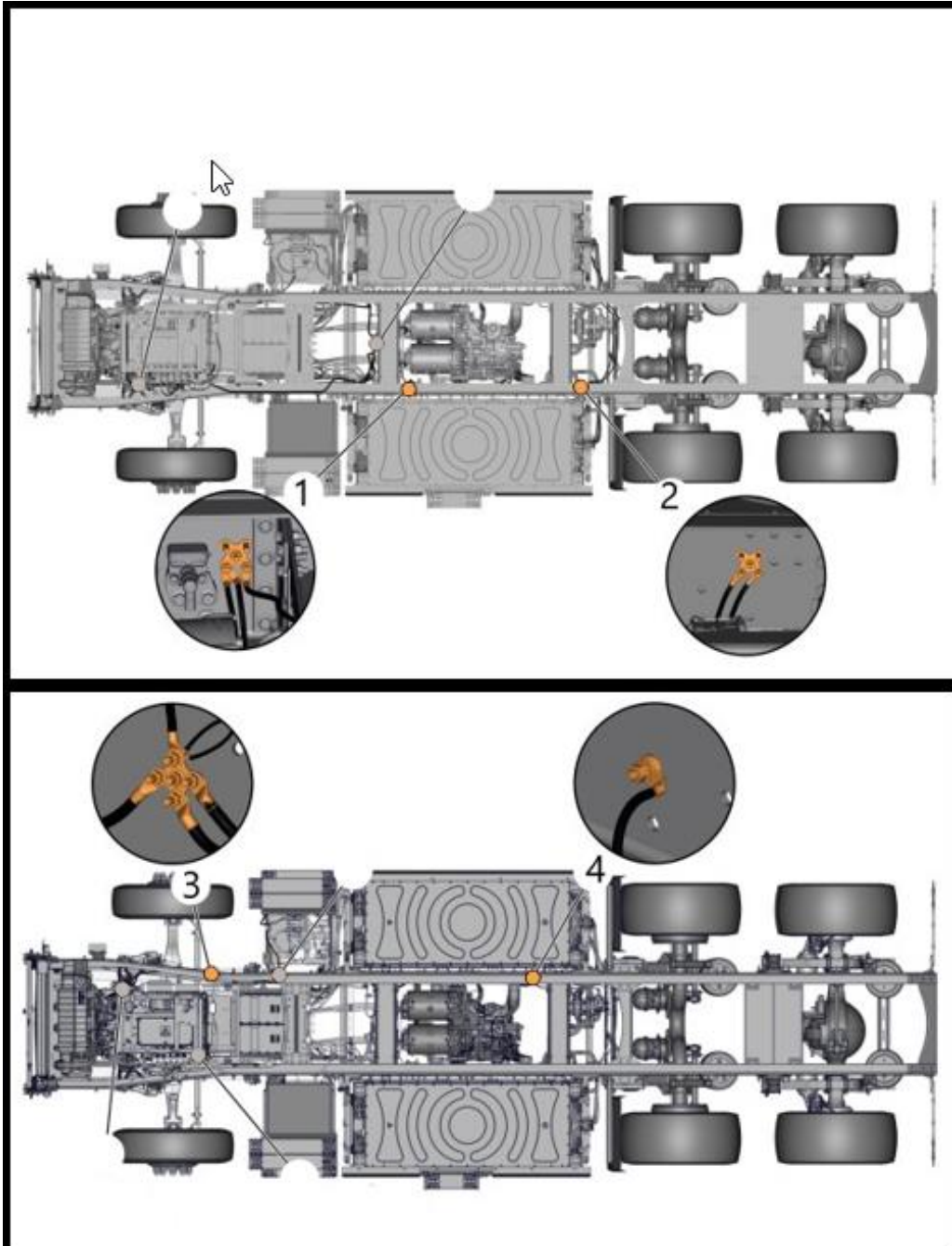


VNRe Ground Stud Update

17. Locate four ground studs that need to be replaced. Two are on the driver's side frame rail, and two are on the passenger's frame rail.

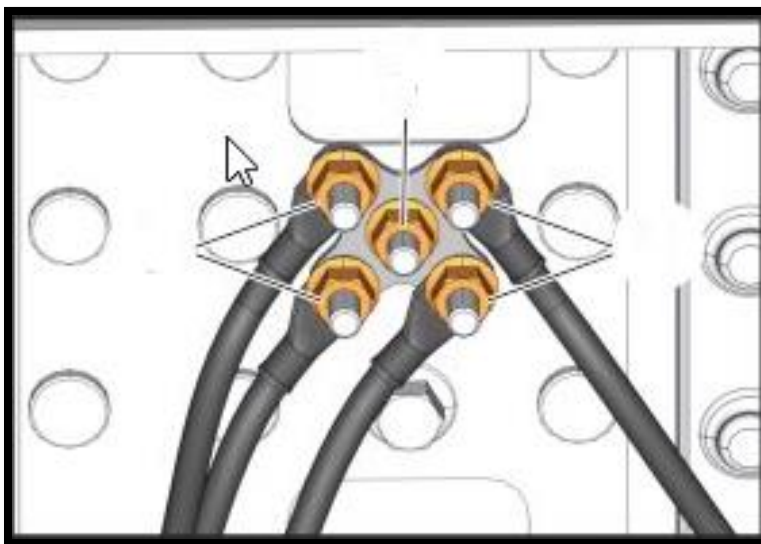
Important Note

On some chassis configurations stud number 2 may be blocked by the rear battery mounting bracket. If you encounter this, please follow steps 18 to 22 to relocate the ground stud. If stud is not blocked continue to step 23.



