

NXT 5 Pure Water System

Effective May, 2019

Pure Water Window Cleaning System Operation and Maintenance Manual



Overview

Congratulations on your purchase.

Thank you for purchasing the NXT 5 Pure Water System. With proper care, this unit will provide you with years of trouble free service. This system was designed with professional window cleaners in mind. The NXT 5 will help you clean faster, safer, and better than ever before, leaving spot free results that you and your customers will love.

The NXT 5 is a multistage water purification unit using Carbon/Sediment, Reverse Osmosis (RO), and Deionization (DI) filtration to remove impurities from water before delivery to surfaces for cleaning. General lifespan of the filters will vary depending on feed water Total Dissolved Solids (TDS). Based on an average TDS of 100 ppm (parts per million) in your source water, approximately 20,000 gallons of water can be passed through the Carbon/Sediment and DI filters before replacement filters are needed. Lower TDS levels in the source water will allow for a longer lifespan, while a higher TDS source levels will lead to a shorter lifespan for the DI filter. It is recommended that the Carbon/ Sediment and DI filters be replaced at the same time. The RO membrane is rated to process 100,000 gallons under ideal conditions. Failure to properly maintain the RO membranes will reduce the life of the filter. See

maintenance and filter replacement sections for more details on filter replacement.

In The Box

Parts Check

- NXT 5 System
- Hose Reel
- Shut-off Valve
- TDS Meter
- Bypass-Hose Assembly
- Owners Manual

1. Unpacking/Inspecting The System

Your system is packaged to stay undamaged in transit. Please inspect all components to ensure no damage has occurred prior to continuing. Carefully remove the packaging material from around the system and discard. Your NXT 5 comes with all filters installed and ready for use. Inspect your NXT 5 for any shipping damage. If damage has occurred, notify the shipping company that made delivery to begin a damage claim. Check all fittings to ensure that they are connected tightly, as they may loosen up during shipping.

2. Initial Setup

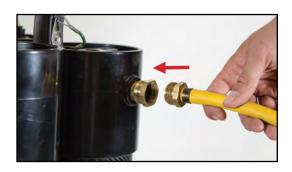
Refer to your quickstart guide for more set up information.

You can also watch the quickstart video at: www.abcWindowSupply.com/NXT5QuickStart



- 1. Attach handle to the hose reel.
- 2. Insert bypass hose assembly into blue fittings on the top of both RO Filters. Open the bypass valve fully to start
- 3. Attach feed hose to female brass fitting on the Carbon/Sediment filter.
- 4. Attach the black plastic shut off valve onto the hose reel outlet and connect pole tubing. The connector on the pole tubing goes in easier with the shut off valve in the off position.
- 5. Ensure that the black plastic shut off valve is in open position before continuing.
- 6. Turn on source water.
- 7. Wait for water (and air) to begin flowing out of the bypass tube.
- 8. Once the air has been pushed out of the filters (within 1-2 minutes), plug in your cart to an electrical outlet.
- 9. With the bypass valve fully opened, turn on pump. Don't run your pump dry. Turn off the pump before closing any valves.
- 10. Adjust bypass valve until system pressure is 120-160 psi. **Don't exceed 180 psi.** Never close the bypass valve fully during operation (a stream of bypass water should always be flowing out). See Bypass Valve section for more information.
- 11. Start cleaning windows.

3. Hooking Up To Water Source



Your NXT 5 is designed to be operated while standing up. Locate an external water source on the building to be cleaned. Attach one end of the feed hose (not supplied) to the water source (a ¾" garden hose is preferred). Open bypass valve fully and turn on source water. Once the air in the filters has left the bypass line, open the shut-off valve between the hose and the pole to allow water to flow through the pole and wash glass. Do not turn on any pumps without water flowing out of both the bypass hose and the pure water outlet. Turn on pump. **Do not drink pure water made from your system.**

4. Bypass Valve Operation

The system comes with a bypass hose assembly that controls the amount of pressure on the RO membrane and the amount of minerals that are removed from the filter. This assembly is the black tubing with a valve that plugs into the top of the RO filters. RO membrane filters use the bypass flow to remove concentrated dissolved solids from the filter. **There should always be water flowing out of the bypass hose assembly.** Inadequate bypass flow will result in fouling and possibly damage the RO filter.

