

Cheese Melter

Model RS-250

Owner's Manual

Manufacturing Numbers:

9100618



CHEESE MELTER

TABLE OF CONTENTS

Owner Information	2	Programming	10
General	2	Factory Settings.....	10
Warranty Information	2	General Information.....	10
Service/Technical Assistance	3	Programming the RS-250.....	10
Important Safety Information	4	Maintenance.....	14
Specifications	6	Maintenance Schedule	14
Electrical Ratings.....	6	Daily Cleaning	14
Electrical Cord & Plug Configurations	6	Daily Steam Generator Maintenance	16
Dimensions	6	Checking and Cleaning Water Strainer	18
Installation.....	7	Flushing and Cleaning Water Solenoid	18
Unpacking.....	7	Diagnostics	19
Equipment Setup	8	Troubleshooting	21
Operation.....	9	Wiring Diagram	24
Operating Instructions	9	Replacement Parts	25
		Limited Warranty	Back Cover

OWNER INFORMATION

General

The Cheese Melter produces steam using ordinary tap water for quick heating of food items. Simple push-button action delivers an adjustable impulse of steam. Because the amount of steam is consistent, it removes the guesswork and produces a uniform finished product from one operator to the next.

This manual provides the safety, installation, operating, and basic troubleshooting procedures for the Cheese Melter. We recommend that all information contained in this manual be read prior to installing and operating the unit.

Your Cheese Melter is manufactured from the finest materials available and is assembled to Antunes' strict quality standards. This unit 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 unit 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 a result of improper use.
- Installation of electrical service.
- Normal maintenance as outlined in this manual.
- Malfunction resulting from improper maintenance.
- Damage caused by abuse or careless handling.
- Damage from moisture into electrical components
- Damage from tampering with, removal of, or changing any preset control or safety device.

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

OWNER INFORMATION (continued)**Service/Technical Assistance**

If you experience any problems with the installation or operation of your unit, contact your local Antunes Authorized Service Agency. They can be found in the service agency directory packaged with the equipment.

Fill in the information below and have it handy when calling your Authorized Service Agency for assistance. The serial number is on the specification plate located on the rear of the unit.

Purchased From: _____

Date of Purchase: _____

Model No.: _____

Serial No.: _____

Mfg. No.: _____

Refer to the service agency directory and fill in the information below:

Authorized Service Agency

Name: _____

Phone No.: _____

Address: _____

Use only genuine Antunes replacement parts in this unit. Use of replacement parts other than those supplied by the manufacturer will void the warranty. Your Authorized Service Agency has been factory trained and has a complete supply of parts for this unit.

You may also contact the factory at 1-630-784-1000 if you have trouble locating your local Authorized Service Agency.

CHEESE MELTER

IMPORTANT SAFETY INFORMATION

Throughout this manual, you will find the following safety words and symbols that signify important safety issues with regards to operating or maintaining the unit.



WARNING

GENERAL WARNING. Indicates information important to the proper operation of the equipment. Failure to observe may result in damage to the equipment and/or severe bodily injury or death.



WARNING

ELECTRICAL WARNING. Indicates information relating to possible shock hazard. Failure to observe may result in damage to the equipment and/or severe bodily injury or death.



CAUTION

GENERAL CAUTION. Indicates information important to the proper operation of the equipment. Failure to observe may result in damage to the equipment.



WARNING

HOT SURFACE WARNING. Indicates information important to the handling of equipment and parts. Failure to observe may result in personal injury.

In addition to the warnings and cautions in this manual, use the following guidelines for safe operation of the unit.

- Read all instructions before using equipment.
- For your safety, the equipment is furnished with a properly grounded cord connector. Do NOT attempt to defeat the grounded connector.
- 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 the nearest Antunes Authorized Service Agency for adjustment or repair.
- Do NOT block or cover any openings on the unit.
- Do NOT immerse cord or plug in water.
- Keep cord away from heated surfaces.
- Do NOT allow cord to hang over edge of table or counter.

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

- Turn the unit off, disconnect the power source, and allow unit to cool down before performing any service or maintenance on the unit.
- The procedures in this manual may include the use of chemical products. These chemical products will be highlighted with bold face letters followed by the abbreviated HCS (Hazard Communication Standard). See Hazard Communication Standard manual for the appropriate Material Safety Data Sheets (MSDS).
- The equipment 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.
- All electrical connections must be in accordance with local electrical codes and any other applicable codes.

IMPORTANT SAFETY INFORMATION (continued)

- WARNING ELECTRICAL SHOCK HAZARD. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR DEATH.
 - Electrical ground is required on this appliance.
 - Do NOT modify the power supply cord plug. If it does not fit the outlet, have a proper outlet installed by a qualified electrician.
 - Do NOT use an extension cord with this appliance.
 - Check with a qualified electrician if you are unsure if the appliance is properly grounded.
- 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).
- Water pressure must not exceed 20 psi (1.4 kg/cm² or 138 kPa). Higher pressure may cause poor performance or flooding. To reduce water pressure, install a Water Pressure Regulator and set to 20 psi (1.4 kg/cm² or 138 kPa). To order a Water Pressure Regulator from your Authorized Service Agency, order Antunes part no. 7000235.
- Do NOT clean this appliance with a water jet.
- Do NOT use a sanitizing solution or abrasive materials. The use of these may cause damage to the stainless steel finish.
- To ensure proper steaming characteristics, some mineral deposits must be present on generator casting. If, during cleaning, the casting does become free of mineral deposits, add plain tap water to casting and allow it boil off. This will ensure proper steaming characteristics by creating a thin layer of mineral deposits on the casting.
- Chlorides or phosphates in cleansing agents (such as bleach, sanitizers, degreasers, or detergents) could cause permanent damage to stainless steel equipment. The damage is usually in the form of discoloration, dulling of metal surface finish, pits, voids, holes, or cracks. This damage is permanent and not covered by warranty:

The following tips are recommended for maintenance of your stainless steel equipment,

- Always use soft, damp cloth for cleaning, rinse with clear water and wipe dry. When required, always rub in direction of metal polish lines.
- Routine cleaning should be done daily using soap, ammonia detergent, and water.
- Stains and spots should be removed using a vinegar solution as required.
- Finger marks and smears should be rubbed off using soap and water.
- Hard water spots should be removed using a vinegar solution.

IMPORTANT

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.

CHEESE MELTER

SPECIFICATIONS

Electrical Ratings

Model & Mfg. No.	Voltage	Watts	Amps	Hertz
RS-250 9100618	208	3300	15.9	50/60

⚠ CAUTION ⚠

All electrical connections must be in accordance with local electrical codes and any other applicable codes.

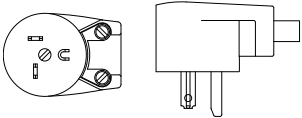
⚠ WARNING ⚠

ELECTRICAL SHOCK HAZARD.

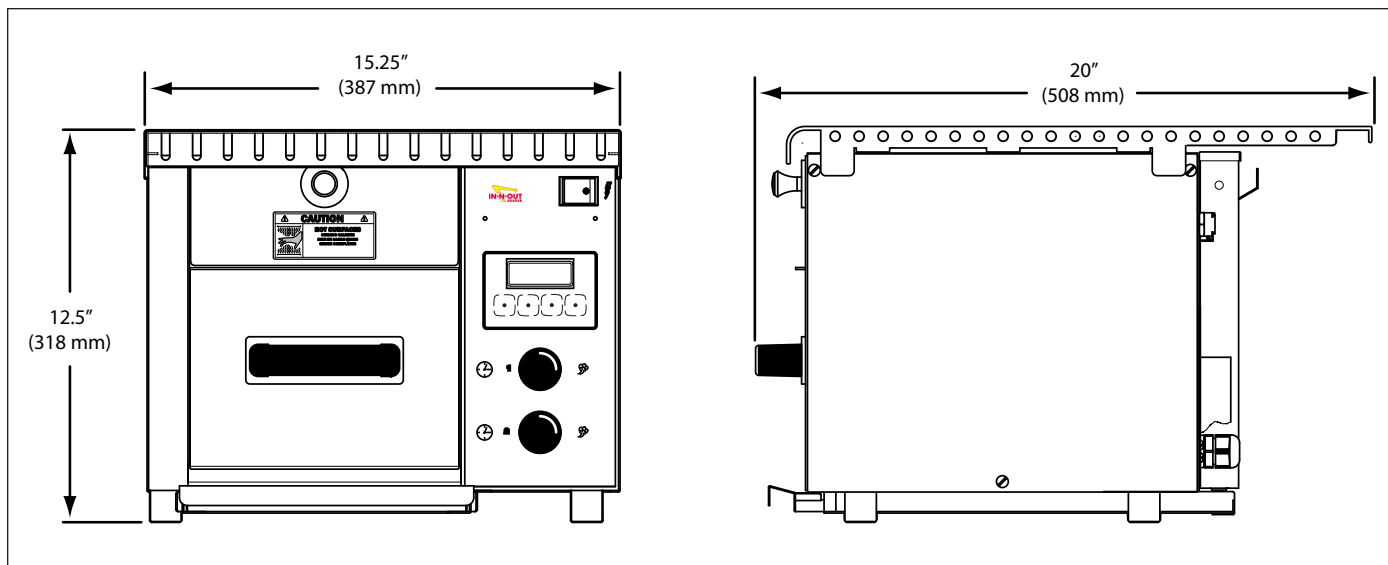
FAILURE TO FOLLOW THE INSTRUCTIONS IN THIS MANUAL COULD RESULT IN SERIOUS INJURY OR DEATH.

