

# PREVOST

ENREGISTRÉ-REGISTERED ISO 9001 & ISO 14001

# MAINTENANCE INFORMATION

Mi05-09



DATE: JUNE 2005 SECTION: 14 - Steering

SUBJECT: PITMAN ARM TORQUE AND MAINTENANCE

**RECOMMENDATIONS** 

# IMPORTANT NOTICE

This modification is recommended by Prevost Car to increase your vehicle's performance. Note that no reimbursement will be awarded for carrying out this modification.

# **APPLICATION**

ALL EIGHTION		
Model	VIN	VIN RECONSTRUCTION PREVOST CAR INC. PREV
XL Coaches Model Year : 1996 - 2000	From 2PCL33	495 <u>T</u> 102 <u>5872</u> up to 2PCL33493 <u>Y</u> 102 <u>7045</u> incl.
H3-40 Vehicles Model Year : 1990 - 1994	From 2P9V33	402 <u>L</u> 100 <u>1030</u> up to 2P9H33409 <u>R</u> 100 <u>1399</u> incl.
H3-41 H3-45 Coaches Model Year : 2000 - 2001	From 2PCH33	49X <u>Y</u> 101 <u>3701</u> up to 2PCH33497 <u>1</u> 101 <u>4035</u> incl.
VIP-45 Model Year : 1997 - 1999	From 2PCV33	494 <u>V</u> 101 <u>1795</u> up to 2PCV33499 <u>X</u> 101 <u>2458</u> incl.

## **DESCRIPTION**

The following procedure is a reminder of the maintenance required on pitman arm and the correct torques to be applied to ensure proper steering linkage operation.

## **PROCEDURE**



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

#### PITMAN ARM REMOVAL

1. Remove cotter pin, nut and washers from drag link ball stud at pitman arm.

2. Disconnect drag link from pitman arm, using jaw style pullers (pressure screw type).



Always wear approved eye protection when operating pullers.

# **⚠** CAUTION **⚠**

Do not drive (hammer in) pitman arm on or off pitman shaft as this can damage the steering gear.

# **⚠** CAUTION **⚠**

Heating of components to aid in disassembly is not allowed because it has a detrimental effect on axle components and steering linkages.

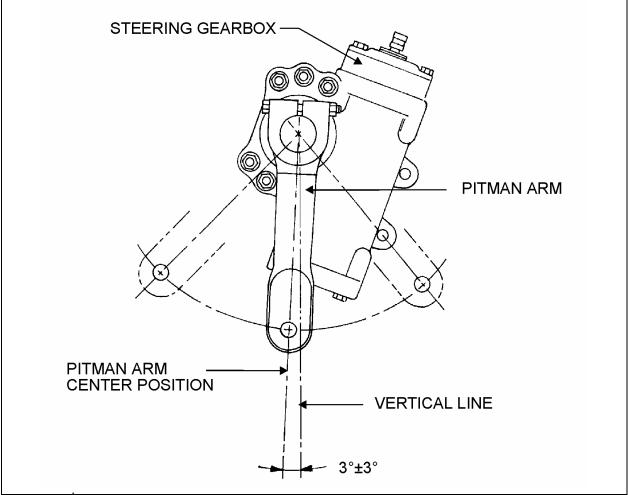


FIGURE 1: PITMAN ARM ADJUSTMENT

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- 3. Remove pitman arm clamp bolt nut, washer and bolt.
- 4. Check the radial position of the pitman arm in relation to the sector shaft prior to removal of pitman arm.
- 5. Add reference marks to the arm and shaft if necessary to ensure correct alignment at reassembly.
- 6. Remove pitman arm. A chisel will help you loosen the pitman arm. Use a puller if you cannot remove the pitman arm manually.

## PITMAN ARM INSTALLATION

- 1. Position pitman arm on sector gear shaft with reference marks aligned. Ensure that the clamp bolt groove matches.
- 2. Install bolt, washer and nut. Tighten nut to 280-300 lbf-ft (380-410 Nm).

⚠ CAUTION ⚠

TRW recommends checking this tightening torque 4 times a year.

3. Connect drag link to pitman arm while ensuring that rubber stabilizer is in place on the rod end. Install washers. Tighten nut to 160-300 lbf-ft (220-410 Nm). Afterwards, install a new cotter pin.

#### **ADJUSTMENT**

- 1. Disconnect the drag link from pitman arm. Center steering wheel by dividing the total number of steering wheel turns in two. Scribe a reference mark on steering gearbox at the center previously determined.
- 2. Using a protractor, check the angle of the pitman arm (refer to Fig. 1 for details).
- 3. The pitman arm should be adjusted to an angle of  $3^{\circ} \pm 3^{\circ}$  in relation with the vertical axis (towards rear of vehicle). If not, unscrew and remove bolt, nut and washer. Remove the pitman arm according to the procedure outlined under previous heading "Pitman arm removal". Adjust to the proper angle.
- 4. When adjustment is achieved, replace bolt, nut and washer, and torque to 280-300 lbf-ft (380-410 Nm).

## Waste disposal:

Discard according to applicable environmental regulations (Municipal/State[Prov.]/ Federal)