

# 2-POST SEAL KIT INSTALLATION

(Seals in cylinders can be replaced one cylinder at a time, or both cylinders in the same session.)

For further assistance, visit: http://ste01.us/fg

#### **STEPS 1-9**

## Removing the Cylinder

- 1] Raise the lift until the bottom of  $\underline{both}$  carriages are five (5) feet off the ground.
- 2] Lower the carriages onto the safety locks.
- 3] Depress the power-unit lowering handle, and keep the power-unit lowering handle depressed during this procedure. (**Hint:** Use a tie-wrap or bungee cord to lock the lowering handle in the down position while working on the lift carriage.)
- 4] You will need a ladder to reach the top of the lift.





It's a good idea to use a length of wire to tie up the lifting-chain, securing it to the carriage. This will keep the chain out of the way, and make it easier to reset the chain when replacing the cylinder.

- 5] Properly securing the ladder, access the chain roller within the column of the lift, and push down on the chain roller. This will remove fluid from the cylinder and return it to the power-unit reservoir. (Hint: An extension, such as a 2x4 board, may be useful in pushing down upon the chain roller where your arm may not be long enough to reach.)
- $\textbf{6]} \ \text{The cylinder must be completely compressed (down) to continue}.$
- 7] Remove floor-plate cover. (**Note:** This only applies if you have a "Floor-Plate" model lift This is the steel plate on the ground, between the two columns, which covers the hose and cables.)
- **8]** Carefully disconnect hoses from cylinder fittings. (There may be a trickle of residual fluid, so a shop-towel may be useful.)
- 9] Remove the cylinder from the column.

#### **STEPS 10-32**

## **Changing the Seal**

- 10] Secure the bottom-end of the cylinder by clamping it in a vise one (1) inch from the end of the barrel. (Note: Keep the cylinder level.)
- 11] Pull on the chain-roller yoke, to extend the cylinder rod about six (6) inches. Using a spannerwrench or pipe-wrench, unscrew the cylinder cap at the top-end of the cylinder.



IMPORTANT: When pulling the cylinder rod out of the cylinder barrel, Keep the rod level so that it does not get scratched. Scratches or damage to the rod will ruin the cylinder.



- **12]** Once the rod is removed inspect the inside of the barrel for scarring, rusting or scratches. If there are none, continue. Clean out any debris. (**Note:** Any physical damage to the cylinder needs to be corrected <u>before</u> installing new seals. Failure to do so will ruin the new seals. If any physical defects cannot be corrected, the cylinder will need to be replaced.)
- 13] Place the cylinder rod assembly on a soft or pliable surface. (Do not set on floor or metal, where it might be damaged.)
- 14] Remove the lock-nut from the end of the cylinder rod.
- 15] Slide the piston off the cylinder rod. (Note: the large seal at the bottom.)
- 16] Slide the cap off the cylinder rod.
- 17] Remove and replace the small cap seal and the cap wiper-seal; then replace the cap back onto cylinder rod.
- 18] Replace the piston O-Ring located on the end of the cylinder rod.
- 19] Replace the piston (Note the direction of the large seal), and tighten the lock-nut.
- 20] Remove the large, main seal from the piston. (Note: the seal "taper" goes at the bottom.)





IMPORTANT: Note the direction of the seal that is removed. The new seals need to be installed in the same direction.

A small ¼" or ½" hook tool is recommended.

Be careful not to damage the surface around the seal.

- 21] Clean the piston with a spray cleaner (such as brake cleaner) and wipe with a clean shop rag.
- 22] Let the piston dry. Surface must be clean and dry before continuing.
- 23] Apply lube grease to seal groove.
- 24] Carefully install the new seal in the groove, in the same direction as the old seal. Also replace the piston wiper-seal.





CAUTION: Do not nick or tear seal during installation.

- 25] Apply lube grease generously around the piston head, including the seal.
- 26] Spray the inside of the cylinder barrel with WD-40, for about 15 seconds.
- 27] Apply lube grease generously inside the cylinder barrel. Be sure that all threads are well lubricated.



IMPORTANT: Use plenty of grease.



- 28] The barrel should still be level at this point.
- **29]** <u>SLOWLY</u> push the piston into the barrel, keeping the rod level. After the threads are cleared, use a flash-light to check the gap between the piston and the cylinder barrel to make sure the wiper-seal is still in the groove and seated properly.
- 30] Push the piston-rod into the barrel, until you feel resistance.
- 31] Screw the cylinder cap back on. Using a spanner-wrench or pipe-wrench, tighten until snug, then  $1/8^{th}$  turn forward.
- 32] The cylinder has been rebuilt.

## **STEPS 33-40**

## Replacing the Cylinder

- 33] Return the cylinder to the lift-column. Make sure the cylinder is sitting flush with the base of the column. Line up the cylinder fitting with the base of the column to ensure the cylinder is straight.
- 34] Connect the hose to the fitting at the bottom of the cylinder.
- 35] Replace cover-plate (if present).
- 36] Remove wire securing the lifting chain, and reinstall chain onto chain-roller.
- 37] Remove tie-wrap or bungee cord from power-unit lowering handle.
- **38]** Raise lift slowly and carefully, being sure the chain is settling properly onto the chain-roller; until the chain tightens and the carriages lift off the safety locks.
- 39] Raise the lift, disengage the locks, and lower fully to bleed the system.
- 40] Lift is ready for use.



NOTE: This would be a good time to perform Preventative maintenance and inspection of the lift.
(See operation manual.)

Remember to visit  $\underline{http://ste01.us/fg}$  for further information.