18. Remove the nuts and ground cables from all the ground stud number 2.

VNRe Ground Stud Update

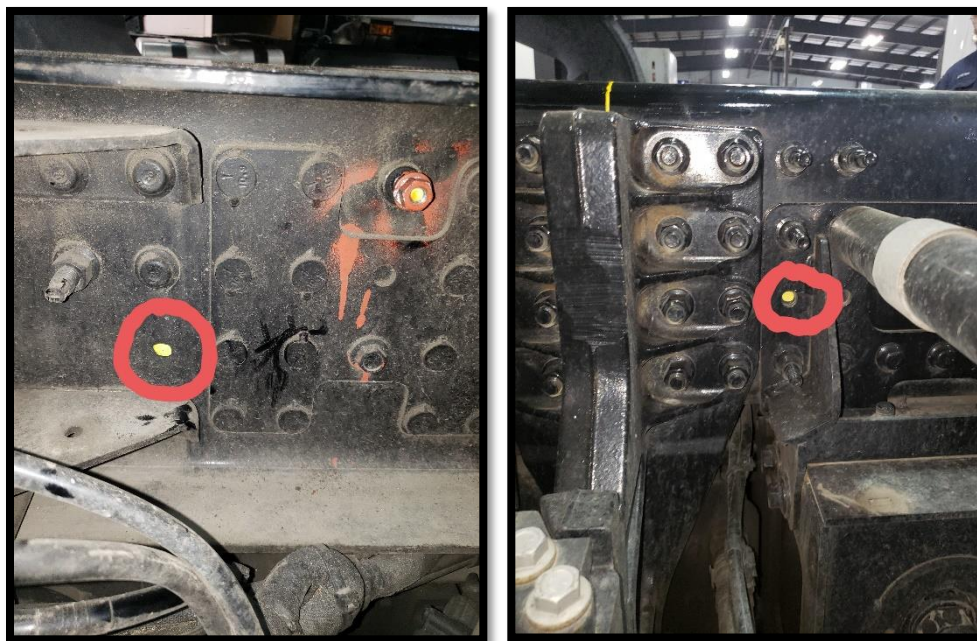


19. Leave old stud in frame and cut ground stud off of the press screw.

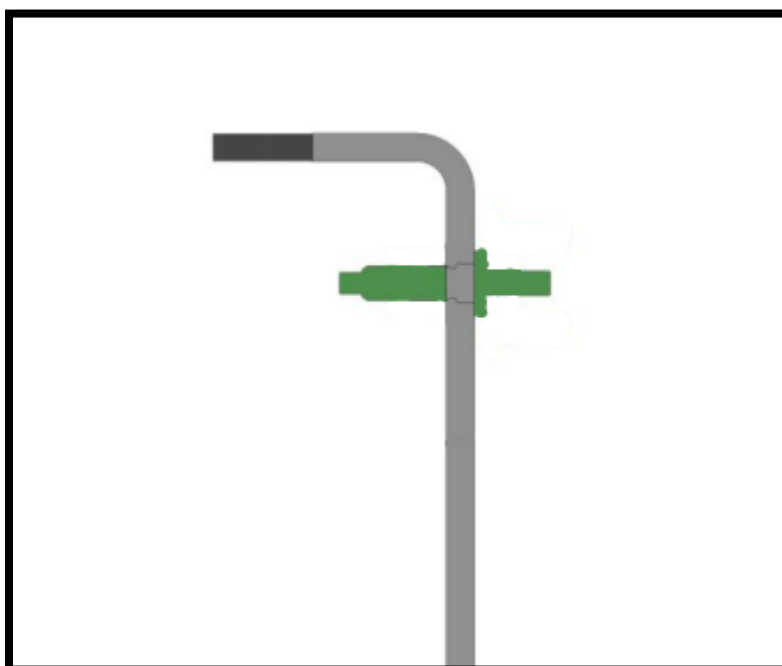


20. Drill a new 15.5 mm hole in the location marked below.

VNRe Ground Stud Update



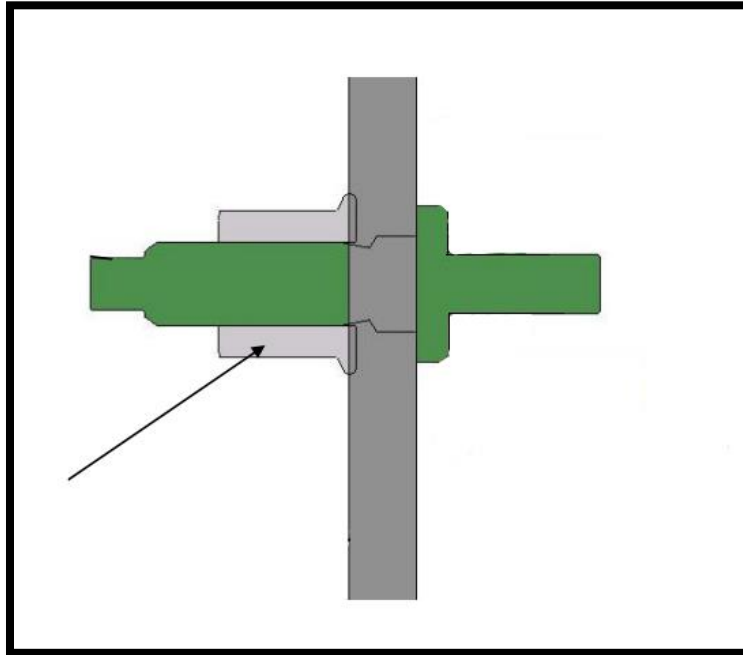
21. Install new ground stud P/N 60112719.



