Installation & Operating Instructions

MULTI-PURPOSE WATER FILTER

MultiMix

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For future reference, fill in the following data

INSTALLATION RECORD

Serial number: _____

Model: _____

Water hardness-inlet: _____

Iron (Fe) content-inlet: _____

Manganese (Mn) content-inlet: _____

Ammonia (NH_3) content-inlet: _____

Water pressure-inlet: _____

Date of installation: _____

Company name: _____

Installer name: _____

Phone number: _____

WARNING & SAFETY INSTRUCTIONS

- Before you begin the installation of the multi-purpose water filter, we advise you read and carefully follow the instructions contained in this manual. It contains important information about safety, installation, use and maintenance of the product. The actual system that you have received, may differ from the pictures/illustrations/descriptions in these Instructions.

- Failure to follow the instructions could cause personal injury or damage to the appliance or property. Only when installed, commissioned and serviced correctly, the multi-purpose water filter will offer you many years of trouble-free operation.

- The multi-purpose water filter is intended to 'filter' the water, meaning it will remove specific undesired substances; it will not necessarily remove other contaminants present in the water. The multi-purpose water filter will not purify polluted water or make it safe to drink!

- Installation of the multi-purpose water filter should only be undertaken by a competent person, aware of the local codes in force. All plumbing and electrical connections must be done in accordance with local codes.

- Before setting up the multi-purpose water filter, make sure to check it for any externally visible damage; do not install or use when damaged.

- Use a hand truck to transport the multi-purpose water filter. To prevent accident or injury, do not hoist the multi-purpose water filter over your shoulder. Do not lay the multi-purpose water filter on its side.

- Keep these Instructions in a safe place and ensure that new users are familiar with the content.

- The multi-purpose water filter is designed and manufactured in accordance with current safety requirements and regulations. Incorrect repairs can result in unforeseen danger for the user, for which the manufacturer cannot be held responsible. Therefore repairs should only be undertaken by a competent technician, familiar and trained for this product.

- In respect of the environment, this multi-purpose water filter should be disposed of in accordance with Waste Electrical and Electronic Equipment requirements. Refer to national/local laws and codes for correct recycling of this water softener.

- **APPLICATION LIMITATIONS:**
  - **pH**: 5-10
  - **maximum contaminant content**:

Hardness	75 °f / 42 °d
Iron (Fe^{2+})	15 mg/L
Manganese (Mn^{2+})	3 mg/L
Oxidizability (O_2)	4 mg/L
Ammonia (NH_3)	4 mg/L

- **OPERATING PRESSURE: min. 1,4 / max. 8,3 bar**
  - this system is configured to perform optimally at an operating pressure of 3 bar (±½ bar); in case of a lower or higher operating pressure the performance may be affected negatively!
  - check water pressure regularly.
  - take into account that night time water pressure may be considerably higher than day time water pressure.
  - install a pressure reducer ahead of the multi-purpose water filter if necessary.

- **OPERATING TEMPERATURE: min. 2 / max. 48 °C**
  - do not install the multi-purpose water filter in an environment where high ambient temperatures (e.g. unvented boiler house) or freezing temperatures can occur.
  - the multi-purpose water filter cannot be exposed to outdoor elements, such as direct sunlight or atmospheric precipitation.
  - do not install the multi-purpose water filter too close to a water heater; keep at least 3 m of piping between the outlet of the multi-purpose water filter and the inlet of the water heater; water heaters can sometimes transmit heat back down the cold pipe into the control valve; always install a check valve at the outlet of the multi-purpose water filter.

- **ELECTRICAL CONNECTION: 230V-50Hz**
  - this multi-purpose water filter only works on 24VAC; it is equipped with a 230/24V-50Hz transformer; always use it in combination with the supplied transformer.
  - make sure to plug the transformer into a power outlet, which is installed in a dry location, with the proper rating and over-current protection.

