



FLECK 5810 & 5812 XTR2

SERVICE MANUAL



5810



5812


TABLE OF CONTENTS

JOB SPECIFICATION SHEET 2
 INSTALLATION 3
 TOUCHSCREEN CONTROL QUICK START 5
 TOUCHSCREEN CONTROL FEATURES..... 7
 MASTER SETTINGS PROGRAMMING 10
 MASTER SETTINGS REFERENCE CHART 15
 MASTER RESET 16
 CONTROL OPERATION..... 16
 ALARMS AND ERRORS 16
 TROUBLESHOOTING..... 17
 POWERHEAD ASSEMBLY..... 18
 5810 CONTROL VALVE ASSEMBLY 19
 5812 CONTROL VALVE ASSEMBLY 20
 5812 DRAIN LINE FLOW CONTROLS 21
 BYPASS ASSEMBLY..... 22
 SAFETY BRINE VALVE..... 23
 WATER CONDITIONER FLOW DIAGRAMS 24
 5810 DIMENSIONAL DRAWINGS 28
 5812 DIMENSIONAL DRAWINGS 29
 WIRING DIAGRAM..... 30
 INJECTOR FLOW DATA..... 31

JOB SPECIFICATION SHEET


Job Number: _____
 Model Number: _____
 Water Hardness: _____ ppm or gpg
 Capacity Per Unit: _____
 Mineral Tank Size: _____ Diameter: _____ Height: _____
 Salt Setting per Regeneration: _____
 Regenerant Flow: Downflow Upflow Backwash Downflow 2x Backwash
 Filter Upflow Variable Refill Custom Downflow Custom Upflow

- 1. Meter Size:**
 - A. 1-1/4" Turbine
- 2. System Type:**
 - A. System #4: 1 Tank, 1 Meter, Immediate, or Delayed Regeneration
 - B. System #4: Time Clock
- 3. Cycle Settings:**
 - A. Backwash: _____ Minutes
 - B. Brine and Slow Rinse: _____ Minutes
 - C. Rapid Rinse: _____ Minutes
 - D. Brine Tank Refill: _____ Minutes
 - E. Pause Time: _____ Minutes
 - F. Second Backwash: _____ Minutes
- 4. Drain Line Flow Control:** _____ gpm
- 5. Brine Line Flow Control:** _____ gpm
- 6. Injector Size#:** _____



IMPORTANT PLEASE READ:

- The information, specifications and illustrations in this manual are based on the latest information available at the time of release. The manufacturer reserves the right to make changes at any time without notice.
- This manual is intended as a guide for service of the valve only. System installation requires information from a number of suppliers not known at the time of manufacture. This product should be installed by a plumbing professional.
- This unit is designed to be installed on potable water system only.
- This product must be installed in compliance with all state and municipal plumbing and electrical codes. Permits may be required at the time of installation.
- It is established that when daytime water pressure exceeds 80 psi (5.5 bar), the maximum pressure rating of 125 psi (8.6 bar) can be exceeded. A pressure regulator must be installed on this system or warranty is voided.
- Do not install the unit where temperatures may drop below 32°F (0°C) or above 120°F (52°C).
- Do not place the unit in direct sunlight. Black units will absorb radiant heat increasing internal temperatures.
- Do not strike the valve or any of the components.
- Warranty of this product extends to manufacturing defects. Misapplication of this product may result in failure to properly condition water, or damage to product.
- A prefilter should be used on installations in which free solids are present.
- In some applications local municipalities treat water with Chloramines. High Chloramine levels may damage valve components.
- Correct and constant voltage must be supplied to the controller to maintain proper function.



The 5810 & 5812 - 2.5" base models are Tested and Certified by the WQA to NSF/ANSI Std. 44 & 372 for material safety and structural integrity & lead free compliance and CSA B483.1.

Component

CALIFORNIA PROPOSITION 65 WARNING

⚠ WARNING: This product contains chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

INSTALLATION

Water Pressure

A minimum of 20 psi (1.4 bar) of water pressure is required for the regeneration valve to operate effectively.

