

VADA

Service Category Service

Section Function Group

Technician Skill Level A

Market North America

Applicability

VOLVO

Years	Models
2021-2023	VNRE

Introduction

Volvo Trucks has developed updated VADA (Volvo Active Driver Assist) software for certain VNRe configurations. The updated software is remedy to recall RVXX2303 and will allow the radar system to be reenabled. To reenable the VADA system an inspection of the radar hardware and software updates is needed. Please follow the instructions below to complete.

Important Note!

Not all VNRe chassis configurations are included in this campaign. Please ensure to only update VNRe trucks that are included in this campaign. Remedy for the remaining VNRe configurations will be released on a later date.

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	4-December-2020	19-October-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
1700-22-03-11	Campaign, Programming 0.3x2	0.6
3810-22-03-11	Program Instrument Cluster	0.4
1720-16-09-01	Campaign General 0.1x6	0.6
	If Radar/Bracket Installation is Needed.	
Labor Code	Description	Hours
3665-02-02-01	Install Sensor and Bracket	0.3
3665-07-02-02	Forward Looking Radar Calibration	0.3
3100-09-01-06	Decommission 24v system	0.3
3100-09-01-05	Commission 24v system	0.3
Causal Part	23792796	
SCC Authorization Code	S3699	
Expiration Date	December 31, 2024	

Parts Information

Important Note!

NOT all trucks will require a radar to be ordered due to some truck have the radar installed. Please inspect each truck to see if the radar is installed or not before ordering.

Ordering Process: An email is required to order the front radar. Email SCcampaign@volvo.com and include the following in the body of the email:

- VIN of vehicle being repaired.
- Dealer ID number.
- Part Numbers.
- Campaign Number.
- PO number.

A response will be provided within 2 hrs. during normal business.

Part Numbers	Part	Quantity
23792796	Radar sensor and Bracket	1

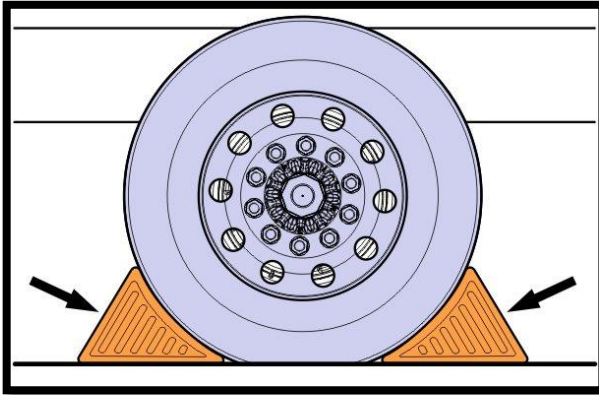
Important Note!

NOT all trucks will require the parts below. Please inspect the truck before ordering.

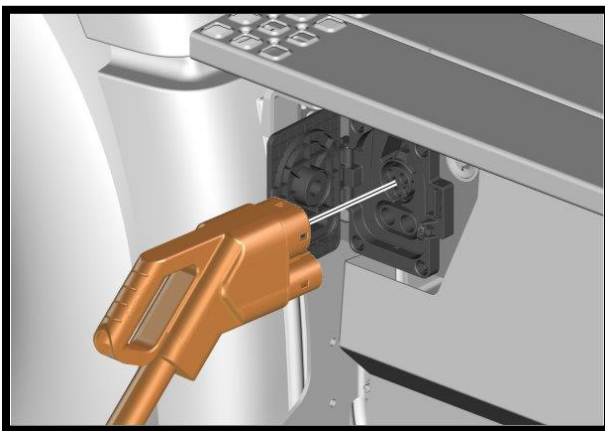
Order as Needed		
Part Numbers	Part	Quantity
990949	Flange Nut	4
60112097	Screw	4
20700116	Spacer	4
82744291	Bracket	1
82744293	Bracket	1

