

Steam and Hold

Infini Steam

IS-8000

Owner's Manual

Mfg. Number:
9100948



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Overview

- 2 This unit is intended to be used for
- 2 commercial applications, for example:
- 2 in kitchens of restaurants, canteens,
- 2 hospitals and in commercial enterprises
- 2 such as bakeries, butcheries, etc., But not
- 2 for continuous mass production of food.

Before Use

- 3 This manual contains safety, installation,
- 3 and operating procedures for the unit.
- 3 Read and understand it completely before
- 3 installing or operating the unit. Keep this
- 4 document for reference. If the unit changes
- 4 ownership, this manual must accompany it.

In Case of Damage

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

Website

- 9 www.antunes.com

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 at +1-877-392-7856 (toll free).

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:

Safety Information

Installation

- Read and understand all instructions before installing or using the unit.
- The unit **MUST** be installed by personnel qualified to work with electricity and plumbing.
- Install this unit 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).
- Install and locate the equipment only for its intended use as described in this manual.



WARNING

ELECTRICAL SHOCK HAZARD.

Failure to follow the instructions in this manual could result in serious injury or death.

Do not modify the power supply cord plug. If it does not fit the outlet, have a proper outlet installed by a qualified electrician.

Electrical ground is required on this appliance.

Check with a qualified electrician if you are unsure if the appliance is properly grounded.

Do **NOT** use an extension cord with this product.

The unit should be grounded according to local electrical codes to prevent the possibility of electrical shock. It requires a grounded receptacle with separate electrical lines, protected by fuses or circuit breaker of the proper rating.

NEVER unplug the power cord while the unit is running. Use the proper shutdown procedure before unplugging the power cord.

Operation

- The unit is furnished with a properly grounded cord connector. Do not attempt to defeat the grounded connector.
- Do not operate the unit if it has been damaged or dropped, if it has a damaged cord or plug, or if it is not working properly.
- Do not block or cover any openings on the equipment.
- Do not immerse the cord, unit, or plug in water.
- Keep the cord away from heated surfaces.
- Do not allow the cord to hang over the edge of a table or counter.
- Keep the area around the unit free and clear of all combustible materials. Failure to do so may result in fire or property damage.
- Opening steamer drawers during operation releases steam. Compartment and contents may be hot.

Maintenance

- Do not use abrasive materials; they can damage the unit's stainless steel finish.
- Do not use corrosive chemicals in this equipment.
- Chlorides or phosphates in cleaning agents (e.g., bleach, sanitizers, degreasers, and detergents) can permanently damage stainless steel equipment. The damage is usually in the form of discoloration, dulling of the metal surface finish, pits, voids, holes, or cracks. This damage is permanent and is not covered by warranty.
- Always use a soft, damp cloth for cleaning. Rinse with clear water and wipe dry. When required, always rub in the direction of metal polish lines.
- Routine cleaning should be performed daily with soap and water.
- Rub off finger marks and smears using soap and water.
- Do not clean unit or components in a dishwasher unless specifically specified in the cleaning instructions.
- Do not clean the unit with a water jet or steam cleaner.
- When using the citric acid cleaning solution as prescribed in this manual, follow the recommended manufacturer's safety precautions. Use gloves and eye protection when required.

Service

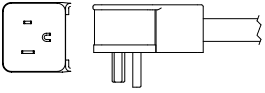
- Inspection, testing, and repair of electrical equipment must be performed only by qualified service personnel.
- To avoid possible personal injury and/or damage to the unit, all inspections, tests, and repair of electrical equipment should be performed by qualified personnel **ONLY**. Contact Antunes Technical Service for adjustment or repair.
- Turn the power off, unplug the power cord, and allow unit to cool to room temperature before performing any service or maintenance.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or a similarly qualified person in order to avoid an electrical hazard.
- Cleaning and user maintenance shall not be made by children without supervision.

Specifications

Electrical Ratings

Model & Mfg. No.	Volts	Watts	Amp	Hertz
9100948 9100949	208	9000	41	50/60

Electrical Cord & Plugs

Model & Mfg. No.	Description	Configuration
9100948 9100949	NEMA 6-50P 250 VAC, 50 AMP or 6 AWG Wires	

Water Requirements Water Quality (Treated Water):

Hardness (Calcium & Magnesium)	1 GPG Maximum
Total Alkalinity	600 PPM Maximum
Total Silica	150 PPM Maximum
Iron Content	0.1 PPM Maximum
pH	6.5-10.5
Total Dissolved Solids	2,500 PPM Maximum
Oxygen Content	0 PPM
Carbon Dioxide	0 PPM

Water Pressure Requirements

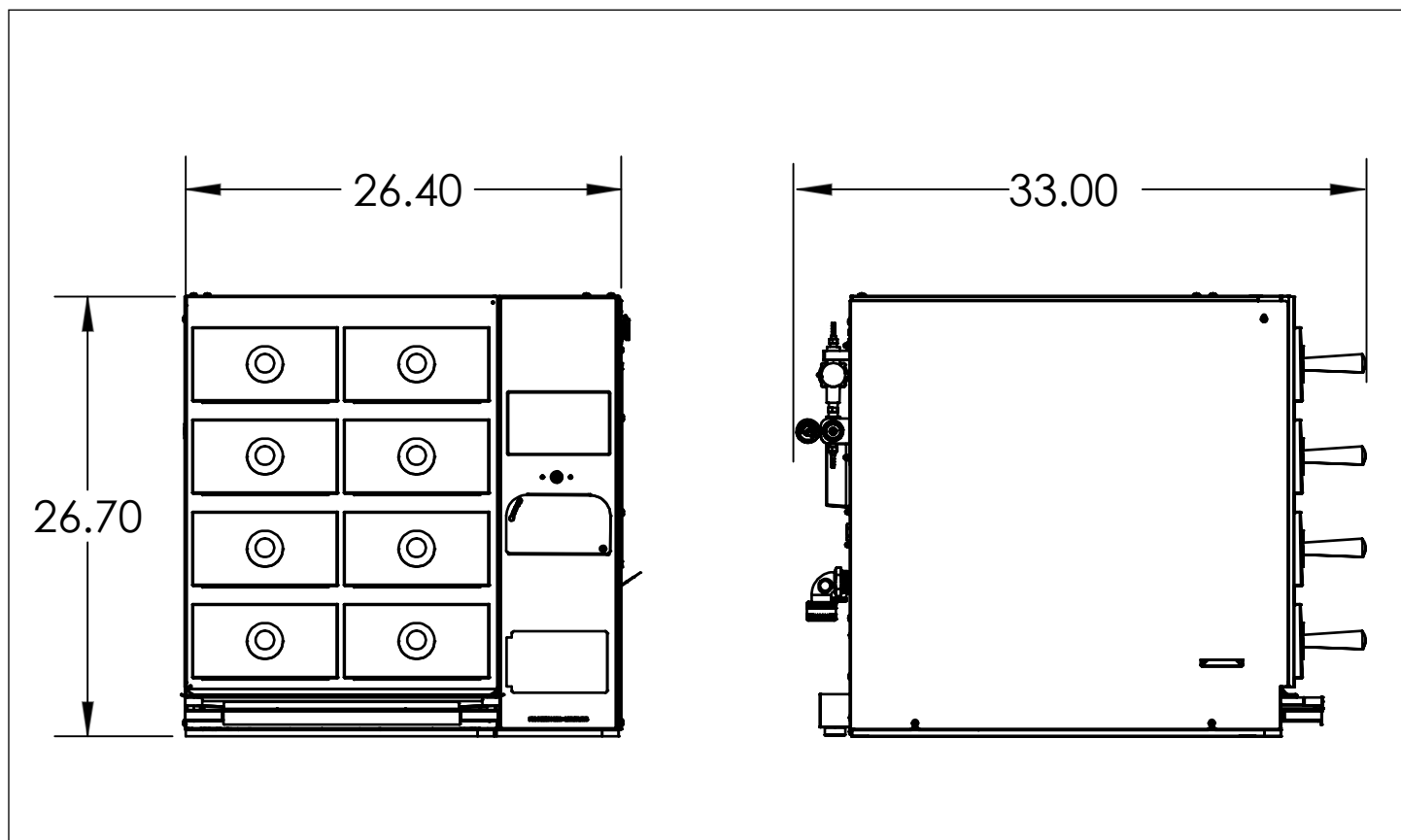
Minimum Water Pressure	40 psig
Maximum Water Pressure	60 psig



IMPORTANT

Failure to follow these water quality conditions will void the warranty and may cause the steamer to operate erratically or fail prematurely and require a service call.

Dimensions



Unpacking

WARNING

This steamer must be installed by personnel who are qualified to work with electricity and plumbing. Improper installation can cause injury to personnel and/or to the equipment. The steamer must be installed in accordance with all applicable codes.

CAUTION

The Steamer has an approximate shipping weight of 260 pounds. For safe handling OBTAIN EXTRA PERSONNEL to properly and safely install the steamer.

WARNING

The installation surface MUST be flat, and the cart, table, or service rack MUST have a rated service weight capacity of 360 pounds per steamer.

1. Remove steamer and all accessories from the packaging.
2. Remove all packing materials and protective coverings from the steamer.
3. Record the model number, serial number, and installation date of your steamer and keep this information for future reference. Space for this is provided on page 2.

NOTE: If any parts are missing or damaged, contact Antunes IMMEDIATELY at 1-800-253-2991 (toll free in the U.S. and Canada) or at 630-784-1000.

4. Wash all removable components in soap and water. Wipe down all exterior surfaces of the steamer with a hot damp cloth.

NOTE: Do NOT use a dripping wet cloth. Wring out before use.

