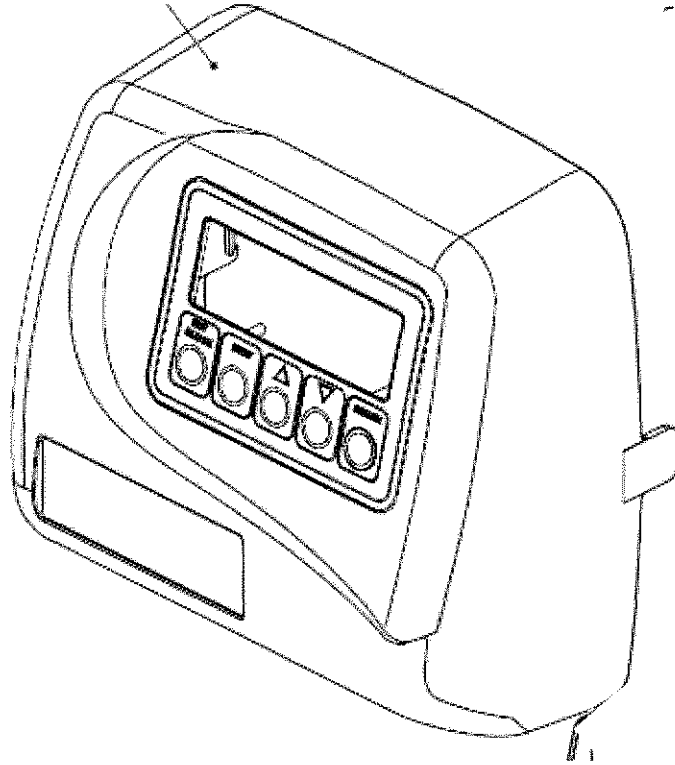


# WATER TENDER®

**Quality Water Treatment Products**



---

## WTC Metered Series Residential Systems

---

Installation and Operation Manual

2015 Version

## Table of Contents

Page No.	Topic	Description
1	Model # and Packaging	Packaging Information
	Component Packaging Description	Packaging Description
2	Softening System	System Positioning
	WTC Control Valve	Attaching Valve to Tank
3	WTC Control Valve, cont'd	Attaching Valve, cont'd
	Service & Drain Piping	Drain Piping
4	Service & Drain Piping, cont'd	Drain Piping
5	System Schematic	Piping Layout
6	Electrical Supply	Electrical Requirements
	Brine Tank / Brine Tubing	Brine tank w/shut off
7	Filling Softener with Water	Details for Filling Softener Tank with Water
8	Filling Softener with Water, cont'd	Details for Filling Softener Tank with Water, cont'd
	WTC-Control Valve Timer	Setting the timer
9	WTC-Control Valve Timer, cont'd	Setting the timer, cont'd
	Final Check	Final Installation Check
10	Disinfection	Conditioner Disinfection
11	Manual Regeneration	Instructions for Manual Regeneration
	Power loss/ Error codes	"What if" Instructions
12	Bypass	Bypass Operation
13	Troubleshooting	Problem/ Cause / Solution
14	Troubleshooting	Problem/ Cause / Solution
15	Troubleshooting	Problem/ Cause / Solution
16	Troubleshooting	Problem/ Cause / Solution
17	Troubleshooting	Problem/ Cause / Solution
18	Error Code Troubleshooting	Problem/ Cause / Solution
19	Valve Parts List	Parts Number List
20	Valve Parts List	Parts Number List
21	Valve Parts List	Parts Number List
22	Valve Parts List	Parts Number List
23	Warranty	Warranty

**Installation and Operating Instructions for**  
**WTC CONTROL**  
**Top Mount Water Softener**

**Model #:**

_____	WTC-240DR	24K Demand Softener
_____	WTC-250CDR	25K Demand Cabinet Softener
_____	WTC-320DR	32K Demand Softener
_____	WTC-320CDR	32K Demand Cabinet Softener
_____	WTC-320IHCDR	1 CF Upflow Iron Handler/Softener Cabinet
_____	WTC-480DR	48K Demand Softener
_____	WTC-480IHDR	1.5 CF Upflow Demand Iron Handler/Softener
_____	WTC-640DR	64K Demand Softener
_____	WTC-640IHDR	2.0 CF Upflow Iron Handler/Softener
_____	WTCN-240DR	¾ CF Nitrate Removal
_____	WTCN-320DR	1 CF Nitrate Removal
_____	WTCN-480DR	1.5 CF Nitrate Removal
_____	WTCN-640DR	2 CF Nitrate Removal
_____	WTC320IHDR	

**Shipping Carton Description / unit:**

# of cartons	Contents	Description
1	Mineral tank	Distributor pipe installed
1	Brine tank	464 shutoff valve assembly. <b>*NOTE:</b> WTC valve is shipped in brine tank.
1	WTC control valve	WTC timer and backwash flow control and bypass with 1" copper or pvc connection
	C-800	Pre-loaded @ factory
	C-800F	Pre-loaded @ factory
	Garnet	Pre-loaded @ factory
	A-520E	Pre-loaded @ factory

**NOTE: THIS SOFTENER IS NOT INTENDED TO BE USED FOR TREATING WATER THAT IS MICROBIOLOGICALLY UNSAFE OR OF UNKNOWN QUALITY WITHOUT ADEQUATE DISINFECTION WHETHER BEFORE OR AFTER THE SYSTEM.**

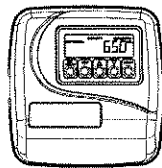
### ***Water Softener Positioning:***

1. Place water softener in desired position, far enough from walls and other obstructions to allow for servicing the unit.
2. Place the water softener within reasonable access to a grounded 115V/60 HZ circuit and a legal drain line connection.

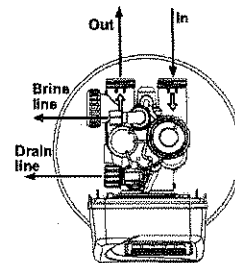
### ***WTC Control Valve:***

1. When facing the front of the WTC timer, the inlet connection is located on the right and the outlet connection is on the left. The control valve's inlet and outlet connections are either 1" copper or PVC equipped with split ring and nut.

Control Valve



Front View



Top View

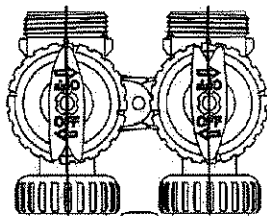
1. Turn the control valve upside down and ensure that the control valve distributor o'ring is in place. Use silicone lubricant on the o'ring.

