

Pitman Arm Pinch Bolt Alignment

Service Category Service Department

Section Function Group 643

Technician Skill Level C

Market North America

Applicability

MACK

Years	Models
2025	PI

Introduction

Mack Trucks has identified that certain PI model trucks may have been manufactured with pitman arms that could have an improperly drilled pinch bolt hole. The defect can prevent the pinch bolt from seating correctly, potentially leading to a loss of torque retention. Please refer to the instructions below to inspect the pitman arm and replace if necessary.

Production Change Information

This bulletin applies to vehicles built within the specified production dates below.

Brand	Engine	Emission Level	Starting Build Date	Ending Build Date
Mack	MP8	EM-USA21	24-April-2024	06-May-2024

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 (For Inspection)	Hours
1720-16-09-01	Campaign, General (0.1x4)	0.4
Labor Code	Description (If Replacement is Needed)	Hours
6437-03-02-01	Pitman Arm Replacement	0.2
Causal Part	21131839	
SCC Authorization Code	S0285	
Expiration Date	October 31, 2025	

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Parts Information

All trucks will need the parts in the list below to complete the pitman arm inspection. Parts can be ordered using Parts LinQ.

Part Numbers	Part Names	Quantity
993909	Hex Screw	1
994882	Washer	2
990954	Lock Nut	1

As Needed Parts

The parts below are only needed if the pitman arm fails inspection. Parts can be ordered using Parts LinQ.

Part Numbers	Part Names	Quantity
Refer to Impact for P/N	Pitman Arm	1
992479	Hex Screw	1
990993	Lock Nut	1
994884	Washer	2

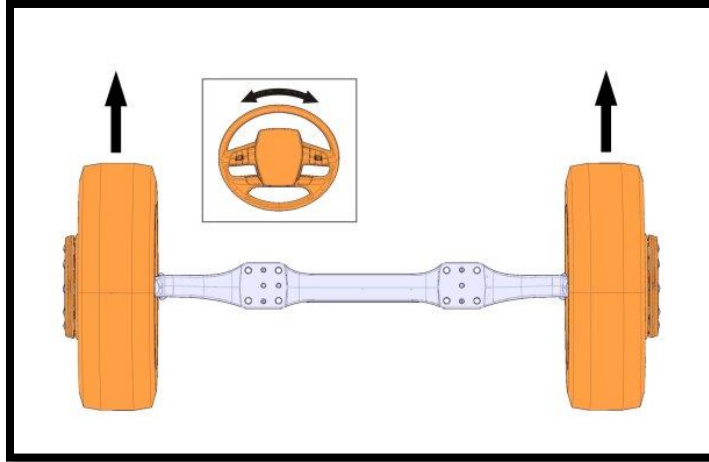
Required Tools & Equipment

- Measuring Calipers.

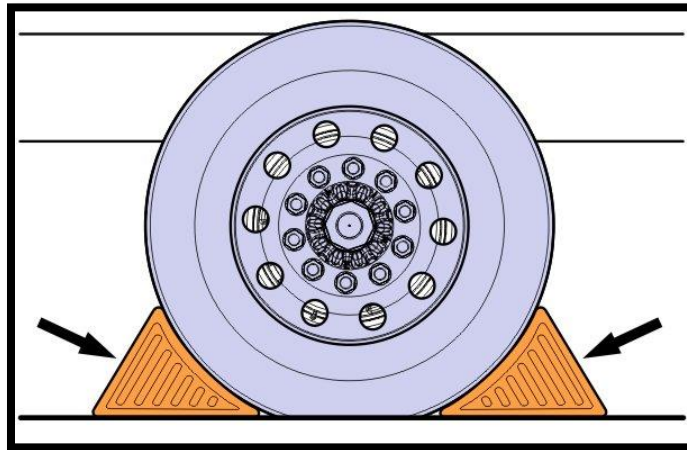
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Pitman Arm Inspection Procedure

1. Park the vehicle on a level surface.
2. Apply the parking brake.
3. Place the transmission in neutral.
4. Ensure that the steer tires are straight forward and secure the steering wheel.

