

# SAFETY RECALL

Volvo Trucks North America  
Greensboro, NC USA

**VOLVO**

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Date	Number	Release	Page
12.2016	RVXX1606	01	1 (17)

## Draglink Rod, Replacement

VHD

### SAFETY RECALL INFORMATION:

(December 2016)

VOLVO Trucks North America has determined a defect relating to motor vehicle safety may exist in certain VOLVO VHD trucks manufactured between 04/07/2008 and 12/09/2015. The draglink rod boot may tear and enable dirt/dust to contaminate the draglink rod ball socket on some VOLVO VHD trucks. Replacement of the existing non-greasable draglink rod with a new greasable draglink rod for VHD trucks is necessary to prevent solid contamination of the draglink rod ball socket, accelerated wear, ball joint failure, and possible loss of steering control which may potentially cause injury and/or damage to property. The mounting hardware should be replaced with new mounting hardware each time the draglink rod is replaced. Follow the repair procedure outlined in this Safety Recall.

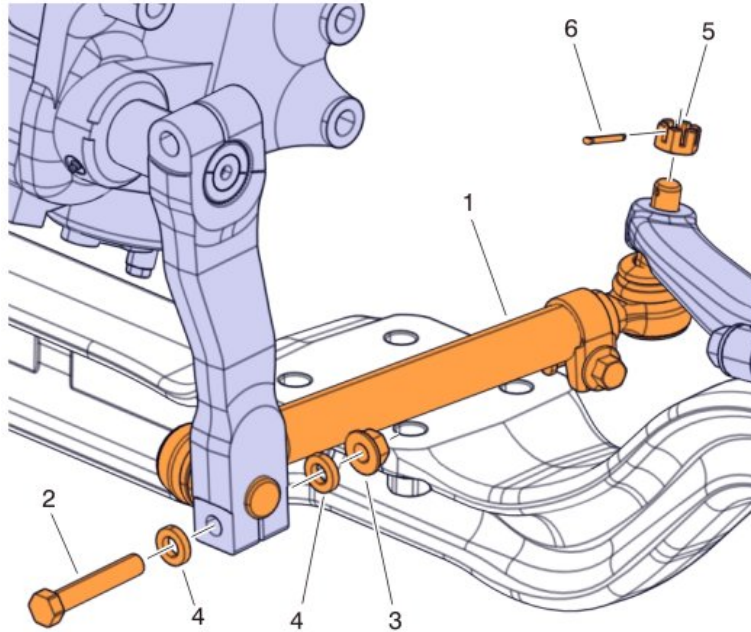
VOLVO Trucks has received no reports of personal injury as a result of this condition. Therefore, VOLVO considers this as a proactive measure to protect the public and VOLVO's customers from the potential risk associated with this defect.

### VEHICLES AFFECTED:

Certain 2009 through 2016 VOLVO VHD model trucks manufactured from April 07, 2008 through December 09, 2015.

### VEHICLE IDENTIFICATION NUMBERS (VIN):

The number of vehicles affected by this recall is 5,311 (4,177 USA, and 1116 Canada, 17 Mexico, and 1 Export).

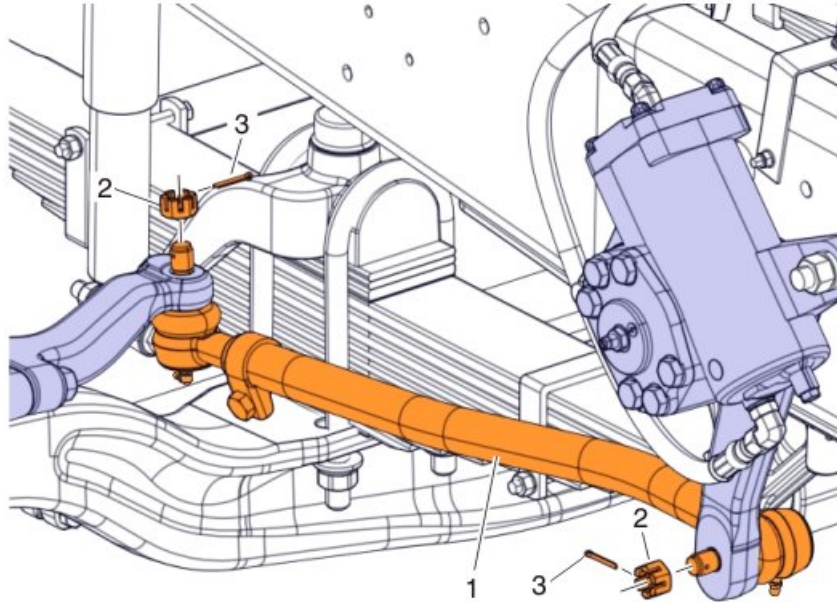


**Required Parts:**

To schedule parts orders and repairs, please call (877) 986-5862 with the Vehicle Identification Number (VIN) of the vehicle in need of this repair.

