

# GROWONIX

TUNED FOR GROWING



## FLOW BOX OWNERS MANUAL

[WWW.GROWONIX.COM](http://WWW.GROWONIX.COM)



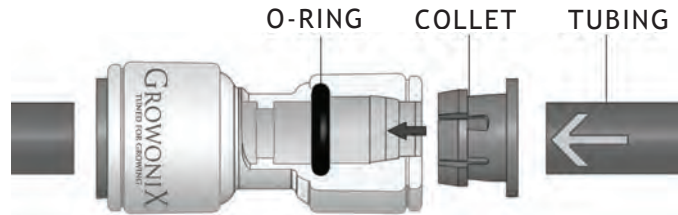
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# INFORMATION ON QUICK CONNECT FITTINGS

## GROWONIX WATER FILTERS USE QUICK CONNECT FITTINGS THAT ALLOW FOR EASY MAINTENANCE.

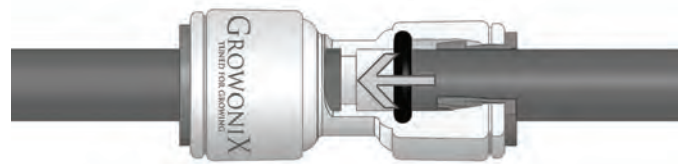
### MAKE A CLEAN TUBE CUT

Cut the tube squarely and if using plastic tubing, ensure that the cut has not made the tube out of round. Also ensure that the tube has a smooth outside diameter without any burrs or score marks prior to inserting it into the fitting.



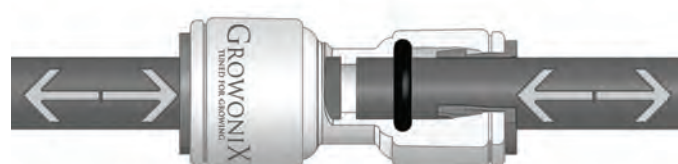
### INSERT TUBE INTO FITTING

Push the tubing through the collet and dual o-rings until it bottoms out against the tube stop. The collet holds the tube in place and the dual o-rings provide a leak resistant seal.



### TEST AND INSPECT

Push and pull the tubing toward and away from the fitting to ensure that it has been installed properly. Test and inspect the installation for any leaks.



