



ORIGINS

HF 200 / HF 400 • PARTICULATE AND CARBON FILTER

Operation Manual

System Installation

**CAUTION:**

Do not use systems on untreated well water that is microbiologically unsafe.

- Do not exceed 125 psi water pressure.
- Do not exceed 110F water temperature.
- Do not subject unit to freezing conditions.

All plumbing must be in compliance with local and state plumbing codes.

Determine a suitable location for the system. The chosen location should provide you adequate access to service the unit. Ensure that the location is after the main water supply control valve with access to the water line that feeds the home (prior to hot water heater).

OVERVIEW

- **Plumbing connections**
 - Shut off main
 - Release water pressure
 - Make pipe connections
- **Level I valve programming**
(Initial settings)
 - Current Time
 - Current Date
- **Level II programming**
(settings made at factory)
- **Drain line connection**
- **System start-up** (in backwash)



Plumbing Connections



Be sure to comply with all required plumbing codes.

1. Shut off main water supply to the home.
2. Release water pressure by opening a faucet at the kitchen sink or other location.

Important! - Be sure to lubricate the o-rings on the quick connect fittings prior to installation.

3. Make final main water connections to the valve, using quick connect fittings.

Included fitting options:

- (2) 3/4 " male threaded 90 quick connect fitting
- (2) 1" male threaded straight quick connect fitting

- a) Install fittings on the by-pass by removing the red locking clips.
- b) Return the red locking clips to secure the fitting.

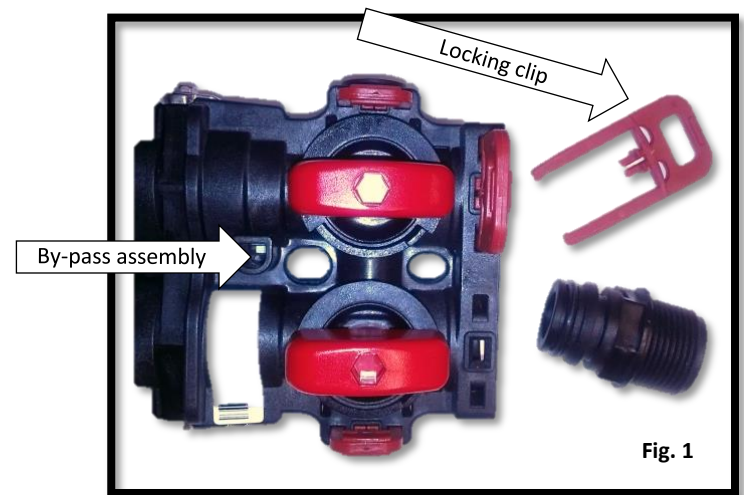
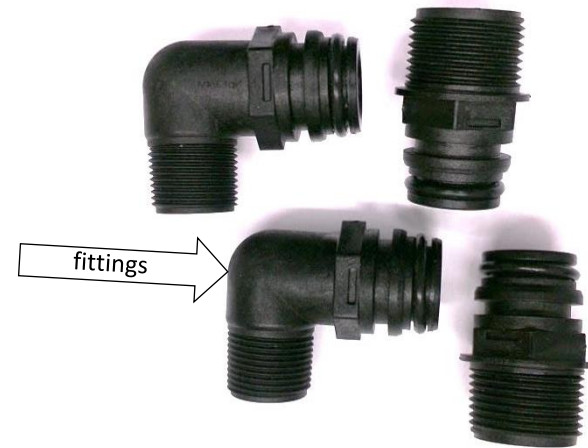


Fig. 1

1850 Valve

(Metered for demand regeneration)

Features

- By-pass valve is included and comes with $\frac{3}{4}$ " and 1" quick connect pipe fittings
- Metered for demand regeneration
- Ideal for softeners, iron, sulfur, carbon and sediment filters
- For tanks to 16" (softeners)
- For tanks to 10" (filters)
- Easy to program
- Operational data shown on LED, including flow rate, last regeneration date, gallons remaining and more



Valve Programming







FIRST - UNLOCK VALVE

Press  and hold for 3 seconds to unlock the valve for programming.

Settings

Valve button programming control definitions

- 1) Menu Key 
Press this key to enters or exit menu
- 2) Set / Save Regen Key 
Press this key to select a program or to save a setting
- 3) Up arrow Key 
Press these keys to go to the previous menu
- 4) Down arrow Key 
Press these keys to go to the next menu



Level-I Set up Parameters

(Required for initial set-up)

Level-1

Time – Enter the time of valve set up.

Date - Enter today's date at time of valve set up.

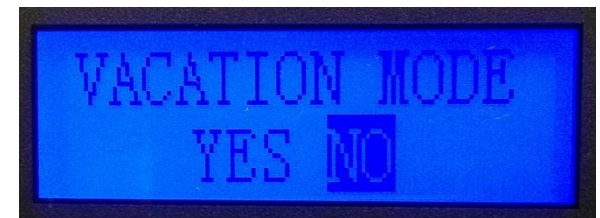
Vacation Mode – Default is no, changing this setting will change the valve operation to a calendar cycle.



