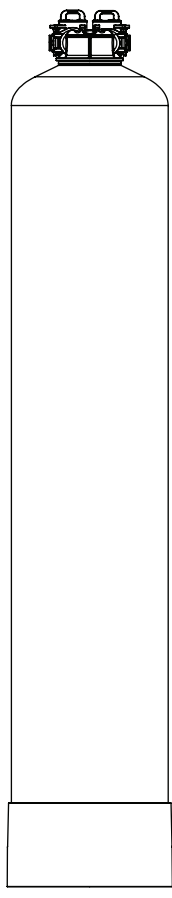
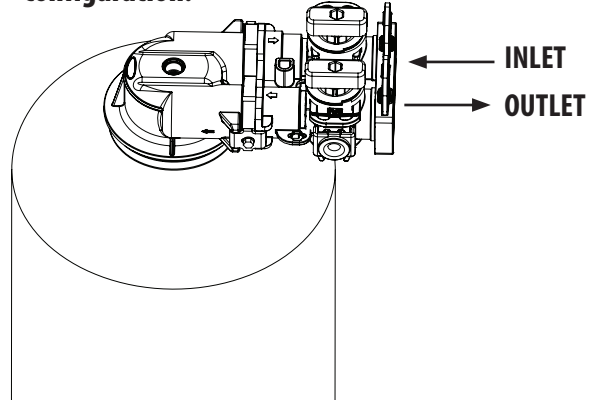


The Inlet and Outlet should be as per below illustration. This will ensure that water will flow through the filter in an upflow configuration.



NRV Filter



IAPMO R&T Certified
Against NSF/ANSI 42, 372
and CSA B483.1

- 1. This manual contains important safety and operating instructions. Read all instructions and follow them when using this product. Failure to consider this information and follow these instructions, including those concerning maintenance, may result in property damage, injury and or death.**
2. We recommend installation only be completed by a competent installer or plumbing professional to insure this product is installed in accordance with local plumbing codes.
3. Read this manual in full and follow all instructions carefully before operation.
4. Avoid pinched O-rings during installation by applying NSF certified lubricant to all seals (provided with install kit).
5. This system is not intended for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.
6. Discard small parts remaining after the installation.
7. Failure to install the system correctly voids the warranty.
8. Handle all components of the system with care. Do not drop, drag or turn components upside down.
9. Save these instructions and keep track of your product's serial number.

NOTICE: THIS MANUAL CONTAINS A LIMITED WARRANTY. BY INSTALLING AND OR USING THIS PRODUCT, YOU WAIVE CERTAIN LEGAL RIGHTS INCLUDING THE RIGHT TO SUE OR CLAIM COMPENSATION IN THE EVENT OF PROPERTY DAMAGE, INJURY, AND OR DEATH.

Canature WaterGroup Canada Inc.
855 Park St., Unit 1
Regina, SK, S4N 6M1
Toll Free: (877) 288-9888









Canature WaterGroup U.S.A. Inc.
6353 Commerce Drive, Suite 300
Whitestown, IN, 46075
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SAFETY

Throughout this manual, certain conventions are used, including;

HAZARD SYMBOLS	
	For your own safety, please pay strict attention! Examples include: temperature, electrical, and water pressure, etc.
HAZARD SIGNALS	
	Indicates a hazardous situation that, if not avoided will result in death or serious injury, and/or property loss or damage.
	Indicates a hazardous situation that, if not avoided may result in death or serious injury, and/or property loss or damage.
	Indicates a hazardous situation that, if not avoided, could result in a minor or moderate injury, and/or property loss or damage
	Indicates important information, that if not followed may result in damage to equipment, or property loss.
WARRANTY EXCLUSIONS	
	Identify specific instructions that, if not followed, will void the warranty. The warranty provided gives you specific legal rights and otherwise limits your legal rights to the extent permitted by law. By installing and/or using this product, you are accepting these limits on your legal rights.
NOTES	
	Help you take full advantage of the system and are used to emphasize installation, operation, or maintenance information that is important but does not present a hazard.
MANDATORY SIGNS	
	Used to depict a specific behavior that MUST be followed to avoid the present hazard (problem).

Canature WaterGroup U.S.A. Inc. / Canature WaterGroup Canada Inc. (“Canature”) has disclosed all known risks associated with the product within this manual but cannot disclose risks that are beyond its knowledge.


Original instructions. All information, illustrations, and specifications in this manual are based on the latest information available at the time of the publication.

The right is reserved to make changes at any time without notice.

FIND AND RECORD VALVE TYPE & SERIAL NUMBERS

Find and record your product model number and serial number in the **Records & Contacts** section as they will be important if you need to troubleshoot.

XXXXXXXXXX [Barcode] XXXX, XXXX-XXXX	Item # Model #
Serial No: 1234-221231-00001 [Barcode]	System Serial #

 NOTE
Do NOT remove or destroy the serial number. It MUST be referenced on request for warranty repair or replacement.

RECORDS & CONTACTS

Please have the information below filled out and available when calling in for parts or warranty:

YOUR DEALER:
Name:
Address:
Phone:
Other:
YOUR SYSTEM:
Model number:
Serial number:
Valve Serial number:
Date installed:
Installed by:
NOTES:

KNOW THIS BEFORE STARTING YOUR INSTALLATION

- ▶ Read this manual thoroughly to become familiar with the filter and its capabilities before installing or operating.