Repair Instructions

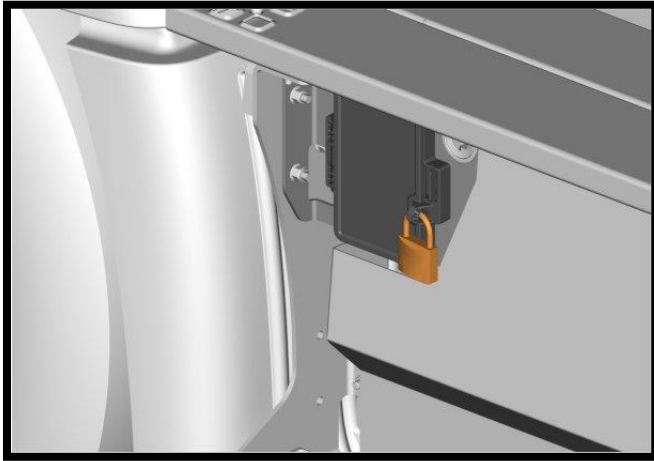
1. Park the vehicle on level surface.
2. Apply parking brake.
3. Place the transmission in park or neutral.
4. Turn off ignition.
5. Install wheel chocks.



6. Visibly inspect forward facing VADA radar.
 - If radar and bracket is installed proceed to step 35. **(Make sure the radar connector is plugged in.)**
 - If radar is not installed proceed to next step.
7. Disconnect all external power supply or charging devices.



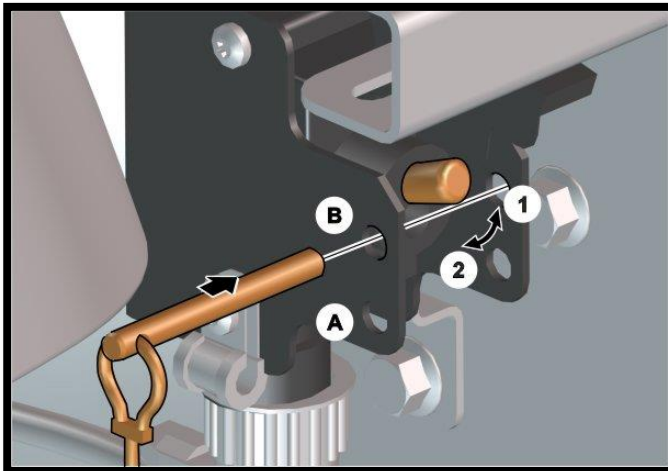
8. Lock the access to the CCS (Combined Charging System).



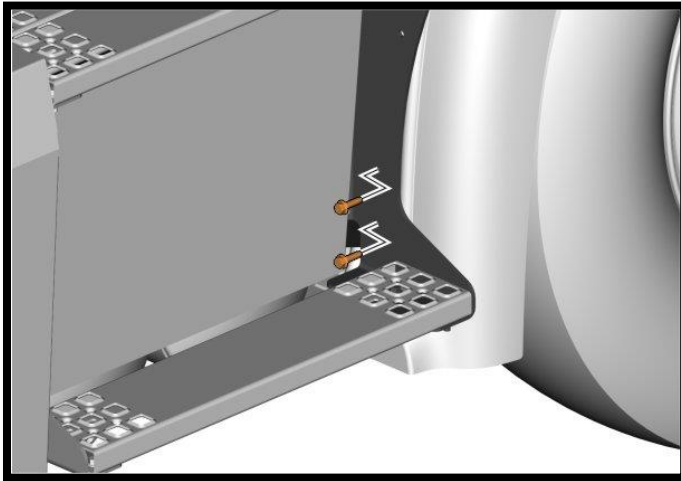
9. Set the chassis switch to position (1).
Switch, position

Position	Status
1	OFF
2	ON

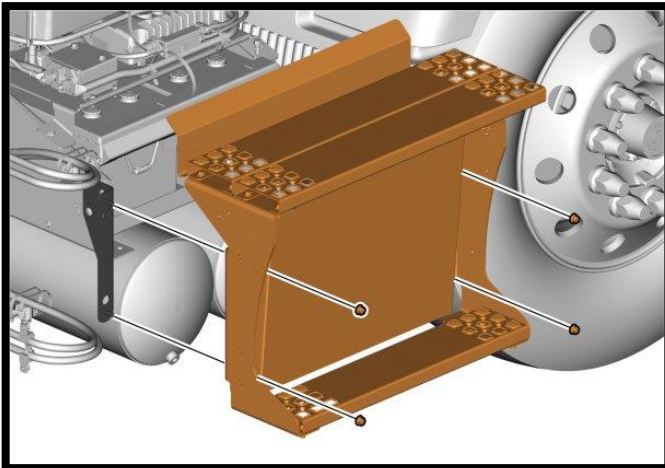
10. Remove the safety pin from the slot (A) and install in the slot (B).