5. Install components onto steamer as shown in Figure 2.

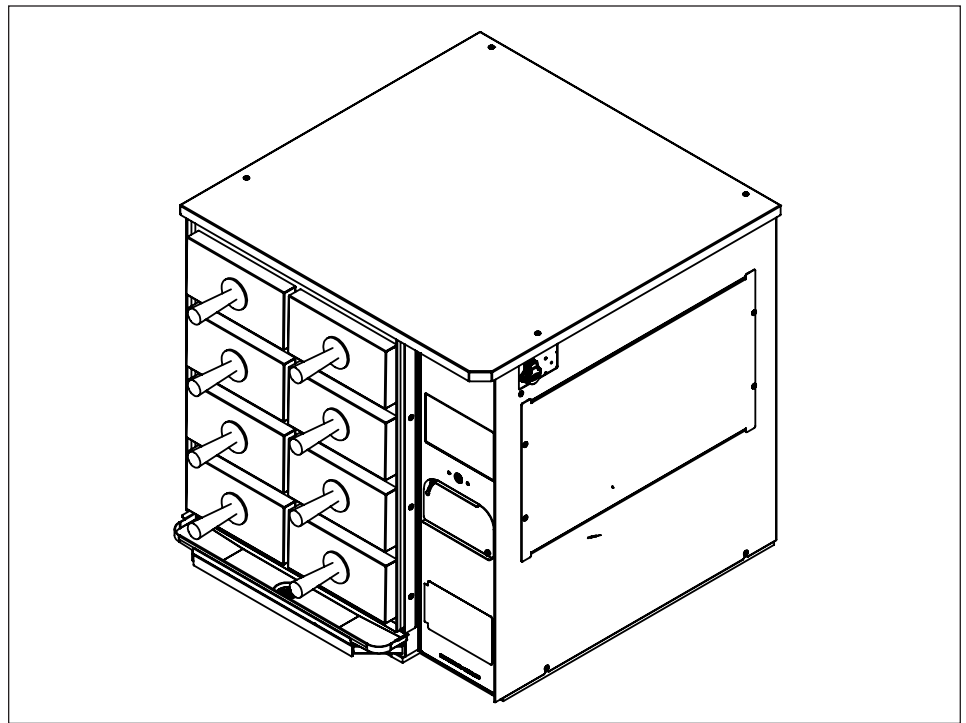


Figure 1. Steamer

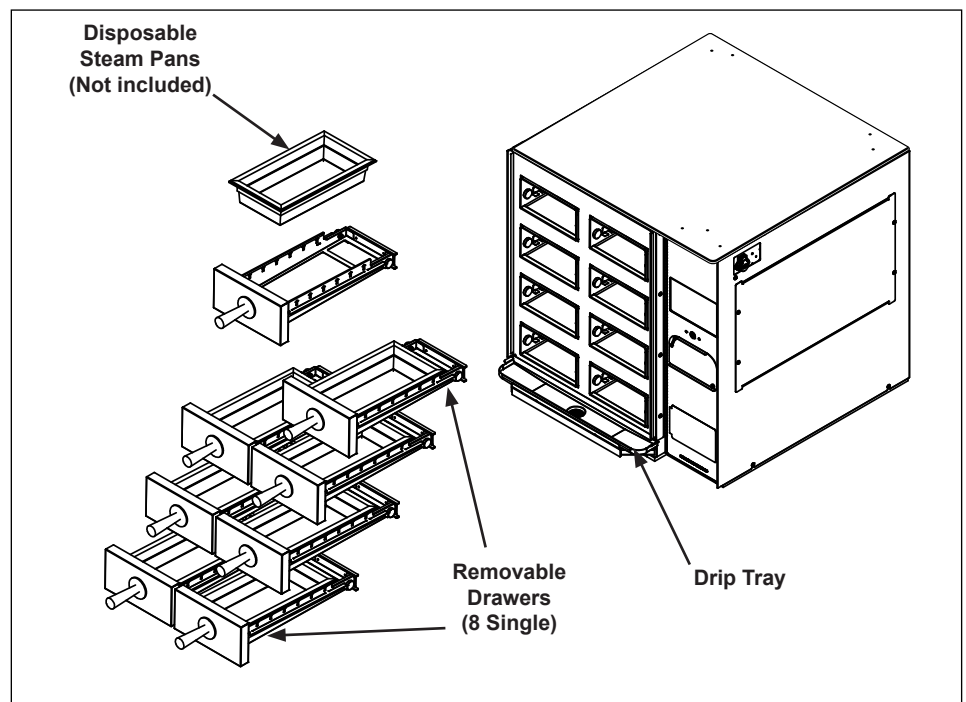


Figure 2. Steamer Components

Installation

The steamer should be installed in a well-ventilated room. The steamer must be securely fastened to a table or moveable cart that is capable of handling the weight of one or multiple steamers. Each Steam and Hold weighs approximately 200 pounds and the total weight capacity requirements of the cart or table must be considered prior to installation. 3X safety factor recommended. I.e. 1 Steam and Hold (200 lbs) x 3 S.F. = 600 lbs minimum weight load capacity per work surface.

NOTE: Installer **MUST** verify the weight restrictions of the table, cart, or service rack prior to installation of the steamer. All warranties will be **VOID** if work surface is unable to handle the specified weight load.

The steamer must be installed on a level surface. The Steam and Hold has built-in water level controls requiring the surface to be parallel to the horizon. The steamer must be level front-to-back or pitched slightly backwards for the cavities to drain properly.

Install steamer with at least 6 inches of clearance from the back wall. Side clearances of at least 6 inches are recommended. Antunes recommends enough clearance for easy cleaning, service and maintenance; specific customer installations will dictate the final configuration.

Water Supply Quality

The quality of the water supply to the boiler is important for proper operation. Low hardness water will keep the boiler cleaner and reduce the need for frequent clean cycles.

It is recommended that the water quality conditions in this documents be met.

An Antunes Water Treatment System is recommended to best attain these water conditions. Consult Antunes Customer Service for more information on and Antunes product that is designed for the Steam and Hold.

NOTE: Failure to follow these water quality conditions will **VOID** the warranty and may cause the steamer to operate erratically or fail prematurely and require a service call.

Water Supply Plumbing

The Steam and Hold is equipped with a standard 1/4 NPT female water connection. Also included with the steamer is a quick disconnect fitting (p/n's 2080134 (Male) & 2080118 (Female)) which can be readily adapted and/or permanently secured to a flexible water feed line that delivers water pressure at a minimum of 40 psig and a maximum of 60 psig. CA minimum flow rate of 1 gpm is required.

NOTE: Minimum dynamic supply water pressure (from a softener, RO system, or tap water supply line) to be 40 psig minimum and a maximum of 60 psig. Contact Antunes Tech Service on measuring the proper supply water pressure.

Antunes Recommended Clearances from walls and other Equipment			
Front of Steamer	Rear of Steamer	Left Side of Steamer	Right Side of Steamer
36" - 48" for full drawer extension	6" - 8" for proper air flow	6" for ease of cleaning and maintenance	6" for ease of cleaning and maintenance

Agency Required Clearances from walls and other Equipment			
36"	6"	0"	0"

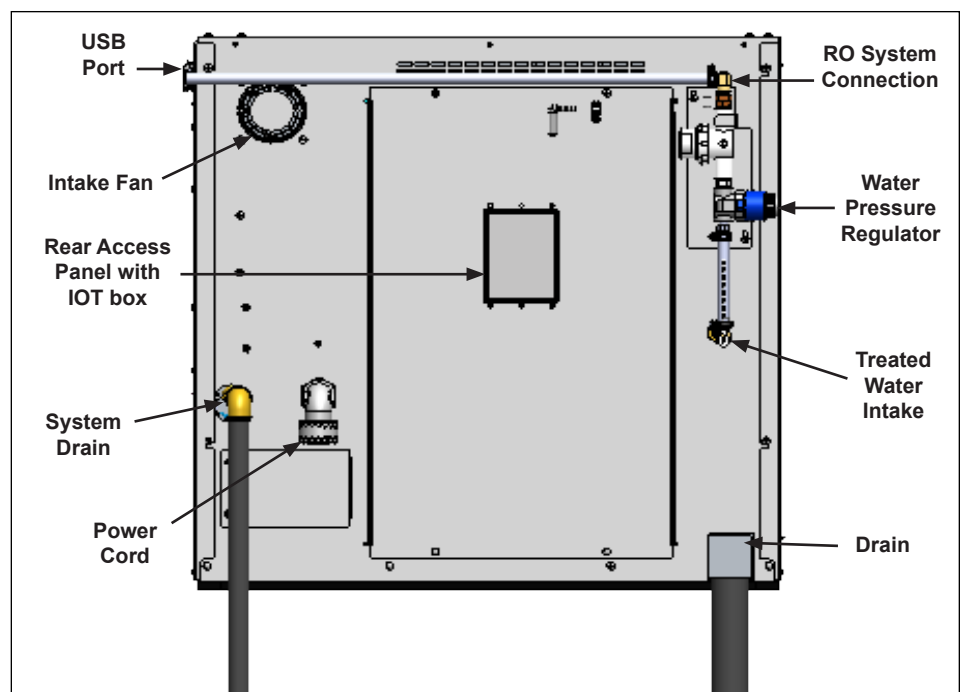


Figure 3. Steamer Connections and Items (Rear of Steamer)

Supply Wiring

WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in electrical shock or death.

WARNING

An electrical ground is required to the wall receptacle. Failure to provide a proper ground can result in death or serious injury. All applicable electrical codes MUST be followed in accordance with ANSI/NFPA 70 or latest edition. In Canada, provide electrical service in accordance with Canadian electrical code, CSA C22.1 and local codes.

1. Remove the four side panel screws as shown below.

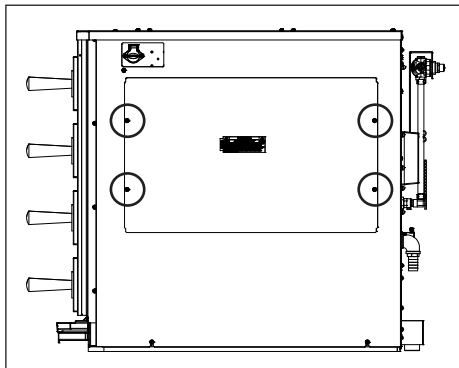
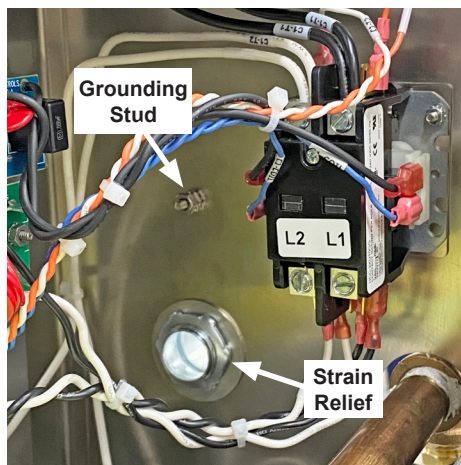
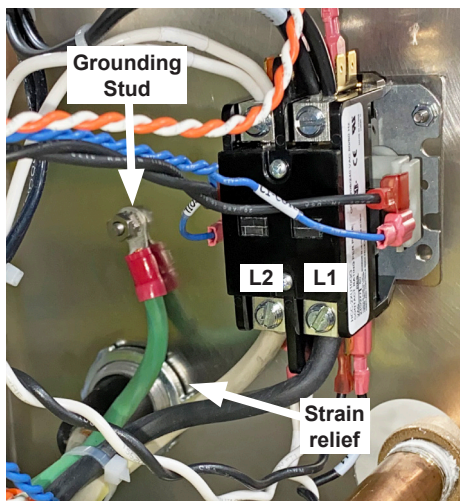


Figure 4. Electrical Side Panel

2. Route power supply (not included) through the strain relief as shown below and secure with screw.



3. Connect black and white wires to contactor as shown. Connect Line Voltage Input to Contactor L1 and L2. Use torque screw driver set at 35in-lb.