VNRe Ground Stud Update

22. Install and torque the ground stud retaining nut. Ensure the stud is pulled completely into the frame and the stud collar is flush with the rail when tighten the nut.

Tightening torque	
Fuse, nut	40 ± 6 Nm (30 ± 4 lb-ft)

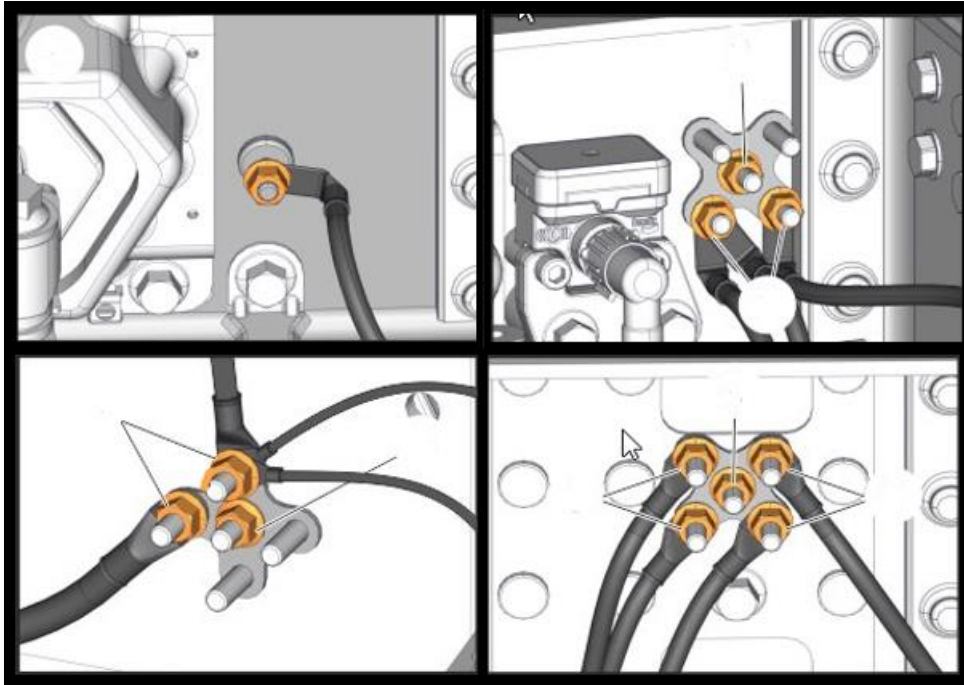


Important Note

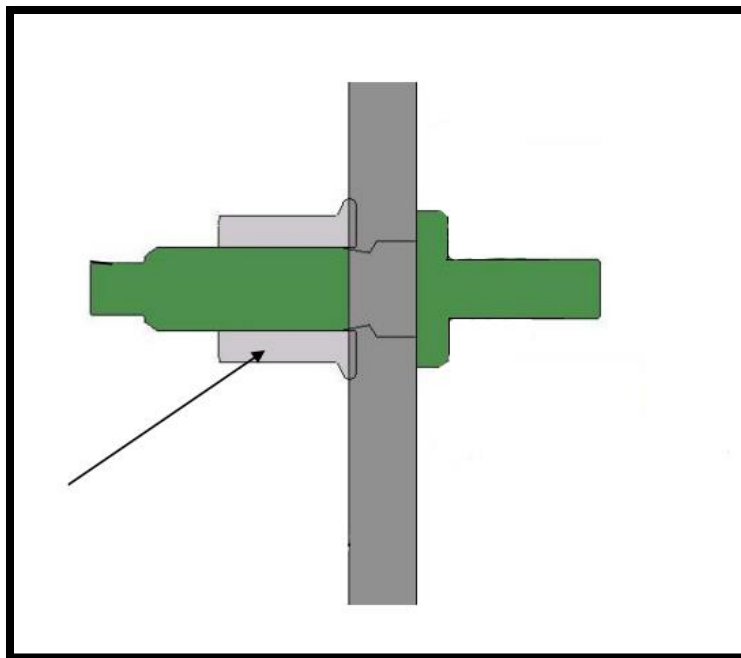
Continue with repair instruction to replace the remain grounds studs and reinstall the ground cables.

