

DCH-320 SQ

Display Cabinet Heated

Owner's Manual

Manufacturing Numbers:
9500558 (Domestic)
9500733 (International)



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Overview

This product is a heated display cabinet. The cabinet maintains temperature of cooked food while prominently displaying them in a convenient place for customers to view. This unit is designed to be used with cooked food. The cabinet does NOT cook food and should not be used as a heating apparatus.

Note that the heated display cabinet maintains food in a temperature range that may be within the temperature danger zone for certain types of food. Check all temperature danger zones of food before placing into the heated display cabinet.

Before Use

This manual contains safety, installation, and operating procedures for the display cabinet. Read and understand it completely before installing or operating the display cabinet.

Keep this document for reference. If the heated display cabinet changes ownership, this manual must accompany it.

In Case of Damage

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

Website

www.antunes.com

Service/Technical Assistance

In Case of Damage

If any parts are missing or damaged, contact Antunes Customer Service immediately at +1-877-392-7856 (toll free).

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

Fill in the information in the next column and have it handy when calling for assistance. The serial number is on the specification plate located on the system.

Equipment Information to Save

Purchased from:

Date of purchase:

Model number:

Serial number:

Manufacturing number:

Safety Information

Installation

- Read and understand all instructions before installing or using the unit.
- Install and locate the equipment only for its intended use as described in this manual.
- This unit is to be installed to comply with the basic plumbing code of the Building Officials and Code Administration, Inc. (BOCA) and the Food Service Sanitation Manual of the Food and Drug Administration (FDA).
- All electrical connections must be in accordance with local electrical codes and any other applicable codes. The equipment must be grounded according to local electrical codes to prevent electrical shocks. It requires a grounded receptacle with separate electrical lines, protected by fuses or a properly-rated circuit breaker.
- Electrical ground is required on this appliance. Consult a qualified electrician if there is any uncertainty about whether the appliance is properly grounded.
- 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.

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 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.

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.
- Rub off finger marks and smears using soap and water.
- Do not clean the unit with a water jet.
- The procedures in this manual may include the use of chemical products. These chemical products will be highlighted with bold letters followed by the abbreviated HCS (Hazard Communication Standard). See the Hazard Communication Standard manual for the appropriated Material Safety Data Sheets (MSDS).

Service

- Inspection, testing, and repair of electrical equipment must be performed only by qualified service personnel.
- Have the unit serviced only 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 or shock.

Heated Display Cabinet Glass Warnings

(DCH Models)

Please follow the Safety Instructions below in order to reduce the chance of damaged/broken glass:

Warning: Mishandling this product or failure to follow these instructions may result in shattering glass.

DO NOT scratch, chip, or nick the glass.

DO NOT place any metal objects in contact with the glass (merchandise holders, signs, etc.).

DO NOT transfer coins over the unit.

DO NOT use the glass as a serving counter.

When cleaning, handling, or removing the glass, make sure that the glass is cool (room temperature).

USE approved cleaners marketed for glass cleaning only.

USE a flat surface covered with a soft cloth to place the glass on, if the glass is removed.

USE a clean, soft cloth when cleaning the glass. Do not use paper towels.

