

Aquavance Water Softener System

Model WSS-0618-ENC

Owner's manual

Manufacturing Numbers:

9710134

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General

This manual provides important safety, installation, and operating procedures. All information contained in this manual should be read prior to installing and operating the system.

This system is manufactured from the finest materials available and is assembled to strict quality standards. This system has been tested at the factory to ensure dependable trouble-free operation.

Warranty Information

Please read the full text of the Limited Warranty in this manual.

If the system arrives damaged, contact the carrier immediately and file a damage claim with them. Save all packing materials when filing a claim. Freight damage claims are the responsibility of the purchaser and are not covered under warranty.

The warranty does NOT extend to:

- Damages caused in shipment or damage as result of improper use.
- Installation of electrical service.
- Normal maintenance as outlined in this manual.
- Malfunction resulting from improper maintenance.
- Damage from moisture leaking into electrical components.
- Damage from tampering with, removal of, or changing any preset control or safety device.

Service/Technical Assistance

In Case of Damage

If any parts are missing or damaged, problems with the installation or operation of this product contact Antunes Customer Service immediately toll free at +1-877-392-7856.

If there are problems with the installation or operations of this product, contact Antunes Technical Service toll free at +1-877-392-7854.

Fill in the information in the next section and have it ready when calling for assistance. The serial number is on the specification sticker located on the system.

Equipment Information to Save

Purchased from:

Date of purchase:

Model number:

Serial number:

Manufacturing number:

Authorized Service Agency

Name:

Phone No:

Address:

IMPORTANT
<p>Keep these instructions for future reference. If the unit changes ownership, be sure this manual accompanies the equipment.</p>

CAUTION
<p>When installed on metallic plumbing, a properly sized electrical bonding jumper must be installed across the inlet and outlet pipes serving this unit.</p>

IMPORTANT
<p>Antunes reserves the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions or replacements for previously purchased equipment.</p>

IMPORTANT
<p>This equipment is to be installed to comply with the basic plumbing code of the Building Officials and Code Administrators, Inc. (BOCA) and the Food Service Sanitation Manual of the Food and Drug Administration (FDA).</p>

IMPORTANT
<p>Water Flow Regulator Assemblies are NOT interchangeable. Operating the system with the wrong Water Flow Regulator or without a regulator can damage the system, cause personal injury, and voids the warranty!</p>

Important Safety Information

In addition to the warnings and cautions in this manual, use the following guidelines to safely operate the system:

- Read all instructions before using equipment.
- Install or locate the equipment only for its intended use as described in this manual.
- Do NOT use corrosive chemicals in this equipment.
- Do NOT operate this equipment if it has a damaged cord or plug; if it is not working properly, or if it has been damaged or dropped.
- This equipment should be serviced by qualified personnel only. Contact Antunes Technical Service for repair.
- Do NOT immerse cord or plug in water.
- Keep cord away from heated surfaces.
- This equipment should be supplied with only cold water.
- For installations in Massachusetts, the Commonwealth of Massachusetts Plumbing Code 248 CMR shall be adhered to. The use of saddle valves are not permitted. Please consult your local plumber.

The following warnings and cautions appear throughout this manual and should be carefully observed.

- This equipment is to be installed to comply with the local plumbing code and any other applicable code.
- Water pressure must not exceed 100 psig (690 kPa). To reduce water pressure, install a water pressure regulator and set to suit the application.
- When installed on metallic plumbing, a properly sized electrical bonding jumper must be installed across the inlet and outlet pipes serving this unit.

NOTE: If the inlet water pressure is less than 40 psig (276 kPa), it is recommended that a suitably-sized booster system be installed (outlet pressure 60 psig - 100 psig max/414-kPa - 690 kPa max).

Protect from freezing

If the unit freezes during operation or storage, irreversible damage and brittle cracking of the housing may result.

Protect from direct sunlight or other UV sources

Avoid long-term exposure to direct sunlight or other UV sources. The unit should be stored in a dark location.

Protect from high temperatures or abrupt variation in temperature

The maximum operating temperature is 100°F (38°C). Avoid abrupt variations in temperature. Any temperature variation should be made slowly.

Protect from rough handling or dropping

Mechanical damage, external breakage, and/or internal breakage of the filter can result if the system is dropped or bumped. Handle with care at all times during transportation and installation.

Protect from organic solvents and concentrated acids

Prevent any and all contact of the system with strong solvents, solvents containing chlorine, or concentrated acids. Do NOT use strong solvents or concentrated acids on any plastic parts of the filter system. Examples of some solvents to avoid: acetone, methyl acetate (nail polish remover); hexane (spot removers); turpentine, toluene (paint thinners); dry cleaning solutions, insecticides.

