

## Clamp Assembly

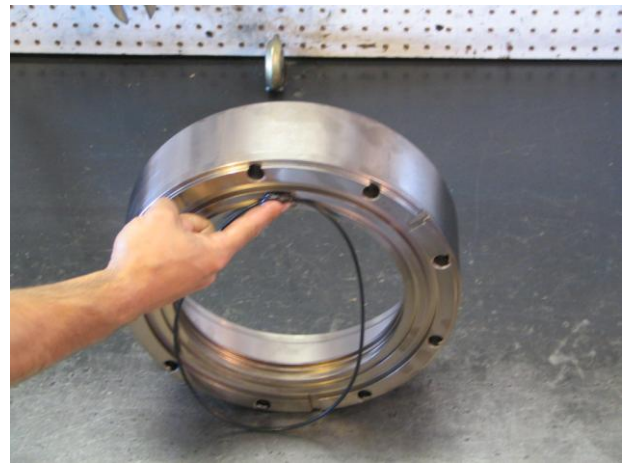
The assembly of the clamp is accomplished in the sequence listed below.

- NOTE:**
- a) the housing and all internal parts must be thoroughly cleaned and free from burrs before assembly.
  - b) all seals and other internal parts must be oiled and/or greased before assembly.
  - c) all bolts should have an Anti-seize compound on them before being installed

The following is a detailed step by step procedure.....



Install the 9 Oil Seals (18100156) in the Rod Clamp Housing (18100170).

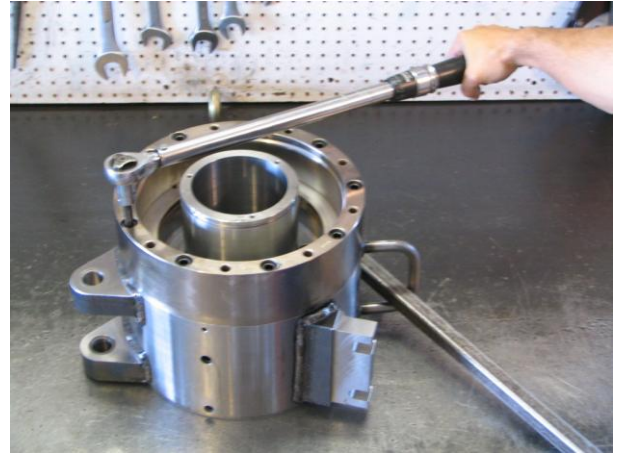


Install an O-Ring (18100191) in the Cylinder (18100052).



Install the Cylinder (18100052) on the Rod Clamp Housing (18100170) (you can use 2 bolts as shown to assist you). NOTE the position of the ¼ NPT tapped hole on the side of the Cylinder.

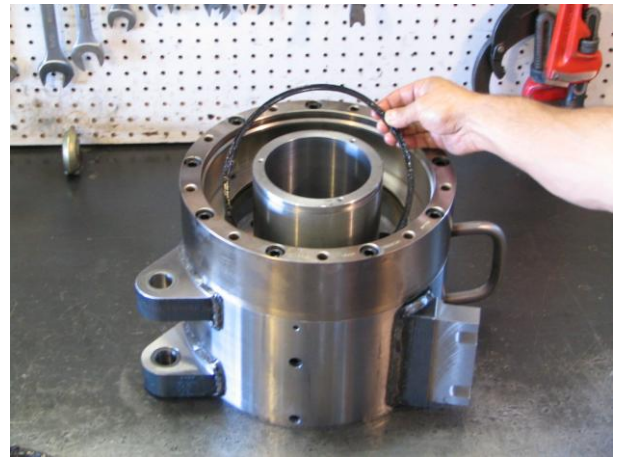




Apply an Anti-Seize compound to the 9 bolts ( $\frac{1}{2}$ " x 4" long) and torque to 70 ft.lbs.



Apply a small bead of grease in the 2 U-Cup Seals



Install the U-Cup Seal (18100062) in the top groove of the Cylinder (18100052), with the groove facing up.



Apply grease to the Wear Ring (18100064) and install it in the bottom groove of the Cylinder (18100052).



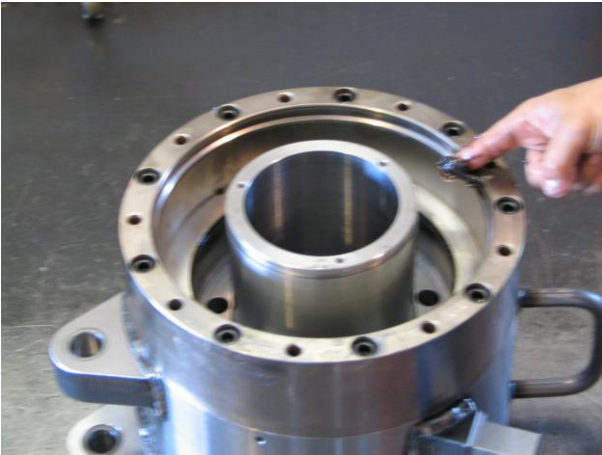
Install the U-Cup Seal (18100061) in the top groove of the Piston (18100171), with the groove facing up.