The water coming out of the bypass hose assembly may initially appear milky. This milky appearance is actually small air bubbles being pushed out of the filter housing through the bypass line. Fully opening the bypass valve should quickly remove most of the trapped air. Remove all air from the filter before using any pumps.

The bypass valve is also the primary way you can control the pressure of your system. Opening the bypass valve more will reduce the amount of pressure that is used to produce pure water resulting in lower flow rates at the brush. Closing the bypass valve will increase the amount of pressure which will lead to higher flow rates at the brush. Remember to fully open the bypass valve when starting up for the day and before turning on your pump. When using the system without a pump, close your bypass valve until the flow coming out is roughly equal to the flow coming out of the pure water outlet.

When using the pump, start with the bypass valve in the fully open position. Watch your pressure gauge as you slowly close the bypass valve to ensure that restricting the bypass valve does not lead to



overpressurization. The bypass valve should be mostly open when using the pump to reach a pressure of 140-160 psi. **Make sure not to exceed 160 psi on the pump to prevent damage to your filters.**

Flushing water through the RO filter after each use will remove excess minerals from the housing. The pump should not be turned on when flushing the system. It is recommended that your run your system with the bypass valve fully open and the black plastic shut off valve closed for a few minutes each time you finish using your system. This helps to clean out your RO membranes and help extend their life. See Shutdown section of this manual for more details on storage between use.

5. Your NXT 4 Pump

Your NXT5 system comes with a ³/₄ HP positive displacement rotary vane pump. **Do not run the pump dry.** Running the pump without water will result in damage to the internal components and ultimately a loss of pump function.

The maximum pressure rating for the RO filter is 180 psi - do not operate the system above this pressure. ALWAYS shut off the pump before shutting off flow out of the bypass line or the pure water going to the pole. **Do not shut off your bypass valve or pure water outlet while the pump is running.** Should your pump pressure exceed 180 psi, you can lower the system pressure by opening the bypass valve. Having the bypass valve fully open before starting a pump (or running water through filters) will reduce the likelihood of trapping air or exceeding the pressure rating for the system. The maximum pressure rating for the DI filter is 110 psi. Do not restrict flow to the brush or out of the bypass line while the pump is running. Shutting off the pure water outlet while the pump is running will exceed the pressure rating for the DI filter.

The power cord for the system comes with a GFCI plug. When possible, plug the GFCI plug directly into the wall outlet. In some situations this is not feasible and extension cords can be employed. Ensure that any power cords are free from damage and are heavy enough to power the unit.



GFCI adapter not included. GFCI adapter can be purchased at most hardware stores.

We recommend using cords with 10 gauge (or larger) wire thickness for spans up to 100 feet and 8 gauge (or larger) wire for spans up to 200 feet for this unit. Smaller gauge extension cords may be able to handle the amperage requirements, but will allow significant voltage loss over distance. Running the motor and pump with a low voltage supply, caused by undersized extension cords, will cause the motor to overheat and possibly shut down. This will damage the motor over time and can cause it to stop working completely.

Always plug extension cords into GFCI protected outlets to reduce any chances of accidents. Place a GFCI adapter between the outlet and any extension cords if there are no GFCI protected outlets. The GFCI plug on the system will protect it from voltage leaks, but does not protect any upstream extension cords.

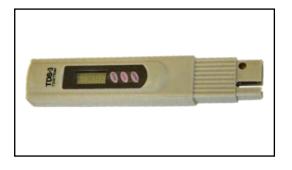
6. Operating Without Power

7. TDS (Total Dissolved Solids) Meter

When tap pressures are adequate (60 or more psi) or electrical outlets are difficult to access, you can produce pure water without using the pump. Because the pressure will be less than what you would see with the pump, the production levels will also be lower than what you see when using the pump.

The pump may stop with the internal components in a position that restricts flow. When this happens, the flow coming out of the bypass line will slow or stop. Users can bypass the pump completely if this happens on a site without electricity. To do so, attach the wye shaped hose coming from the bottom of the RO filters directly into the bottom of the Carbon/Sediment filter. Replace the hoses to their original position before using the pump again. Failure to do so will damage the pump.