- Electrical ground is required on this appliance.
- Do NOT modify the power supply cord plug. If it does not fit the outlet, have a proper outlet installed by a qualified electrician.
- Do NOT use an extension cord with this appliance.
- Check with a qualified electrician if you are unsure if the appliance is properly grounded.

Electrical Cord & Plug Configurations

Model & Mfg. No.	Description	Configuration
RS-250 9100618	NEMA 6-20P, 20 Amp., 250 VAC, Right Angle Plug	

Dimensions



INSTALLATION

Unpacking

1. Remove unit and all packing materials from shipping carton.
2. Open the box. It should contain the following items:
 - Cheese Melter
 - Water Drip Tray
 - Water Hookup Kit
 - Information Packet
3. Remove information packet.
4. Remove all packing materials and protective coverings from the unit.
5. Wash all removable parts (Spatula and Water Drip Tray) in soap and water. Rinse with clean hot water and allow to air dry.
6. Wipe all surfaces of the unit with a hot damp cloth.

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

7. Re-install all removed parts.

⚠ CAUTION ⚠

All electrical connections must be in accordance with local electrical codes and any other applicable codes.

⚠ WARNING ⚠

ELECTRICAL SHOCK HAZARD.

FAILURE TO FOLLOW THE INSTRUCTIONS IN THIS MANUAL COULD RESULT IN SERIOUS INJURY OR DEATH.

- Electrical ground is required on this appliance.
- Do NOT modify the power supply cord plug. If it does not fit the outlet, have a proper outlet installed by a qualified electrician.
- Do NOT use an extension cord with this appliance.
- 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.
- Check with a qualified electrician if you are unsure if the appliance is properly grounded.

INSTALLATION (continued)

Equipment Setup

GENERAL

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

- Make sure the unit is off and at room temperature.
- Do NOT block or cover the openings on the bottom of unit.
- Do NOT immerse cord or plug in water.
- Keep cord away from heated surfaces.
- Do NOT allow cord to hang over edge of table or counter.

ELECTRICAL

1. Place the unit on a sturdy, level table or other work surface. Turn the unit off before proceeding.
2. Ensure that the line voltage corresponds to the stated voltage on the unit's specification label and power cord warning tag (Figure 1).
3. Connect the unit to the power supply.

PLUMBING

NOTE: Cheese Melter models are designed to use cold tap water. The use of a reverse osmosis system is strongly recommended to reduce mineral deposit buildup and reduce maintenance costs.

The RS-250 requires a direct water hookup. An installation kit is packed inside the unit.

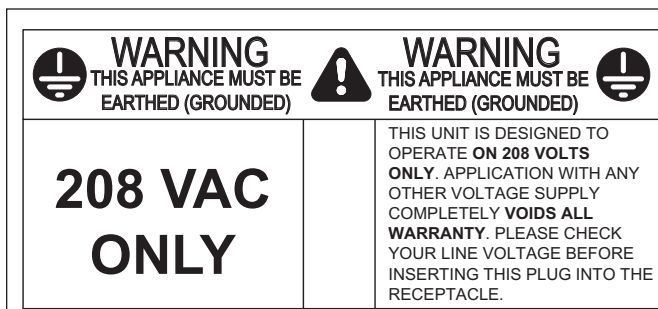


Figure 1. Warning Labels

⚠ CAUTION ⚠

Water pressure must not exceed 20 psi (1.4 kg/cm² or 138 kPa). Higher water pressure may cause poor performance or flooding. To reduce water pressure, install a Water Pressure Regulator, and set water pressure to 20 psi (1.4 kg/cm² or 138 kPa). To order a Water Pressure Regulator from your Authorized Service Agency, order Antunes part no. 7000235.

⚠ CAUTION ⚠

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).

OPERATION

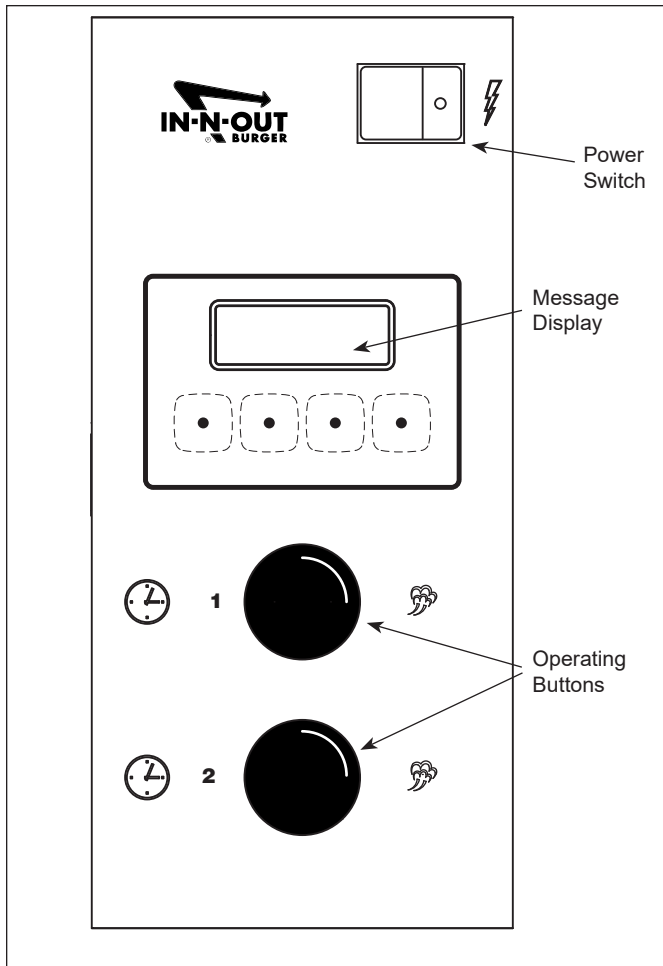
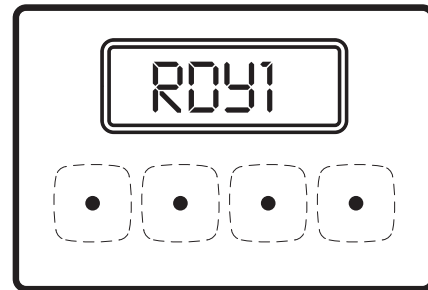


Figure 2. Operating Controls

Operating Instructions

1. Turn the power on (Figure 2).
2. Allow the unit to preheat for approximately 20-30 minutes.

NOTE: During preheating, the display flashes "LOW". When unit reaches operating temperature, the display shows "RDY1" or "RDY2" and the active channel indicator is lit.



3. Pull out the Spatula and place the product to be steamed onto the Spatula Trivet.
4. Push the Spatula fully into the unit.
5. Press and release an Operating Button (Figure 2) to start the steam cycle. Display will count down to zero.
6. Remove steamed product.

⚠ WARNING ⚠

To avoid injury, be careful when pulling spatula out from unit. Be sure to allow steam to escape before putting hands or face over the unit.

PROGRAMMING

Factory Settings

The RS-250 is factory programmed for the following default values:

	CH-1	CH-2	RANGE
CYC	21 secs	24 secs	0 sec to 99 mins 59 secs
RATE	7 secs	7 secs	1 sec to 5 mins 59 secs
SHOT	0.21 secs	0.21 secs	0.10 sec to 2.50 secs

General Information

CYC (Total Cycle Time) refers to the total amount of cooking time set for the product.

RATE (Shot Interval Time) is the time set between shots of steam during a complete cycle.

SHOT (Steam Shot Time) is used to adjust the water volume during each solenoid operation or shot of steam.

The amount of steam produced by your unit depends on the amount of water sprayed onto the steam generator. The generator may flood if the RATE setting is too low or if the SHOT setting is too high.

To prevent flooding, increase the RATE to allow more time for generator heat recovery and decrease the SHOT to reduce the water volume.

Adjustments should be made to both values to determine the best settings for your cooking needs.

Programming the RS-250

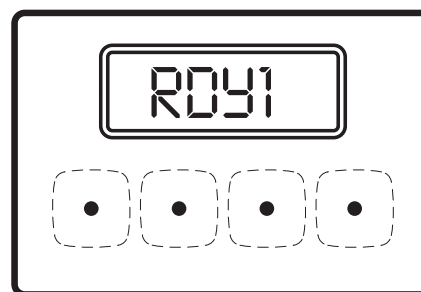
NOTE: CYC, RATE, and SHOT are sequential operation per channel for all programming (You must perform all steps for CYC and RATE to change SHOT).

