



Installation Instructions

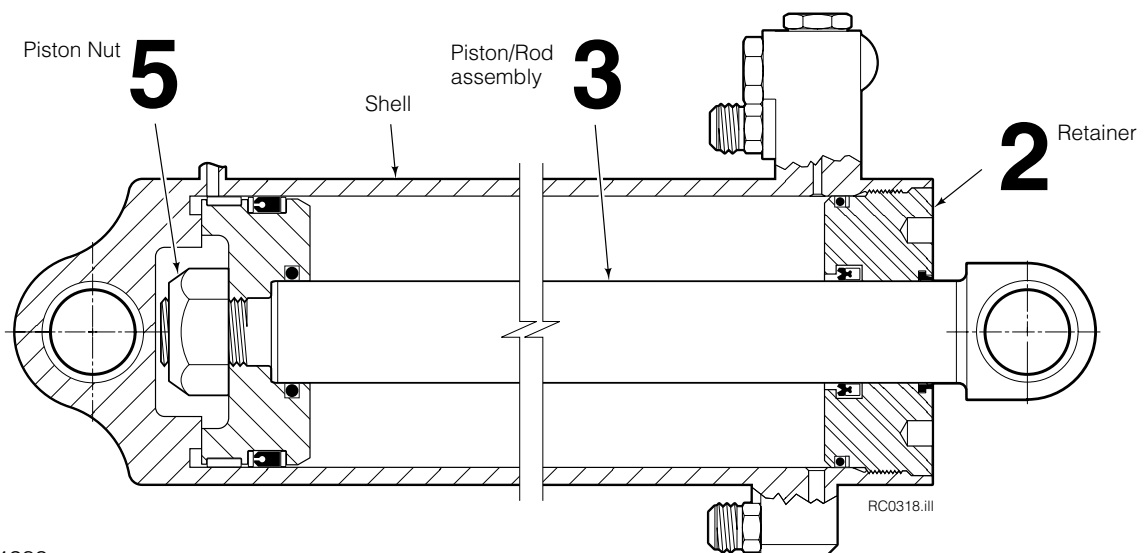
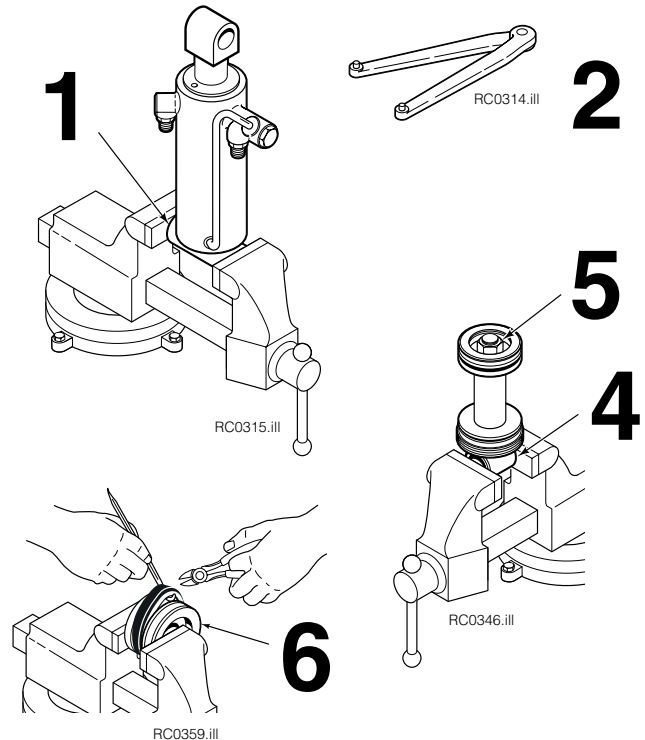
Cylinder Service Kit 555208

This sheet provides instructions to install Cylinder Seal Kit 555208.

Cylinder Disassembly

NOTE: Use a soft-jawed vise for all cylinder disassembly and assembly procedures.

- 1 Clamp the cylinder at the base end. **IMPORTANT: Do not clamp on the barrel of the shell.**
- 2 Remove the piston retainer with a pin-type spanner wrench.
- 3 Remove the piston/rod/retainer assembly from the cylinder shell.
- 4 Clamp the piston/rod/retainer assembly across the rod end. **IMPORTANT: Do not clamp on the rod sealing surface.**
- 5 Remove the piston nut from the rod.
- 6 Clamp the piston in a soft-jawed vise. Pry the seals up with a brass seal removal tool and cut to remove.
CAUTION: Do not scratch the seal grooves.



Part No. 554289

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Cylinder Inspection

- Inspect components for nicks or burrs. Remove minor nicks or burrs with 320-grit emery cloth. If they cannot be removed, replace the parts.
- Inspect the outside of the shell for any deformities or cuts that could reduce performance or cause leaks under pressure. If necessary, replace the part.

Cylinder Reassembly

- 1 Lubricate all new seals and O-rings with petroleum jelly.
- 2 Note the direction of the U-cup seals. **Pressure seals must always be installed with the lip toward the high pressure side of the cylinder.**
- 3 Polish the piston and retainer chamfer angle with emery cloth to facilitate seal installation.
- 4 Install new seals on the piston and retainer. Hook one side of the seal in the groove and stretch it over the piston or retainer as shown.
- 5 Install the retainer and piston on the cylinder rod. Tighten the piston nut to a torque of 200–225 ft.-lbs. (270–305 Nm).
- 6 Place the piston loader furnished with the seal kit into the cylinder shell. The loader must cover all the cylinder shell threads but not contact the thread relief chamfer. Trim the loader stop fins if more engagement is needed.

CAUTION: The piston will not enter the cylinder shell properly if the loader contacts the thread relief chamfer.
- 7 Apply a thick film of petroleum jelly to the inside of the cylinder shell, piston loader and piston seals.
- 8 Using a rubber mallet, tap the piston/rod assembly through the loader into the cylinder shell.
- 9 Remove the loader by cutting down one side and pulling it out of the cylinder bore.
- 10 Apply a thick film of petroleum jelly to the inside of the cylinder shell, and to the retainer and seal.
- 11 Thread the retainer into the cylinder shell and tighten to a torque of 350–400 ft.-lbs. (470–540 Nm).

