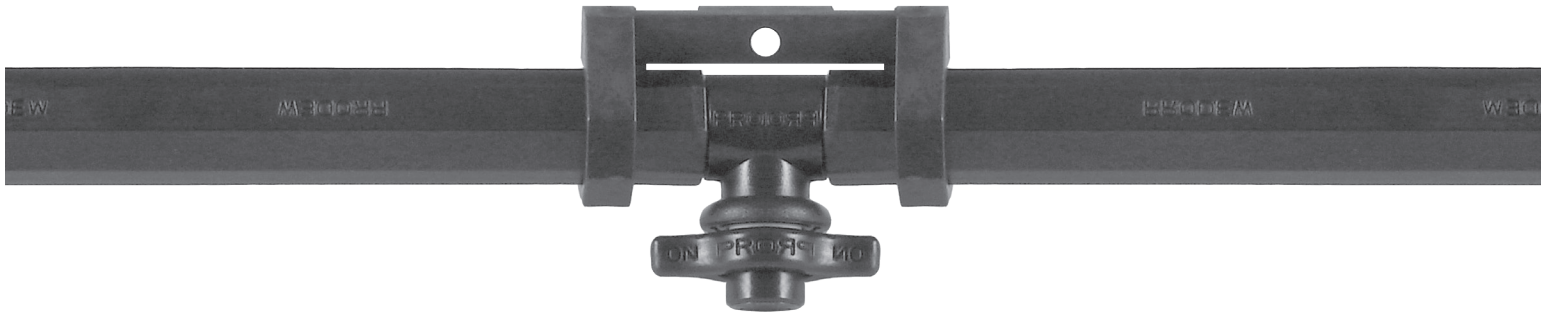


System Maintenance & Troubleshooting Manual



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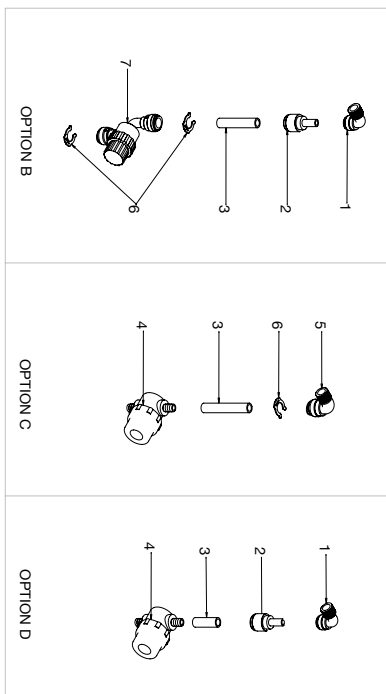
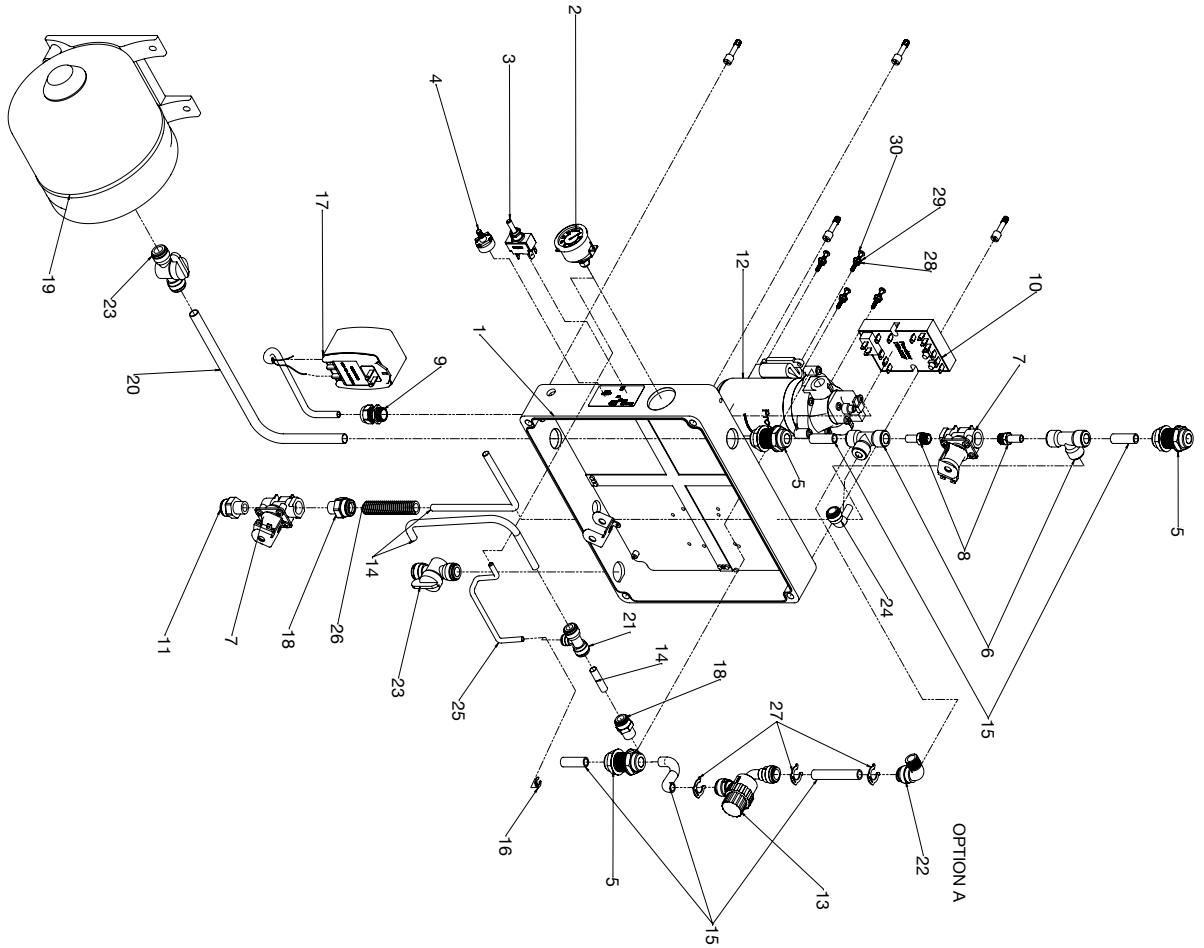
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If there is any information in this manual that is unclear, please let us know so we can revise future editions.