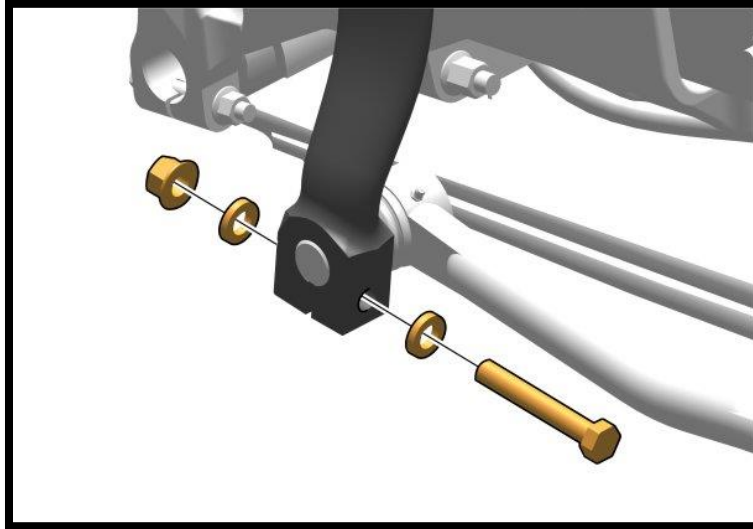


5. Install wheel chocks.

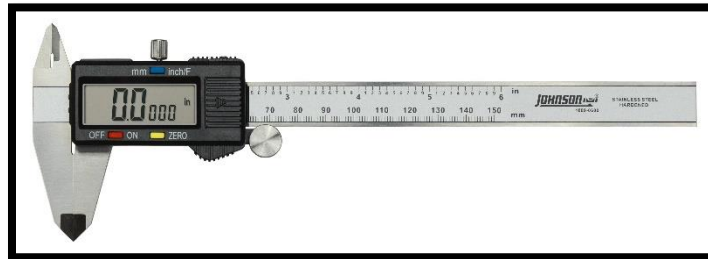


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6. Remove the drag link ball joint nut and bolt.



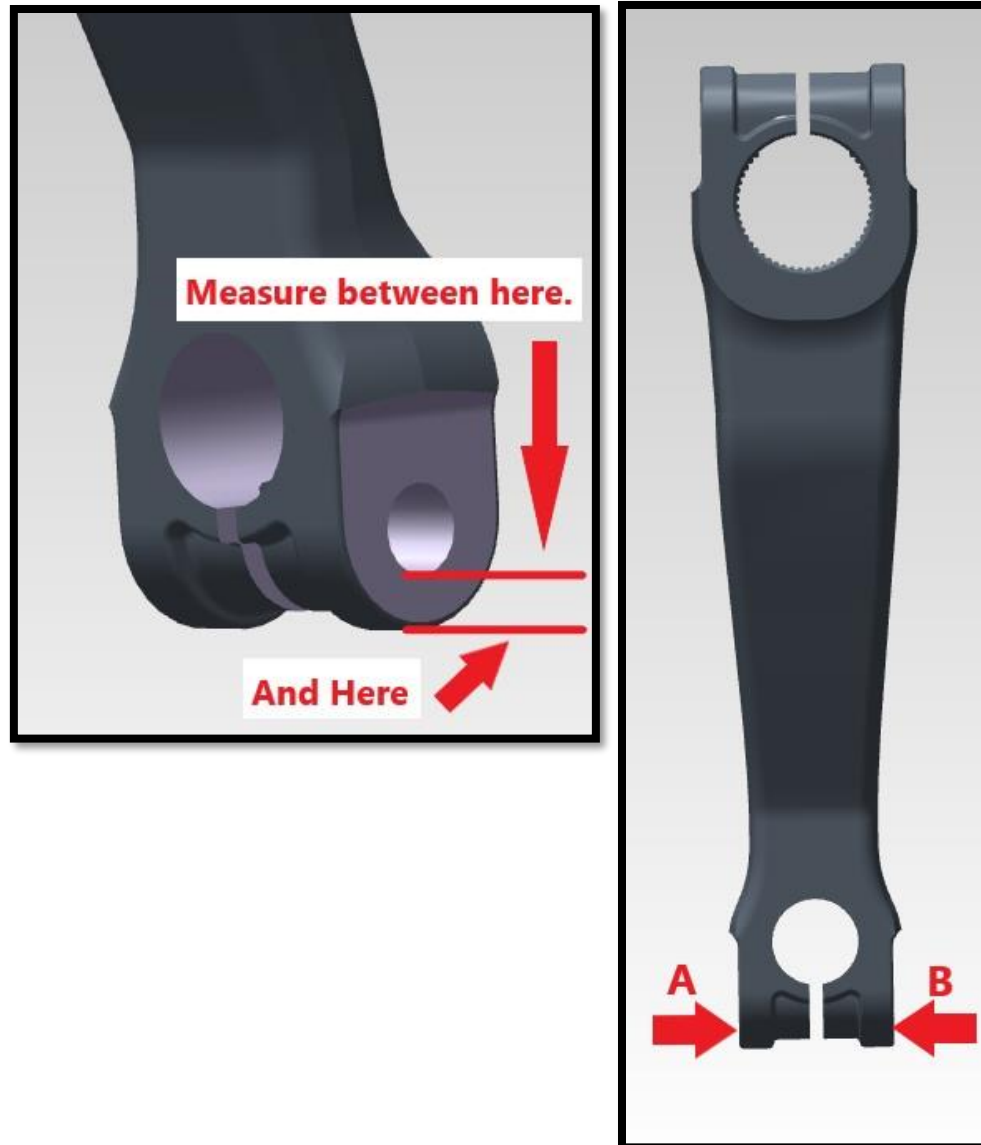
7. Ensure your calipers are set to zero in the fully closed position.