VNRe Ground Stud Update

23. Remove the nuts and ground cables from all the affect ground studs.

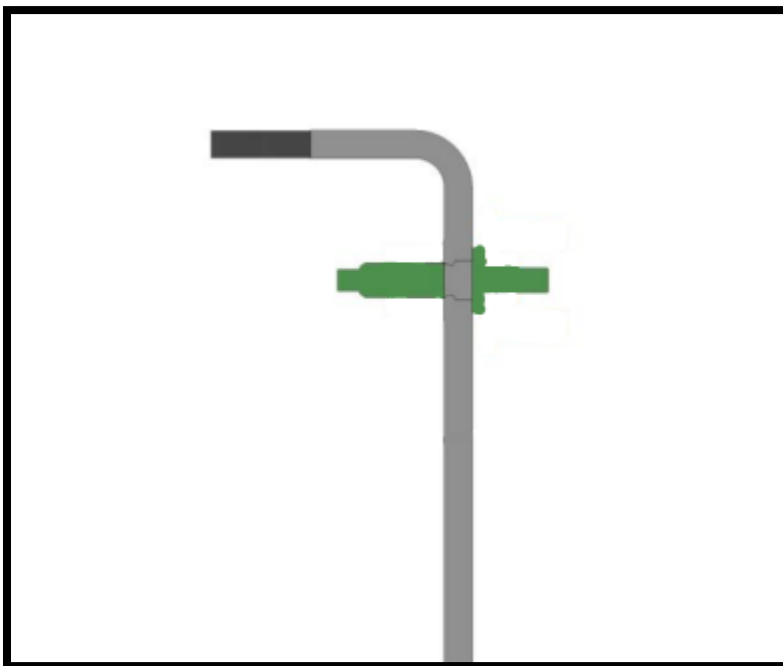


24. Remove the ground stud retaining nut from all 4 studs.

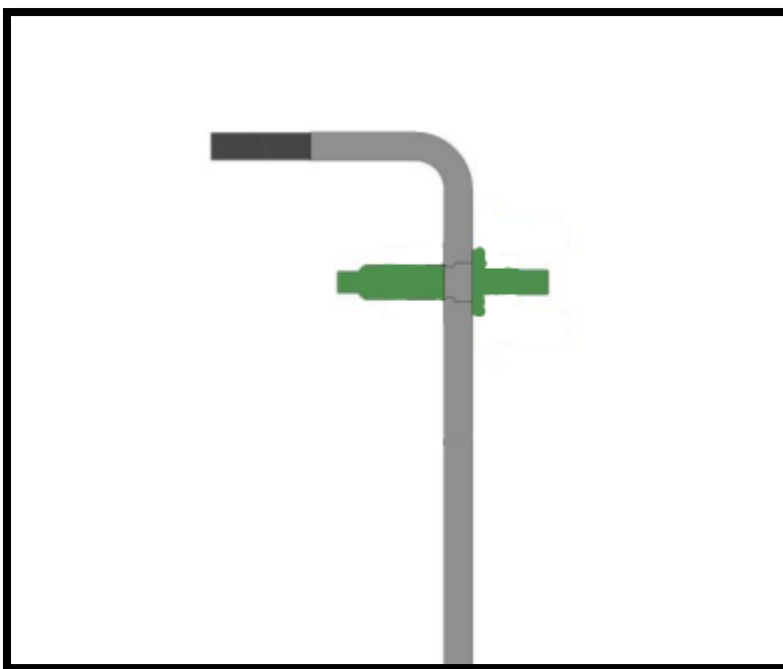


VNRe Ground Stud Update

25. Remove all 4 studs from the frame rail. The studs will need to be hammered out of the rail.



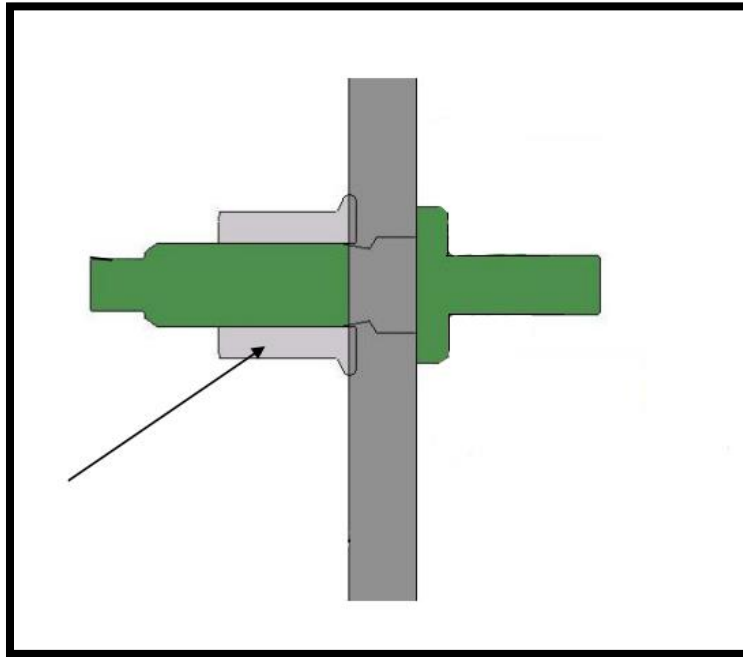
26. Install the new ground studs P/N 60112719.



VNRe Ground Stud Update

27. Install and torque the ground stud retaining nuts (Reuse the removed retaining nut). Ensure the studs are pulled completely into the frame and the stud collar is flush with the rail when tighten the nut.