INSTALLATION

CONTENT CHECK

☑ *Actual parts that you have received, may differ from the pictures/illustrations in these Instructions!*

☑ *For ease of transportation and installation, the filter media is NOT loaded in the pressure tank, but delivered in separate bags of 12 or 25 ltr; it must be loaded on-site, after positioning of the pressure tank.*

Check the content of the system, using the Composition Overview at the end of these Instructions. Identify and lay-out the different components to facilitate the assembly.

FILTER MEDIA LOADING

1. Move the pressure tank to the correct installation location; position it on a flat and level surface. Make sure to leave enough space for ease of service.
2. Position the riser assembly upright and centred in the pressure tank; plug the top of the riser tube with a piece of tape or clean rag, to prevent filter media from entering the tube.
3. Add water to the pressure tank to a height of ±30 cm from the bottom; this water will protect the bottom of the pressure tank and the bottom distributor, during filling of the pressure tank.
4. Place a funnel on the pressure tank opening and fill the pressure tank with filter media.
5. Rinse the pressure tank opening to remove any filter media beads from the threaded section.
6. Unplug the top of the riser tube.

CONTROL VALVE

7. Make sure the O-ring in the riser insert and the tank O-ring (around the threaded section of the control valve) are in the correct position.
8. Screw the top distributor onto the control valve.
9. Lubricate the threaded section of the pressure tank, the top of the riser tube and the tank O-ring of the control valve; use a silicon-based lubricant.
10. Lower the control valve straight down onto the riser tube, until the riser tube is correctly inserted in the riser insert; then push it down firmly and screw it onto the pressure tank.

BRINE TANK

Picture 1

11. Move the brine tank to the correct installation location; position it on a flat and level surface. Make sure to leave enough space for ease of service.
12. Remove the lid from the brine tank.
13. Run the polytube from the brine valve through the hole in the sidewall of the brine tank, to the outside of the brine tank.
14. Insert the polytube into the brine line compression connection on the control valve (❶); tighten the nut.
15. Add water to the brine tank to a height of ±10 cm from the bottom.
16. Add salt to the brine tank.
17. Install the lid on the brine tank.

ASSEMBLY

INLET & OUTLET

☑ *Check the water pressure at the place of installation of the multi-purpose water filter; it should never exceed 8,3 bar.*

☑ *We strongly recommend the use of flexible hoses to connect the multi-purpose water filter to the water distribution system; use hoses with a large diameter in order to limit the pressure loss.*

☑ *We strongly recommend the installation of a bypass system (not included with this product!) to isolate the multi-purpose water filter from the water distribution system in case of repairs. It allows to turn off the water to the multi-purpose water filter, while maintaining full-flow (untreated) water supply to the user.*

WITH FACTORY BYPASS (optional)

Picture 2

❶ = mains water supply (untreated water)
❷ = inlet of multi-purpose water filter (untreated water)
❸ = outlet of multi-purpose water filter (treated water)
❹ = application (treated water)

1. Screw the factory bypass onto the in/out ports on the control valve (❷&❸); make sure to install the gasket seals. Tighten the nuts firmly by hand.
2. Screw the connection kit with nuts onto the factory bypass (❶&❹); make sure to install the gasket seals. Tighten the nuts firmly by hand.
3. Connect the mains water supply to the adaptor on the inlet port of the factory bypass (❶).
4. Connect the application to the adaptor on the outlet port of the factory bypass (❹).

WITH 3-VALVE BYPASS SYSTEM (not included)

Picture 3

❶ = inlet of multi-purpose water filter (untreated water)
❷ = outlet of multi-purpose water filter (treated water)

1. Install the 3-valve bypass system.
2. Screw the connection kit with nuts onto the in/out ports on the control valve (❶&❷); make sure to install the gasket seals. Tighten the nuts firmly by hand.
3. Connect the IN valve of the 3-valve bypass system to the adaptor on the in port (❶) of the control valve.
4. Connect the OUT valve of the 3-valve bypass system to the adaptor on the out port (❷) of the control valve.
5. Connect the mains water supply to the inlet of the 3-valve bypass system.
6. Connect the application to the outlet of the 3-valve bypass system.

