



# Installation Instructions

## 120G & 140G Cylinder Upgrade Kits

The Cylinder Upgrade kits include new cylinders equipped with spherical end nuts. The spherical nuts allow for cylinder, arm and frame alignment during clamping.

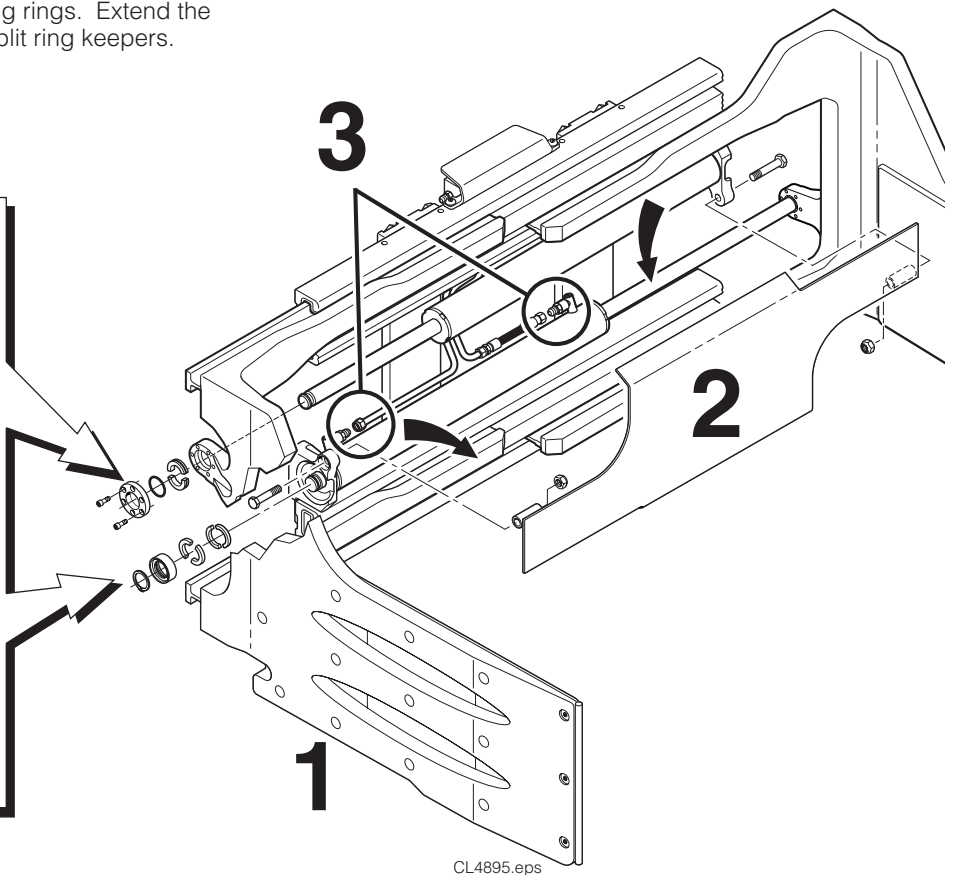
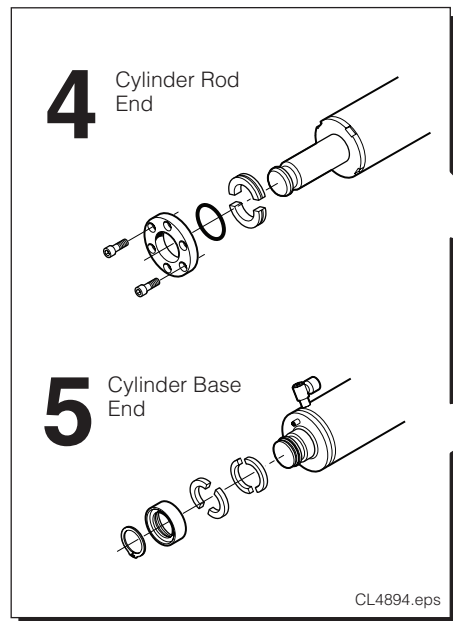
**NOTE:** The following procedures can be performed with the attachment mounted on the truck and the arms remaining on the attachment.

- 1 Extend the arms outside the width of the frame.
- 2 If equipped, remove the bumper capscrews and remove the bumper.
- 3 Disconnect the hose/tube ends from the cylinder ports. Plug the hoses and cap the cylinder ports. Tag hoses for reassembly.
- 4 Remove both cylinder rod end retaining rings. Extend the cylinder rods outward to expose the split ring keepers. Remove the keepers.

- 5 Disconnect the cylinder base ends by removing the snap ring, sliding the collar outward and removing the split ring keepers. Disengage both cylinders from the mounting lugs and lift away from the frame.



**WARNING:** Before disconnecting hydraulic lines, relieve pressure in the attachment hydraulic system. Turn the truck off and move the auxiliary control levers several times in both directions.



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**6** Install the new cylinders.

- Lubricate the cylinder threads, nut threads and spherical portion of the nuts with chassis grease.
- Install the hex washer on the rod end with the beveled side facing the arm lug.
- Engage the cylinder rod into the arm lug. Engage the cylinder base end roll pins with the frame holes.
- Install and tighten the nuts to a torque of 250 ft.-lbs. (340 Nm).

**NOTE:** The rod end nut is being tightened against the hex washer. The nut will not be tight against the arm lug. This looseness allows for cylinder alignment during clamping.

- Install the locking caps and cotter pins.

**7** Connect hoses/tubes to the cylinders.

**8** Install the bumper.

**9** Cycle attachment through 5 complete cycles to remove trapped air from the cylinders.

**WARNING:** After completing this service procedure, test the attachment through five complete cycles. First test empty, then test with a load to make sure the attachment operates correctly before returning it to the job.