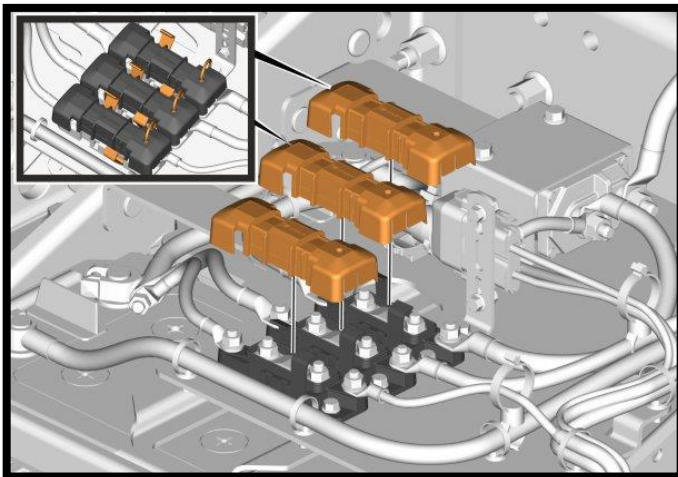
11. Remove battery cover bolts.



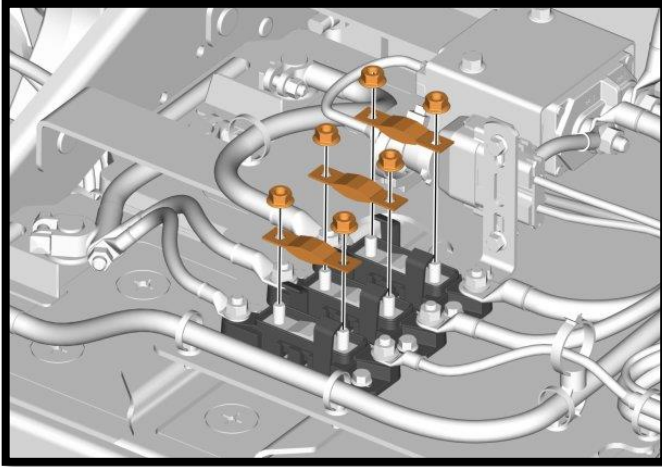
12. Remove battery cover nuts and remove cover.



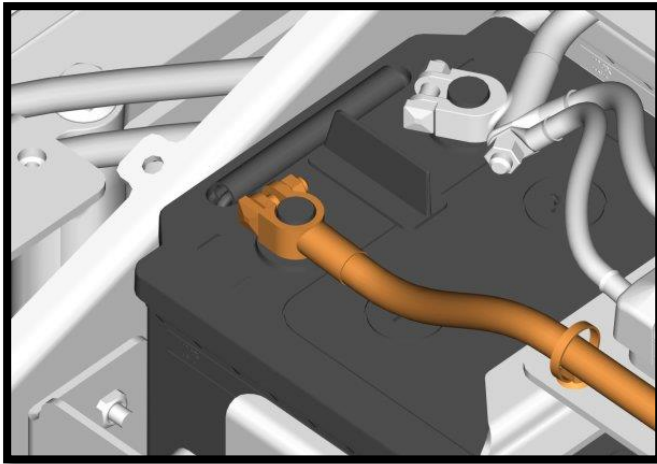
13. Remove fuse covers.