DRAIN

☑ *We recommend the use of a stand pipe with air trap.*

☑ *To prevent backflow from the sewerage system into the multi-purpose water filter, always make sure to have an air gap between the end of the drain hose and the sewerage system itself; as a rule of thumb, the air gap should be minimum 2x the diameter of the drain hose.*

☑ *Always use separate drain hoses for the control valve (evacuation of rinse water) and the brine tank overflow.*

☑ *Lay-out the drain hoses in such a way that pressure loss is minimized; avoid kinks and unnecessary elevations.*

☑ *Make sure that the sewerage system is suitable for the rinse water flow rate of the multi-purpose water filter.*

Picture 4

1. Connect a 13 mm hose to the drain elbow of the control valve (❶); secure it by means of a clamp.
2. Run the drain hose to the sewerage system and connect it to the stand pipe assuring sufficient air gap. This drain line operates under pressure, so it may be installed higher than the water softener.
3. Connect a 13 mm hose to the overflow elbow on the brine tank; secure it by means of a clamp.
4. Run the drain hose to the sewerage system and connect it to the stand pipe assuring sufficient air gap. This drain line does NOT operate under pressure, so it may NOT be installed higher than the water softener.

ELECTRICAL

Picture 5

1. Plug the transformers output lead into the socket on the water softeners power cord; secure it by means of the TwistLock clamp.
2. Plug the transformer into an electrical outlet.

START-UP

PRESSURIZING

1. Put the bypass system in 'bypass' position.
2. Make sure the electronic controller of the multi-purpose water filter is in service mode.
3. Open the mains water supply.
4. Open a cold treated water faucet nearby the multi-purpose water filter and let the water run for a few minutes until all air is purged and all foreign material that may have resulted from the installation is washed out; close the tap.
5. Gently pressurize the multi-purpose water filter, by putting it into service:
   - close the 'BYPASS' valve;
   - open the 'OUT' valve;
   - slowly open the 'IN' valve.
6. After 2-3 minutes, open a cold treated water faucet nearby the multi-purpose water filter and let the water run for a few minutes until all air is purged from the installation and the filter media is rinsed (it is normal for the rinse water to show some discoloration!); close the tap.
7. Check the multi-purpose water filter and all hydraulic connections for leaks.

☑ *After the first regenerations of the multi-purpose water filter, some slight discoloration of the treated water might occur. This is totally harmless and will disappear rapidly!*

ELECTRONIC CONTROL PANEL

8. Program the electronic controller.

PERFORM REGENERATION

11. Manually initiate a regeneration, by pressing the ***scroll*** button repeatedly until the display shows:

    Regen in 10 sec

12. Leave the multi-purpose water filter in this position; the count-down timer will count down to 0 sec and start a regeneration.

Picture 6

symbol	button	function
	SCROLL	to advance to the next parameter
	UP	to increase the value of the parameter
	DOWN	to decrease the value of the parameter

POWER-UP

After power-up the display will show the installed software version, f.e.:

```
EZRSDg EZ Rot0.8
```

After 5 seconds it will automatically revert back to the service display.

POWER FAILURE

In the event of a power failure, the program will remain stored in the NOVRAM® during an undefined period, while an incorporated SuperCap (capacitor) will maintain the correct time of day during a period of several hours; consequently, in case of prolonged power failure, the time of day might not be maintained; if this happens, the time of day will be reset to 8:00 when the power supply is re-established, while the indication will *flash*, indicating that the time of day needs to be set.

```
8:00     1000L -
```

When the power failure occurs during the execution of an automatic regeneration, the control valve will remain in its last position; when the power supply is re-established, the control valve will return to the service position, stay there for 60 sec. and restart a complete regeneration from the beginning.

TIMER FAILURE

In the event of a timer failure, the display will show the message:

```
Service Required
```

In such case, entering one of the programming levels can possibly solve the problem. However if the problem persists, professional service is required.

