



DOSATRON®

An Ingersoll Rand Business

Piston Flange Kit

D14T Series Part #: PPD1034-1



GENUINE
DOSATRON
PARTS

Dosatron Hot-Water Piston Kit

Part #: PPDI034-1

This kit is for the Dosatron D14T Series

Hot-Water Piston Flange Kit Contents:

PDI651U Omega Spring	
PDI649-1 Connecting Rod	
PDI648 Push Rod Seal	
MPDI243U Upper Flange	
MPDI244U Lower Flange	
PDI1236 Top Locking Ring	
PDI1237 Lower Locking Ring	



Remember to wear proper protection when performing maintenance such as gloves, eyewear, and apron.

Hot-Water Piston Kit Instructions

1



Unscrew and remove the Bell Housing, you may have to use a strap wrench.

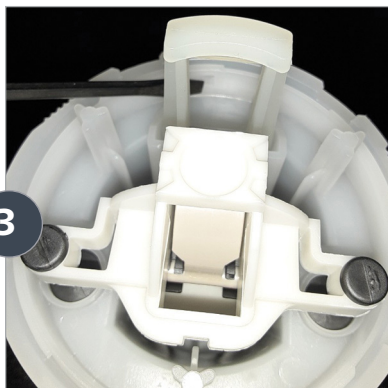
Pull the piston out of the Dosatron injector, and set the bell housing and body aside.

2



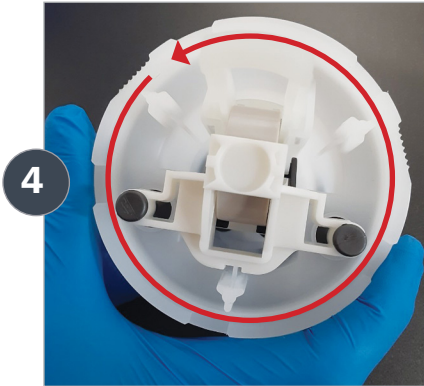
Remove the Plunger from the Piston by twisting a quarter turn counterclockwise, and set aside.

3

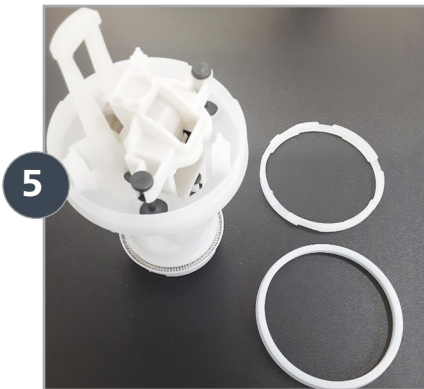


Locate the small notch inside the top of the white piston shell.

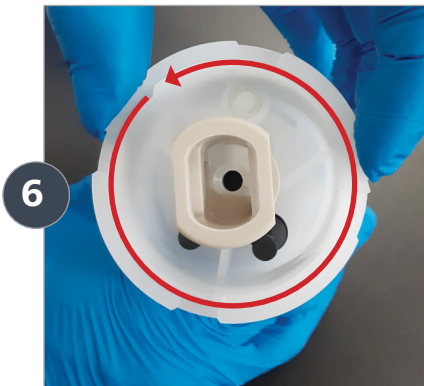
This is where a tooth on the inside of the Top Locking Ring will secure it into place on the white piston shell.



Squeeze the Locking Ring from grip points outside-edge and turn it counterclockwise to unlock the tooth.



Lift up the old Top Locking Ring and Upper Flange to remove from the Piston shell.



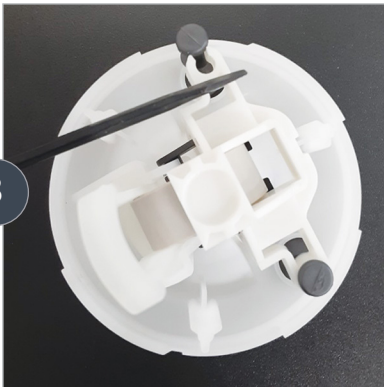
Flip the piston upside down and follow steps 3 - 4 to unlock the Lower Locking Ring.

7



Lift up the old Lower Locking Ring and Lower Flange to remove from the Piston shell.

8



With the use of a flat head screwdriver, remove the upper valves from the guide.

The valves look like golf tees. These will drop down and out of the piston shell. Set them aside.

9



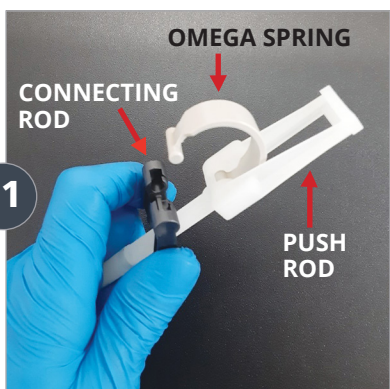
Grasp the top of the white plastic components inside the piston shell, and pull the piston's mechanism up and out.

10



Now you have two subassemblies, the push rod on the right and valve support frame on the left.

11



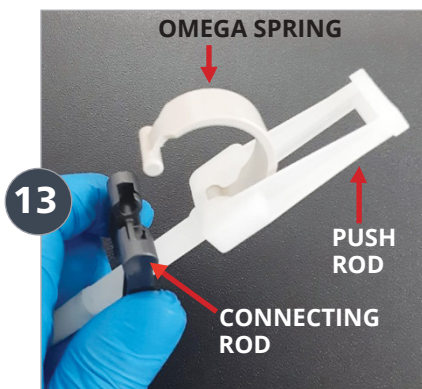
In order to disassemble the push rod, remove the Connecting Rod from the Omega Spring.

Now, twist the Omega Spring to remove from push rod.