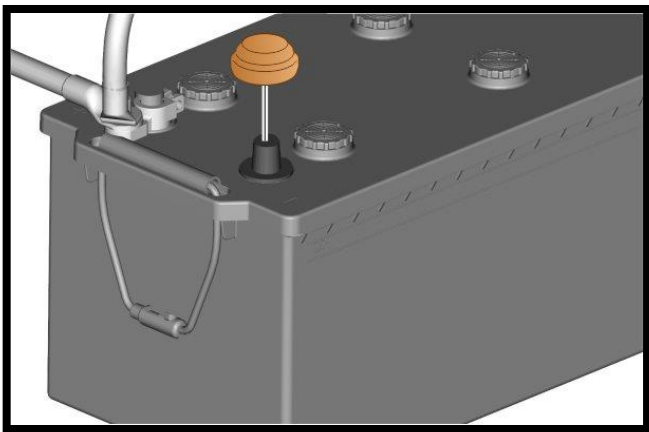
14. Remove Fuses.



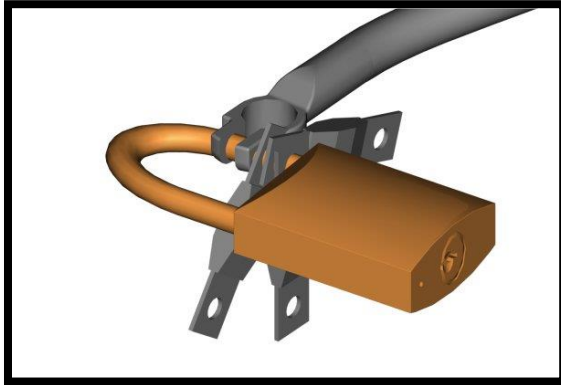
15. Disconnect the cable from the negative terminal.



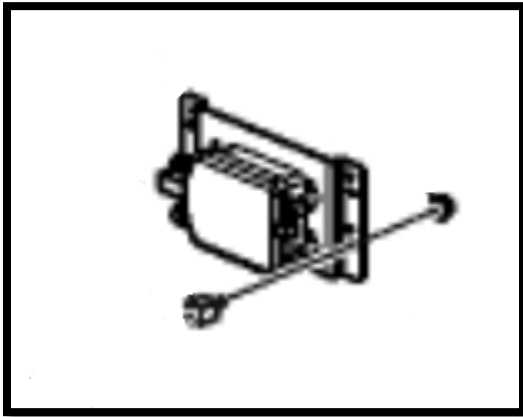
16. Cover negative battery post.