**\*\*DO NOT USE PETROLEUM!\*\***

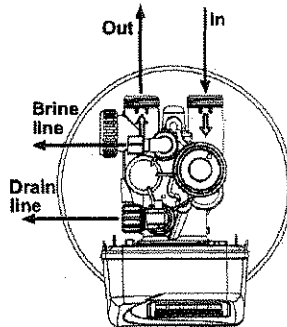
**\*\*USE ONLY SILICONE \*\***

2. Place the control valve onto the distributor pipe and into the tank opening.
3. Thread the control valve hand tight . Do not overtighten.

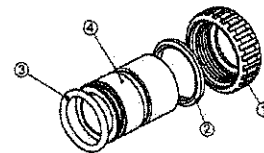
4. Locate the bypass valve assembly that is packaged with the control valve. The bypass valve has two red handles that indicate flow direction, two threaded connections for the tail piece kit and two o’ring seal connections with nuts for the control valve. Align the insert connection ends with o’ring seals and nuts to the inlet and outlet connections of the control valve. Hand tighten the nuts. **DO NOT OVERTIGHTEN THE NUT!**



Bypass Valve



Control Valve



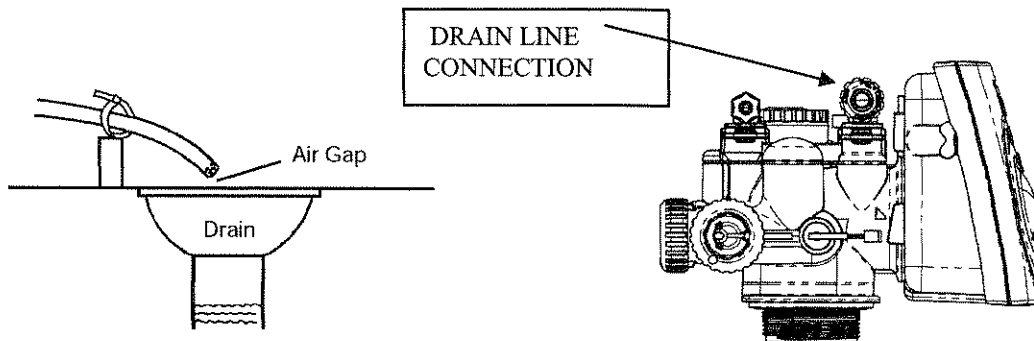
Tail piece assembly

5. Locate the tail piece kit that is packaged with the control valve. The standard tail piece kit is 1” copper with optional 1”/ 3/4” PVC or 3/4” copper kits available as a special order. Each tail piece, o’ring, split ring and nut is presassembled at the factory. Align a tail piece assembly to the bypass valve threaded inlet and insert until the nut can be tightened. Hand tighten the nut because excessive tightening will damage the assembly. **REPEAT THE PROCEDURE FOR THE OUTLET CONNECTION.**

### ***Service and Drain Piping:***

1. Pipe water softener into the service lines .The inlet and outlet connections of the control valve are 1” copper or PVC and are located on the back of the valve body. As you face the timer the inlet is on the right and the outlet is on the left. Always follow local plumbing codes when installing our water treatment equipment.

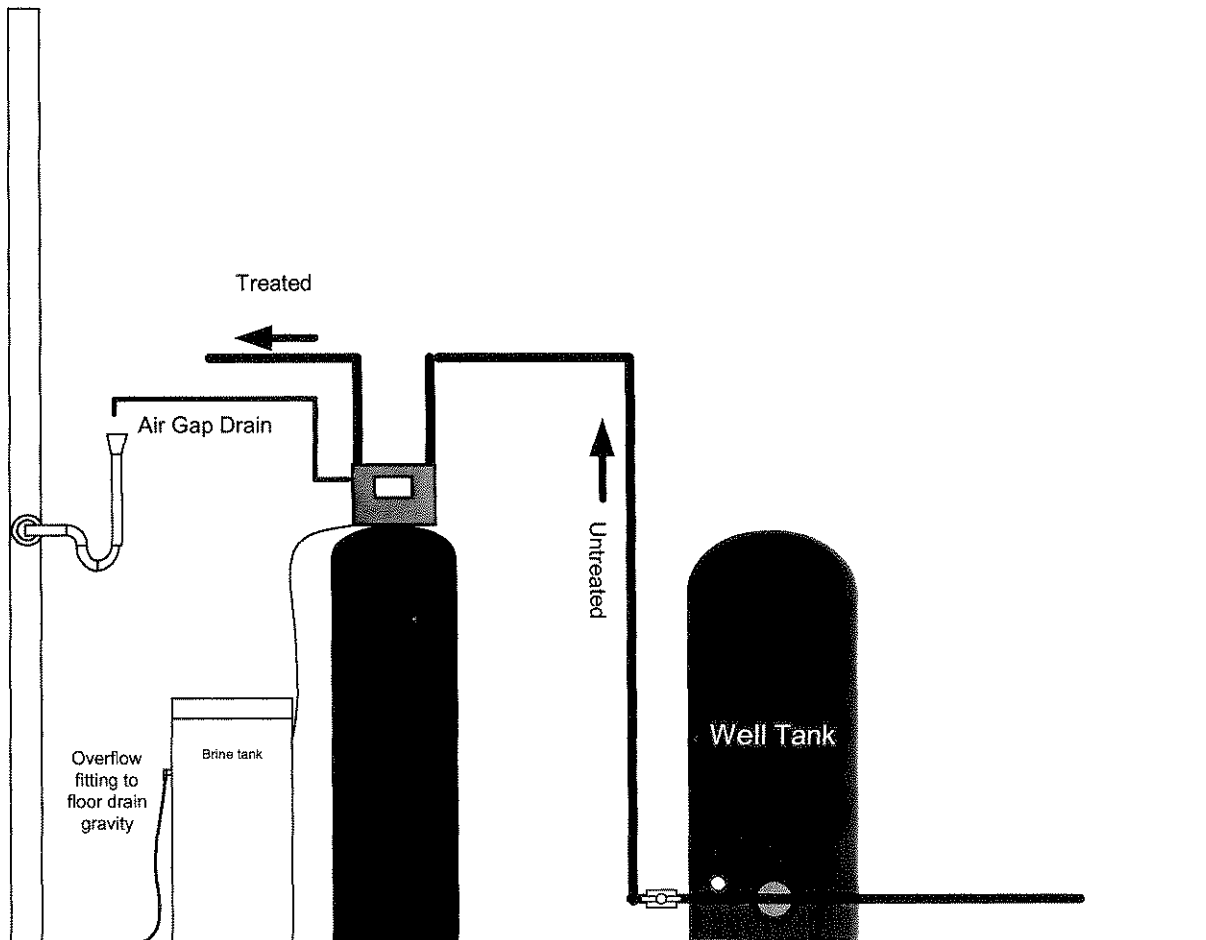
2. If sweat fittings are used, be sure soldering is done in such a manner as not to allow heat to reach the control valve or bypass. (If Schedule 80 PVC is used make sure to follow the proper primer and solvent instructions.)
3. The drain line connection is 5/8" OD or 3/4" npt and is located on the top left of the valve as you face the timer. It is recommended you install a 3/4" union on the drain line for servicing if not using 5/8 OD. The drain line must be of adequate size to allow for full regeneration flow.