4. Connect green ground wire to grounding stud using provided nut. Use torque nut driver set at 20 in-lbs.
5. Reassemble side electrical panel.

System Water Drainage

A 9 ft. roll of high temperature 3.4" I.D. flexible hose is provided and connections must be made in the field. Kinking of the hose, will impede the performance and functionality of the Steam and Hold.

1. Measure distance from steamer drain to floor drain making sure to leave room for a two (2) inch gap between the hoses and floor drain.
2. Cut the supplied drain tubing for drain connection.

NOTE: A 2 inch air gap from the drain hose to the floor drain must be maintained in order to provide adequate/proper drainage capabilities. Failure to comply with a 2" air gap minimum will result in a warranty failure and nuisance performance issues.

NOTE: Depending on your installation, local plumbing codes may require the use of a wall mounted drain box (P/N 0013900).

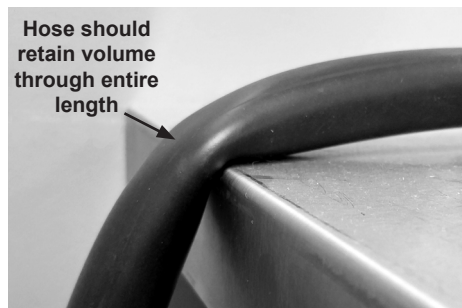


Figure 5. Kinked Hose

Operations

Initial Startup

1. Connect the water treatment system to the treated water inlet according to Figure 3 on page 6.
2. Plug the power cord into the appropriate outlet. Turn on water.
3. The steamer performs a system test and displays information on the display.
4. The steamer then shows the splash screen. Press the Power Button to turn the steamer on.
5. The steamer displays the main screen and fills the internal tank.
6. When the tank is filled and the unit reaches temperature, the steamer displays "System is Ready" on the main screen.

Drawer Installation

Inside of the drawer cavity is a roller and a rail cutout on either side. The cutout is located right behind the roller. On the bottom rear edge of each drawer is a tab extension. The tab helps to keep the drawer inside the cavity. See Figure 5.

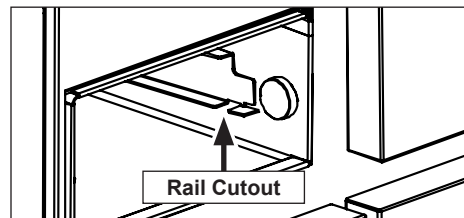
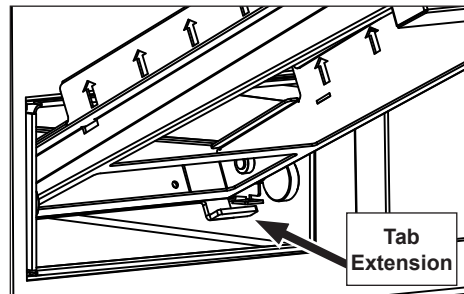


Figure 6. Rail Cutout

To Install:

1. Hold the drawer at about a 30 degree angle. Insert the drawer tabs through the cutouts in the drawer rails so the tabs are under the rails.



2. Rotate the drawer down and insert pan.
3. Drawer should now easily close and seal.

NOTE: Remove pans before removing drawers.

System Power-up

1. Upon application of power, the system will display the following splash screen.

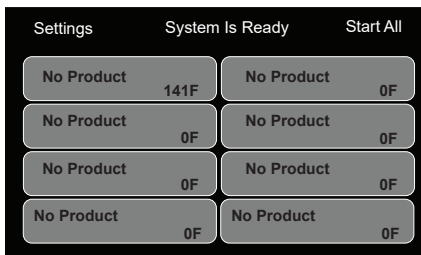


2. After initializing the system will display:



NOTE: The system will display **Wakeup Disabled** when the automatic **Wakeup** function is not enabled. When the **Wakeup** function is enabled, the screen will display 'Wakeup X:XX' where X is the set time.

3. Press and Hold the Power Button on the Control Panel to begin. The unit will display "System is Not Ready", begin to fill with water, and start the heating process. Once the unit reaches temperature the screen will display:



Programmed Steaming

1. When the Initial Warm-up is complete, the operations screen appears on the display.
2. Open the appropriate drawer and load the product to be steamed onto the steam trivet. Close the drawer securely.

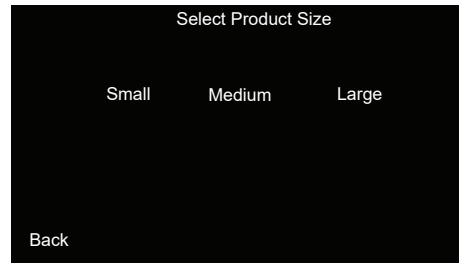
3. On the display, press the appropriate button for the drawer being used.

NOTE: All drawers can be used for holding at the same time. Steaming with five or more drawers at the same time will reduce heating performance and pan content may not reach the desired internal temperature.

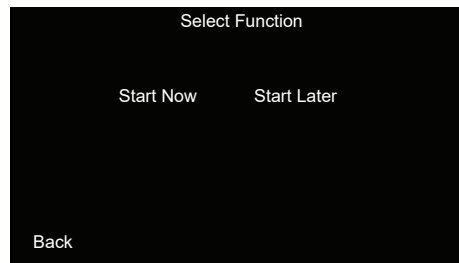
4. Select the product from the pre-loaded options.



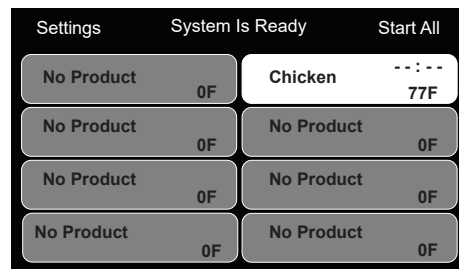
5. After selecting the product, select the product size to steam.



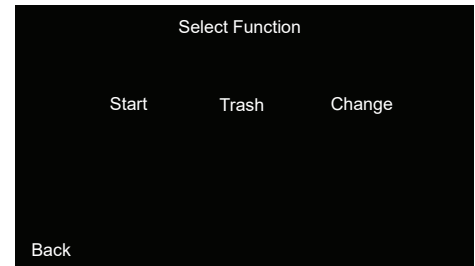
6. There are two options for steaming: Now or Later. If Now is selected the unit will return to the main screen and begin steaming.



7. If Start Later is selected the unit will return to the main screen. The newly created timer will wait for further instruction before starting. This is indicated by the --:--.



8. Tap the button for the primed timer. There are three options: Start the timer, Delete the timer (trash), or change the steaming options for the drawer.

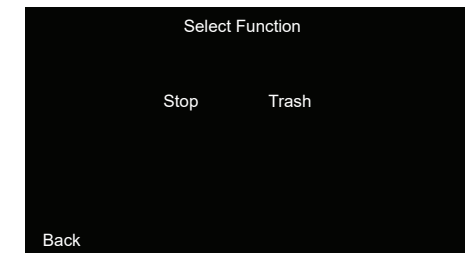


9. Drawers display three different colors and timers:

- Yellow - The drawer is **STEAMING**
- Green - The drawer is **HOLDING**
- Red - The drawer is **EXPIRED**



10. Once a drawer has finished steaming, the drawer will switch to holding. Product may be removed and used during any time while the drawer is holding.



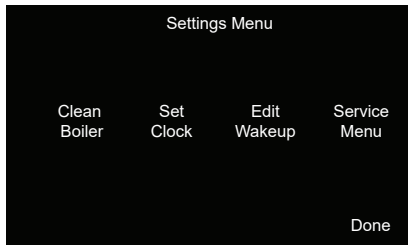
NOTE: A timer may be stopped or trashed at any time while in use. Simply tap the selected drawer and choose your option.

First In First Out (FIFO)

The Steamer uses a feature called First In First Out. FIFO helps make sure product placed into the unit first is the first product removed. If there is more than one drawer running the same product and size, the display and beeper will prompt the user to pull product from the drawer that was started earliest.

Steamer Settings

To access the Steamer Settings, press the **Settings** button on the display. This opens the **Settings** screen, shown below.



The **Settings** Screen shows three buttons, described below:

Button	Description
Edit Product	Select to access the Edit Screen for access to editing products, steaming times, and product names.
Edit Clock	Changes the date and time.
Edit Wakeup	Changes the time in which the Steamer turns on.
Clean Boiler	This option works with the Antunes RO system. Please see your RO manual for information on how to use the clean cycle.
Service	Displays information necessary for servicing/repairing the unit.

Editing Products

To Edit Products:

1. Press **Settings** to open the settings menu.
2. Press **Edit Products**.
3. Select the product you wish to edit from the available list (see below).



4. The following screen displays:



5. Select any field to edit. Anything that is changed will save automatically or press Cancel to discard any changes.

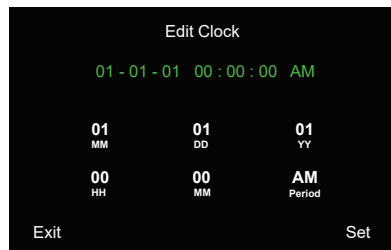


NOTE: Cook time is displayed in minutes : seconds
Hold time is displayed in hours : minutes

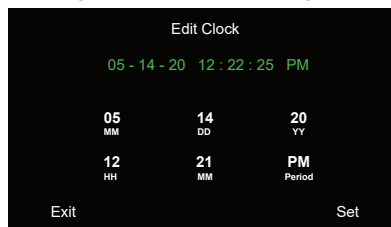
Edit Clock

To change the time and date on the Steamer:

1. Select **Edit Clock** in the Tools Screen.
2. The screen will display as shown below:



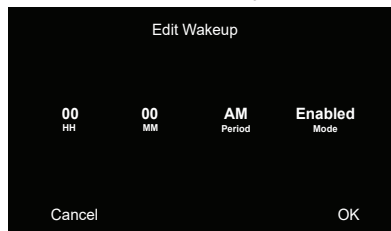
3. Tap each designated field to set the time and date. Press Set to save changes. The clock will begin ticking.