17. Lock the negative terminal along with fuses.

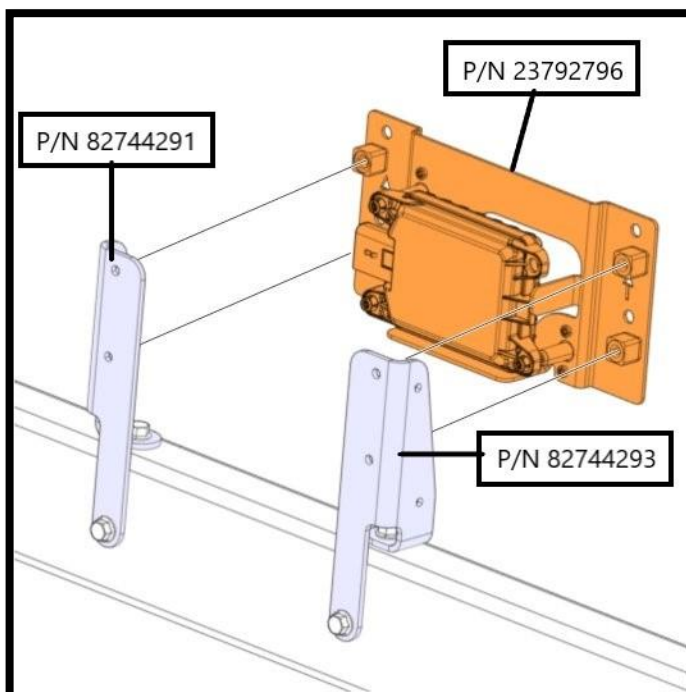


18. If not already installed, install spacers (P/N 20700116) on to radar bracket using flange nut (P/N 990949).

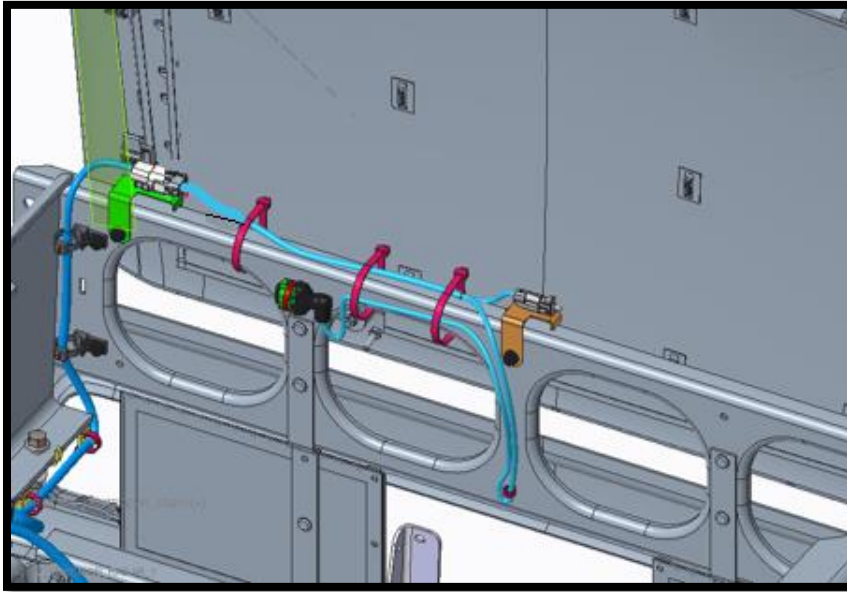


19. If not installed, install the radar mounting brackets (P/N 82744291 & 82744293).

20. Install the Radar and bracket assembly screw P/N 60112097.



21. Remove tie straps pictured below.



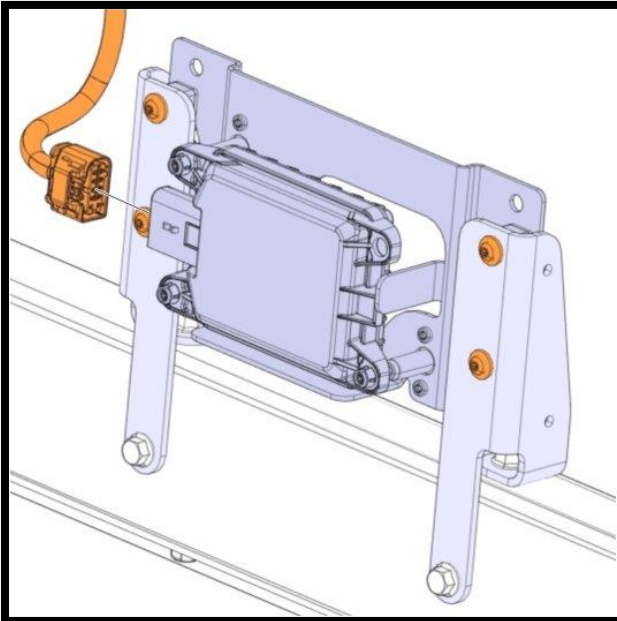
22. Remove label from harness.



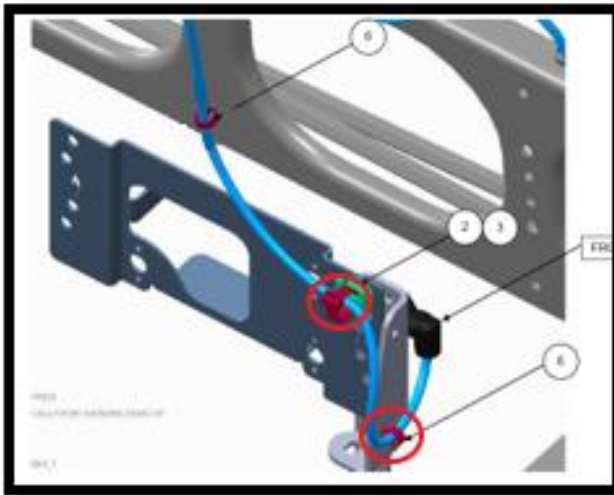
23. Remove and discard radar connector cap plug.