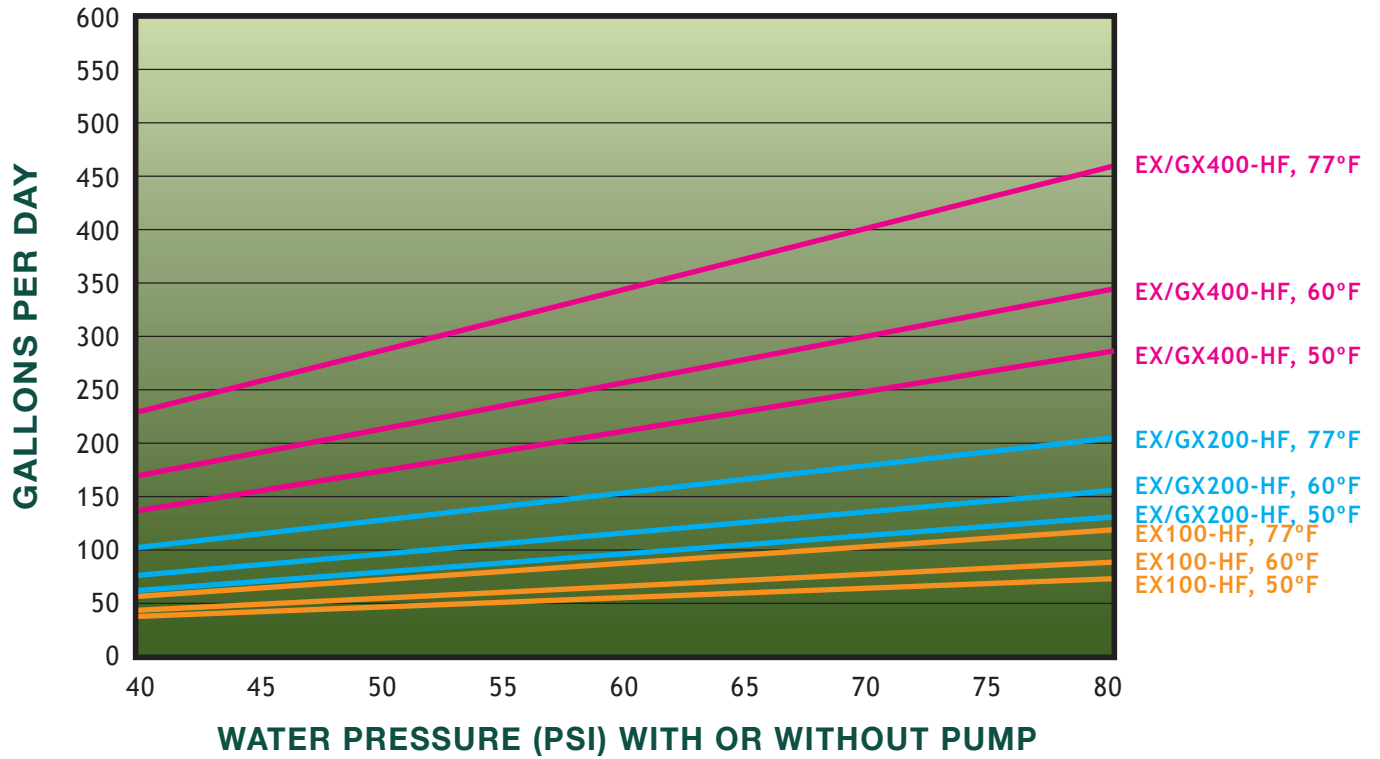
### TUBE REMOVAL

Relieve pressure from the tubing and fitting. Push uniformly around the collet flange against the fitting body while pulling the tubing away from the fitting to release it.