Draglink Rod, Replacement Parts			
Item	Description	Part Number	Qty
1	Draglink Rod, VHDF, Steer Side	22595403	1
2	Hex Screw, M16	993909	1
3	Flange Nut, M16	990944	1
4	Flat Washer	994882	2
5	Castle Nut	10506	1
6	Split Pin	907861	1

Draglink Rod, Replacement Parts			
Item	Description	Part Number	Qty
1	Draglink Rod, VHDF, Assist	22607486	1
2	Hex Screw, M16	993908	1
3	Flange Nut, M16	990944	1
4	Flat Washer	994882	2
5	Castle Nut	10506	1
6	Split Pin	907861	1

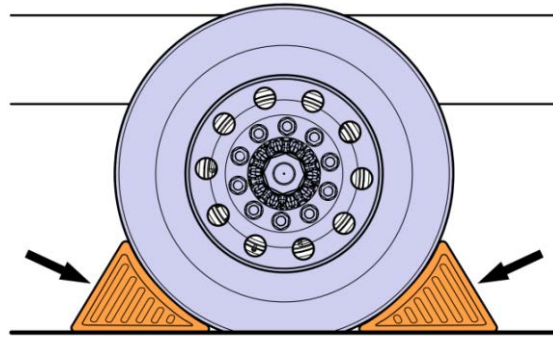


<b>Draglink Rod, Replacement Parts</b>			
<b>Item</b>	<b>Description</b>	<b>Part Number</b>	<b>Qty</b>
1	Draglink Rod, VHDB, Steer Side	22595406	1
2	Castle Nut	10506	2
3	Split Pin	907861	2

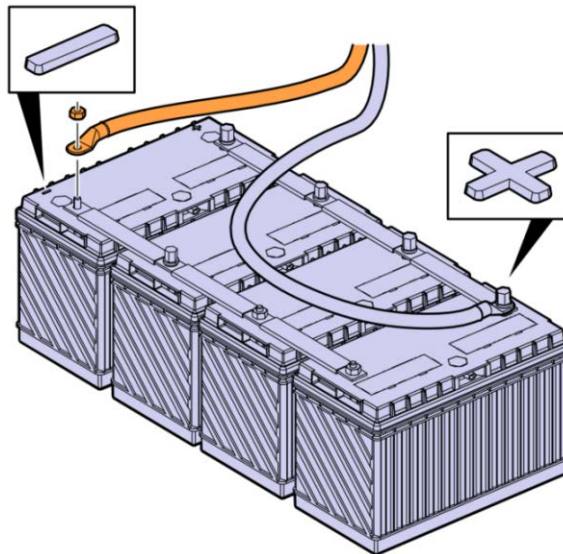
<b>Draglink Rod, Replacement Parts</b>			
<b>Item</b>	<b>Description</b>	<b>Part Number</b>	<b>Qty</b>
1	Draglink Rod, VHDB, Assist	22607488	1
2	Castle Nut	10506	2
3	Split Pin	907861	2

### Decommissioning the Truck for Inspection or Repair:

1. Secure the vehicle for service by parking on a flat and level surface, placing the transmission in neutral, applying the parking brake, turning the ignition key to the OFF position, and chocking the front wheels.