24. Connect radar.

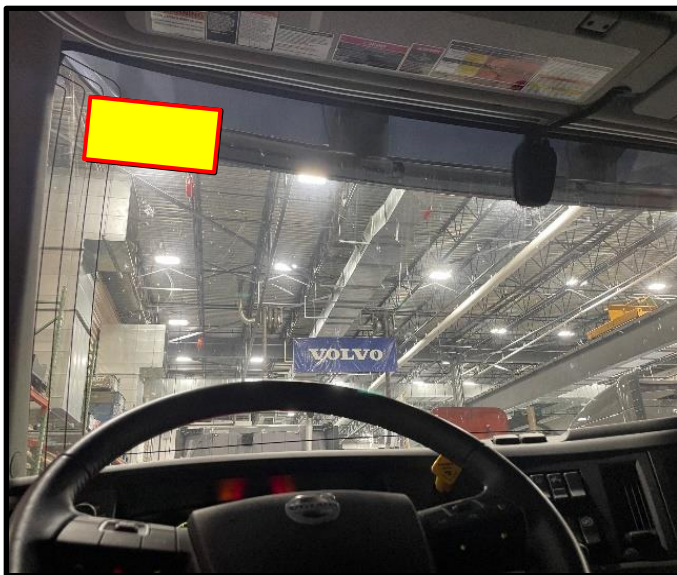


25. Install three tie straps as pictured below.

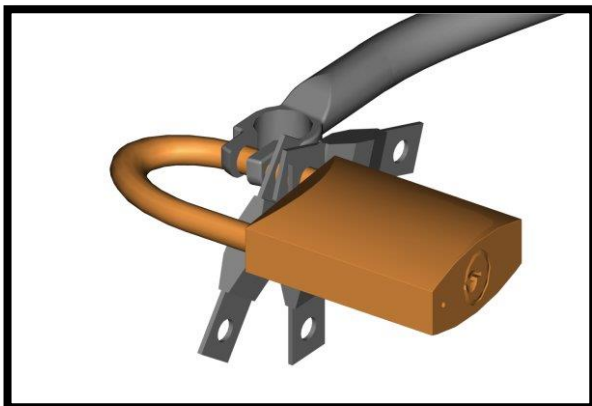


26. Align the forward-looking radar in accordance with, **Forward Looking Radar, Vendor Information** in Impact, under function group 366, Identity 164557390.

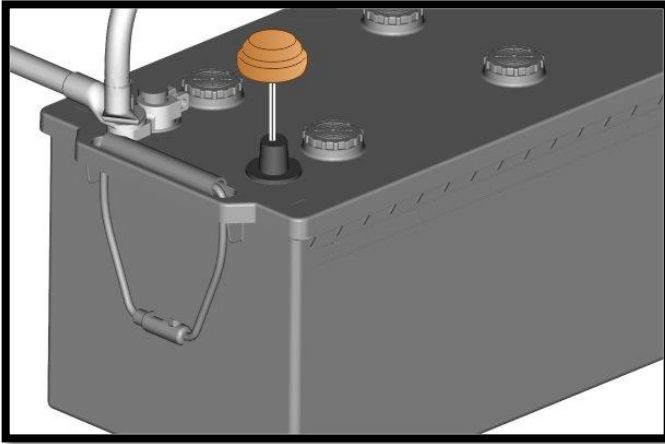
27. Remove windshield label.



