



Read this entire set of instructions BEFORE you start replacing the seal kit. You will need to use common hand tools and compressed air so proper protective attire, especially eye protection, must be used during the job.

It is very important to keep all parts clean when working with hydraulic cylinders, even one small piece of dirt or grit can damage the cylinder.

Required Tools

- Eye protection
- Gloves
- Non-sharp seal tool (preferably plastic)
- Chain wrench or large pipe wrench
- Vise with steel jaws and rubber jaws
- Wrench set
- Torque wrench
- Fresh, clean hydraulic oil
- Fresh, clean grease compatible with oil above
- Clean shop rags
- Compressed air supply
- Adapters to connect air supply to cylinder ports

Piston Locking Nut Torque Values

Piston Nut Thread Size	Torque Value
3/8"-24	20 ft-lb
1/2"-20	40 ft-lb
3/4"-16	130 ft-lb
1"-14	190 ft-lb
1-1/4"-12	350 ft-lb

Seal Replacement Procedure

1. Drain all oil from cylinder.
2. Clean all dirt and grit from outside of cylinder.
3. Insert cylinder into vise.
4. Remove gland-retaining collar using a chain wrench or a large pipe wrench.
5. Remove the shaft assembly from the barrel.
6. Insert rod, gland and piston assembly into a soft jawed vise so that the gland and piston can be removed. Be sure the rod and vise are both clean before using.
7. Remove piston nut from the end of the rod and pull the gland and piston off of the rod.
8. Remove all seals from the gland and piston using a non-sharp seal tool such as item number 9-8099 available from Surplus Center.
9. Clean all oil and debris off of the gland, piston, rod, gland retainer and barrel using solvent, rags, and compressed air.
10. Inspect all parts for any wear or damage, if damage is found replace with new part.
11. Reinstall all seals on the gland and piston using the non-sharp seal tool.
12. Place a small amount of oil on the inside seals of the gland and reinstall it on the rod by slipping gland over the piston end of the rod being very careful not to damage the inside seals.
13. Place a small amount of oil on the inside seals of the piston and reinstall it on the rod by slowly twisting the piston on over the threads of the rod being very careful not to damage the inside seals.
14. Reinstall the piston nut; torque nut to the proper torque value shown in chart above.
15. Grease the outside seals of the gland and piston.
16. Reinstall the rod into the barrel of the cylinder and push in until the lip of the gland is flush with the end of the barrel.
17. Reinstall the gland-retaining collar and tighten with a chain wrench or a pipe wrench.
18. Cycle the cylinder using compressed air to check for proper operation.