Electrical Facilities

An uninterrupted power supply is required. The control uses a transformer to supply 12 VDC. Please make sure your voltage supply is compatible with your unit before installation.

Existing Plumbing

Condition of existing plumbing should be free from lime and iron buildup. Piping that is built up heavily with lime and/or iron should be replaced. If piping is clogged with iron, a separate iron filter unit should be installed ahead of the system.

Location Of System And Drain

The system should be located close to a drain to prevent air breaks and back flow.

Outdoor Locations

When the water conditioning system is installed outdoors, several items must be considered.

- Moisture — The system is not designed to withstand extreme humidity or water spray from below. Examples are: constant heavy mist, near corrosive environment, upwards spray from sprinkler.

CAUTION This unit is for dry location use only unless used with a Listed Class 2 power supply suitable for outdoor use.

- Direct Sunlight — The materials used will fade or discolor over time in direct sunlight. The integrity of the materials will not degrade to cause system failures. If it is necessary to locate the system in direct sunlight, a protective outdoor cover (P/N 61994) over the valve and controller is necessary.
- Insects — If installing in an environment that may expose the system to insects or other small animals, a protective cover is required. The protective outdoor cover (P/N 61994) has been designed to keep all but the smallest insects out of the critical areas. The cover should be installed securely in place.

Bypass Valves

Always provide for the installation of a bypass valve if unit is not equipped with one.

CAUTION Water pressure is not to exceed 125 psi (8.6 bar), water temperature is not to exceed 110°F (43°C), and the unit cannot be subjected to freezing conditions.

WARNING: The system must be depressurized before removing any connections for servicing.

Installation Instructions

1. Place the media tank where you want to install the unit. Make sure the unit is level and on a firm base.
2. During cold weather, the installer should warm the valve to room temperature before operating.
3. All plumbing should be done in accordance with local plumbing codes. The pipe size for a residential drain line should be a minimum of 1/2" (13 mm). Backwash flow rates in excess of 7 gpm (26.5 Lpm) or drain line length in excess of 20' (6 m) require 3/4" (19 mm) drain line. Commercial drain lines should be the same size as the drain line flow control.

NOTE: The tank should have the distributor tube installed and have the proper amount of regenerant in place.

4. Refer to the valve spec sheet for cutting height of the distributor tube.
5. Lubricate the distributor O-ring seal and tank O-ring seal. Place the main control valve on tank. Note: Only use silicone lubricant.
6. Soldering of joints near the drain port must be done prior to connecting the Drain Line Flow Control fitting (DLFC). Leave at least 6" (15 cm) between the DLFC and solder joints when soldering pipes that are connected on the DLFC. Failure to do this could cause interior damage to the DLFC.
7. Plumber tape is the only sealant to be used on the drain fitting.
8. Make sure that the floor is clean beneath the salt storage tank and that the tank is level.
9. Place approximately 1" (25 mm) of water above the grid plate. If a grid is not utilized, fill to the top of the air check (Figure 1) in the salt tank. Do not add salt to the brine tank at this time.

CAUTION If grid plate is used, cut air check height just below the grid plate. This is critical on 6", 7", 8" and 9" tanks. The brine refill water must come above the grid plate and make contact with the salt.

10. On units with a bypass, place in bypass position. Turn on the main water supply. Open a cold soft water tap nearby and let run a few minutes or until the plumbing is free from foreign material (usually solder) that may have resulted from the installation. Once clean, close the water tap.
11. Slowly place the bypass in service position and let water flow into the mineral tank. When water flow stops, slowly open a cold water tap nearby and let water run until the air is purged from the unit.
12. Plug the transformer into an electrical outlet.

NOTE: All electrical connections must be connected according to local codes. Be certain the outlet is uninterrupted.

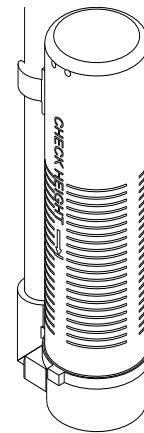


Figure 1 Residential Air Check Valve

60002 Rev E

Electrical Connection

The controller operates on 12-volt DC power supply. This requires use of the supplied power adapter included with your system.