28. Unlock the negative terminal and fuses.

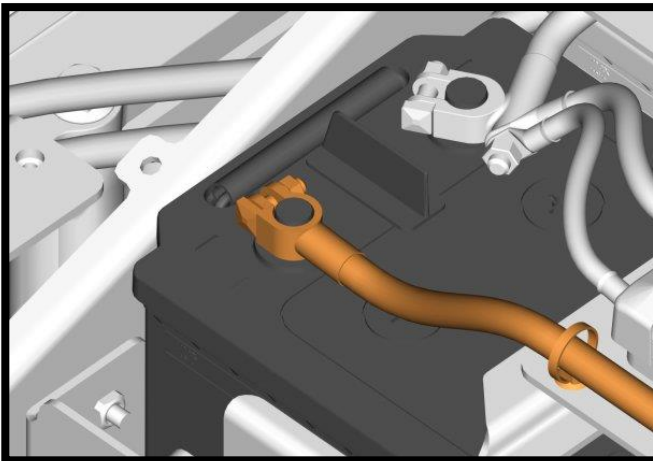


29. Remove negative battery post cover.



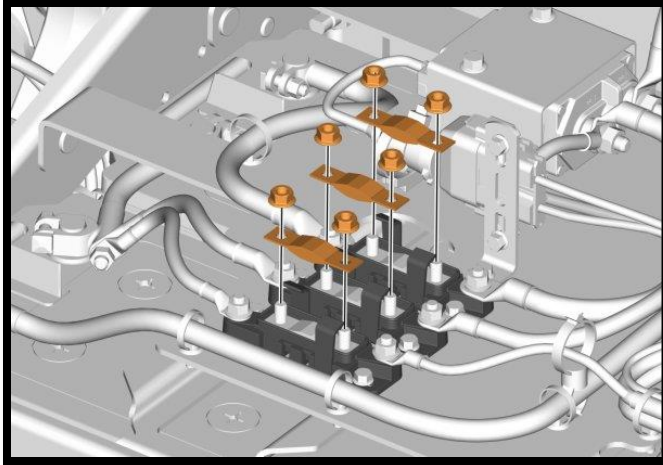
30. Connect the cable to the negative terminal.

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

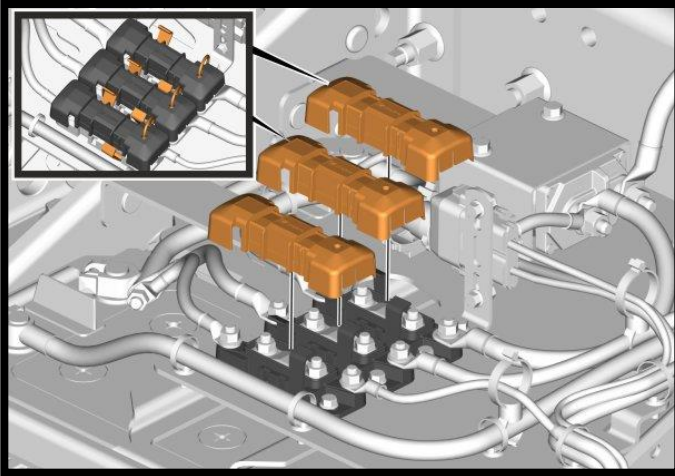


31. Install fuses.

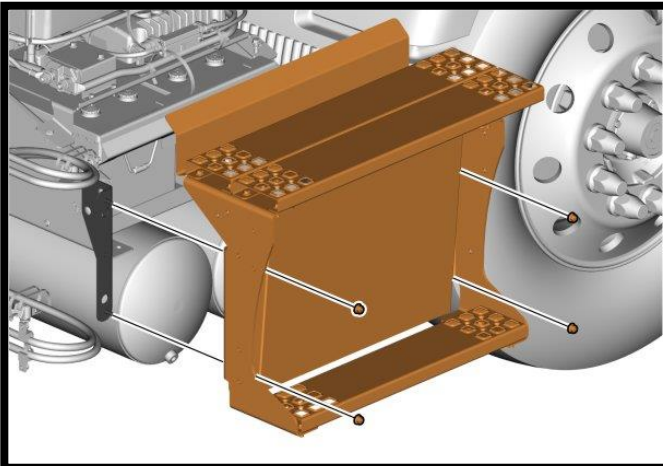
Tightening torque	
Fuse, nut	15 ±3 Nm (11 ±2 lbf·ft)



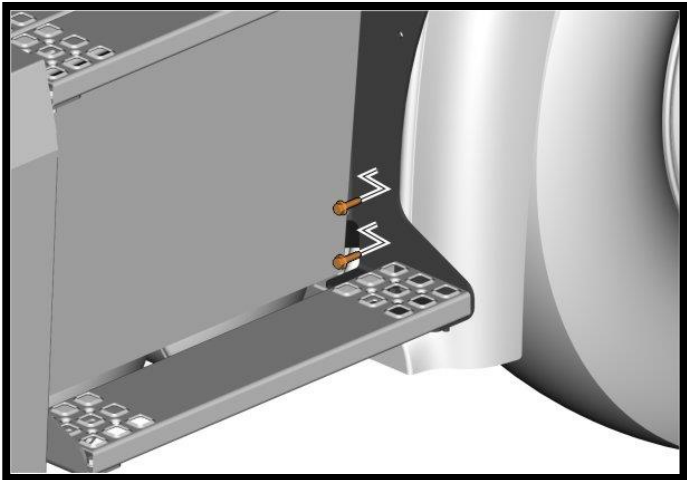
32. Install fuse covers.



