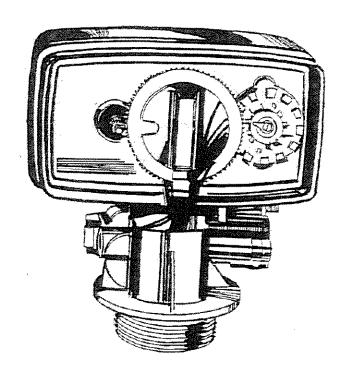


Quality Water Treatment Products



WTF Time Clock Series Residential Filters

Installation and Operation Manual

March 2015 Version

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<u>Installation and Operating Instructions for WTF</u> <u>Top Mount Filters</u>

Model #:

WTF15ACV	Carbon Filter
WTF25ACV	Carbon Filter
WTF10ANXV	Neutralizer
WTF15ANXV	Neutralizer
WTF25ANXV	Neutralizer
WTF10AGV	Turbidity Filter
WTF15AGV	Turbidity Filter
WTF15FEV	Iron Filter

Shipping Carton Description / unit:

# of cartons	Contents	Description
1	Mineral tank	Distributor pipe installed
1	WTF control valve	WTF control valve and bypass
	Carbon Media	0.5 CF Boxes
	Filter Ag	0.5 CF Boxes
	Greensand	0.5 CF Boxes

Filter Media is Packaged as Follows:

Model #	Media
WTF15ACV	1.5 CF Carbon
WTF25ACV	2.5 CF Carbon
*WTF10ANXV	Neutralizing Media
*WTF15ANXV	Neutralizing Media
*WTF25ANXV	Neutralizing Media
WTF15AGV	1 CF Filter Ag Plus
WTF15AGV	1.5 CF Filter Ag Plus
WTF15FEV	1.5 CF Greensand

Note: Gravel preloaded at factory.

THIS FILTER 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.

^{*}Media sold separately. Contact installer for specific neutralizing media selection.

Water Filter Positioning:

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

Water Filter Tank Loading:

- (Note: only for the WTF15FE units) Center the distributor and make sure it is resting on the bottom of the tank. The top of the distributor pipe should be flush with the top of the tank (this was prefitted at the factory).
- 2. Cover the top opening of the distributor pipe before filling the tank with media.
- 4. Pour the appropriate media provided with the unit into the top of the tank. See page one for your specific model number unit to determine the amount of media to load into the mineral tank.

Model #	Media
WTF15ACV	1.5 CF Carbon
WTF25ACV	2.5 CF Carbon
*WTF10ANXV	Neutralizing Media
*WTF15ANXV	Neutralizing Media
*WTF25ANDV	Neutralizing Media
WTF10AGV	1 CF Filter Ag Plus
WTF15AGV	1.5 CF Filter Ag Plus
WTF15FEV	1.5 CF Greensand

^{*}Media sold separately. Contact installer for specific neutralizing media selection.

5. Remove the material used to cover the top opening of the distributor pipe.

WTF Control Valve:

- 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.
- 2. Place the control valve onto the distributor pipe and into the tank opening.

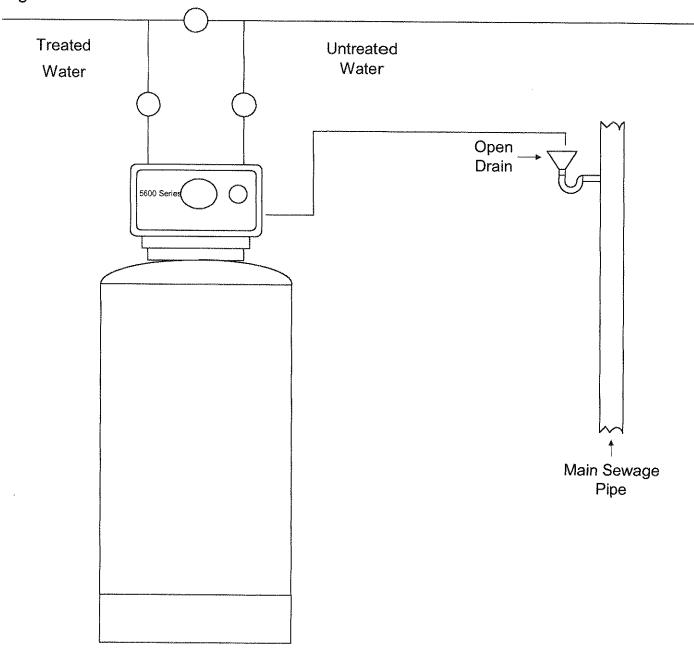
- 3. Thread the control valve hand tight. Do not overtighten.
- 4. The control valve's drain connection is 1/2" npt and is located on the back right of the control valve.