Contact our Customer Service department with your suggested edits: [sales@prodew.com](mailto:sales@prodew.com) or 770.420.3060

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# Exploded View of the System



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2PSECQ88S38	Stem Elbow, 3/8OX3/8Stem	1
2	2PSEC12S38	Stem Enlarger, 1/2OX3/8Stem	1
3	2TUB120-381-W	Tub, 1/2OD Poly WH	1
4	2PHL007	Fill, 1/2 QC 100 Mesh- GRAY	1
5	2PEEQ12M38	Fixed Elbow, 1/2" QC X 3/8" M	1
6	3LOOKCLP12	LOOKING CLIP 1/2"	1
7	2FIL102	Fill, 1/2 QC 100 Mesh- GRAY	1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	3ENCO04	Enclosure, 12x10x6 Pl- Gray	1
2	2GAU006	Gauge, 1.5" 1/4NPT, 0-160	1
3	1SW006	Tgl Switch, w/lt 3 Pos NC-24V	1
4	1POT001	Pt-4 Potentiometer	1
5	2PBHQ12Q12	Bulkhead, 1/2QC X 1/2QC	3
6	2PRT012Q38Q12	Reducing T, 1/2OX 3/8OX1/2Q	2
7	1SOL38-24-NC-FIL-P	Solenoid, 3/8" FNPT 2 W/NC 24VPI/FIL	2
8	2PSAS12M38	Stem Adapter, 1/2" x 3/8" NPT	2
9	1CON018	Cord Grip, Waterproof PG11	1
10	1TAN007	Trim Block, MESH/FLUSH	1
11	2PMCO12M38	Male Connector, 1/2QC X 9/8MPPT	2
12	2FVMP24V-100P-SF38-SW	Fmp 24V/NSR 3/8PT Switch	1
13	2FIL102	Fill, 1/2 QC 100 Mesh- GRAY	3
14	2TUB380-141-W	Tub, 3/8OD Poly WH	5
15	2TUB120-381-W	Tub, 1/2OD Poly WH	1
16	3LOOKCLP14	LOOKING CLIP 1/4"	1
17	1THA001	Trnst, 24V-40VA-110-WI Pig	1
18	2PMCO38M38	Male Connector, 3/8" QCX3/8NPT	1
19	2EXH02G-12	Expansion Tank, 2Gal- 1/2" FNPT Port	1
20	2PRT038Q14Q38	Reducing T, 3/8OX1/4OX3/8	1
21	2PRT038Q14Q38	Fixed Elbow, 1/2" QC X 3/8" M	2
22	2PEEQ12M38	Straight Valve 1/2-1/2	1
23	2VALQ12	Stem Elbow, 3/8OX3/8Stem	1
24	2TUB120-381-W	Tub, 1/2OD Poly WH	1
25	2TUB140-12ID-W-SLT	Corr Tube, 1/2 ID Slt BK	3
26	2TUB-COR-12ID-B-SLT	Stem Enlarger, 1/2OX3/8Stem	1
27	2PSEC12S38	Fsmr, 8-32 MACH Screw NUT Z	4
28	2FAS003	Fstr, Washer 5/16X3/4 Z TENG	4
29	3FAS006	Fstr, 8-32 X 1 1/4 Pdll MSZ	4
30	3FAS009		4