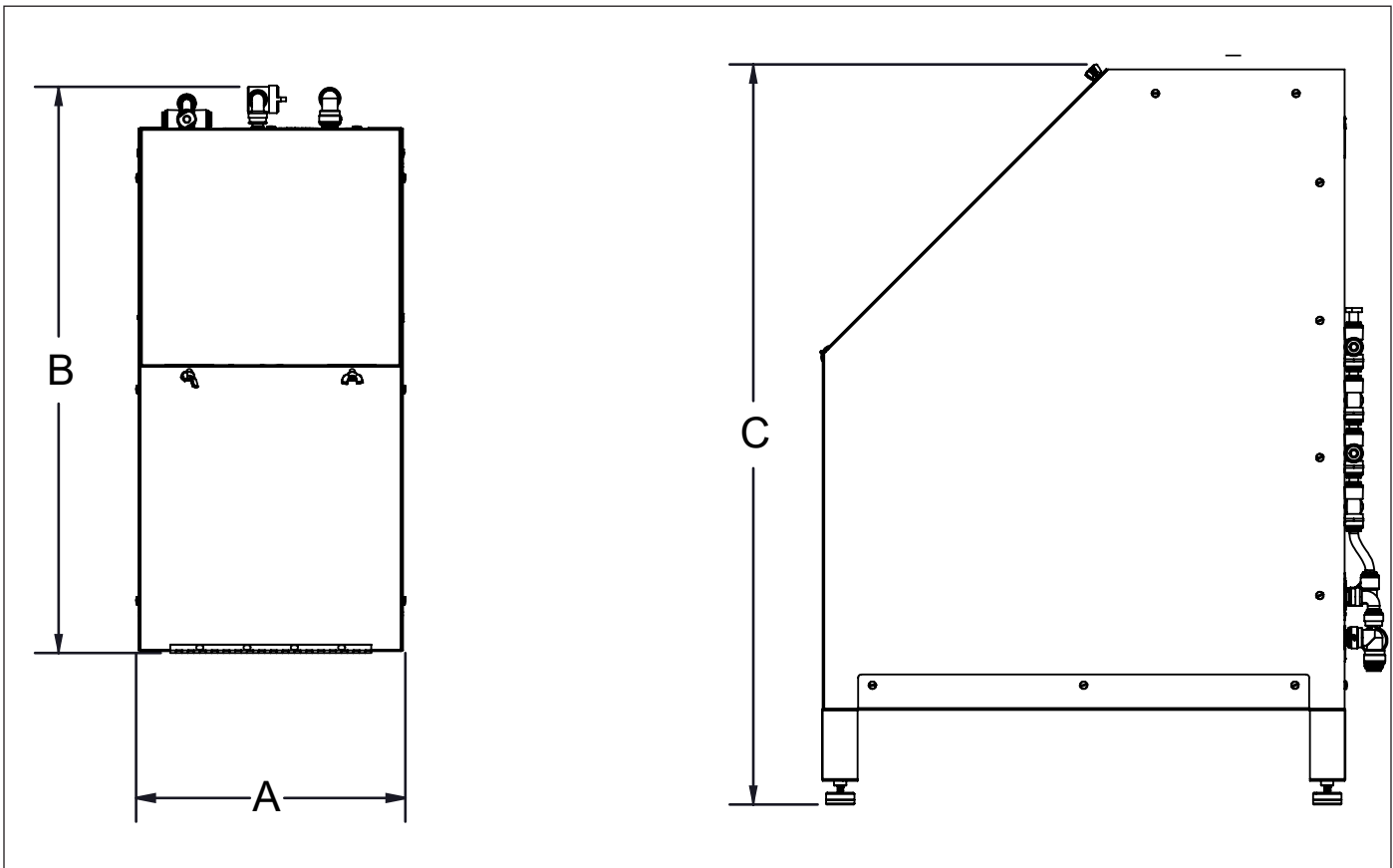
Protect from abrasive material

The system must be protected from abrasive materials like shavings left in a pipe. Abrasive materials in contact with the system can cause irreversible damage. All pipes must be flushed clean before installing the filter. All plastic parts of the filter system must be protected from sharp objects like knives, sand paper, or other tools. Cutting or nicking a plastic part can weaken it and cause a leak. Do NOT use abrasive cleansers on any plastic parts.

Protect from water hammer

The system must be protected from shock, pressure surges, or pulsation that may occur inside water pipes. Water hammer occurs in pipes when a valve or faucet shuts quickly. Install a water hammer arrestor (pressure vessel containing compressed air separated from the water by a diaphragm) to reduce pressure shock.

Specifications



Model & Mfg. No.	Width (A)	Depth (B)	Height (C)	Operating Weight
WSS-0618-E 9710134	11.38" (289.1 mm)	23.94" (608.2 mm)	31.3" (795.1 mm)	120 lbs. (54 kg)

Model	Drain must accommodate flow up to:
WSS-0618-E	2 gpm

Replacement Components		
Model	Kit, 6x18 Softener & Cntrl Valve Replacement	Kit Brine System, 10x16 Replacement
WSS-0618-E	7002191	7002192

Electrical Ratings			
Volts	Hertz	Watts	Amps
120	50/60	40 VA	0.33

Electrical Cord and Plug
US NEMA 1-15 (2 pin) or NEMA 5-16 (3 pin)

CAUTION
When installed on metallic plumbing, a properly sized electrical bonding jumper must be installed across the inlet and outlet pipes serving this unit.

CAUTION

When placing the unit into service, pay attention to the following guidelines:

- Water Pressure: A minimum of 40 psi (2.8 bar) of water pressure is required for the system to operate effectively.
- Electrical Facilities: An uninterrupted alternating current (120 VAC) 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 water softener.

Unpacking

1. Remove the softener from packaging and place on a sturdy work surface. Peel all protective coverings from the enclosure before proceeding.
2. Remove top access panel and remove any packing material on the inside of the system enclosure.
3. Inspect system for any broken components or fittings.

Equipment Setup

General

When placing the system into service, pay attention to the following guidelines:

- DO NOT immerse cord or power plug in water.
- Keep cord away from heated systems.

Electrical

The line voltage must match the voltage on the specification label. The plug on the power cord must match the appropriate outlet. DO NOT connect the system to a switched electrical outlet.

Plumbing

NOTE: The system must be connected to the COLD water line. DO NOT connect the system to the hot water line.