- The control valve drain connection is 3/4" npt.
- Never decrease the drain piping size to below the drain connection size.
- Maximum drain line length is 30 feet with proper sloping the entire length.
- Maximum drain line height is 6 feet above the control valve.
- The drain line must be piped to an open air gap (See Figure above)
- Always follow local plumbing codes.

**UNDER NO CIRCUMSTANCES SHOULD THERE BE A DIRECT CONNECTION WITH SANITARY SEWAGE FACILITIES.**

# PIPING SCHEMATIC



*NOTE: All Conditioners must be installed after the well tank or water meter if its public water supply.*

**Temperature :            MAX: 120 F, MIN: 34F**  
**Pressure: MAX: 100 PSI, MIN: 20 PSI**  
**Electrical: 115V/ 60 HZ**

## **Electrical Requirements:**

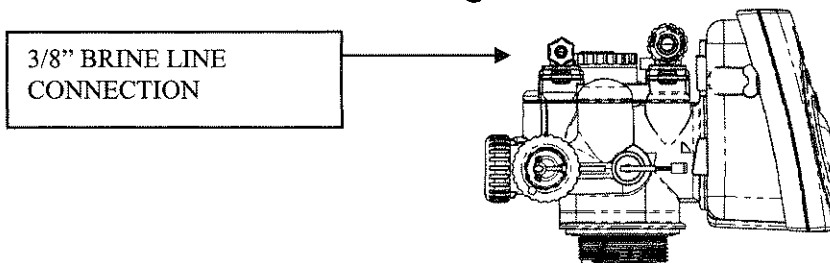
Always follow all local electrical codes when installing our water treatment equipment.

1. Provide an 115v/60Hz properly grounded dedicated electrical Outlet. (It's very important that the polarity be correct)  
**Avoid using outlets that are switch controlled.**
2. Maximum amperage required is 5 amps.
3. Make sure the electrical service provides power 24 hours per day.  
We recommend installing a **surge protector** to protect unit from power surges, which are not covered by warranty.

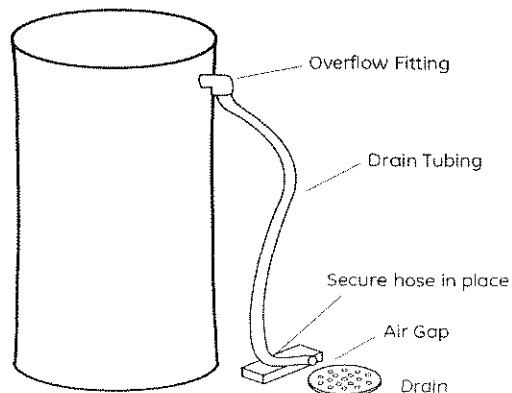
## **Brine Tank:**

1. The brine tank should be located directly beside the water softener mineral tank.
2. Connect the 3/8" poly tubing to the 3/8" black elbow compression fitting located on the top left side of the MCA control valve.

**See Figure Below.**



**The brine tank is equipped with a shutoff valve, the float height was preset at the factory.**





### ***Filling Water Softener with Water:***

**For the WTC-240DR through WTC-640DR, and WTCN-240DR through WTCN-640DR units:**

1. Connect the WTC control valve transformer into the electrical outlet provided.
2. Press and hold the REGEN button until the drive motor starts. When the drive motor stops, the display will read "BACKWASH" position.
3. Open the inlet ball valve a ¼ turn of its full open position to allow water to enter the water softener mineral tank slowly. The water is going to enter the tank from the bottom of the distributor pipe and leave the tank from the top. This will slowly purge all the air from the tank.

**IF WATER ENTERS THE TANK TOO FAST, ALL THE CATION RESIN WILL BE FLUSHED TO DRAIN DURING START UP.**

4. When only water is running to the drain, open the inlet and outlet ball valves fully.
5. Press the REGEN again until the drive motor starts. When the drive motor stops, the display will read "BRINE" position.
6. Press the REGEN again until the drive motor starts. When the drive motor stops, the display will read "2 BACKWASH" position.
7. Press and hold the REGEN button until the drive motor starts. When the drive motor stops, the display will read "RINSE" position. The fast rinse position will rinse the softener tank.
8. The control valve will automatically advance to the brine refill position where the brine tank will fill with the proper amount of water. The display will read "FILL".

**NOTE: THE TIMER WILL AUTOMATICALLY ADVANCE TO THE SERVICE POSITION AND THE DISPLAY WILL READ THE CAPACITY REMAINING, IN GALLONS.**

**For the WTC-320IHCDR through WTC-640IHDR units:**

1. Connect the WTC control valve transformer into the electrical outlet provided.
2. Press and hold the REGEN button until the drive motor starts. When the drive motor stops, the display will read "RINSE" position.

3. Unplug the WTC control valve from the electrical outlet.
4. Open the inlet ball valve a ¼ turn of its full open position to allow water to enter the water softener mineral tank slowly. The water is going to enter the tank from the bottom of the distributor pipe and leave the tank from the top. This will slowly purge all the air from the tank.

**IF WATER ENTERS THE TANK TOO FAST, ALL THE CATION RESIN WILL BE FLUSHED TO DRAIN DURING START UP.**

5. When only water is running to the drain, open the inlet and outlet ball valves fully.
6. Plug the WTC control valve back into the electrical outlet.
7. Press the REGEN again until the drive motor starts. When the drive motor stops, the display will read "BRINE" position.
8. Press the REGEN again until the drive motor starts. When the drive motor stops, the display will read "BACKWASH" position.
9. Press and hold the REGEN button until the drive motor starts. When the drive motor stops, the display will read "RINSE" position. The fast rinse position will rinse the softener tank.
10. The control valve will automatically advance to the brine refill position where the brine tank will fill with the proper amount of water. The display will read "FILL".