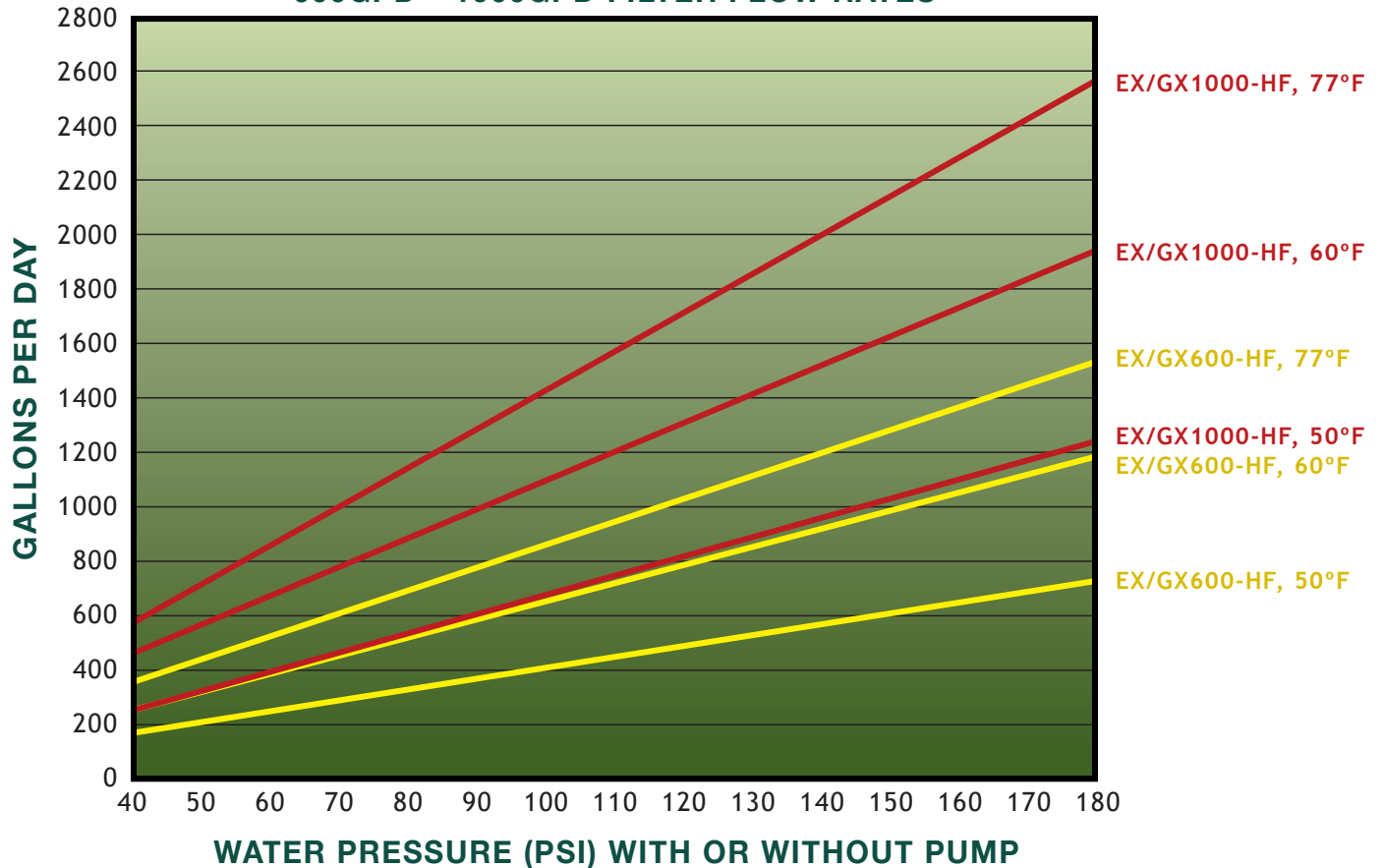


# FLOW RATES





## 100GPD – 400GPD FILTER FLOW RATES

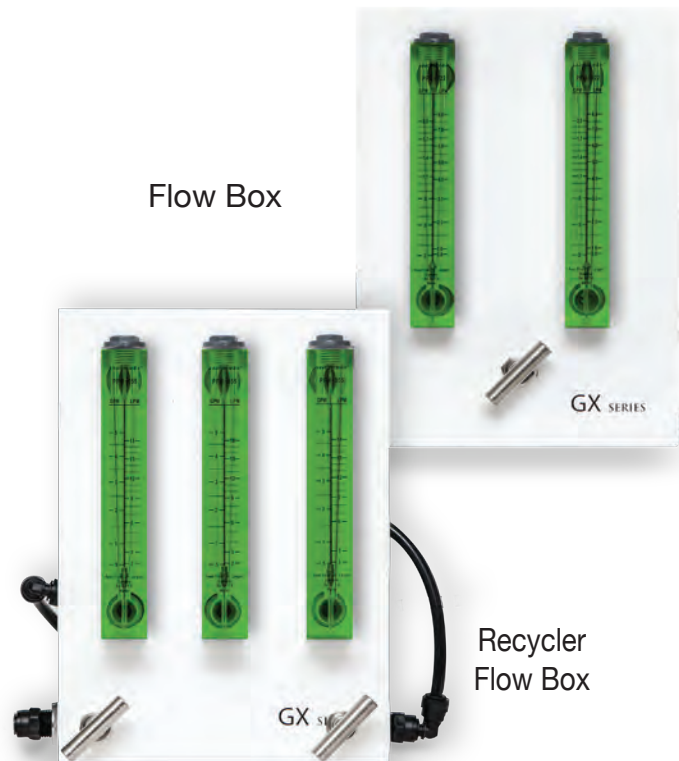


## 600GPD – 1000GPD FILTER FLOW RATES



## FLOW BOX FEATURES

-  **PRECISION FLOW METERS**
-  **STAINLESS STEEL NEEDLE VALVES**
-  **DUAL O-RING FITTINGS**
-  **POWDER COATED STEEL BRACKET**