NOTE: The power source should be constant. Be certain the power adapter is not on a switched outlet. Power interruptions longer than eight hours may cause the controller to lose the time setting. When power is restored, the time setting must then be re-entered.

Typical Residential System Plumbing

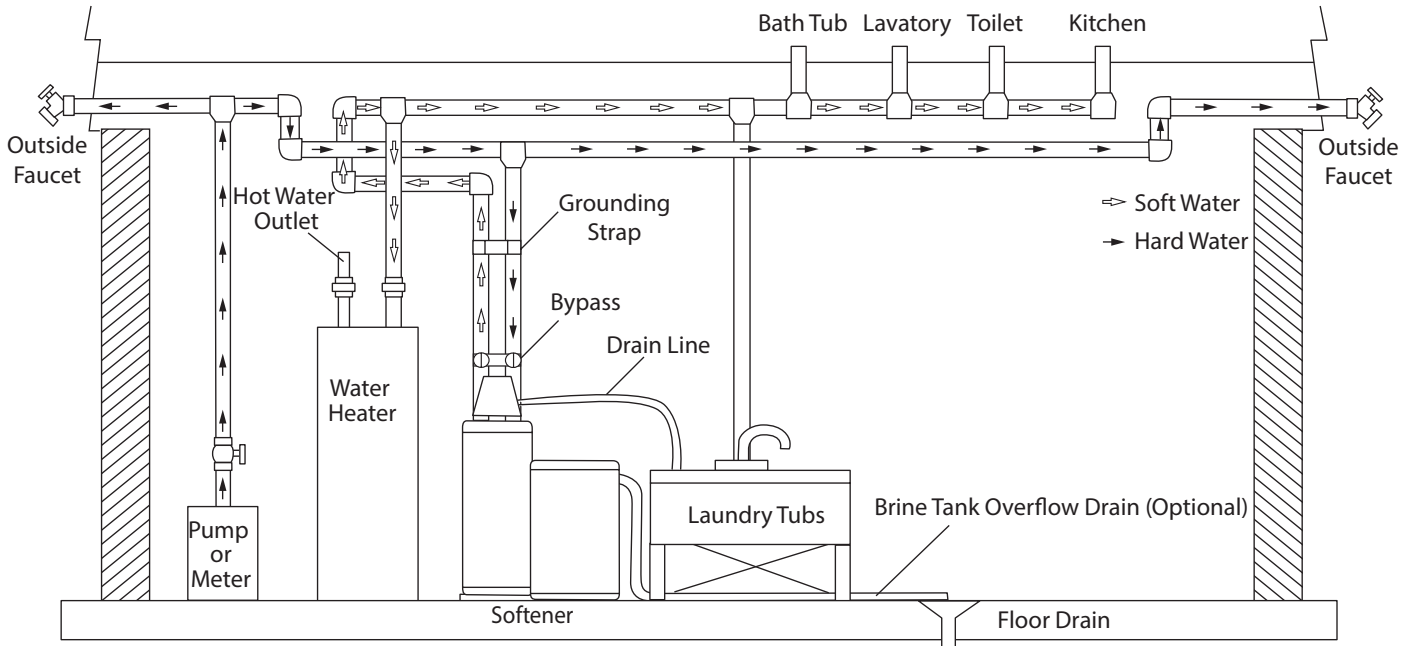


Figure 2 Softened Water Flow

TOUCHSCREEN CONTROL QUICK START

The XTR2 control was designed to be easy to set up and begin using right out of the box. The following simple procedure can be used to set up the system and begin treating water in most typical applications.

NOTE: Steps 3 and 4 are optional and are not required to start the system. All control settings may be changed after the unit is in service.

NOTE: Press  on any Quick Start screen to reset the screen back to its default settings.