2. Disconnect the cable from the battery's negative (ground) terminal.

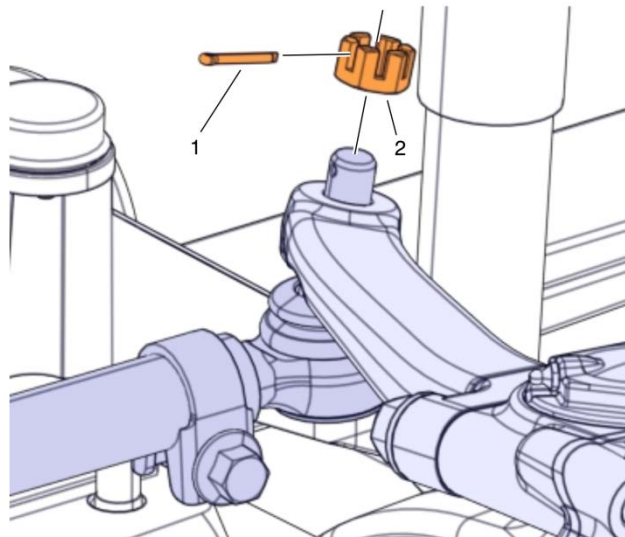


### Draglink Rod, Replacement Procedure VHDF:

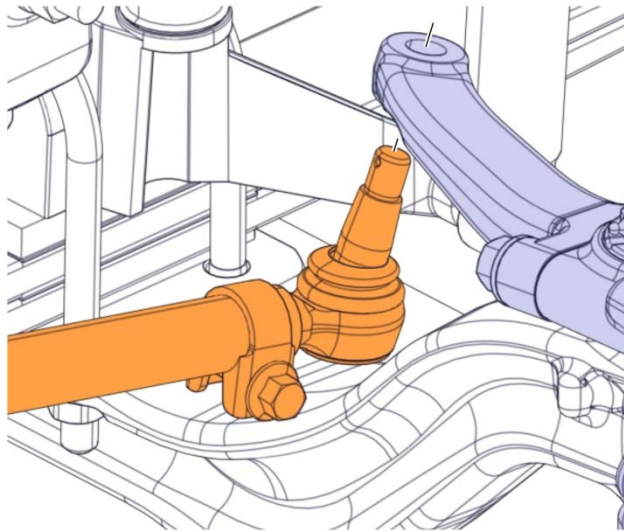
<b>NOTE</b>
The Illustrations shown in this document are used for reference only and may differ slightly from the actual vehicle being serviced. However, the replacement procedure is represented as accurately as possible.

1. Raise the hood.
2. Remove the split pin (1) from the castle nut (2) at the steering knuckle.
3. Remove the existing castle nut.

<b>NOTE</b>
Discard the existing castle nut and split pin. Do not reuse.



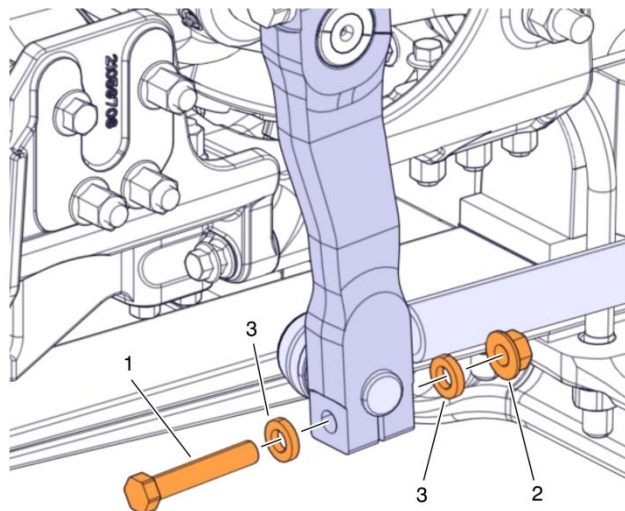
- Using tool 9996201 (Puller), remove the existing draglink from the steering knuckle as shown in the figure below.



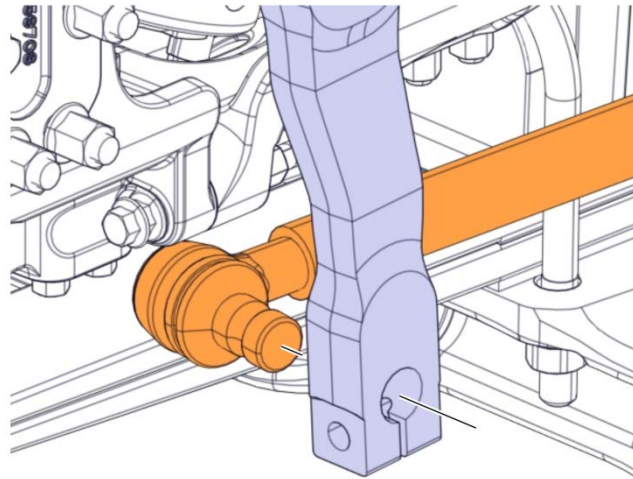
- Remove the existing pinch bolt fastener (1), nut (2) and flat washers (3) from the pitman arm.

**NOTE**

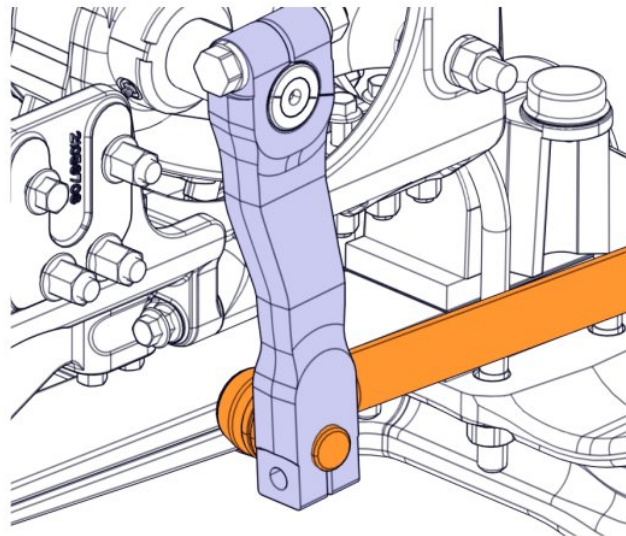
Discard the existing pinch bolt fastener, nut and flat washers. Do not reuse.