## WHY USE A FLOW BOX ?

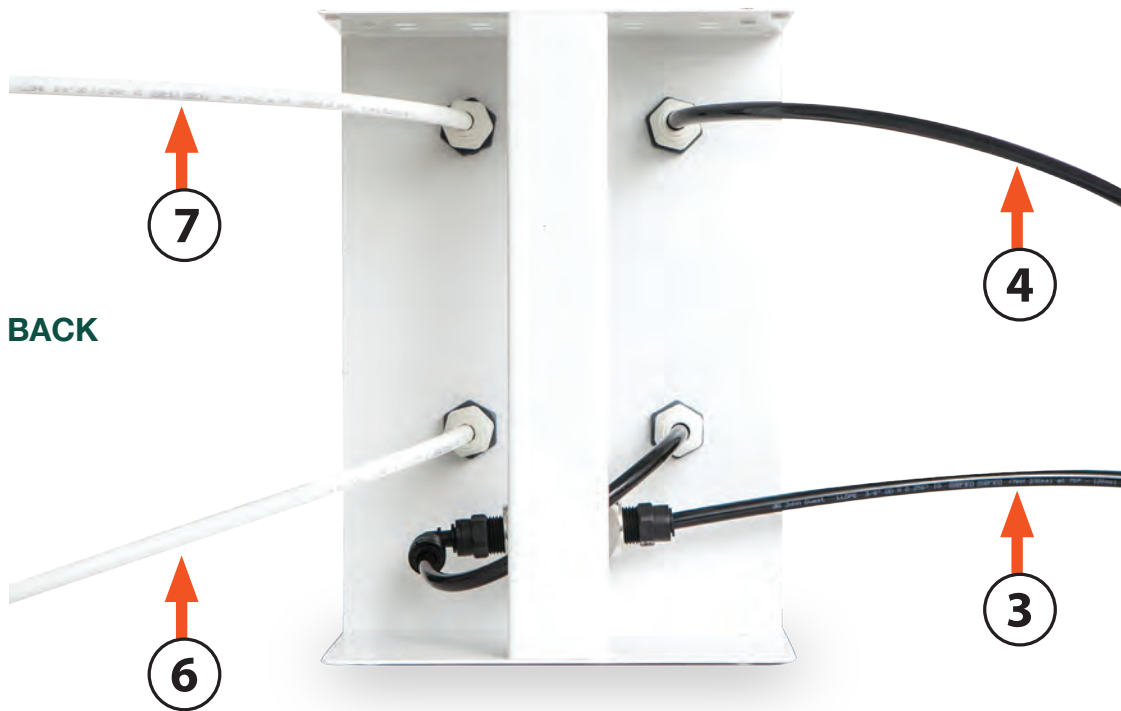
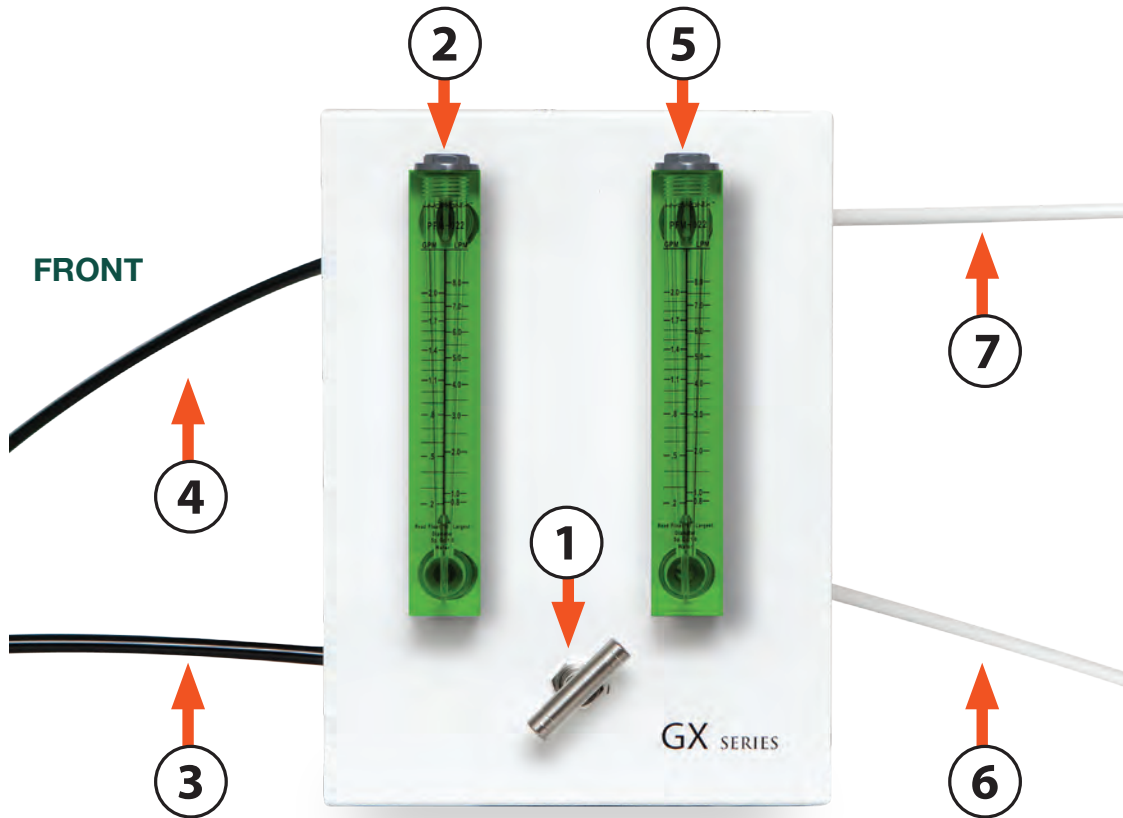
GrowoniX FlowBox is a componential add-on to any EX/GX600/1000 GPD and above that utilizes a BP Series booster pump. Equipped with highly accurate liquid flow meters, the FlowBox allows for custom tuning and fine-tuning of the system ratio. Run your system at any ratio from 3:1 to 1/4:1— whenever you want. System ratios change throughout the year as the weather temperatures change. Keep a perfect 1:1 or better, all year round, with a FlowBox. Flush the system with a simple twist of the stainless steel needle valve. Allows for removal of the standard drain/flush assembly. Mounts atop the EX/GX series chassis for easy viewing and adjusting. Easy wall mounting as well.