Service and Drain Piping:

- 1. Pipe filter system into the service lines (see Figure 1) using the bypass valve assembly supplied with the unit. The inlet and outlet connections of the control valve are located on the back of the valve body. As you face the timer the inlet is on the right and 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 valve. If Schedule 80 PVC is used make sure to follow the proper primer and solvent instructions.
- 3. The drain line connection is located on the top of the valve body as you face the timer. The drain line must be of adequate size to allow for full regeneration flow.
 - The control valve drain connection is 1/2" npt.
 - Never decrease the drain piping size to below 5/8".
 - Maximum drain line length is 20 feet.
 - Maximum drain line height is 8 feet above the control
 - valve.
 - The end of the drain line must be piped to an open drain.
 - Always follow local plumbing codes when piping drain lines to a waste pipe.

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

Figure 1



Electrical Requirements:

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

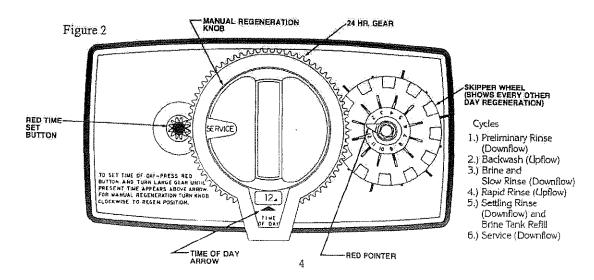
- 1. Provide a properly grounded 115V/60 HZ electrical outlet.
- 2. Maximum amperage required is 3 amps.

- Make sure the electrical service provides power 24 hours per day.
 Avoid using outlets that are switch controlled.
- Follow all local electrical codes when installing our water treatment equipment.

Filling Water Filter with Water:

- 1. Close inlet and outlet ball valves.
- 2. Turn Manual Regeneration Knob in a clockwise direction until you reach the Backwash position.
- Open inlet ball valve 1/4 turn and allow water to fill tank slowly for approximately 10 minutes. After all air has been purged from tank, fully open inlet ball valve and allow water to run in this position for 15 minutes.
- 4. Turn the Manual Regeneration Knob in a clockwise direction until you reach the Rapid Rinse position. Allow the unit to stay in this position for approximately 10 minutes to purge the media fines to drain.
- 5. Plug the timer into the electrical outlet. The timer will automatically advance to the service position after completing the Rapid Rinse cycle. If water runs dirty to service, place unit in backwash position and allow the timer to go through a complete regeneration. The total regeneration will take approximately 2 hours. The unit will be in the service position after regeneration is complete.

WTF Control Valve Timer Settings:



Time of Day Setting

- 1) To set the proper time of day, depress the Red Time Set Button and turn the 24 Hour Gear until the correct time of day is aligned with the Time of Day Arrow. **Note whether the time is A.M. or P.M.**
- 2) The timer is preset to regenerate at 12:00 AM.

Time of Regeneration Setting (1-99 Days Between Regeneration Option) (the factory default is 2 AM)

- 1) Locate the Skipper Wheel on the timer. (See Figure 2).
- 2) The Skipper Wheel has a total of 12 pins which means you have a variety of choices for regeneration frequency. To set a regeneration simply slide a pin to the outside of the Skipper Wheel. This exposes the pin beyond the outer edge of the Skipper Wheel and will engage a regeneration cycle on that day. le: Sliding the # 1 pin to the outside sets the timer to regenerate once every 12 days.
- 3) The recommended regeneration frequency will change according to your water quality problems. We usually recommend a regeneration frequency of 1x6 days for normal water conditions and 1x3 days for severe water conditions. Please contact installer for assistance.

Final Check:

- 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.
- 2. Make sure the Inlet and Outlet on bypass valves are open.
- 3. Make sure the control valve timer is plugged into an dedicated electrical outlet with power 24 hours per day.
- 4. Check all piping for leaks.