Failure to follow instructions could result in personal injury, property damage or death.

This manual will assist you in getting the most out of your new filter.

- ▶ The installation of this filter **MUST** be in accordance with all electrical and plumbing authorities, as well as all applicable local codes and ordinances.

Check with your local public works department for plumbing and sanitation codes.

In the event that the codes conflict with any content in this manual – the local codes should be followed.

Installation by a licensed plumber or certified water treatment professional is recommended.



- ▶ This filter is designed to operate on pressures of 30 -125 psi.

If the water pressure is higher than 125 psi, use a pressure reducing valve ahead of this filter. Additional pretreatment may be required

- ▶ It is not uncommon for sediment, precipitated iron, or hardness to be present in water supplies. Additional pretreatment may be required



- ▶ Do NOT use water that is microbiologically unsafe without adequate disinfection before or after this system.

- ▶ This filter is capable of operating at temperatures between 4 °C – 43 °C or (40 °F -110 °F).



Do NOT expose filter to freezing temperatures or vacuum.



- ▶ Do NOT expose filter to direct sunlight.



- ▶ Do not use this filter on hot water supply lines.

- ▶ Avoid pinched O-rings during installation by applying the silicone-based lubricant supplied. Part #92360.

- ▶ It is recommended to inspect the control on an annual basis.

Your installer can provide a maintenance kit for this purpose.

- ▶ Rural applications should have a water analysis annually prior to system checkup or repair.



- ▶ Chlorine bleach and common iron control chemicals may generate toxic fumes when mixed.



- ▶ Always wear appropriate safety gear, such as safety glasses.

NOTICE

The warranty provided gives you specific legal rights and otherwise limits your legal rights to the extent permitted by law. By installing and/or using this product, you are accepting these limits on your legal rights. Canature is NOT responsible for losses, injury, or death resulting from a failure to observe these safety precautions, or misuse or abuse of the equipment.

NOTE

Check with your local public works department for applicable local plumbing and sanitation codes. Follow local codes if they differ from the standards used in this manual. Otherwise, carefully follow the instructions in this manual. Canature is not liable for any non-compliance with local requirements

HOW YOUR WATER FILTER WORKS

Your NRV (non-regenerating valve) provides an economical whole-house carbon filtration solution for reducing chloramines, chlorine and other bad tastes and odors. The NRV TOCK and TOK models also reduce hydrogen sulfide (H₂S) caused by sulphate reducing bacteria common in warmer climates. These systems are complete, self-contained, loaded with media and ready to use. A simple inlet and outlet connection is all that is required for installation. Please review operating pressures, temperatures and water chemistry limitations to ensure compatibility.

NOTICE

The life expectancy of the carbon media bed in these units will be reduced as compared to a back washing style carbon filter. The actual media bed life will vary depending on water consumption, chlorine/chloramines concentration and flow rate. Exceeding the peak flow rate will drastically reduce the life expectancy of the carbon media.

Specifications	NRV TO-100 15054073	NRV TO-150 15054074	NRV TOK-100 15054075	NRV TOK-150 15054076
Peak Flow Rates	4.0 gpm	5.0 gpm	4.0 gpm	5.0 gpm
Filter Media Volume - Cubic Feet	1.0 ft	1.5 ft	1.0 ft	1.5 ft
Filter Tank Size	9x48	10x54	9x48	10x54
Media Type	Coconut Carbon	Coconut Carbon	Coconut Carbon With KDF Distributor	Coconut Carbon With KDF Distributor
Upper Cone	Yes	Yes	Yes	Yes
Media Loaded	Yes	Yes	Yes	Yes
KDF Protector	No	No	Yes	Yes
Tank Jacket	No	No	No	No
Shipping Weight	60 lbs	78 lbs	60 lbs	78 lbs
Plumbing Connections	Includes 3/4" 90° Elbows NPT. Bypass Included.			
Electrical Requirements	None			
Water Temperature	Min 39 - Max. 100 degrees Fahrenheit			
Water Pressure	Max. 125 psi			

Specifications	NRV TOC-100 15054091	NRV TOC-150 15054092	NRV TOC-200 15054096	NRV TOC-250 15054097	NRV TOCK-100 15054093	NRV TOCK-150 15054094
Peak Flow Rates	4.0 gpm	5.0 gpm	7.0 gpm	8.0 gpm	4.0 gpm	5.0 gpm
Filter Media Volume - Cubic Feet	1.0 ft ³	1.5 ft ³	2.0 ft ³	2.5 ft ³	1.0 ft ³	1.5 ft ³
Filter Tank Size	9 x 48	10 x 54	12 x 52	13 x 54	9 x 48	10 x 54
Media Type	Catalytic Carbon	Catalytic Carbon	Catalytic Carbon	Catalytic Carbon	Catalytic Carbon With KDF Distributor	Catalytic Carbon With KDF Distributor
Media Loaded	Yes	Yes	Yes	No	Yes	Yes
KDF Protector	No	No	No	No	Yes	Yes
Tank Jacket	No	No	No	No	No	No
Shipping Weight	60 lbs	78 lbs	95 lbs	111 lbs	60 lbs	78 lbs
Plumbing Connections	Includes 3/4" 90° Elbows NPT. Bypass Included					
Electrical Requirements	None					
Water Temperature	Min 39 - Max. 100 degrees Fahrenheit					
Water Pressure	Max. 125 psi					