## PRECAUTIONS

- Do not use unit with inlet water pressure exceeding 80 psi. If inlet water pressure is too high, install water pressure regulator before the unit. Regulators and pressure limiters are available at [www.Growonix.com](http://www.Growonix.com) or your local plumbing supply.
- Keep unit away from direct light. Direct light can cause algae and other biologicals to grow inside of the filter housings.
- Do not install unit near electrical outlets or electrical devices. Do not install in places where a leak can cause damage.



# FLOW BOX COMPONENT/CONNECTION DIAGRAM



- 1. DRAIN WATER NEEDLE VALVE
- 2. DRAIN FLOW METER
- 3. DRAIN WATER IN FROM MEMBRANE
- 4. DRAIN WATER OUT TO DRAIN

- 5. RO PRODUCT WATER FLOW METER
- 6. RO PRODUCT WATER IN FROM MEMBRANE
- 7. RO PRODUCT WATER OUT TO TANK

# FLOW BOX INSTRUCTIONS:

## HOW IT WORKS:

The Flow Box allows for accurate monitoring of system ratios and membrane performance.

## ADJUSTING

Open drain needle valve completely.

Start system and adjust drain needle valve to achieve waste ratio of 1:1 (equal drain and RO flow via drain and RO flowmeters). Higher system ratios are recommended for dirtier feed water supplies—2:1 (2 parts drain:1 part RO)