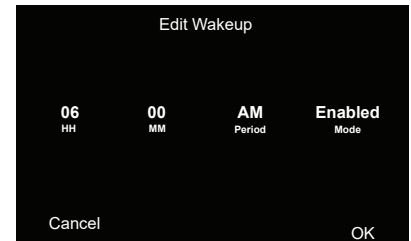
Edit Wakeup

To change the time when the Steamer turns on and Disable or Enable Wakeup Mode:

1. Select **Edit Wakeup** in the Tools Screen.
2. The screen will display as shown:



3. Select each field to change the time, AM or PM, and Disable or Enable Wakeup Mode.

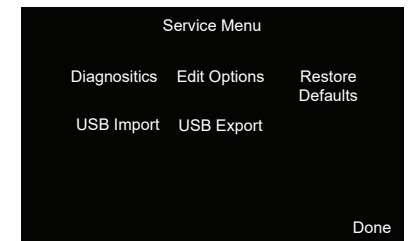


4. Press **OK** to save.

Service Menu

To enter Service menu:

1. Press **Settings** to open the settings menu.
2. Press **Service**.

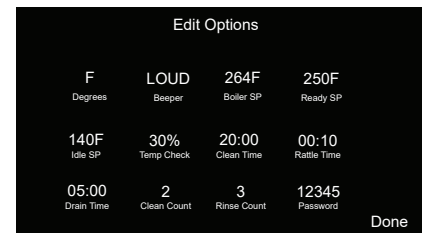


Diagnostics

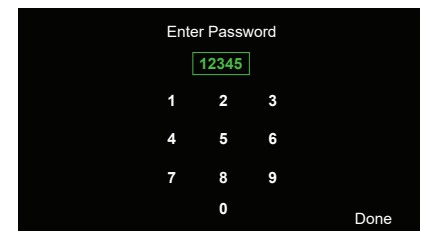
Diagnostics displays the items that the unit is constantly measuring. This cannot be edited.

Edit Options

Edit Options allows ability to adjust various system settings and set a Password.



To set a Password, select Password. The screen will be as shown below. The factory default is '12345'.



Restore Defaults

Allows system to reset to default Options, and Products to factory settings.

NOTE: Do NOT adjust set points or clean cycle times unless instructed by Antunes Technical Service.

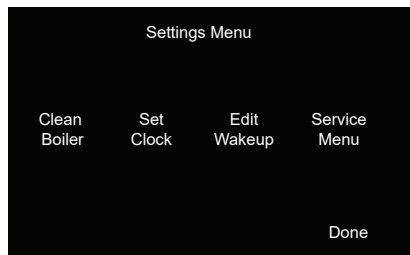
Reset to Factory Defaults

IMPORTANT

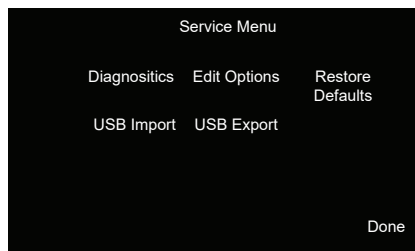
Resetting the Steam and Hold to Factor Defaults erases all edits, menu changes, and customized functions back to Factory Settings.

To reset settings to the factory defaults:

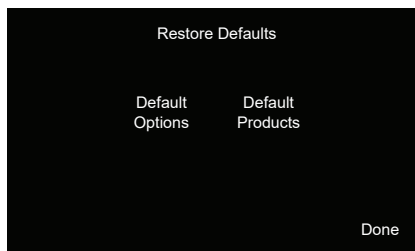
1. Press **Settings** on the display. This opens the **Settings** screen, shown below:



2. Select **Service** to open the Service Menu. Press **Restore Defaults**.



3. Restore Defaults option opens. **Default Options** and **Default Products** is shown.



4. Press either of the functions to restore to the factory defaults. The following screen appears:



5. Press **Done** to return to the Service Menu.

Maintenance

Daily

The Steam and Hold requires a minimal amount of maintenance. Daily maintenance helps keep the steamer running smoothly and free of any excess buildup that comes from daily use and wear. These steps should be completed at the end of every day to ensure that the steamer maintains optimum efficiency.

Open the drawers and remove the steam pans and steam trivets (Figure 8).

1. Remove the drip trays (Figure 8).

2. Wash, rinse, and sanitize the drip trays at the sink. Allow to air dry.
3. Remove all cavity drain screens and rinse clean of any debris (Figure 6).
4. Clean the steam drawers and the inner cavity with a clean towel dampened with sanitizer. Allow to air dry.

NOTE: Do not use a dripping wet towel. Wring the towel out before wiping the steamer.

5. Reinstall all parts (Figure 8).

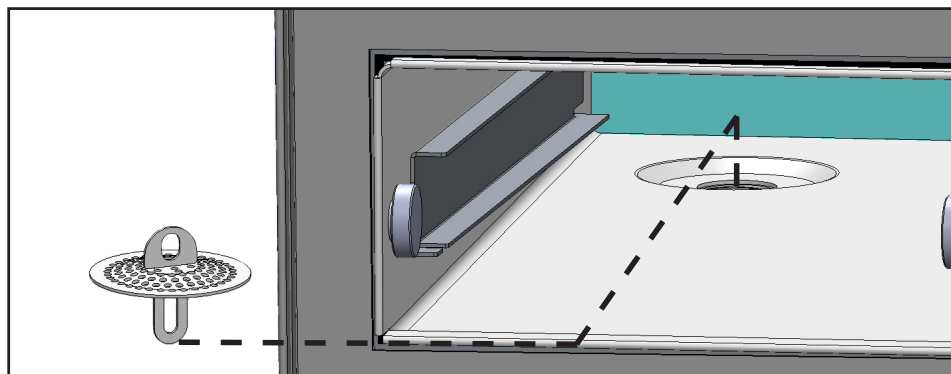


Figure 7. Cavity Drain Screen

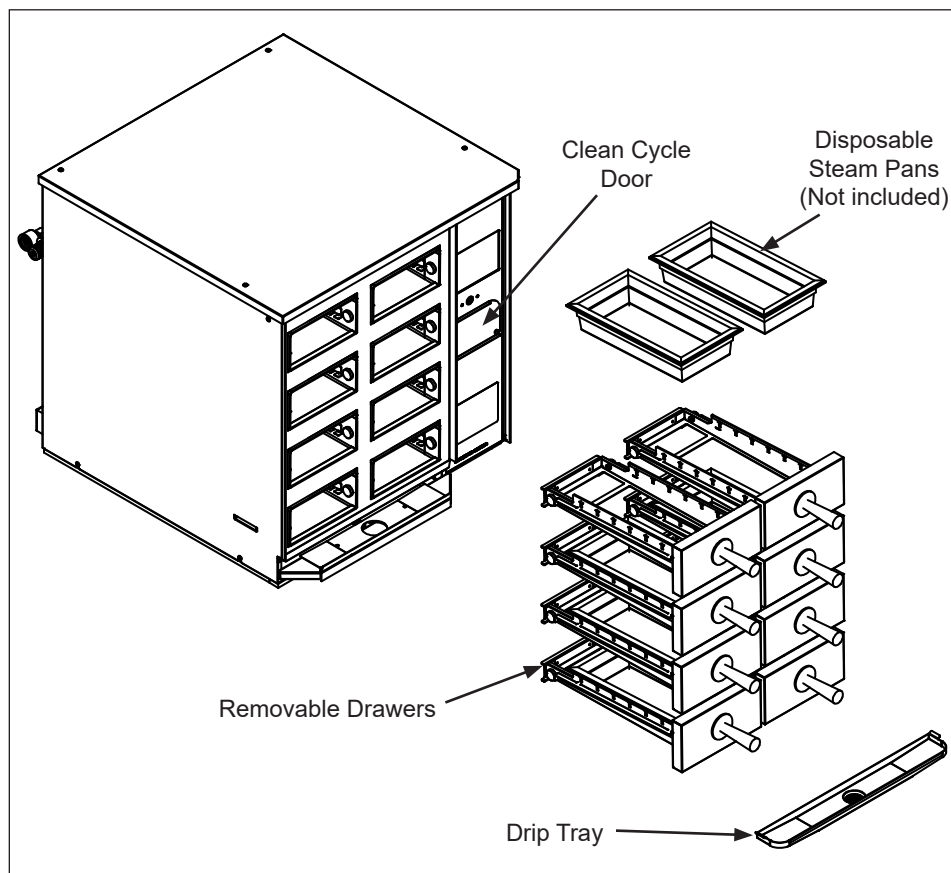


Figure 8. Steamer Drawer Components for Cleaning

Weekly

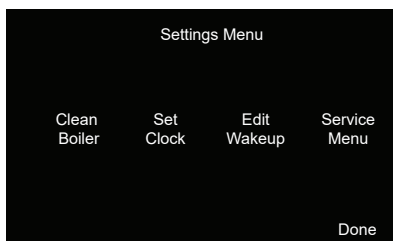
Clean Cycle Maintenance

The cleaning cycle can be accessed and performed at any time during the day.

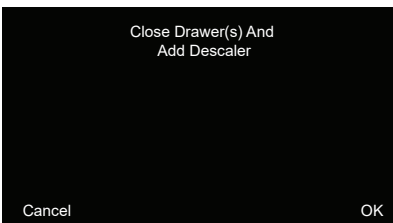
When low mineral content (low TDS) water is used with the steamer, the clean cycle should only be needed monthly. Higher mineral content water may require more frequent clean cycles.

NOTE: Failure to properly clean and de-scale boiler will cause significant changes in operation of steamer. Antunes is not responsible for any damage or complications due to negligent maintenance of steamer.

1. Select **Settings**. The Settings Menu screen opens.



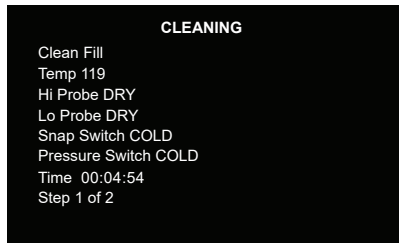
2. Select **Clean Boiler** to begin the Clean Cycle.



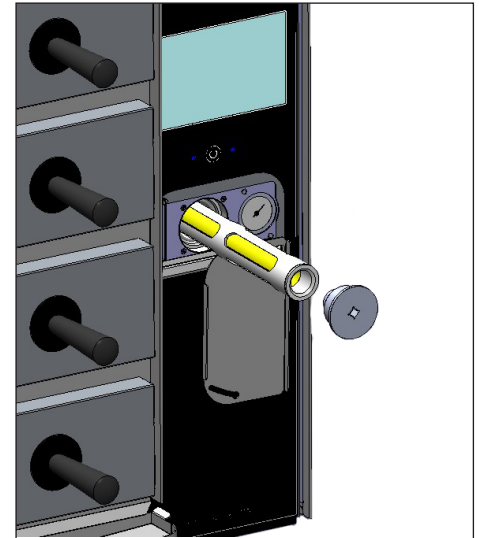
3. Remove the Cycle Key and insert it into the Cleaning Cartridge (Figure 9). Rotate cartridge counter-clockwise and remove from steamer.
4. Remove top of Cleaning Cartridge by pulling top off the plastic housing.
5. Pour 4oz of cleaning solution into the plastic housing (Figure 10).

NOTE: Use two 2oz Delimer Packets in Cleaning Cartridge per Clean Cycle.

6. Reattach top of Cleaning Cartridge.
7. Place Cleaning Cartridge back into steamer.
8. Rotate the supplied key clockwise to tighten cartridge. Steamer is now ready to perform Clean Cycle.
9. Press **OK** to begin the cleaning cycle. The following screen appears and begins the cleaning cycle.



