

Effective: April 2017



# **ChemCast® Seal Installation Instructions**



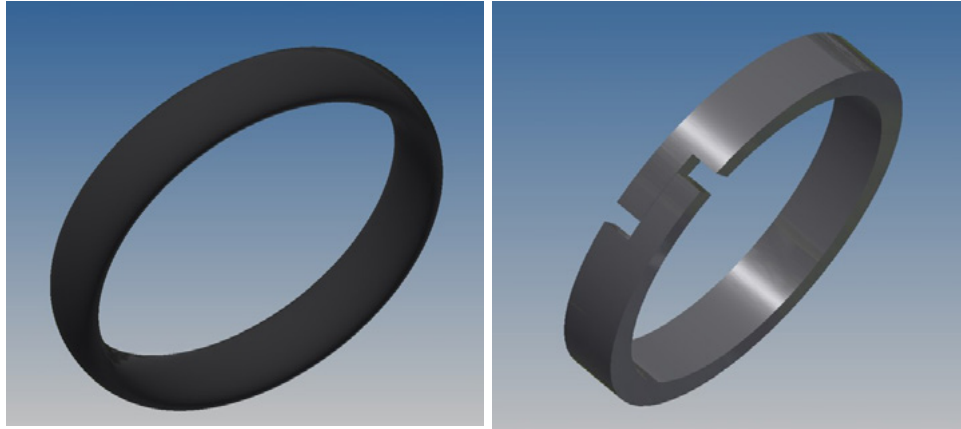
ENGINEERING YOUR SUCCESS.

### General Instructions:

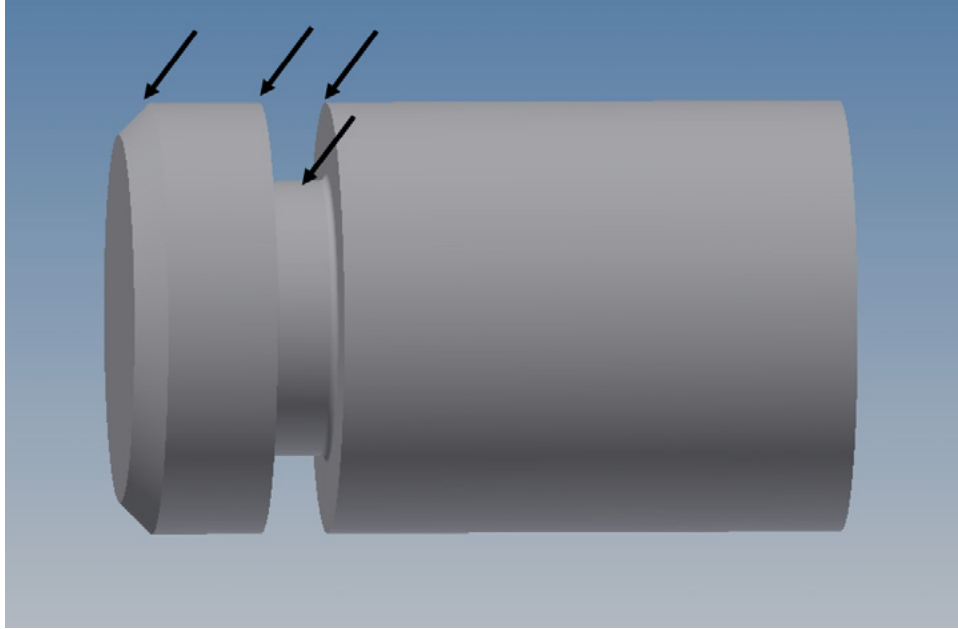
- Check the seal part number to the application dimensions to insure that the correct seal has been selected for installation.
- Clean and inspect all application contact surfaces thoroughly prior to installation.
- Using the recommended system fluid, lubricate all surfaces the seal will come in contact with.
- Use only the recommended tools for installation.