SERVICE MODE

In **service mode** the display shows the time of day and the remaining capacity:

```
20:51    1000L -
```

REGENERATION MODE

In **regeneration mode** the display shows the total remaining regeneration time and remaining cycle time:

```
Rgn:123 CycY:456
```

*The control valve can be **reset to service mode** at any time by pressing the **scroll** button, as such manually advancing it through the regeneration cycles.*

CHECKING THE FLOW METER

In case of water usage, the remaining capacity counter in the service display will count back per unit, i.e. per litre. This way the correct functioning of the water meter can be verified.

MANUAL REGENERATION

It is possible to manually initiate a regeneration.

1. Press the ***scroll*** button repeatedly until the display shows:

   ```
   Regen in 10 sec
   ```

   - If the control valve is left in this position, the count-down timer will count down to 0 sec and *start a regeneration.*
   - To cancel this mode, press the ***scroll*** button before the countdown timer has reached 0 sec; the control valve will return to the service mode.
2. Press the ***scroll*** button again if you want to manually advance the control valve to the next regeneration cycle.

DRIVE MOTOR SPEED

The drive motor of the control valve, that drives the valve body to its different regeneration positions, will start-up at low speed to reduce its noise level. To increase the speed of the drive motor, simply press the ***scroll*** button as soon as the drive motor is activated.

PROGRAMMING INSTRUCTIONS - INSTALLER

☑ *Before entering the programming mode, make sure that the control valve is in the service mode.*

1. Press the ***scroll*** button; the display will show:

   Language:*English*

   - Press the ***up*** or ***down*** button to set *the language*.

2. Press the ***scroll*** button again; the display will show:

   Set time: *20:51*

   - Press the ***up*** button or ***down*** button to set *the time of day*.

3. Press the ***scroll*** button again; the display will show:

   Set Hardn.: *XX*°f

   - Press the ***up*** or ***down*** button to set *the hardness of the incoming untreated water*.

MAINTENANCE

ROUTINE CHECKS

Regularly the user should perform a basic check to verify if the multi-purpose water filter is functioning correctly, on the basis of the following control points:

1. Check settings of electronic control panel.
2. Check water composition before/after multi-purpose water filter.
3. Check drain line from control valve; there shouldn't be any water flow (unless multi-purpose water filter is in regeneration).
4. Check drain line from brine tank overflow; there shouldn't be any water flow.
5. Check multi-purpose water filter and surrounding area; there shouldn't be any water leakages.

BYPASSING THE MULTI-PURPOSE WATER FILTER

Occasionally it may be necessary to put the multi-purpose water filter hydraulically in bypass, i.e. to isolate it from the water distribution system; f.e.:

- in case of an urgent technical problem;
- when it is not necessary to supply treated water to the application.

WITH FACTORY BYPASS (optional)

Picture 7.a

SERVICE POSITION
❶ = inlet valve to multi-purpose water filter is OPEN
❷ = outlet valve from multi-purpose water filter is OPEN

Picture 7.b

BYPASS POSITION
❶ = inlet valve to multi-purpose water filter is CLOSED
❷ = outlet valve from multi-purpose water filter is CLOSED

Picture 7.c

MAINTENANCE POSITION
❶ = inlet valve to multi-purpose water filter is OPEN
❷ = outlet valve from multi-purpose water filter is CLOSED

WITH 3-VALVE BYPASS SYSTEM (not included)

Image 8.a

SERVICE POSITION
❶ = bypass valve is CLOSED
❷ = inlet valve to multi-purpose water filter is OPEN
❸ = outlet valve from multi-purpose water filter is OPEN

Image 8.b

BYPASS POSITION
❶ = bypass valve is OPEN
❷ = inlet valve to multi-purpose water filter is CLOSED
❸ = outlet valve from multi-purpose water filter is CLOSED

Image 8.c

MAINTENANCE POSITION
❶ = bypass valve is OPEN
❷ = inlet valve to multi-purpose water filter is OPEN
❸ = outlet valve from multi-purpose water filter is CLOSED

WATER CONDITIONER SALT

This multi-purpose water filter needs 'brine' for its periodic regenerations. This brine solution is made from water, that is automatically dosed in the brine tank by the control valve, and water conditioner salt. The user should make sure that the brine tank is always kept full of water conditioner salt. Therefore he should periodically check the salt level inside the brine tank and refill it if necessary. Simply lift the brine tank cover to check the salt level inside the brine tank. remplissage.