10. When the Cleaning Cycle is complete, the following screen appears. Press **OK** to return to the Tools Menu.



Rotate the door down and remove key from pocket. Insert key into clean cycle cartridge, counter clockwise, and remove from steamer.

Remove top of cartridge by pulling it off the plastic housing.

Figure 9. Clean Cycle

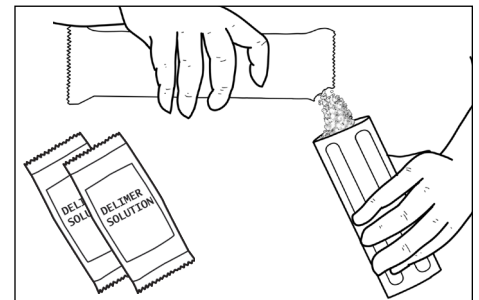


Figure 10. Pour Delimer into Cleaning Cartridge

Weekly Maintenance - Cleaning Cycle

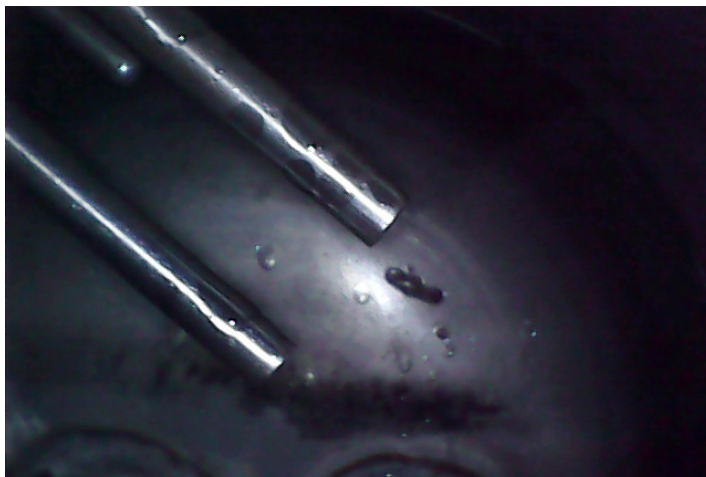
WARNING

Failure to properly follow the cleaning instructions for the unit will result in excess buildup of scale and lime as seen in the examples below. Excess buildup of scale and lime may cause damage to the unit and will void the warranty.

Scaled



Clean



Error Messages

If the steamer displays any error messages, turn the steamer off and restart it. If the error persists, contact Antunes Technical Service at 1-877-392-7854 (toll free).

WARNING

Before replacing any parts, or opening any side or rear panel from the steamer, disconnect the steamers from the electrical power supply.

CAUTION

Use of any replacement part other than those supplied by Antunes or their authorized distributors can cause injury to the operator and damage to the equipment and will void all warranties.

Error	Description
FRAM Missing	Control Board Failure
Zero Cross	
TC0 Open	Thermocouple Broken or Disconnected
TC1 Open	
FlipFlop ON	Power Switch Circuit Malfunction
FlipFlop OFF	
Bootload Fail	Software Update via USB Stick Failed
OPTION Write Failed	EEPROM Failure
MENU Write Failed	
PID Write Failer	
24V Missing	24VDC Power Supply Failed
Display Missing	Touch Screen Display Failed
Boiler Hot	Boiler Failed to Cool Down
Boiler Not Empty	Boiler Failed to Drain
Drain Timeout	
Clean Drain Timeout	Boiler Failed to Cool Down
Initial Fill Timeout	Boiler Initial Water Fill Failed
Clean Fill Timeout	Boiler Clean Cycle Water Fill Failed
Refill Timeout	Boiler Normal Operation Water Fill Failed

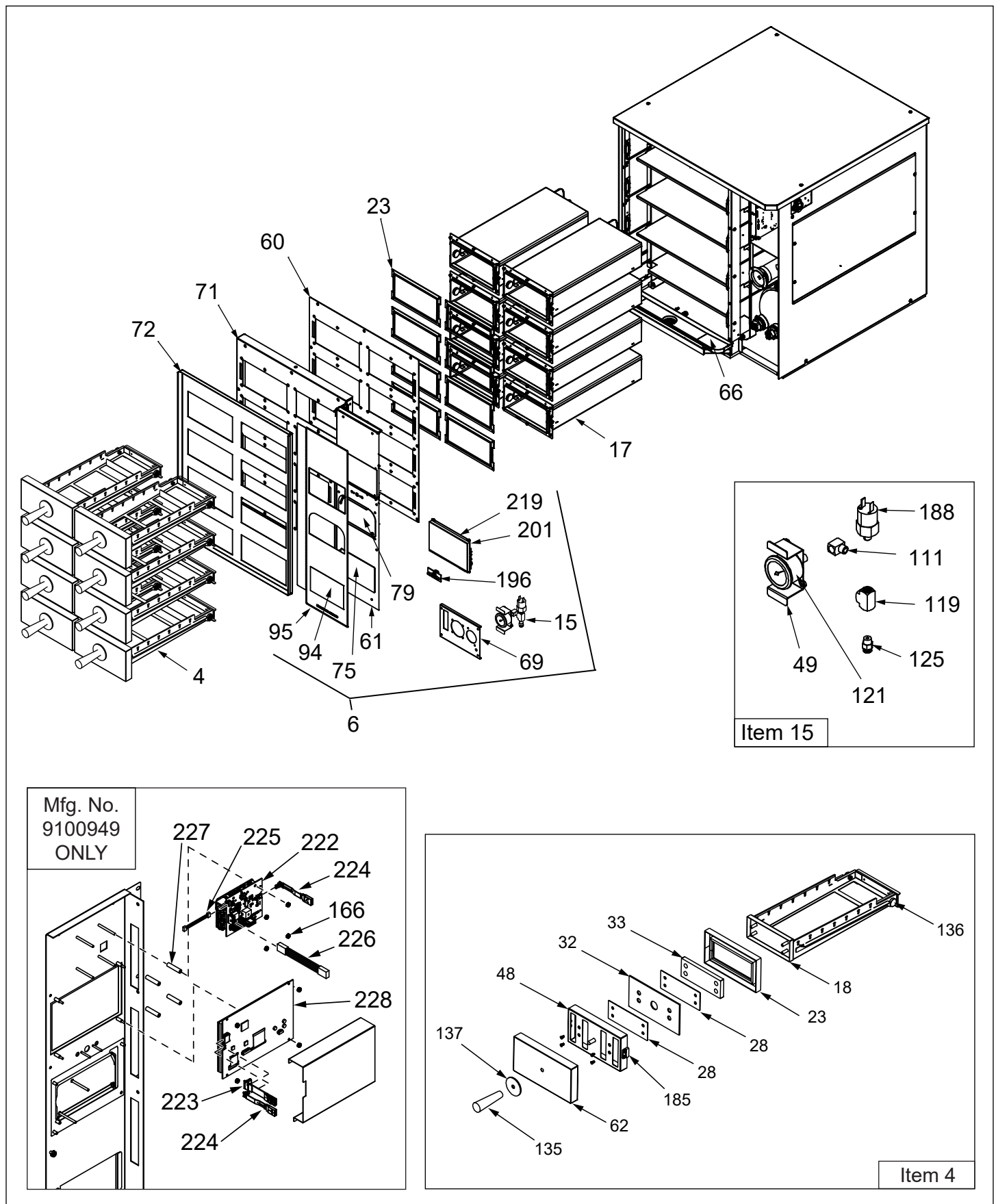
Troubleshooting

Your Antunes Steamer is designed to operate smoothly and efficiently if properly maintained. However, the following is a list of checks or activities to make in the event of a problem:

