



Clean Water Made Easy

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5900e Neutralizer Installation & Start-Up Guide

Thank you for purchasing a Clean Water System! With proper installation and a little routine maintenance your system will be providing neutral pH water for many years.

Please review this start-up guide entirely before beginning to install your system, and follow the steps outlined for best results.

CALCITE MEDIA CONTAINS DUST. USE PAPER MASK AND VENTILATE TO AVOID BREATHING DUST.



Questions?

Call us toll-free: 1-888-600-5426 or 1-831-462-8500

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Packing List

- Model 5900e Backwash Control Valve + Pipe connector kit + Top Basket
- Neutralizer filter tank with distributor tube & Media funnel

Plus the filter media as follows:

For Calcite only types – use the media supplied to fill the tank to 2/3rds volume:

- 1.0 cubic foot size: Qty 2 50-lb bags of Calcite
- 1.5 cubic foot size: Qty 3 50-lb bags of Calcite
- 2.0 cubic foot size: Qty 4 50-lb bags of Calcite
- 2.5 cubic foot size: Qty 5 50-lb bags of Calcite

For Neutralizer Blend 1.0 Cubic Foot: use 90 lbs Calcite and 10 lbs Corosex

- 12 lbs of filter gravel
- Calcite 100 lbs (2 50-lb boxes) 1.1 cu ft
- Corosex (Also called Flo-Mag) 10 lbs (1 10 lb boxes) .13 cu ft

Don't add all the media you receive: You do not want the tank to more than 2/3rds full, so generally we recommend you add 90 lbs of Calcite (1.8 bags) and all 10 lbs of Corosex (or FloMag).

For Neutralizer Blend 1.5 Cubic Foot: use 150 lbs Calcite and 10lbs Corosex

- 16 lbs of filter gravel
- Calcite 150 lbs (3 50-lb boxes) 1.65 cu ft
- Corosex (Also called Flo-mag) 10 lbs (1 10 lb boxes) .13 cu ft

Add the media supplied. Do not overfill tank past 2/3rds full after adding gravel to tank first.

For Neutralizer Blend 2.0 Cubic Foot: use 150 lbs Calcite and 20lbs Corosex

- 20 lbs of filter gravel
- Calcite 150 lbs (3 50-lb boxes) 1.65 cu ft
- Corosex (Also called Flo-mag) 20 lbs (2 10 lb boxes) .26 cu ft

Add the media supplied. Do not overfill tank past 2/3rds full after adding gravel to tank first.

For Neutralizer Blend 2.5 Cubic Foot: use 200 lbs Calcite and 20 lbs Corosex

- 30 lbs of filter gravel
- Calcite 200 lbs (4 50-lb boxes) 2.2 cu ft
- Corosex (Also called Flo-mag) 20 lbs (2 10 lb boxes) .26 cu ft

Add the media supplied. Do not overfill tank past 2/3rds full after adding gravel to tank first.

Pre-Installation

1. Review your packing list and make sure you have received all the parts before beginning installation.
2. If you are going to be turning off the water to the house and you have an electric water heater, shut off the power to the water heater before beginning installation in case water heater is accidentally drained.
3. Pick a suitable location for your filter system on a dry level spot where it won't be exposed to freezing temperatures. A minimum of 20 PSI is required. Maximum pressure is 90 PSI.
4. Get all of your plumbing parts together before beginning installation. Installation typically takes 3 to 5 hours. However, after installation the Neutralizer must be allowed to run through a complete backwash and rinse cycle.
5. After the system is installed and running, your water may be discolored, or full of sediment or rust, particularly if this is older or corroded piping. This typically clears up over a day or two.

Best Practices for Piping & Drain Installation

1. See typical installation on page 7 (Fig 2). The Neutralizer is installed after the pressure tank.
2. Make sure to connect the IN pipe to the 5900e inlet and the OUT pipe to the outlet (see Fig 3). As you face the 5900e control from the front, the water enters on the right and exits on the left. From the back (see Fig 3) the water enters on the left. The inlet and outlet are attached to the bypass valve, which is marked with arrows as well.
3. Make sure there is a working gate or ball valve before the 5900e Neutralizer and also one after as shown in Fig 2. The pressure gauges are optional and perhaps not necessary but a hose bib (which is a faucet that you can attach a garden hose to) is strongly recommended after the Neutralizer and before the second ball valve. This makes it easy to rinse your new Neutralizer on start-up and gives you a place to test the water before it enters your household plumbing.
4. If you will be using copper piping, do not sweat the copper pipe directly on to the 5900e control valve. Avoid heating up the 5900e control valve plastic with the torch.
5. If you have copper pipe before the Neutralizer and it is too difficult to change out, you may still experience some copper staining of fixtures and have a copper residual in the water because this section of pipe will still have acidic water flowing through it. We recommend PEX or PVC pipe up to the Neutralizer and then copper after it, if you have copper plumbing.
6. You do not need unions to install your 5900e control valve. If you need to remove it, the 5900e has quick-release couplings that make it easy to put the Neutralizer on by-pass and remove the filter system from the piping.