Ideally the level of water conditioner salt inside the brine tank is kept between 1/3 and 2/3. A lower level of water conditioner salt can cause insufficient brine saturation, resulting in a loss of softening capacity. A higher level of water conditioner salt can cause salt bridging (hard crust or salt bridges in the brine tank). When you suspect salt bridging:

- carefully pound on the outside of the brine tank to break loose the salt bridges;
- using a broom (or like blunt tool) carefully push the salt to break it apart;
- pour warm water over the top of the salt to dissolve it.

RESIN CLEANER

Other contaminants present in the feed water can cause the filter media (especially the ion exchange resin) to foul up, resulting in a loss of capacity. An approved resin cleaner can be used periodically to thoroughly clean the filter media.

SANITIZING THE MULTI-PURPOSE WATER FILTER

This multi-purpose water filter is manufactured from premium quality material and assembled in safe conditions to assure it is clean and sanitary. If installed and serviced correctly, this multi-purpose water filter will not infect or contaminate your water supply. However, as in any 'device' plumbed-in in your water distribution system, a proliferation of bacteria is possible, especially in case of 'stagnant water'. Therefore this multi-purpose water filter is equipped with a 'days override' feature, that will automatically rinse the filter media periodically, even in case of low or absence of water usage.

If the power supply to the multi-purpose water filter is disconnected for a longer period of time, we recommend, when the power supply is re-established, to manually initiate a complete regeneration.

COMPOSITION OVERVIEW

Model	Media volume	PN	Control valve, incl. EuroT transformer, 1" male BSP connections		Pressure tank, incl. distributor assy		Brine tank, incl. platform, brine valve assy		Filter media	
									(12 kg bag)	(25 kg bag)
	ltr		model	#	model	#	model	#	#	#
Simplex Eco	**25**	**35690**	2400VS/J4JB	1	10x35	1	125 ltr	1	0	1
	37	**35691**	2400VS/J1JB	1	10x47	1	125 ltr	1	1	1
	50	**35692**	2400VS/J1KD	1	12x48	1	125 ltr	1	0	2
	75	**35693**	2400VS/J1LD	1	13x54	1	275 ltr	1	0	3

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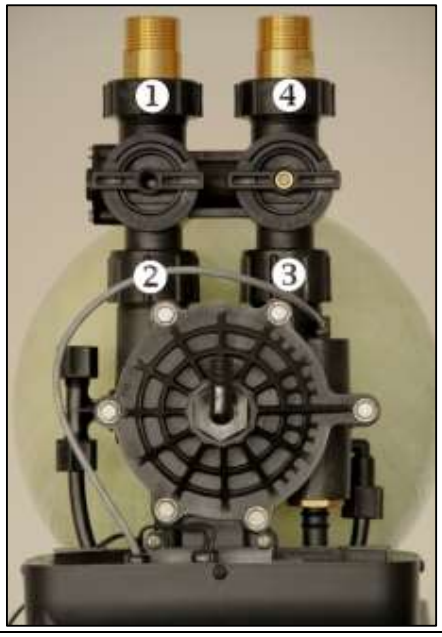
Erie™
Water Treatment Controls

