# PREVOST

# **Instruction Sheet**

# IS-98055 A

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# TAG AXLE LIFTING SYSTEM BRAKE CHAMBER REPLACEMENT (XL SERIES)

This bulletin describes how to replace, on the tag axle system, the superseded brake chamber PN 640729 by a new brake chamber PN 641425. It applies on XL series vehicles before the vehicle 2PCM33491**X**102**6690**.

## MATERIAL

Order kit IS98055 that contains the following part:

Part No.	Description	Qty
641425	BRAKE CHAMBER ASSY / TYPE 36	1
641375	MALE ELBOW 90° NON-SWIVEL / PUSH-IN FITTING #4x1/8NPT-M BR	1
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Other parts that may be required:

ltem No.	Description
1	BRAKE CHAMBER SUPPORT
2	PIN SS
3	BUSHING
4	LEVER ASSEMBLY
5	FLAT WASHER
6	SPRING PIN OR CUTTER PIN
7	CHAIN COVERING
8	CHAIN
9	CHAIN SHACKLE

# NOTE

With the VIN, refer to the part manual for part number of the items listed above (ref. Figure 1).



FIGURE 1

### NOTE

Material can be obtained through regular channels.

## PROCEDURE



# DANGER

Park vehicle safely, apply parking brake, stop the engine. Prior to working on the vehicle, set the ignition switch to the OFF position and trip the main circuit breakers equipped with a trip button.

## NOTE

This bulletin applies to the brake chamber replacement only. If other parts of the tag axle mechanism have to be replaced, make a different work order.

1. Make sure the tag axle lever on the driver console is at the tag axle lifted position (frontward) as shown in Figure 2.

#### NOTE

Damage may occur to the shock absorber rubber bushings if lifting the vehicle with the tag axle at the down position.



FIGURE 2

- 2. Lift up the vehicle.
- 3. Install jacks under the tag axle.



**FIGURE 3** 

4. Identify the left-hand thread screws and the right hand thread screws by the letter "L" or the letter "R" on the studs.



FIGURE 4





FIGURE 5

6. Remove the brake chamber yoke pin.

#### NOTE

If the pin is jammed, cut it. Cut the existing brake chamber yoke if necessary.



FIGURE 6

7. Disconnect the air supply tube on the top of the brake chamber.

8. Remove the existing brake chamber (2 nuts)



FIGURE 7



FIGURE 8

9. Clean the top surface of the brake chamber support with a steel wheel brush.



FIGURE 9

#### NOTE

The new brake chamber is a little bigger and interferes with the structure if using the mounting holes as is. It is necessary to cut the mounting holes to allow the chamber to fit in place keeping a secure gap with the structure.

10. Cut two slots on the top face of the brake chamber support long enough to allow the brake chamber studs to fit in.



FIGURE 10

- 11. Use a permanent with marker and mark the brake chamber support as shown in Figure 11.
- 12. Make the mounting holes slotted.
- 13. Make the center hole bigger to clear the brake chamber bottom emboss.



FIGURE 11

- 14. Before installing the brake chamber, align the yoke with the studs as shown on Figure 12.
- 15. Do not remove the plastic cap in the air inlet hole.



16. Cut the excess length of the brake chamber collar screws.

17. Install the brake chamber on the support. Make sure there is a minimum gap of ¼" between parts. Make the new slotted holes longer and the center hole bigger on the support if



FIGURE 13



**FIGURE 14** 

18. Fix the brake chamber with new screws (2).

#### NOTE

necessary.

Make sure that the brake chamber comes with Stover nuts unless use Loctite 243.



FIGURE 15

19. Install the lever with new cutter pins.



FIGURE 16

20. Apply thread sealant Loctite #567 all around the elbow thread.



FIGURE 17

- 21. Remove the plastic cap.
- 22. Install the elbow.



FIGURE 18

- 23. If necessary, cut the end of the existing air tube maximum ¼" length.
- 24. Connect the tube to the elbow.

#### NOTE

26. Install the wheels.

Make sure that the elbow final orientations combined with the tube length keep a safety gap between the structure and the tube. This is to avoid wearing of the tube and air pressure lost.

25. Repeat previous steps on the opposite side.



FIGURE 19



FIGURE 20

- 27. Tighten stud nuts progressively as shown in Figure 21.
- 28. Torque (aluminum & steel wheels) to a value of 450-500 lb-ft (610-678 Nm).

# 

Insufficient mounting torque can result in damage to parts. Excessive mounting torque can cause studs to break and the wheel to crack in stud hole area.



**FIGURE 21** 

- 29. Down lift the vehicle.
- 30. Locate the air pressure filling valve into the front service compartment.
- 31. Connect air pressure supply hose.



**FIGURE 22** 

- 32. If no air-pressure hose supply start the vehicle and wait until the air system reaches the maximum air pressure. It should be around 130 PSI.
- 33. With soap solution, check air leaking around the new elbow connection. Fix the air leaking.
- 34. Check and confirm that the tag axle mechanism is working properly.



FIGURE 23



**FIGURE 24** 

35. Make sure there is a clearance between the brake chamber and the lever when the tag axle is fully up.



**FIGURE 25** 

36. In case of a too short lifting of the tag axle, it is possible to adjust the stroke with the yoke screw.

## IMPORTANT NOTE

After a wheel installation, stud nuts should be tightened every 100 miles (160 km) for the first 500 miles 800 km) to allow setting in of clamping surfaces.



**FIGURE 26** 

37. Bulletin is complete.

#### ESTIMATED TIME

The time required to perform this bulletin is approximately 1h00 for one brake chamber replacement or 1H30 for the replacement of the brake chamber on both sides.

# PARTS / WASTE DISPOSAL

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