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- The drain line tubing (not supplied) is connected to a drain from the drain outlet using flexible ½" ID tubing. Note that the drain can run up above the 5900e control and into a drain, it does not have to drain down, as the filter backwashes under line pressure from your well pump. Most plumbing codes require an air-gap connection, so that if your sewer or septic tank backs up, it cannot cross connect with the drain tubing.

Installation of Your System Into Copper or Metal Piping Systems

If your new filter system is to be installed in a metal (conductive) plumbing system, i.e. copper or galvanized steel pipe, the plastic components of the system will interrupt the electrical continuity of the plumbing system.

As a result any stray currents from improperly grounded appliances downstream or potential galvanic activity in the plumbing system can no longer ground through the contiguous metal plumbing.

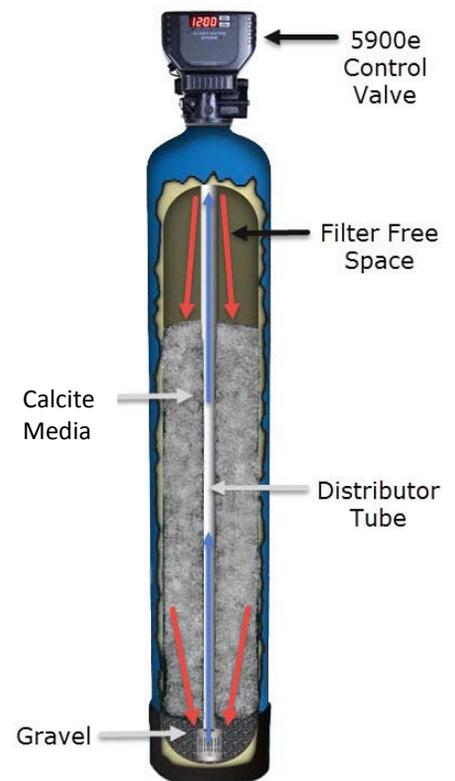
Some homes may have been built in accordance with building codes, which encouraged the grounding of electrical appliances through the plumbing system.

Consequently, the installation of a bypass consisting of the same material as the existing plumbing, or a grounded "jumper wire" bridging the equipment and reestablishing the contiguous conductive nature of the plumbing system must be installed prior to your systems use.

This is simple and easy step to take if you are installing your water treatment system into copper piping. A simple ground jumper wire with a pipe clamp can be purchased at any Home Center, or hardware store etc for a few dollars.

How Your Neutralizer Works

See Fig 1 on the right. In your Neutralizer, the water enters the top of the tank (red arrows) and flows down through the media and up the distributor tube (blue arrows). The downflow type Neutralizer raises the pH of your water and can be backwashed, which cleans and re-classifies the Calcite, preventing channeling. During backwash the flow of water is reversed and water flows down the distributor tube and up through the media, lifting and expanding the Calcite media. During the backwash the Calcite is cleaned by the action of the water flowing through it.



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Fig 2 - Typical Neutralizer 5900e piping installation with ball valve and hose bib after the filter