MultiMix

1

2.a



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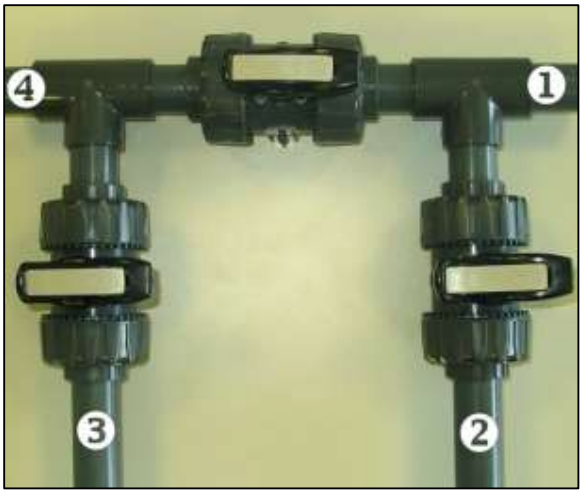

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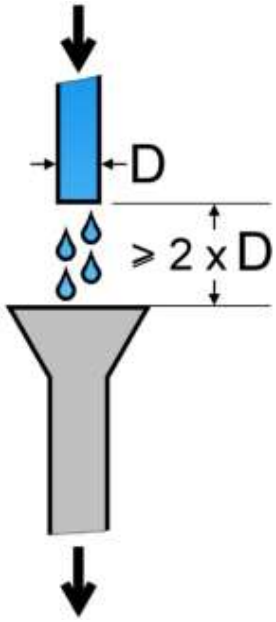
4.a



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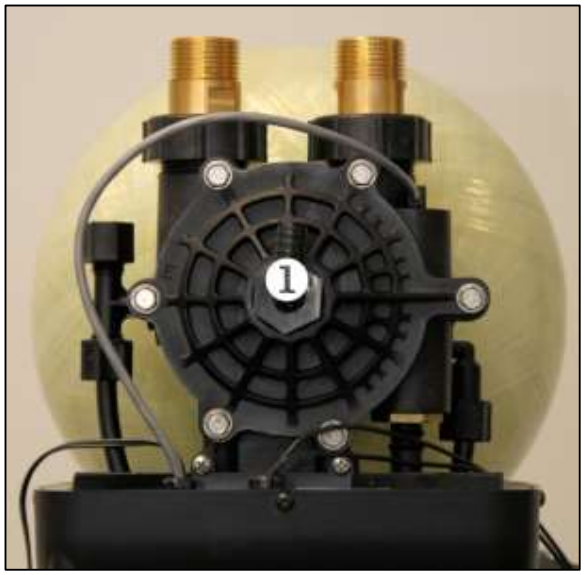

5.a

5.b

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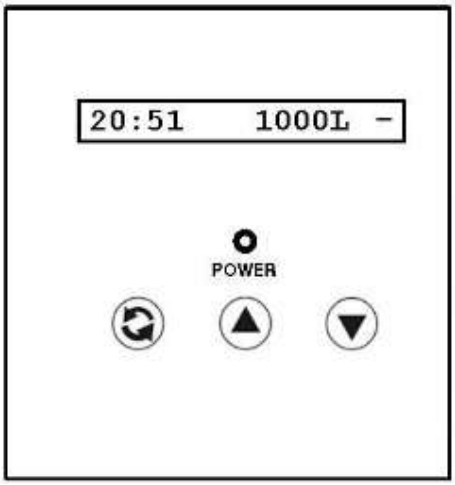

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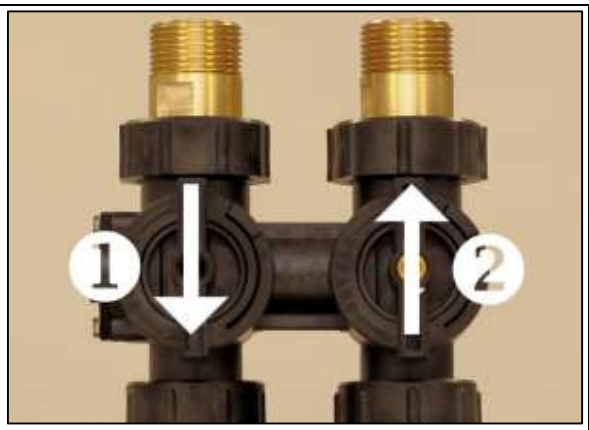