Troubleshooting

Symptom: Unit Fails to Regenerate

Cause	Solution
Faulty electrical supply	Verify that electrical power is getting to the outlet
Low inlet water pressure	Verify a minimum 20 psi inlet water pressure
Drain line is restricted	Insure that the drain line is free of blockage
Defective timer motor	Replace the timer motor
Plugged backwash flow control	Clean or replace the backwash flow control
All skipper pins are slid inward	Slide the desired number of pins outward

Symptom: Poor Water Quality When Unit is in Service Position

Cause	Solution
The bypass valve is open or	Insure that the bypass valve is in
defective	the service position
Excessive water usage	Set the timer to regenerate more
	often
Loss of filter media	See symptom: Loss of filter
	media
Change in raw water quality	Test the raw water quality and
	adjust regeneration frequency
Leak at the distributor tube	Verify that the distributor is flush
	with the top of the tank

Symptom: Loss of Filter Media

Cause	Solution
Backwash flow control is missing	Verify that the proper backwash
or is the incorrect size	flow control is installed
Air in the system	Verify that the well system is
	operating properly

Symptom: Continuous Flow to Drain

Cause	Solution
Defective or damaged	Replace the piston/spacers
piston/spacers assembly	assembly
Piston rod assembly is damaged	Replace piston rod assembly
Drive motor failure	Replace the drive motor

Symptom: Loss of Water Pressure

Cause	Solution
Dirt build-up in filter tank	Clean or replace the Filter media
Dirt build-up in the inlet piping to the Filter Unit	Clean or replace the inlet piping
Distributor pipe is plugged	Clean or replace the distributor pipe

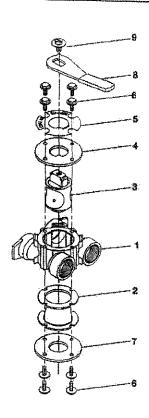
Symptom: Control Valve Cycles Continuously

Cause	Solution
Defective timer assembly	Replace the timer assembly

WTF FILTER CONTROL VALVE & PARTS

MODEL 5600

by-pass valve assembly



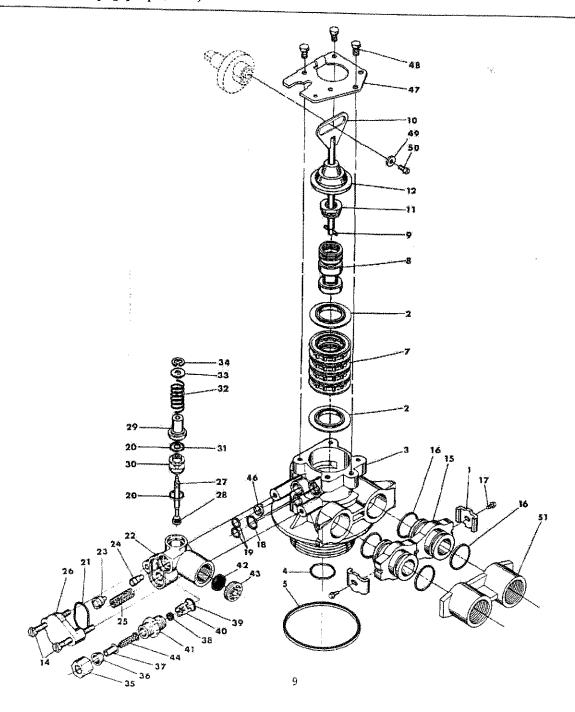
PARTS LIST

Item No.	Quantity	Part No.	Description
1 ,	1	. 17290NP	By-Pass Valve Body, 3/4" By-Pass Valve Body, 3/4" Nickel Plate By-Pass Valve Body, 1"
3 , .	 	.13399NP .11726 .11972	By-Pass Valve Body, 1", Nickel Plate Seal, By-Pass Plug, By-Pass Side Cover
5 , ,		. 13604-01	Label
7 8		. 11986 . 11979	Side CoverLever, By-PassScrew, Hex Head, 1/4-14

MODEL 5600

control valve assembly

(see opposite page for parts list)