12

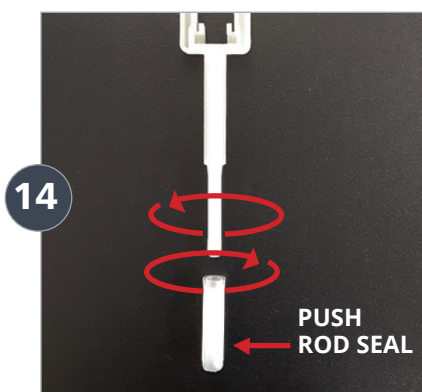


Install the **NEW Omega Spring (PDI651U)** by carefully pushing into its location on the push rod. You will hear a small click when secured properly.



Slide the other end of the Omega Spring into the **NEW Connecting Rod (PDI649-1)**.

The key to this step is to make sure the curved top of the Push Rod faces in the same direction as the Omega Spring.



Remove Push Rod Seal by grasping and twist a quarter of a turn counterclockwise.

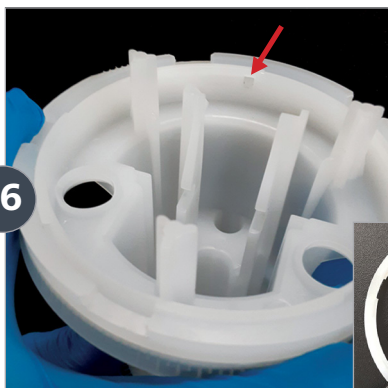
Carefully slide the **NEW Push Rod Seal (PDI648)** onto the push rod as far as it will go, then twist it clockwise a quarter of a turn to lock in place.



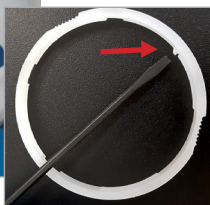
Install the **NEW Upper Piston Flange (MPDI243U)**, with the larger end facing down, by carefully pressing it onto the upper flange mounting area as far as it goes.

NOTE: Be careful not to press down too hard as it can damage the flange.

16



To install the **NEW Top Locking Ring (PDI1236)** locate the small tooth on the inner diameter of the ring, and align the tooth on the Top Locking Ring with the notch on top of the piston shell.



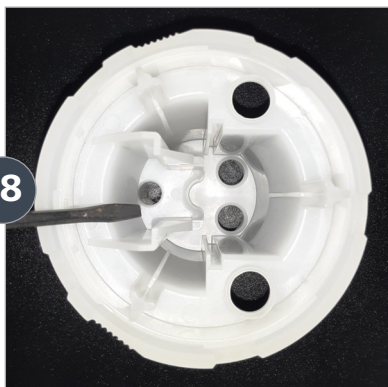
Press down the Locking Ring and turn clockwise until the tooth locks into the notch on the shell.

17



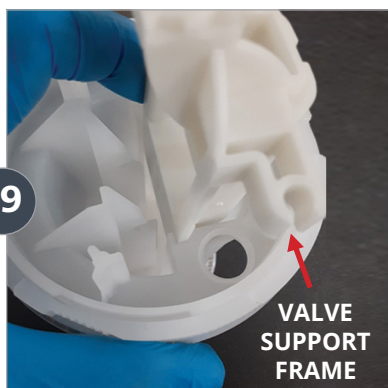
Flip the piston shell over and repeat step 15 - 16 to install the **NEW Lower Piston Flange (MPDI244U)** and **Lower Locking Ring (PDI1237)**.

18



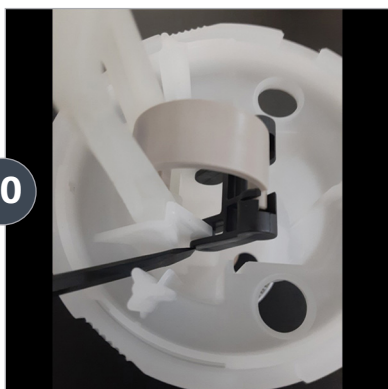
Before reinstalling the push rod and valve support assembly, look inside the piston shell. You will notice four holes in a line and a single hole on the other side.

19



The valve support frame will align on the side with the four holes, making sure it goes into the grooves.

20



To demonstrate the alignment of the push rod assembly, the curved top would be facing inward, inserting the push rod into the single hole at the bottom of the piston shell.

This is where the connecting rod sits in the piston. The key is to make sure the grey connecting rod drops into the notches inside the piston shell.

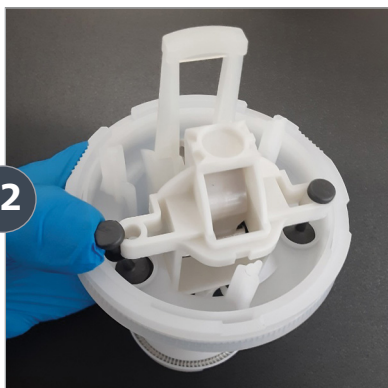
21



To insert both the valve support frame and the push rod into the piston shell, use your index finger to push on the spring.

This will set everything into place, and you will hear a click. If the parts aren't fitting together, just lift both assemblies out and try again.

22



Insert the upper valves through the bottom of the top area, and snap them into the valve support frame.

23



To test the piston, pull the push rod up then push down a few times, it should click in both directions.

24



Reinstall the plunger into the bottom of the piston shell and twist a quarter turn clockwise to lock into place.

25



Carefully press the piston back into the injector and reinstall the bell housing.

If you have any questions, call **1-800-523-8449** or to **CHAT** visit **www.dosatronusa.com**.

2090 Sunnydale Blvd. • Clearwater, FL 33765
1-800-523-8499 • www.dosatron.com