**NOTE: THE TIMER WILL AUTOMATICALLY ADVANCE TO THE SERVICE POSITION AND THE DISPLAY WILL READ THE CAPACITY REMAINING, IN GALLONS.**

### ***WTC Control Valve Timer Settings:***

**Note:** The control valve is set at the factory. You only need to set the time of day, hardness and regeneration time if required, which is preset at 2 am.

#### ***Time of Day Setting***

- 1) Press the CLOCK button. The screen will show the Time of Day in blinking numbers.
- 2) To change the Time of Day, press CLOCK, use the UP and DOWN arrows to set the Hour.
- 3) To change the Minutes, press CLOCK, use the UP and DOWN arrows to set the Minutes
- 4) Press the CLOCK button.

***Hardness Setting (the factory default is 10)***

- 1) Press the NEXT and UP arrow , hold for 3 seconds. The screen will show the Hardness as grains per gallon in blinking numbers.
- 2) To change the number, use the UP or DOWN arrows.
- 3) Press the NEXT button.

**If water was tested by Master Water Conditioning, follow recommendations on water analysis, for hardness setting**

***Regeneration Day Override Setting (the factory default is OFF)***

- 1) Press the NEXT button. The screen will show the Regeneration Day Override in blinking numbers.
- 2) To change the number, use the UP or DOWN arrows.
- 3) Press the NEXT button.

***Time of Regeneration Setting (the factory default is 2 AM)***

- 1) The screen will show the Time of Regeneration in blinking numbers.
- 2) If Regeneration time change is desired, use the UP or DOWN arrows to adjust the hour. Press NEXT.
- 3) Use the UP or DOWN arrows to adjust the minutes. Press NEXT.

**NOTE: SALT SETTING AND CAPACITY ARE PRESET AT THE FACTORY.**

***Final Check:***

1. Fill the brine tank with Solar Salt and the Res-Up Feeders with Res-Up (one quart is provided).
2. Make sure the drain line connection meets all plumbing codes and that the drain line size can handle the backwash flow rate of the softener.
3. Make sure the Inlet and Outlet on bypass valve are open.
4. Make sure the control valve timer is plugged into an electrical outlet with power 24 hours per day.
5. Check all piping for leaks.

## Disinfection of Water Conditioners

The materials of construction of the modern water conditioner will not support bacterial growth, nor will these materials contaminate a water supply. However, the normal conditions existing during shipping, storage and installation indicate the advisability of disinfecting a conditioner after installation, before the conditioner is used to treat potable water. In addition, during normal use, a conditioner may become fouled with organic matter or in some cases with bacteria from the water supply.

Thus every conditioner should be disinfected after installation, some will require periodic disinfection during their normal life, and in a few cases disinfection with every regeneration would be recommended.

Depending upon the conditions of use, the style of conditioner, the type of ion exchanger, and the disinfectant available, a choice can be made among the following methods.

### Sodium or Calcium Hypochlorite

#### Application

These materials are satisfactory for use with polystyrene resins, synthetic gel zeolite, greensand and bentonites.

#### 5.25% Sodium Hypochlorite

These solutions are available under trade names such as Clorox Bleach\*. If stronger solutions are used, such as those sold for commercial laundries, adjust the dosage accordingly.

1. Dosage
  - a. Polystyrene resin: 1.2 fluid ounces per cubic foot.
  - b. Non-resinous exchangers: 0.8 fluid ounce per cubic foot.

\*Clorox is a registered trademark of The Clorox Company.

2. Brine tank conditioners
  - a. Backwash the conditioner and add the required amount of hypochlorite solution to the brine well of the brine tank. (The brine tank should have water in it to permit the solution to be carried into the conditioner.)
  - b. Proceed with the normal regeneration.

### Calcium Hypochlorite

Calcium hypochlorite, 70% available chlorine, is available in several forms including tablets and granules. These solid materials may be used directly without dissolving before use.

1. Dosage
  - a. Two grains (approximately 0.1 ounce) per cubic foot.
2. Brine tank conditioners
  - a. Backwash the conditioner and add the required amount of hypochlorite to the brine well of the brine tank. (The brine tank should have water in it to permit the chlorine solution to be carried into the conditioner.)
  - b. Proceed with the normal regeneration.

### ***Manual Regeneration:***

**Note: For softeners, if brine tank does not contain salt, fill with salt and wait at least 2 hours before regeneration.**

To initiate manual regeneration immediately, press and hold the “REGEN” button for three seconds. The system will begin to regenerate immediately. **The request cannot be cancelled.**

To initiate a manual regeneration at the preset delayed regeneration time, when the regeneration time option is set to “NORMAL” or “NORMAL + on 0”, press and release “REGEN”. The words “REGEN TODAY” will flash on the display to indicate that the system will regenerate at the preset delayed regeneration time. If you pressed “REGEN” in error, pressing the button again will cancel the request.

**Note: If the regeneration time option is set to “on 0” there is no set delayed regeneration time so “REGEN TODAY” will not activate if “REGEN” button is pressed.**

### **Power Loss**

If the power goes out for less than two hours, the system will automatically reset itself. If an extended power outage occurs, the time of day will flash on and off which indicates the time of day should be reset. The system will remember the rest.

### **Error Message**

If the word “ERROR” and a number are alternately flashing on the display, contact a service technician for help. This means the valve is unable to function properly. ( See page 21 )

