

The Flush Kit:
The perfect companion to Harvest Right home freeze dryers



The Flush Kit

User's Manual

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Congratulations on the purchase and ownership of a Harvest Right freeze dryer and our vacuum pump Flush Kit. Follow these simple instructions to learn how to install your Flush Kit, the filter, how to drain out the water and how to change the oil and filter.

Included parts:

1. One fully assembled kit with
 - 1 filter housing
 - 2 hoses
 - 1 vacuum line assembly
 - 1 filter



How to install your Flush Kit

If your freeze dryer is new, skip to step 2.

1. Drain the oil from the vacuum pump by opening the drain valve.
2. Tip the vacuum pump up on its back so the drain valve is easily accessible. Take a ½” wrench and unscrew and remove the drain valve.
3. Attach the ¼” oil line where the drain valve was, using a 9/16” wrench.



4. *Attach the flared fitting that is on the bottom of the “T” to the flared fitting on the top of the pump.



5. *Attach the vacuum hose to the remaining fitting on the "T".



*Please note that your fitting may vary slightly from what is shown in the pictures, depending on your freeze dryer and flush kit model.

How to install the OPTIONAL bracket

Cart mounting bracket:

1. Install the cart bracket to the cart with the enclosed four self-tapping screws. Then attach the filter housing to the bracket with the enclosed three nuts and bolts using two ½" wrenches. Please ensure that the hose from the bottom of the pump is sloping downward towards the filter housing.

Countertop mounting bracket:

1. Install the filter housing to the countertop bracket with the three enclosed nuts and bolts. Then place the vacuum pump on the top of the bracket and ensure that the hose from the bottom of the pump is sloping downward towards the filter housing.

IMPORTANT: make sure to mount your filter LOWER than the vacuum pump so water can gravity feed to the drain on the filter.

The Flush Kit is now installed and ready for you to add the oil in the pump, filter and hoses.

Oil and filter installation:

1. Set the oil filter on a surface, standing upright. Fill the oil filter to the top with vacuum pump oil. Notice it will keep draining down until it is filled with oil.

2. Dip your finger in oil and apply a layer of oil over the black gasket on the oil filter.
3. Screw the filter onto the filter housing and tighten with your hands only. Do not use a wrench.
4. Fill the vacuum pump with oil until you can see the oil level just above the round hole in the window of the vacuum pump.

IMPORTANT: make sure to place your filter LOWER than the vacuum pump so water can gravity feed to the drain on the filter.

5. Now start the vacuum pump by starting the freeze dryer like normal. Set the freeze time to zero (0) by turning the dial or using the touch screen – depending on your freeze dryer model. This will start your pump. Let the pump run for one minute or until bubbles are no longer visible. You will now see that the oil level in the vacuum pump is lower than when you filled it. This is because it has now filled the hoses with oil.
6. Fill the vacuum pump with oil up to the recommended level.
7. Turn the pump back on and run a flush for two more minutes. This will remove all the remaining air out of the system.
8. Replace the oil cap.

Congratulations you finished and are now ready to do a power flush!

How to do a power flush:

Always drain the water out BEFORE you complete a power flush.

1. Make sure the pressure release valve (located behind the freeze dryer) is open.
2. Turn the valve to power flush.
*Valve is in power flush mode when it is horizontal, or pointing towards the oil line hoses. Valve is in freeze dry mode when it is vertical, or pointing towards the pump.
3. Start the vacuum pump by starting the freeze dryer like normal. Set the freeze time to zero (0) by turning the dial or using the touch screen – depending on your freeze dryer model. This will start the power flush. Run the pump for 3-4 minutes.
4. Turn the freeze dryer off.
5. Turn the valve back to freeze dry.

How to change the oil filter:

1. Drain the oil out of the pump as described above.
2. Unscrew the oil filter into a can or bowl.
3. Fill new filter with oil all the way to the top.
4. Put a small amount of oil on the gasket at the top of the filter.
5. Screw filter back on and fill the vacuum pump with oil as previously described. See “Oil and filter installation” for more details.

How to drain out the water:

Drain the water out BEFORE you run a power flush!

1. Get a clear container and set it under the filter.

2. Unscrew the petcock located on the bottom of the filter and drain until the oil runs freely.
3. Run a power flush
4. Refill the oil back to the recommended oil level.

How to change the oil:

1. Unscrew the oil cap at the top of the pump.
2. Set a container that will hold at least one quart of oil under the filter and unscrew the petcock located on the bottom of the filter.
3. Drain oil out completely and discard all used oil.
4. Fill new oil in at the top of the pump until oil is at the recommended oil level.

Freeze Dryer Accessories does NOT recommend reusing the oil that was removed from the pump. Please discard any old oil.

Troubleshooting:

-Your freeze dryer won't achieve a vacuum:

Have you been using your freeze dryer with the Flush Kit installed for some time and just now having issues achieving a vacuum or was this your first time using it since the initial installation?

Trouble shooting after initial installation:

Make sure the connections that attach DIRECTLY to the pump are tightened as tight as possible.

Trouble shooting NOT after initial installation:

Start by doing an oil change. If the oil is too dirty it will not be able to achieve a vacuum. If after an oil change you are still having issues, try removing our kit. If you are still having issues achieving a vacuum, we recommend contacting Harvest Right as the problem is with your freeze dryer or pump, not the Flush Kit. Remember, Harvest Right will not honor your warranty if you have our kit installed. Keep in mind, we offer a one year warranty on the pump, so if you need warranty work on your pump or if you are not having issues once the kit has been removed, then please contact us at customerservice@freezedryeraccessories.com

Warranty Information:

We offer a limited one-year warranty on the Harvest Right freeze dryer pump and the Flush Kit purchased from Freeze Dryer Accessories. Please see website for details.

www.freezedryeraccessories.com