NOTE: CYC, RATE, and SHOT are only displayed momentarily during the programming sequence after pressing the Program button.

CYC (Total Cycle Time)

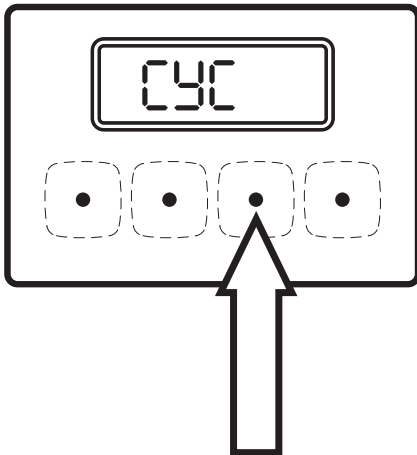
1. Turn the unit on. Allow the unit to preheat for 30 minutes.

NOTE: During preheating, the display flashes "LOW". When unit reaches operating temperature, the display shows "RDY1" or "RDY2" and the active channel indicator light is lit.



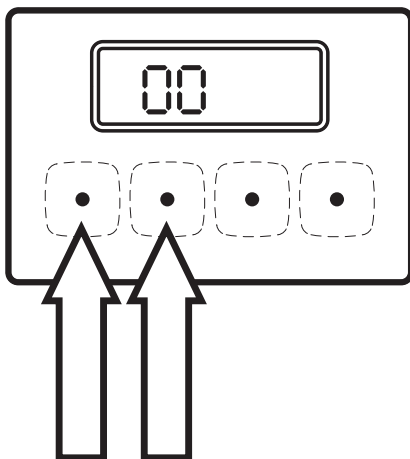
PROGRAMMING (continued)

- Press the button highlighted below to change the control from Operation to Program mode. "CYC" is displayed momentarily. Then press an Operating Button to change that button's settings.

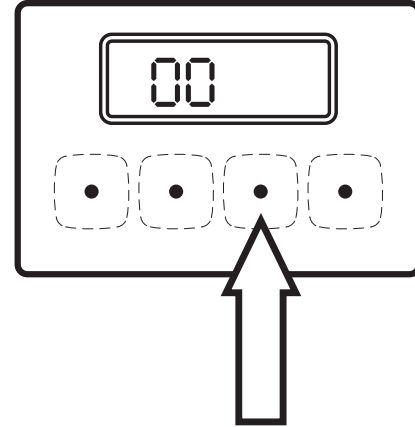


NOTE: If no change is made within 10 seconds at any time during the programming process, all changes made up to that point are stored in memory and the control reverts to Operation mode.

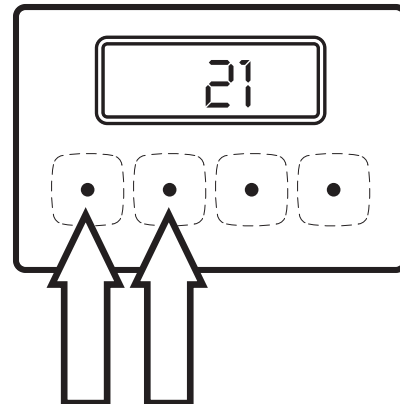
- The unit displays the current setting for total cycle time in minutes. Use the buttons highlighted below to change this setting.



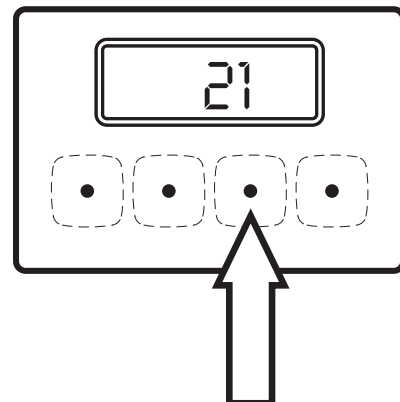
- Press the highlighted button below to accept the total cycle time in minutes on the display.



- The unit then displays the current setting for total cycle time in seconds. Use the buttons highlighted below to change this setting.



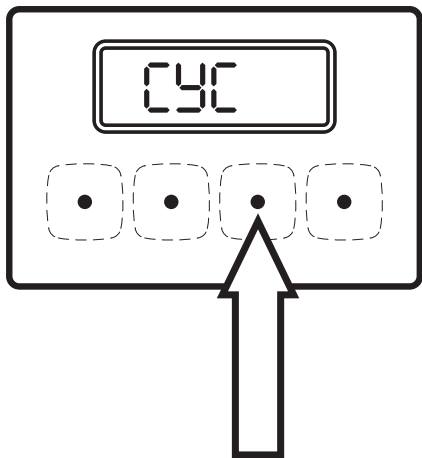
- Press the highlighted button below to accept the total cycle time in seconds on the display.



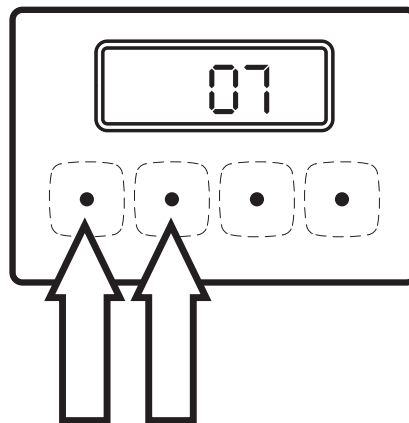
PROGRAMMING (continued)

RATE (Shot Interval Time)

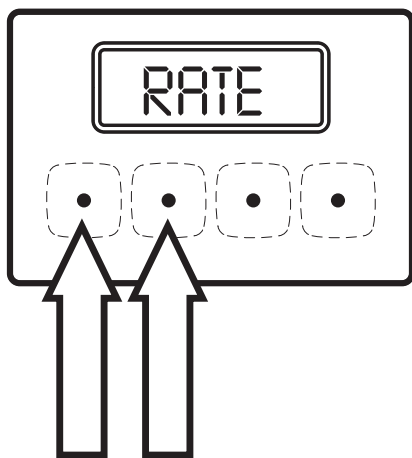
7. If not in Program mode, press the button highlighted below. "CYC" will be displayed momentarily.



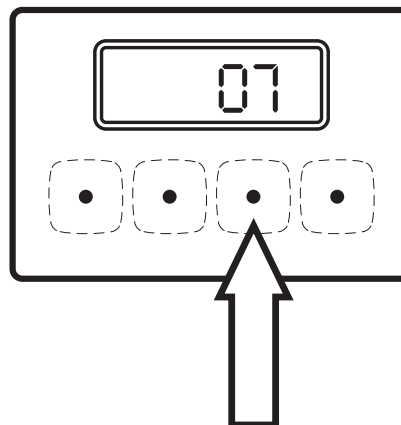
9. The unit displays the current RATE setting in seconds. Use the buttons highlighted below to then change the setting in seconds.



8. Once in Program mode, press and hold both buttons highlighted below. "RATE" will be displayed momentarily.

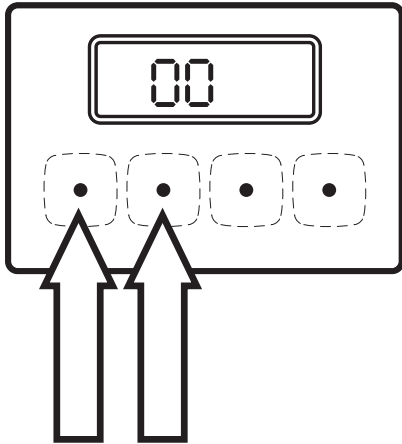


10. Press the highlighted button below to accept the RATE setting in seconds on the display.

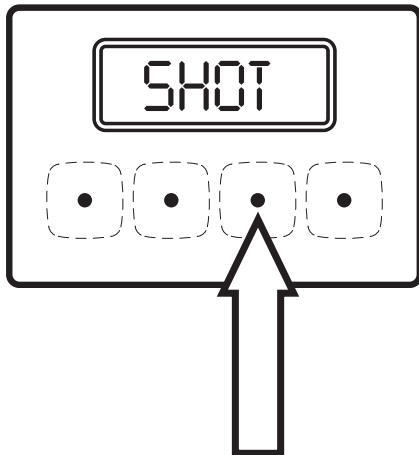


PROGRAMMING (continued)

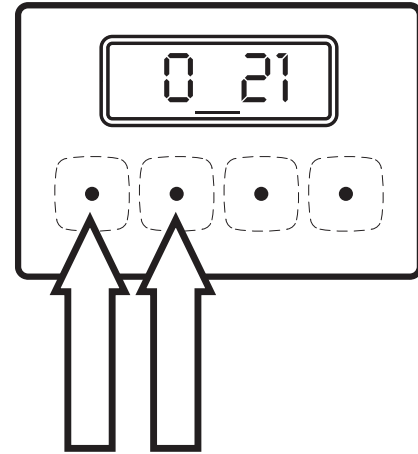
11. The unit displays the current RATE setting in minutes. Use the highlighted buttons below to change the setting in minutes.