# BYPASS VALVE OPERATION

Figure 1

## NORMAL OPERATION

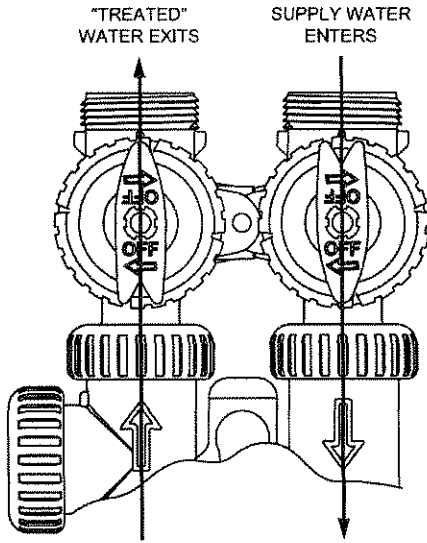


Figure 2

## BYPASS OPERATION

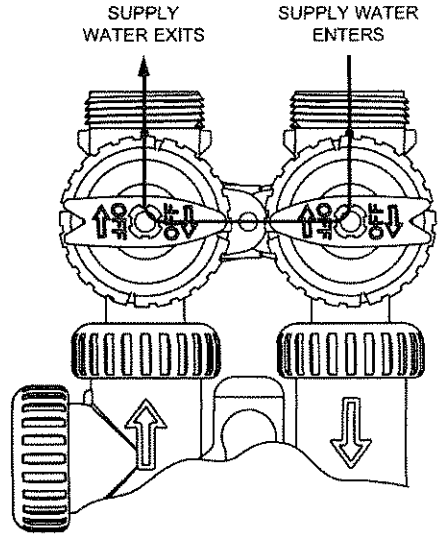


Figure 3

## DIAGNOSTIC MODE

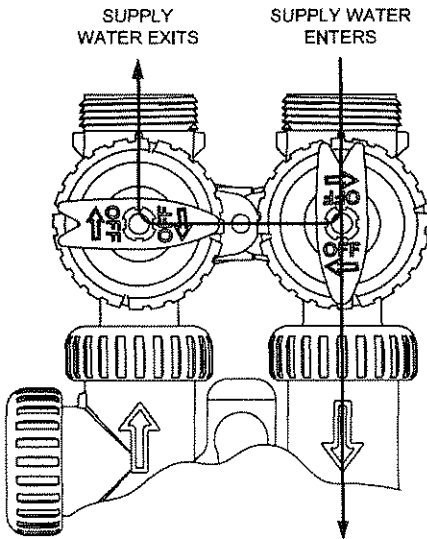
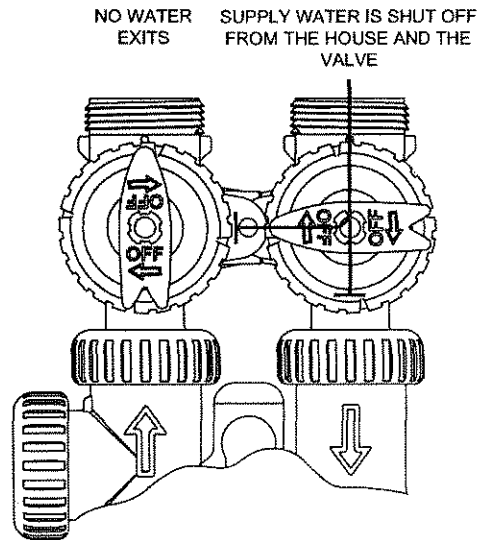


Figure 4

## SHUT OFF MODE



## Troubleshooting

**Problem:** Water conditioner fails to regenerate. No soft water.

<b>Possible Cause</b>	<b>Solution</b>
Power supply to WTC control has been interrupted.	Determine reason for power interruption and correct. Reset time of day.
Water pressure lost.	Restore water pressure.
Corrupted programming of WTC timer.	Reprogram timer assembly.
Defective WTC timer.	Replace timer assembly.
No salt in brine tank.	Add salt and regenerate.
Manual bypass valve is open.	Close manual bypass valve.
Leak at riser pipe seal.	Insure that riser pipe is properly sealed at o'ring seal. Inspect pipe for cracks.
Insufficient brine.	Check brine float height and clean assembly if necessary. Check flow rate capabilities of safety float and air check assembly.
Plugged injector or injector screen.	Inspect and clean injector and/or injector screen.

**Problem:** No Brine Draw

<b>Possible Cause</b>	<b>Solution</b>
Plugged injector or injector screen.	Inspect and clean injector and/or injector screen.
Insufficient water pressure.	Increase water pressure above 25 psig (172kPa) minimum.
Corrupted programming of WTC timer.	Reprogram timer assembly.
Defective WTC timer.	Replace timer assembly.
Obstructed drain line.	Remove obstruction.

**Problem: Insufficient brine draw**

<b>Possible Cause</b>	<b>Solution</b>
Partially clogged injector or injector screen.	Inspect and clean injector and/or injector screen assembly.
Restricted flow rate in brine line.	Check flow rate capabilities of the safety float/aircheck assembly.
Insufficient water pressure.	Increase water pressure above 25 psig (172kPa) minimum.
Excessive back pressure on injector due to elevated drain line.	Reduce drain line elevation to height of valve.
Damaged valve disk.	Replace all valve disks.
Partially restricted drain line.	Remove restriction.

**Problem: Insufficient Refill to Brine Tank**

<b>Possible Cause</b>	<b>Solution</b>
Brine refill control	Remove and clean
Restricted flow rate in brine line.	Check flow rate capabilities of the safety float/aircheck assembly.

**Problem: Excessive Water in Brine Tank**

<b>Possible Cause</b>	<b>Solution</b>
Plugged drain line flow control.	Clean flow control.
Plugged injector and/or injector screen	Inspect and clean injector and/or screen.

**Problem: Loss of Media to Drain**

<b>Possible Cause</b>	<b>Solution</b>
No flow control installed in drain line.	Install drain line flow control.



**Problem: Leak to Drain**

<b>Possible Cause</b>	<b>Solution</b>
No flow control installed in drain line.	Install drain line flow control.
Insufficient water pressure.	Increase water pressure above 25 psig (172kPa) minimum.
Damaged valve disk or obstruction in valve disk.	Inspect and if damaged, replace all valve disks or remove obstruction.

**Problem: Loss of Water Pressure**

<b>Possible Cause</b>	<b>Solution</b>
Fouled resin bed due to iron accumulation.	Clean control valve and mineral bed with cleaner.
Slots in riser pipe or laterals are filled with resin fines.	Inspect and clean distributor pipe slots as needed.

**Problem: Salt in Water to Service after Regeneration**

<b>Possible Cause</b>	<b>Solution</b>
Injector is too small for system size.	Install correct injector
Brine draw time excessively long due to low water pressure.	Increase water pressure above 25 psig (172 kPa) minimum.
Restricted drain line.	Remove drain line restriction.
Insufficient rinse volume.	Increase slow rinse time, fast rinse time, or both.
Damaged valve disk.	Replace all valve disks.
Plugged injector and/or injector screen.	Inspect and clean injector and/or injector screen.