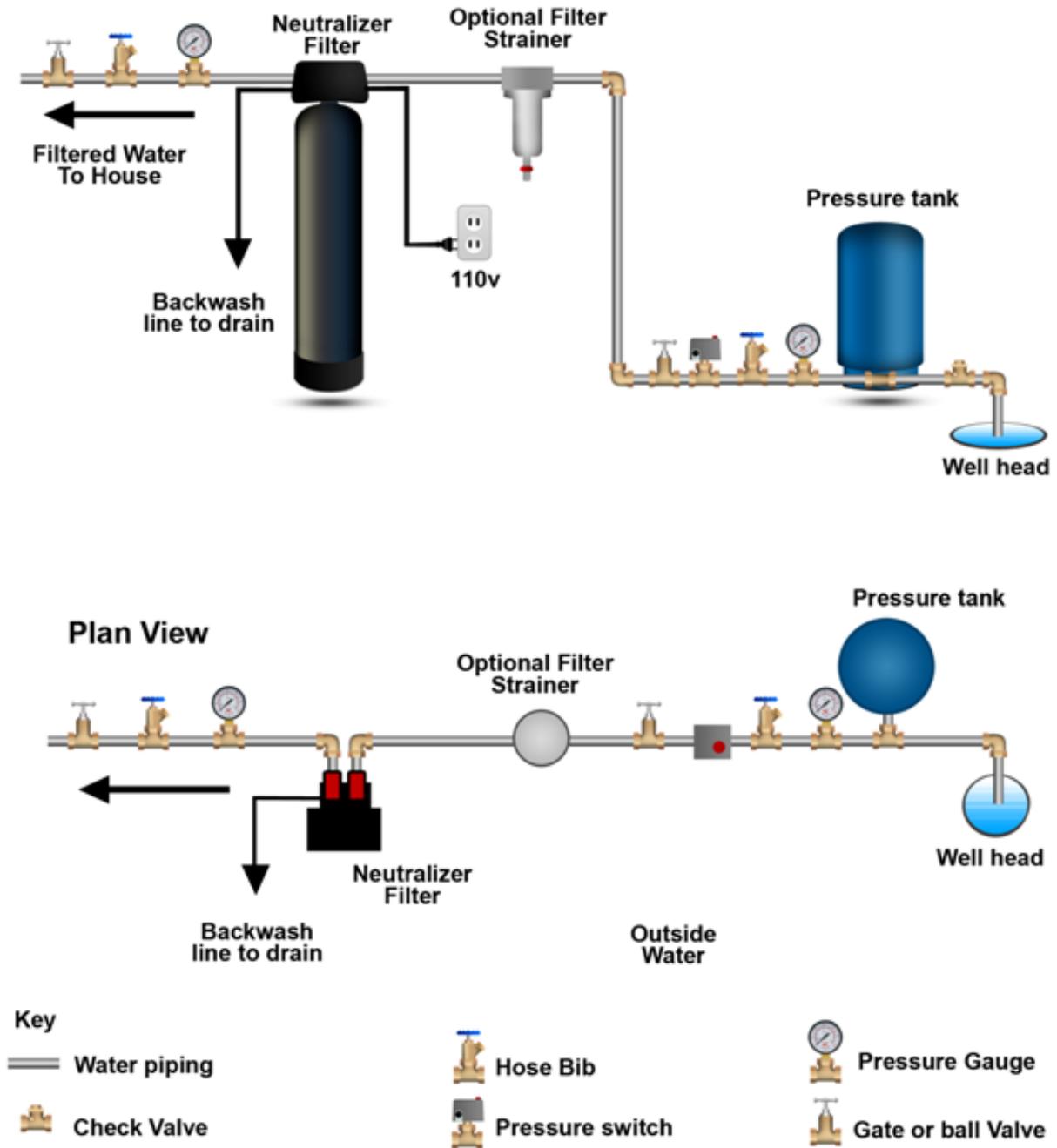


Fig 3: 5900e from the rear showing the inlet (left) and outlet (right) end-connector fittings 3/4" or 1" NPT in Noryl plastic. Brass end-connectors are also available for connecting to copper tubing.