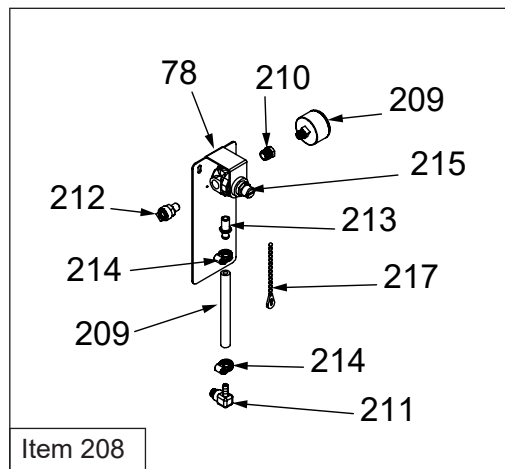
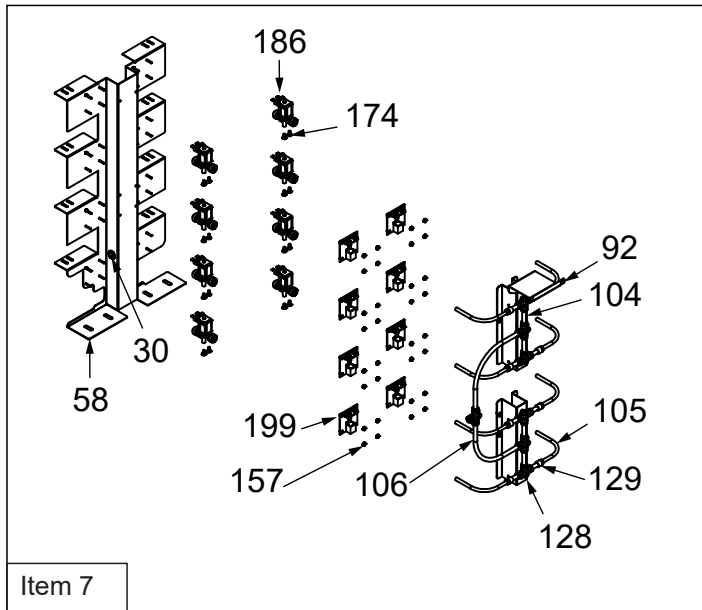
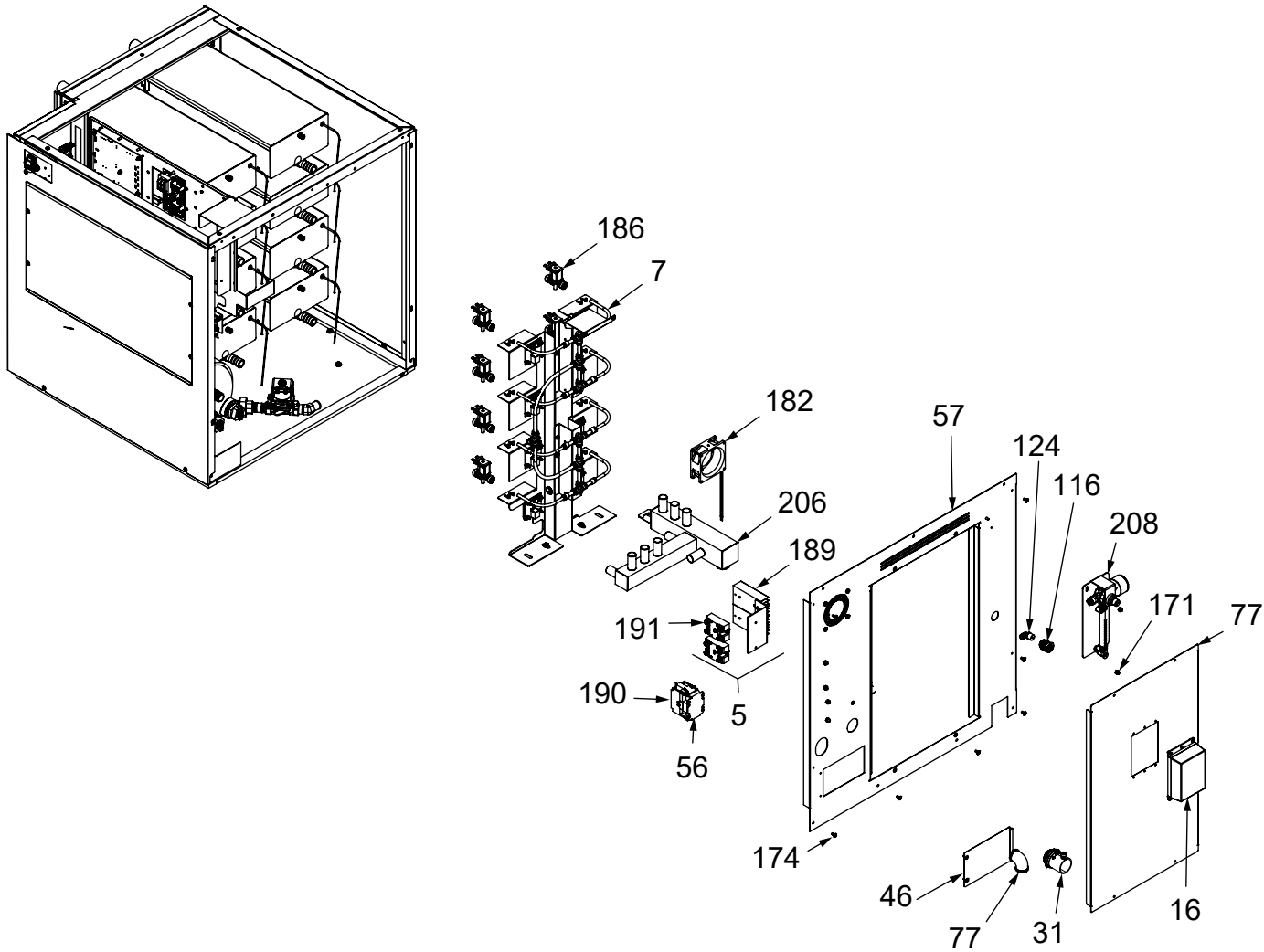
Problem	Possible Cause	Who Services Steamer	Corrective Action
Excessive steam escaping from the cavity	Cavity Drain Screen is Plugged	User	Remove both drawers of steamer and clean Drain Screens.
	Drain Hose is kinked or 2" air gap is blocked	User	Make sure the drain hose are not kinked and a 2" air gap is maintained to the floor drain or drain box.
Excessive water is pouring out of the cavity	Water Probes Scaled	User	Run one or more clean cycles. Check the water treatment system.
	Cavity Drain Screen is Plugged	User	Remove both drawers of steamer and clean Drain Screens.
	Drain Hose is kinked or 2" air gap is blocked	User	Make sure the drain hose are not kinked and a 2" air gap is maintained to the floor drain or drain box.
	Water fill Solenoids are clogged	Auth Service Rep Only	Check water fill solenoids for debris.
	Steam Solenoid Valves are clogged.	Auth Service Rep Only	Check Steam Solenoids Valves for debris and continuity (N.C.) for normal operation.
Steamer Does Not Heat	Steamer is unplugged or circuit breaker is tripped	User	Make sure steamer is plugged in and circuit breaker has not tripped.
	Cavity Drawer(s) are not fully inserted.	User	Make sure both cavity drawers are pushed in all the way.
	Loose component connections	Auth Service Rep Only	Check operation of Pressure Switch, Control Board, Contactor, and Cartridge Heaters for continuity and/or loose connections.
Steamer fails to reach proper temperature	GUI Settings have changed	User	Adjust GUI Control Settings and set Boiler Temperature (BT) to 268 deg °F. See settings/ operation section in this manual on page 17.
	Voltage issue on electrical components	Auth Service Rep Only	Check for voltage or open circuit on control board, contactor, heaters, pressure switch, or GUI control Panel.
Steamer is continually draining and doesn't build pressure or temperature	System buildup or blockage.	User	Turn steamer off and run a clean cycle. Allow steamer to complete the entire clean cycle – See preventative maintenance section of this manual on page 18.
	Drain Valve malfunction/failure.	Auth Service Rep Only	Clean the drain valve seat or replace drain valve with the steamer powered down. Once powered up, run a clean cycle to ensure trouble free operation.
Steam is escaping from the rear panel of the steamer	Internal Component Failure	Auth Service Rep Only	Shut down and unplug the unit. Call Authorized Service Rep.
Water is escaping from rear of steamer during initial operation	Water Inlet Hose has connection problem	User	Check inlet water feed hose to steamer. Reconnect if needed and/or replace.
	Water level probe scaled up	User	Run a cleaning cycle.
System Error Displayed on GUI	System Error - Refer to Error Messages on Next Page	User	Turn steamer OFF and then back ON. If error persists, contact Authorized Service Rep

[illegible]