33. Install battery cover and install nuts.



34. Install bolts.

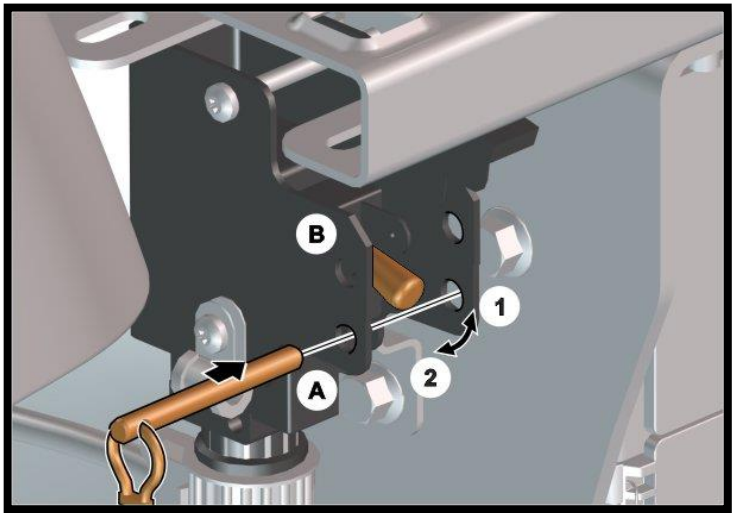


35. Remove the safety pin from slot (B) and install in slot (A).

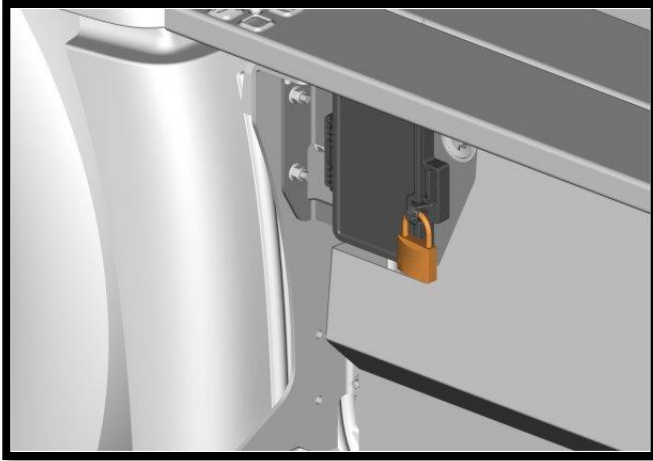
36. Set the chassis switch to position (2).

Switch, position

Position	Status
1	OFF
2	ON



37. Unlock the access to the CCS.



38. Turn on ignition.

39. Connect to PTT.



Important Note!
It is very important that the MID-140 is updated before the accessory kit is installed.

40. In the programing tab, perform operation 1700-08-03-39 to update the MID-140 programming to the latest version.

41. In the Program tab, run operation 1700-22-03-02 to set date and time.

42. In the Program tab, run operation 1700-22-03-06 and install accessory kit number 85166707.

43. In the Program tab, run operation 3241-05-03-02 and update the MCU software.

44. In the Calibrate tab run operation 3241-05-03-01 to perform Resolver Calibration.

45. Run operation 5931-07-03-20 to update the ABS software.

Important Note!
If you are experiencing issues running operation 5931-07-03-20 reference CBR- 2042 on how to set up Vendor Configuration Programming (VCP).

46. Under the Calibration tab run operation to perform ESP calibration.
47. Start truck and fully build air pressure.
48. Turn off ignition.
49. Turn on ignition.
50. Depress the brake pedal fully and hold for 5 seconds.
51. Clear all DTCs.
52. Disconnect PTT.
53. Remove wheel chocks.
54. Release truck.