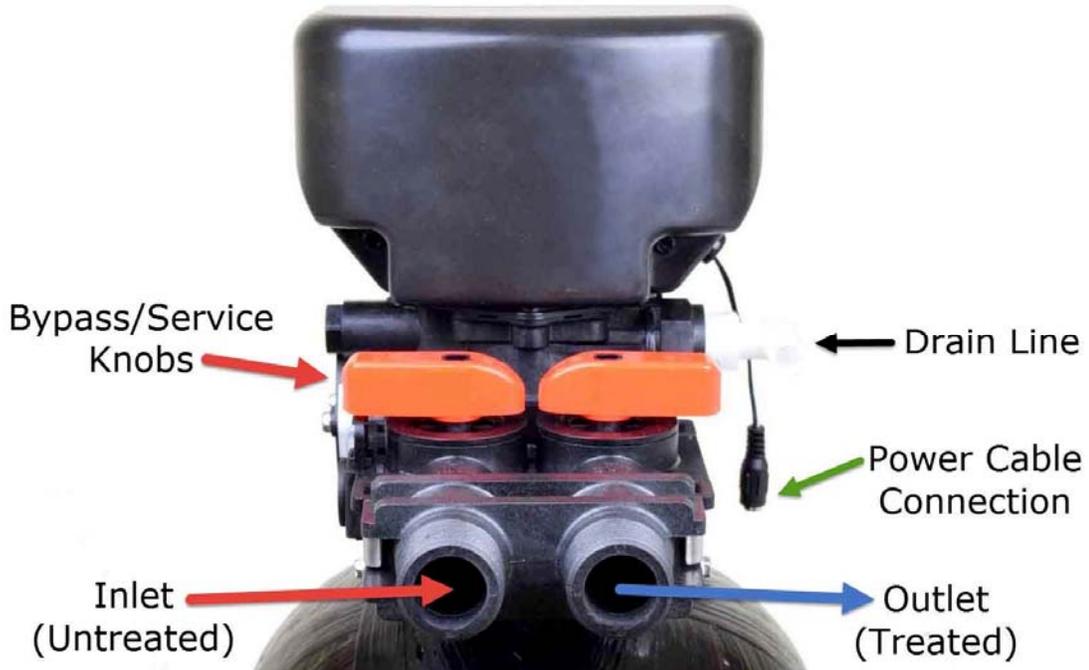


Fig 4 5900e Bypass/Service Mode Knob Positions



Assembly and Installation Instructions

1. Wrap the top of distributor tube with electrical or duct tape so that no gravel or Calcite will go down the distributor tube when adding the media.

Plug or tape top of distributor tube to prevent media from entering distributor tube when adding media. Remove when finished.

Temporary plug



2. Add the filter gravel that came with your order. You will want the gravel to cover the bottom distributor screen before adding the Calcite media.
3. If you received Corosex in your shipment (used with pH's below 6), you can now mix it together with the Calcite before adding the blend into the tank. It does not have to be exact, but we recommend mixing them together in a bucket, and adding into the tank until it is 2/3rds full, do not fill past 2/3rds.
4. Next add the Calcite media or Calcite/Corosex blend. The tank will be about 2/3rds full of media. Do not fill more than 2/3rds full, even if there is some left over. You can save that for when it is time to refill the tank with more Calcite.
5. Remove cap or tape from top of distributor tube. Be careful not to pull up distributor tube when removing cap or tape.
6. If possible at this point, fill the tank completely with water. This will allow the Neutralizer media to settle and eliminate the need of "purging" the air out of the tank later.
7. Attach plastic top screen to the under-side of the 5900e control valve. It is a funnel-shaped plastic screen that snaps on to the control valve and prevents resin from being backwashed out to drain during the regeneration cycles. It may twist on clockwise or counter-clockwise.



8. Add a small amount of silicone grease to the tank threads and screw on 5900e control valve carefully. Do not use pipe-joint compound, vegetable oil, Teflon tape, or Vaseline or other petroleum greases to lubricate tank threads.

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9. Insert the bypass assembly if it has not been pre-assembled. See the bypass image below. Note the pipe connectors, while the other end is what gets attached to the control valve. The 5900e valve is usually shipped in by-pass position. Leave in bypass position for now.

Fig 5: 5900e Bypass and Service Mode Positions



10. Lubricate the by-pass valve o-rings on the pipe connectors only with silicone grease and connect the bypass assembly to the 5900e control by sliding the bypass valve firmly into the body of the 5900e. **DO NOT USE VEGETABLE OIL OR PETROLEUM GREASE ON ANY PART OF THE 5900e CONTROL VALVE.** O-rings are OK to lubricate but not the main tank threads.
11. Next lubricate the end-connectors with some silicone grease and insert them into the bypass valve.
12. Note that the 5900e is usually shipped in the bypass position. There is a bypass valve knob on both the inlet and the outlet (Fig 3). You can easily tell if it is in bypass because the two knobs will be in line with each other (Fig 5). If the valve is in the Service position (Fig 5) the knobs will be parallel to each other. Make sure both sides are in the by-pass position.
13. Now install your water pipes to the 5900e bypass end connectors. Make sure inlet is installed to the 'In' pipe connector on the bypass valve and outlet is on the "Out" connector.
14. Connect some flexible tubing from the drain connection on the 5900e control valve to a suitable drain such as a septic tank or drain to a sewer. It is OK to run the drain line up and over the 5900e Neutralizer up to 4 feet above the top of the tank. If the drain line will be more than 20 feet, use larger diameter tubing such as $\frac{3}{4}$ " or 1". Note that it is desirable to be able to run the drain line into a bucket in order to test the backwash flow rate in the future. This is why hard piping the drain line is discouraged: however, if you do use hard PVC piping for the drain line, and you are able to remove the hard PVC drain piping and attach flexible tubing should you ever desire for testing purposes, it is OK to use rigid PVC pipe for the drain. Make sure the drain tubing is firmly clamped to the barbed fitting with a hose clamp to prevent leaks.