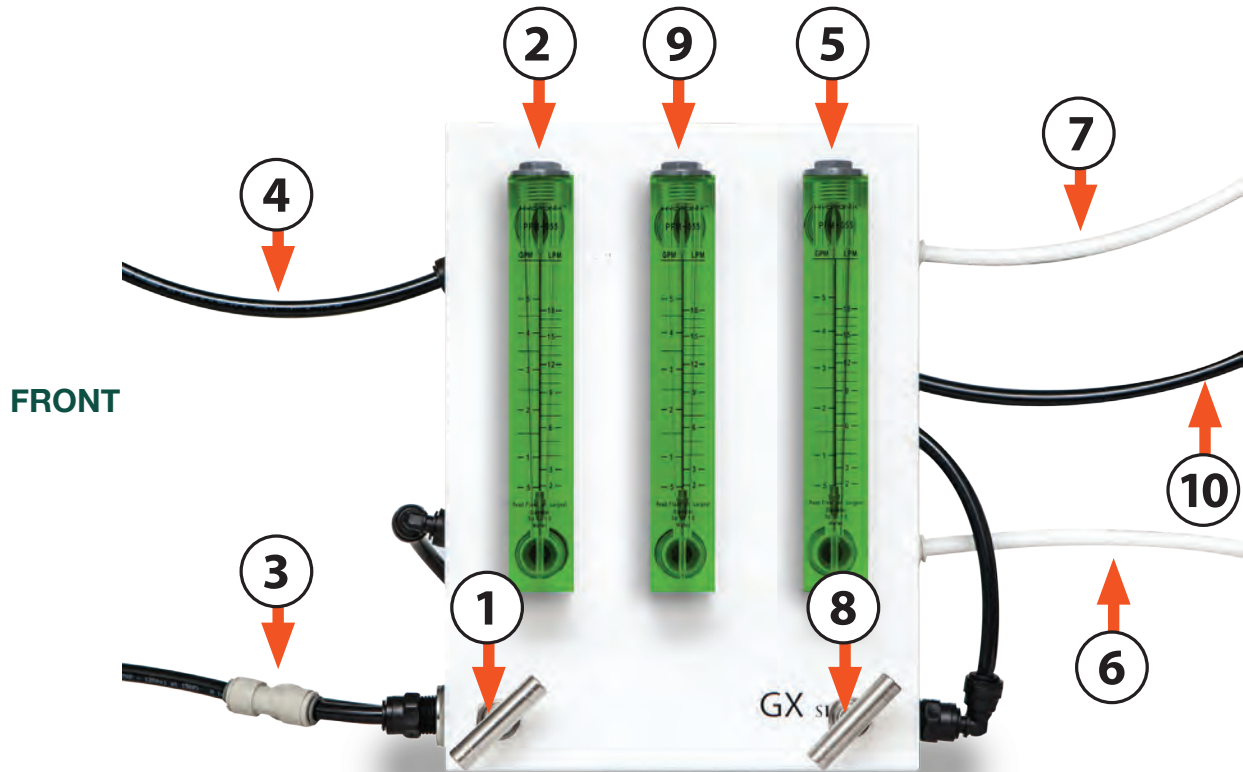
If using a booster pump, set system pump pressure to 150 psi. Make sure system pump pressure does not exceed 150psi. If system pressure exceeds 150psi, open pump bypass to reduce pressure.

NEVER COMPLETELY CLOSE DRAIN VALVE while system is running. Pressure may spike far above normal running pressure of 150psi.

## FLUSHING:

While system is running, completely open drain needle valve. All system water is routed to the drain. Flush for 5-15 minutes. It is recommended to flush after each time making RO water.

