

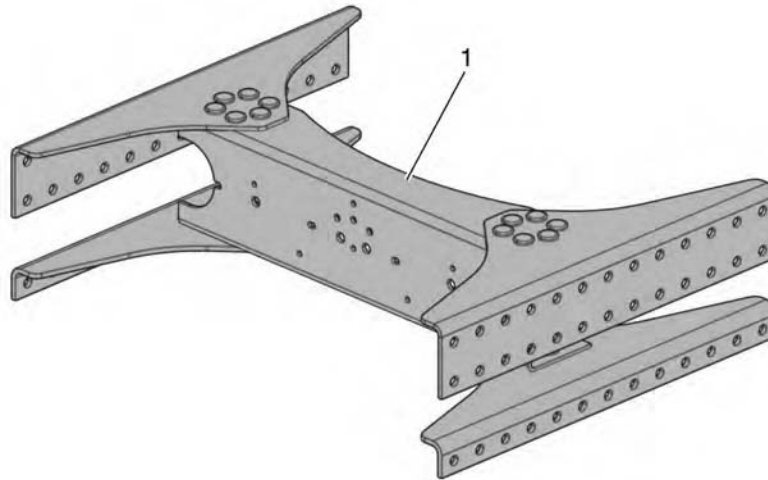
Bogie Crossmember, Replacement VNM, VNL, VAH

FSB 711-009, Bogie Crossmember, Replacement

(July 2017)

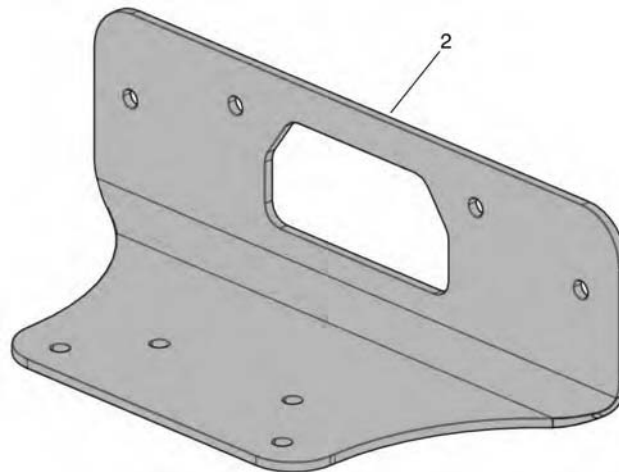
Some Volvo VNM, VNL and VAH trucks built between 02/23/2009 and 07/14/2017 with steel bogie cross members may develop cracks depending on application or duty cycle. Several stress points have been identified and addressed in a redesigned bogie cross member for service. Follow the repair procedures outlined in this Field Service Bulletin to perform the repair.

Required Parts, Bogie Crossmember Replacement



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Bogie Crossmember Replacement Parts			
Item	Description	Part Number	Qty
1	Crossmember, Assembly	23140440	1



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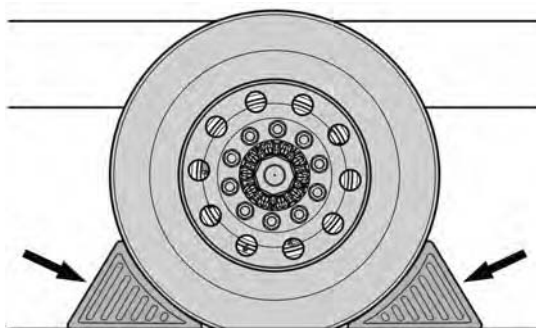
Relay Modulator Bracket – Use if truck is equipped Anti-Lock Brake System (ABS) 6S6M			
Item	Description	Part Number	Qty
2	Bracket, Relay Modulator	23188340	1

Decommissioning the Truck for Repair

You must read and understand the precautions and guidelines in Service Information, group 70, "General Safety Practices, Frame, Springs, Shocks & Wheels" before performing this procedure. If you are not properly trained and certified in this procedure, ask your supervisor for training before you perform it.