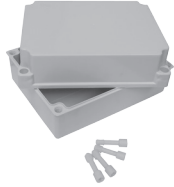


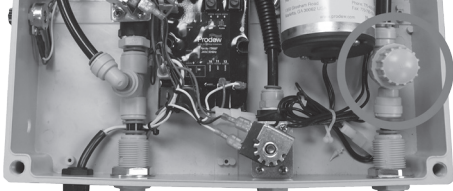

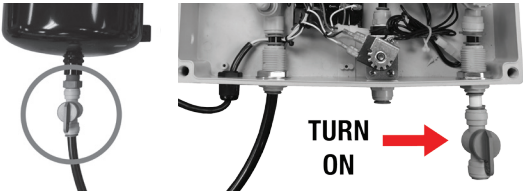
DATE	BY	REV	DESCRIPTION
11/15/2017		1	PRELIMINARY ASSEMBLY
11/15/2017		2	OPTION D CHG/FIN
11/15/2017		3	
11/15/2017		4	

# Semi-annual System Maintenance: Screen Filter Cleaning

- Inspect and clean the screen filters inside the solenoid box as instructed below.
- If the filters cannot be cleaned, have them replaced.

## Monthly System Maintenance: Nozzle Cleaning

- Sprayheads and nozzles should be disinfected according to your normal sanitation standards.
- Use a clean, wet cloth to clean any deposits on the nozzles (dust, vegetable matter, pink yeast, or minerals).

Instructions	Images
<p><b>STEP 1</b></p> <ul style="list-style-type: none"> <li>• Remove the mist box cover by unscrewing the 4 screws located at each corner of the box.</li> </ul>	
<p><b>STEP 2</b></p> <ul style="list-style-type: none"> <li>• Turn off the ball valve on the tank and the “water inlet” valve on the mist box.</li> </ul>	 <p>TURN OFF</p> <p>TURN OFF</p>
<p><b>STEP 3</b></p> <ul style="list-style-type: none"> <li>• To empty any remaining water from the system, flip the toggle switch to the Off position, wait 10 seconds, and then flip it back to the On position.</li> <li>• This will activate the timer and start a misting and a flush cycle. Flip the toggle switch to the Off position at the completion of the cycle (10 seconds).</li> </ul>	 <p>ON/OFF SWITCH</p>
<p><b>STEP 4</b></p> <ul style="list-style-type: none"> <li>• Locate the filter on the inlet side of the pump and unscrew the top of the filter.</li> <li>• Remove the filter top and take out the cylindrical wire screen.</li> </ul>	
<p><b>STEP 5</b></p> <ul style="list-style-type: none"> <li>• Clean the screen with water and scrub with a soft brush</li> <li>• Reinsert the screen. Replace and tighten the filter top.</li> <li>• Lubricate any rubber seals.</li> </ul>	
<p><b>STEP 6</b></p> <ul style="list-style-type: none"> <li>• Turn the tank and mist box ball valves to the open position.</li> <li>• Flip the toggle switch to the On position.</li> <li>• Check system operation and leaks.</li> </ul>	 <p>TURN ON</p>

