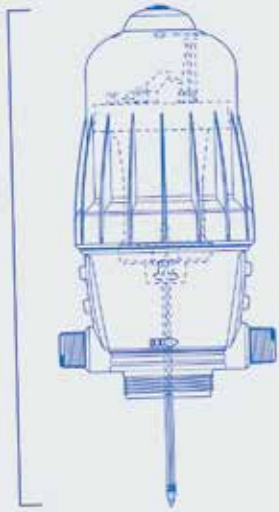
DOSATRON®

WATER POWERED DOSING TECHNOLOGY

Extend the Life of Your Dosatron

REBUILD KIT



D14MZ3000VFIIK
Part #: MKD14MZ3000K

Kit includes:
Part 1: Piston Kit
Upper flange
Lower flange
Omega spring
Connecting rod
Push rod seal
Part 2: Seal Kit
Injection sleeve o-ring
Injection stem o-ring
Check valve assembly
Plunger with seal

GENUINE DOSATRON PARTS

Congratulations on purchasing your Dosatron Rebuild Kit.

Part #: MKD14MZ3000K

This kit is for the Dosatron D14MZ3000VFIIK and consists of two parts:

- Part 1 - Piston Kit
- Part 2 - Seal Kit

Part 1 - Piston Kit Contents:	
PDI651 - Omega Spring	
PDI649 - Connecting Rod	
PDI648 - Push Rod Seal	
PDI643 - Upper Flange	
PDI644 - Lower Flange	

Part 2 - Seal Kit Contents:	
PJDI140 - Check Valve Assembly	
JDI120 - Injection Stem O-Ring	
JDI100 - Injection Sleeve O-Ring	
PJDI138 - Plunger With Seal	

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

CHAT at www.dosatronusa.com

MKD14MZ3000K

Part 1: Piston Kit Instructions

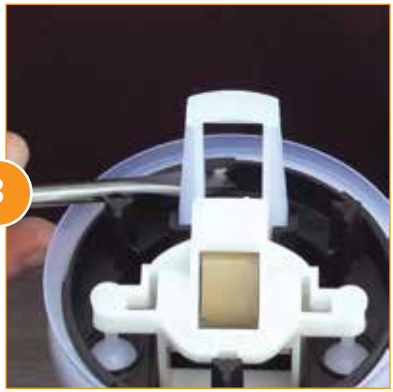
1

Begin by removing the piston from your Dosatron injector. Unscrew and remove the bell housing (you may use a universal strap wrench), pulling the piston out of the body. Set the bell housing and body aside.

2

Position needle nose pliers near the top of the plunger, and carefully twist the plunger counter clockwise to remove.

3



In order to remove the top or larger diameter flange, locate the small notch inside the black piston shell. This is where a tooth, on the inside of the flange, locks it into place.

4

You will need to apply pressure to the flange on either side of the notch as you twist the flange counter clockwise. It may be a snug fit. Lift to remove and discard.

5

Flip the piston upside down and follow steps 3 and 4 to remove the lower or smaller diameter flange.

6

To remove the motor and valve support assembly from the piston shell, you will need a flat head screwdriver. Using the screwdriver, remove the upper valves from the guide. The valves look like golf tees and will drop down and out of the piston shell. Set them aside.

7

Grasp the top of the white plastic parts of the mechanism and lift straight up.

8

You now have two subassemblies – the push rod on the left and the valve support frame on the right.

9

In order to disassemble the push rod, remove the connecting rod off the Omega spring.

10

Twist to remove the Omega spring out of the push rod.

Install the new **Omega Spring (Part #: PDI651)** by carefully pushing the Omega spring into the push rod.

11

Slide the other end of the Omega spring into the new **Connecting Rod (Part #: PDI649)**. 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.

12

Replace the **Push Rod Seal (Part #: PDI648)**. Remove by grasping and turning counter clockwise. Carefully slide the new push rod seal onto the push rod as far as it will go and twist a quarter turn clockwise to lock.

13

Install the new **Upper Flange (Part #: PDI643)** by locating the small tooth on the inner diameter of the flange.

14

Now locate the notch on the piston shell.

15

Be careful not to install the flange upside down.

Align the tooth with the shell and press down and twist a quarter turn clockwise to lock. If it is difficult to twist or if the flange lifts up easily, just remove the flange, realign and try again.

Install the new **Lower Flange (Part #: PDI644)** the same way.