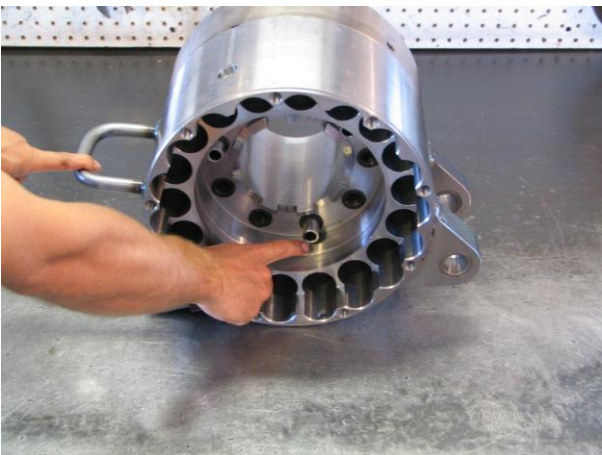
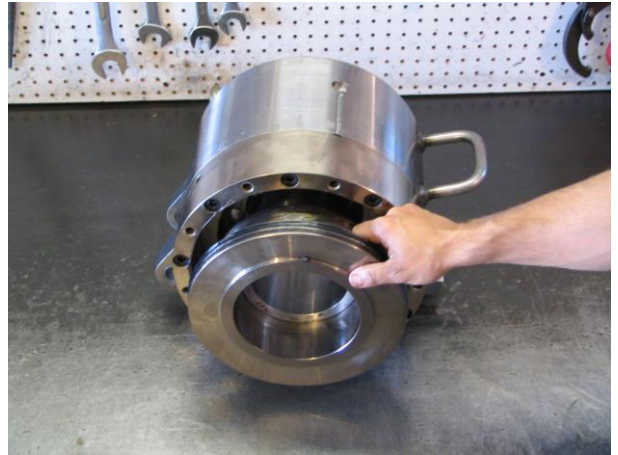
Apply grease to the Wear Ring (18100063) and install it in the bottom groove of the Piston.



Apply grease at the top of the Piston, to facilitate the installation in the Cylinder.



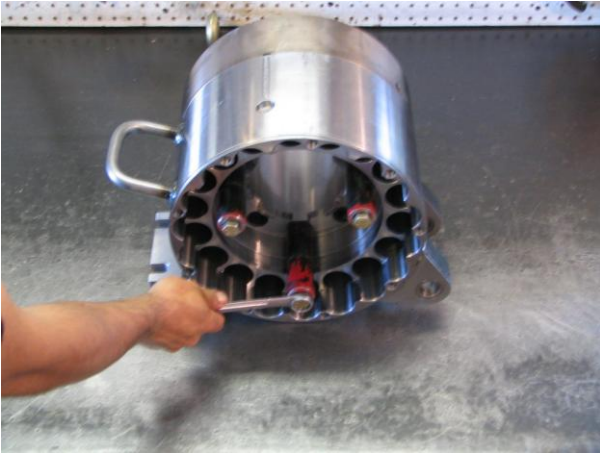
Apply grease at the top of the inside of the Cylinder to facilitate the installation of the Piston.



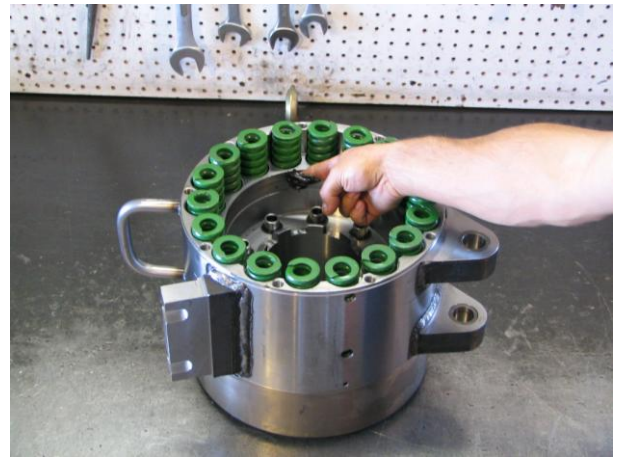
Insert the 9 Bottom Spacers (18100059)



Properly align the 9 tapped holes in the Piston with the holes in the Clamp Housing