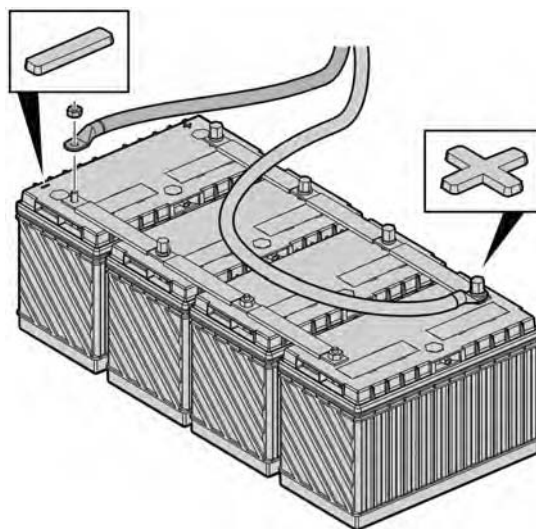
NOTE: Information is subject to change without notice. Illustrations are used for reference only and can differ slightly from the actual vehicle being serviced. However, key components addressed in this information are represented as accurately as possible.

- 1 Park the vehicle on a flat and level surface.
- 2 Apply the parking brake.
- 3 Place the transmission in neutral or park.
- 4 Install the wheel chocks on the front wheels.



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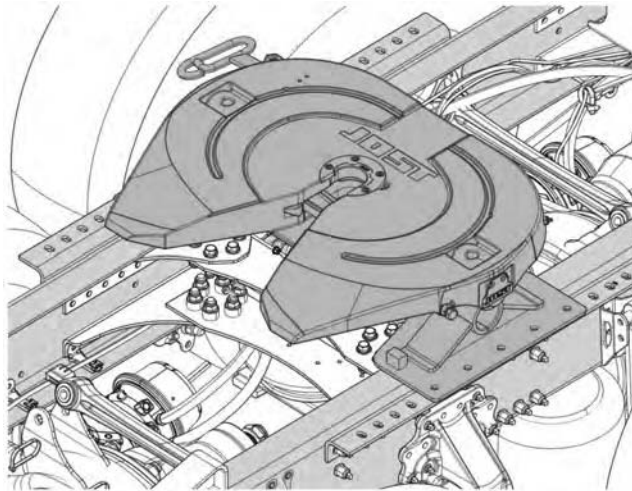
- 5 Disconnect the cable from the battery's negative terminal.



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Bogie Crossmember, Replacement

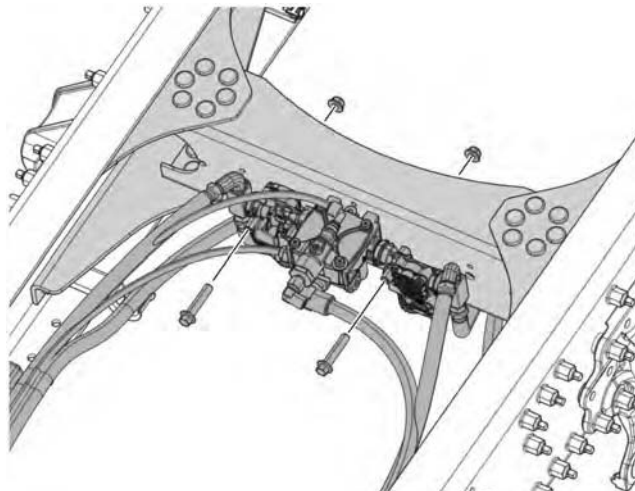
- 1 Using a jack, raise the rear of the frame and support with jack stands.
- 2 Remove rear wheels, on both sides.
- 3 Disconnect air line to the slide release cylinder on the fifth wheel.
- 4 Remove the fasteners securing the fifth wheel assembly to the frame.
- 5 With assistance and a suitable lifting device, remove the fifth wheel assembly and store for installation.



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- 6 For ABS 6S6M valve group, proceed to steps 9 through 10. If not, proceed to steps 7 through 8.
- 7 Remove the fasteners securing Anti - Lock Brake System (ABS) modulator valve to the bogie crossmember.
- 8 Remove the ABS modulator valve from the bogie crossmember.