6. Remove the existing draglink rod from the pitman arm and discard.



7. Position the replacement draglink rod on the pitman arm as shown in the figure below.

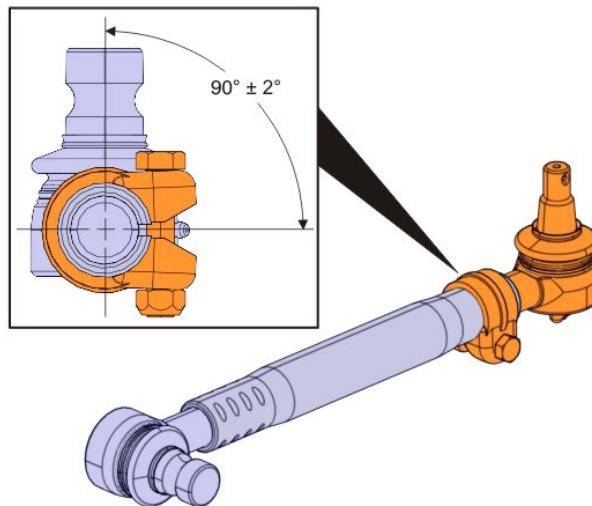


- Adjust the replacement drag link rod to length for the correct steering wheel angle. Adjust the drag link rod to length and torque the clamp fastener as shown in the figure below.

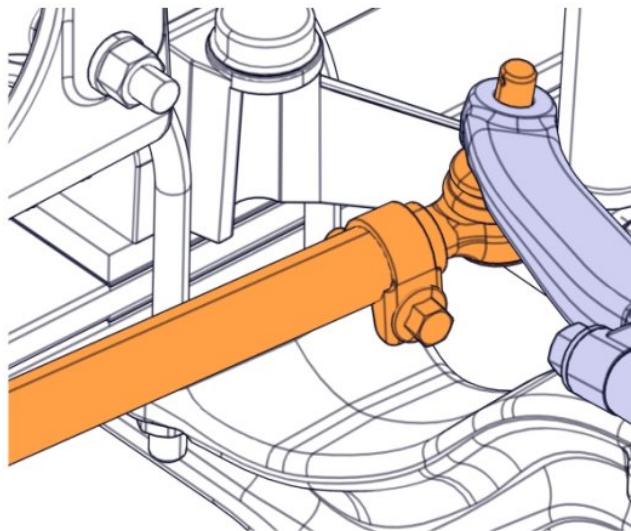
**NOTE**

Use the table below for the draglink rod clamp torque specifications.

Draglink Rod Torque Specifications	
Clamp Fastener	Torque Specification
M12 10.9	105 ± 20 Nm (77 ± 14 ft-lb)
M16 8.8	220 ± 35 Nm (162 ± 25 in-lb)

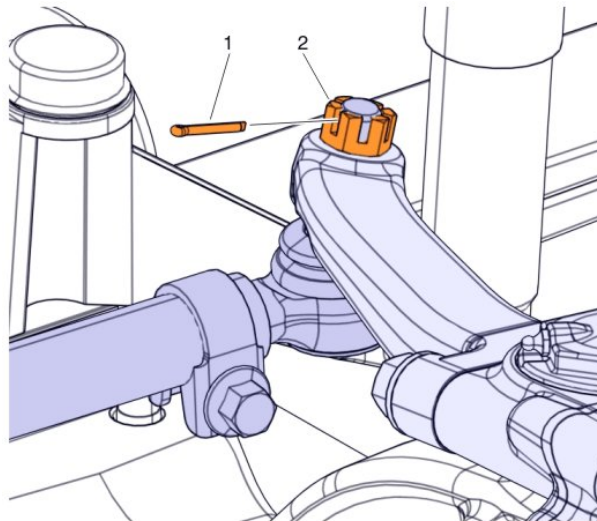


- Position the replacement draglink at the steering knuckle as shown in the figure below.