UNPACKING / INSPECTION

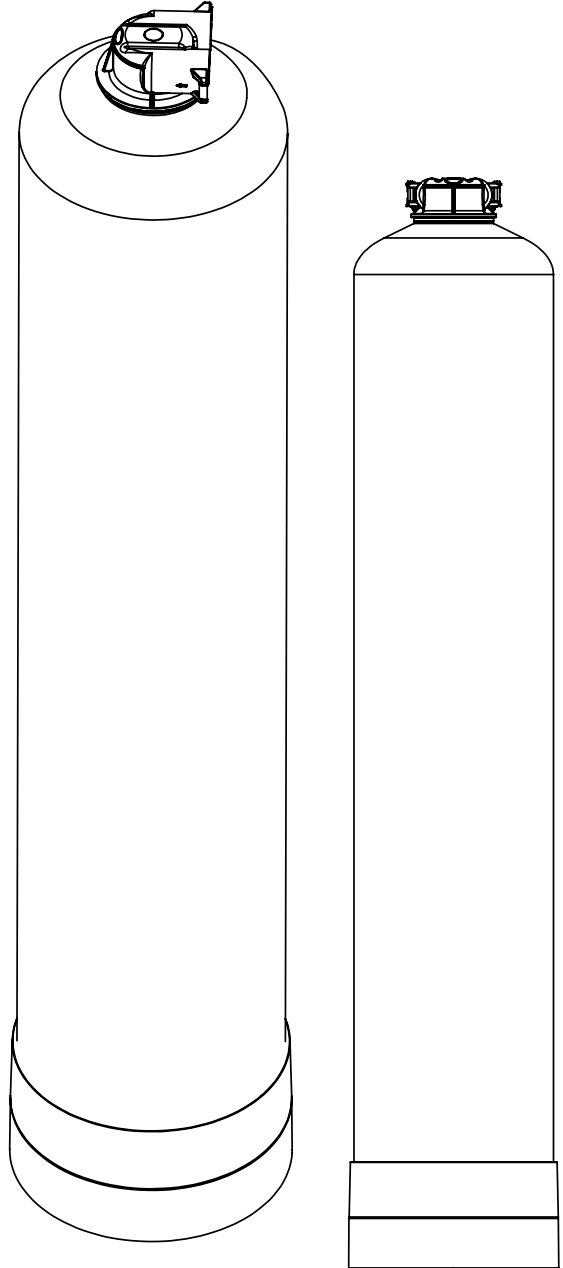
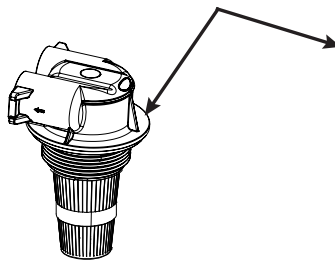
Be sure to check the entire unit for any shipping damage or parts loss. Also note damage to the shipping cartons. Contact the transportation company for all damage and loss claims. The manufacturer is not responsible for damages in transit.

Small parts, needed to install the filter, are in a parts box. To avoid loss of the small parts, keep them in the parts bag until you are ready to use them.

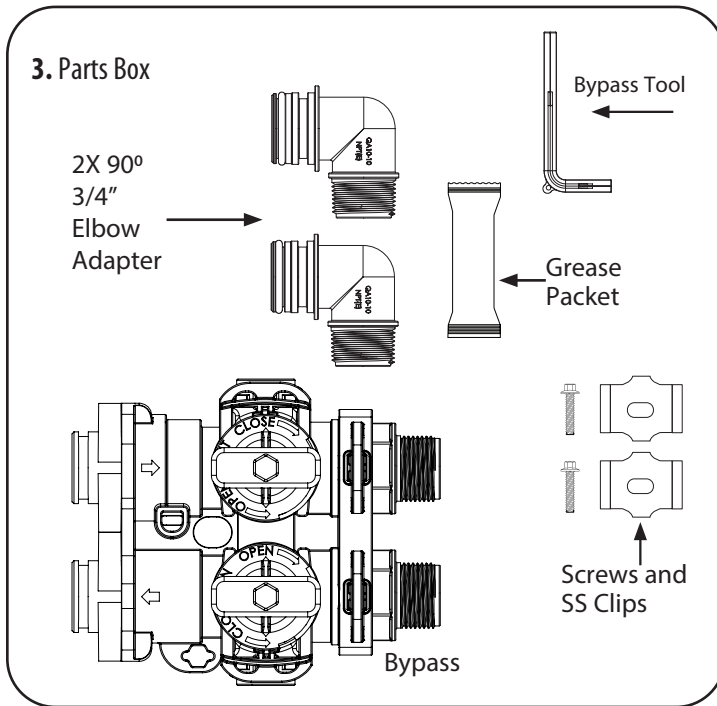
What is included in the box?