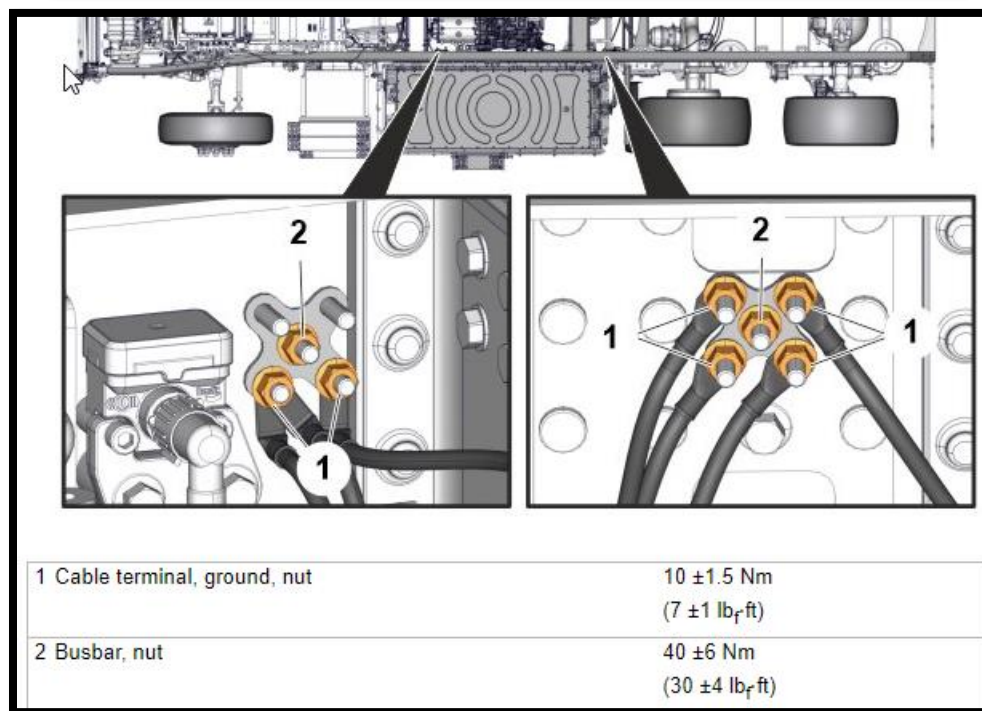
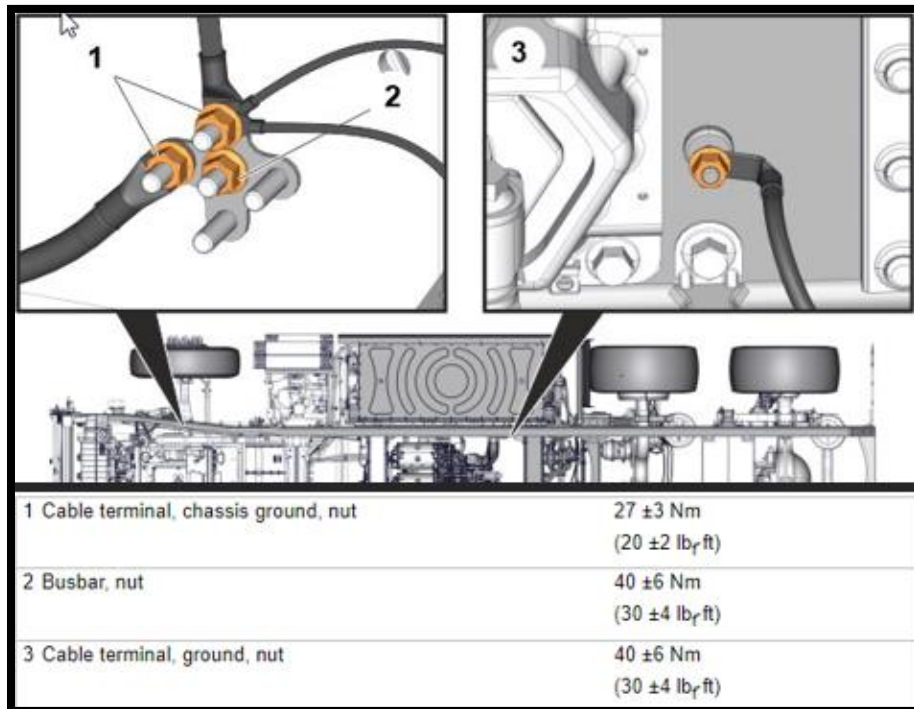
Tightening torque	
Fuse, nut	40 ± 6 Nm (30 ± 4 lb-ft)



VNRe Ground Stud Update

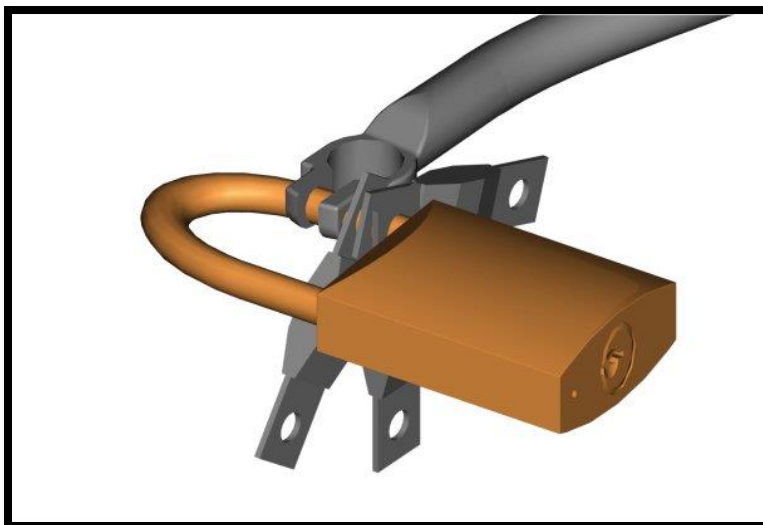
28. Install all removed ground cables.