If there is electricity on site and the pump is restricting flow (out of the bypass line), turn the pump on for a second or two to rotate the inner components and restore flow through the system. This should allow water to pass through the pump which will then flow out of the bypass line. If the flow out of the bypass does not return to normal, follow the steps above to bypass the pump.



Total Dissolved Solids are the minerals and salts within source water that lead to spotting on glass as the water evaporates. Your TDS meter measures the amount of dissolved solids using the conductivity of the water. The meter can test water before and after individual filters or to determine how they are performing. TDS levels are measured in parts per million (ppm).

Remove the cap from the TDS meter and fill with the sample you wish to test. Push the "On" button on the handheld TDS meter to get a TDS reading of the water sample. A TDS reading of 0 – 10 parts per million (ppm) is acceptable for cleaning most windows, though specific conditions and results may vary.

When measuring source water before pure water TDS levels, it is important to rinse out any source water with pure water to ensure accurate readings. Even a single drop of source water will cause the pure water TDS reading to appear higher than it actually is. Taking multiple readings will help ensure maximum accuracy when measuring filter performance.

Your TDS meter also has a thermometer which reads temperature. This can allow you to monitor the temperature of your feed water. Running your system at feed water temperatures of less than 10 °C (50 °F) will result in low pure water flow exiting the system. RO filters require more pressure to create the same amount of clean water as the temperature of the source water gets colder. The pump on your NXT 5 unit will help to compensate for low source water temperatures. **Do not let the system or any filter freeze.**

8. Using A WaterFed[®]Pole



Once your NXT 5 system is hooked up, and you have a WaterFed® pole connected to the hose, you're ready to clean windows.

Always begin by cleaning the top row or highest windows first, including scrubbing the frames. Work the WaterFed® pole up one side of the frames, across the top, and back down the other side. Scrub the glass in an up and down motion, moving the pole the entire length of the glass with each stroke if possible. Return the pole to the top of the window, and with a side to side motion, allow rinse water to flow completely down the surface of the glass.

Frame rinsing may not be required. If the height of the glass and the weight of the pole allow for it, hold the brush slightly off of the surface of the glass to rinse. If this is not possible, move the pole side to side slowly with the brush on the glass at the top, and let the water flow down the glass to rinse.

Once you have completed the top row or highest glass on one side of the building, repeat these steps for each tier or level of glass, working your way down. A good initial scrubbing on the glass followed by a complete rinse will ensure that the glass dries completely spot-free.

Pure water is a great natural solvent for many soils. In some cases, such as heavy soils, a pre-soak or even a double scrub and rinse may be needed to achieve optimal results. The agitation of the brush, coupled with the flow of water through the brush when scrubbing, should break down and suspend most soils, readying them for complete removal via the rinse step.

As with any new procedure, practicing the use of your WaterFed® pole is the best way to achieve optimal results. Learn more about basic technique at www.abcWindowSupply.com/StartingWF

9. Soap Residue

Getting spotting when your TDS levels are below 10? A common issue encountered when transitioning buildings from traditional window cleaning methods to pure water cleaning is soap residue. After the initial cleaning with pure water, small white or gray spots and runs may be seen on the glass after drying. Most often this is soap and or detergent residue left behind by previous traditional cleanings and brought out of the pores of the glass by the pure water cleaning process. The soap can take up to 30 minutes to dissolve if it has been baked on or pushed into seals and frames. Soaking the glass 15-20 minutes before performing a normal agitation and rinse cycle will remove soap spotting. Repeat agitation and rinse if the spots persist.

10. Shutdown

- 1. Turn pump off (always turn off pump before turning the source water off).
- 2. Open the bypass valve fully.
- 3. Close the pure water outlet (at the bottom of the DI filter or the end of the hose reel) using the black plastic shut off valve.
- 4. Let the system flush through the Carbon/Sediment and RO filters filter for 3-5 minutes.
- 5. Turn supply water off.
- 6. Optional detach lower hose fittings to drain water from housings for transport.

11. Maintenance

Your NXT 5 system requires little maintenance to operate a peak performance. Changing Carbon/Sediment filters on a regular basis is essential to the health of the RO filters. Flushing the RO filters after each use will ensure they reach their maximum lifespan.