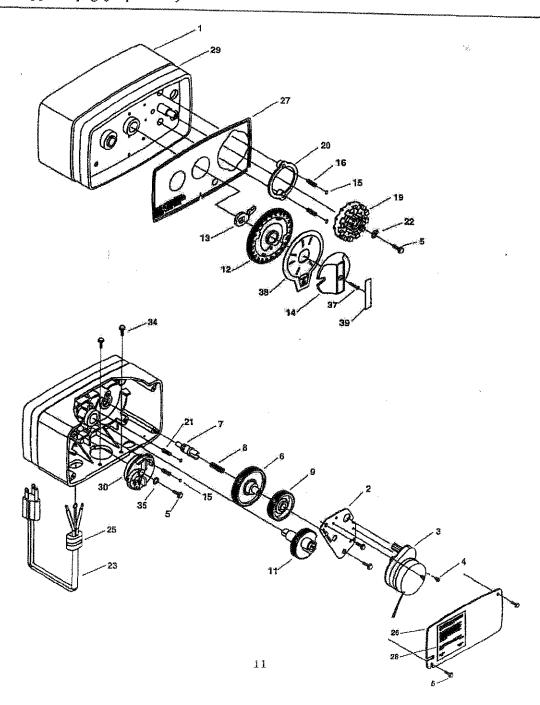
MODEL 5600 CONTROL VALVE ASSEMBLY PARTS LIST

ITEM NO.	NO. REQ'D.	PART NO.	DESCRIPTION
1	2	. 13255 , , ,	. Adapter Clin
2	. , . , . 5	. 13242	Seal
3		. 14449	. Valve Rock Assembly 1* Dist
	1	. 14450	Value Back, Americally, 131 B Pici
4		. 13304	. "O" Rino - Distributor Tube - 1"
	l	. 10244	. "O" Ring - Dietributer Tube 12/29
5		. 12281	. "O" Ring - Top of Tank
D			. Not Assigned
7	4	. 14241	. Spacer
8.,,,,	† . , , . ,	. 13247	, Piston - Standard
	1	. 13781	. Piston - Low Water
	1,	, 13852 . ,	. Piston - Filter
9.33.12		, 10696	. Piston Pin
10,,,,,	1	. 13001	. Piston Rod Assembly
11		. 1 295 3	. Piston Retainer
12	***** [* * * * * * * * * * * * * * * *	. 13446	. End Plug Assembly Std White
	1.000,000,000	, 13446-10	End Plus Assembly Filter - Blank
7.2	Berennen .	. 13446-20	. End Plug Assembly Low Water - Grey
13.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	医医子类皮肤 人名英巴尔斯 化海 化二		. Not Assimum
14	**************************************	. 13315	Screw - Injector Mounting
10	**************************************	. 13709	Adapter Coupling
177	.,	* 10000	O Ring - Adapter Coupling
18	**************************************	. 12638	Screw - Adapter Coupling
10	5 * * * * * * * * * * * * * * * * * * *	. 13301	. 'O' Hing - Urain
20		13302	. "O" Ring - Injector . "O" Ring - Brine Spacer
21		13303	. "O" Ring - Injector Cover
22		. 13163	histor Bady
23		. 10913	Injector Nozzio - Concièr Sire
24		, 10914	Biector Throat - Specify Size
23		. 10227	Injector Screen
26	1	. 13166	. Inlector Cover
27	1	. 13172	Brine Value Stein
28		. 12626	. Brine Valve Seat
29	, , , , , ,]	. 13165	. Brine Valve Cap
3U	តំនៃទីនិង <u>ដីធ្</u> នៃក្នុង ទើនធំ នំ	. 13167	. Brine Valve Spacer
- ಚಿತ್ರಗಳು - ಇಗ	ခြင့်အောင် မြို့သွေးသည်။ အောက် မြို့သော	. 12550	, Quad Ring
92	e distribuit se a a a a a a a a a a a A	. 11973	Spring - Brine Valve
34	*****	. 11981-01	Washer - Brine Valve
35	************	. 10329	Hetaining Hing
36	* * * * * * * * * * * * * * * * * * *	. 10330	- ELF.C. Fitting Nut
37		10332	. B.L.F.C. Tube Insert
38		. 12094	BL.F.C. Button25 GPM
	**	12005	M: F. M. M
39	1	. 12977	. "O" Ding - D EC
40	1	. 13245	B.L.F.C. Button Retainer
41	1	13244	ALEC Eitting
42			D. EC Bulton - Specify Size
40.,,,,,]	, 131/3	. D.I. E.C. Buitton Retainer
44	1	. 12767	Screen - Bring Line
45	1	.15348	"O" Ring - D (FC (and shower)
46		, 13497	. Air Disperser
4/	,] , , , , , ,	. 13546	. End Plug Retainer
48	., .3. .,,.	. 12112	. Screw
4₩.,,,,,	*	.13363	. Washer
51	* * * * * * * * * * * * * * * * * * *	.13296	Screw
9144444		. 13708	- Adapter - */* N.P.T.
- , - 1 - 1 -		- 1	- musesself + (* 34,54.).