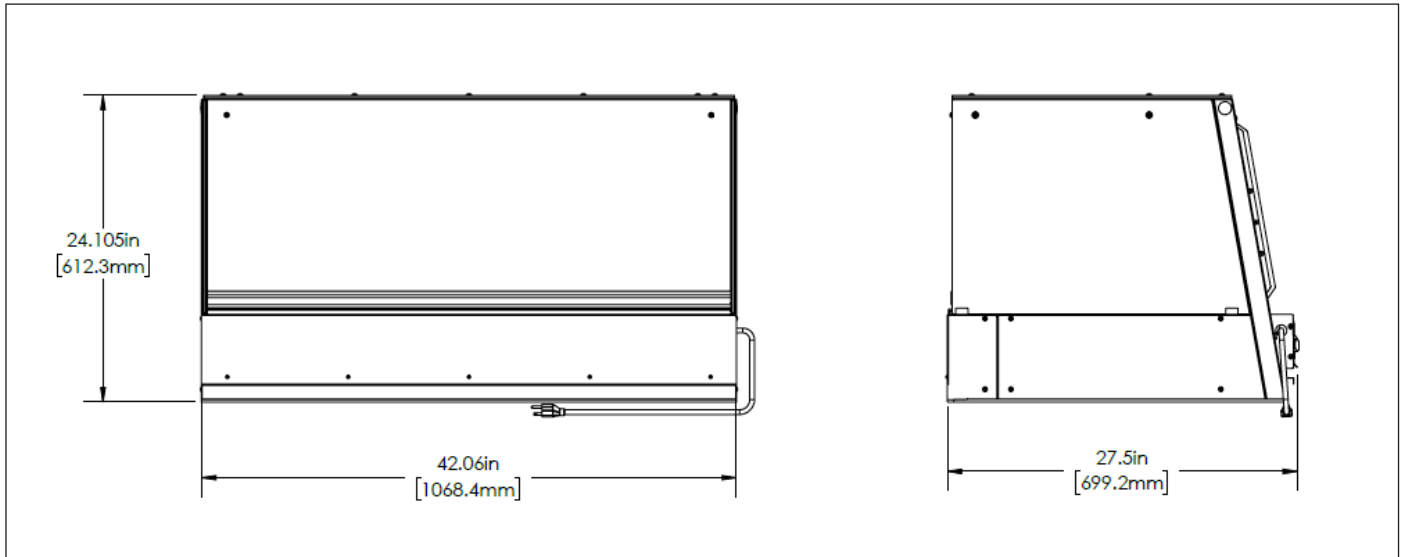
USE light pressure when wiping/cleaning the glass.

MAKE SURE that the top cover glass does not touch the edge of the side glass.

MAKE SURE to replace scratched, chipped, nicked, cracked, or broken glass.

Specifications

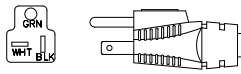
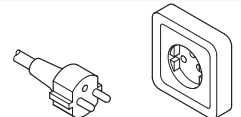
Dimensions



Electrical Ratings

Model & Mfg. No.	Volts	Watts	Amp.	Hz.
DCH-320 9500558	120	1800	15.0	50/60

Electrical Cord & Plug Configurations

Model & Mfg. No.	Description	Configuration
DCH-320 9500558	Power Cord NEMA 5-20P 20 Amp., 120 Volt	
DCH-320 9500733	Power Cord 16 Amp., 250V CEE 7//7	

Installation

Unpacking

1. Remove unit and all packing materials from shipping carton.
2. Open the large box. Remove all packing materials and protective coverings from the unit and parts.

NOTICE: If any parts are missing, contact Antunes Technical Service IMMEDIATELY at +1-877-392-7854 in the U.S., or +1-630-784-1000 outside the U.S..

3. Wipe all surfaces of the unit with a hot damp cloth.

NOTICE: Do not use a dripping wet cloth. Wring out before use.

Equipment Setup

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

- Make sure power to the unit is off and the unit is at room temperature.
- 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.
- Place unit on a sturdy, level table or work surface.
- Ensure that the line voltage corresponds to the stated voltage on the unit specification label located at the end of the power cord.
- Turn the Rocker Switch (power On/Off) to OFF. Connect the unit to the power supply.