The Carbon/Sediment filter should be replaced every 6 months with frequent use and should not be kept in service for more than a year. Failure to replace the Carbon/Sediment filter regularly can lead to chlorine reaching your RO filter and result in damage to the membrane. We often recommend that users should replace both their Carbon/Sediment and DI filters at the same time as this usually ensures that the carbon is kept fresh without having to track service dates. If you are using this unit in a soft water area (less than 200 ppm) replace your Carbon/Sediment filter every 6-12 months, as your DI filters will last longer than normal. If you are replacing DI filters often due to very hard source water (500 plus ppm), replace the Carbon/Sediment filters every 6-12 months rather than every DI filter change. Changing the Carbon/sediment filter on a system will not significantly change the TDS levels of water leaving the system.

RO membranes have the potential to process 100,000 gallons of water when properly maintained. New RO filters generally start with a 98 percent rejection rate. This means that if 100 ppm source water enters the filter, we expect the water coming out of the pure water exit will have about 002 ppm. The amount of pressure on the membrane and the quantity of water flowing out of the bypass valve can affect the rejection rate of the RO filter. Higher amounts of bypass flow, compared to the pure water outlet, will result in lower TDS levels in the pure water stream. Closing off the bypass valve will increase the amount of TDS that reaches your DI filter, which will shorten its lifespan.

To test the rejection rate of your RO membrane compare the TDS levels of the source water to the level of pure water leaving the RO filter. For example,100 TDS source water with 10 TDS leaving the RO filter indicates 90% rejection. When RO membrane rejection rates drop below 80% it is generally time to replace the RO filter canister. Flushing out the RO membranes at the end of the day is crucial to achieving maximum RO filter lifespan. Never reverse the direction of flow for your RO filters. Hooking them up backwards will ruin the RO filters. Check your manual and or quick start guides to ensure filters are in the correct location and are attached to the correct hoses. The lifespan of your DI filter depends on the TDS levels of the water entering and exiting the filter. If these numbers are the same, the filter is completely exhausted. Periodically check the TDS levels of the purified water leaving the DI filter with the provided TDS meter. Testing the water coming out of the filters will be more accurate than testing water that is in a hose reel. When the TDS levels reach unacceptable levels for your application (abc suggests 10ppm or less for window cleaning and 40ppm or less for cleaning opaque surfaces) the DI filter is likely exhausted and should be replaced. See troubleshooting section below for more information on high TDS levels coming from the system.

Periodically check the electrical wiring and system for damage. Test your GFCI by pushing the white button to test the shut off and the red button to reset the system.

12. Filter Replacement

Learn how to change your filters by video: www.abcWindowSupply.com/NXT5Filter



Carbon/Sediment Filter

Unscrew the hose from the bottom of the Carbon/ Sediment Filter (P/N WF2CSC-21). Unscrew the wingnut at the top of the Carbon/Sediment filter cartridge that secures the filter to the cart. Remove the spent cartridge from the bolt and the holding clip at the bottom and discard. Slide bottom end of the new filter into the clip at the bottom of the frame. Rotate the filter so that the female brass fitting is on the top and pointed to the left side of the cart when standing at the handle. Swing the top so that the bolt is inserted in the hole on the cap of the filter labeled NXT. Reattach the wingnut on the bolt to secure the filter. Reattach the three legged hose to the bottom of the Carbon/Sediment filter. Fittings should be tight enough to avoid leaks, but over tightening could result in damage to the brass fittings.

DI Filter

Unscrew the gray hoses from the top and bottom of the DI filter (P/N WF2CDI-21). Unscrew the wingnut at the top of the DI filter cartridge. Remove the DI filter by pulling the top of the filter away from the frame pulling it off of the bolt at the top. Next, lift up to remove the filter from the clip at the bottom. Discard used filter. Slide the bottom (the end without stickers) of the new filter into the clip at the bottom of the frame. Swing the filter so that the bolt is inserted in the hole on the top cap. Attach and tighten the wingnut on the bolt to secure the filter. Attach your brass fitting to the bottom DI filter. Fittings should be tight enough to avoid leaks, but over tightening could result in damage to the brass fittings.