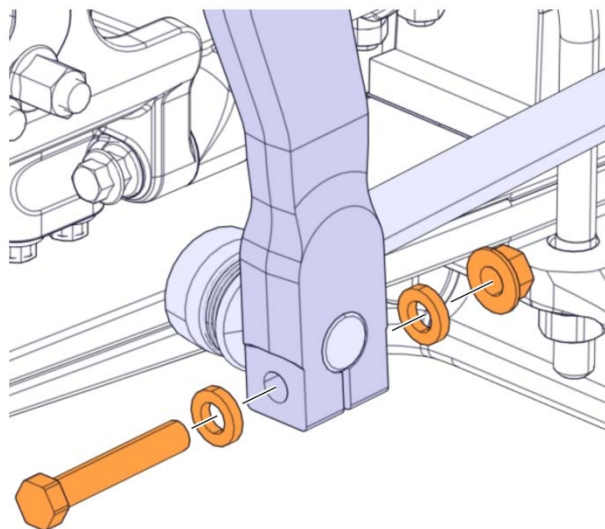




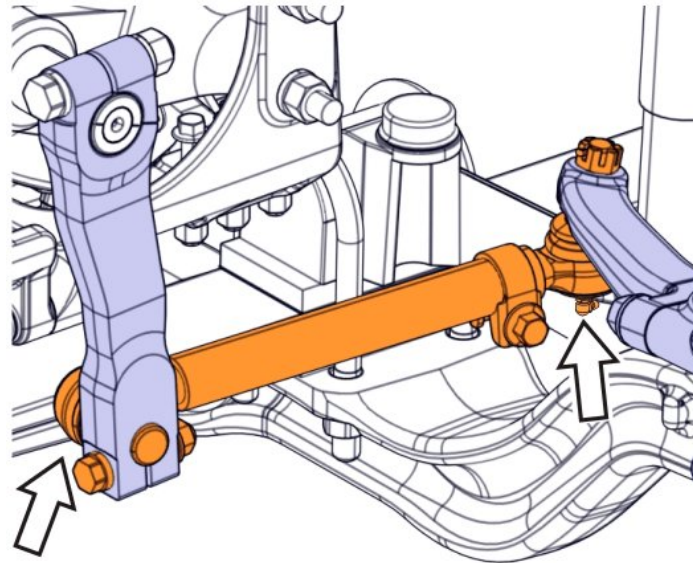
10. Install the replacement castle nut (1) (part number 10506).
11. Tighten the castle nut (part number 10506) to 200 Nm (147 ft-lb) minimum.
12. Turn the castle nut **CLOCKWISE** until the next castle nut slot aligns with the hole in the draglink rod ball socket.
13. Install the split pin (2) (part number 907861).



14. Install the replacement pinch bolt fastener (993908), nut (990944) and flat washers (994882) on the pitman arm.
15. Tighten the fasteners to  $275 \pm 20$  Nm ( $202 \pm 14$  ft-lb).



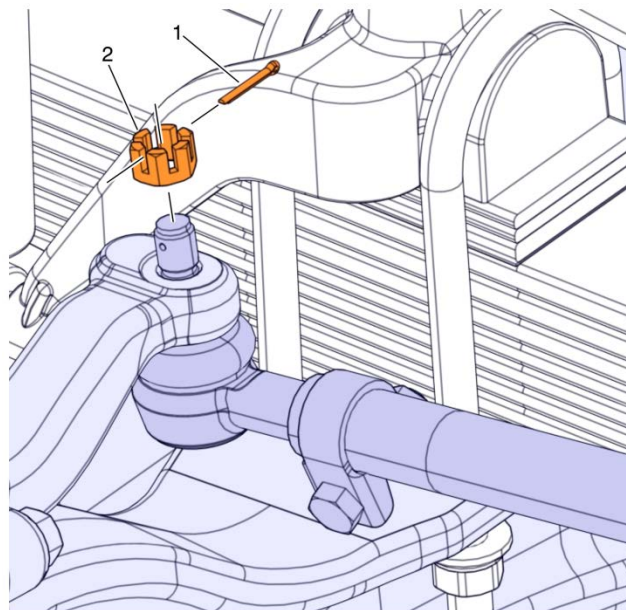
16. Locate the grease fittings shown in the figure below, and lubricate the replacement draglink rod.



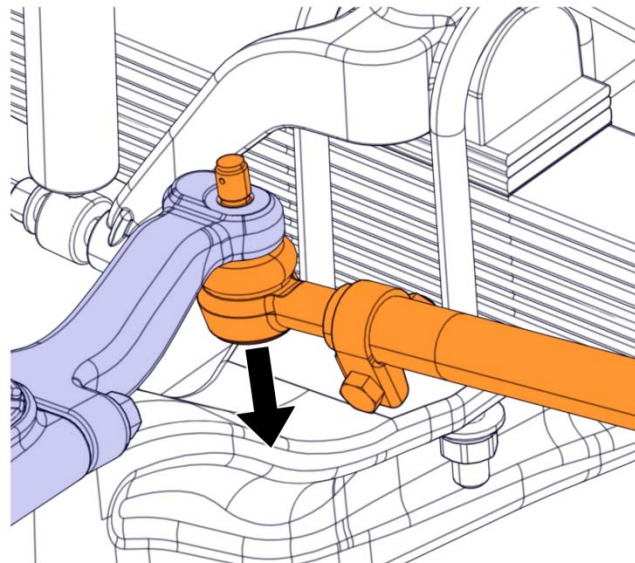
17. Proceed to step to **(Commissioning the Truck for Operation)**.