15. Next, you will need to program the system to work as a Neutralizer Filter. There are a few settings that must be changed before the system can be put into service. Plug in the control valve and begin the programming instructions.

Programming Your Valve



*While scrolling through numbers, it only increases the value. To decrease the value, you will have to “go all the way around” to get back to a lower value.

1. To enter main menu press the Menu/Enter button
(Time of day will flash)
 2. To set time of day press the Set/Change button
(First digit will begin to flash) Example [12:00]
 - **To change digit value press the Set/Change button**
 - **To accept the digit press the Menu/Enter button**
 - (Next digit will flash)
 - (Once hours is accepted all digits will flash)
 3. With all digits flashing press the Menu Button to set A.M. or P.M.
- (Once A.M./P.M. is accepted the next menu item will flash) Example [A]
 4. To Set Regeneration Frequency Press the Set/Change Button
- **The recommended setting for a Neutralizer filter is every 7 days**
- Once the last digit is accepted all digits will flash Example [A - 07]
- Notes: -Maximum Value is 29
-If value is set to 0, automatic regeneration will never occur
-One cycle must be completed before new setting will be accepted.
5. To exit menu press the Menu/Enter button
Note: If no buttons are pressed for 60 seconds or longer the menu will automatically be exited.

Next you will need to set the Master Programming to be used as a Neutralizer filter, continue on to the next page to finish the programming instructions.

Master Programming Mode

Entering Master Programming Mode

-To enter Master Programming Mode press and hold both buttons for 5 seconds.

1. Regeneration Time (r)

Press the Menu/Enter Button. The next display viewed is the option setting for Regeneration Time. It is identified by the letter 'r' in the left digit. Set the desired time of day that a regeneration may occur, if required. **We recommend setting the system to backwash at 2 AM**, or at any time that it is unlikely that any water will be used. The first digit(s) indicates the Hour and the other digit indicates A.M. or P.M..

Example: 2 A.M. regeneration time - [r 2A] (factory setting)

2. Regeneration Cycle Step Programming (1)(2)(3)

The next 3 displays viewed are part of a series of option settings used to program the Regeneration Cycle. Up to 4 steps can be programmed, however, some steps may not be necessary for your application and will be set to 0. Each display is used to set the duration time in minutes for that specific step in a regeneration cycle. A step # will turn on for the regeneration cycle step being programmed. Regeneration steps are *skipped* by setting the display to 0 as shown below:

Examples: Regeneration Cycle Step #1 - 10 minutes - [1 - 10] (Factory Setting)

Regeneration Cycle Step #2 - skipped - [2 - - 0]

Set each step according to the values below, appropriate for a carbon filter:

- 1 10 minutes. This is the Backwash cycle. [1 - 10]
- 2 0 minutes. This is the Brine Draw cycle, not used on your valve. [2 - 0]
- 3 6 minutes. This is the Rapid Rinse cycle. [3 - 6]

3. Blue Tooth (This feature is not used in your application; it is for rental units)

After Cycle Step Three above, when you press the menu/enter button, the display will show bE 1 ; press the menu/enter button again, the display shows: bTPP and then changes to 1234. Press the menu/enter button, and now you are back to the home service screen (displaying the clock time and the number of days until backwash).

Exiting the Master Programming Mode

Press the Menu/Enter Button until all steps have been viewed. The Program Mode will be exited and normal operation resumed. If no buttons are pressed for 60 seconds or longer in Master Programming Mode, it will be exited automatically.

Sample Regeneration Displays

The diagram illustrates five stages of a regeneration cycle on a control panel. Each stage shows a digital display and two buttons labeled 'MENU ENTER' and 'SET CHANGE'.