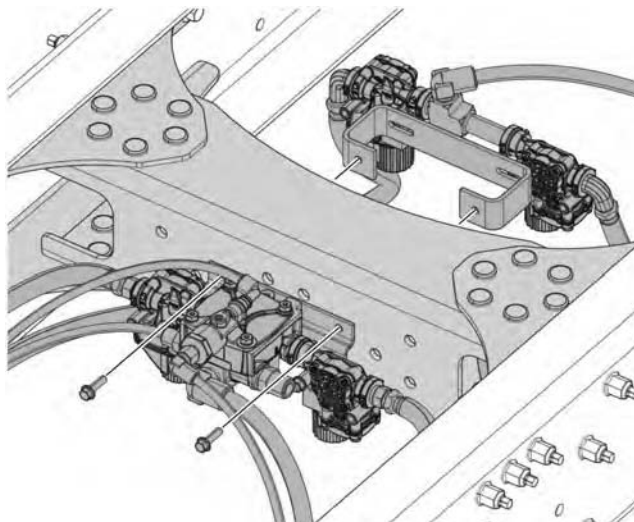
Note: Do not disconnect the air lines. Allow air lines and the ABS modulator valve to hang freely until installation.



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- 9 If equipped with ABS 6S6M valve group, remove the fasteners securing the valve assembly to the bogie crossmember.
- 10 Remove the ABS modulator valve from the bogie crossmember.

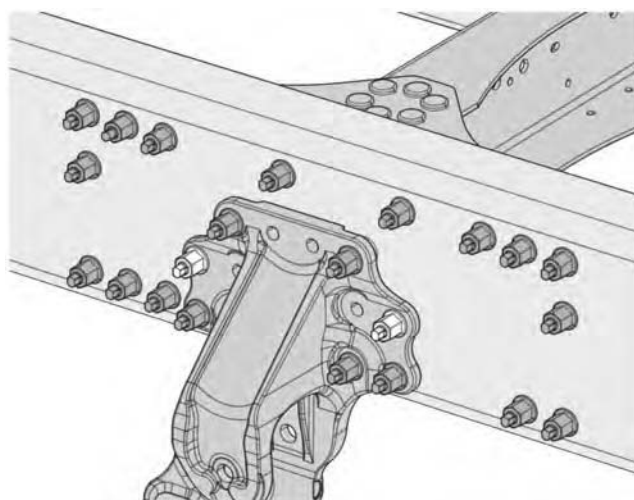
Note: Do not disconnect the air lines. Allow air lines and the ABS modulator valve to hang freely until installation.



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- 11 Remove huck bolts and collars securing the securing the crossmember as shown in the figure below. Leave

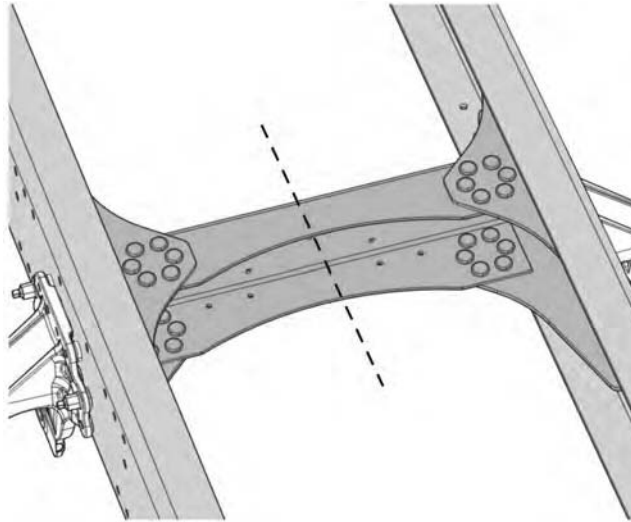
Note: DO NOT remove the two fasteners not securing the suspension to the crossmember.



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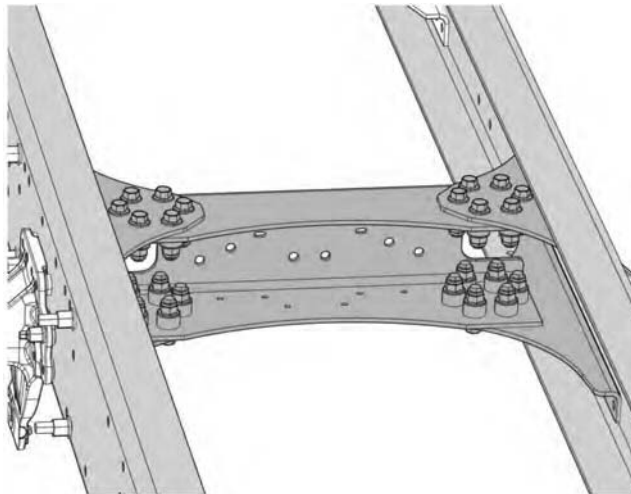
12 Using a saw, cut the crossmember in half, and remove it from the frame rails.