**SHOT (Steam Shot Time)**

12. Press the button highlighted below and "SHOT" will be displayed momentarily.



13. Use the buttons highlighted below to change the Steam Shot Time.



14. When done, either:

- a). Press the selected Operating Button to store the settings to that button (Pressing this again will start the steam cycle).
- b). Select the other Operating Button for change and repeat Steps 1-13. Changes made to the previous channel will automatically be stored.

CHEESE MELTER

MAINTENANCE

Maintenance Schedule

NOTE: Frequency of cleaning is determined by water conditions, usage, and water filter systems. Recommended water hardness, or Total Dissolved Solids (TDS), should not exceed 60 ppm (parts per million).

⚠ CAUTION ⚠

Chlorides or phosphates in cleansing agents (e.g. bleach, sanitizers, degreasers, or detergents) could cause permanent damage to stainless steel equipment. The damage is usually in the form of discoloration, dulling of metal surface finish, pits, voids, holes, or cracks. This damage is permanent and not covered by warranty. The following tips are recommended for maintenance of your stainless steel equipment:

- Always use soft, damp cloth for cleaning, rinse with clear water, and wipe dry. When required, always rub in direction of metal polish lines.
- Routine cleaning should be done daily using soap, ammonia detergent, and water.
- Stains and spots should be removed using a vinegar solution.
- Finger marks and smears should be rubbed off using soap and water.
- Hard water spots should be removed using a vinegar solution.

⚠ WARNING ⚠

Turn the power off, unplug the power cord, and allow the unit to cool down before performing any service or maintenance.

⚠ CAUTION ⚠

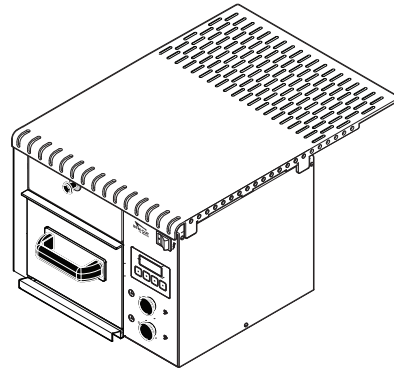
Do not use a sanitizing solution or abrasive materials. The use of these may cause damage to the stainless steel finish.

⚠ CAUTION ⚠

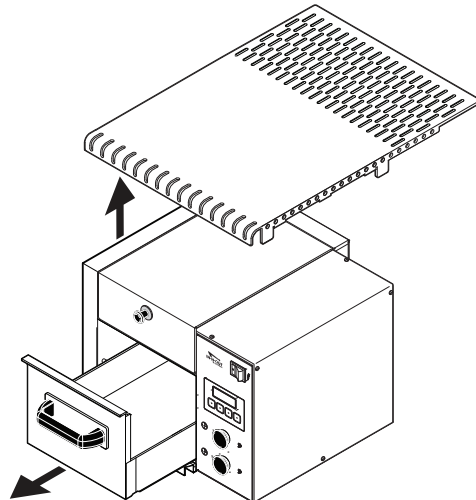
If a chemical cleaner is used, be sure it is safe to use on cast aluminum. Observe all precautions and warnings on product label.

Daily Cleaning

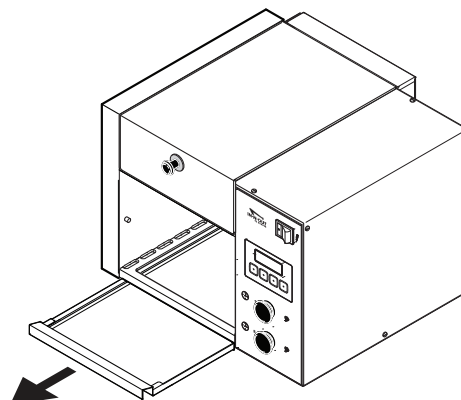
1. Turn the power off, unplug the power cord, and allow the unit to cool down before proceeding.



2. Remove the Heat Shield and Spatula.

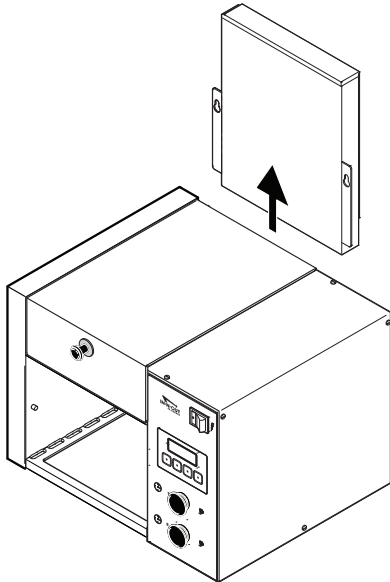


3. Remove the Drip Pan.

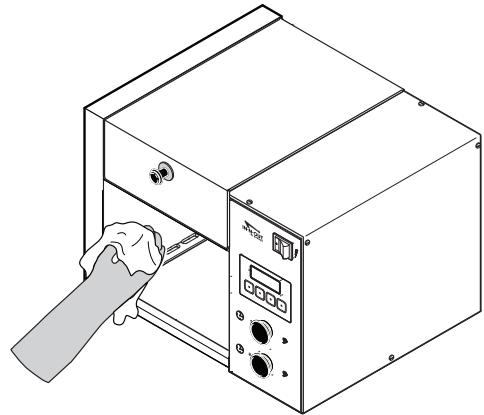


MAINTENANCE (continued)

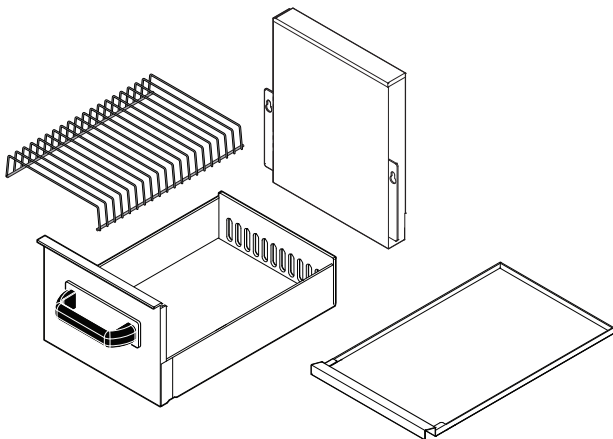
4. Remove the Vent by lifting it up and away from the unit.



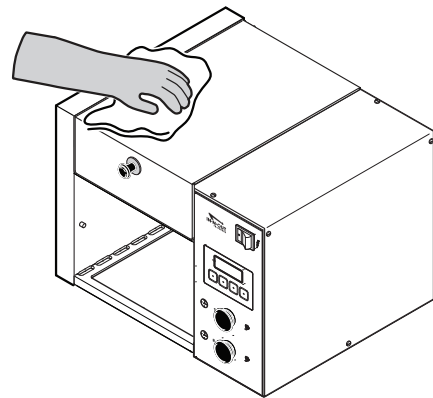
6. Clean the Chamber of any product spills.



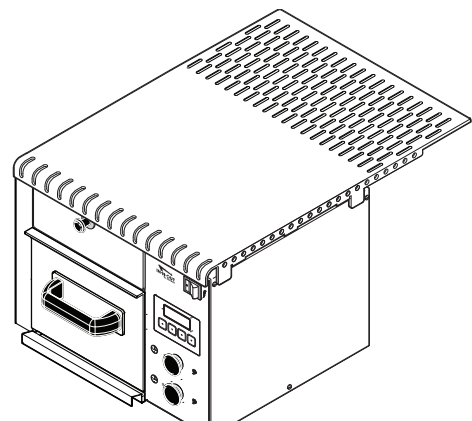
5. Wash the Spatula, Drip Pan, and Vent in hot detergent water and rinse. Allow to air dry.



7. Wipe the entire unit with a clean, damp towel. Allow to air dry.



8. Re-assemble the unit.

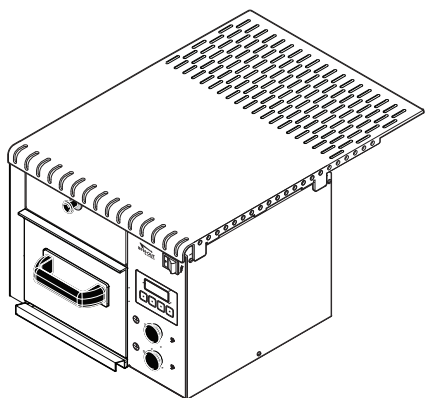


MAINTENANCE (continued)

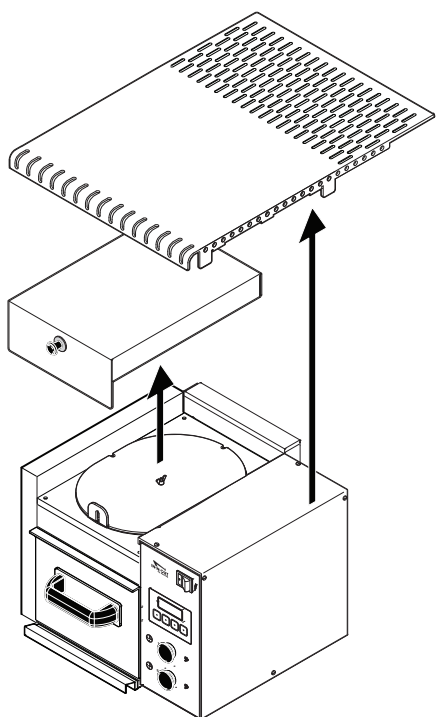
Weekly Steam Generator Maintenance

Your Cheese Melter utilizes an open steam generator. When introduced, water immediately vaporizes and creates a burst of steam, leaving behind any minerals that had previously been dissolved. Though a small amount of minerals are necessary for proper operation, excessive amounts will cause poor steaming and may permanently damage the Generator.