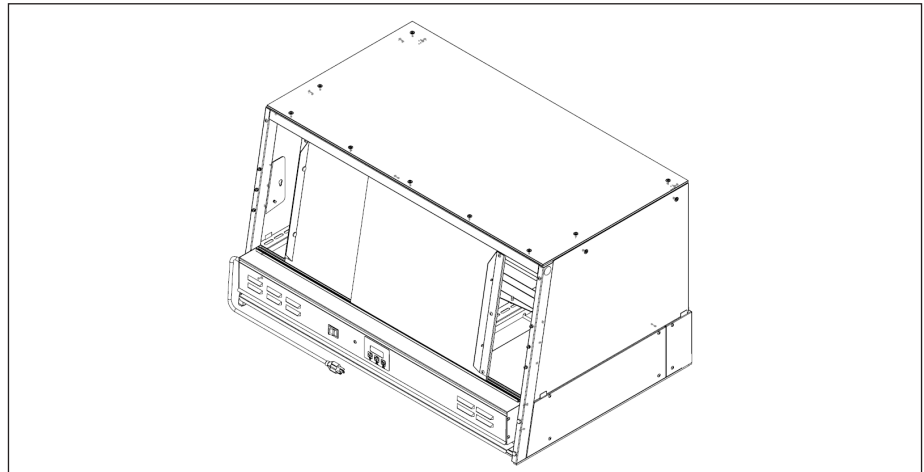


Figure 1. DCH-320

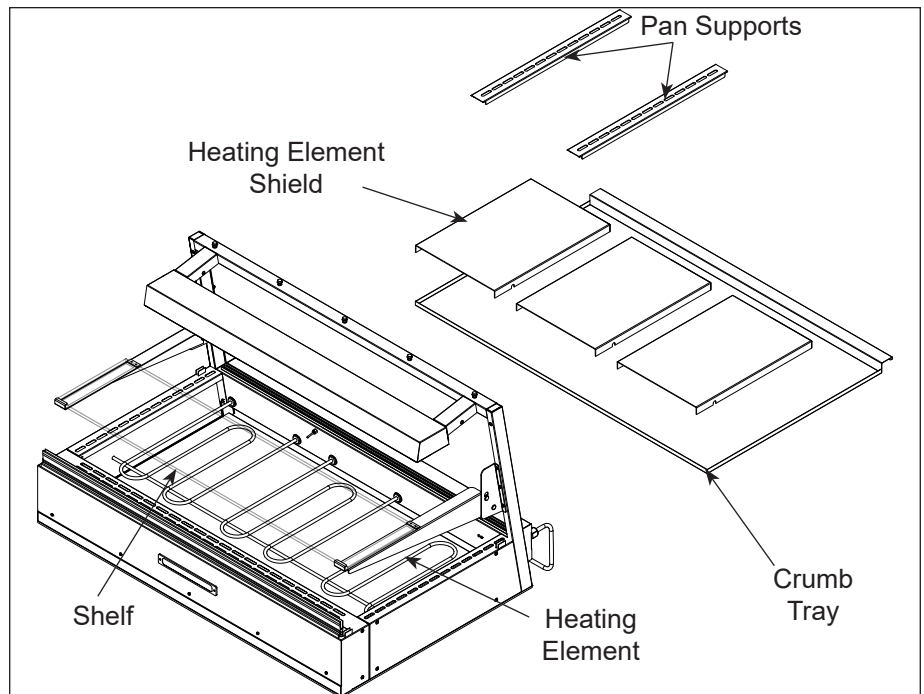


Figure 2. Display Components (DCH-320 Shown)

Operations and Programming

The Setpoint temperature is the desired cabinet temperature setting. When the Temp UP button is pressed and held (and provided that the unit is up to temperature), the actual cabinet temperature is displayed. When the button is released, the Setpoint temperature is displayed.

NOTICE: Models DCH-120/220/320 have an adjustable temperature range of 100-165° F (38-74° C). Since the temperature can be set below 150° F (65° C), which is below the safe holding temperature for some foods, only NON-MEAT products should be held in these units. Models DCH-100/200/300 have an adjustable temperature range of 150-165° F (66-74° C).