Note: Clean the frame rails of any debris before installation of the replacement crossmember.



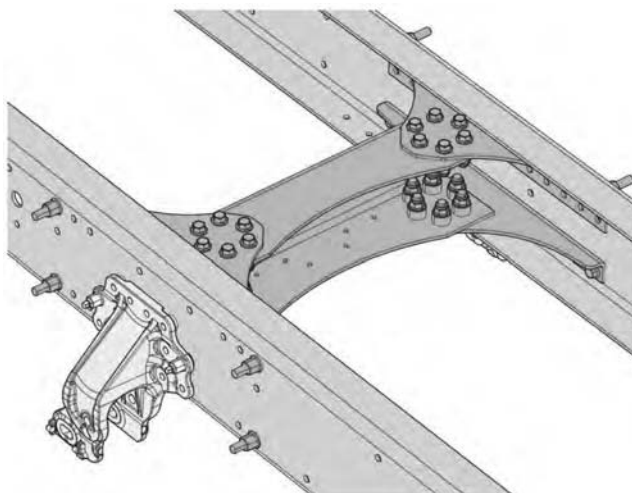
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13 With the replacement bogie crossmember fasteners loosely installed, position the crossmember assembly in the frame rails.



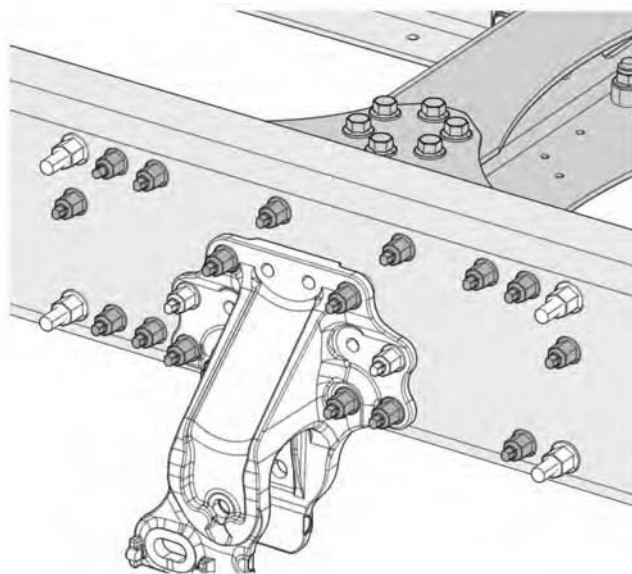
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- 14 Temporally install bolts and nuts to secure the replacement crossmeber in the frame rails as shown in the figure below.



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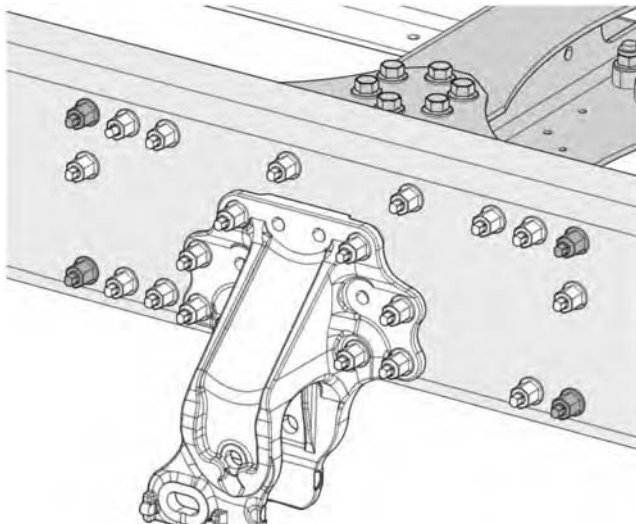
- 15 Using Huck bolts and collars, secure the replacement crossmemembr and suspension as shown.