# RECYCLE FLOW BOX COMPONENT DIAGRAM

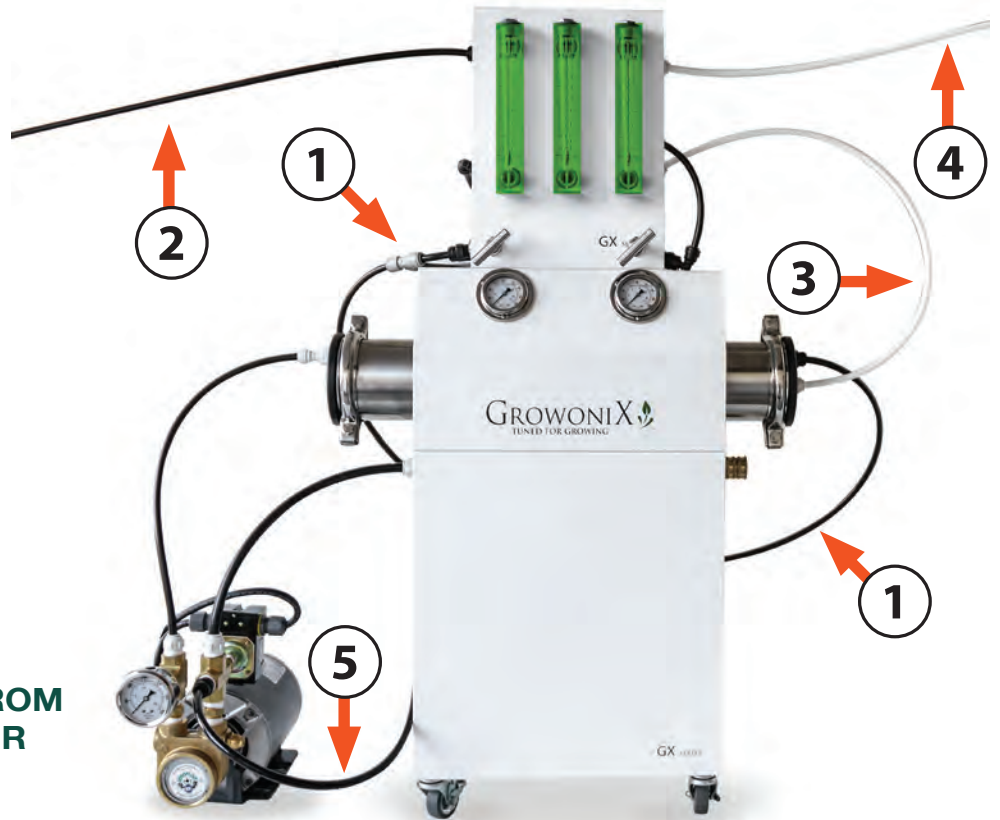


1. DRAIN WATER NEEDLE VALVE
2. DRAIN FLOW METER
3. DRAIN WATER IN FROM MEMBRANE
4. DRAIN WATER OUT TO DRAIN
5. RO PRODUCT WATER FLOW METER

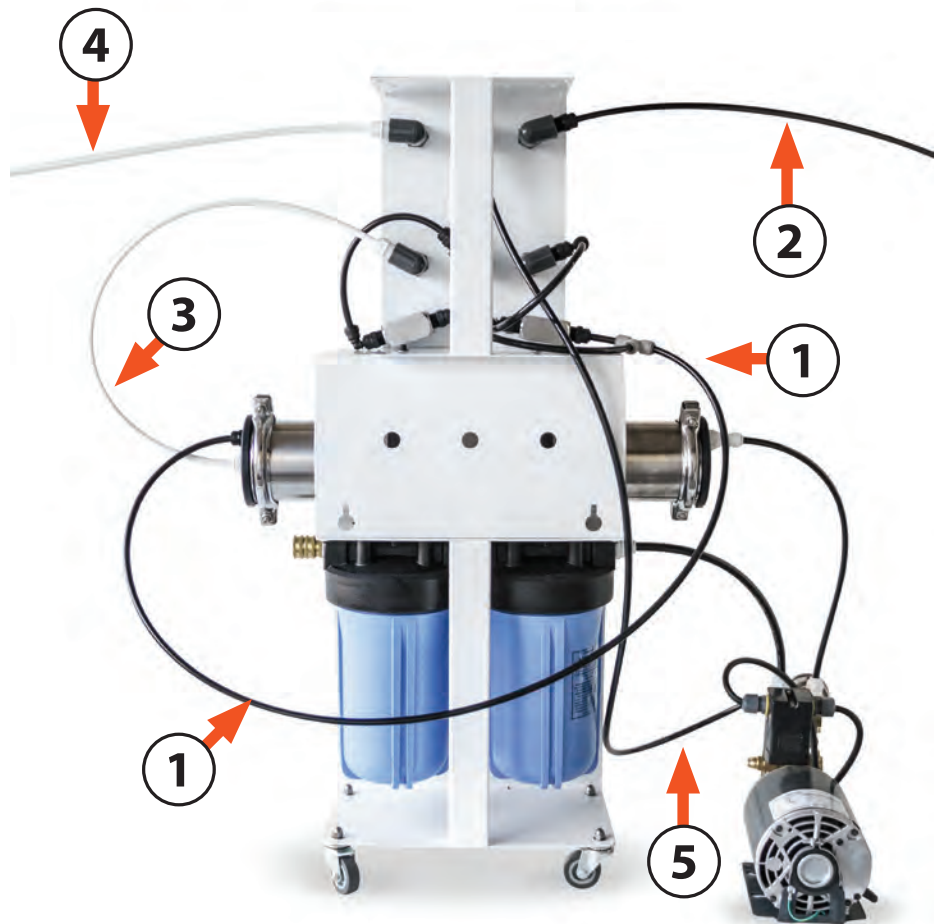
6. RO PRODUCT WATER IN FROM MEMBRANE
7. RO PRODUCT WATER OUT TO TANK
8. RECYCLE NEEDLE VALVE
9. RECYCLE FLOW METER
10. RECYCLED WATER FROM RECYCLE FLOW METER

# RECYCLE FLOW BOX CONNECTION DIAGRAM

1. DRAIN WATER IN FROM MEMBRANE
2. DRAIN WATER OUT TO DRAIN
3. RO PRODUCT WATER IN FROM MEMBRANE
4. RO PRODUCT WATER OUT TO TANK
5. RECYCLED WATER FROM RECYCLE FLOW METER



CLOSE-UP OF 10





# RECYCLE FLOW BOX INSTRUCTIONS:

## HOW IT WORKS:

The Recycle Flow Box allows drain water from the drain side of the RO membrane to be routed back through the input of the membrane—for another pass of filtering. The amount of recycled water is adjusted by the recycle needle valve. The Flow Box also allows for custom waste ratio settings and membrane flushing via the drain needle valve.