1. Distribution Head
2. Tank
3. Parts Box
4. Owners Manual

1. Distribution Head



3. Parts Box



NOTE

Due to transportation and climatic conditions, all connections, including the valve to the tank, need to be checked at time of installation and hand tightened, where necessary.

NOTE

Canature is NOT responsible for damages in transit.



WARNING

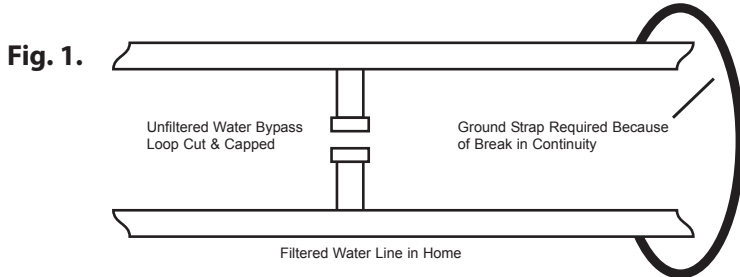
RISK OF CHOKING

Discard all leftover parts and packaging materials after installation. Small parts could be a choking hazard.

BEFORE INSTALLATION

Make sure you have a copy of your most recent water test results. If your water has not been tested previously, your professional installer can obtain a water sample bottle to be sent to one of our facilities for a free analysis. **It is important that this product not be installed until you have this information.**

In all cases where metal pipe was originally used and is later interrupted by poly pipe, or the Noryl bypass valve, an approved ground clamp with physical separation and no less than #6 copper conductor must be used for continuity, to maintain proper metallic pipe bonding.



WARNING

If the ground from the electrical panel or breaker box to the water meter or underground copper pipe is tied to the copper water lines and these lines are cut during installation of the bypass valve and/or poly pipe, an approved grounding strap must be used between the two lines that have been cut in order to maintain continuity. The length of the grounding strap will depend upon the number of units being installed and/or the amount of copper pipe being replaced with plastic pipe.

See Figure 1.

MECHANICAL

Do NOT use petroleum-based lubricants such as petroleum jelly, oils or hydrocarbon based lubricants. Use only 100% silicone lubricants (packet #92360 provided in parts kit). All plastic connections should be hand tightened only. Thread tape may be used on connections that do not use an O-ring seal.

Do NOT use pliers or pipe wrenches except when indicated by nut shape, e.g., pipe adapters. All plumbing must be completed according to local codes. Soldering connections should be done before connecting any plastic pieces to the pipe as excessive heat can damage them.

Filter resins will degrade in the presence of chlorine or chloramines above one (1) ppm. If you have anything in excess of this amount, you will experience reduced life of the resin. Pre-carbon filtration may be required ahead of the water filter to reduce chlorine/chloramine levels

TOOLS REQUIRED FOR INSTALLATION

- ▶ Two adjustable wrenches.
- ▶ Additional tools may be required if modification to home plumbing is required.
- ▶ Plastic inlet and outlet fittings are included with the filter. To maintain full valve flow, use of $\frac{3}{4}$ " or 1" [1.9 cm or 2.54 cm] pipes to and from the filter. You should maintain the same or larger pipe size as the water supply pipe to the filter inlet and outlet.
- ▶ Use copper, brass, or PEX pipes and fittings.
- ▶ Some codes may also allow PVC plastic pipe.
- ▶ $\frac{5}{8}$ " [15.8 mm] Outside Diameter drain line is needed for the valve drain.
- ▶ Drain line tubing may be needed for the optional brine tank overflow fitting.

NOTE

Use of a competent installer or plumbing professional to ensure this product is installed in accordance with local plumbing codes is recommended. Canature is not liable for any non-compliance with local requirements.

PLANNING YOUR INSTALLATION

WATER FILTER INSTALLATION LAYOUT

Select the location for your filter tank with care. Various conditions that contribute to proper location include:

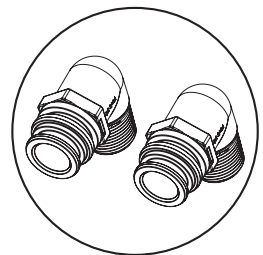
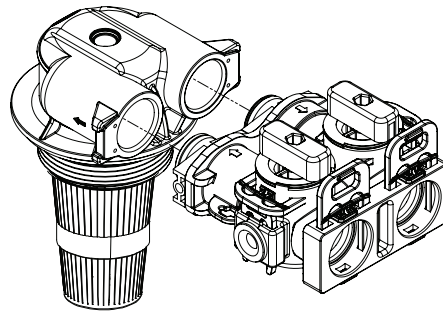
1. All installation procedures must conform to local or regional plumbing codes. Canature is not liable for any non-compliance with local requirements
2. Outside taps used to water lawns and gardens should be isolated from the water line required to supply untreated water to the inlet of the water filter – a separate (new) line may be needed.
3. Where required by local plumbing codes, a check valve may need to be installed. Canature is not liable for any non-compliance with local requirements
4. Locate filter as close as possible to the water supply source.
5. Filters should be located before the water heater on the supply line. If closer than three (3) metres [10 feet], install a check valve in accordance with local plumbing codes.
6. Do NOT install a filter in a location where freezing temperatures occur. Freezing may cause permanent damage to this type of equipment and will void the factory warranty. Freezing could also result in flooding and / or property loss and damage.
7. Allow sufficient space around the unit for easy servicing.
8. Keep the filter out of direct sunlight.