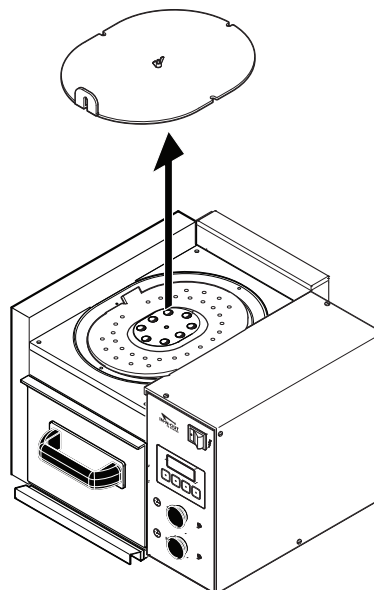
1. Turn the power off, unplug the power cord, and allow the unit to cool.



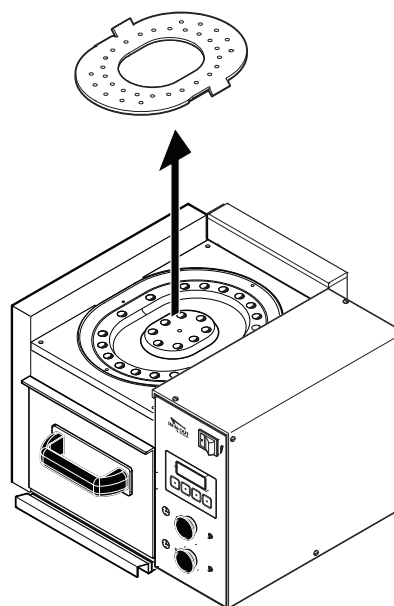
2. Remove the Heat Shield and Top Cover.



3. Remove the Generator Cover (Wing Nut is attached to the cover).

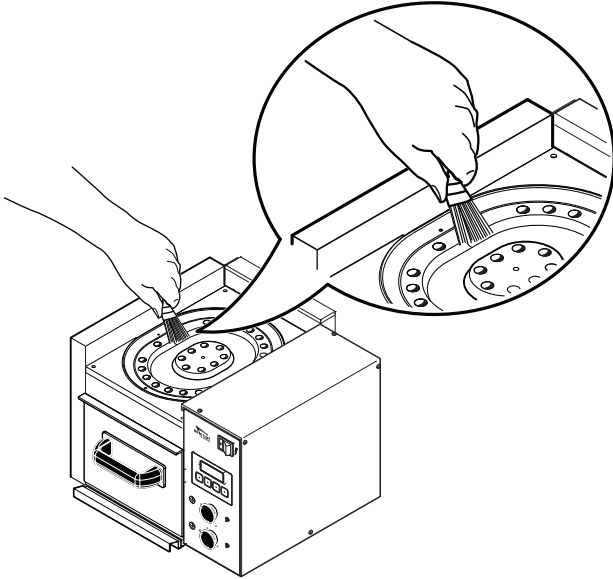


4. Remove the Diffuser.

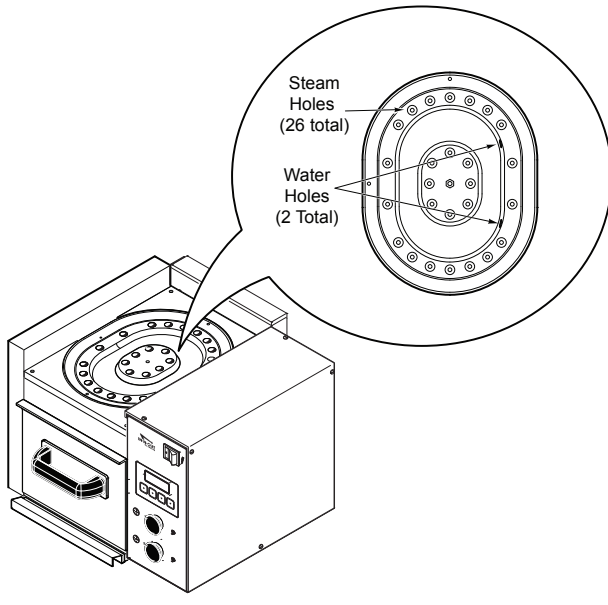


MAINTENANCE (continued)

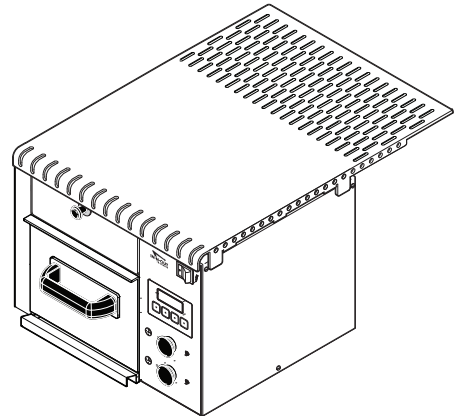
5. Clean the Generator with a wire brush to remove excess buildup. Wipe off scrapped flakes with a wet towel.



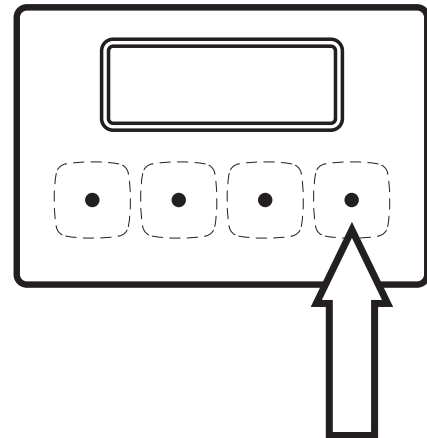
6. Check all steam holes and the two water holes. Clean ALL clogged holes using a flat blade screwdriver.



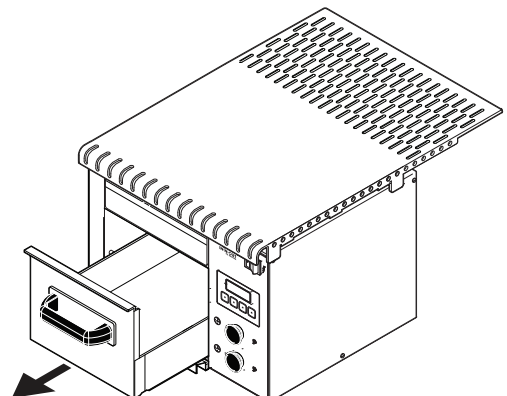
7. Re-assemble the unit.



8. Press the button highlighted below 3 or 4 times to flush the buildup of flakes from the Generator.



9. Remove the Spatula and wipe off any flakes before the next use.



MAINTENANCE (continued)

Checking and Cleaning Water Strainer

To ensure proper and consistent steaming results, inspect the water pressure regulator gauge and strainer cup regularly. If the water pressure on the gauge has dropped, visually check the clear plastic strainer cup and clean out the accumulated debris as follows:

1. Shut off the water supply valve to the unit. Unscrew the clear plastic strainer cup and carefully remove the mesh strainer screen.
2. At the sink, gently flush all of the accumulated debris from the strainer cup and mesh strainer screen. Be especially careful not to damage the mesh strainer screen.
3. Carefully place the mesh strainer screen into its seat at the bottom of the clear plastic cup and confirm that the orange O-ring is properly seated in its place before screwing the strainer cup and top back together.
4. Purge the air out of the strainer tubing by disconnecting the male quick disconnect fitting from the equipment and, over a bucket, pushing its valve core in until there is a good water flow.

Flushing and Cleaning Water Solenoid

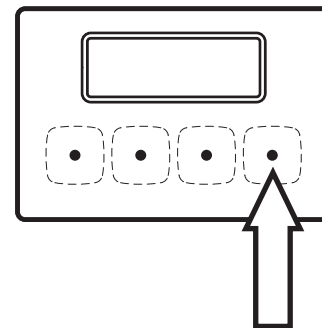
The Cheese Melter can be programmed to provide a much larger volume of water per shot to flush and clean the Solenoid Base.

NOTE: Based on the water conditions in your area, the Water Solenoid should be flushed and cleaned at the same time as when cleaning the Steam Generator. This procedure should be performed monthly but could be done weekly or daily.

To perform the Water Solenoid flushing and cleaning on the Cheese Melter, you have to re-program the shot time on the Operating Button #1. The standard SHOT setting is 0.21 seconds.