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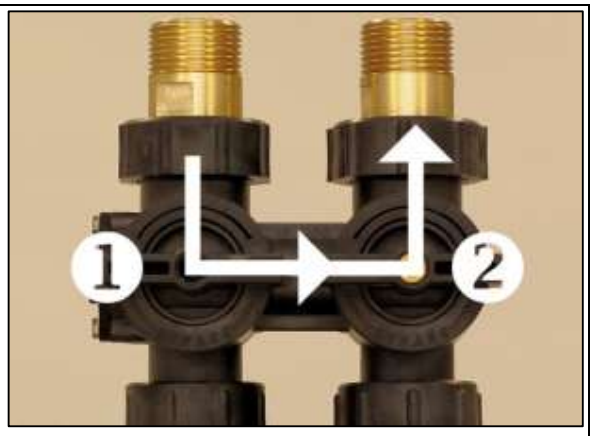

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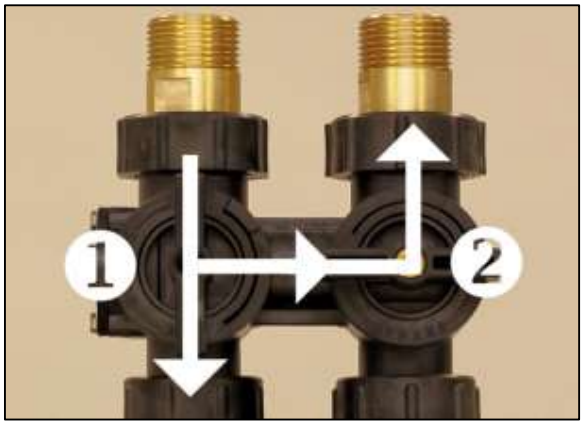

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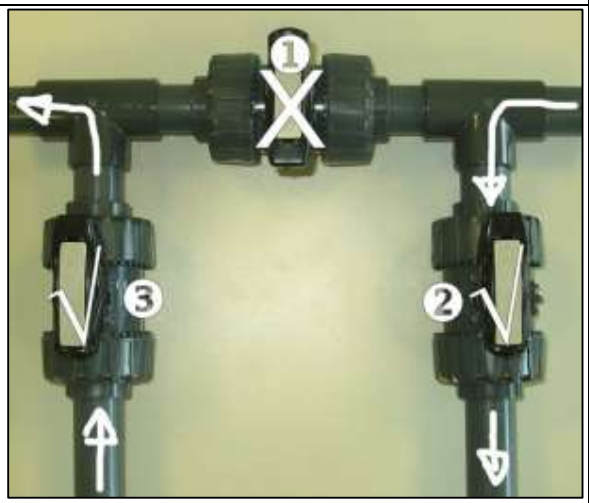

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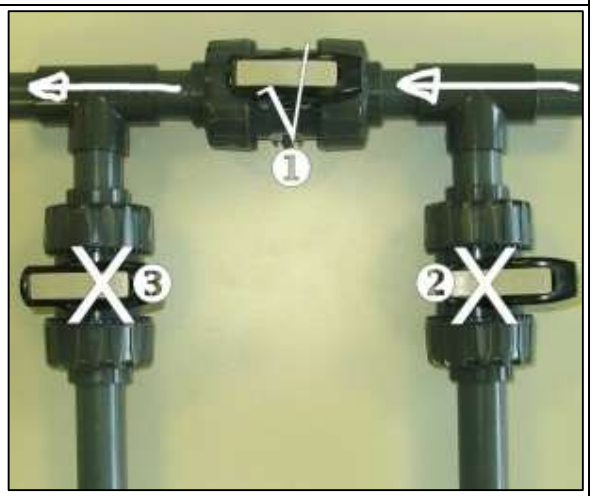

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