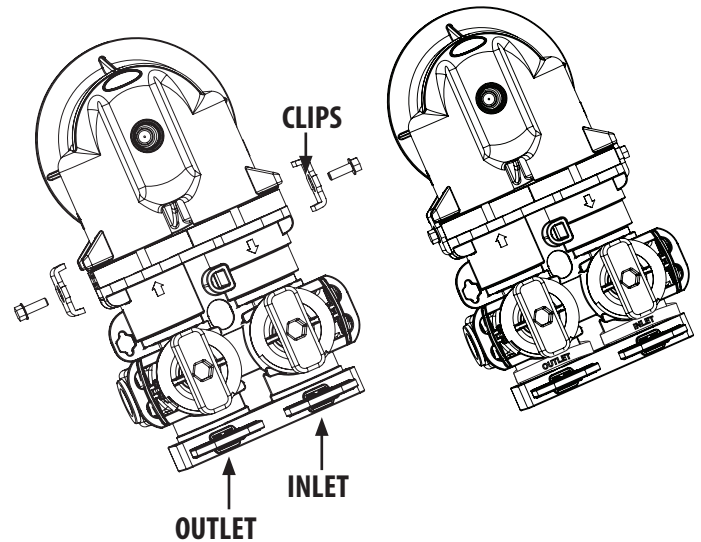
INSTALLATION STEPS

TO BEGIN YOUR INSTALLATION:

1. Apply the supplied lubricant (#92360) to the O-rings of the bypass and plumbing fittings.
2. Using the bypass clips and screws provided in the small parts box, securely attach the bypass to the distribution head.
3. Apply thread tape to threaded connections on the elbow plumbing adaptors
4. Connect the supplied elbow plumbing adaptors to the bypass with clips.
5. Connect the inlet and outlet of the water filter to the plumbing of the house.



Elbow plumbing adaptors



NOTICE

Any solder joints near the distribution head must be done before connecting any piping to the distribution head. Failure to do this could cause damage to the distribution head.

Failure to leave enough distance could cause damage to the distribution head. Always leave at least 6" [152 mm] between the valve and joints when soldering pipes that are connected to the distribution head.

NOTICE

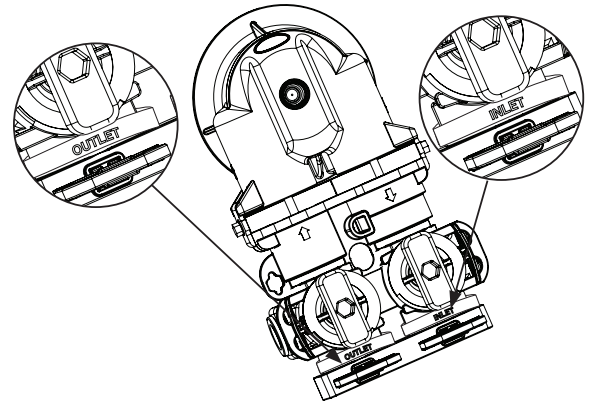
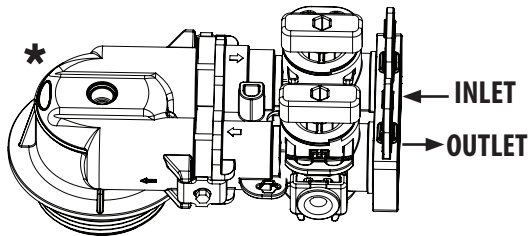
Do NOT use pipe thread compound as it may attack the material in the distribution head.

NOTE

Check local plumbing codes requirements for use of check valve(s), back-flow prevention, or vacuum breakers. Canature is not liable for any non-compliance with local requirements.

INSTALLATION STEPS (CONTINUED)

6. If your hot water tank is electric, turn off the power to it to avoid damage to the element in the tank.
7. If you have a private well, turn the power off to the pump and then shut off the main water shut off valve. If you have municipal water, simply shut off the main valve. Go to the faucet, (preferably on the lowest floor of the house) turn on the cold water until all pressure is relieved and the flow of water stops.
8. The Inlet and Outlet should be as per below illustration, this will ensure that water will flow through the filter under upflow configuration. Any solder joints near the valve must be done before connecting any piping to the valve. Always leave at least 6" (152 mm) between the valve and joints when soldering pipes that are connected to the valve. Failure to do this could cause damage to the valve.



*NOTICE

The Inlet and Outlet should be as per above illustration. This will ensure that water will flow through the filter in an upflow configuration.

9. Using the Allen Key (included), place the unit in the bypass position. Slowly turn on the main water supply. At the nearest cold treated water tap nearby remove the faucet screen, open the faucet and let water run a few minutes or until the system is free of any air or foreign material resulting from the plumbing work.
10. Make sure there are no leaks in the plumbing system before proceeding. Close the water tap when water runs clean.
11. Turn the bypass valve to the closed position and allow the carbon media bed to soak for 15 to 20 minutes. After soaking, run the water again at the nearest faucet (ensure the aerator screen is removed) until all of the black carbon fines have been rinsed to the drain and the water runs clear.