CURRENT DATE
OCT/18/2012



CURRENT TIME
01:17PM
















VACATION MODE
YES NO

Making Adjustments – Level I

All programing is adjusted using the methods described in the programing method.

Setting level I programing

Time

- 1) Press * to enter menu (hour display will be highlighted)
- 2) Press  to enter hour setting (**must be flashing to edit**)
- 3) Press  or  to adjust hour
- 4) Press  to save and move to minute setting (flashing)
- 5) Press  or  to adjust minute
- 6) Press  to save and move to AM/PM setting (flashing)
- 7) Press  or  to adjust AM/PM
- 8) Press  to save and move to hour spot (not flashing)
- 9) Press  to go to current date set up or to cycle through level I settings (continue to set all level I setting)
- 10) Press * to exit menu and return to main screen

***Note:** if valve is “locked” you will need to press and hold menu for 3 seconds. Valve will “beep” when changing menus or parameters. Highlighted parameter must flash to be able to adjust setting.

Level-II Programming

(Settings have been pre-set at the factory)

Level-II

These settings have been made at the factory and are held in memory. Level-II settings will not be lost during a power outage. However, if adjustments are desired, follow the directions below.

- Language
- Valve operation
- Regen Mode
- Regen Time
- Capacity Calc.
- Resin Volume (FT3)
- Salt Settings (lbs./FT3)
- Refill Flow Rate (GPM)
- Unit Capacity (grains)
- Reserve Capacity
- Backwash (min)
- Brine/Rinse (min)
- Rapid Rinse (min)
- Refill (min)

Reasons to change Level-II setting (examples)

- 1) Initial start up configurations
- 2) Using tanks other than 9X48
- 3) Using Valve for Carbon or Iron Filter
- 4) Setting valve up for use in in Iron Filter
- 5) Adjusting any cycle or setting to enhance performance

Making Adjustments – Level II

All programming is adjusted using the same methods as for Level-I programming.

Setting level II programming

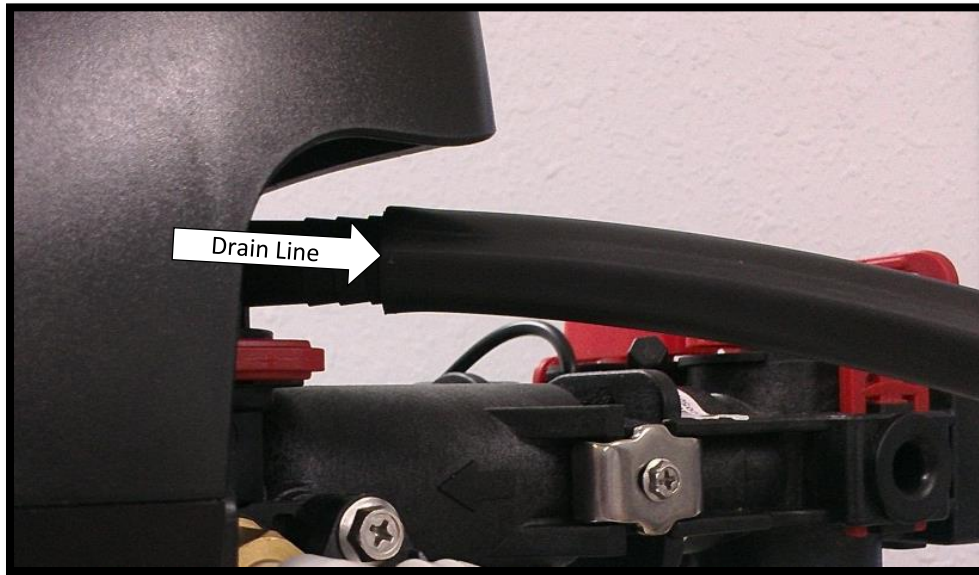
Backwash

- 1) Press ▲ and ▼ together to enter menu (5 sec.)
- 2) Press ▲ or ▼ scroll to backwash setting
- 3) Press ■ to enter menu (flashing)
- 4) Press ▲ or ▼ to adjust minutes (flashing)
- 5) Press ■ to save setting and advance to tenths of minute
- 6) Press ▲ or ▼ to adjust tenths of minute for backwash
- 7) Press ■ to save
- 8) Press ▲ or ▼ to move to another menu
- 9) Press □ to exit menu and return to main screen

Note: Valve must be in manual mode to adjust and save capacity and refill duration.

***Note:** If the valve is “locked” you will need to press and hold menu for 3 seconds. Valve will “beep” when changing menus or parameters. Highlighted parameter will flash when you are able to adjust setting.