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8. Measure between the two points shown below at both side A and B.

Note
Take the measurement multiple times on each side to ensure the value is repeatable.



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9. Determine the difference between the measurements of side A and side B by subtracting the smaller measurement from the larger.

Example (Point A subtracted from Point B = Difference)		
Point A	Point B	Difference
0.500"/12.7mm	0.480"/12.192mm	0.020"/0.508mm

10. Refer to the chart below to assess your findings.

Difference Less the 0.032"/0.8128mm	Difference Greater Than 0.032"/0.8128mm
Replacement of the pitman arm is NOT needed. Continue to next step.	Replacement of the pitman arm is needed. Skip the next step. Continue to Pitman Arm Replacement Instructions.

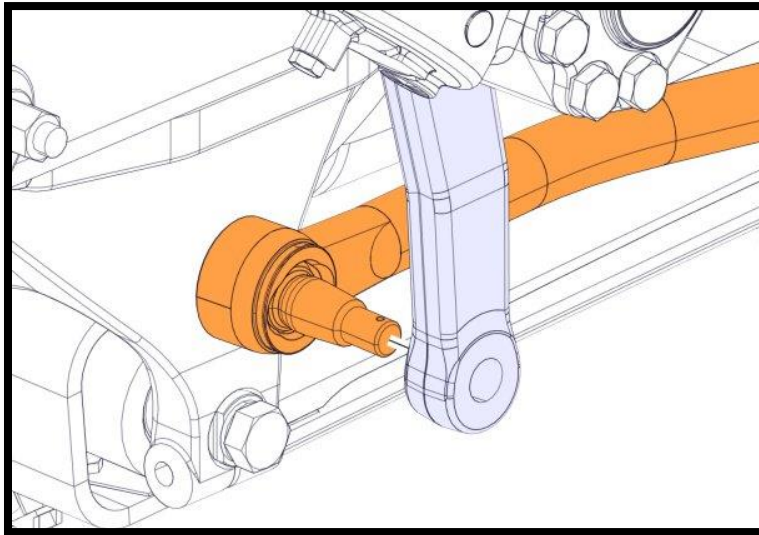
11. Install and torque the new drag link ball joint bolt (P/N 993909), washers (P/N 994882), and lock nut (P/N 990954).