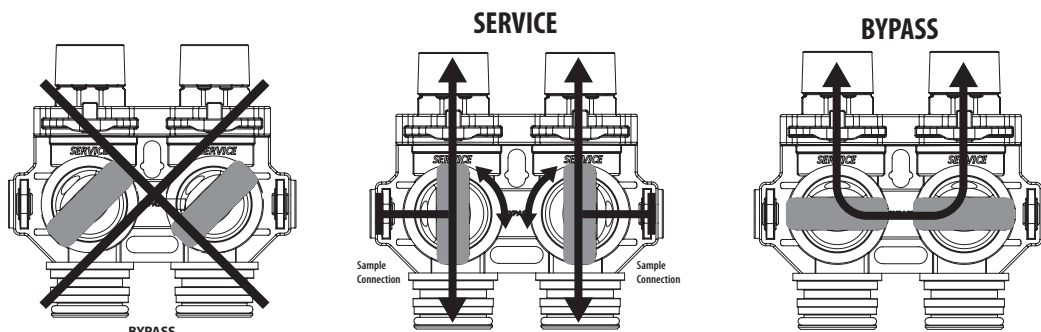
MANUAL WATER BYPASS

In case of an emergency, or to perform maintenance, you can isolate water filter from the water supply using the bypass valve located at the back of the control.

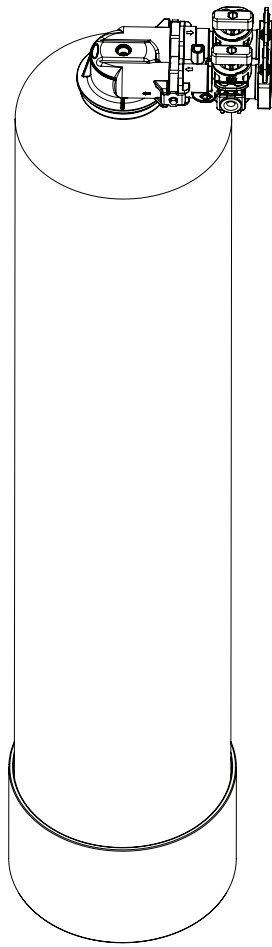
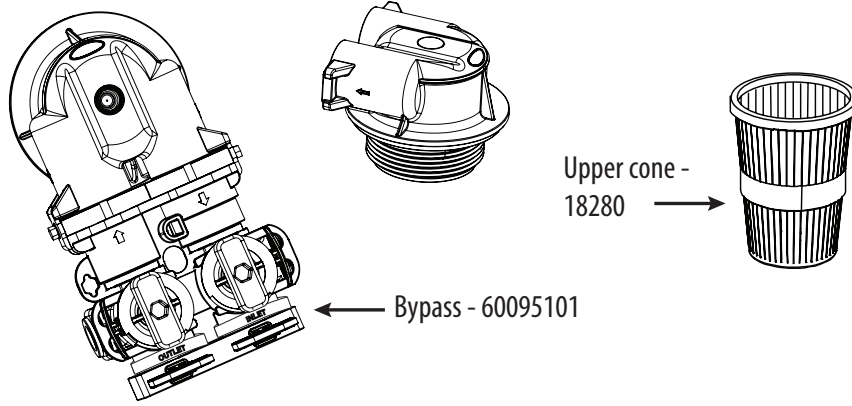
In normal operation the bypass is OPEN with the ON/OFF knobs in line with the INLET and OUTLET pipes, i.e., the black marks in the vertical position. See SERVICE above

To isolate the filter, simply rotate the knobs as indicated to the CLOSE position until they lock. You can continue to use your water related fixtures as the water supply is bypassing the softener. However, the water you use will be untreated.

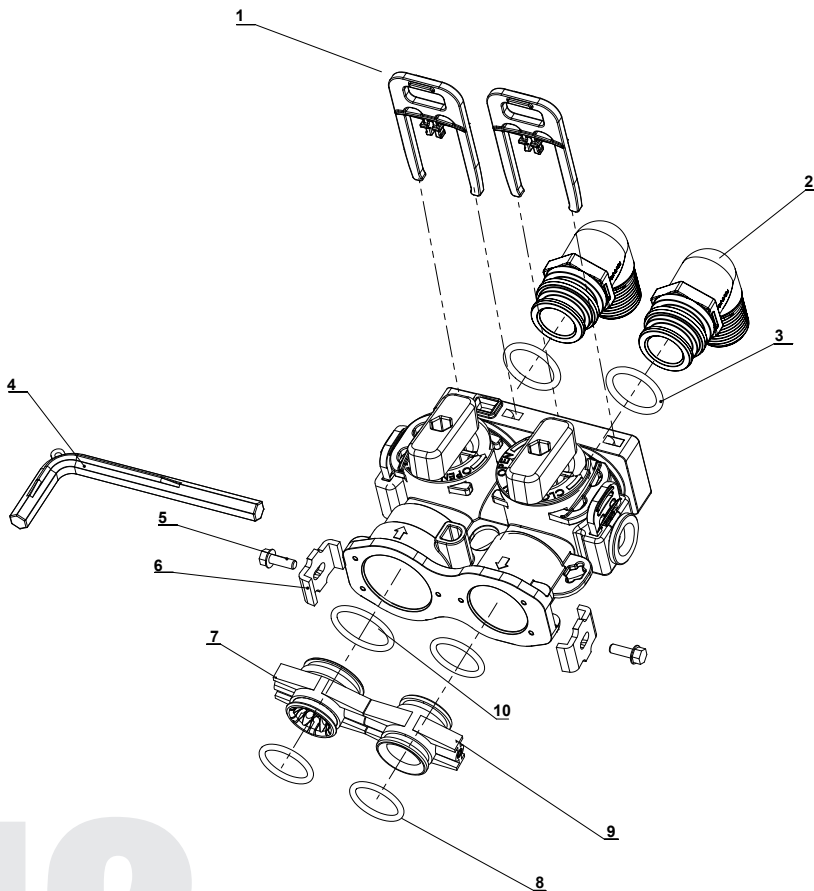
To resume treated service, OPEN the bypass valve by rotating the knobs back to the SERVICE position.



