

Owner's Manual



Name of Dealer Purchased From: _____

Phone : _____



Product Features, Benefits, & Job Specification Sheet



Congratulations on the purchase of your new Iron Removal Filter.

You will have peace of mind knowing your system will bring you years of treated water use and enjoyment.

This filter is an effective and economical way to remove iron from water. It can also remove low concentrations of dissolved hydrogen sulfide and manganese from water.

Product Features & Benefits

- Rugged, simple design
- Non-corrosive, UV-resistant valve body
- Economical (small annual power consumption)
- Made in Canada

Eliminate:

- Raises Water Oxygen Content
- Clogged Plumbing
- Yellow, Orange or Brown Rust Stains on Laundry, Sink, Tubs and Toilet

Enjoy:

- Longer Lasting Appliances (up to 30% longer)
- Cleaner Laundry, Sinks, Tubs and Toilets

CUSTOMER INSTALLATION INFORMATION

Unit type: _____

Install Date: _____

Dealer Name: _____

Installer Name: _____

Water Type: City Well

Pump Pressure: _____ PSI

WATER INFO

Hardness _____ GPG (grains/gallon)

Iron _____ PPM

Hydrogen Sulfide _____ PPM

Manganese _____ PPM

TDS _____ PPM

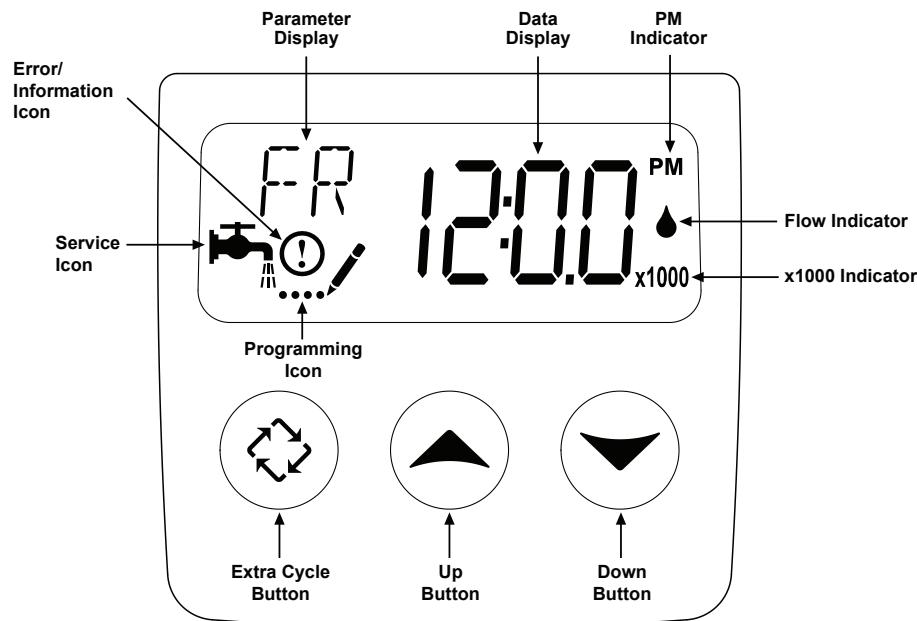
P.H. _____

Other _____

PROGRAM INFO

Days between Regeneration: _____

Timer Features



SXT Features

- Power backup that continues to keep time and the passage of days for a minimum of 48 hours in the event of power failure. During a power outage, the control goes into a power-saving mode. It does not monitor water usage during a power failure, but it does store the volume remaining at the time of power failure.
- Settings for both valve (basic system) and control type (method used to trigger a regeneration).
- Day-of-the-Week controls.
- While in service, the display alternates between time of day, volume remaining or days to regeneration, and tank in service (twin tank systems only).
- The Flow Indicator flashes when outlet flow is detected.
- The Service Icon flashes if a regeneration cycle has been queued.
- A Regeneration can be triggered immediately by pressing the Extra Cycle button for five seconds.
- The Parameter Display displays the current Cycle Step (BW, BF, RR, etc) during regeneration, and the data display counts down the time remaining for that cycle step. While the valve is transferring to a new cycle step, the display will flash. The parameter display will identify the destination cycle step (BW, BF, RR, etc) and the data display will read "----". Once the valve reaches the cycle step, the display will stop flashing and the data display will change to the time remaining. During regeneration, the user can force the control to advance to the next cycle step immediately by pressing the extra cycle button.