1. Follow the programming instruction in the Owner's Manual to change the shot setting to 2.5 seconds. This is the maximum time that can be programmed.
2. Make sure the unit is up to operating temperature.
3. Run one cycle using the button highlighted below. The longer SHOT time will generate a larger volume of water flowing through the solenoid. This increased volume of water will flush and clean the Water Solenoid Base.

NOTE: This volume of water will flood the casting.



4. When the cycle is completed, you may want to run a second cycle. Wait until all of the water has turned to steam before using the unit or turning it off.

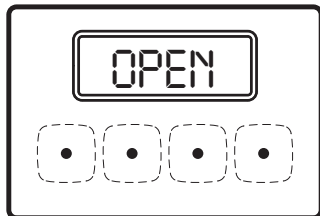
NOTE: Re-program the water SHOT back to its previous setting.

DIAGNOSTICS

Diagnostics

The two-channel controller is also equipped with diagnostic features. Listed under each drawing is a brief description of the particular feature. The control housing mounted on the control board also contains diagnostic LED's. They are in three colors and represent the following:

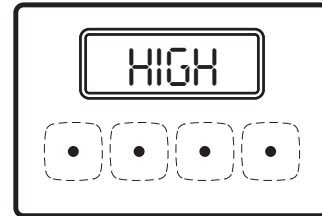
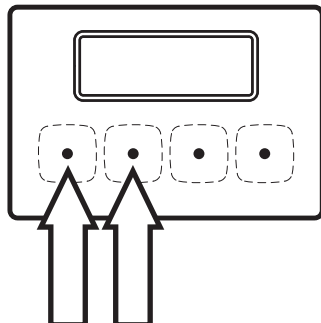
- * **Green (Program):** When lit, indicates default settings are being set.
- * **Yellow (Audio):** When lit, indicates power is being sent to the audio device.
- * **Red (Heat):** When lit, indicates the unit is calling for heat.
- * **Green (Water):** When lit, indicates that power is being sent to the water pump or solenoid.



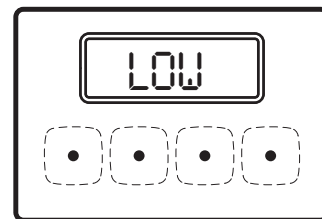
“OPEN” will be displayed when the thermocouple is damaged or not installed correctly.

To change the setpoint temperature, press and hold the two buttons highlighted below simultaneously for three seconds. Then use those same two buttons to raise or lower temperature.

NOTE: Minimum temperature should be 375°F (191°C).

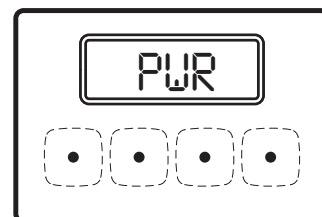
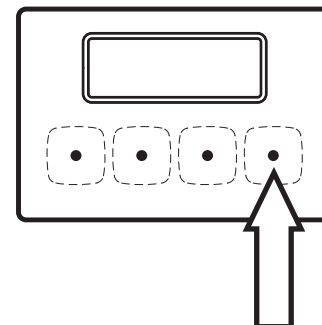


“HIGH” will be displayed when the Generator temperature exceeds the setpoint temperature by 50°F (10°C).



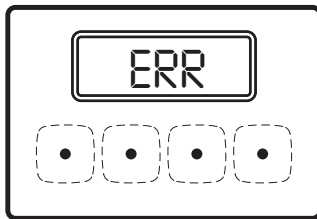
“LOW” will be displayed until the Generator temperature exceeds 250°F (121°C).

To check the Generator temperature, press and hold the button highlighted below. The display will show the set temperature.



“PWR” will be displayed when the supply voltage is lower than 160 VAC or above 265 VAC.

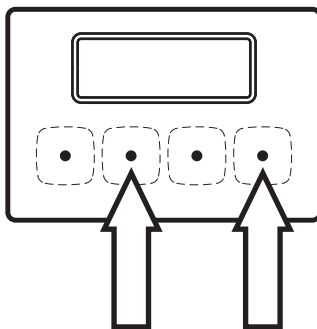
DIAGNOSTICS (continued)



“ERR” will be displayed when there are programming parameter errors. If this message appears, you may have to clear the current parameters.

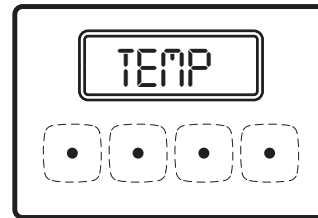
To clear the unit's current programming and reset the unit to its factory default settings:

1. Turn the unit off.
2. Push the two buttons highlighted below simultaneously and continue to hold them both while turning the unit on. Release once you hear the unit beep and then stop.



3. Check the Display:
 - If the Display shows “ERR” again, contact Antunes for technical assistance.
 - If the Display appears normal, try both a single shot and a factory default timed cycle before re-programming the unit.

Review the Programming section of this manual (Page 10) and then program the Operating Buttons according to your cooking requirements.



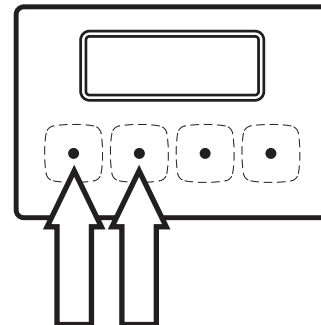
“TEMP” indicates the control cabinet temperature has exceeded 155°F (68°C), causing the unit to shut down. If this occurs, the unit must be turned off for at least 20 minutes so that it can cool off and reset.

If this condition reoccurs, contact your local Authorized Service Agency or Antunes Technical Assistance.

The control board monitors the control cabinet ambient temperature and records whatever its highest temperature has been. This information will help your service technician when troubleshooting the unit.

To determine what the control cabinet's highest temperature has been since it was last reset:

1. Turn the unit off.
2. Press and hold the two buttons highlighted below while turning the unit on.



3. Record the highest control cabinet temperature shown on the display and release the arrow keys.
4. Turn the unit off to preserve this record.

To clear/reset this record, simultaneously press the two buttons highlighted above (before turning the unit off). The display will show 33°F – indicating that the record has been cleared – and then turn the unit off.

TROUBLESHOOTING

⚠ WARNING ⚠

To avoid possible personal injury and/or damage to the unit, inspection, test, and repair of electrical equipment should be performed by qualified service personnel. The unit should be unplugged when servicing, except when electrical tests are required.

Problem	Possible Cause	Corrective Action
Unit will not heat up when power is on.	Unit is not plugged in.	Plug power cord into outlet.
	Loose connections.	Check connectivity of the power cord and connector.
	Circuit breaker is off or has been tripped in main power supply.	Turn on or reset circuit breaker.
	Defective wiring.	Contact your maintenance person or Authorized Service Agency.
	Inoperable power cord.	Contact your Authorized Service Agency to replace power cord.
	Hi-Limit thermostat tripped or inoperable.	Allow the unit to cool down. It will then reset on its own.
	Inoperable Heater Relay.	Contact your maintenance person or Authorized Service Agency.
Unit heats up but will not steam. or Product is unevenly steamed. or Multiple cycles are required to melt cheese or otherwise prepare the product.	Inoperable Steam Generator.	Contact your maintenance person or Authorized Service Agency.
	Restrictor Tube and/or Generator Tubes are clogged.	Clean Restrictor Tube and/or Generator Tubes.
	Main water supplies.	*(Units with regulators) Verify pressure is set to 20 psi (138 kPa).
	Spray Tube is partially clogged.	Remove and clean as described in the Maintenance section of this manual.
	Diffuser is missing.	Re-install the Diffuser.
	Water Filters are clogged.	Remove Filters and clean.
	Loose electrical connection at water pump/solenoid valve, or inoperable water solenoid valve.	Contact your maintenance person or Authorized Service Agency.
	Defective momentary switch.	Contact your maintenance person or Authorized Service Agency.