29. Install and torque ground cable nuts.

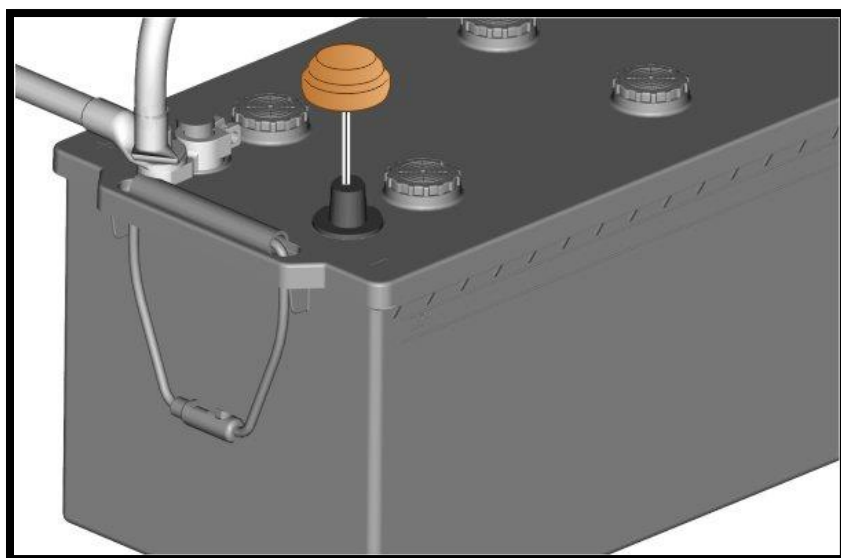


VNRe Ground Stud Update

30. Unlock the negative terminal and fuses.



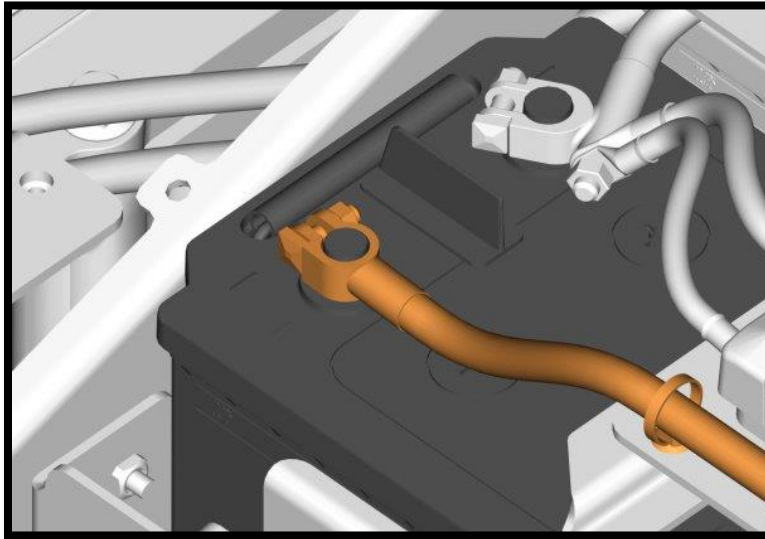
31. Remove negative battery post cover.



VNRe Ground Stud Update

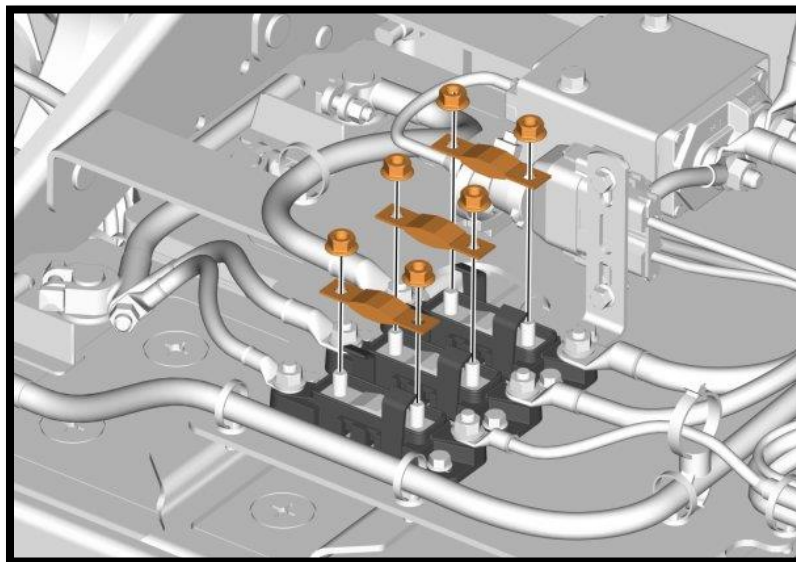
32. Connect the cable to the negative terminal.