#### **Draglink Rod, Replacement Procedure VHDB:**

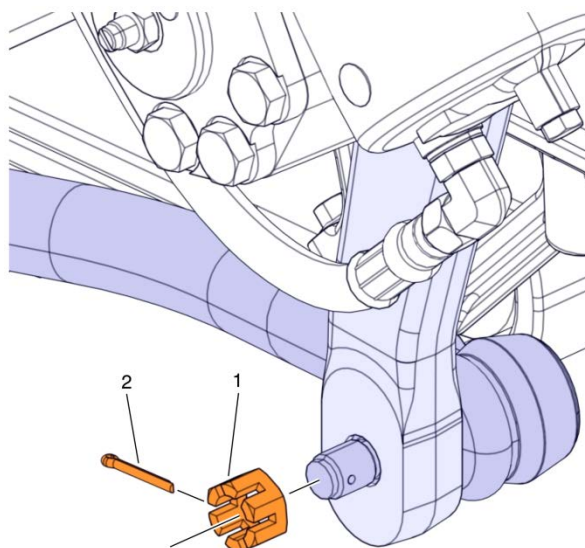
1. Locate the draglink rod on the right side of the truck.
2. Remove the split (1) from the castle nut (2) at the steering knuckle. Do not reuse split pin.
3. Remove the existing castle nut. Do not reuse castle nut.



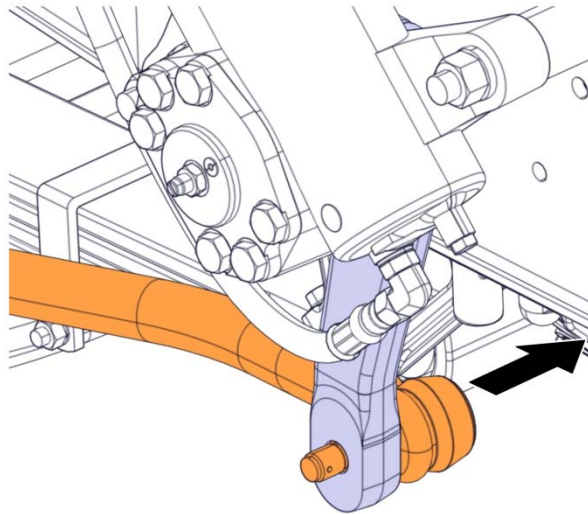
4. Using tool 9996201 (Puller), remove the existing draglink rod from the steering knuckle as shown in the figure below.



5. Remove the split pin (2), and castle nut (1) securing the draglink rod to the pitman arm. Do not reuse split pin or castle nut.



- Using tool 9996201 (Puller), remove the draglink rod from the pitman arm.

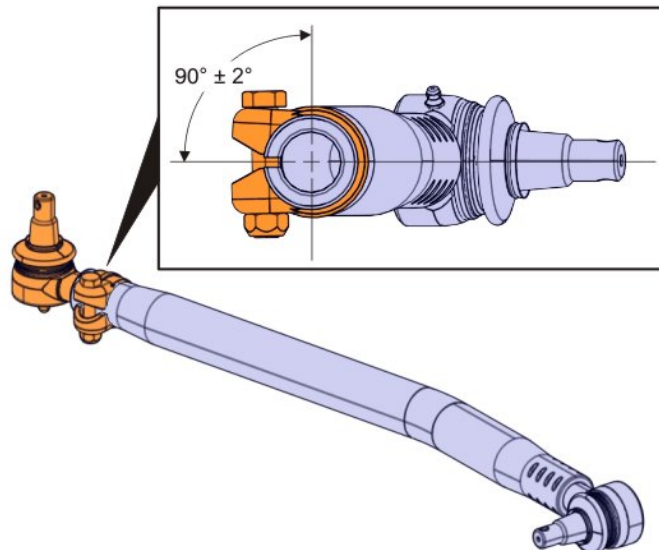


- Adjust the replacement drag link rod to length for the correct steering wheel angle. Adjust the drag link rod to length and torque the clamp fastener as shown in the figure below.

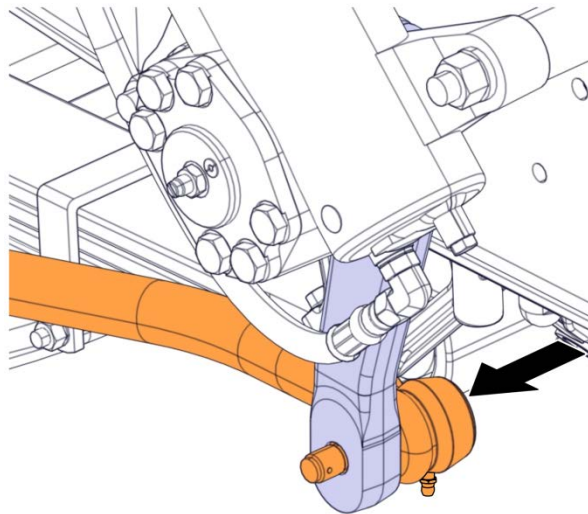
**NOTE**

Use the table below for the draglink rod clamp torque specifications.