PARTS BREAKDOWN



Model	Mineral Tank Size	Tank # (Natural Color)	Tank # (Black Color)	Tank # (Blue Color)	Distributor#	Distribution Head #	Media Bed #
NRV-100	9 x 48	25010034	25010036	25010035	50010006	60010068M	95402
NRV-150	10 x 54	25010049	25010051	25010050	50010005		95403
NRV-100TOK	9 x 48	25010034	25010036	25010035	50010012		95402
NRV-150TOK	10 x 54	25010049	25010051	25010050	50010012		95403



Bypass Parts List

No.	Part #	Description	Qty
1	60010025	Secure Clip Inlet and Outlet	2
2	60010023	Elbow 3/4" NPT Inlet and Outlet	2
3	60010026	O-ring on Inlet and Outlet	2
4	60010006	Bypass Tool	2
5	60010701	Screw on SS Clip	2
6	60010046	SS Clip	2
7	60010101	Valve-Bypass Connector(Outlet)	1
8	60010562	Small O-ring on Connector(Outlet)	3
9	60010079	Valve-Bypass Connector(Inlet)	1
10	60010561	Big O-ring on Connector(Outlet)	1

SERVICING YOUR FILTER

MEDIA INSTALLATION BED REPLACEMENT

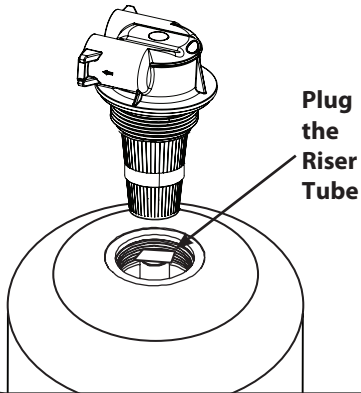


MANDATORY

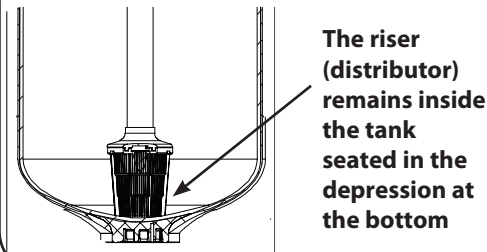


Wear a Dust Mask.
Airborne particles could pose
potential health risks.

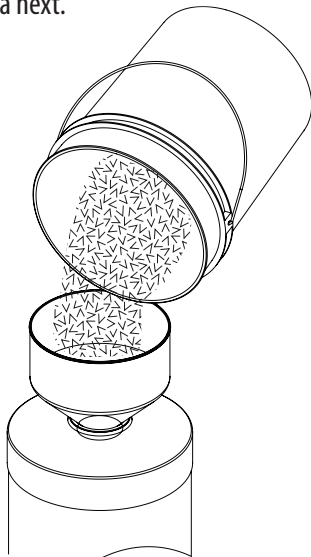
1. Temporarily plug the open end at the top of the riser (distribution) tube with tape.



2. Ensure the bottom of the riser tube remains seated in the depression at the bottom of the tank. Fill tank one-quarter full with water to protect the distribution tube during gravel installation.

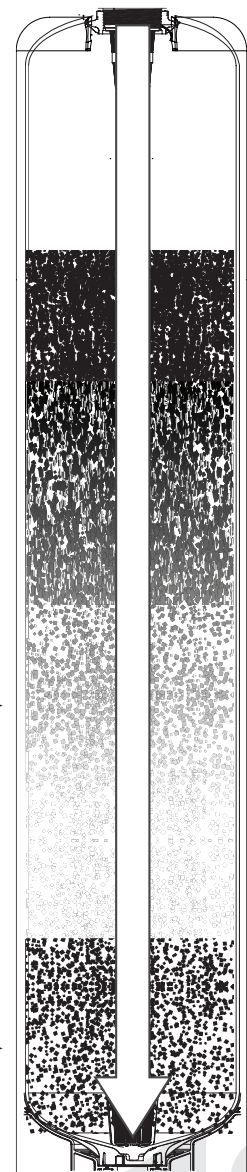


3. Fill the gravel support bed first. A large funnel makes filling the tank much easier. Order part #99003 separately for your own funnel. Slowly add the gravel. Depending on the type of system, add the resin, or media next.