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



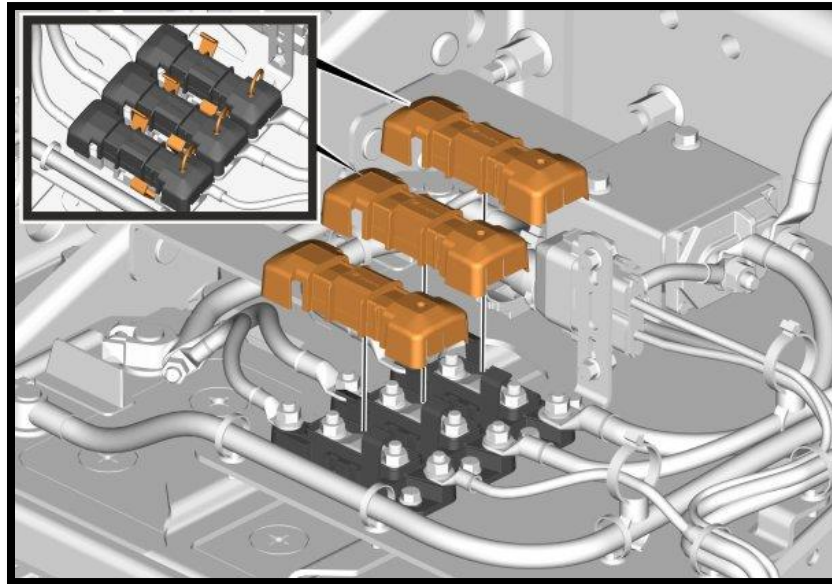
33. Install fuses.