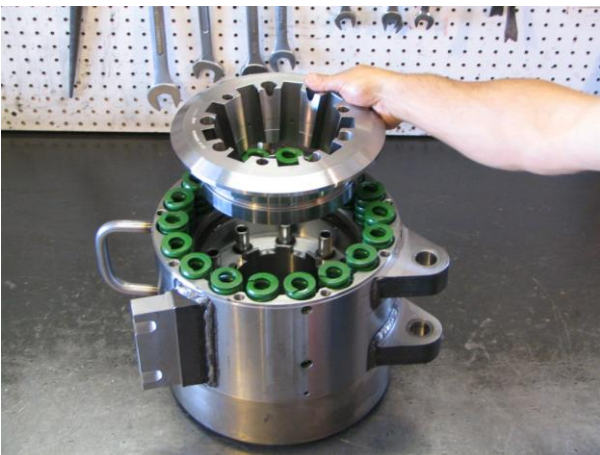


Use 3 bolts (1/2" x 8" long) and 3 pieces of tubing ( 1.25" OD x 1" ID x 4.75" long ) to pull the Piston into the Cylinder. Verify that the Wear Ring is properly positioned as you pull the Piston in.



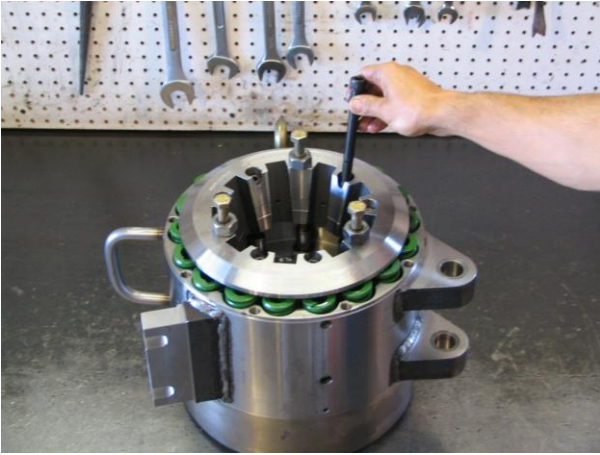
Insert the 18 Springs (18100155).

Apply grease to the inside of Clamp Housing

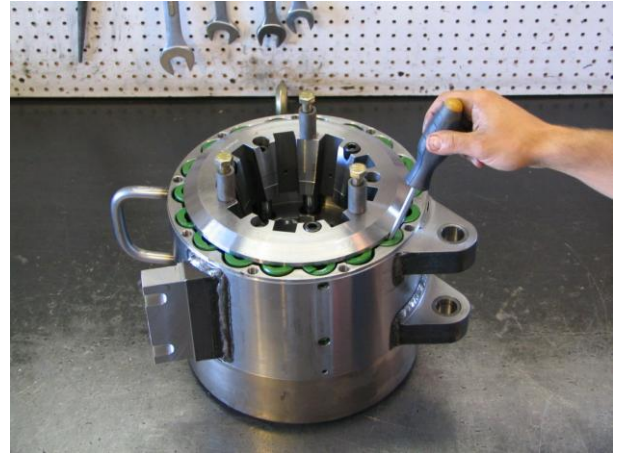


Install the Clamp Bowl (18100169).

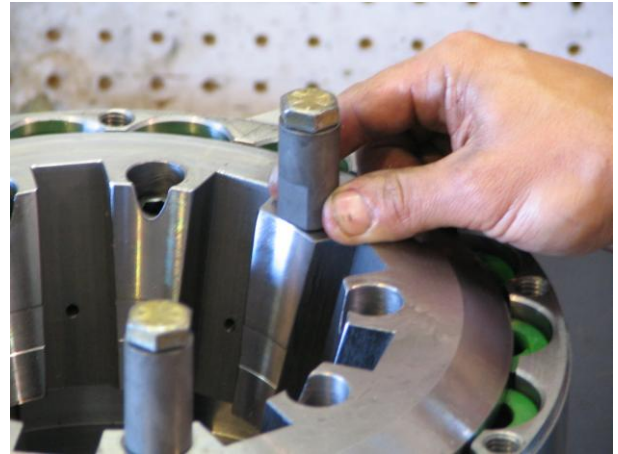
Use 3 bolts (1/2" x 8" long) and 5/8" nuts to pull the Piston and Clamp Bowl together.



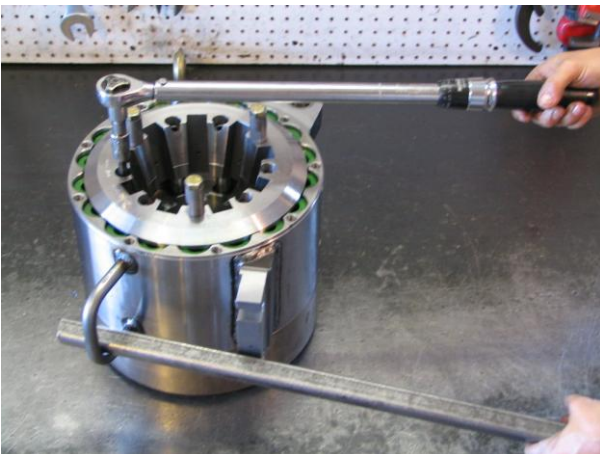
Insert 6 - 5 ½” long Allen bolts, and fasten these once they make contact with the Piston.