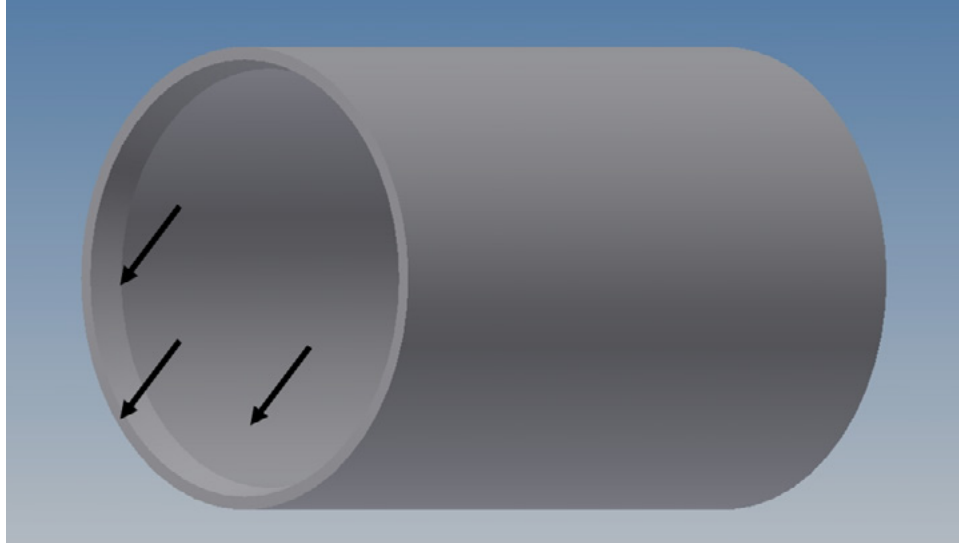
- Tools and supplies needed for assembly of a seal may include protective clothing, safety glasses and system hydraulic fluid. Other supplies, equipment or tooling may be required by the cylinder manufacturer.



The ChemCast® Seal consists of a rubber expander and a plastic seal ring with a step cut. Do not modify these component parts in any way. Grinding, trimming or shaving of any surface of the seal ring or expander will adversely affect the sealability of the seal assembly.

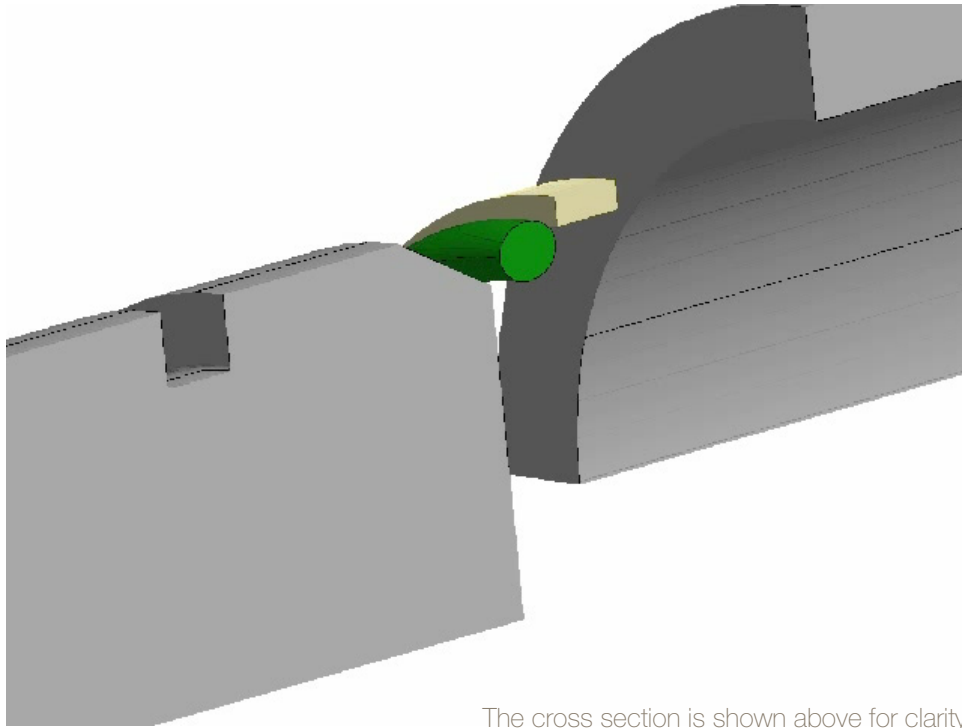


Inspect the piston and piston groove for sharp edges, gouges, dirt or debris that could damage the rubber expander.