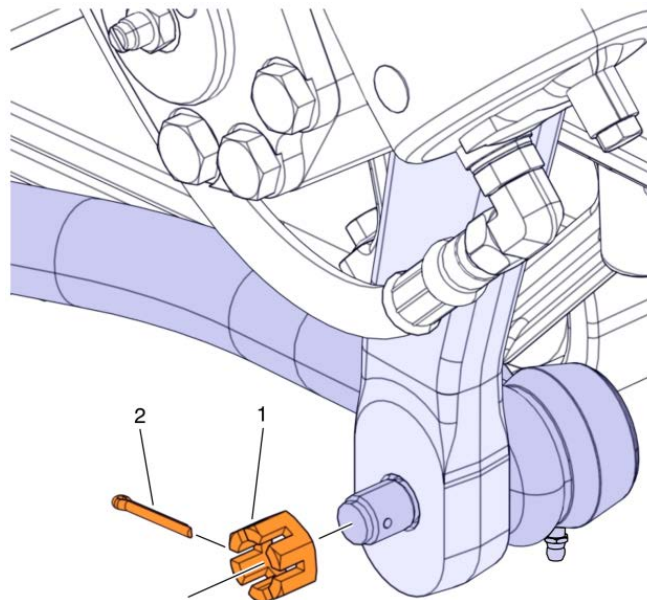
Draglink Rod Torque Specifications	
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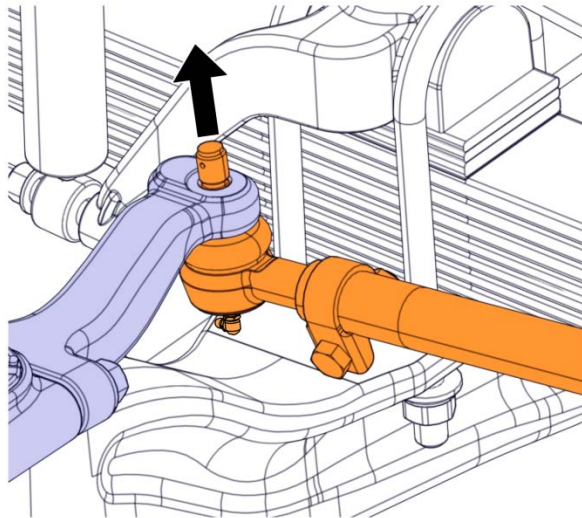
8. Position the replacement draglink rod on the pitman arm as shown in the figure below.



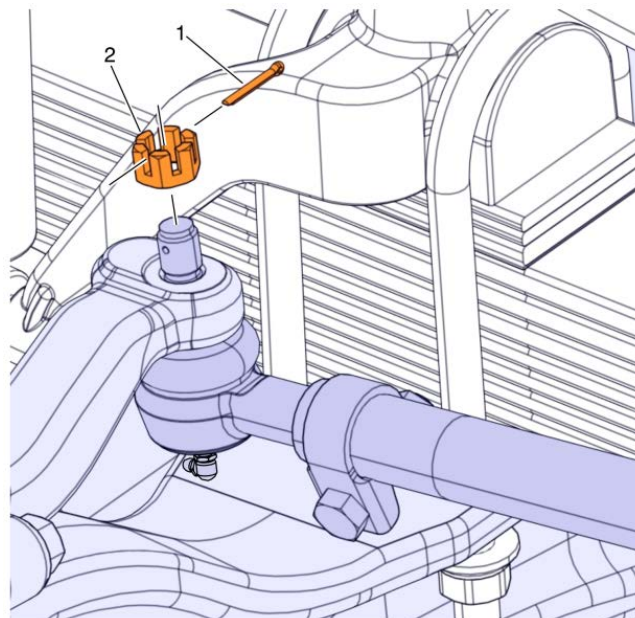
9. Install the replacement castle nut (1) (part number 10506).
10. Tighten the castle nut to 200 Nm (147 ft-lb) minimum.
11. Turn the castle nut **CLOCKWISE** until the next castle nut slot aligns with the hole in the draglink rod ball socket.
12. Install the split pin (2) (part number 907861).