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

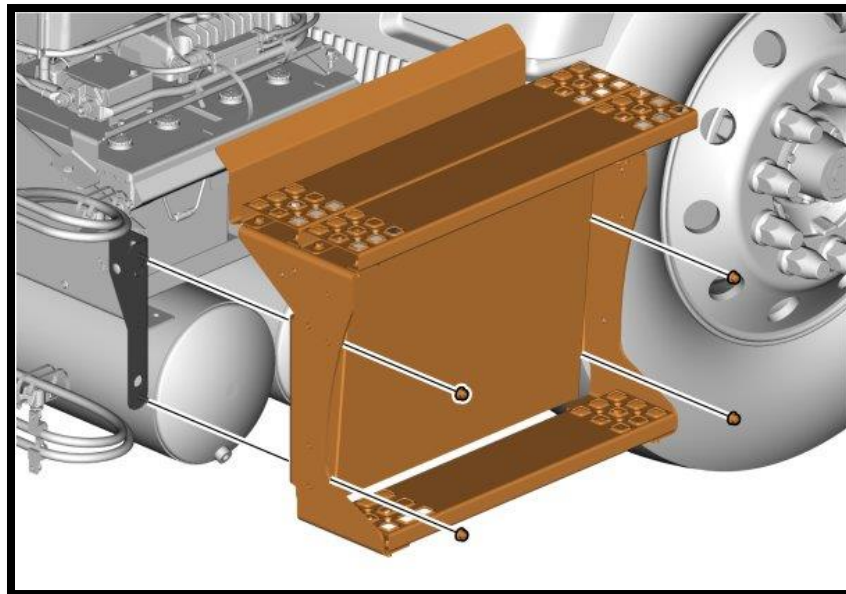


VNRe Ground Stud Update

34. Install fuse covers.

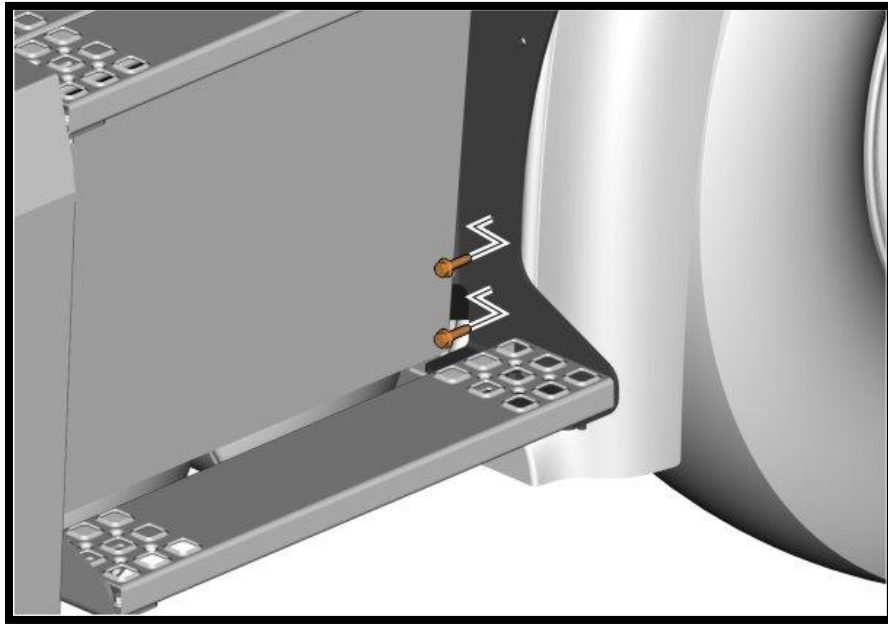


35. Install battery cover and install nuts.



VNRe Ground Stud Update

36. Install bolts.

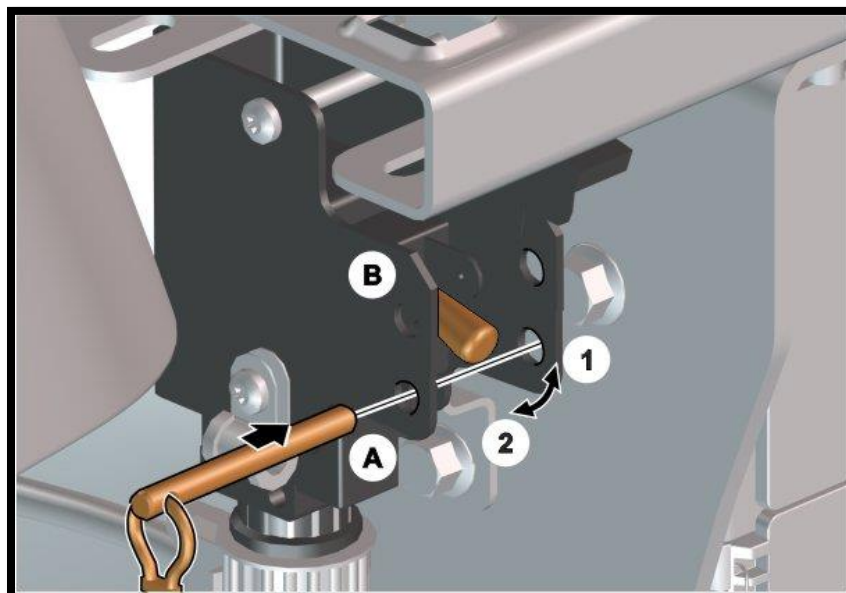


37. Remove the safety pin from slot (B) and install in slot (A).

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

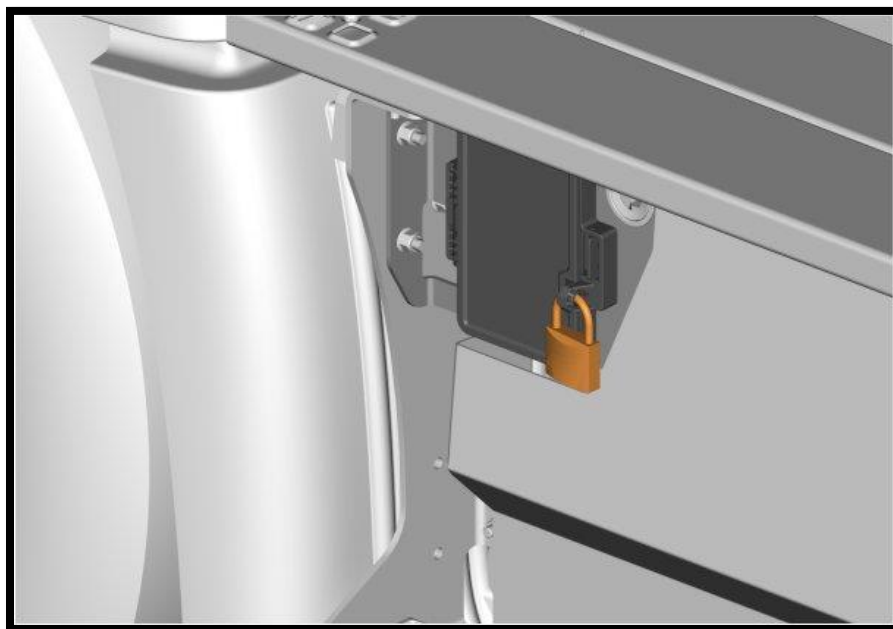
Switch, position

Position	Status
1	OFF
2	ON

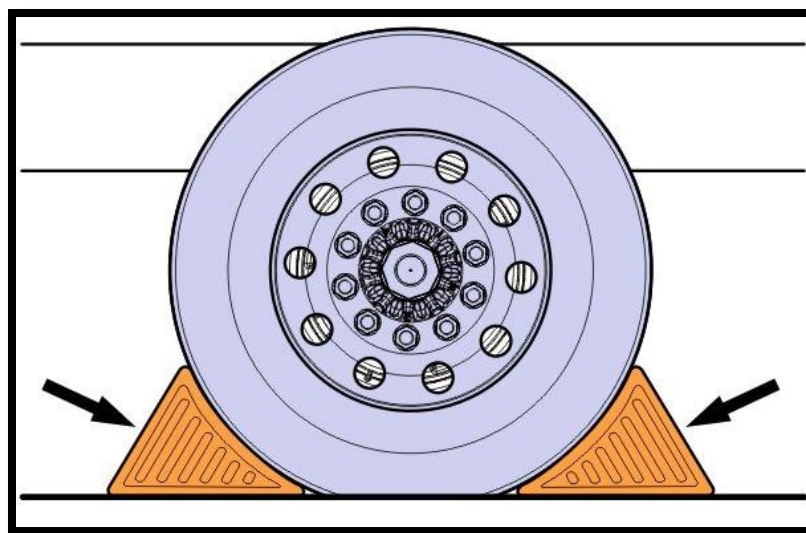


VNRe Ground Stud Update

39. Unlock the access to the CCS.



40. Remove wheel chocks.



41. Return truck to service.