Tightening torque	
Drag Link Ball Joint, nut and bolt	275 ±20 Nm (203 ±15 lb _f ·ft)

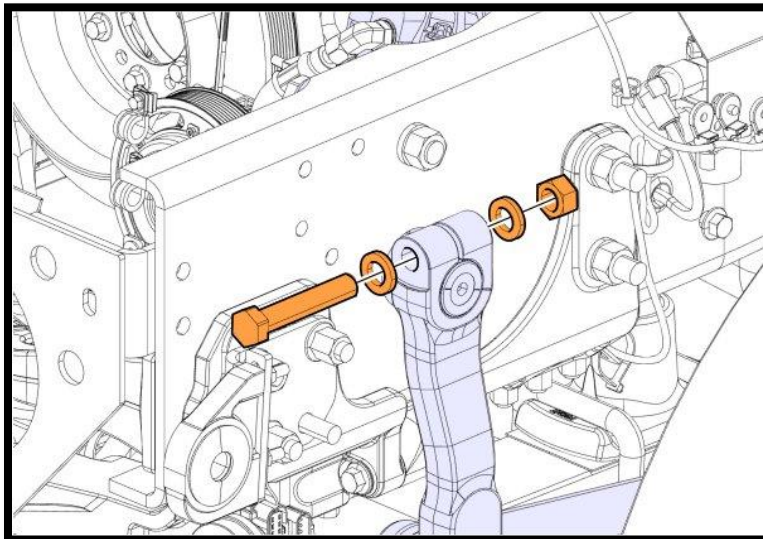
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Pitman Arm Replacement Instructions

1. Remove drag link from pitman arm.

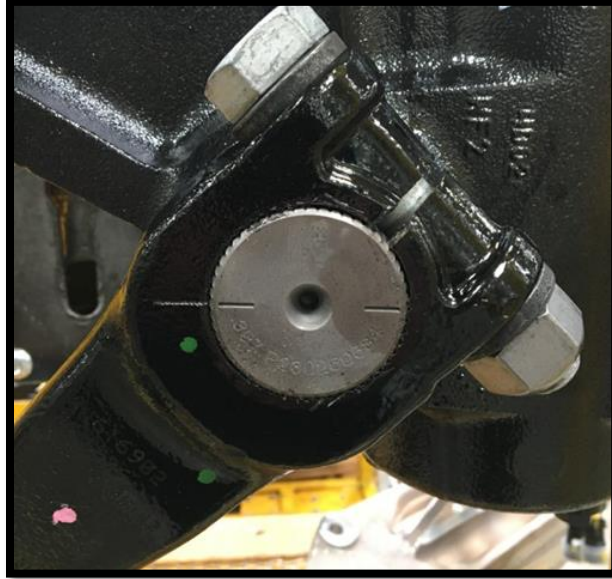


2. Remove the pitman arm nut and bolt.

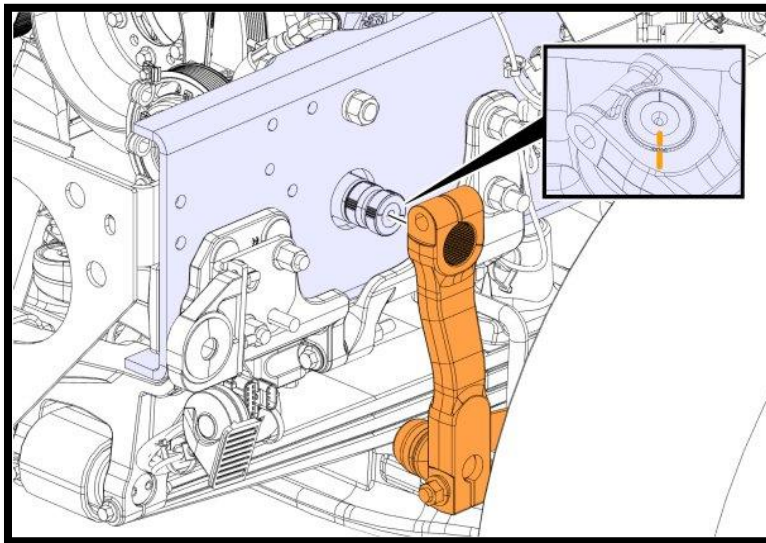


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2. Ensure the alignment marks are visible on the steering box sector shaft before removing the pitman arm. Mark as needed.