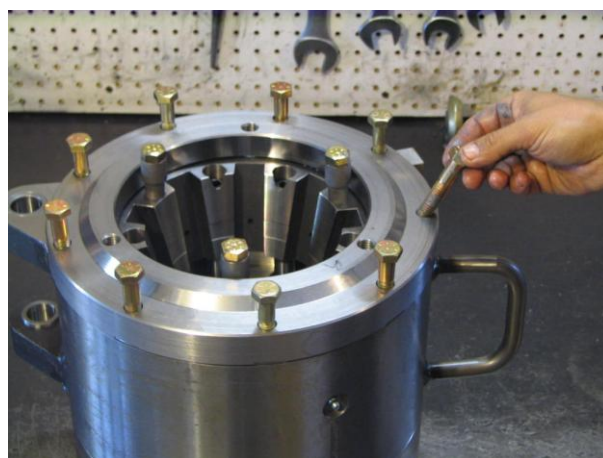
Using a screw driver, pry the springs toward the outside of the Clamp Housing. This will ensure that the springs are properly positioned under the Clamp Bowl.



Remove the 8” long bolts and nuts. Install the 3 Top Spacers (18100202) and the 3 – 8” long bolts.  
NOTE : the Top Spacers must be installed with the flat facing the inside of the Clamp Bowl.



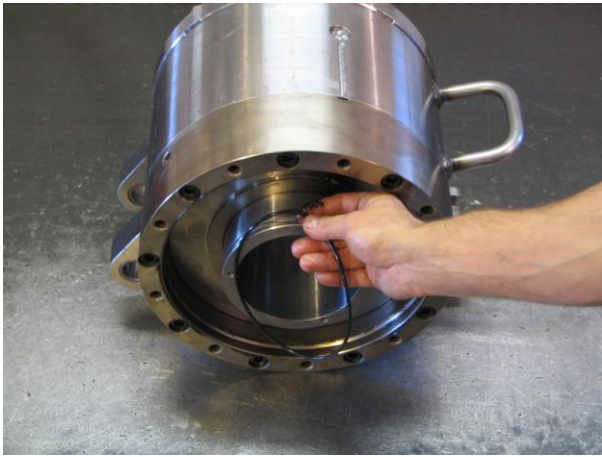
Torque all 9 bolts to 70 ft.lbs.  
NOTE : use a pair of vice grips to hold the Top Spacers when torquing.



Install the Top Cap Holder (18100168) and the 9 bolts (1/2" x 2 1/4" long).  
NOTE : the holes to fasten the Top Cap (18100167) must be between 2 of the 8" long bolts.  
Torque all of the 9 bolts to 70 ft.lbs.



Install the Top Cap (18100167) and torque the 3 bolts (5/8" x 1 1/2" long) to 70 ft.lbs.



Install the O-Ring (18100200) in the hub of the Clamp Housing

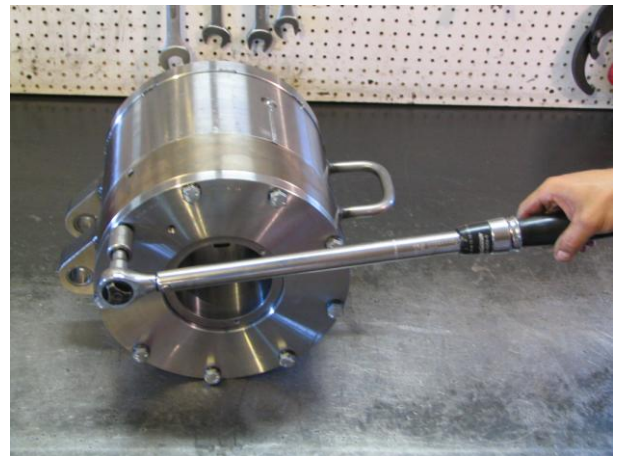


Install the O-Ring (18100192) in the Bottom Cap (18100172).



Install the Bottom Cap in the Cylinder.

NOTE : the hole for the Breather Plug in the Bottom Cap must be near the hole for the hydraulic fitting in the Cylinder.



Apply an Anti-Seize compound and install the 9 bolts (1/2" x 2" long) and Lockwashers, and torque all 9 bolts to 70 ft.lbs.



Install the Breather Plug (18100173) in the Bottom Cap (18100172).



Install the 3 Grease Fittings (1 in the Cylinder, and 2 in the Clamp Housing).

Your Rod Clamp Assembly is now complete.