

Service Procedure

Rev. 0

Service Department

For: Standard cylinders

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Repacking a Cylinder

1. Before you disassemble the old cylinder, be sure you have these items on hand:
 - A repacking kit. Parts may be damaged when you disassemble the cylinder. You should have replacement parts on hand so you can reassemble the lift and use it immediately.
 - A supply of new hydraulic oil. Contaminated oil may damage the new packing.
 - A container to catch the used oil.
 - A clean place to work. Choose a place which will not be damaged if you spill some oil.
2. **Raise the lift and insert the maintenance devices.**
3. Turn off electrical power at the main disconnect or circuit breaker, or unplug the machine. This will prevent the lift from moving accidentally while you are working on it.
4. Disconnect the cylinder supply line at the pump, and place the end into a container to collect the used oil.
5. Disconnect the vent line at the cylinder(s).
6. At the top end of the cylinder rod, remove the “keeper,” and drive out the clevis pin. Push the rod back into the cylinder to drive the hydraulic fluid out through the hose into the container. You may use air pressure at the vent hole to do this. Disconnect the hydraulic line(s) from the cylinder(s). Lift the cylinder(s) out of the lift. Be careful the cylinder is heavy!
7. At the upper end of the cylinder, remove the snap ring.
Pull the rod and piston all the way out of the cylinder. This assembly is heavy -- be careful not to drop it as it comes free.
8. Remove the press-fit bushing from the hole at the upper end of the cylinder rod.
9. Look for deformation around the hole at the clevis end of the cylinder rod. If necessary, clean up the rod diameter with a file to allow the rod bearing to slide off without damage.
10. Remove the plastic rod bearing from the cylinder rod. Observe how the wiper ring sits in the rod bearing. Remove the wiper ring and the O-ring from the rod bearing. Do not try to remove the aluminum piston from the cylinder rod, as this will damage the assembly. Remove the poly U-cup and the fiber wear ring from the piston.
11. Check the vent plug, and clean it if it appears dirty.

NOTICE

While reassembling, it is very important to keep all of the parts free of dirt, dust, metal chips, water, and other contamination. Most of the problems with hydraulic systems are caused by contamination in the oil.

12. Clean the piston surfaces, and install a new fiber wear ring. Install a new poly U-cup seal, with the open part of the seal facing down.

13. Clean all of the surfaces on the rod bearing. Install a new O-ring and wiper. Replace the rod bearing assembly on the rod.

NOTICE

Be careful not to install the wiper backwards. The lip on the wiper should point upwards.

14. Clean the bore of the cylinder tube thoroughly. Inspect the bore of the tube for scratches that run up and down, along the length of the cylinder. If you do see any scratches, hone the inner surface of the cylinder. Be sure to clean the tube thoroughly after you do this.

15. Lubricate the seal and piston with clean grease or oil. Carefully insert the piston and rod back into the cylinder. Be very careful not to pinch or tear the poly U-cup as the piston passes the shoulder inside the cylinder. It is helpful to tip the rod assembly and twist it as you slide it into the cylinder. Once the piston is inside the cylinder, it should slide easily.

NOTICE

If the poly U-cup is pinched or torn during reassembly, the piston may not maintain pressure as designed.

16. Slide the rod bearing into the cylinder. Install a new snap ring to hold the rod bearing in place. Replace the bushing or install a new one in the top of the cylinder rod.

17. Install the cylinder in the lift. Replace the clevis pin and “keeper.” Reconnect all of the hydraulic lines and the vent line.

18. At the start of the packing process, you drained the cylinder(s) into a container. Replace this used oil with an equal amount of fresh oil. Be sure to reinstall the vent plug when you're done.

19. Turn on the electrical power and press the “up” button. The pump will self-prime. After a few seconds, the cylinder should lift the table off the blocks. Remove the maintenance devices. Cycle the lift up and down a few times to remove air pockets. Check for leaks.

20. Raise the lift and check the oil level with a dipstick. The oil should be about 3/4 inch above the bottom of the tank.

21. If you have spilled any oil, clean it up.

DANGER!

Spilled hydraulic oil is slippery, and may present a fire hazard. Always clean up any spilled oil



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Caution: Before performing any service on a machine read and understand all safety instructions in the service manual. Manuals are available free of charge, if you do not have one please call the Customer Service Department at the toll free number above.