- Step 1:** Less Than 9 Minutes Remaining in the Backwash Step. Display: 1--9
- Step 2:** Less Than 59 Minutes Remaining in the Brine/Rinse Step (For Filters & Reactr, this is a Rest Period). Display: 2-59
- Step 3:** Less Than 9 Minutes Remaining in the Rapid Rinse Step. Display: 3--9
- Step 4:** Less Than 11 Minutes Remaining in the Brine Refill Step (For Filters & Reactr, this Step is Skipped). Display: 4-11
- Step 5:** Valve is In Service. Display: 12:00

Notes:

- When the Valve is Between Positions the Display will Flash the Number of the Step it is Moving towards.
- To Fast Cycle Thru Regeneration Press and Hold the Set/Change Button Until the Valve Starts to Advance to the Next Step.

(4 steps are shown, as some valves are configured with four steps)

Initial Backwash

- 1 If days remaining is not already at 1 press and hold the Set/Change button. Now, press and hold the set change button again, until the valve begins the backwash cycle and the display reads 1 – 10. Now, proceed to step two.
- 2 Start to put the valve into the service position by turning inlet the bypass knobs counter-clockwise about a quarter inch, until you can hear water passing through the bypass into the filter. Stop and wait until you see water coming out of the drain line. It will often be mixed with air bubbles, but we will want to get all of that air out. When you do not see bubbles anymore, keep opening the valve, a little bit at a time, stopping for a minute or two each time. You want to see a corresponding increase in flow out of the drain line as you increase the flow of water into the filter. After several minutes, you should have the valve fully open, and with no media coming out. The water may appear milky white.
- 3 If possible verify that the backwash flow corresponds with the size of your system below. You can easily run the drain hose to a bucket and using a watch verify the flow rate in gallons per minute. An adequate backwash is critical to properly clean the Calcite media and prevent it from cementing together.

1.0 CF	5 GPM
1.5 CF	5 GPM

- 4 Once the water is clear, press and hold the Set/Change button, and after 3 seconds the valve will start to advance to the “Rinse” position. Once again, allow the water to flow for about five minutes or until the water is clear.
- 5 Press and hold the Set/Change button advance to the “Service” position. Next, open the outlet on the bypass valve and then open the nearest treated water faucet to the unit and allow the water to run until it is clear. We advise using a bathtub, laundry sink, or other fixture that does not have an aerator screen as any remaining residue may get caught in the screen.

Congratulations, you are done setting up your valve!

Maintenance

Maintaining Your Neutralizer

1. Check the pH before and after the neutralizer. You want to have a pH of at least 7.0 after the neutralizer filter.
2. If the pH drops below 7, check the depth of the Calcite media by shining a bright light through the tank. Your tank should be about 2/3rds full of media. When the media level drops to ½ full, it is time to add more Calcite or Calcite blend media if you are using a blend.
3. For most residential applications, adding Calcite media once or twice a year is adequate. Do not fill more than 3/4ths full; about 2/3rds full is best.

How to Add Calcite Media to the Neutralizer Filter

CALCITE MEDIA CONTAINS DUST. USE PAPER MASK OR VENTILATE TO AVOID BREATHING DUST.

1. Begin by putting the neutralizer filter on bypass, or turning the water pressure off before the neutralizer.
2. Initiate a manual backwash cycle. Since it is on bypass, this will relieve the pressure inside the control valve so you safely unscrew the Media Fill Plug located on top of the neutralizer tank.
3. Unplug the control valve cord from the wall outlet.
4. Unscrew the media fill plug with channel locks or pliers, and using a tube or hose siphon 2 to 3 gallons of water out of the filter tank. If you don't siphon water out before adding filter media, water will flow out the fill plug hole and onto the floor. If water on the floor is OK, then you do not have to siphon water out first before pouring Calcite media into the fill plug hole.
5. Add neutralizer filter media until the tank is 2/3rds full. Do not over-fill; be sure to leave at least 12" of free space above the media to allow room for it to expand during a backwash.
6. Put the top fill plug back in. You can lubricate the threads with some vegetable oil or silicone grease, but do not use Teflon tape or plumbing grease.
7. Plug the control valve back in and press the Extra Cycle button so the Fleck 7000 control is in a backwash cycle.
8. Turn on the bypass valve - slowly at first - back to the service position (if it is in "service" this means it is in the proper position for filtering and neutralizing).
9. Allow the system to go through a complete backwash and rinse cycle. Repeat this backwash and rinse cycle by starting another manual cycle, so the neutralizer is thoroughly backwashed and rinsed before going back into service.