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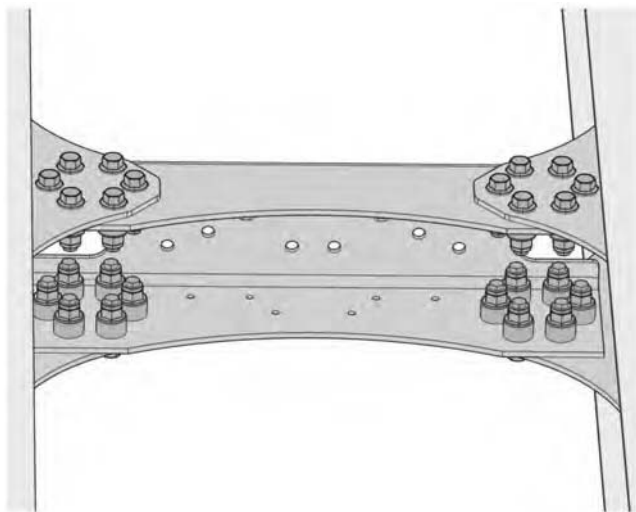
16 Remove the temporary bolts and nuts from the frame rails as shown.

17 Replace the removed bolts and nuts with huck bolts and lock collars as shown.



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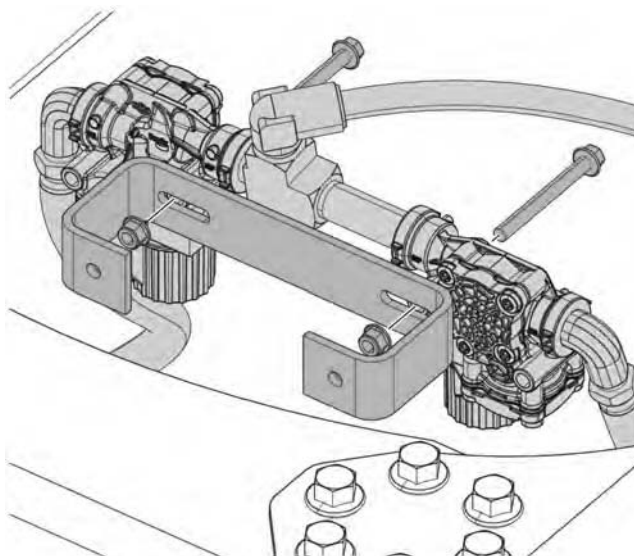
18 Tighten the crossmember fasteners to 295 Nm (218 ft-lb).



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19 For ABS 6S6M valve group, follow steps 20 through 26. If not proceed to steps 27 through 28.

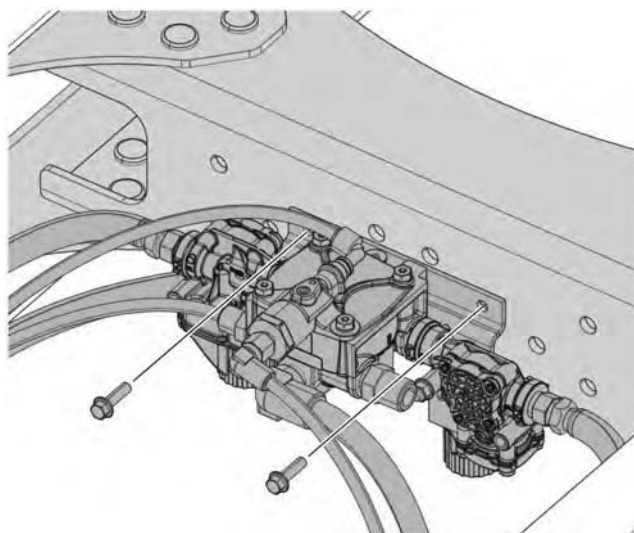
20 If equipped with ABS 6S6M valve group, remove the U-bracket from the previously removed ABS modulator valve and discard the U-bracket.



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21 Install the ABS modulator valve to the crossmember as shown.