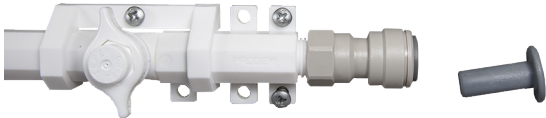

## Pre-Requisites for Troubleshooting

BEFORE STARTING ANY TROUBLESHOOTING PLEASE CHECK THE FOLLOWING:

Items to Check	Instructions
<b>STEP 1</b> Power	Ensure that the transformer is plugged in and the system is getting power. If there is no power to the system, test the transformer with multimeter 24 VAC output. If the transformer is not functioning, replace it.
<b>STEP 2</b> Water	Ensure that the system is connected to the city water supply and the ball valve on the female adapter is turned on. Ensure there is Incoming Water pressure and flow.
<b>STEP 3</b> Equipment Assembly	Ensure that the system is assembled properly and all the components are tightly connected.

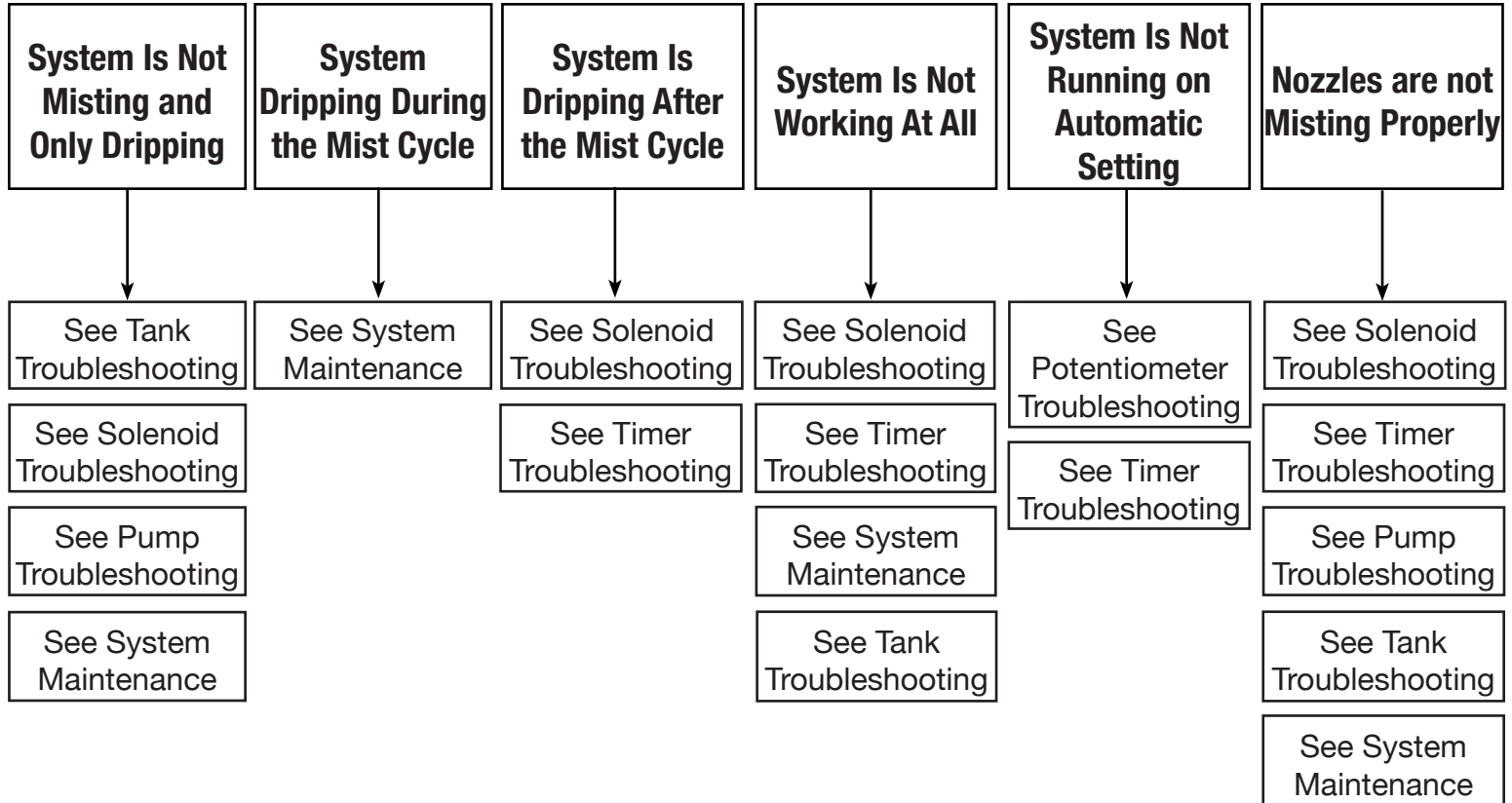
**\*\*\*If repairs or changes have been made to the control box, pressure tank, or water feeds, we recommend that you flush the lines to ensure that no particles, liquid teflon, teflon tape, pipe dope, or any other foreign matter is present in the system.**