## RECYCLING:

Close recycle valve completely.

Open drain needle valve completely.

Start system and adjust drain needle valve to achieve waste ratio of 1:1 (equal drain and RO flow via drain and RO flowmeters).

Set system pump pressure to 150 psi. Make sure system pump pressure does not exceed 150psi. If system pressure exceeds 150psi, open pump bypass to reduce pressure.

Adjust recycle needle valve for recycling between 1.5 GPM and 2 GPM on recycle flow meter.

NEVER COMPLETELY CLOSE RECYCLE VALVE while system is running. Pressure may spike far above normal running pressure of 150psi.

Adjust waste ratio to desired amount.

Adjust pump bypass to 150psi.

## FLUSHING:

While system is running, completely open drain needle valve. All system water is routed to the drain. Flush for 5-15 minutes. It is recommended to flush after each time making RO water. For a more complete flush, close recycle valve after opening drain valve.

## CHEMICAL INJECTION DATA:

In most cases, Recycling using a Recycle Flow Box can only be achieved using antiscalant injection. For injection settings, please call GrowoniX at 1-888-406-8521.

# GROWONIX REVERSE OSMOSIS SYSTEM WARRANTY

For a period of one year from the date of original purchase, we will replace or repair any part of the GrowoniX reverse osmosis water system that we find to be defective in operation due to faulty materials or workmanship with the EXception of the replaceable filters and membranes.

## GENERAL CONDITIONS

Damage to any part of this reverse osmosis system because of misuse; misapplication; negligence; alteration; accident; installation; or operation contrary to our instructions, incompatibility with accessories not installed by GrowoniX, or damage caused by freezing, flood, fire, or Act of God, is not covered by this warranty. In all such cases, regular charges will apply. This limited warranty does not include service to diagnose a claimed malfunction in this unit. This warranty is void if the claimer is not the original purchaser of the unit or if the unit is not operated under normal municipal water or well water conditions.

GrowoniX assumes no liability in connection with this reverse osmosis system. GrowoniX assumes no liability for any damages incurred through the use of this product. It is the responsibility of the end user to gauge the safe use of this product in the environment where it is applied. We do not authorize any person or representative to assume for us any other obligations on the sale of this reverse osmosis system. The information given out in the manual we believe to be true, but are offered to you in good faith without guarantee because each application of this product is different and beyond our control.

THE FOLLOWING STANDARD OPERATING CONDITIONS FOR RESIDENTIAL/COMMERCIAL REVERSE OSMOSIS SYSTEMS MUST BE MET FOR WARRANTY TO BE VALID.

|                 | Water Pressure | pH Range | Maximum TDS | Water Temp |
|-----------------|----------------|----------|-------------|------------|
| Standard System | 40-80 psi      | 2-11     | 2000 ppm    | 40-100 F   |

## GROWONIX RETURN POLICY

### MERCHANDISE RETURN DETAILS AND PROCEDURE:

If any merchandise was defective —we will refund the full purchase price upon receiving and reviewing the merchandise returned in undamaged condition.

### RMA NUMBER:

You must first obtain a Return Merchandise Authorization (RMA) number from GrowoniX.com. Any products sent to GrowoniX without an RMA number will not receive a refund and may be returned to the sender at their expense.

All refund amounts will be based on the manufacturer's warranty and GrowoniX return policy. Refunds will be issued back using the payment method you used when you placed your order. Refunds take up to 3-5 business days to process once we receive the return.

### PACKAGING:

Please kindly re-pack the product in its original box, or a box of equivalent strength. The unit should be packed in the same manner as it came to prevent damage in shipping. Please return everything that was in the original box, including any free items if applicable. Be sure to drain out all water from wet systems and parts and wrap them in plastic bags before packing.

### RETURN TO:

We will provide you with an GrowoniX warehouse address for return merchandise when we issue the RMA number.