**Problem:** Timer does not display time of day

Possible Cause	Solution
AC Adapter unplugged	Connect power
No electric power at outlet	Repair outlet or use working outlet
Defective AC Adapter	Replace AC Adapter
Defective PC Board	Replace PC Board

**Problem:** Timer does not display correct time of day

Possible Cause	Solution
Switched outlet	Use uninterrupted outlet
Power Outage	Reset time of day
Defective PC Board	Replace PC Board

**Problem:** Control Valve regenerates at wrong time of day

Possible Cause	Solution
Power Outages	Reset control valve to correct time of day
Time of day not set correctly	Reset to correct time of day
Time of regeneration incorrect	Reset regeneration time

**Problem:** Control valve stalled in regeneration

Possible Cause	Solution
Motor not operating	Replace motor
No electric power at outlet	Repair outlet or use working outlet
Defective AC adapter	Replace AC adapter
Defective PC board	Replace PC board
Broken drive gear or drive cap assembly	Replace drive gear or drive cap assembly
Broken piston retainer	Replace piston retainer
Broken main or regenerate piston	Replace main or regenerate piston

**Problem:** Control valve does not regenerate automatically when UP and DOWN buttons are held and depressed

<b>Possible Cause</b>	<b>Solution</b>
AC adapter unplugged	Connect AC adapter
No electric power at outlet	Repair outlet or use working outlet
Broken drive gear or drive cap assembly	Replace drive gear assembly
Defective PC board	Replace PC board

**Problem:** Control valve does not regenerate automatically but does when UP and DOWN buttons are depressed and held

<b>Possible Cause</b>	<b>Solution</b>
Defective PC board	Replace PC board
Set-up error	Check control valve set-up procedure

## ERROR CODES

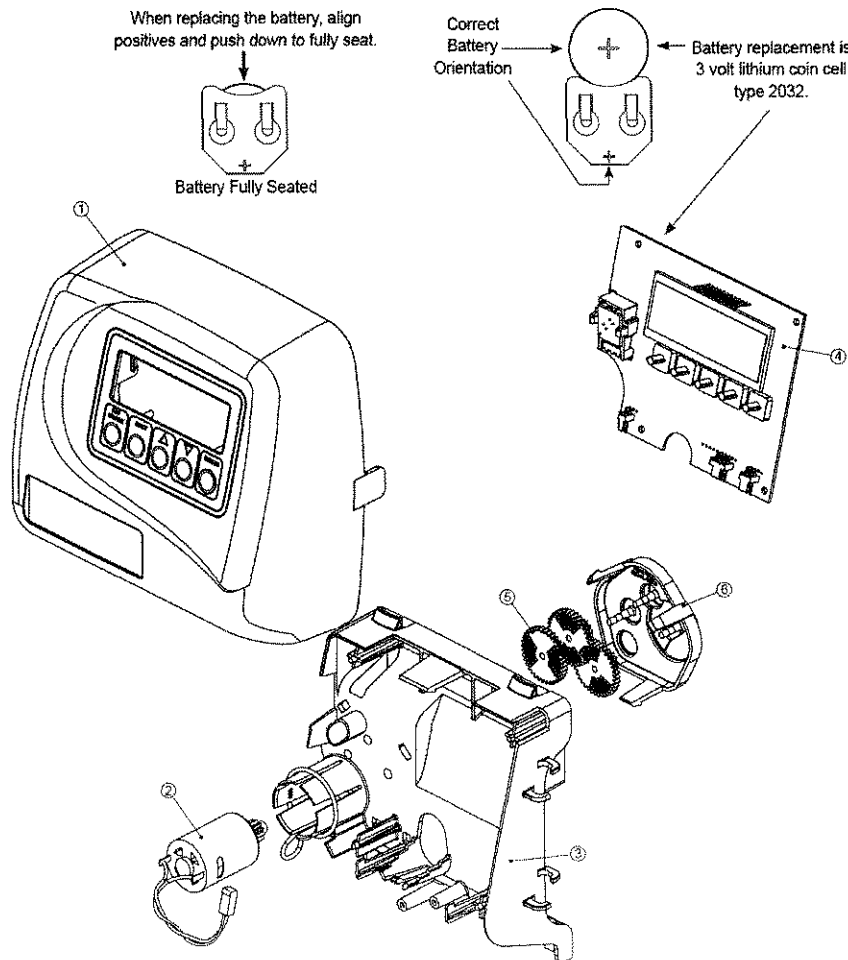
Display	Description	Cause
E1 (1001)	Unable to recognize start of regeneration	Defective motor, damaged wiring, or poor wire connection.
E2 (1002)	Unexpected electrical or mechanical stall	Defective motor, damaged wiring, poor wire connection, or mechanical component failure.
E3 (1003)	Motor running too long or timeout during piston relocating	Damaged wiring, poor wire connection, or mechanical component failure.
E4 (1004)	Motor timeout when piston is relocating to service position	Damaged wiring, poor wire connection, or mechanical component failure.
(1006)	MAV-No Hard Water Bypass motor ran too long, piston can't find proper position	Unplug transformer from electrical outlet. After 1 minute, connect transformer to electrical outlet. The MAV will synchronize to the proper position.
(1007)	MAV-No Hard Water Bypass motor ran too short, piston can't find proper position and movement is stalled	Unplug transformer from electrical outlet. After 1 minute, connect transformer to electrical outlet. The MAV will synchronize to the proper position.
(1009)	Internal software error generated by detection of an invalid motor start	Replace circuit board.

### Front Cover and Drive Assembly

Drawing No.	Order No.	Description	Quantity
1	V3175-01	WS1 Front Cover ASY	1
2	V3107-01	WS1 Motor	1
3	V3106-01	WS1 Drive Bracket&Spring Clip	1
4	V3108-09BOARD	WS1 PC Board with Battery REPLACE	1
5	V3110	WS1 Drive Reducing Gear 12x36	3
6	V3109	WS1 Drive Gear Cover	1
	V3002	WS1 Drive ASY	*
Not Shown	V3186	WS1 AC Adapter 110V-12V	1
Not Shown	V3186	WS1 AC ADAPTER 110V-12V	1
	V3186EU	WS1 AC ADAPTER 220-240V-12V EU	
	V3186UK	WS1 AC ADAPTER 220-240V-12V UK	
	V3186-01	WS1 AC ADAPTER CORD ONLY	

\* Drawing number parts 2 through 6 may be purchased as a complete assembly, part V3002.

AC Adapter	U.S.	International
Supply Voltage	120 V AC	230V AC
Supply Frequency	60 Hz	50 Hz
Output Voltage	12 V AC	12 V AC
Output Current	500 mA	500 mA