The softener system uses the following connections:

System Inlet	3/8" OD Tubing
System Outlet (Softened Water)	3/8" OD Tubing
Drain	1/2" OD Tubing

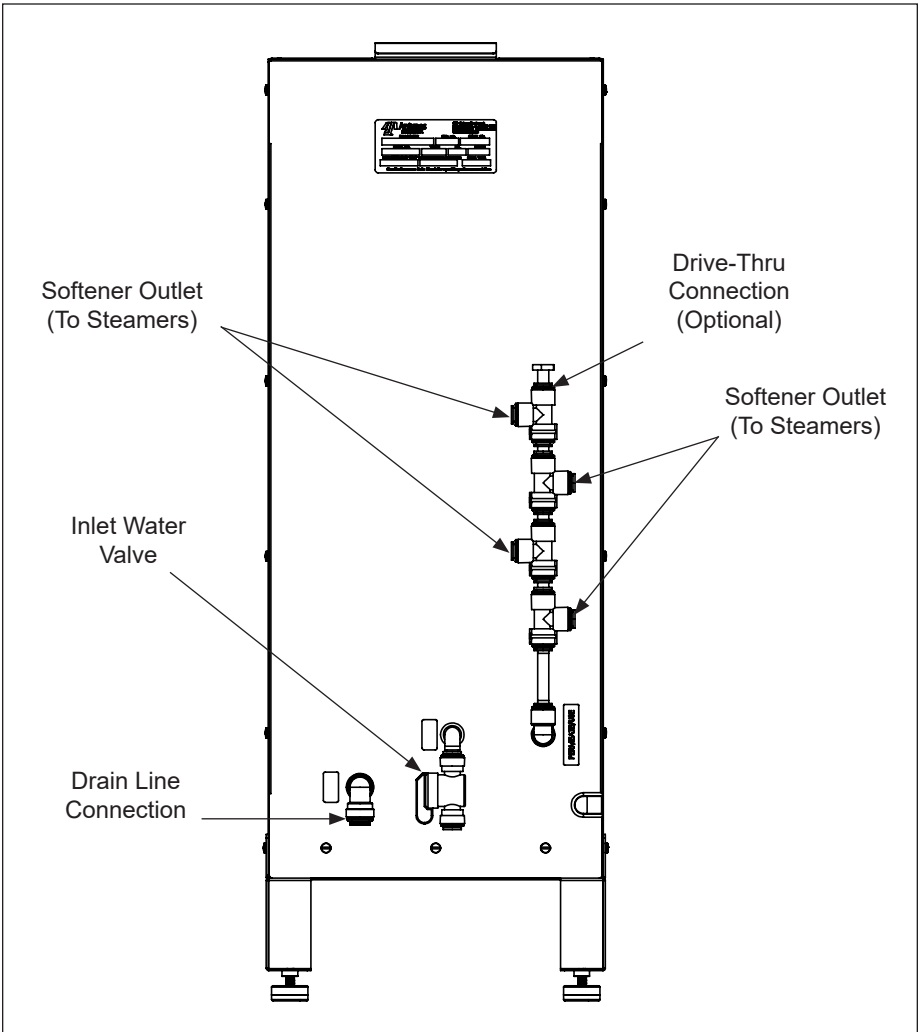


Figure 1. System Components

Installation

Suggested Tools and Supplies for Installation

The following tools and supplies are suggested to help with the installation:

- Torpedo Level
- Tube Cutter
- Screw Drive
- Nut Driver
- Softener Salt
- Hose Clamp
- Hose to stem adaptor
- 1/2" OD tubing (for softener drain line)
- 3/8" OD tubing for water inlet tubing
- 1/2" OD tubing union (push to connect)

NOTE: If any parts are damaged, contact Antunes Technical Service IMMEDIATELY at: +1-877-392-7854 (toll free).

1. Remove the softener from packaging and place on a sturdy work surface. Peel all protective coverings from the enclosure before proceeding.
2. Power off and unplug the steamers before continuing. Confirm that the table that will hold the steamers and softener unit can hold the required weight. At least 12 inches is required to fit the softener. Measure the space between the steamers and move them accordingly.



- Use 2 people to lift and carry the unit. Place the unit on the table between the two steamers.



- The unit is equipped with leveling feet. Use a torpedo level to check that the unit is level from front to back as well as from side to side. This is required for efficient operation of the unit.



- Attach 3/8" OD tubing to the inlet connection on the back of the unit. Push the tubing all the way into the fitting.

NOTE: Make sure the fitting is completely inserted onto the tubing past the O-ring. A loose connection results in leaking at the point of connection. (See figure and table below for reference).

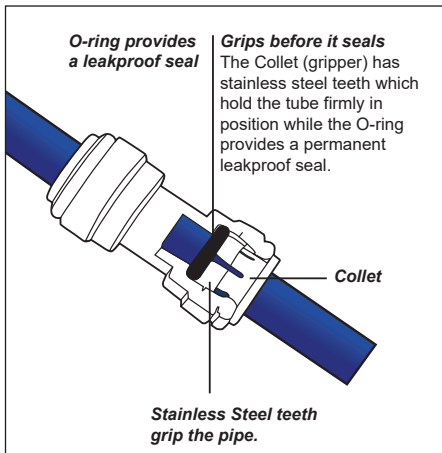


Figure 2. Fitting

- Take a hose clamp and slide it over the open end of the 1/4" ID hose supplied with the steamer. Then insert the stem hose adaptor into the end of the hose. Tighten the hose clamp with a nut driver to secure the adaptor in place.



- Attach the stem fitting to one of the open push-to-connect fittings on the back of the unit.



- At the other end of the 1/4" ID hose is a metal quick disconnect elbow fitting. Insert this end into the "Treated Water Only" port on the rear of the steamer.



- Repeat steps 6-8 to finish connecting all remaining steamers to the softener unit.

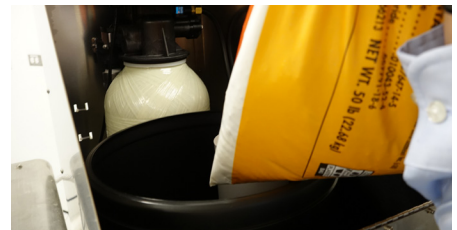
- Drive-thru connection (Optional). At the top of the tubing on the back of the softener is a plug. If necessary, remove the plug by pushing down on collet and pulling the plug out. Repeat steps 6-8 to connect additional steamers as needed from this fitting.