RO Filter

Remove the bypass tubing from the top of each RO filter. To remove the tube, push down on the blue retaining ring of the fitting while pulling the tubing straight up. Repeat for the other filter. Retain this bypass tubing for re-installation on new membranes. Unscrew brass fittings from each end of the RO filters (P/N WF2CRO-21) and unscrew the wingnut and bolt secures the top of the filter to the cart. Remove the spent membranes from the holding clips and discard dused filter. Reinstall the new RO filters into the holding clips and re-attach the brass fittings. DO NOT OVERTIGHTEN THE BRASS FITTINGS. Re-install the bypass hose as described above

12. Storage

Storage - Short Term (2-4 Weeks)

Do not allow the filters or system to freeze. Failure to do so could result in damage to your filters and NXT 5 system. Do not allow DI or RO filters to dry out. Dry DI resin will lose its charge and therefore become unable to remove dissolved solids from the water. Dry RO membranes will develop cracks which allows more dissolved solids to pass through the filter. Increased TDS levels entering the DI filter will deplete it at a faster rate. abc recommends that you run water through your carbon and RO membrane filters once every 2 weeks or so, not only to help keep your filters moist but to also wash out any microorganisms that might try to grow in your filters. RO and DI filters need to stay moist but do not need to be full of water. Always run your source water through the carbon filter before the RO membrane when flushing the filter.

Storage - Long Term (Winterizing)

abc strongly recommends flushing out the RO filter once every 2-4 weeks to ensure the maximum lifespan of the filters. When flushing the RO membrane filter, the source water should be passing through the Carbon/ Sediment filter before the RO membrane. This will prevent damage to the membranes from chlorine and chloramine. Periodic flushing will ensure that the filter membrane does not dry out and will reduce the chance that biological growth will foul the filter elements while in storage.

If periodic flushing is not feasible, we recommend that users wrap filters tightly in plastic wrap or plastic bags and then seal with tape. This will reduce the chance that the filter dries out when in storage. **Do not allow DI or RO filters to dry out.** Dry DI resin will lose its charge and therefore become unable to remove dissolved solids from the water. Dry RO membranes will develop cracks which allow more dissolved solids to pass through the membrane. RO and DI filters need to stay moist but do not need to be full of water.

Store filters, pumps, and hose assemblies indoors over the winter. **Do not allow the filters or system to freeze.** Failure to do so could result in damage to your filters and NXT system. After RO filters have been stored for extended periods of time, they will need to be flushed thoroughly before use. Leaving RO filters wrapped for extended periods of time can lead to biological fouling, which is why we recommend flushing them out before use.

13. Troubleshooting

Low pure water flow out of the brush

1. Low tap pressure is the most common cause of low pure water production from multifilter style units. This should only be a concern when operating the NXT 5 without the pump. For low production issues when using the pump, see the Pump Issues section below Source water pressure is the primary driver of system performance for RO filters. Even sources that appear to have plenty of flow out of the tap may not have enough pressure to push water through the RO membrane. Ensure that the tap pressure is sufficient using a pressure gauge. Trying a different source may lead to better performance. Also check all hoses (incoming and outflowing) for kinks or blockages, especially hose reels that are wound too tight. Trying a larger diameter hose (1/2" or more) or a shorter hose length between the system and the tap can also improve flow.

2. Mineral fouling of the RO membranes will lead to reduced pure water production from your system. Processing water through the RO membranes without enough (or any) bypass flow will lead to increasing mineral concentration within the RO filters. In minor cases, this will result in a temporary drop in production from the RO membrane. Flushing the excess minerals from the housing will normally return the filter to normal production rates. In extreme cases the mineral buildup will permanently reduce the flow rate of the filter. These cases can only be fixed by replacing the filter.

3. Biological fouling is another potential cause of reduced pure water production from the RO filter. Algae, bacteria and fungi can land and grow on the surface of the RO membranes. These organisms eventually block off pores in the membrane leading to reduced production levels. Letting filters sit for long periods of time without running any water through them increases the chances of biological fouling. After long term storage, running a series of long flushes will often return the RO membrane to normal production levels. Fully open you bypass valve and shut off the flow of pure water out of the system. Run it like this for 10 minutes and then open the shut off valve and open your bypass valve to its normal running setting. Retest the pure water production rates out of the system to see if purification has improved. Doing this flushing process 2 or 3 times may be required to return to normal production levels.