Connect Drain Line

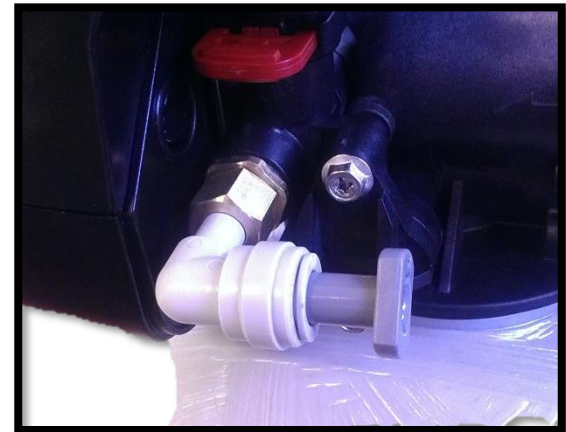


Connect drain line

Slide the supplied drain line tube over barbed drain line connection fitting until secured.



CAUTION: *Inspect valve for "brine plug" installed at the factory. (Plug is required to prevent water leaking when valve advances)*



System Start Up

Notice:

For initial start-up, the Inlet and Outlet valves on the bypass should be in the closed position.

- 1) Press and hold ■ to enter Manual Regen Mode. (press for 3-5 seconds)
- 2) Press ■ to enter edit mode (flashing)
- 3) Press ▲ or ▼ to select immediate (flashing)
- 4) Press ■ to save
- 5) Press □ to show “Advancing to Backwash”



Note: Valve will reset backwash cycle to delay after manual regen. cycle has finished.

Start-Up In Backwash

- 1) Screen will now display “Backwash” and flash “Remaining XX min”
- 2) You will need to run Backwash cycle until drain line runs clear



NOTE: When advancing to another cycle, valve will show “advancing to”. Once the valve is “in” a subsequent cycle, you may press any button to advance to another cycle. Valve cannot be advanced while in the “advancing to” position.

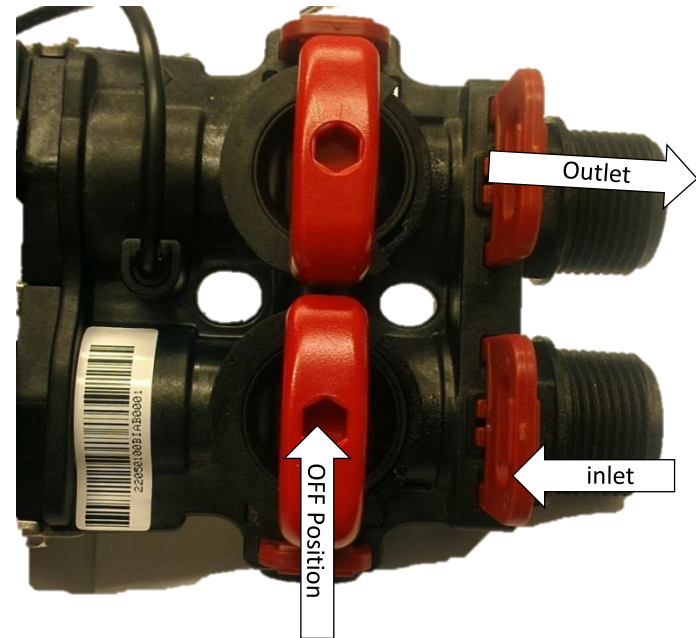
Fill the Mineral Tank



CAUTION: *Allow time for glued connections to cure before proceeding.*

If the mineral tank was not filled, do so at this time following the directions below:

- 1) With bypass valves in the “OFF” position turn on the main water supply.
- 2) Open “Inlet” valve slowly $\frac{1}{4}$ turn clockwise to fill the media tank. Continue to open inlet all the way.



NOTE: Watch to see if the backwash flow rate is proper – do not obstruct drain line. This is particularly important for Iron and Sulfur filters.



CAUTION: *Inspect all plumbing connections. Check for leaks and make repairs as needed.*

System Start up



Leave the system in backwash for a minimum of five to ten minutes until the water runs clear. This will flush loose particles and preservatives from the media.

REPEAT of the initial backwash cycle may be required should the backwash discharge water does not run “clear” after unit has finished the first cycle.

Press  to advance to the next cycle

NOTE: *It's common to run multiple backwash cycles with carbon and Iron filters due to the amount of “fines” in the media.*

Ready for Service

- 1) Slowly open outlet to supply water to the house.



- 2) Open faucet in the house to remove debris and air flushing the system.

Weather Cover

(For outdoor installations)



WARNING

If the water treatment system is to be installed outside, exposed to the weather and/or UV Rays, it is necessary to install a weather cover over the valve. The weather cover will protect the valve from the damaging effects of UV Rays on the LCD Screen and is required to submit a warranty claim.