- On the back of the softener is a single line of tubing. This is the drain connection from the softener. Route this to a drain using appropriate fittings and tubing as necessary. Make sure to secure the line at the drain, maintaining a proper air gap. During regeneration, trapped air could cause the drain line to vibrate or move.



- Remove the access panel on the top of the system and set aside. Remove the lid of the brine tank. Fill the brine tank with softener salt. (40 lbs.) Replace the lid when finished. Do not replace the access panel yet.



- Plug in the power supply for the softener.

- Open the inlet water valve. Check for leaks at all fittings.



- Program the controller to set the time of day. Press the two arrow buttons on the controller to enter the Master Programming Mode. See instructions below for details.



- Once softener has been programmed, activate a manual regeneration by pressing and holding the extra cycle button for 5 seconds. Air and water will come out of the softener drain line and water will fill the salt brine tank.

NOTE: The regeneration will take approximately an hour to complete.

- After the regeneration is complete, the system is operational. Replace the access panel.

Drain Connection

The drain is for regenerating the softener resin and for flushing particle buildup out of the system during operation.

Install a sufficient length of 1/2" OD tubing (not supplied) from the drain outlet of the system to the drain.

When connecting the drain hose, pay attention to the following guidelines:

- The drain line plumbing must be able support the flow rate when the system operates.
- The drain line leading out of the system must be as short as possible and slope downwards without any kinks or loops.

- The drain line plumbing must be positioned and secured at least 2 inches above the drain (Figure 3). This air gap protects the system from contamination in the event of a backed-up drain.
- The drain used must not be blocked or restricted.
- The drain used must be as large or larger than the drain line plumbing.
- The drain line from the system should be secured at the drain using appropriate mounting hardware.

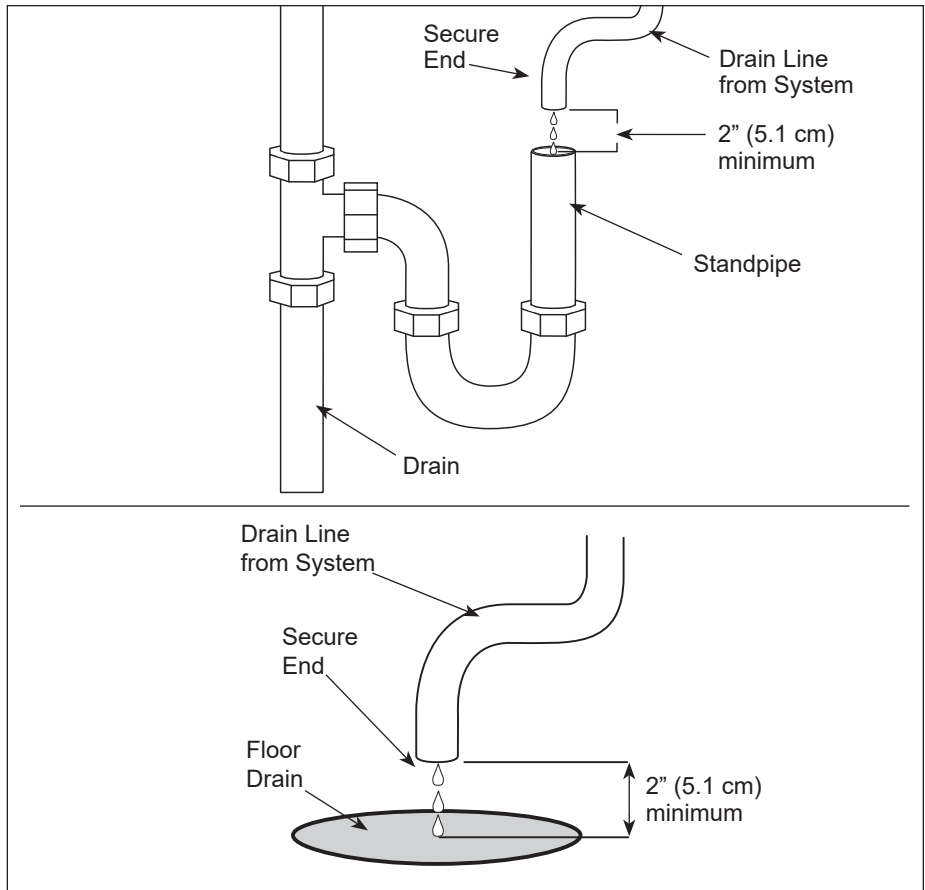


Figure 3. Drain Line Plumbing

Operation

1. Make sure the water supply to the softener is on.
2. Proper hardness reduction can be checked by measuring a sample of the outlet water for hardness.
3. Collect a water sample from any hose leading from the softener system and measure hardness using the supplied test strips or any test that measures total hardness.

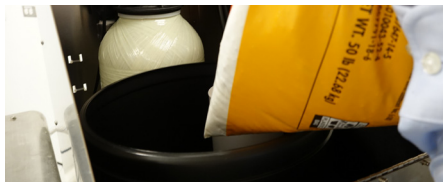
Maintenance

Every Week

Checking Salt Levels

NOTE: Abrasive 'hard' water contains high levels of calcium and magnesium, causing lime scale buildup and interfering with the steamer's ability to operate correctly.

1. Remove the top access panel and set aside.
2. Remove the lid of the brine tank.
3. Check the level of the salt in the brine tank. It is recommended that the brine tank should be filled at least half-full with salt. The salt should measure at least 3 inches above the water level.



4. Break up any salt bridges. Salt can form a solid layer or "bridge" in the brine tank. Break up any solid layers that have formed until the salt moves freely. This will ensure that the salt mixes properly with the water in the brine tank.

NOTE: For stubborn salt layers, warm water may be added to help break up solid pieces of salt.

5. Replace the brine tank lid when finished.
6. Once the salt brine tank has been filled, a manual regeneration can be activated if necessary. Press and hold the extra cycle button for 5 seconds to start a manual regeneration.
7. Reinstall the top access panel. After the regeneration is complete, the system is operational.