Setting the Time of Day

1. Press and hold either the Up or Down buttons until the programming icon replaces the service icon and the parameter display reads TD.
2. Adjust the displayed time with the Up and Down buttons.
3. When the desired time is set, press the Extra Cycle button to resume normal operation. The unit will also return to normal operation after 5 seconds if no buttons are pressed.



Description of the Operation

How does it work?

This filter works by adding oxygen to the incoming water by passing it through a bubble of compressed air. The water is then passed through a special filter bed.

The special media not only increases the pH of the water to enhance iron removal but also acts as a physical barrier to trap iron precipitate.

As more water passes through this iron filter, the oxygen in the unit is used up, and the media gets loaded with iron. The regeneration process then begins in order to replenish the supply of oxygen, and to backwash the precipitated iron trapped in the media bed. The iron removal efficiency will be more effective with high pH water.

The filter is fitted with an inlet check valve to prevent any air from flowing backwards out of the filter tank.

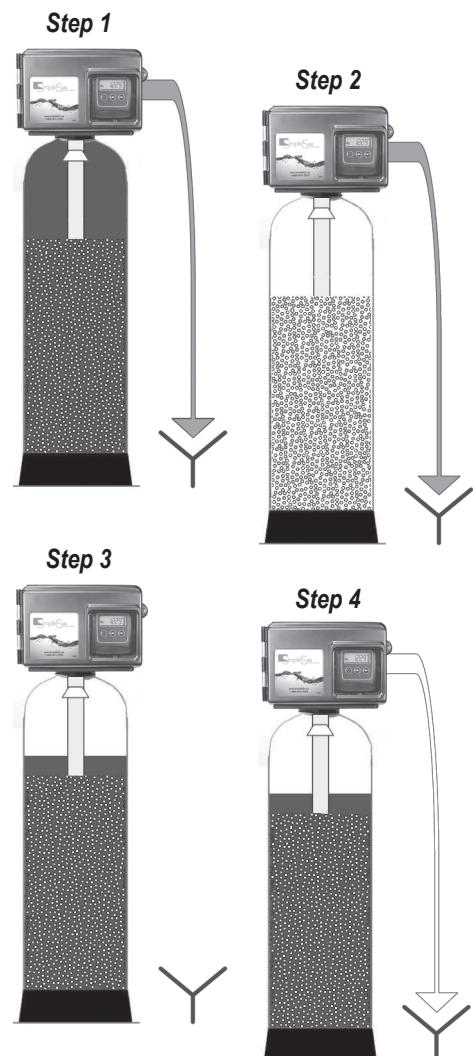
Regeneration Sequence

The regeneration cycle goes through 4 steps.

- 1. Backwash (minimum 30 psi inlet pressure required):** During the backwash cycle, water flows upwards through the bed, expanding the media and carrying any precipitated iron trapped within it to the drain. The air is evacuated from the tank.
- 2. Air Draw:** The air is injected to oxidize the tank. With the new design, the filter pulls the air into the tank to perform the oxidation instead of pulling in the brine or any oxidizing chemical. The unit is replenished with a new bubble of air. During this step water will run to the drain. There is a delay at the start of the cycle while the pressure of the air within the tank reaches atmospheric pressure. During this time no air is drawn into the tank. Once the pressure has equalized you can usually hear the sound of air being drawn in to the unit.
- 3. Rapid Rinse (minimum 30 psi inlet pressure required):** During the rapid rinse cycle, the media bed will be re-settled for the next service period and any small loose particles of iron or media will be flushed to the drain.
- 4. In-Service Position:** The unit then returns to the In-Service position. While this happens water continues to enter the tank, compressing the air into a bubble in the top of the tank. The actual size of the bubble will vary depending on the on-site conditions.

Maintenance

The control valve requires annual maintenance and service of internal wear components including piston, seals and spacers. Please contact your distributor for annual maintenance kits.



General Residential Checklist

Manual Regeneration

1. Press the Extra Cycle button. The service icon will flash to indicate that a regeneration is queued.
2. To cancel a queued regeneration, press the Extra Cycle button.

Regenerating Immediately

Press and hold the Extra Cycle button for five seconds.

Water Pressure

Water pressure range of 30-80 psi is required for regeneration valve to operate effectively.

Electrical Facilities

An uninterrupted alternating current (A/C) supply is required. Please make sure voltage supply is compatible with unit before installation.

Existing Plumbing

Condition of existing plumbing should be free from lime and iron buildup. Replace piping that has heavy lime and/or iron build-up.

Location of Filter & Drain

Locate the filter close to a clean working drain and connect according to local plumbing codes. Drain cannot be elevated more than 36 inches or exceed 20 feet in length.