When to Use Calcite Blends

If the water pH is less than 6.0, Calcite alone may not be enough to bring the pH up to the desired range of 7.0 to 7.8. In this case, a blend of Calcite and Corosex should be used. Calcite is a calcium media consisting of calcium carbonate and will raise the pH slowly. Calcite will not raise the pH much over 7.2. Corosex is a natural mineral media consisting of magnesium oxide. It reacts much faster and raises the pH much higher than Calcite alone.

Corosex is almost never used alone as it will raise the pH too high and in some cases will over-correct and create a highly basic (high pH) condition. It can also cement together like concrete in the neutralizer tank if you add too much and there is not sufficient backwash.

For most residential well applications, a 90% Calcite and 10% Corosex is best. However, in some cases an 80%/20% mix or even a 70%/30% is used. It is always better to start with a 90%/10% mix at first as this solves the majority of low pH problems in the range of 4.5 to 5.9.

For a pH of 6.0 to 6.9 use Calcite alone.

For a pH of 5.0 to 6.0 use a blend of Calcite and Corosex usually 90% Calcite and 10% Corosex, or more Corosex as needed if the pH is less than 5.0.

How to Mix and Use Calcite Blends

The Calcite and Corosex media is sold and shipped in separate boxes. It does not have to be completely blended together to use as it will mix during the backwash and rinse cycles.

Still, when you are adding the Calcite and Corosex it is better to blend it lightly in a 5 gallon bucket and then add it. You can also add some Calcite and then add some Corosex as you are filling the tank. Do not fill tank more than about 2/3rds full.

Note the following:

- Calcite is shipped in 50 lb boxes and one box of Calcite is equal to 0.55 cu ft.
- Corosex is shipped in 10 lb boxes and 1 box is equal to 0.13 cu ft.
- 50 lbs of Calcite = 0.55 cubic foot of media
- 50 lbs of Corosex = 0.66 cubic foot of media
-

Neutralizers 1.0 Cubic Foot: use 90lbs Calcite and 10 lbs Corosex

Your new 1.0 CF neutralizer includes:

- Calcite 100 lbs (2 50-lb boxes) 1.1 cu ft
- Corosex 10 lbs (1 10 lb boxes) .13 cu ft

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Neutralizers 1.5 Cubic Foot: use 150 lbs Calcite and 10lbs Corosex

Your new 1.5 Cubic Foot Neutralizer Blend filter includes:

- Calcite 150 lbs (3 50-lb boxes) 1.65 cu ft
- Corosex 10 lbs (1 10 lb boxes) .13 cu ft

Neutralizers 2.0 Cubic Foot: use 150 lbs Calcite and 20lbs Corosex

Your new 2.0 Cubic foot Neutralizer Blend filter includes:

- Calcite 150 lbs (3 50-lb boxes) 1.65 cu ft
- Corosex 20 lbs (2 10 lb boxes) .26 cu ft

Neutralizers 2.5 Cubic Foot: use 200 lbs Calcite and 20 lbs Corosex

Your new 2.5 Cubic Foot Neutralizer Blend filter includes:

- Calcite 200 lbs (4 50-lb boxes) 2.2 cu ft
- Corosex 20 lbs (2 10 lb boxes) .26 cu ft

Neutralizers 3.0 Cubic Foot: use 250 lbs Calcite and 20 lbs Corosex

Your new 2.5 Cubic Foot Neutralizer Blend filter includes:

- Calcite 250 lbs (5 50-lb boxes) 2.75 cu ft
- Corosex 20 lbs (2 10 lb boxes) .26 cu ft

Normal Operation

- Normal display alternates between time of day and days until regeneration.
- Days remaining until the next regeneration will count down from the regeneration day override value to 1 day remaining.
- Once the count reaches 1, a regeneration cycle will be initiated at the next designated regeneration time.

Battery back-up (this unit uses a standard 9 volt alkaline battery)

- Installing the battery
- To install the battery the back-cover must be removed by removing the two back-cover screws.
- Next insert the battery into the battery holding clip and snap the 9 volt battery connector onto the battery.
- Replace back-cover
- Features of battery back-up
- The battery back-up maintains the time of day during power failures.
- The battery back-up continues to count down gallons remaining during power failure (Metered Version)

Note: During power failure to conserve battery power the display is turned off.

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However, to confirm that the battery is working you can press either button and the display will turn on for five seconds.