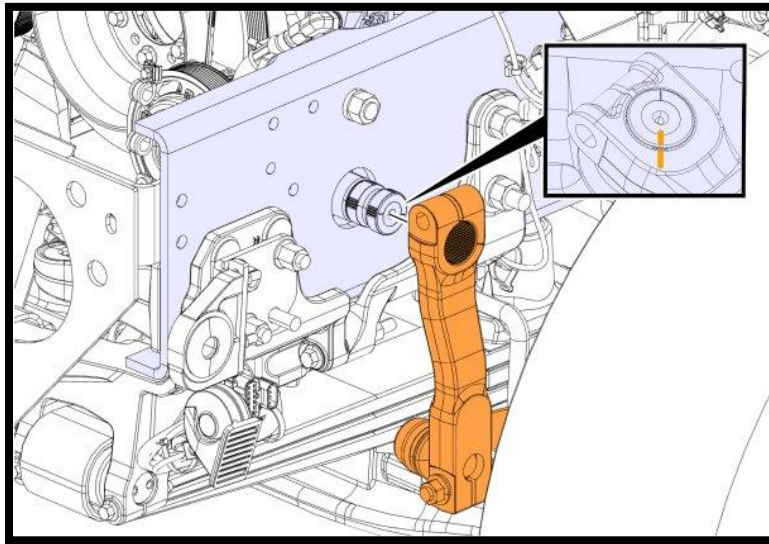
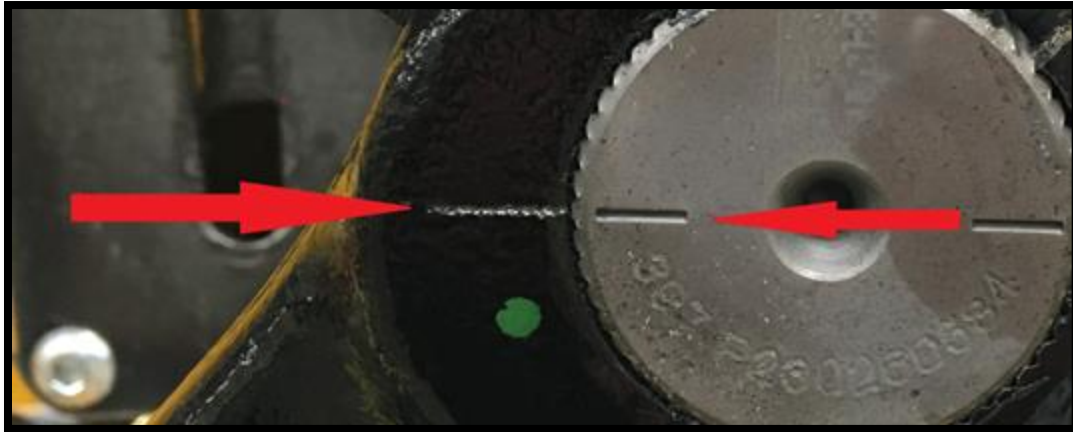


3. Remove the pitman arm.



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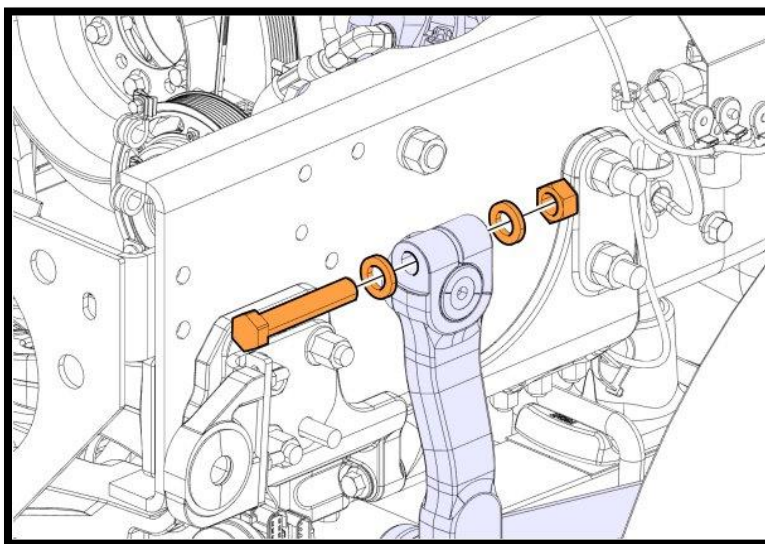
4. Use alignment marks on the pitman arm and sector shaft to ensure correct orientation and install the new pitman arm.