1. Turn the unit ON. The display will flash "LO" to indicate that the unit is heating up. After 20-30 minutes (when the unit is up to temperature), the display will show the setpoint temperature.
2. To adjust the setpoint temperature, press and hold the Temp Up and Temp Down buttons until the display begins to flash. Release the buttons. Then, press the Temp Up or Temp Down buttons to raise or lower the setpoint temperature. Release when the display shows the desired temperature.
3. To change the display from Fahrenheit to Celsius and back, press and hold the Temp Scale button (Figure 3) for 2-3 seconds and release.
4. Open the rear door(s) and place the serving table pan(s) into the unit (Figure 4). Load the pan(s) with the food product using tongs or a similar utensil. Close the door(s).

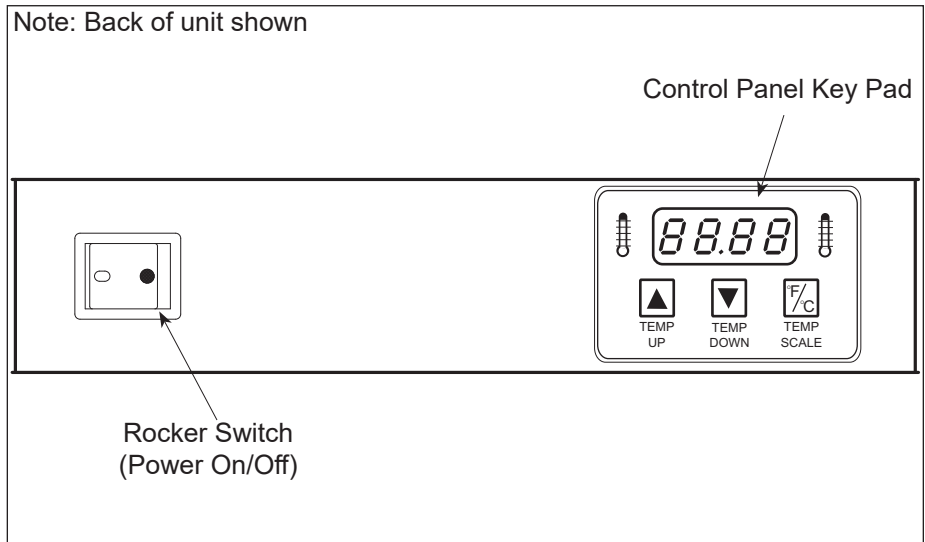


Figure 3. Controls

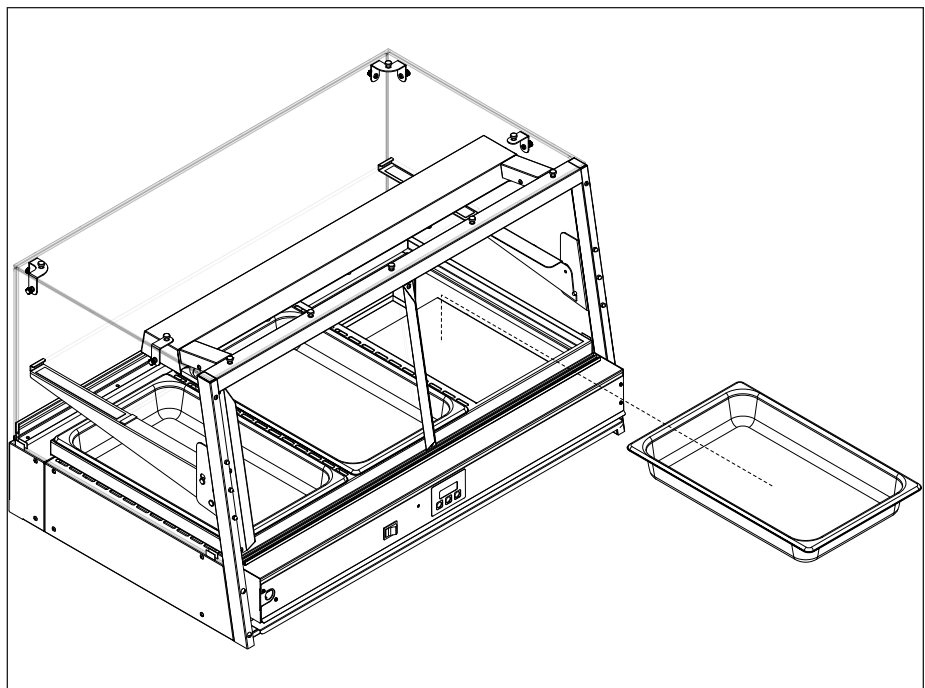
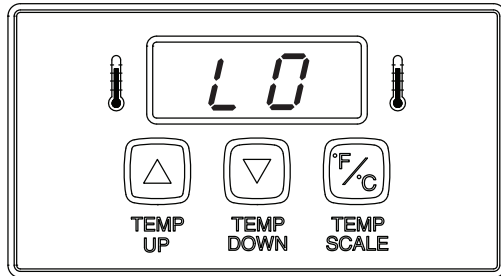