4. Expect decreased production rates when running your ROs with colder source water. The ideal temperature for source water is 77°F. You can expect less than half the flow for water at 50°F that you would get at 75°F, even if both sources are at the same PSI. Use your TDS meter to measure the temperature of your source water to determine if this is the cause of lowered flow rates.

5. Leaks in the system and the pole tubing can release pressure and take flow away from the jets in your brush. A couple of small leaks in the pure water lines can cut pressure to the jets in half. Read the "leaks" section below for more information on eliminating leaks in the system.

Pump Issues

1. GFCI lights will not come on /pump will not turn on. Hook the unit up to your source water and let it run before troubleshooting the pump. Do not run the pump dry when performing the following tests. First, check that the light on the GFCI turns on when it is plugged into an outlet. If there are no lights on the plug after pushing the reset button, check your plug in another outlet to see if the lights turn on. If the GFCI plug will not light up, it likely indicates that it is damaged, and will need to be replaced.

2. GFCI lights up but pump will not turn on. Perform these tests with the water plumbed and running. Turning on the pump without any water in the system will damage the pump. If the GFCI lights are on, the voltage is verified to be 120, and the motor still doesn't want to rotate, it is likely an issue with the switch. Remove the electrical tape holding the plugs together on the power cord coming out of the motor (between the motor and the switch box). Plug an extension cord into a GFCI protected outlet and plug the other end directly into the plug connected to the motor. If the motor now runs, the switch was the problem and will need to be replaced.

3. Pump runs, but shuts off periodically. The motor has a thermal protection shutoff to prevent damage to the motor from excessive heat. Once the motor cools down it will reset itself automatically. The most common cause of overheating is an undersized extension cord. As the motor runs it also spins a fan which cools its housing. If you use an undersized extension cord, your pump will overheat. Plug the system directly into the wall when possible. We recommend using a 12 gauge cord for distances up to 50ft; 10 gauge up to 100ft; and 8 gauge for spans up to 200 feet. Attempt to plug the system direct into the wall when possible. If you have to use an extension cord, a 12 gauge cord for distances over 50ft and 10 gauge over 100ft should provide a low enough voltage drop to avoid overheating your motor.

High TDS coming from the system

1. Retest your water sample. When you get a higher than expected reading on your handheld TDS meter, it is a good idea to use the water you are testing to wash out both the measuring lid and the measuring prongs of the meter itself. Do not get the body of the meter wet, it is not waterproof. Minerals can stay in the cup from other measurements and can make the sample appear to have a higher TDS than it actually does. Taking multiple samples ensures maximum accuracy.

2. High TDS coming out of the system usually indicates that the DI filter is spent. Testing before and after the DI filter will verify that there is not another issue. If the TDS levels before and after the DI filter are the same, the filter is completely depleted. Replace the DI filter (P/N WF2CDI-21) once depleted. If water coming from the RO filter has high TDS levels, check the RO performance as well.

3. In addition to spent DI resin, High TDS can also indicated a problem with one or both of the RO filters. The best way to test your ROs is to use your handheld TDS meter to measure the water coming out of the ROs and compare that number to the source water. Disconnect the hose from the top of the DI filter and turn on the source water. Allow the water to flow out the hose from the RO filters for two minutes to allow the ROs to get over their initial TDS spike and then take a TDS reading. Compare the TDS reading of the ROs to the TDS of the source water to get your rejection rate. Your RO should have a rejection rate of over 80%. If the rejection rates are below normal, follow the step below to ensure that the RO filter needs to be replaced.

4. If your RO rejection is lower than expected, you can try running a 10 minute flush. Increasing flow through the filter housing will help the flushing process. Fully open you bypass valve and shut off the flow of pure water out of the system. Run it like this for 10 minutes and then open the shut off valve and open your bypass valve to its normal running setting. Check your RO TDS to see if it is dropping to more acceptable levels. Repeat the forward flush 2-3 times if necessary to drop the RO TDS.

5. If the TDS levels coming from the RO membrane do not drop, your RO is faulty. You can continue to use the faulty RO, however you will use up your DI resin faster than normal. Replace the faulty RO filters (WF2CRO-21) as soon as possible.