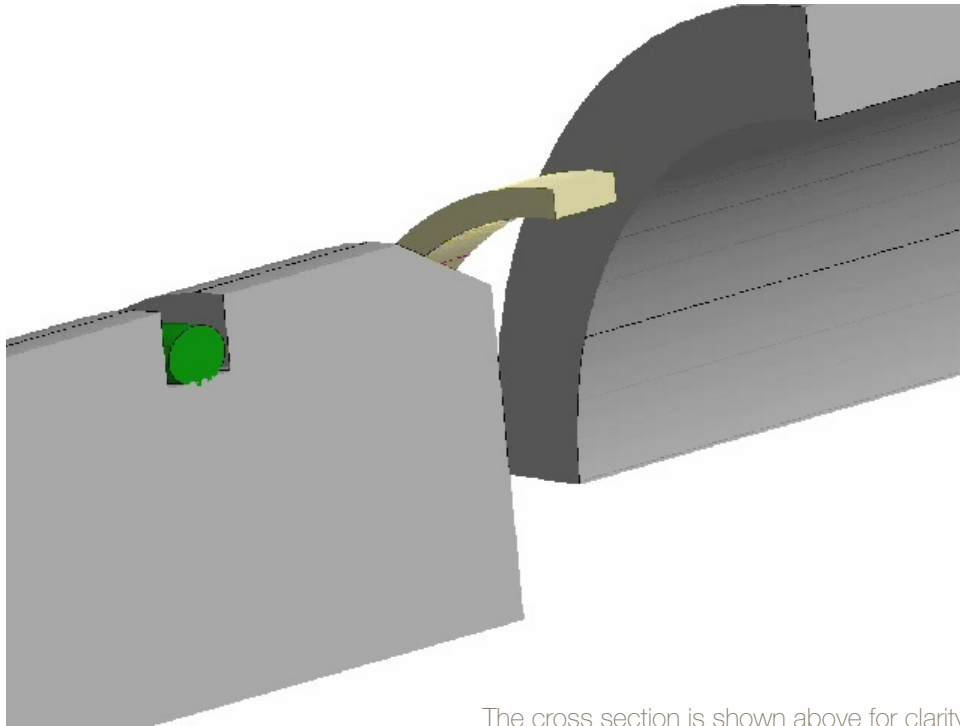
Inspect the bore and the bore lead-in chamfer for nicks, burrs with sharp edges, gouges, dirt or debris that could damage the plastic seal ring.

The entrance chamfer is recommended to have a maximum angle of  $15^{\circ}$  with a minimum bore diameter of 0.0125 inches larger than the maximum cylinder bore.



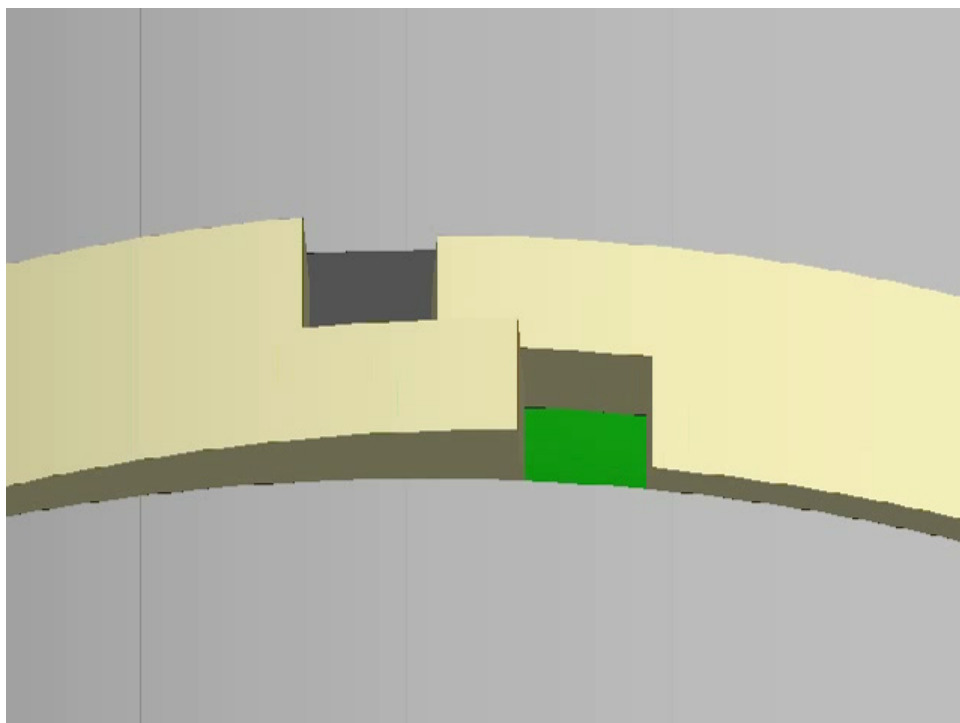
The cross section is shown above for clarity