## Procedure for Flushing the Lines

Instructions	Images
<b>STEP 1</b> <ul style="list-style-type: none"> <li>• Flip the toggle switch on the Mist Box to the Off position.</li> <li>• Unplug the 3/8 Stem Plug from the end of the Mist Track.</li> <li>• Connect a piece of 3/8 Poly tubing to the Mist Track and place the other end into a bucket or drain.</li> </ul>	
<b>STEP 2</b> <ul style="list-style-type: none"> <li>• Flip the toggle switch to the On position.</li> <li>• Let the system run for 30 seconds to flush the lines from any debris.</li> <li>• Disconnect the tubing from the Mist track and plug the Mist Track with the 3/8 Stem Plug.</li> </ul>	

# Problem Identification

Flip the toggle switch to the ON position and observe.



# Timer Adjustment

- The recommended settings are preset at our manufacturing facility.
- ONLY change the settings if there is too much or too little mist.

## Recommended Timer Settings


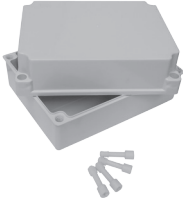
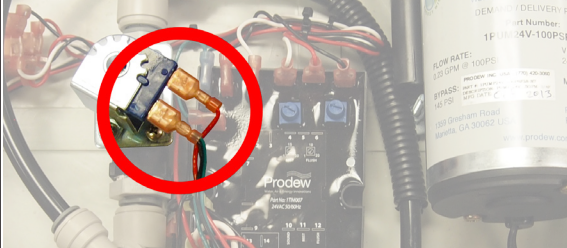



Recommended Timer Settings	Cases with Drain
<b>MIST Time</b> (Amount of time the mist is being produced)	7 Sec
<b>OFF Time</b> (Amount of time between mistings)	7 Min
<b>FLUSH Time</b> (This flushes the system and prevents dripping)	3 Sec

## Steps to Set the Timer

Instructions	Images
<p><b>STEP 1</b></p> <ul style="list-style-type: none"> <li>• Change the time between mist cycles by turning the “OFF TIME” knob on the front of the control box.</li> </ul>	
<p><b>STEP 2</b></p> <ul style="list-style-type: none"> <li>• To change the ON time or FLUSH remove the mist box cover by unscrewing the 4 screws located at each corner of the box.</li> </ul>	
<p><b>STEP 3</b></p> <ul style="list-style-type: none"> <li>• The ON time is set by rotating the blue screw marked “MIST” on the timer block.</li> <li>• The FLUSH time is set by rotating the blue screw marked “FLUSH” on the timer block.</li> </ul>	
<p><b>STEP 4</b></p> <ul style="list-style-type: none"> <li>• Re-attach the mist box cover by screwing in the four screws located at each corner of the box.</li> </ul>	


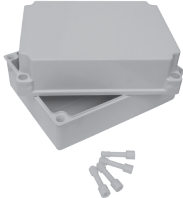
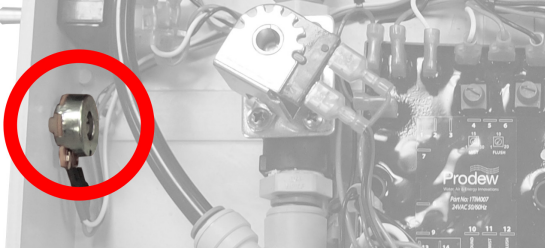