CHEESE MELTER

TROUBLESHOOTING (continued)

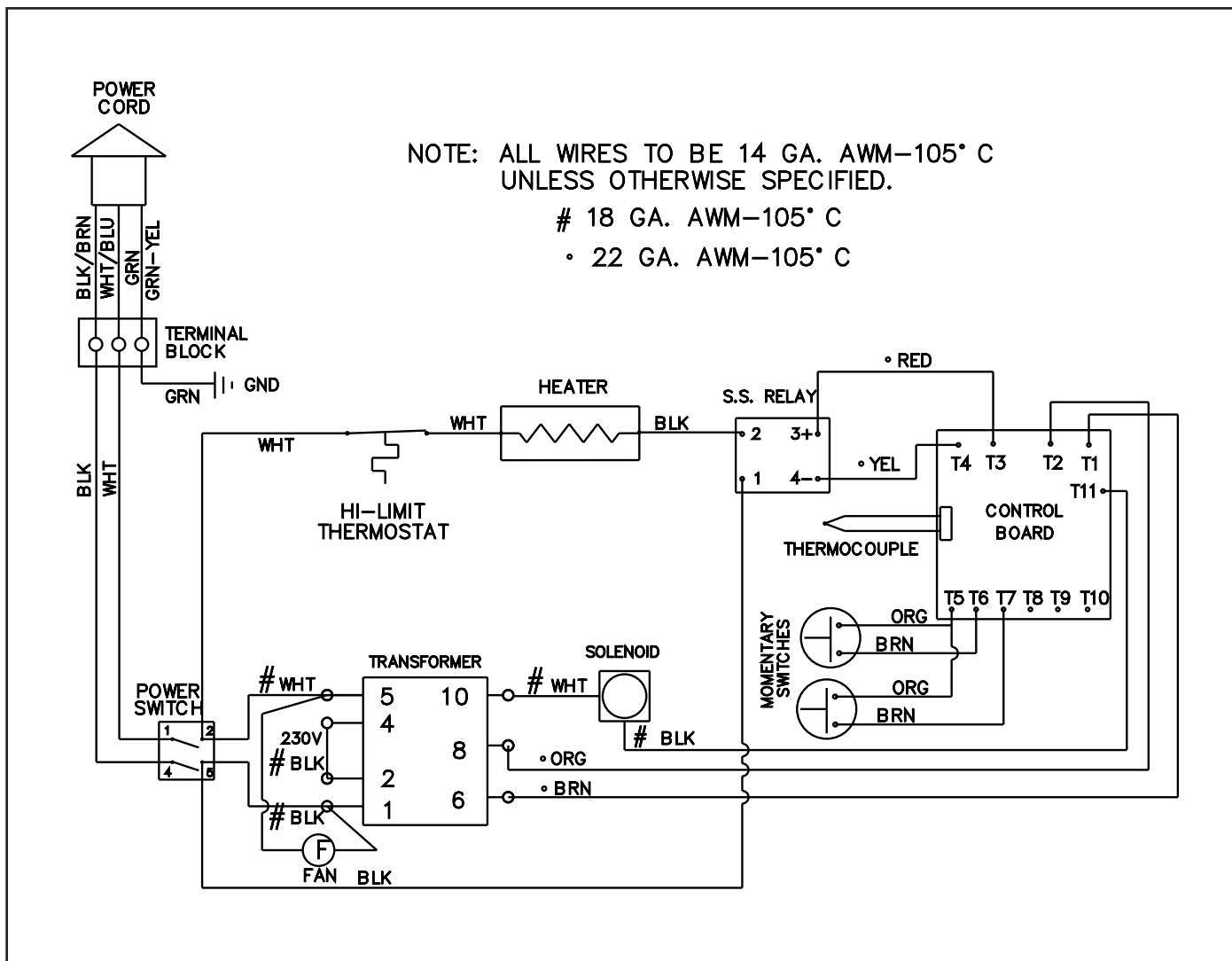
Problem	Possible Cause	Corrective Action
Steam from Generator is reduced compared to former operation.	Restrictor Tube and/or Generator Tubes are clogged.	Clean Restrictor Tube and/or Generator Tubes.
	Water pump solenoid is inoperable.	Contact your maintenance person or Authorized Service Agency.
	The unit was not allowed enough time to preheat.	Remove excess water from the generator casting. Allow 20 minutes to preheat before operating. Do NOT operate the unit during preheat cycle.
	Inoperable heater relay.	Contact your maintenance person or Authorized Service Agency.
	The Control Board setpoint temperature is set too low.	Surface temperature of the casting should be between 375°–425°F (191°–218°C) when the red light on the control board turns off. If the temp is too low, contact your maintenance person or Authorized Service Agency.
	Heavy deposit buildup on the Generator.	Clean the Generator according to the procedures in the Maintenance section of this manual.
Unit floods or is always steaming. Power on, solenoid makes a chattering noise. or Unit floods overnight. Power off. Water leaking in the electrical housing. Unit heats up, pump or solenoid valve works with the momentary switch but will not steam during timer cycles.	Incorrect water pressure.	*(Regulated units only.) Set water pressure to 20 psi (138 kPa).
	Solenoid Valve inoperable.	Clean or replace Solenoid Valve. Contact your maintenance person or Authorized Service Agency.
	Control Board is not programmed properly.	Verify programming as described in the Programming section of this manual.
	Control Board is inoperable.	Contact your maintenance person or Authorized Service Agency.
	Pin hole leak in the hoses.	Replace the hoses.
	Water pump impeller is cracked or damaged.	Contact your maintenance person or Authorized Service Agency.
	Inlet Tube or Restrictor Tube is loose.	Tighten the loose fittings.
	Generator Tube is loose or damaged.	Tighten the loose fittings or contact your maintenance person or Authorized Service Agency.

TROUBLESHOOTING (continued)

Problem	Possible Cause	Corrective Action
Insufficient water entering Generator casting.	If Ready light does not light but the unit steams regularly, the Ready light is inoperable.	Contact your maintenance person or Authorized Service Agency.
	If the Ready light does light and the unit does not steam, the control board is inoperable.	Contact your maintenance person or Authorized Service Agency.
	*(Direct Feed Units) Quick-disconnect not connected properly or inoperable.	Make sure the quick-disconnect and O-ring are properly positioned and are not damaged. Replace damaged parts.
	Water volume adjustment is too low.	Adjust the water volume control. See Calibration section of the manual.
	Water Filter clogged.	Remove and clean Water Filter.
	Inoperable solenoid or solenoid damage caused by connecting a hot water supply line.	Make sure unit is connected to a cold water supply. Contact your maintenance person or Authorized Service Agency.
	Inoperable Control Board.	Contact your maintenance person or Authorized Service Agency.
Steam coming out around top cover or sides.	Wing Nut is loose.	Tighten Wing Nut.