NOTE: The regeneration will take approximately an hour to complete.

Every Month

Check Clock Time

The clock should be checked monthly to make sure the local time is set properly.

1. Remove the top access panel and set aside.
2. Look at softener display and check that displayed time is the same as local time.
3. If time is incorrect, adjust the time by following the programming steps in the Installation section.
4. Reinstall the top access panel.

Every Six Months

Check Hardness Reduction

The hardness reduction should be checked every 6 months. Use any test strips or tester that measures Total Hardness.

If Total Hardness coming from the softener system is not less than 1 grain per gallon (gpg), contact the factory for more information.

Every Three Years

Cleaning the salt Brine Tank

1. Unplug the power supply for the softener.
2. Remove the top access panel and set aside. Remove the lid of the brine tank.
3. Disconnect all plumbing connections to the brine tank and empty the brine tank. Siphon or dump all water out of the tank, then dump out the salt and throw it away.

NOTE: Dissolve blocks or bridges of salt with hot water if needed.

4. Scrub with soapy water. Mix a generous amount of dish soap into one or two gallons (4-8 liters) of water. Pour it into the tank and scrub the entire interior with a brush.
5. Rinse the tank. Dump out the soapy water and rinse with plain water.
6. Replace the brine tank in the enclosure and reconnect all plumbing connections to the brine tank.
7. Fill the brine tank with salt.
8. Once the brine tank has been filled with salt, activate a manual regeneration by pressing and holding the extra cycle button for 5 seconds.
9. Reinstall the top access panel.

NOTE: The regeneration will take approximately an hour to complete.

Every Five Years

Replacing the Softener Resin Tank

Consult the factory for replacement of the resin tank.

After a Power Failure

Power Loss

The clock should be checked after a power loss to the softener system.

1. Remove the top access panel and set aside.
2. Look at softener display and check that displayed time is the same as local time.
3. If time is incorrect, adjust the time by following the programming steps in the Installation section.
4. Reinstall the top access panel.

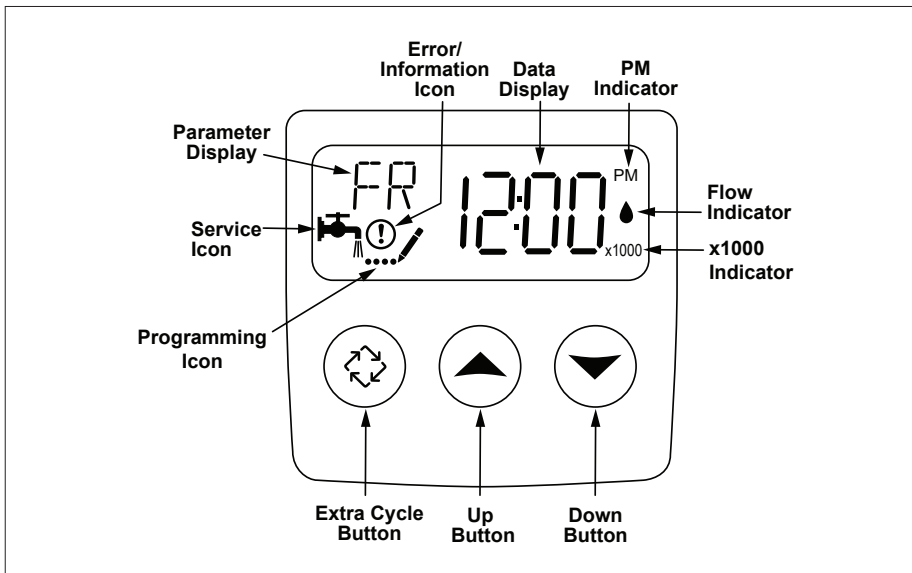
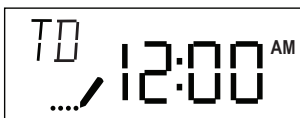


Figure 4. Softener Controller

Programming Instructions

Setting the Time of Day

1. Press and hold either the Up or Down buttons until the programming icon replaces the service icon and the parameter display reads TD.
2. Adjust the displayed time with the Up and Down buttons.
3. When the desired time is set, press the Extra Cycle button to resume normal operation. The unit will also return to normal operation after 5 seconds if no buttons are pressed.



Enter Master Programming Mode

When the Master Programming Mode is entered, all available option setting displays may be viewed and set as needed. Depending on current option settings, some parameters cannot be viewed or set.

NOTE: If the control is left in Master Programming mode for 5 minutes without any keypad entry, the control will automatically disregard any programming changes and return to normal operation.

1. Set the Time of Day display to 12:01 PM following the instructions in the previous Set the Time of Day section.
2. Press the Extra Cycle button to exit Setting Time of Day.
3. Press and hold the Up and Down buttons together until the Programming Icon replaces the Service Icon and the Display Format screen appears.

Display Format (Display Code DF):

NOTE: Do NOT alter this setting without consultation.

- The Display Code (DF) is the first screen that appears when entering Master Programming Mode. The Display Format setting specifies the unit of measure that will be used for volume and how the control will display the Time of Day. This option setting is identified by "DF" in the upper left-hand corner of the screen. There are two possible settings. It should be set to GAL. Use the Up and Down buttons to select the value. Press the Extra Cycle button to save the selection.

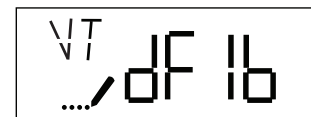


Display Format Setting	Unit of Volume	Time Display
GAL	U.S. Gallons	12-Hour AM/PM
Ltr	Liters	24-Hour

Valve Type (Display Code VT):

NOTE: Do NOT alter this setting without consultation

- The Valve Type (VT) screen automatically comes up next. The Valve Type setting specifies the type of cycle that the valve follows during regeneration. This option setting is identified by "VT" in the upper left-hand corner of the screen. There are six possible settings. It should be set to dF 1b. Use the Up and Down buttons to select the value. Press the Extra Cycle button to save the selection



Abbreviation	Parameter
dF1b	Downflow/Upflow Single Backwash
dF2B	Downflow Double Backwash
Ftr	Filter
UFbd	Upflow Brine First
UFtr	Upflow Filter
Othr	Other

Control Type (Display Code CT):

NOTE: Do NOT alter this setting without consultation.