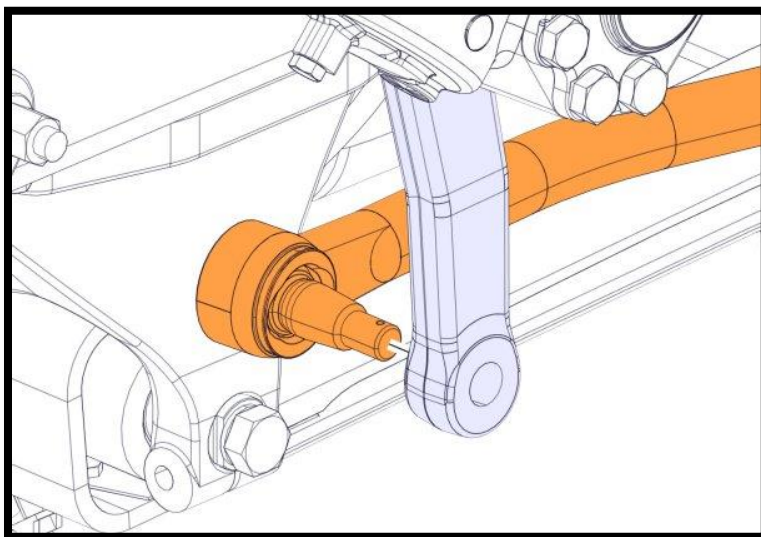
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5. Install and torque the new pitman arm bolt (P/N 992479), washers (P/N 994884), and lock nut (P/N 990993).

Tightening torque	
Pitman Arm, nut and bolt	450 ±40 Nm (332 ±30 lb _r ·ft)



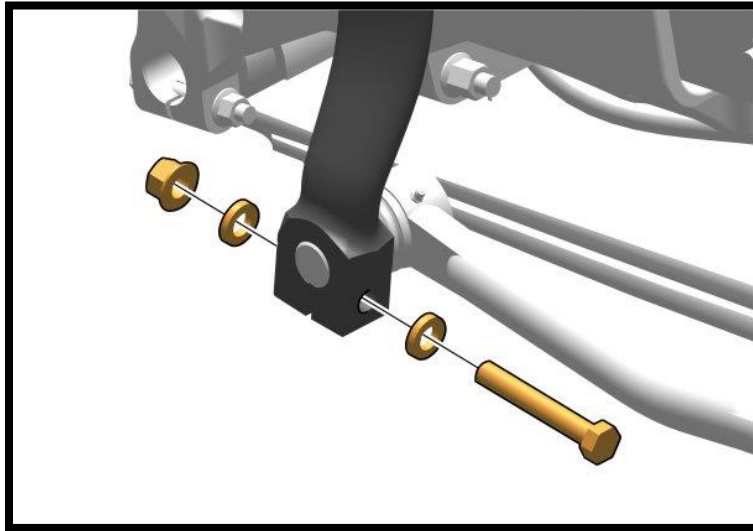
6. Install the drag link into the pitman arm.



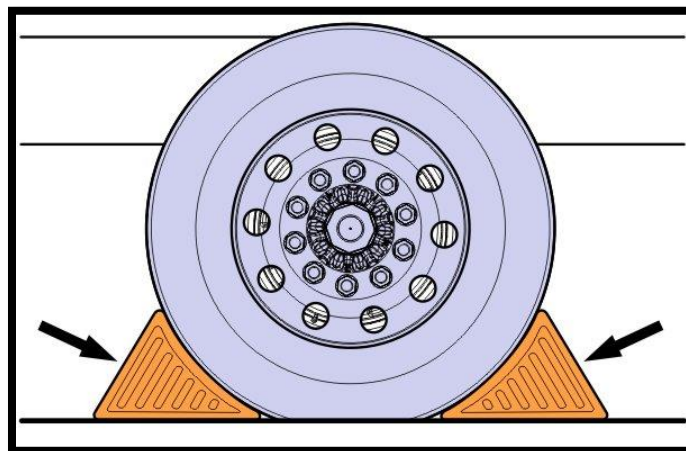
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7. Install and torque the new drag link ball joint bolt (P/N 993909), washers (P/N 994882), and lock nut (P/N 990954).

Tightening torque	
Drag Link Ball Joint, nut and bolt	275 ±20 Nm (203 ±15 lb·ft)



8. Remove wheel chocks.



9. Release truck.