1. After plugging in the unit, the Format screen (Figure 3) is displayed.

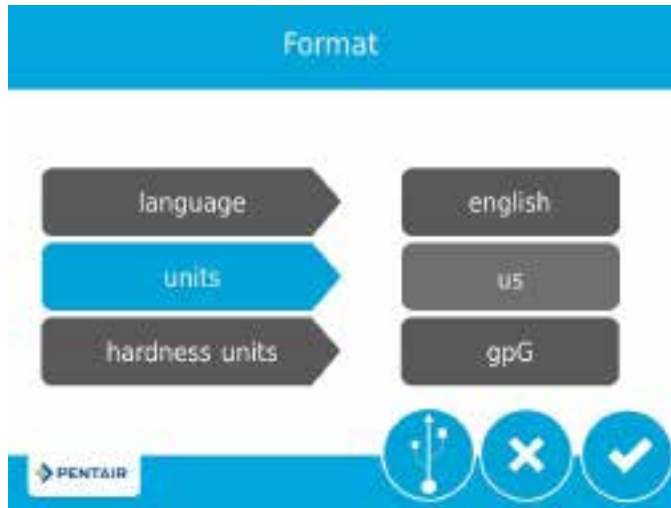





Figure 3 Format Screen

Press the **language** button to adjust the system's displayed language (international version only): English, French, German, Italian, or Spanish. Press  when finished.

Press the **units** button to adjust the system's units of measure (either U.S. or metric). Press  when finished.

Press the **hardness units** button to adjust the system's hardness units of measure (grains per gallon, mg/L or ppm, German degrees, French degrees, or English degrees). Press  when finished. Hardness units are adjustable only if metric units are selected.

NOTE: If the screen is blank after plugging in the unit, touch the screen to turn the screen on.



2. After pressing , the Assistance Name screen (Figure 4) is displayed.



Figure 4 Assistance Name Screen

Using the keypad, type the name of the water treatment professional or company that the homeowner may call for system service (optional).

To enter a letter using the keypad, quickly press the keypad button the number of times that correspond with the position of the correct letter on the button. For example, to enter the letter "C", quickly press the ABC button three times. Press  when finished.




3. After pressing , the Assistance Phone screen (Figure 5) is displayed.



Figure 5 Assistance Phone Screen

Enter the phone number of the water treatment professional or company that the homeowner may call for system service (optional). Press  when finished.

4. After pressing , the Assistance Interval screen (Figure 6) is displayed.

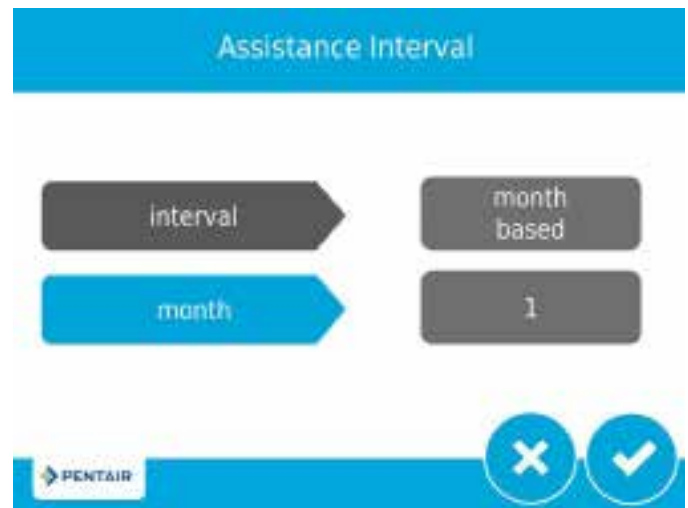




Figure 6 Assistance Interval Screen

Use the Assistance Interval screen to set the interval in which the homeowner will need to call a water treatment professional for system service (optional). The assistance interval can be based on a set number of months (month based) or a number of regenerations (regen based).

Press the **interval** button to select a month-based or regen-based assistance interval, then press . Press either the **month** or **regen** button (depending on your previous selection), and select the number of months (up to 60) or regenerations (up to 2000) until the homeowner will need to call for service. Press  when finished.



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