Leak between brass garden hose fitting and plastic housing

- 1. Unscrew leaky brass fitting.
- Check brass fittings for damage or deformation. If necessary replace brass fittings. Replacement parts can be ordered from abc Window Cleaning Supply or bought from a local store. The plastic hole size is ½" national pipe thread (NPT) and the Brass fitting connection are a standard ¾" Garden hose thread (GHT).
- 3. Fittings should be attached with an adhesive to prevent leaks. We recommend Liquid Nails Perfect Glue from Home Depot.
- 4. If leak persists replace filter.

Leak between brass garden hose fittings

- 1. With the source water off, check that the fitting is properly tightened. Tighten until you feel the gasket engage. DO NOT OVER TIGHTEN.
- 2. Unscrew the leaky connection. Check gasket in the female fitting for damage or deformation. Replace gasket if necessary.
- 3. Check brass fittings for damage or deformation.
- 4. If necessary replace brass fittings. Replacement parts can be ordered from abc Window Cleaning Supply or bought from a local store. The plastic hole size is ½" national pipe thread (NPT) and the Brass fitting connection are a standard ¾" Garden hose thread (GHT). Fittings should be attached with an adhesive to prevent leaks. We recommend Liquid Nails Perfect Glue from Home Depot.

Leaks on push to fit connections (found on the bypass lines)

- 1. Make sure that the bypass tube is properly inserted into fitting. Inserting the tube part way into the fittings will cause leaks.
- 2. Bending the tube as it enters the push to fit connection can also cause leaks. Reduce strain on the tube to prevent this.
- 3. Damage to the tube, such as scratched or cracking, will interfere with the sealing elements. Cut off any damaged tube and reinsert into the fitting.

Water coming out of bypass tube

- 1. Strong bypass flow is normal during system operation. This water is the discharge water and it contains a very high TDS. This water is not potable but is not harmful to plants or surrounding areas. **DO NOT DRINK DISCHARGE WATER.**
- Milky white bypass flow is a common occurrence when starting up the system or using a new RO membrane. It is trapped air being pushed out of the filter housing and will stop once the air is gone.

Expressed Warranty

abc Window Cleaning Supply warrants new water purification systems against manufacturing defects under normal use to the original purchaser.

abc Window Cleaning warrants new equipment for one year from the original purchase date to be free from manufacture defect. Any parts sent out for warranty are warranted from the original purchase date of the machine.

The customer must first contact abc Window Cleaning to notify them of the problem. abc may require the merchandise to be shipped back to them at the customer's expense to evaluate the warranty claim. It is the responsibility of the customer to package the product properly so that it arrives for evaluation undamaged. If the equipment is found to be a manufacture defect abc Window Cleaning will reimburse shipping expense and parts will be sent out at no charge including standard ground shipping. Rush shipping will be the sole responsibility of the customer.

Wear items exempt from warranty include filters and membranes

This warranty does not apply to misuse or abuse causing failure of the system. The customer must contact abc Window cleaning before attempting any repairs or modification to the system. Failure to do so will void your warranty.

abc Window cleaning holds no responsibility for loss of labor, time or any costs associated with using the equipment. abc Window Cleaning holds the sole discretion of whether a claim falls under warranty.

Returns

If for any reason the customer wishes to return the system they may do so at anytime within 30 days of the original purchase date.

The customer must first contact abc Window cleaning supply to notify them of their intent to return the merchandise.

The customer is responsible for the return of all merchandise and insuring that the product is properly packaged to arrive in a new resellable condition. The customer is responsible for all costs associated with returning damaged merchandise to a new resellable condition.

The customer is also responsible for a 20% restocking fee, in addition to any costs associated with shipping and repairing the merchandise to a new resellable condition. abc Window cleaning supply will issue a refund to the credit card on file once all repairs are completed.



Replacement Parts



RO Filter WF2CRO-21



Carbon Filter WF2CSC-21



Replacement Hoses available upon request. 1-800-989-4003





DI Filter

WF2CDI-21

TDS Meter HMTDS-3



Wheel WF65000-WH



Replacement Feet WF7000-RF

Shut-off Valve WF601311



Pump TA-NXT-PUMP5



Motor WF7000-SGM