# Timer Troubleshooting





Instructions	Images
<p><b>STEP 1</b></p> <ul style="list-style-type: none"> <li>Flip the toggle switch to the OFF position.</li> </ul>	 <p>ON/OFF SWITCH</p>
<p><b>STEP 2</b></p> <ul style="list-style-type: none"> <li>Remove the mist box cover by unscrewing the screws in the corners of the box.</li> </ul>	
<p><b>STEP 3</b></p> <ul style="list-style-type: none"> <li>Disconnect the red and green power leads from solenoid in the mist box.</li> </ul>	
<p><b>STEP 4</b></p> <ul style="list-style-type: none"> <li>Connect multimeter to the two wires previously attached to the solenoid.</li> </ul>	
<p><b>STEP 5</b></p> <ul style="list-style-type: none"> <li>Flip the toggle switch to the ON position.</li> </ul>	 <p>ON/OFF SWITCH</p>
<p><b>STEP 6</b></p> <ul style="list-style-type: none"> <li>Check for 24 VAC to solenoid multimeter reading.</li> <li>If the reading is not 24 VAC, the timer needs to be replaced.</li> </ul>	



# Potentiometer Troubleshooting



Instructions	Images
<p><b>STEP 1</b></p> <ul style="list-style-type: none"> <li>Flip the toggle switch to the OFF position.</li> </ul>	 <p>ON/OFF SWITCH</p>
<p><b>STEP 2</b></p> <ul style="list-style-type: none"> <li>Remove the mist box cover by unscrewing the 4 screws located at each corner of the box.</li> </ul>	
<p><b>STEP 3</b></p> <ul style="list-style-type: none"> <li>Disconnect wires from potentiometer in the mist box.</li> </ul>	
<p><b>STEP 4</b></p> <ul style="list-style-type: none"> <li>Connect the black power multimeter lead to the <u>first</u> black power lead and the red power multimeter lead to the <u>red</u> power lead.</li> <li>While rotating the potentiometer knob in the front of the box check the multimeter reading. It should be <u>between 0 and 10,000 OHM</u>.</li> <li>Then connect the red power multimeter lead to the <u>white</u> power lead. Repeat the multimeter procedure above.</li> <li>Connect the black power multimeter lead to the <u>second</u> black power lead and the red power multimeter lead to the <u>red</u> power lead. Repeat the multimeter procedure above.</li> <li>Then connect the red power multimeter lead to the <u>white</u> power lead. Repeat the multimeter procedure above.</li> </ul>	
<p><b>STEP 5</b></p> <ul style="list-style-type: none"> <li>Check the OHM measurements. If the readings keep adjusting the potentiometer is working properly.</li> <li>If not, replace potentiometer.</li> </ul>	

# Pump Troubleshooting

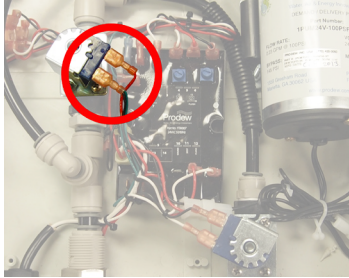
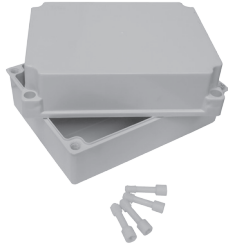
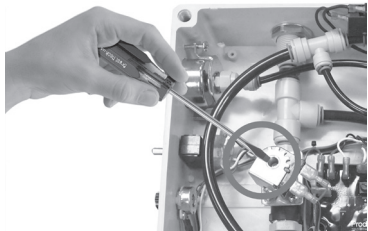


Instructions	Images
<p><b>STEP 1</b></p> <ul style="list-style-type: none"> <li>Turn the tank valve to the OFF position.</li> </ul>	 <p>TURN OFF</p>
<p><b>STEP 2</b></p> <ul style="list-style-type: none"> <li>Flip the toggle switch to the TEST position.</li> <li>Pump should start running after 5 seconds.</li> </ul>	 <p>ON/OFF SWITCH</p>
<p><b>STEP 3</b></p> <ul style="list-style-type: none"> <li>Check pressure gauge on the mist box. If should reach 100 PSI and then turns off.</li> <li>If not, the pump needs replacement.</li> </ul>	
<p><b>STEP 4</b></p> <ul style="list-style-type: none"> <li>Flip the toggle switch to OFF position.</li> <li>Turn the tank valve to the ON position.</li> </ul>	 <p>ON/OFF SWITCH</p>

## Tank Troubleshooting

Flip the toggle switch to the Test position and run the system.  
If the mist pressure increases after 20 seconds follow the instructions below.

