



PREVOST


**SAFETY
RECALL**

SR13-08A

DATE : MARCH 2013	SECTION : 14-STEERING
SUBJECT : DRAGLINK TURNBUCKLE INSPECTION AND REPLACEMENT	

REVISION A:	THIS SAFETY RECALL SUPERSEDES PREVIOUS VERSION.
Changed for 161910 was 160932	

APPLICATION

NOTICE TO SERVICE CENTERS	
Verify vehicle eligibility by checking safety recall status with SAP or Vehicle Warranty Information tool found on PrevoSt-Systems tab of the Volvo Trucks Dealer Portal	
Model	VIN 
H3-45 coaches With I-beam front axle Model Year : 2003 - 2013	From 2PCH3349131014485 up to 2PCH3349841014999 and from 2PCH3349X41010002 up to 2PCH33491DC712312 incl.
H3-41 coaches With I-beam front axle Model Year : 2003 - 2013	Single unit 2PCH3341041014845 and from 2PCH3341X51010044 up to 2PCH33413DC712306 incl.
H3-45 VIP shells With I-beam front axle Model Year : 2003 - 2012	From 2PCV3349631014467 up to 2PCV3349041014997 incl. And from 2PCV3349X51010019 up to 2PCV334929C711521 incl.
This Safety Recall does not necessarily apply to all the above-mentioned vehicles, some vehicles may have been modified before delivery. The owners of the vehicles affected by this recall will be advised by a letter indicating the Vehicle Identification Number (VIN) of each vehicle concerned.	

DESCRIPTION

On vehicles affected by this recall, under certain conditions, interference between the fore draglink clamp bolt and the pitman arm may cause a sudden drag link fracture. Visual inspection of fore clamp bolt and pitman arm must be carried-out. If contact has occurred, replacement of the draglink turnbuckle and clamps is required.

Order the following parts:

Part No.	Description	Qty
161910	Turnbuckle	1
661133	Clamp	2

NOTE

Material can be obtained through regular channels.

PROCEDURE

The scope of this procedure is to inspect the steering draglink turnbuckle clamps on vehicles with an I-beam front axle.

If required, the procedure details how to perform the replacement of the turnbuckle and clamps without undergoing a vehicle alignment.



DANGER

Park vehicle safely, apply parking brake, stop engine and set battery master switch(es) to the OFF position prior to working on the vehicle.

1. Setting-up for the procedure

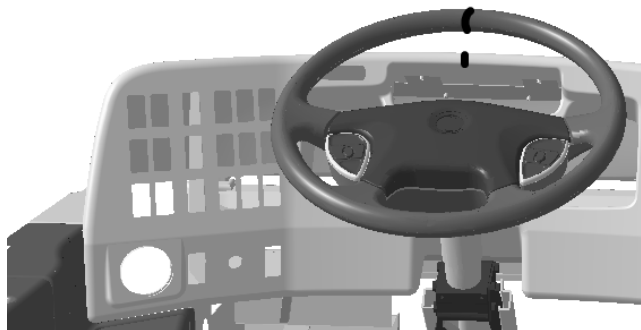
Drive the vehicle in the service bay, making sure to leave the steering wheel as straight as possible.

Mark steering wheel position with a pair of masking tape. Align the tapes by placing one piece on the dashboard and the other on the steering wheel.

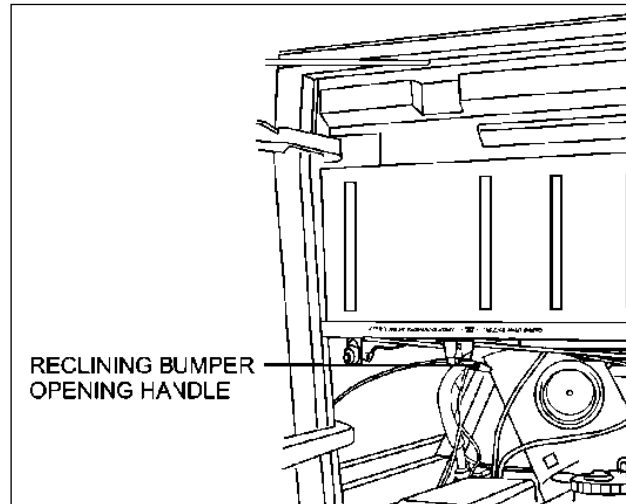
This will be your reference to restore the steering to its original state.

Note that on vehicles having a substantial steering wheel indexation or offset, the vehicle wheels may not be straight ahead when starting procedure. This does not affect the procedure in itself.

Leave vehicle on the ground to make sure the wheels will not move.



Recline the front bumper and remove spare tire.



Locate the steering gear pitman arm on the driver's side of the spare tire compartment.

On VIP shells, dismantling a partition or equipment installed in this compartment may be required to properly inspect the vehicle.



2. Steering operation inspection

Turn wheels all the way left.

No contact should occur between pitman arm and bolt.

If contact occurs, replace both clamps and turnbuckle. Refer to replacement procedure below.



3. Pitman arm and bolt shank inspection

If no contact occurs in the above inspection, visually inspect the fore clamp bolt shank and pitman arm surface for previous contact marks.

Typical signs of contact may be a circular rust spot (1) on the pitman arm and/or flattened threads on bolt shank end (2).

If any one of these contact marks are visible, replace clamps and turnbuckle.

If there is no contact evidence, proceed to clamp inspection.