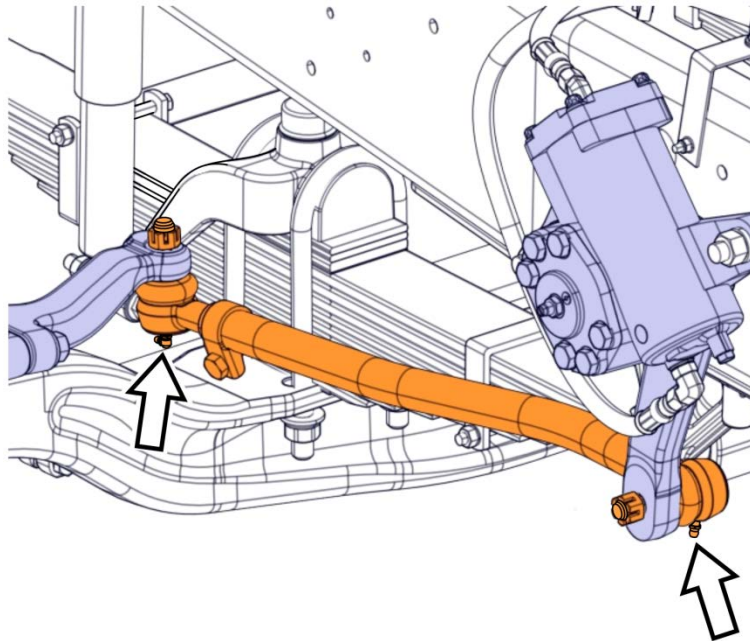
13. Position the replacement draglink rod on the steering knuckle as shown in the figure below.



14. Install the replacement castle nut (1) (part number 10506).
15. Tighten the castle nut to 200 Nm (147 ft-lb) minimum.
16. Turn the castle nut **CLOCKWISE** until the next castle nut slot aligns with the hole in the draglink rod ball socket.
17. Install the split pin (2) (part number 907861).

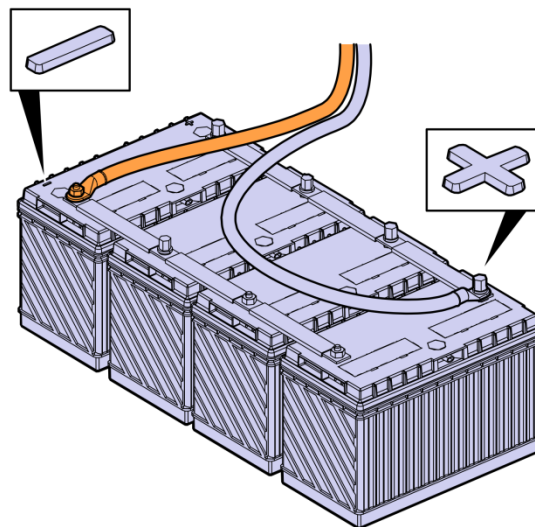


18. Locate the grease fittings shown in the figure below, and lubricate the replacement draglink rod.

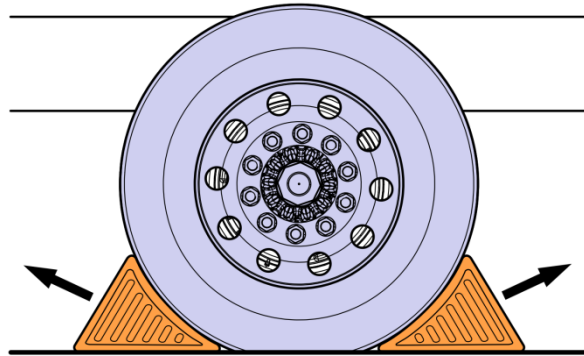


**Commissioning the Truck for Operation:**

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



2. Remove the wheel chocks.



3. Test-drive the truck to ensure proper operation of the replacement draglink.

<b>NOTE</b>
Ensure the steering wheel is correctly positioned before and after test driving the truck.

<b>NOTE</b>
If the steering wheel is not positioned correctly, perform a truck alignment procedure.



**Reimbursement:**

<b>This repair is covered by an authorized Safety Recall campaign. Reimbursement is obtained through the normal claim handling process.</b>	
	<b>UCHP Reimbursement</b>
<b>Claim Type</b> (used only when uploading from the Dealer Business System)	R
<b>Recall Status</b>	
Vehicle repaired per instructions	1-Modified per instructions
<b>Labor Code</b>	
Primary Labor Code (Draglink Rod, VHDF and VHDB, Steer Side, Replacement)	6438-03-09-01 0.7 hrs
Additional Labor Code (Draglink Rod, VHDF and VHDB, Steering Assist, Replacement)	6438-03-09-04 0.3 hrs
Time to take charge of vehicle and determine campaign status	1700-16-01-01 0.3 hrs
<b>Causal Part</b>	VHDF Steer Side 21128340 VHDF Assist 21128342 VHDB Steer side 21128344 VHDB Assist 21128346
<b>Authorization Number</b>	C6580

Take-charge time is not included in the labor code for this operation. Take charge may be eligible, but can only be used once per vehicle repair visit. If the vehicle is having other warranty repairs performed, take-charge should be charged to the warranty repair, otherwise take-charge can be charged to this Safety Recall campaign.