Apply a thin film of hydraulic fluid to the expander, seal ring, bore and piston to ease assembly. Using both hands, stretch the rubber expander over the piston and slide into the groove. Exercise caution to not use any tool with sharp edges to damage the expander or transport debris onto the seal.



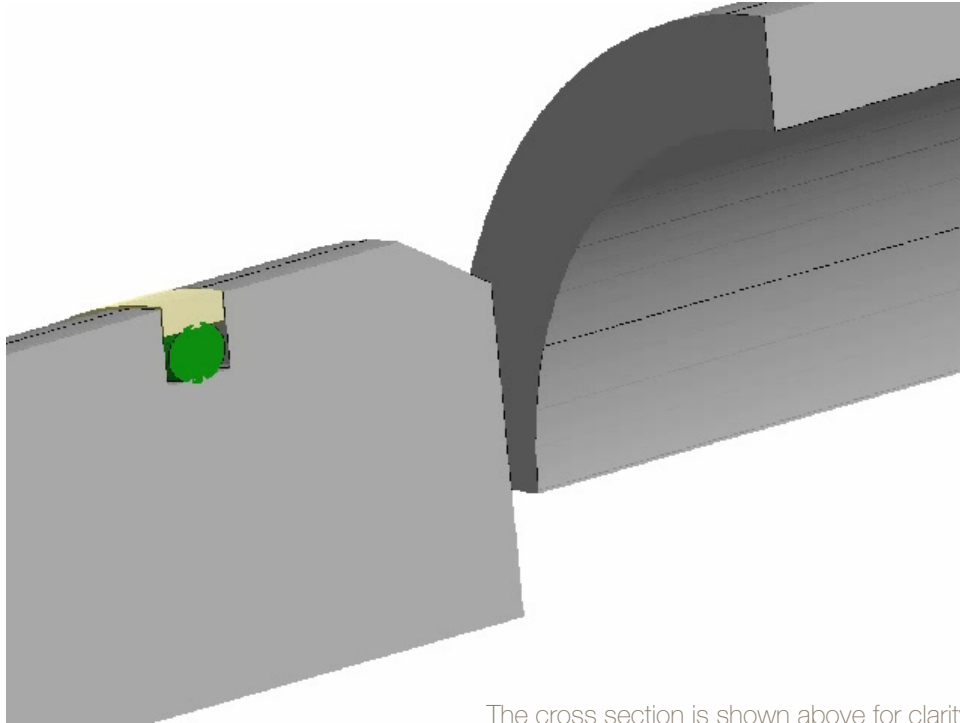
The cross section is shown above for clarity

Slide the plastic seal ring over the piston and position over the expander in the piston groove. Make sure to expand the plastic ring diameter only enough to slip over the piston diameter. Excessive stretching of the seal ring will weaken the seal ring. Exercise caution to not transport debris onto the seal components.



Compress the seal ring so that the step joint is fitted properly.





The cross section is shown above for clarity

Lubricate all seals and install the piston into the bore so that the plastic step joint is approximately opposite the cylinder fluid port. Carefully, slide the piston assembly into the bore making sure that the plastic ring remains in the piston groove and is not damaged. Fill with system recommended fluid and follow the cylinder manufacturer's system final assembly instructions.