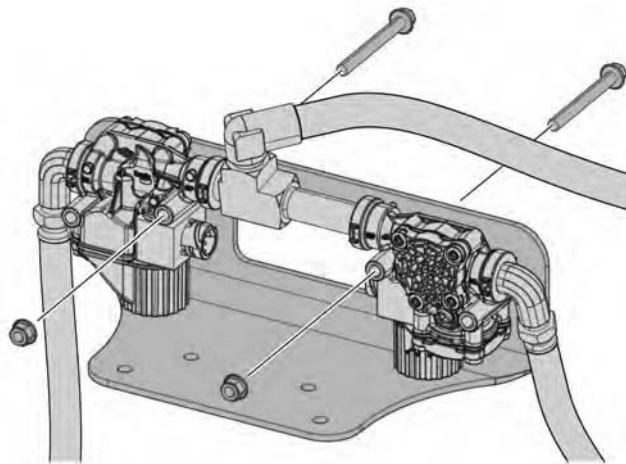
22 Tighten the fasteners to 24 ± 4 Nm (18 ± 3 ft-lb).



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23 Assemble new bracket (part number 23188340) and ABS valve as shown in the figure below.

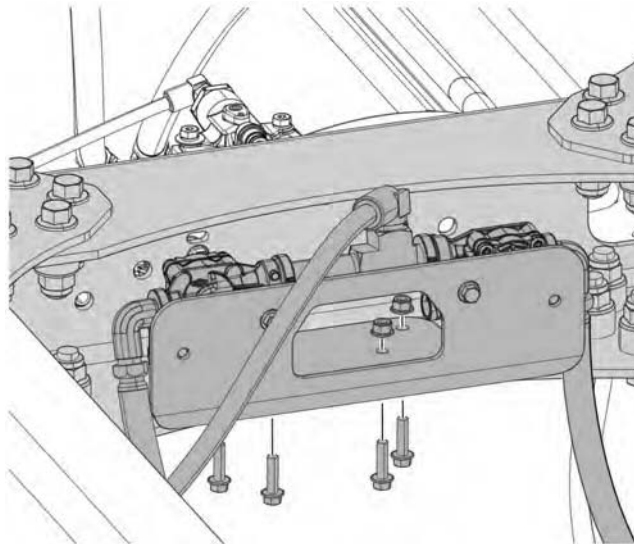
24 Tighten the fasteners to 24 ± 4 Nm (18 ± 3 ft-lb).



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25 Install the new bracket and ABS valve assembly to the replacement crossmember as shown.

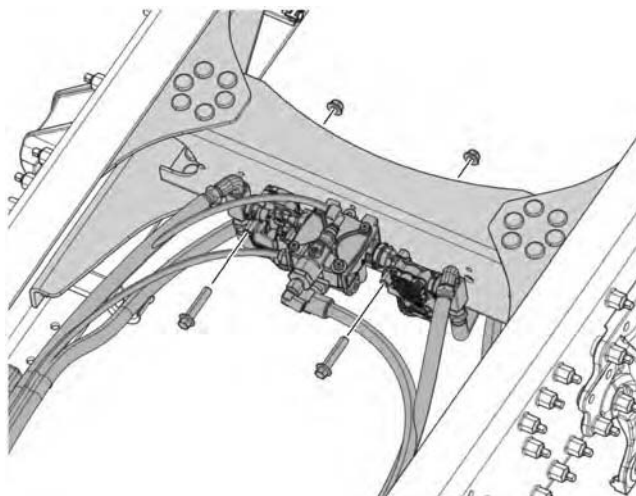
26 Tighten the fasteners to 24 ± 4 Nm (18 ± 3 ft-lb).



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27 Install the ABS modulator valve to the crossmember as shown.

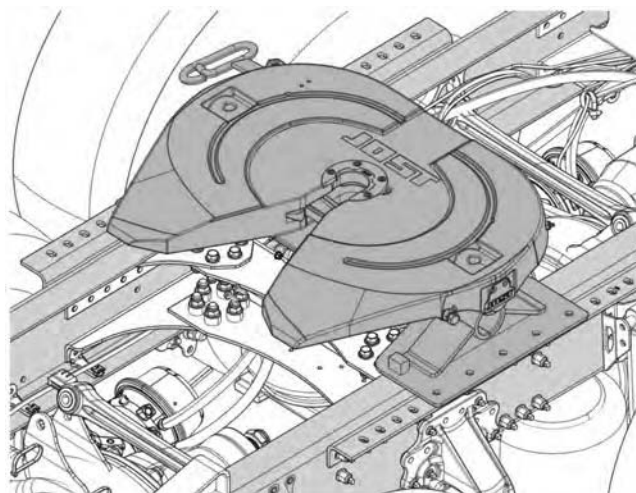
28 Tighten the fasteners to 24 ± 4 Nm (18 ± 3 ft-lb).