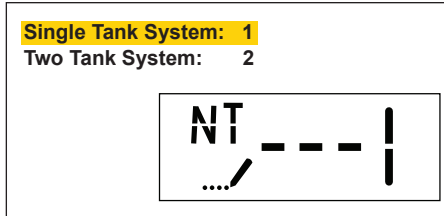
- The Control Type (CT) screen automatically comes up next. Use this display to set the Control Type. This specifies how the control determines when to trigger a regeneration. This option setting is identified by "CT" in the upper left-hand corner of the screen. There are four possible settings. It should be set to dAY. Use the Up and Down buttons to select the value. Press the Extra Cycle button to save the selection.

Meter Delayed :	FD
Meter Immediate:	FI
Time Clock:	tc
Day of Week:	dAY

Number of Tanks (Display Code NT):

NOTE: Do NOT alter this setting without consultation.

- The Number of Tanks (NT) screen automatically comes up next. Use this display to set the Number of Tanks in your system. This option setting is identified by "NT" in the upper left-hand corner of the screen. There are two possible settings. It should be set to 1. Use the Up and Down buttons to select the value. Press the Extra Cycle button to save the selection.



Regeneration Time (Display Code RT):

- The Regeneration Time (RT) screen automatically comes up next. Use this display to set the Regeneration Time. This setting specifies the time of day the control will initiate a regeneration. This option setting is identified by "RT" in the upper left-hand corner of the screen. It should be set to 2:00 AM, but you can adjust the time to your local needs.

CAUTION: Do Not Set the Regeneration Time for a Time When Water is Being Used. If you do, hard water will be sent to your equipment.

- Use the Up and Down buttons to adjust the value as needed. Press the Extra Cycle button to save the selection.



Regeneration Cycle Step Times (Display Code BW / BD / RR / BF):

NOTE: Do NOT alter this setting without consultation.

- The Regeneration Cycle Step times (BW / BD / RR / BF) screen automatically comes up next. Use this display to set the Regeneration Cycle Step Times. The different regeneration cycles are listed in sequence based on the valve type selected for the system and are identified by an abbreviation

in the upper left-hand corner of the screen. The abbreviations used are listed below. Each cycle step time can be set from 0 to 199 minutes. Setting a cycle step time to 0 will cause the control to skip that step during regeneration but keeps the following steps available. The times should be set as shown below. Use the Up and Down buttons to adjust the value as needed. Press the Extra Cycle button to accept the current setting and move to the next parameter.

BW	Backwash	= 06 Minutes
BD	Brine Draw	= 27 Minutes
RR	Rapid Rinse	= 06 Minutes
BF	Brine Fill	= 08 Minutes

Day of Week Setting (Display Code D1 / D2 / D3 / D4 / D5 / D6 / D7)

NOTE: Do NOT alter this setting without consultation.

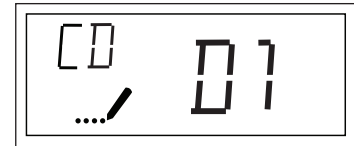
- The Day of Week Settings (D1 / D2 / D3 / D4 / D5 / D6 / D7) screen automatically comes up next. Use this display to set the regeneration schedule for a system configured as a Day of Week control. The different days of the week are identified as D1, D2, D3, D4, D5, D6, and D7 in the upper left-hand corner of the display. Set the value to "ON" to schedule a regeneration or "OFF" to skip regeneration for each day. Use the Up and Down buttons to adjust the setting as needed. Press the Extra Cycle button to accept the setting and move to the next day. Note that the control requires at least one day to be set to "ON." If all 7 days are set to "OFF", the unit will return to Day One until one or more days are set to "ON." The only day that should be set to "ON" is D7. Press the Extra Cycle button to accept the setting for each day and to move to the next day.

D1	OFF
D2	OFF
D3	OFF
D4	OFF
D5	OFF
D6	OFF
D7	ON

Current Day (Display Code CD)

NOTE: Do NOT alter this setting without consultation

- The Current Day (CD) screen automatically comes up next. Use this display to set the current day on systems that have been configured as Day of Week controls. This setting is identified by "CD" in the upper left-hand corner of the screen. Use the Up and Down buttons to select from Day 1 through Day 7. Make sure the value is set to D1. Press the Extra Cycle button to save the selection.



Pressing the Extra Cycle button after this last parameter saves all settings and returns the control to normal operation. The Programming icon should be replaced by the Service icon.

NOTE: If the control is left in Master Programming mode for 5 minutes without any keypad entry, the control will automatically disregard any programming changes and return to normal operation.

If any other screens come up, it could be because a previous screen was not set properly. Return to the Master Programming Mode and confirm the settings.

Resets

Soft Reset

Press and hold the Extra Cycle and Down buttons for 25 seconds while in normal Service mode. This resets all parameters to the system default values, except the volume remaining in meter immediate or meter delayed systems and days since regeneration in the time clock system. Check and/or set the values selected or recommended in the Master Programming Mode.

Master Reset

Hold the Extra Cycle button while powering up the unit. This resets all the parameters in the unit. Check and/or set the values selected or recommended in the Master Programming Mode.