MODEL 5600

control valve drive assembly

(see opposite page for parts list)



MODEL 5600 CONTROL VALVE DRIVE ASSEMBLY PARTS LIST

ITEM NO.	NO, REQ'O.	PART NO.	DESCRIPTION
1	1	13162-000	Drive Houseton
2,,,,,,	1	13175	Motor Mounting Plate
3	1	13400	Motor - 1 10V., 60 Hz.
	. 1	13494	MOIOF - 1 TUV., 60 FIZ.
4	ą	******************	Screw - Motor Mtg. & Ground Wire
5.	s	19904	Screw - Motor Mtg. & Ground Wire Screw - Component Mounting
6	1	13017	Screw - Component Mounting
7	. 4	13018	Idler Gear
9	. 4 4 4 9 7 н с в 4 15 15 15 15 15 15 15 15 15 15 15 15 15	13016	Idler Pinion
9,,,,,,	4	13312 13164	Spring - Idler
***	4	13104	Drive Gear
19	Saro I savete passas.	13170	Main Gear & Shaft
16-2-5	4	19205	24 Hour Gear Assembly, Silver
49	trasanteevas N	(9205-U], (J	24 Hour Gear Assy, Tan
14	4	13011	Cycle Actuator Gear
46	A	141// ashibiashi	Knob - Manual Regeneration
16	ユリスクライン・サール・ディング。 1955	13300	Ball - 1/4" Dia.
10.		13311	Spring - Detent - Skipper Wheel
ု သော သာသာ ရေးရ ရှားမျိုး	9 % 1 % 1 4 p 4 (4 (4 (4 ± ± ± ± ± ± ± ± ± ± ± ± ± ±	(438)	Skipper Wheel Assembly - 12 Day
20	4	14660	Skipper Wheel Assembly - 7 Day
201			
22	7 × 4 0 % 3 4 3 4 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4	1440/	Spring - Detent - Main Gear
29	يوروسو و يوندره ها فيه « ». أها	13014	Regeneration Pointer
24	કર્મને જ ફિલ્મેલ લેવા કરે હાલ હો. જો	11042	Bectrical Cord - Standard
25	र कर प्रव€त का 'क' को के का उन्हरू आई	13547	Wire Connector (Not Shown)
26	இது கூடு இது இருவியான இது இந்து இது இரும் இது	13229	Strain Relief
27	* * * * * * * * * * * * * * * * * * *	19659	Hack Cover
**** ** * ***	* * * * * * * * * * * * * * * * * * *	13009	Front Label - Brown on Belge
2R	· · · · · · · · · · · · · · · · · · ·	13310	Front Label - Blue/Silver on Black
29	4	19940	Hear Label
	4	10100 1	Tape Stripe - Brown on Beige
30	1 *************************************	RAKTA	Tape Stripe - Blue on Silver Brine Carn Assembly, 3-18
	: ويوم مد د جو ويوي) • • • • • • : ۲	BORTA OF	Brine Carn Assembly, 3-18
34	9	17472	Brine Carn Assy., 6-36 Screw-Drive Mounting
35	4	12037	Screw-Drive Mounting
37		15151	wasner
38	4	121 TO 12 TO	Screw - Knob Valve Position Dial - Standard
		14970	valve Position Dial - Standard
	1	(***/**	Valve Position Dial - Low Water
	1. 图片中央中央的电路 ·	(9716 . , , , , , , , , , , , , , , ,)	Valve Position Dial - Chemical Filter
39	1	4175	Valve Position Dial - Filter
	· A P · · · · · · · · · · · · · · · · ·	PETER AND SANDARY SANDARY PROPERTY	noo Label - Beige
	*********	14207	Knob Label - Silver

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.

PHYSICAL PROPERTIES				
Max. Pressure	75 PSI			
Max. Temperature	100 Degrees Fahrenheit			
Mm. Temperature	32 Degrees Fahrenheit			

COMPONENT PART	WARRANTY PERIOD
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.

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#1	WARRANTY REGISTRATION CARD
	Purchaser Name:
2	and Address
8	Model # Date of Purchase:
#	Dealer Name:
**	and Address
D)	

MILBY COMPANY

6201 South Hanover Road Elkridge, MD 21075-5651

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