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

Notice how the valve support frame aligns 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 face inward, inserting the push rod into the single hole. This is where the connecting rod sits in the piston.

21

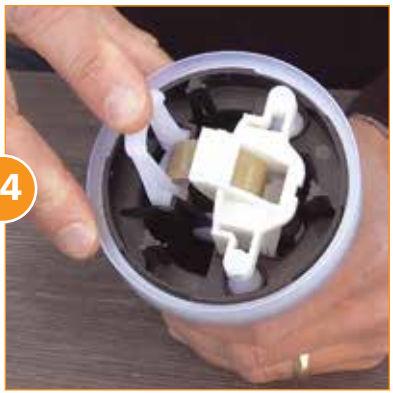
The key is to make sure the white connecting rod drops into the notches inside the piston shell.

22

Now 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 subassemblies out and try again.

23

Insert the upper valves into the bottom of the upper area, snapping them into the valve support frame.



24

To test the piston pull the push rod up and press it down a few times. It should click in both directions.

Click on QR code to view video.

D14MZ3000
Piston Video

D14MZ3000
Troubleshooting Video

For video instructions go to: http://www.dosatronusa.com/d14mz3000/ and view the D14MZ3000 Troubleshooting Video and the D14MZ3000 Piston Video or scan the QR codes with your smart phone.

MKD14MZ3000K

Part 2: Seal Kit Instructions

PJDI139

1

Unscrew the suction hose nut and remove the suction hose.

2

Unscrew the injection stem nut.

3

Pull the injection stem straight out from the body of the injector. Set the nut and body aside.

4

Unscrew and remove the check valve nut.

5

Grab the barb and pull the check valve assembly straight out. It usually comes out in two pieces. Discard all check valve parts.

6

Unscrew and remove the lock nut.

7

Remove the C clamp by spreading the opening and sliding it down over the threads.

8

Unscrew and remove the adjusting nut.

9

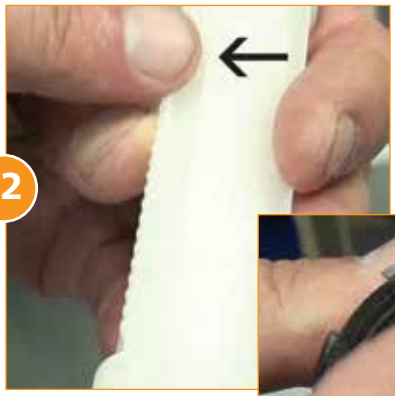
Push the white injection stem up and out of the black sleeve.

10

Remove and replace the **Injection Stem O-Ring (Part #: JDI120)**.

11

Remove and replace the **Injection Sleeve O-Ring (Part #: JDI100)**.



12

Align the groove in the white stem with the tooth inside the lower portion of the black sleeve. Sliding the stem down in, as far as possible.

13

Thread the adjusting nut back onto the black sleeve.

14

Replace the C clamp by sliding it over the threads. Rotate until it clicks into place.

15

Thread on the lock nut and hand tighten.

16

Install the new **Check Valve Assembly (Part #: PJDI140)** into the stem. Make sure it is in the position shown before inserting into the stem.

17

Reinstall the check valve nut.

18

Reinstall the **Plunger with Seal (Part #: PJDI138)** into the bottom of the piston shell. Using the needle nose pliers twist the plunger a quarter turn clockwise to lock.

19

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

20

To finish up, carefully insert the plunger into injection stem assembly.

NOTE: Be extremely careful not to bend the plunger when reassembling.

21

Align the notches in the lower part of the blue body with the teeth on the top of the injection stem assembly. Make sure the scale of your preference is facing out.

If the scale you prefer is not facing out, loosen the stem nut and remove. Pull the stem down slightly, rotate 180 degrees and push it back up.

22

Reinstall the nut hand tight.

23

Before installing the suction hose, slide the ferrule back onto the hose. Cut a half inch off the top of the hose.

24

Reposition the ferrule as shown.

25

Insert the hose onto the barb.

26

Hand tighten the hose nut.

27

After you tighten the nut, pull on the hose to make sure it is connected securely.

If the hose comes off easily, cut another half inch off and reattach.

Click on QR code to view video.

D14MZ3000
Seal Kit Video

For video instructions go to:
https://www.youtube.com/user/DosatronIntl
and view the D14MZ3000 Seal Kit Video or scan the QR code with your smart phone.

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