Troubleshooting

Problem	Possible Cause	Corrective Action
No water comes out of the filter system.	Inlet/Outlet valves closed.	Open the inlet/Outlet valves.
	Product pump not working.	Replace product pump.
	Regeneration timer is not set.	Set regeneration timer.
	Water pressure is too low.	Check incoming water pressure to ensure that it meets specifications. If not, boost the inlet water pressure.
	Controller valve is stuck.	Clean controller valve (consult factory).
Low water flow comes out of the filter system.	See Above.	See Above.
	The inlet water pressure is too low.	Boost the inlet water pressure.
Water isn't soft.	System regenerating, temporarily bypassed.	Wait for regeneration to complete.
	No salt in brine tank.	Add salt to brine tank.
	Salt is bridging in brine tank (not in contact with water).	Break up salt bridging.
	Salt level is below water level.	Add salt to brine tank so salt level is above water level.
	Water conditions changed.	Set the timer to regenerate more often or consider installing additional filtration.
Water splashes at drain during flush.	Drain line not positioned properly.	Reposition the end of the drain line.
	Drain not capable of handling flow rate.	Clean drain; find alternate drain.
Water leaks from system fitting or connection	Fitting broken or loose.	Tighten or replace the fitting.

Replacement Parts List

(See Exploded Views for more information)

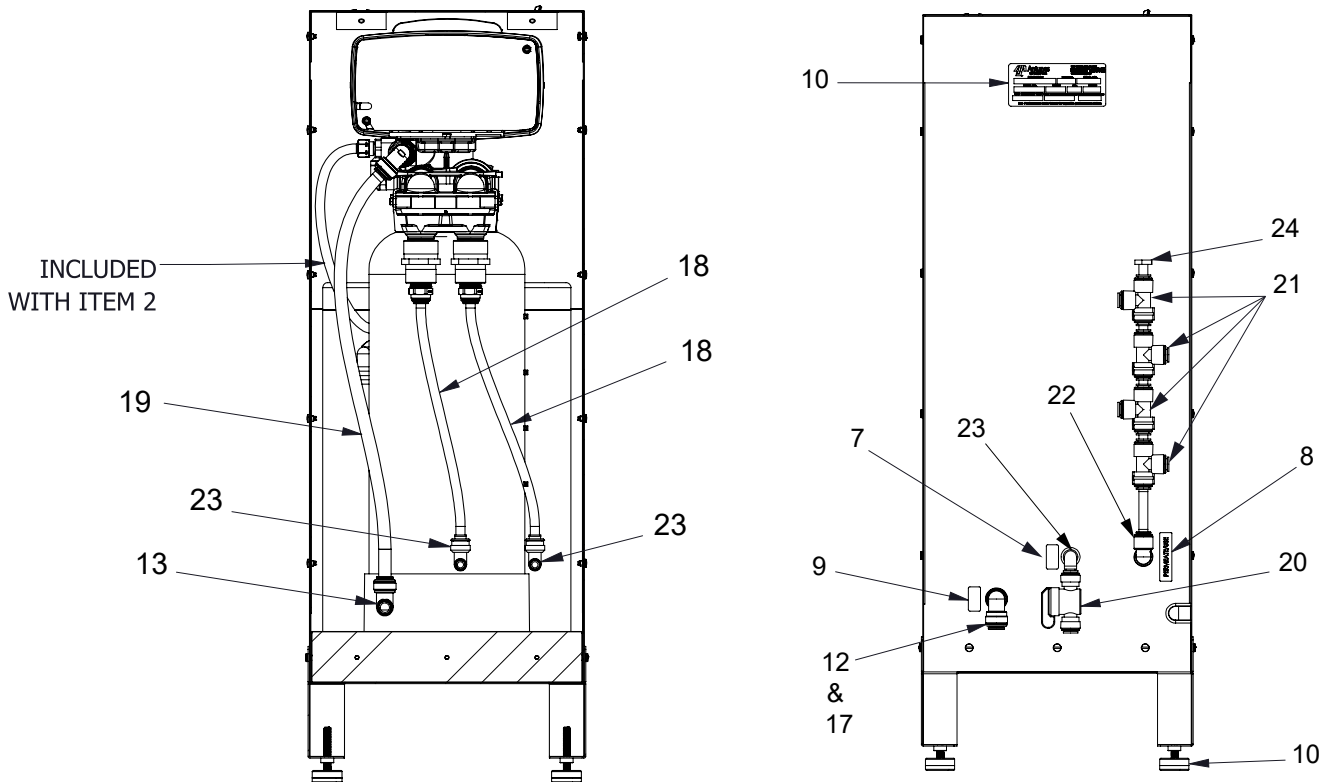
NOTE
 Use only genuine Antunes replacement parts in this unit. Use of parts other than those supplied by the manufacturer will void the warranty.

Item #	Part #	Description	Qty.
1	0014409	Softener Back Panel Fitting Assembly	1
2	0014410	Softener Assembly 6X18 with Connections	1
3	0024770	Weldment, Softener Leg Base	1
4	0504845	Softener Enclosure Front Panel	1
5	0504846	Softener Enclosure Base Panel	1
6	0504847	Softener Enclosure Cover Panel	1
7	1001133	Label, Inlet	1
8	1001134	Label, Permeate	1
9	1001135	Label, Drain	1
10	1031614	Spec Label, #9710134	1
11	2100427	Leveling Mount 1/4"-20 Threaded Stud	4
12	2080216	Elbow, 90 Degree, 1/2 Tube, PP, QIK Disc.	1
13	2080216	Plug-In Elbow, 1/2 Stem O.D X 1/2 Tube O.D	2

Item #	Part #	Description	Qty.
14	2150151	Bearing, 3/8ID X 7/16OD Nylon Snap-In	2
15	2090302	Brine Assembly 10X16, With Brine Valve	1
16	3080133	Screw, MACH. #8-32 X 1/4, Slotted Pan HD	21
17	2150204	Bearing, Shaft Dia .500"	1
18	5206015	Tube, Polyethylene, 3/8 OD, White, 12"	1
19	5206031	Tube, Polyethylene, 1/2 OD, Natural, 18"	1
20	2080154	Valve, 3/8" OD	1
21	2080157	Union Tee, 3/8" O.D.	4
22	2080162	Elbow, 90 DEG, 3/8 Tube, PP, QIK Disc.	1
23	2080133	Plug-In Elbow, 3/8" Stem OD X 3/8 Tube OD	3
24	2080163	Plug, Stem 3/8" O.D.	1