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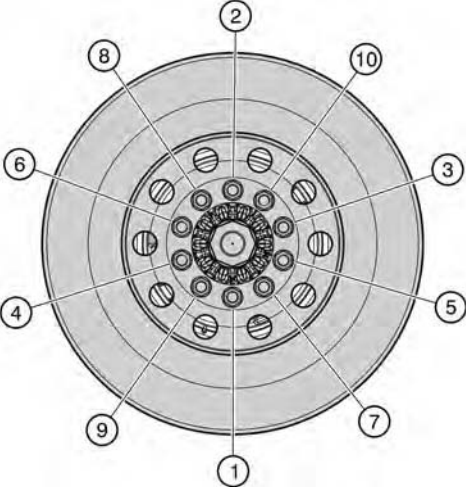
29 With assistance and an appropriate lifting device, install the fifth wheel and fasteners.

30 Tighten the fasteners to 175 ± 30 Nm (129 ± 22 ft-lb).



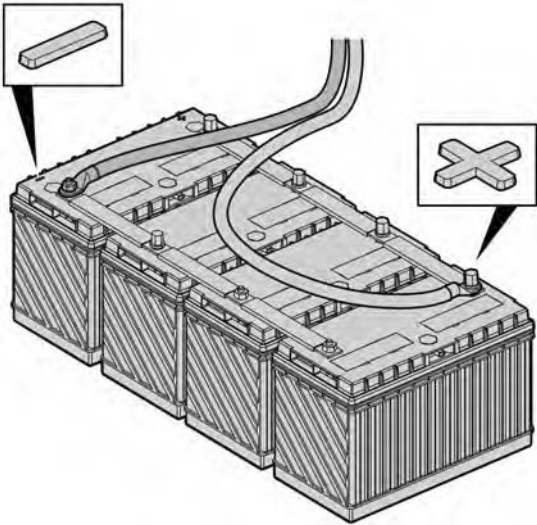
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- 31 Connect the air line to the slide release cylinder on the fifth wheel.
- 32 Install the rear wheels and tighten the fasteners as shown in the table below.

Wheel Nut Torque Sequence		
 W7125473	Wheel Nut M22	
	1.	Tightening sequence: 1 – 10
		300 ± 30 Nm (221 ± 22 ft-lb)
	2.	Tightening sequence: 1 – 10
		670 ± 30 Nm (494 ± 22 ft-lb)

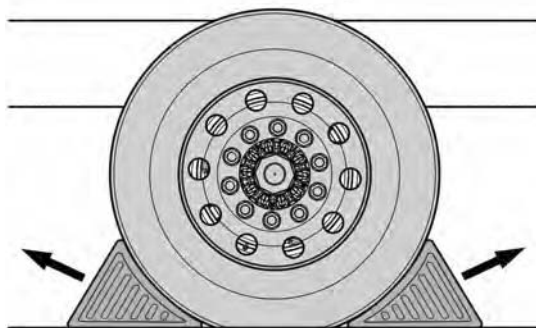
Commissioning the Truck for Operation

- 1 Connect the battery cable to the negative (ground) terminal.



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- 2 Remove the wheel chocks.



W7086759

Reimbursement

This repair may be eligible for reimbursement if a product failure was experienced within time and mileage limits of the applicable Warranty coverage. Reimbursement is obtained via the normal claim handling process.	UCHP Reimbursement
Claim Type (used only when uploading from the Dealer Bus. Sys.)	W
Labor Code	
Primary Labor Code (Bogie Crossmember, Replacement)	7112-03-09-02 3.5 hrs.
Causal Part	20392686

VOLVO Trucks North America reserves the right to make any changes in design or to make additions to or upon its products without incurring any obligations to install the same on vehicles previously built.