CHEESE MELTER

WIRING DIAGRAM



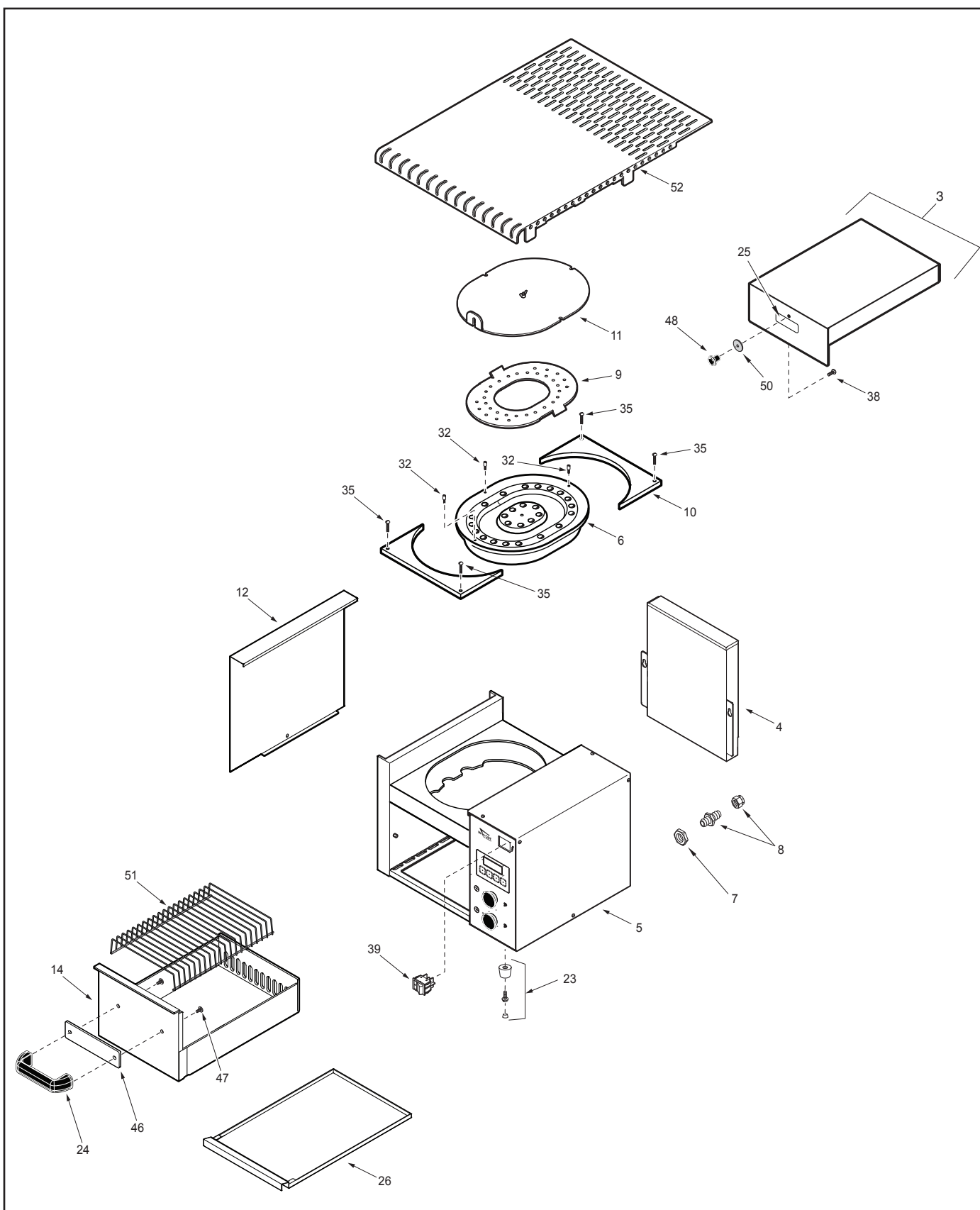
REPLACEMENT PARTS

Item	Part No.	Description	Qty.
1	0010583	Relay/Heat Sink	1
2	0011123	Solenoid Valve Assy. (MS-250)	1
3	0012179	Top Cover Assy. (Incl. #32, 57-60)	1
4	0021558	Vent Assy.	1
5	0021562	Floor/Chassis Weldment	1
6	7000430	Generator, 208V/3300W	1
7	040P138*	Locknut, 1/2" (10 pack)	1
8	040K251	Strain Relief Kit (incl. item #7)	1
9	0503592	Diffuser, Steam	1
10	0021562	Bracket, Corner Filler	2
11	0021559	Cover, Generator Assy.	1
12	0505703	Cover, End Housing	1
13	0503093	Retainer, Thermocouple	1
14	0012181	Spatula Assy.	1
15	0503708	Cover Control Housing	1
16	0700737	Power Cord, 208V	1
17	1001241	Label, Control Panel	1
18	2000203	Tube, Restrictor, 1/4"	1
19	2000226	Tube, Inlet, 1/4"	1
20	2040103	Connector, Male, 1/4 x 1/8 NPT	1
21	2040145	Elbow, Female, 1/8" x 1/4"	1
22	2040146	Tee, Female, 1/8" x 1/4"	1
23	210K230	Leg Kit	4
24	2100257	Handle	1
25	1001192	Label, Caution HOT	1
26	0505705	Drip Pan, Water	1
27	7000447	Generator Tube, 4-1/2" Lg.	1
28	300P102*	Nut, Speed, "U", #8-32	2
29	304P105*	Nut, Hex, KEPS, #4-40, Zinc	4
30	306P101*	Nut, Hex, #6-32	2
31	306P123*	Screw, Machine, #6-32 x 7/8"	2
32	306P134*	Screw, Machine, #6-32 x 3/8	3
33	308P103*	Screw, Machine, #8-32 x 1/4"	2

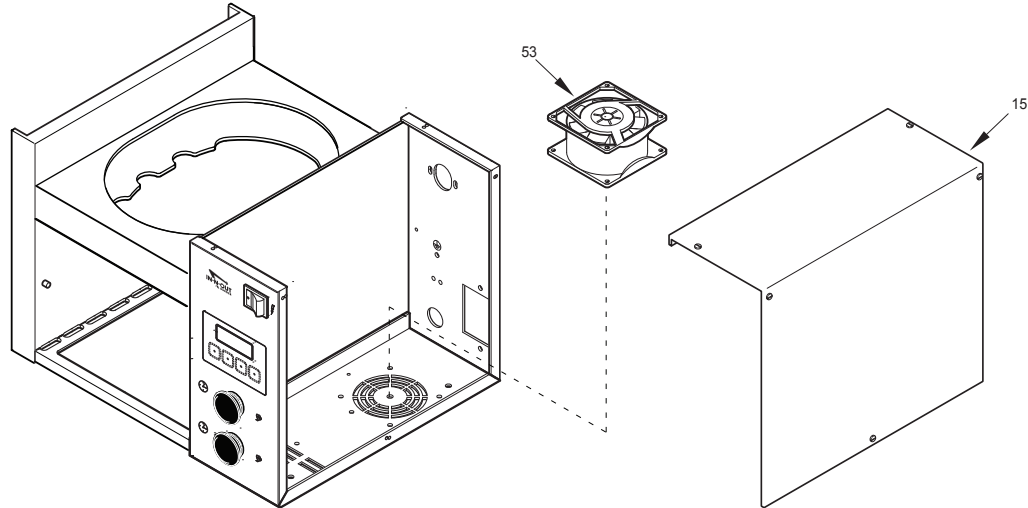
Item	Part No.	Description	Qty.
34	308P105*	Screw, Machine, #8-32 x 1/2"	4
35	308P120*	Screw, Machine, #8-32 x 5/8" (sltrshd)	4
36	308P143*	Nut, Hex, KEPS, #32-1/2"	2
37	310P136*	Screw, Machine, #10-32 x 1-1/4"(splanhd)	4
38	308P104	Screw Machine, #8-32 x 3/8" (sltrshd)	1
39	7000882	Rocker Switch Kit	1
40	4010236	Switch, Start/Stop	2
41	7000319	Transformer, 115-230/24V	1
42	4030222	Thermostat, Hi-Limit	1
43	4050214	Thermocouple, Type-K	1
44	4060304	Terminal Block, 3-Pole	1
45	7000559	Control Board Kit	1
46	0400382	Handle Guard	1
47	325P132*	Screw Machine, Spatula (10 pack)	1
48	2100247	Knob	1
49	0505712	Cover, Top	1
50	2100250	Guard, Knob	1
51	0800402	Trivet	1
52	0505718	Heat Shield	1
53	7000913	Fan Kit, Axial	1
54	100P967	Label, Marking (10 pack)	1
55	7000547	Water Pressure Regulator Kit	1

* Only available in packages of 10.

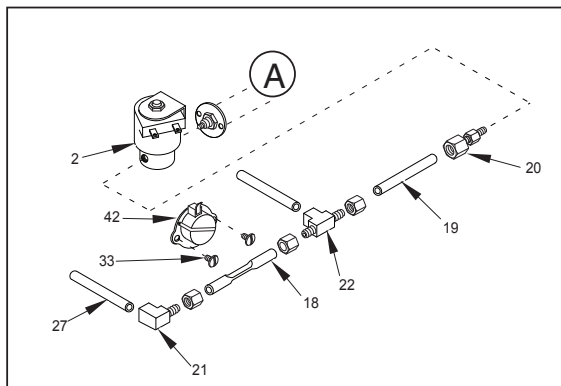
REPLACEMENT PARTS (continued)



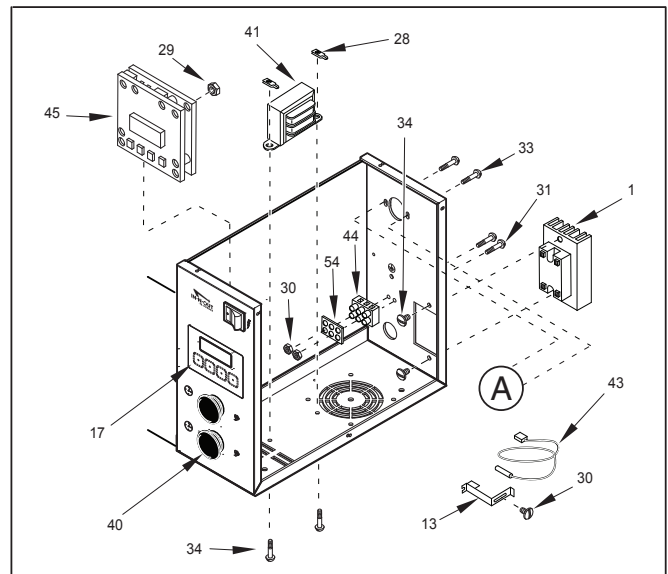
REPLACEMENT PARTS (CONTINUED)



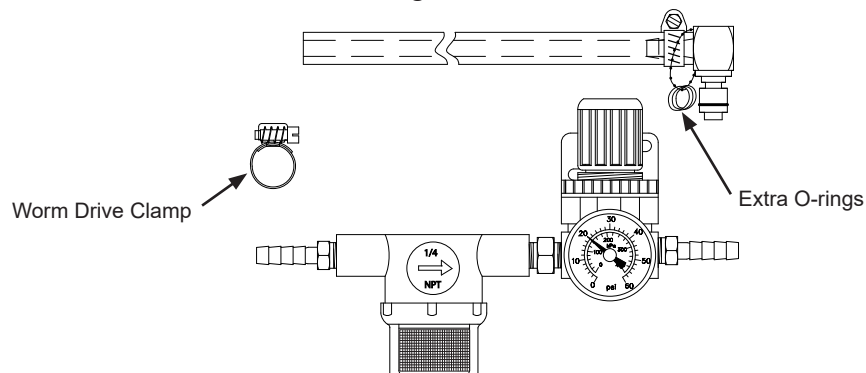
INSET A



INSET B



Water Pressure Regulator Kit - Part No. 7000547



LIMITED WARRANTY

Equipment manufactured by Food Equipment Division of 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, electro-mechanical 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.



Corporate Headquarters

Carol Stream, Illinois
Phone: +1 (630) 784-1000
Toll Free: +1 (800) 253-2991
Fax: +1 (630) 784-1650

China Facility

Suzhou, China
Phone: +86-512-6841-3637
Fax: +86-512-6841-3907