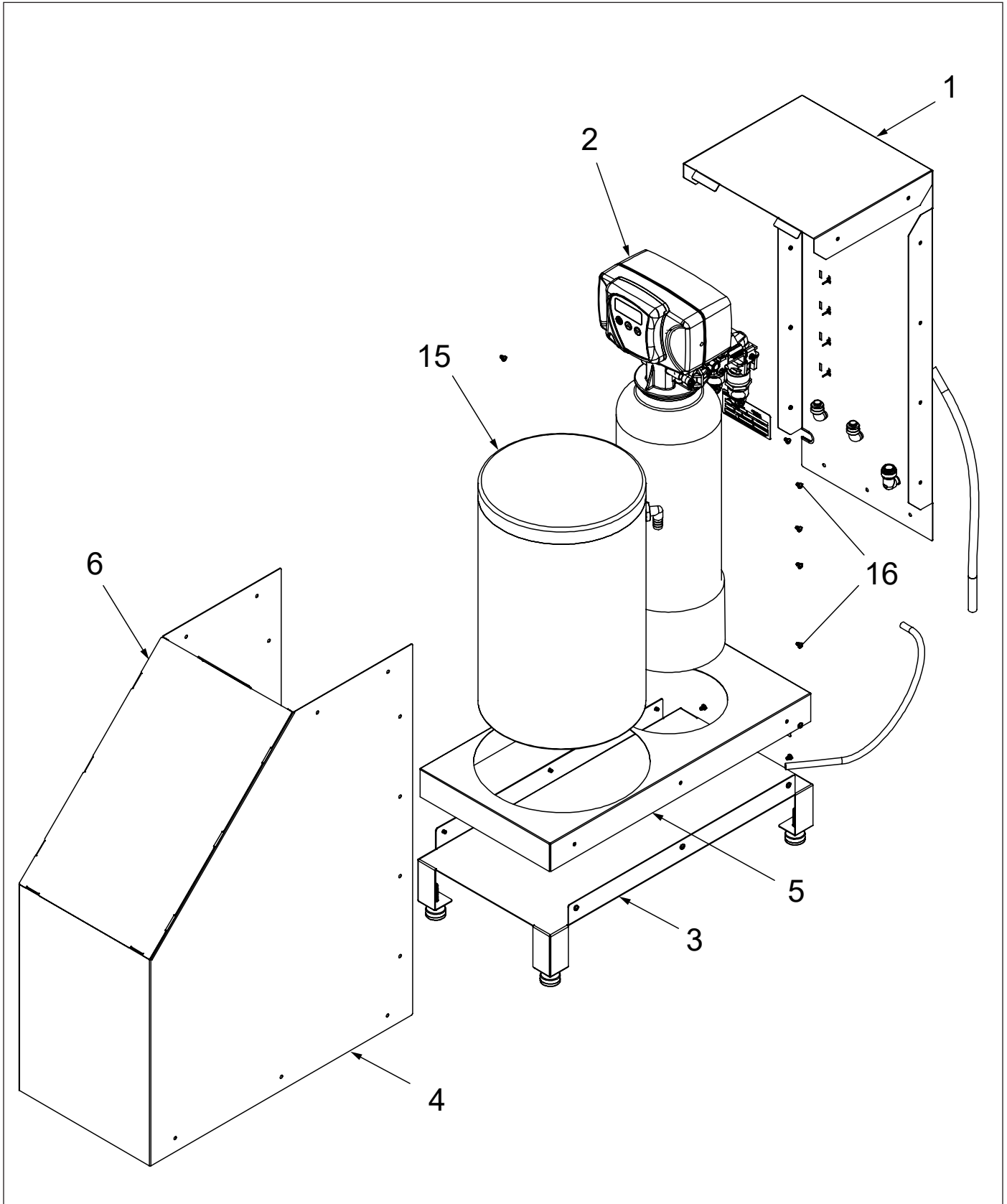
Replacement Parts

Exploded View #1



Replacement Parts

Exploded View #2



Limited Warranty

Equipment manufactured by Antunes has been constructed of the finest materials available and manufactured to high quality standards. These units are warranted to be free from defects in materials and workmanship for a period of one year from date of purchase under normal use and service, and when installed in accordance with manufacturer's recommendations*.

*To ensure continued proper operation of the units, follow the maintenance procedure outlined in the Owner's Manual.

1. This warranty does not cover failures due to improper system installation, defects caused by improper storage or handling prior to placing of the equipment into service. This warranty does not include overtime charges or work done by unauthorized service agencies or personnel. This warranty does not cover normal maintenance, calibration, or regular adjustments as specified in operating and maintenance instructions of this manual, and/or labor involved in moving adjacent objects to gain access to the Equipment.
2. Antunes reserves the right to make changes in design or add any improvements on any product. The right is always reserved to modify equipment because of factors beyond our control and government regulations. Changes to update equipment do not constitute a warranty charge.
3. **If shipment is damaged in transit, the purchaser should make a claim directly upon the carrier. Careful inspection should be made of the shipment as soon as it arrives and visible damage should be noted upon the carrier's documentation. Damage should be reported to the carrier. This damage is not covered under this warranty.**
4. THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, EACH OF WHICH IS HEREBY EXPRESSLY DISCLAIMED. THE REMEDIES DESCRIBED ABOVE ARE EXCLUSIVE AND IN NO EVENT SHALL ANTUNES BE LIABLE FOR SPECIAL CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR THE BREACH OR DELAY IN PERFORMANCE OF THIS WARRANTY.

Prices and specifications are subject to change without notice.



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