Instructions	Images
<p><b>STEP 1</b></p> <ul style="list-style-type: none"> <li>Remove the plastic cap on the side of the tank.</li> <li>It will expose the shrader valve.</li> </ul>	
<p><b>STEP 2</b></p> <ul style="list-style-type: none"> <li>Momentarily press the needle valve inside the shrader.</li> <li>This should give you a burst of air.</li> <li>If not, the tank needs replacement.</li> </ul>	

# Solenoid Troubleshooting

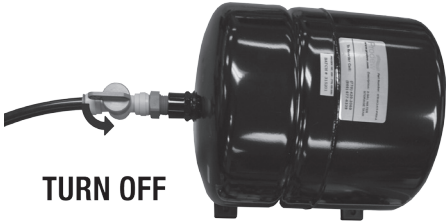
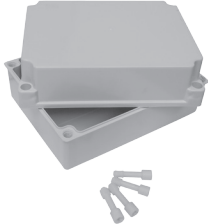
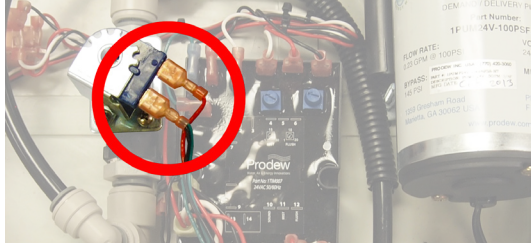


Instructions	Images
<p><b>STEP 1</b></p> <ul style="list-style-type: none"> <li>• Check if the solenoid are getting 24 VAC power.</li> <li>• Disconnect the power leads from each solenoid.</li> <li>• Connect the power leads from each solenoid to the multimeter. The multimeter reading should be 24 VAC or more.</li> <li>• If not see Timer Troubleshooting.</li> </ul>	
<p><b>STEP 2</b></p> <ul style="list-style-type: none"> <li>• Remove the mist box cover by unscrewing the 4 screws located at each corner of the box.</li> </ul>	
<p><b>STEP 3</b></p> <ul style="list-style-type: none"> <li>• To check the mist solenoid hold a small magnetic piece of metal (steel or iron) over the solenoid coil during the mist cycle.</li> <li>• To check the drain solenoid hold a small magnetic piece of metal (steel or iron) over the solenoid coil after the mist cycle.</li> <li>• The metal object should be attracted to the the solenoid coil. If not, the coil is bad and needs to be replaced.</li> </ul>	
<p><b>STEP 4</b></p> <ul style="list-style-type: none"> <li>• If the mist or drain coil is energizing check the proper flow through solenoid by removing the line from “mist” or “drain” port and then connecting a spare piece of tubing into it. Tubing should be long enough to reach a bucket or drain.</li> <li>• Aim tubing into a 5 gallon bucket.</li> <li>• Flip the toggle switch to the On position.</li> </ul>	
<p><b>STEP 5</b></p> <ul style="list-style-type: none"> <li>• Heavy flow of water will rush out into the bucket.</li> <li>• If not, the solenoid is clogged and needs to be serviced or cleaned (See Solenoid Cleaning).</li> <li>• If the solenoid cannot be cleaned replace the solenoid.</li> </ul>	

# Solenoid Cleaning




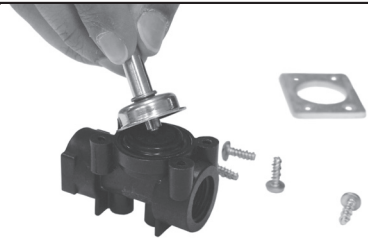


If one of the 24V solenoids is not functioning:

- 1) the drain remains open or,
- 2) the drain does not open or,
- 3) no water is going to the misting nozzles and you have confirmed that the solenoids are getting power,



The diaphragm hole may be blocked and needs to be cleaned.