4. Clamp inspection

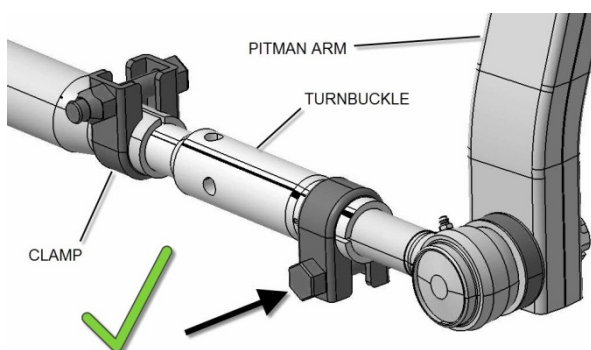
Proper draglink clamp orientation is shown here.

Note horizontal orientation of clamp bolt and bolt insertion direction.

Clamps should not be bent or squeezed by the bolt. If this is the case, they have been over torqued and should be replaced. Refer to replacement procedure below.

If clamps are in good condition but are not properly oriented, rotate the clamps as shown.

If clamps are properly oriented and in good condition, proceed to interference inspection.



Clamp is bent. Replace clamp.

5. Turnbuckle replacement procedure

Mark top of turnbuckle with a permanent marker or tape. (useful for part return process)

Mark center of ball joint.

Measure distance **(A)** between center of ball joint on pitman arm and draglink end.

A : _____

Unfasten clamps.

Release the clamps.

Rotate turnbuckle by inserting a tool like a round nose chisel in the turnbuckle holes.

Install the new clamps on the new turnbuckle. Make sure bolts are inserted as shown on the clamps.

Apply a small amount of anti-seize compound to the turnbuckle threads.

Engage the turnbuckle female threads two or three turns on the ball joint end.

➤ **Two people are required for next steps.**

Align turnbuckle and draglink. Have a partner turn the steering wheel to position the turnbuckle male threads ready to engage in the draglink.

Engage by turning the turnbuckle in the draglink while applying a light tension on the steering to help thread insertion.

Adjust the turnbuckle until you reach measure **(A)** noted earlier.

At this point, make sure threads are visible the entire length of the slots on the draglink and turnbuckle female ends.

Finish by making fine adjustments to align the tape marks on the steering wheel.

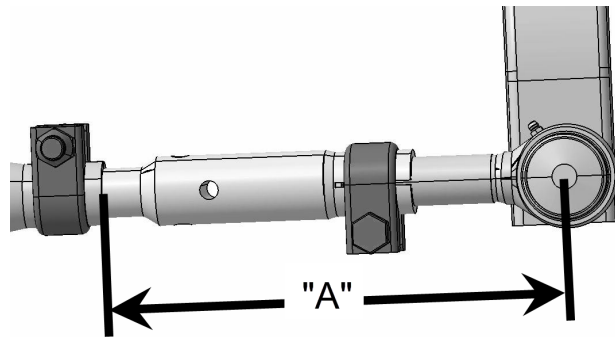
This will return the steering to its original state.

Make sure the ball joints at each end of the draglink assembly are in neutral position (centered) before final clamp tightening.

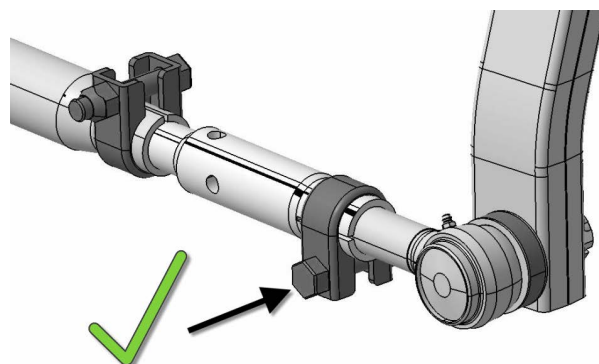
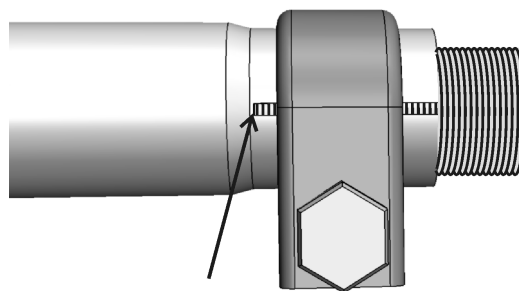
Clamp bolts should be installed horizontal with bolt head as shown. Tighten clamp bolts to 50-60 lbf-ft.

Mark bolt head with torque seal.

If applicable, remove rust at contact mark and paint the pitman arm. This way any future contact resulting from a bad clamp orientation will be revealed.



THREADS MUST BE VISIBLE
THE ENTIRE LENGTH OF THE SLOT



6. Interference inspection

➤ **Two people are required for next steps.**

Turn the wheels fully in both directions while another person inspects the linkage for interference with surrounding structural parts and components.

Minimum acceptable clearance is 3/8".

PARTS DISPOSITION

Return to Prevost with A.F.A. for full reimbursement.

WARRANTY

This modification is covered by Prevost's normal warranty. We will reimburse you thirty minutes (30min) for *inspection only* or one hour thirty minutes (1h30) of labor plus the parts for *inspection and replacement* upon receipt of replaced parts and a completed A.F.A. form on which you must specify as per "Safety Recall SR13-08".

You also have to fill the "Safety Recall Certification Sheet" provided with this bulletin and return it with your A.F.A. form to be reimbursed.

OTHER

VBC Bulletin	N/A
Fail Code	14.04
Defect Code	09
System Condition	R
Causal Part	661133

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