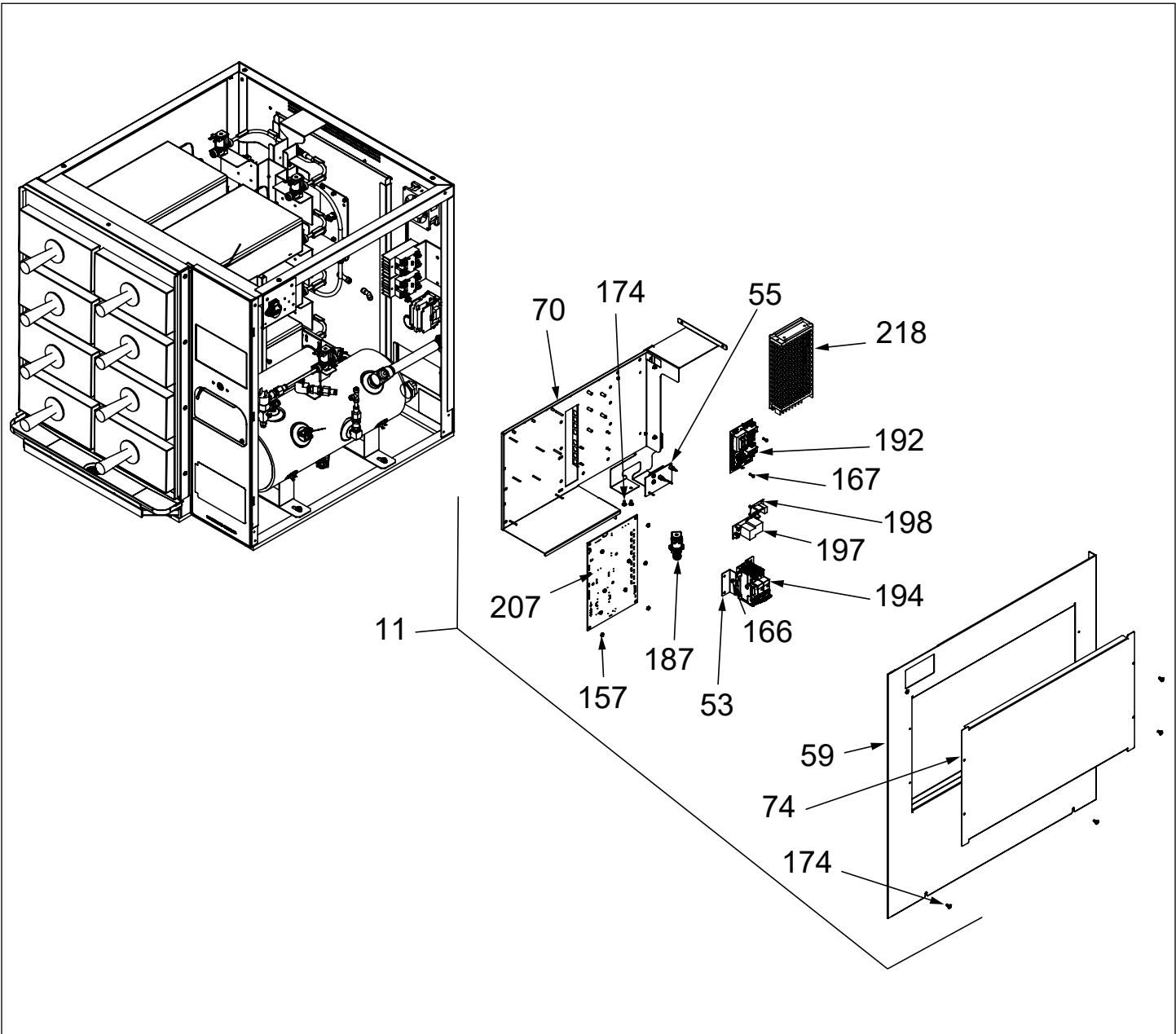
Exploded Diagram #1



Exploded Diagram #2



Exploded Diagram #3



Exploded Diagram #4

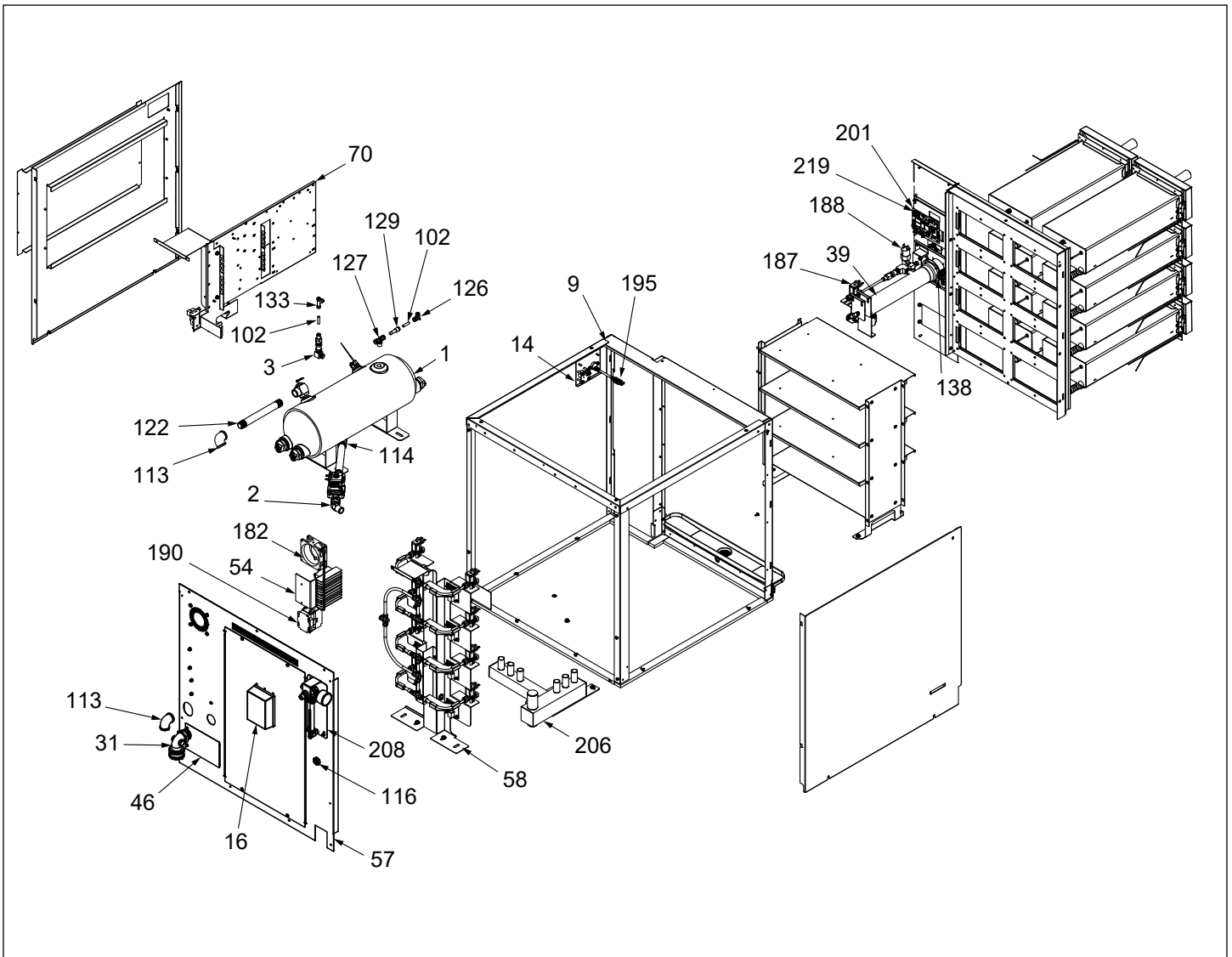


Photo Diagram

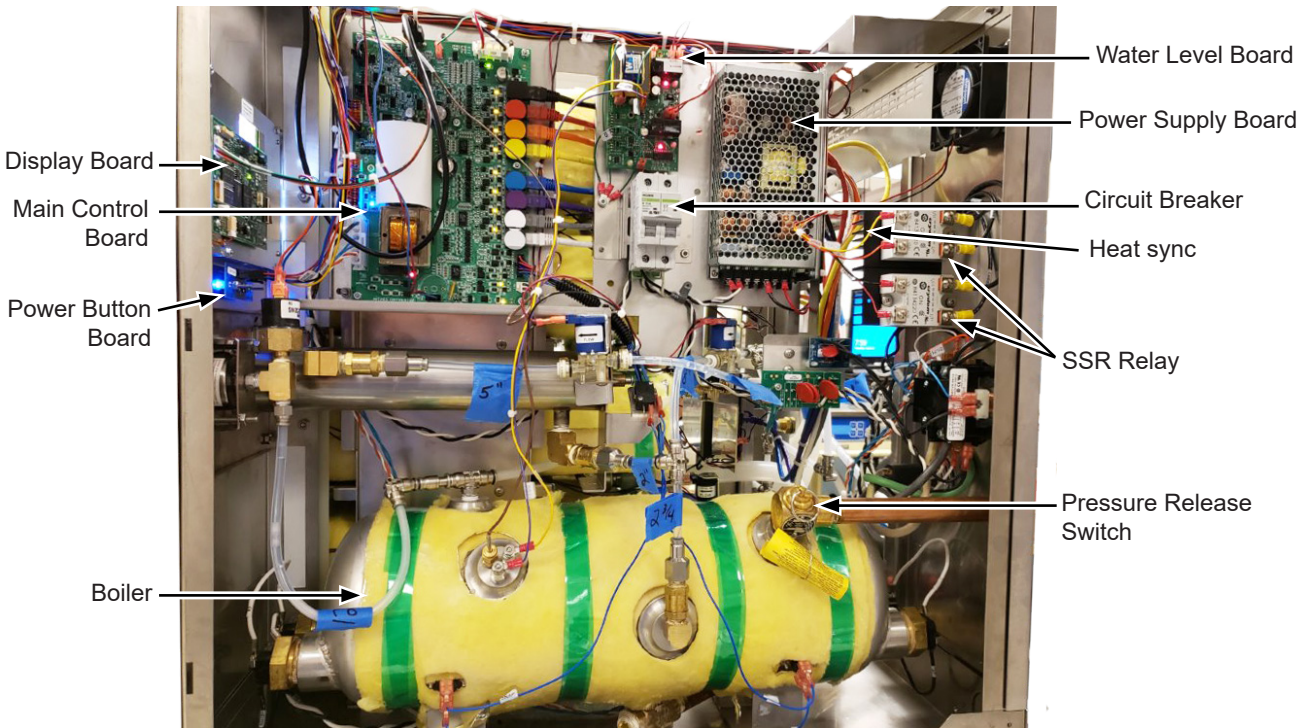


Figure 11. Interior Side Panel View

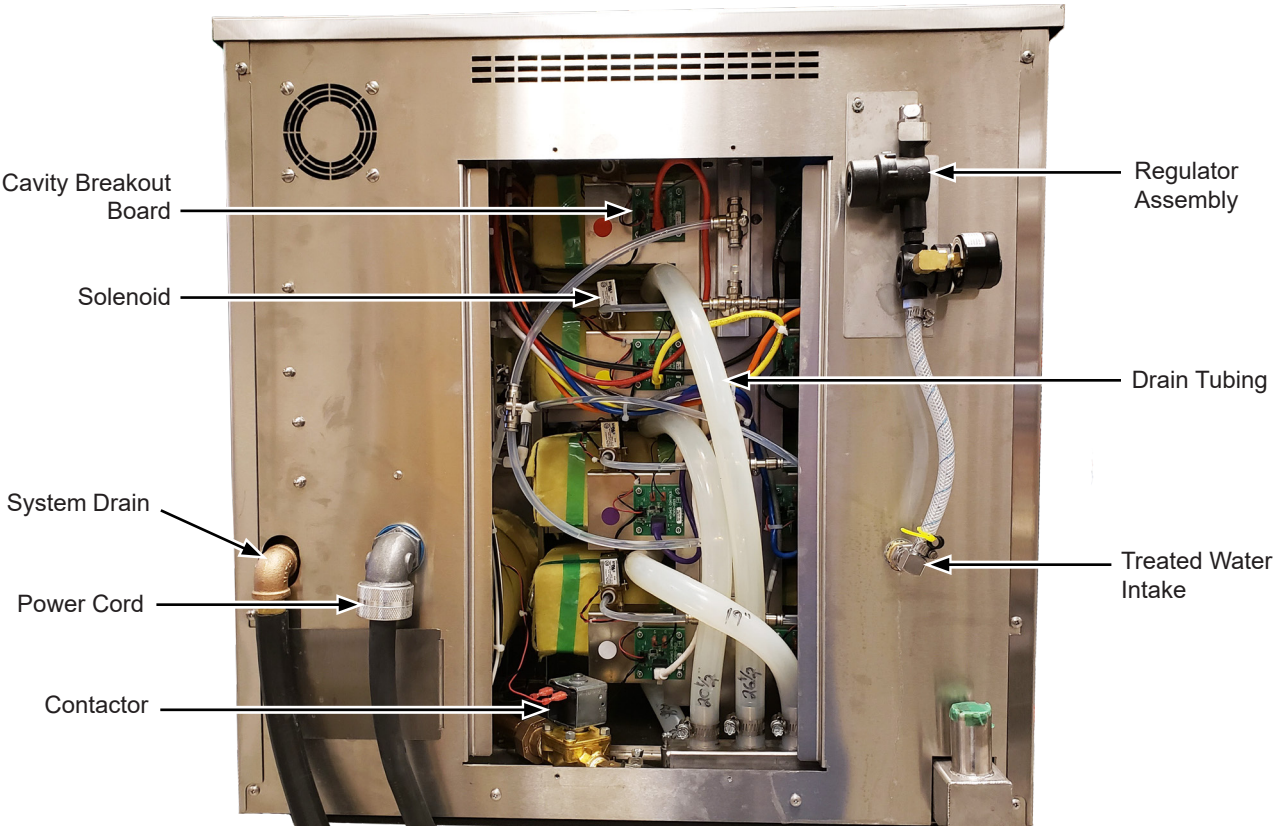


Figure 12. Rear Access Panel View

Replacement Parts

Parts List

(See Exploded Views for more information)

NOTICE

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

Item No.	Part #	Description	Qty.
1	0014106	Boiler Assembly	1
2	0014153	Drain Pipe Assembly	1
3	0014154	Fill Valve Piping Assy	1
4	0014162	Tray Assy	8
5	0014196	SSR Assy	1
6	0014243	Control Panel Assy	1
7	0014434	Control Tower Assy	1
8	0014435	Sensor Brkt Mt Assy	8
9	0014439	Frame Weldment	1
10	0014441	Front Access Cover Assy	1
11	0014443	Ele Panel Assy	1
12	0014481	Clean Cycle Module Complete Assy	1
13	0014497	Back Panel Assy	1
14	0014503	Buzzer Assy	1
15	0014580	Pressure Switch Assy	1
16	0014601	lot Box Assy	1
17	0014147	Cavity Assy	8
18	0024463	Large Tray Frame Weldment	8
23	0209302	Drawer Gasket 8D	8
30	0400119	Bushing, Shorty 5/8	2
31	0400649	Connector, 3/4 Conduit	1
34	0508228	Bracket, Clean Cycle Support	1
35	0508229	Actuator, Clean Cycle Plunger	1
36	0508230	Bushing, Clean Cycle Bracket	1
37	0508231	Frame, Clean Cycle Front	1
38	0508232	Cap, Clean Cycle Threaded Outer	1
39	0508233	Housing, Tube Clean Cycle	1
40	0508236	Tube, Internal Clean Cycle Delimer Cartridge	1
41	0508237	Adapter, Clean Cycle Internal Cartridge Cap	1
42	0508238	Screen, Deliming Cartridge	1
43	0508239	Adapter, Closed End Clean Cycle Cartridge	1
44	0509885	Support Angle	6
45	0509888	Cubby Bottom Lg	8
46	0509912	Cover, Heating Element 3 Pan Gen. Market	1
48	0510101	Front Plate	8
49	0510386	Braket Gauge	1
53	0510849	Circuit Breaker Bracket	1
54	0510883	SSR Mt Bracket	1
55	0510884	Snub And Varistor Mt Plate	1
56	0510885	Contacto Mt Plt	1
57	0510967	Back Panel Full	1
58	0510970	Valve Stand	1