Instructions	Image
<p><b>STEP 1</b></p> <ul style="list-style-type: none"> <li>• Turn off the ball valve on the mist box, tank and incoming water line.</li> <li>• Release the pressure from the system by turning the toggle switch to the On position. Let it run for one cycle.</li> <li>• Turn the toggle switch to the Off position.</li> </ul>	
<p><b>STEP 2</b></p> <ul style="list-style-type: none"> <li>• Remove the mist box cover by unscrewing the 4 screws located at each corner of the box.</li> </ul>	
<p><b>STEP 3</b></p> <ul style="list-style-type: none"> <li>• Remove the red power leads from the solenoid.</li> </ul>	
<p><b>STEP 4</b></p> <ul style="list-style-type: none"> <li>• Detach the solenoid from the tees on both sides and remove it from the mist box.</li> </ul>	
<p><b>STEP 5</b></p> <ul style="list-style-type: none"> <li>• Locate the screw with the anti vibration washer. Remove the screw first.</li> </ul>	

## Solenoid Cleaning (Continued)

Instructions	Image
<p><b>STEP 6</b></p> <ul style="list-style-type: none"> <li>Lift off coil.</li> </ul>	
<p><b>STEP 7</b></p> <ul style="list-style-type: none"> <li>Undo remaining 3 screws.</li> </ul>	
<p><b>STEP 8</b></p> <ul style="list-style-type: none"> <li>Remove metal plate.</li> </ul>	
<p><b>STEP 9</b></p> <ul style="list-style-type: none"> <li>Remove post and spring and set aside.</li> </ul>	
<p><b>STEP 10</b></p> <ul style="list-style-type: none"> <li>Remove diaphragm.</li> </ul>	
<p><b>STEP 11</b></p> <ul style="list-style-type: none"> <li>If the solenoid is clogged clean out the hole with a brush, pressurized air or with flowing water. If the diaphragm is torn, replace the solenoid. Re-assemble.</li> </ul>	

## Pressure Gauge Adjustment

Instructions	Images
<p><b>STEP 1</b></p> <ul style="list-style-type: none"><li>Remove the mist box cover by unscrewing the 4 screws located at each corner of the box.</li></ul>	
<p><b>STEP 2</b></p> <ul style="list-style-type: none"><li>Using an allen wrench, adjust the pressure switch by rotating the pressure switch counterclockwise.</li></ul>	



## VersaFresh System Warranty

At Prodew, we are dedicated to providing innovative designs and well-made products to fit our customers' individual needs. If the product you purchase from us does not perform to the design specifications, we ask for the opportunity to make it right.

If you are still not satisfied, we will make adjustments according to our Limited Warranty and Exclusion of Remedies Policy.

### LIMITED WARRANTY AND EXCLUSION OF REMEDIES

Perishable control equipment and component parts distributed by Prodew, Inc., its suppliers and agents, as well as new material furnished hereunder, is warranted against any defect in materials or service in accordance with factory recommendations providing that a claim, therefore, is made in writing within the limit set forth as 365 days from the date of invoice for parts and 90 from the date of invoice for labor, and that either Prodew, Inc. or its Authorized Service Agency's examination, shall disclose to the Distributor's satisfaction to be thus defective. PRODEW INC.'S OBLIGATION ON ANY CLAIM IS LIMITED TO REPLACEMENT OR REPAIR OF THE DEFECT OR MATERIAL F.O.B. FACTORY.

Pretreatment may adversely affect the performance of Prodew, Inc.'s perishable control equipment. Prodew, Inc. takes no responsibility for damage resulting from unapproved pretreatment equipment and/or inappropriate maintenance of said equipment.

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, OF ANY NATURE WHATSOEVER, INCLUDING THE WARRANTY OF MERCHANTABILITY, EXCEPT AS SPECIFICALLY SET FORTH HEREIN.

Except as stated above, Prodew, Inc., its suppliers, and agents will not be liable for any loss, injury, or damages to persons or property resulting from failure of defective operation of any material, equipment, or installation furnished hereunder or delay in performance of this agreement, nor will it be liable for direct, indirect, special, incidental, or consequential damages of any kind sustained from any cause. This writing expresses the entire agreement, and no other agreement, statement, or representation shall be binding unless reduced to writing.