



“O” Ring Replacement (Part #5)

- Step 1: Remove the spherically seated cylinder platen out of the piston and the lower platen off the bottom crosshead. Place a 6” x 12” concrete cylinder inside the load frame. You will use it to set the piston on.
- Step 2: Place a rag under the hydraulic hose fitting on the flow control valve mounted on top of the pump. Now, loosen the hydraulic hose fitting. You do not need to remove the hose, just loosen it to break the air lock. After the new “O”-ring is installed and the piston is placed back in the cylinder, DO NOT OVER – TIGHTEN THIS FITTING. Tighten it and then run the machine. Retighten it until it stops leaking. Tools needed: 9/16” and 11/16” Wrench.
- Step 3: On the top of the machine, loosen the 3/8” nut (part #2) to the end of the tension rod thread (part #7) and stop. DO NOT REMOVE THE NUT. Tool needed: 9/16” wrench.
- Step 4: Place one hand on each bolt (Part #9) and push the piston down about 2”. With a 15/16” wrench, remove both bolts (part #9) out of the piston return spring (part #6). Now, put the bolts back into the piston. Carefully, with one hand on each bolt, push the piston out of the cylinder. Set it on top of the concrete cylinder and then remove it from the load frame. BE CAREFUL NOT TO DROP IT, you may nick its finish. Tool needed: 15/16” wrench.
- Step 5: Wipe the inside of the cylinder out with a clean rag. Look up inside the cylinder; you will see a groove cut in the side of the cylinder 3/4” from the bottom. With a small blade screwdriver, remove the round black “O”-ring.
- Take a clean rage and clean out the “O”-ring groove. Now, push the new “O”-ring into place on top of the white plastic ring in the same groove. Wipe the bottom half of the cylinder and “O”-ring, on the inside of the cylinder with clean ATF oil.
- Step 6: Inspect the piston for scratches. If there are any, you can buff them off with extra fine emery paper. Wipe the piston off to remove all dirt, and set it on top of the concrete cylinder inside the load frame.
- Center it under the cylinder opening and coat the upper half of the piston with ATF oil. Keep the piston level and lift it into the cylinder. Push it up into the cylinder at least 4”. If you don’t keep the piston level, it will be very hard to get it back inside the cylinder.
- Place a block of wood or something under the piston to hold it up inside the cylinder.
- Remove both bolts (part #9) out of the piston. Place them through the ring on the end of the return spring and put them back into the piston. Tighten them with a 15/16” wrench.
- Step 7: On the top of the machine tighten both 3/8” nuts (part #2). Go from nut to nut taking up about 1/2 “ of thread each time until they are tight and the piston has been pulled all the way back into the cylinder. Check each bolt to see that you have an equal amount of thread used on each nut rod. Retighten fitting on the flow control valve. Run the machine to check for leaks.

Tools Needed: 9/16", 11/16" and 15/16" open end wrench, small blade screwdriver, rags and a ruler.