Bypass Valve

Your new filter is equipped with a bypass valve for installation.

NOTE: If the valve continues to leak after turning the bypass to bypass position, shut off the main water line and call your dealer IMMEDIATELY.



CAUTION

- Do Not Exceed Water Pressure of 80 psi
- Do Not Exceed 110°F
- Do Not subject Unit to Freezing Conditions

Maintenance & Troubleshooting

The Iron Filter requires annual maintenance. Please contact your dealer for maintenance kits (Part #61662).

PROBLEM	CAUSE	SOLUTION
1. Unit goes does not go through air draw sequence	A. Electrical service to unit is interrupted B. Power failure C. Timer is defective	A. i) Check supply is operating (Check fuse, plug, etc.) ii) Check that supply cut off when light is switched off or similar B. Reset time of day C. Check that dial showing days moves from day today. If it doesn't, replace timer
2. Unit doesn't draw air in refill cycle	A. Line to drain is kinked B. Water pressure to unit is too low C. Drain flow control is blocked D. Injectors or screen is plugged E. Internal leak in control	A. Straighten B. i) Check pressure. It must be above 20psi at all times. ii) If below, increase pressure C. Check and clean if necessary D. Check and clean or replace as needed E. Check piston and seals and spacers. Replace if needed.
3. Water flows to drain continuously	A. Timer motor stopped or jammed B. Foreign material jammed inside control C. Internal leak	A. Replace if necessary B. Remove piston and check C. Inspect piston and seals and spacers. Replace if necessary.
4. Water is clear when drawn, turns red upon standing (stain producing)	A. Insufficient air drawn by valve B. Bypass open or leaking C. Filter bed backwashed at improper levels D. Presence of manganese or tannins	A. Check valve at air draw time B. Close bypass valve and/or repair as necessary C. Refer to backwash frequency chart in operation manual to ensure unit is set correctly. Do not increase the backwash frequency unless required to based in the chart, since the media needs to be somewhat iron-fouled for best performance (in more severe iron-fouling cases, filter bed may need chemical cleaning - contact dealer). D. Recheck water analysis
5. Water is red when drawn from tap	A. Filter bed overloaded with precipitated iron due to insufficient backwash flow rate. B. Filter bed backwashed at improper intervals	A. i) Check for obstructions or kink in drain line ii) Check for improper drain line flow controller (see specs). Upon correction of this problem, if manually backwashing does not clear bed of iron, filter bed may need chemical cleaning. B. Refer to backwash frequency chart in operation manual to ensure unit is set correctly. Do not increase the backwash frequency unless required to based on the chart, since the media needs to be somewhat iron fouled for best performance (in more severe iron-fouling cases, filter bed may need chemical cleaning - contact dealer).
6. Excessive pressure loss through filter	A. Filter bed overloaded with precipitated iron B. Control in/outlet valve(s) not fully open C. Sand, silt or mud collecting in filter media D. Filter bed not properly "classified" E. "Cementing" or "channelling" of filter media	A. Refer to Section 2 B. Open valves C. Check well for these conditions D. Manually backwash to reclassify. E. Prod (stir) filter bed to break up hardened layer, backwash frequency to prevent recurrence.
7. "Milky" or "bubbly" water (appears to contain small bubbles)	A. Excess gases in water (carbon dioxide, hydrogen sulfide, methane)	A. May require cleaning or installation or air-relief control (contact dealer).

Warranty

We guarantee that your new iron filter is built of quality material and workmanship. When properly installed and maintained, it will give years of trouble-free service.

FIVE YEAR COMPLETE PARTS GUARANTEE

We will replace any part which fails within 60 months from date of manufacture, provided the failure is due to a defect in material or workmanship. The only exception shall be when proof of purchase or installation is provided and then the warranty period shall be from the date thereof.

TEN YEAR GUARANTEE ON MINERAL TANKS

We will provide a replacement mineral tank to any original equipment purchaser in possession of a tank that fails within 120 months, provided that the iron filter is at all times operated in accordance with specifications and not subject to freezing or exposure to direct sunlight.

GENERAL PROVISIONS

We assume no responsibility for consequential damage as a result of escaped water from the iron filter; labor or expense incurred as a result of a defect or for failure to meet the terms of these guarantees because of circumstances beyond its control.

We do not authorize any person or representative to assume for any other obligation on the sale of the iron filter.

Any or all implied or expressed warranties other than stated are the sole responsibility of the local dealer from which this unit was purchased.

For questions or in case of emergency, please refer to the front page of owners manual for dealer information.