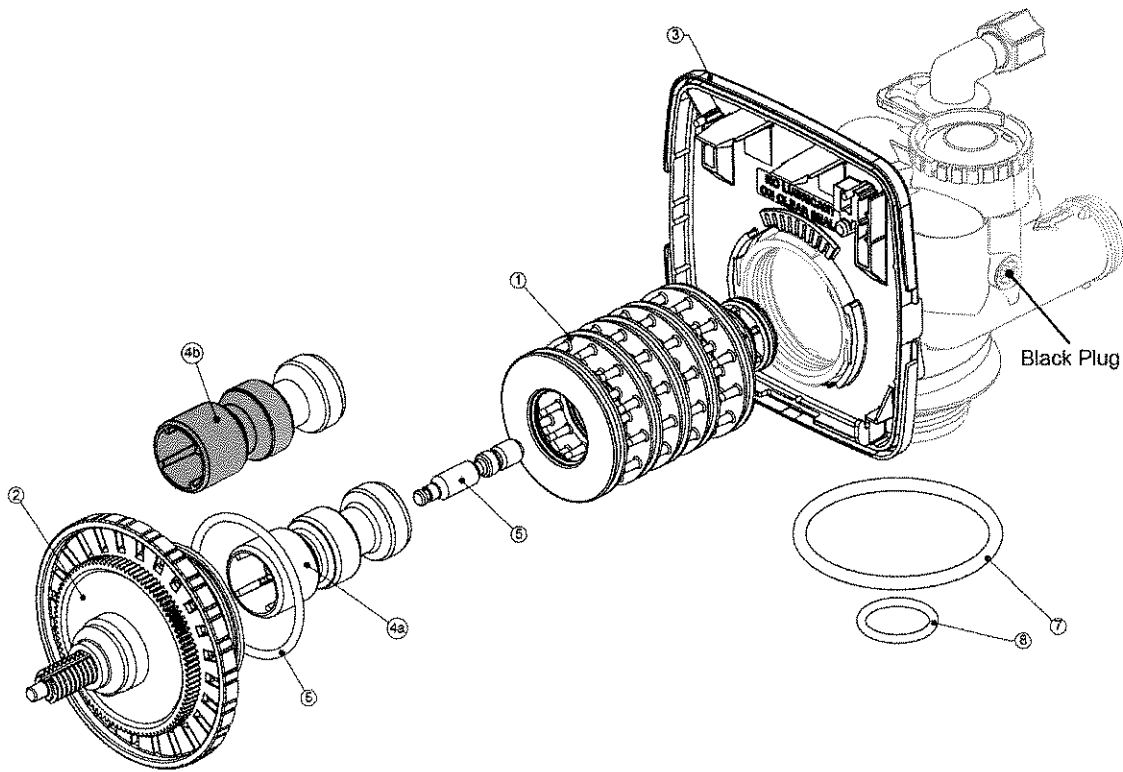


WS1 Drive Cap Assembly, Downflow Piston, Upflow Piston, Regenerant Piston and Spacer Stack Assembly

Drawing No.	Order No.	Description	Quantity
1	V3005	WS1 Spacer Stack Assembly	1
2	V3004	Drive Cap ASY	1
3	V3178	WS1 Drive Back Plate	1
4a	V3011*	WS1 Piston Downflow ASY	1
4b	V3011-01*	WS1 Piston Upflow ASY	
5	V3174	WS1 Regenerant Piston	1
6	V3135	O-ring 228	1
7	V3180	O-ring 337	1
8	V3105	O-ring 215 (Distributor Tube)	1
Not Shown	V3001	WS1 Body ASY Downflow	1
	V3001-02	WS1 Mixing Valve Body ASY	
	V3001UP	WS1 Body ASY Upflow	
	V3001-02UP	WS1 Mixing Valve Body Upflow ASY	

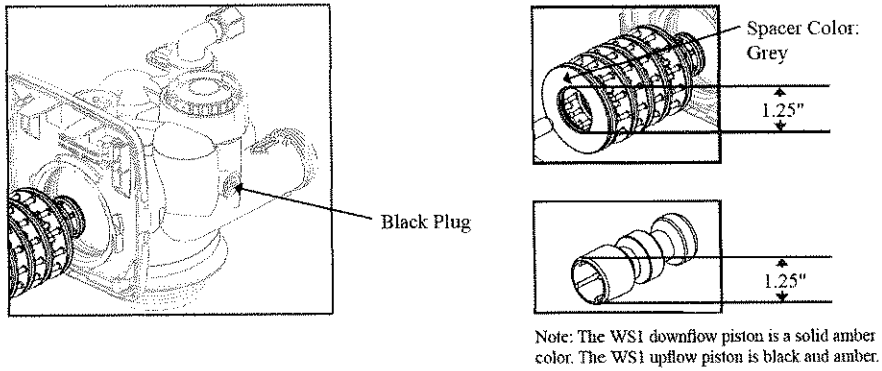
\*V3011 is labeled with DN and V3011-01 is labeled with UP.

Note: The regenerant piston is not used in backwash only applications.

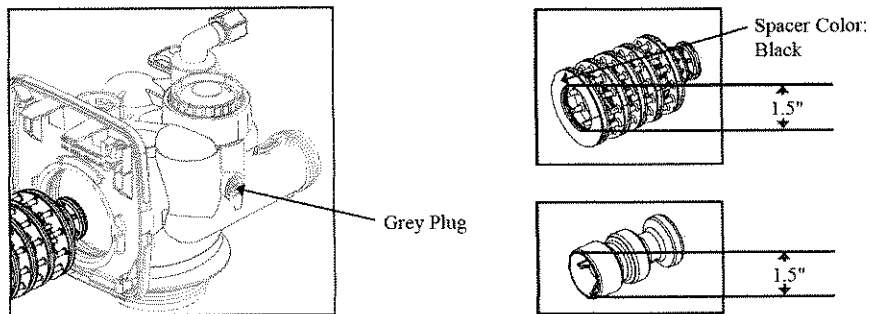


**WS1 & WS1.25 Identification Figure**

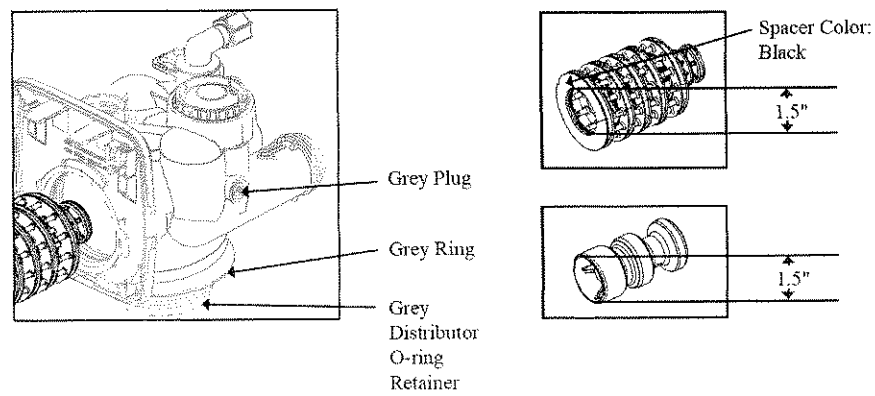
**WS1 with 1.050" Distributor Tube Opening Identification**