Item No.	Part #	Description	Qty.
59	0510972	Side Pane Rh	1
60	0510973	Cubby Front Brace	1
61	0510978	Control Panel	1
62	0510979	Front Plate	8
66	7002357	Drip Pan Kit	1
69	0511265	Clean Cycle Mt Brkt	1
70	0511272	Electrical Mount Bracket	1
71	0511278	Front Cover Panel	1
72	0511284	Front Cover Panel Os	1
74	0511289	Side Ele Panel	1
75	0511290	Front Access Cover	1
76	0511357	Bracket, Clean Cycle Support	2
77	0511360	Back Access Door	1
78	0511361	Bracket, Mounting	1
79	0511387	Clean Cycle Door	1
80	0511407	Buzzer Bracket	1
85	0511634	Rail Lh	8
86	0511635	Rail Rh	8
87	0511639	Tray Frame 8D	8
88	0511640	Stop Bracket	8
92	0511666	Top Fitting Support	1
94	1002835	Front Access Label	1
95	1002838	Label, Control Panel 8D	1
102	2000595	Tube, 1/4Od X 1Lg	2
104	2000599	Tube, 5/16Od X 2Lg Steam	4
105	2000607	Tube, Elbow	8
106	2000609	Tubing, .312 Elbow	2
108	2000613	Tubing 1/4Od X 4"Lg	1
111	2060125	Elbow90 Deg, 1/8 Npt X 1/8 Nptf	1
112	2060136	Valve, Check 1/4 Nptm	3
113	2060141	Elbow, 90 Deg 1/2 Npt Brass	1
114	2060143	Tee, 1/2 Npt F X M X F Brass	1
115	2060144	Plug, Pipe 1/2 Npt Brass McMaster 50785K115"	1
116	2060151	Coupling, Bulkhead Panel Mount 1/4 Nptf	1
117	2060158	Elbow, 90 Degree Brass 1/4 Npt	2
118	2060168	Union, Straight Brass 1/2 Npt	1
119	2060172	Tee, 1/8 Npt Machined Brass	1
121	2060179	Gauge, Pressure 1/8 Nptm Panel Mount	1
122	2060206	Pipe Nipple 7" 1/2Npt Brass	2
123	2070142	1/4 Tube X 1/4Npt Female	1
124	2070143	Elbow, 1/4Npt X 1/4Hose Sst	1
125	2070147	1/4 Tube X 1/8Npt Straight Sst	1
126	2070148	Elbow, 1/4Tube X 1/4 Tube	1
127	2070175	Tee, 5/16 Tube X 1/4Nptm	1
128	2070177	Tee, 5/16 Tube Sst	7
129	2070178	Reducer, 5/16 Tube X 1/4 Tube Ss	9
130	2070179	Fitting, 1/4Tube X 1/8Nptf Ssta	2
131	2070181	Barb Fitting 1/2Npt X .75 Hose	8
132	2070183	Fitting 45° 3/4Hose X 1/2Npt	1
133	2080149	Fitting, Tee Push To Connect	2
135	2100107	Handle, 3/8-16 Insert	8
136	2100195	Bearing .90 Dia X .25Thk	32
137	2100432	Heat Shield Disk	8

Replacement Parts Continued

Item No.	Part #	Description	Qty.
138	2110223	Key	1
139	2120174	Spacer, #10, 5/15 Od X 3/16 Lg	1
140	2120249	Spacer, .115 Id X .25 Od .062 , Nylon	8
141	2120273	Standoff, Pem - Bsos-632-16	5
142	2120302	Round Spacer, .115 Id X .192 Od X 3/4"H	4
143	2120378	Spacer, #4 X.18Od X.13Lg Ss	1
144	2120379	Spacer, #4X,5Lg .18Od Ss	4
145	2160219	Fitting, Pipe 1/4 Npt Clean Cycle Feed -Welded	1
146	2160220	Fitting, Pipe 1/4 Npt Drain Welded	1
152	2190178	Nipple Pipe, 1/8" Npt	1
153	3010112	Screw, Weld 3/8-16 S/S	8
154	3020109	Rivet, 1/8 Blind	1
155	3020136	#2-56 Ss Hex Nut	2
156	3020137	Screw, #2-56 X 7/8" Lg 18-8 S.S. Pan Hd Phillips	2
157	3040105	Nut, Hex 'Keps' #4-40 Zinc	55
158	3040114	Scr, Mach. #4-40 X 1/4"	4
159	3040123	4-40 X .38 Lg Pan Hd Phillips	6
160	3040132	4-40 Flat Head Soc. Head X .312 Lg	16
161	3040141	Screw Flat Hd #4-40 X 1/4 18-8 S.S. 82 Deg Undercut	4
162	3040155	4-40 X 1 1/8" Pan Hd, Phillips Screw	4
163	3040163	Nut, 4-40 Keps	4
164	3040173	Screw, 4-40 X 1/4Lg Sst	16
165	3040175	Nut, 4-40 Keps 18-8 Sst	32
166	3060130	Nut,Hex""Keps"" #06-32 Steel; Zinc Plated	10
167	3060136	Screw, Mach #6-32 X 3/8"	5
168	3080104	8-32 X 3/8 Lg S.S. Truss Head	1
169	3080124	8-32 X .5 Lg Round Hd. One-Way	1
170	3080143	Nut, Hex 'Keps' #8-32	13
171	3080145	Nut, Hex Acorn #08-32 Low Crown	6
172	3080186	Washer, #8 Split Lock	16
173	3080199	Nut, Hex Keps #8-32 S/S	18
174	3080203	Screw #8-32 X 3/8 With Int. Tooth Washer	88
175	3080401	Standoff, #8-32 X 7/8Lg .28Od Sst	32
176	3080402	Screw, #8-32 X .38L Fh W/Ring	60
177	3100123	Screw,Mach #10-24 X 1/2"	1
178	3100157	Washer, Flat #10	17
179	3100178	Screw, Hex Bolt #10-32 X 3/8"	4
180	3100308	Weld Nut, #10-32	8
181	3250302	1/4-20 Pem Nut Sst	32
182	4000216	Fan	1
183	4010254	Micro-Switch	2
184	4010260	Switch, Reed	8
185	4010261	Actuator, Reed Switch	16
186	4040207	Solenoid Valve .060 High Temp	8
187	4040239	Solenoid Valve .088 Orifice	2
188	4040266	Low Pressure Switch, Fixed 28 Psi	1

Item No.	Part #	Description	Qty.
189	4050180	Heat Sink	2
190	4050236	Contact, 2 Pole Normally Open	1
191	4051010	Relay, Random Phase, Solid State	2
192	4051059	Board Water Level	1
193	4058132	Probe, Thermistor	8
194	4058191	Circuit Breaker	1
195	4060487	Usb	1
196	4070088	PCB, Power Switch W/Leds	1
197	4070221	Varistor Board	1
198	4070198	Snubber Board	1
199	4070387	PCB, Valve	8
200	4070422	PCB Buzzer	1
201	4070430	PCB, Capacitive Display	1
204	2070165	Elbow 1/2 Npt Sst	8
206	0024386	Drain Box 3 Pan Steamer	1
207	4070426	Main PCB	1
208	7002130	Regulator Assy	1
209	2030144	Tubing -C, 1/4" I.D. Pvc Brd	1
210	2060159	Bushing, Hex Brass1/4 Nptm X 1/8 Nptf	1
211	2080105	Elbow, Qik Disc (Sov) - 1/4"	1
212	2080118	Quick Disconnect-1/4" Npt	1
213	2080134	Quick Disconnect-Male 1/4" Npt Brass	1
214	2110104	Clamp, Worm-Drive (S/S)	2
215	2170208	Regulator, Water Pressure	1
216	2170209	Pressure Gauge	1
217	4060118	Wire, Tie	1
218	4060578	Power Supply	1
219	4070463	PCB, Resistive Display	1
220	7002428	Large Tray Assembly Kit, 8 Drawers	1
221	7002429	Large Tray Assembly Kit, Single Drawer	1
222	4070469	ASY-PCB, Raspberry Pi Display Adapter Assembly (Mfg. No. 9100949 Only)	1
223	0701143	Cable Assy, HDMI (Mfg. No. 9100949 Only)	1
224	0701144	Cable Assy, Micro USB (Mfg. No. 9100949 Only)	2
225	0701142	Power Cable, Display Board (Mfg. No. 9100949 Only)	1
226	0701153	Connector Cable (Mfg. No. 9100949 Only)	1
227	3060226	Standoff, 1/4" OD X 1 1/8" LG, Nylon (Mfg. No. 9100949 Only)	4
228	MOD02-0020	MOD, LCD, 7" Cap Touch HDMI, USB, Noritake (Mfg. No. 9100949 Only)	1

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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 electrical and mechanical defects for a period of one (1) year from date of purchase under normal use and service, and when installed in accordance with manufacturer's recommendations. To insure continued operation of the units, follow the maintenance procedures outlined in the Owner's Manual. During the first 12 months, electromechanical parts, non-overtime labor, and travel expenses up to 2 hours (100 miles/160 km), round trip from the nearest Authorized Service Center are covered.

1. This warranty does not cover cost of installation, defects caused by improper storage or handling prior to placing of the Equipment. This warranty does not cover 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. This warranty does not cover consumable/wear items. This warranty does not cover damage to the Load Cell or Load Cell Assembly due to abuse, misuse, dropping of unit/shock loads or exceeding maximum weight capacity (4 lbs). This warranty does not cover water contamination problems such as foreign material in water lines or inside solenoid valves. It does not cover water pressure problems or failures resulting from improper/incorrect voltage supply. This warranty does not cover Travel Time & Mileage in excess of 2 hours (100 miles/160 km) round trip from the nearest authorized service agency.
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 receipt. Damage should be reported to the carrier. This damage is not covered under this warranty.
4. Warranty charges do not include freight or foreign, excise, municipal or other sales or use taxes. All such freight and taxes are the responsibility of the purchaser.
5. 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.

The warranty does not extend to:

- Damages caused in shipment
- Installation of electrical service
- Installation, calibration, or adjustment
- Normal maintenance outlined in this manual
- Consumable parts such as egg rings, gaskets, rubber feet, labels, O-rings, light bulbs, etc.
- Malfunction resulting from improper service or maintenance
- Damage caused by improper installation, improper use, abuse, or careless handling
- Damage from moisture coming in contact with electrical components
- Damage from tampering with, removal of, or changing preset controls or safety devices
- Damage caused by parts or components not provided by Antunes
- Failure to meet water quality requirements



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