- * Menus can not be accessed during power failure
- * If a power failure occurs while the valve is in regeneration the regeneration will resume operation once the power is restored

How To Start An Extra Regeneration Cycle

1. Starting delayed extra cycle

- If days remaining is not already at 1 press and hold the Set/Change button.
- After 3 seconds the days remaining display will read 1 Example [1]
- Regeneration cycle will be initiated at the next designated regeneration time

2. Starting Immediate Extra Cycle - First, complete above delayed cycle steps

- With days remaining at 1 press and hold the Set/Change button
- After 3 seconds the regeneration cycle will begin.

3. Fast Cycling Through Regeneration

- First complete above immediate cycle steps
- Press and hold the Set/Change button
- After 3 seconds the valve will start to advance to the next step

Troubleshooting the 5900e Neutralizer Filter

Backwash Flow Rate

One problem that may occur is if you do not have enough backwash flow rate to properly clean the Neutralizer filter. You can verify the backwash flow rate by running the drain line into a bucket and timing it when the 5900e is in Cycle 1 or backwash. A 1.0 or 1.5 cubic foot system should have 5 gallons per minute and a 2.5 cubic foot system should have 10 gallons per minute of backwash.

In some cases, the 5900e may not be programmed correctly. See the 5900e service manual for instructions on how to access the master programming.

Error Codes

There are five (5) error codes that could indicate a possible problem with the control valve:

- Error 2** - Homing slot expected. Valve will start looking for home.
(Normal operation continues)
- Error 3** - Encoder is not sending a signal
(Valve requires service to continue)
- Error 4** - Unable to find homing slot

(Valve requires service to continue)

Error 5 - Motor overload (stalled position or shorted motor)

(Valve requires service to continue)

-New 5900e programming is identified by "r2.1" in presentation upon power up.

What To Do If Your Filter Tank Does Not Sit Level On the Floor

Your black filter tank base is not glued to the bottom of your tank. Occasionally tank bases will become crooked during shipment. If you find that that your tank does not sit level on the floor, you can easily adjust it by holding the empty tank and rapping it on a concrete or solid floor once or twice in order to level it.

pH is Too High!

If the pH after your neutralizer is greater than 8.5, your pH kit may turn the color of the reagent, a purple color. This is nothing to be alarmed about. In some cases, too much Corosex added to the neutralizer-Calcite-Corosex blend can cause this problem; it almost never happens with Calcite only systems. If this happens, set the backwash cycle frequency to every night for a couple of weeks, which will cause the media to be washed more thoroughly and use up the excess Corosex. Alternatively, you can manually backwash it several times on a given day, etc. Secondly, you can open up the bypass valves slightly, and allow some untreated water to lower the pH by blending in some of the lower pH water. When you go to add more media in 6 to 12 months, just add less Corosex.

pH is Too Low!

This can happen if the water entering the neutralizer has a pH less than 6.0. Generally the water after your neutralizer should have a pH of 7.0, and the pH reagent in your pH test kit should turn a light green to darker green depending on the pH. Give your neutralizer some time, and after several weeks, if the pH is still coming out less than 7 and the test reagent is yellowish in color, you may need to add some Corosex to the neutralizer tank to raise the pH. Contact our office if you don't have any Corosex on hand and/or you ordered a Calcite-only system. The Calcite-only systems work best if your water's pH is between 6 and 6.9 and are desirable as they add fewer minerals to the water, so it is best to start out with a Calcite only system if your pH is 6.0 to 6.9. This works for a majority of our customers.

White Spots on Fixtures and Glasses

Calcite neutralizers work by adding natural calcium minerals to the water. Many natural well or spring waters that are acidic (with a pH of less than 7.0) are low in minerals and are considered "soft" water. This lack of natural buffering calcium minerals contribute to the corrosive nature of these waters. After the water has passed through the neutralizer, the water will be higher in calcium and "harder" but typically not hard enough to warrant a water softener, which removes calcium hardness.

5900e Neutralizer Installation & Startup Guide

It is more common to see some white film or spotting on fixtures if you are using a blend of Calcite and Corosex. In some cases, it might be that too much Corosex was used originally in the mix of media.

If you are starting to see white spots and films on surfaces after the neutralizer has been installed, you might want to take these steps:

Set the backwash frequency for every 3 days for a couple of months.

Check the hardness level before and after. If your hardness is higher than 5 grains per gallon after the neutralizer, your neutralizer may be adding more minerals than is needed, and you can open up the bypass valves a slight amount in order to blend in some untreated water.

Check the pH before and after. You only need the pH to be in the 7.0 to 7.5 range. If the pH is higher than that, you may be adding more minerals than is necessary.