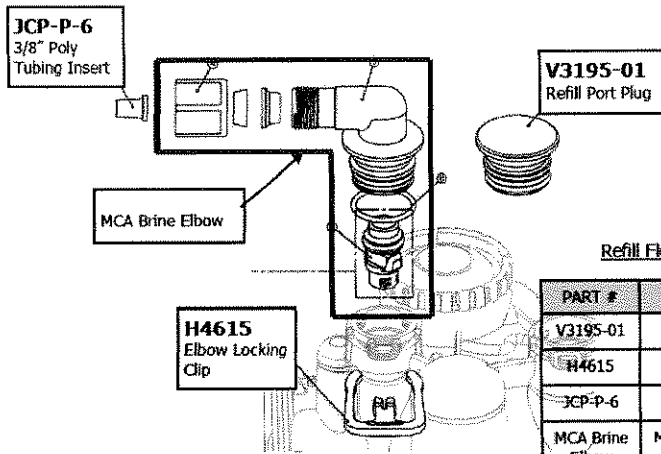
**WS1.25 with 1.32" Distributor Tube Opening Identification**



**WS1.25 with 32mm Distributor Tube Opening Identification**



## PARTS

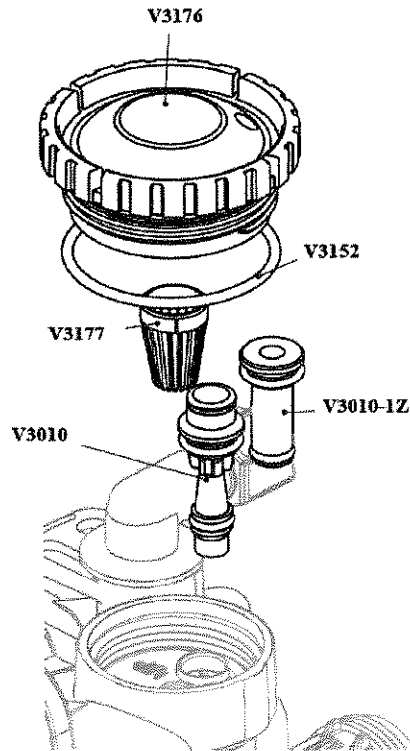


**Refill Flow Control Assembly And Refill Port Plug**

PART #	DESCRIPTION	PRICE
V3195-01	Refill Port Plug Assembly	\$6.87
H4615	Elbow Locking Clip	\$.52
JCP-P-6	Poly Tube Insert 3/8"	.19
MCA Brine Elbow	MCA 3/8" Brine Elbow Assembly with BLFC	\$6.50

**Injector Cap, Injector Screen, Injector, Plug and O-Ring**

PART #	DESCRIPTION	PRICE
V3176	Injector Cap	\$2.82
V3152	O-Ring	\$1.04
V3177	Injector Screen	\$2.57
V3010-1Z	Injector Assembly Z Plug	\$1.71
V3010	Injector assembly — Specify Model Number of Unit	
V3010-1A	Black Injector	\$5.34
V3010-1D	Red Injector	\$5.34
V3010-1E	White Injector	\$5.34
V3010-1F	Blue Injector	\$5.34
V3010-1G	Yellow Injector	\$5.34







**Quality Water Treatment Products**

**QUALITY WATER TREATMENT SYSTEMS**

**LIMITED WARRANTY**

This **LIMITED WARRANTY** applies to original purchasers of water conditioners and filters (“Unit” or “Units”) distributed by the Milby Company. The Units are made from the finest materials available and are warranted for the periods shown below so long as the Units are operated in conformity with the specified Physical Properties and only in residential applications.

Any component part of a purchased Unit identified in the attached Warranty Registration Card by model and serial number that is installed by a licensed contractor according to the applicable installation manual and local plumbing and electrical codes will be repaired or replaced, at Milby’s option, if a failure occurs due to defective material or workmanship. Any accident to the Unit, misuse, abuse or alteration of the Unit, or any unauthorized attempt to repair the Unit will void this warranty. Modifications or repairs by anyone other than an authorized Milby dealer are not covered by this warranty.

<b>PHYSICAL PROPERTIES</b>	
Max. Pressure	75 PSI
Max. Temperature	100 Degrees Fahrenheit
Min. Temperature	32 Degrees Fahrenheit

<b>COMPONENT PART</b>	<b>WARRANTY PERIOD</b>
Media Tank	10 yrs. From Date of Purchase
Salt Storage Tank	5 yrs From Date of Purchase
Control Valve	3 yrs From Date of Purchase
Media Performance due to misapplication, faulty installation, or clogging	None

Under this warranty, Milby will only repair or replace a Unit or component part with an identical or similar Unit or component part distributed by Milby. A replacement Unit or component part shall be warranted only for the remainder of the warranty period of the original purchased Unit or part. The purchaser is responsible for all other costs, including, but not limited to (1) labor charges for service, removal, repair or reinstallation of the Unit or component part, (2) shipping, delivery, handling and administrative charges for necessary or incidental costs for any materials required for installation of the replacement Unit or component parts.

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES FOR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WHATSOEVER WITH RESPECT TO THE INSTALLATION, OPERATION, REPAIR OR REPLACEMENT OF A UNIT AND/OR ITS COMPONENT PARTS THAT EXTEND BEYOND THE APPLICABLE LIMITED WARRANTY HEREIN. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

UNDER NO CIRCUMSTANCES SHALL MILBY BE LIABLE TO THE PURCHASER OR ANY OTHER PERSON FOR WATER DAMAGE, LOSS OF USE OF THE UNIT, INCONVENIENCE, LOSS OR DAMAGE TO PERSONAL PROPERTY, OR ANY OTHER SPECIAL OR CONSEQUENTIAL DAMAGES, WHETHER ARISING OUT OF BREACH OF WARRANTY, BREACH OF CONTRACT, TORT, OR OTHERWISE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

To obtain coverage under this warranty, the consumer must complete and return the attached Warranty Registration Card within thirty (30) days from the date of purchase to Milby at: Attn: Customer Service, Milby Company, 6201 South Hanover Road, Elkridge, Maryland 21075-5651. Any claim under this warranty should be initiated with the dealer who sold the Unit to the purchaser. If this is not practicable, the purchaser should contact Milby directly at 410-796-7700.

.....

■ WARRANTY REGISTRATION CARD ■

■ Purchaser Name: ■

■ and Address ■

■ Model # \_\_\_\_\_ Date of Purchase: \_\_\_\_\_ ■

■ Dealer Name: ■

■ and Address ■

.....

**MILBY COMPANY**  
 6201 South Hanover Road  
 Elkridge, MD 21075-5651

Phone: 410- 796-7700  
 Fax: 410- 796-7739