Media →

Support Bed Gravel →



NOTE

If severe loss in water pressure is observed when the filter unit is initially placed in service, the filter tank may have been laid on its side during transit. If this occurs, backwash the filter to 'reclassify' the media.

TROUBLESHOOTING GUIDE

NOTE

Before attempting any troubleshooting, be sure to test the water. The tests should include;

1. Raw water
2. Hot treated water
3. Cold treated water.

PROBLEM

DELIVERS UNTREATED WATER

The bypass is closed, sending raw water past the unit.	Return the bypass valve to the open position to service the home. See Manual Bypass.
Bypass loop in the home's plumbing.	Close outlet valve only on filter bypass, open nearest softened water line. If no water flows, then there is not a bypass in the plumbing. If there is water flow, then there is a hidden bypass in the plumbing and you need to call the installer.

DISCOLORED WATER

Check with your local water authority to see if there has been water main activity in your area.	If there has been, manually regenerate the unit a couple of times in a row to clear the color. If there hasn't been and main activity, contact your authorized installer.
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EXCESSIVE PRESSURE LOSS

Peak or continuous service flow rate may be exceeding capacity causing the unit to be restrictive due to size.	<ol style="list-style-type: none">1. Check unit specifications to ensure proper sizing for the application.2. Degradation of carbon due to chlorine or chloramine.<ul style="list-style-type: none">• Replace the carbon bed.
--	--

WARRANTY

NOTICE: THIS MANUAL CONTAINS A LIMITED WARRANTY. BY INSTALLING AND/OR USING THIS PRODUCT, YOU WAIVE CERTAIN LEGAL RIGHTS INCLUDING THE RIGHT TO SUE OR CLAIM COMPENSATION IN THE EVENT OF PROPERTY DAMAGE, INJURY AND/OR DEATH.

Products manufactured and assembled by Canature WaterGroup™ are warranted to do the work for which they are intended where properly installed, operated and maintained. Canature WaterGroup™ warrants each new residential water filter to be free from defects in materials and workmanship subject to the qualifications or exclusions below.

Residential Systems are defined by pressure tank size and / or the amount of resin or filter media contained in the tank. Residential systems use up to 13" [76mm] diameter tanks and can contain up to 3.0 cubic feet [28.3 L] of resin or filter media.

Warranty on Control Valve and Parts:

Canature WaterGroup™ will replace or repair any part (except for media) which fails within five (5) years from date of manufacture, as indicated by the serial number, provided the failure is due to a defect in material or workmanship. The only exception from the date of manufacture shall be proof of purchase or installation is provided and then the warranty period shall be from the date thereof.

Warranty on Mineral Tanks:

Canature WaterGroup™ will provide a replacement mineral tank to any original equipment purchaser in possession of a tank that fails within ten (10) years from the date of manufacture, as indicated by the serial number, provided the failure is due to a defect in material or workmanship and lifetime of the original owner, provided the failure is due to a defect in material or workmanship and that the water filter or filter is at all times operated in accordance with specifications provided in the Owner's Manual and not subject to freezing or vacuum.

Exclusions:

Damage to any part of this water filter or filter as a result of misuse, misapplication, neglect, alteration, accident, installation or operation contrary to our printed instructions, or damage caused by any force of nature is not covered in this warranty. At our sole discretion, we will repair or replace defective parts if our warranty department determines it to be defective under the terms of this warranty. Canature WaterGroup™ assumes no responsibility for consequential damage, labor or expense incurred as a result of a defect or failure. Media and Resin coverage is limited to the warranty provided by the original manufacturer.

As a manufacturer, we do not know the characteristics of your water supply. The quality of water supplies may vary seasonably or over a period of time. Your water usage may vary as well. Water characteristics can also change if the appliance is moved to a new location. For these reasons, we assume no liability for the determination of the proper equipment necessary to meet your requirements, and we do not authorize others to assume such obligation for us. Further, we assume no liability and extend no warranties, express or implied, for the use of this product with a non-potable water source or a water source which does not meet the conditions for use as described in the Owners Guide.

CANATURE WATERGROUP'S™ OBLIGATIONS UNDER THIS WARRANTY ARE LIMITED TO THE REPAIR OR REPLACEMENT OF THE FAILED PARTS OF THE WATER FILTERING SYSTEM AND WE ASSUME NO LIABILITY WHATSOEVER FOR DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL, GENERAL OR OTHER DAMAGES.

Return of Goods:

An authorization number must be obtained before returning any merchandise. NOTE: All material returned to Canature Watergroup must be returned freight prepaid. Upon inspection, if our warranty department determines the goods to be defective under the terms of this warranty, the warranty shall be limited to the defective parts to be repaired, replaced, or credited at Canature WaterGroup's discretion. You pay only freight to return defective parts to our factory and local dealer charges, including but not limited to labor charges, travel and transportation expenses, and handling fees.

Some State & Provincial jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Similarly, some State & Provincial jurisdictions do not allow exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from jurisdiction to jurisdiction. Consult your authorized Dealer for warranty and service information.

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