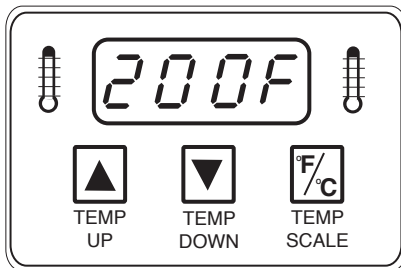
Figure 4. Loading Pans

Display Codes (DCH-320)

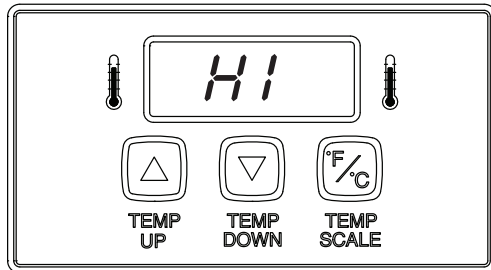
This section describes the different display codes and their meanings.



“LO” flashes during the initial warm up period. The unit continues to display this code until the unit reaches the setpoint temperature. When the unit reaches the setpoint temperature, it displays the setpoint temperature.

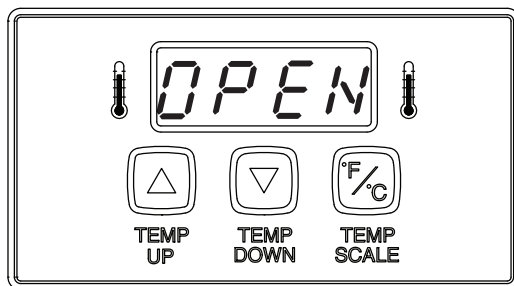


This figure shows an example setpoint temperature of 200° F displayed on the console.



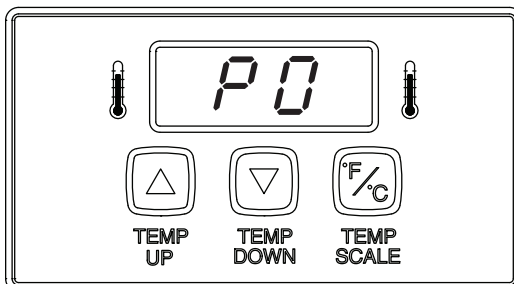
“HI” flashes if the actual cabinet temperature exceeds the setpoint temperature or if the thermistor has shorted.

NOTICE: The thermistor should be 100k ohm +/- 2% at room temperature.



“OPEN” flashes if the thermistor is OPEN or disconnected. The unit will not call for heat.

NOTICE: The thermistor should be 100k ohms +/- 2% at room temperature.



“PO” In 120 VAC units, this code flashes if the supply voltage is below 100 VAC or above 135 VAC. In 220/240 VAC units, this code flashes if the supply voltage is below 190 VAC or above 265 VAC.

NOTICE: If voltage is within normal ranges, then the Control Board is faulty.

To reset a unit in this state, the supply voltage must be within acceptable limits and the unit must be turned off for a few seconds and then turned back on.

Maintenance

Be sure to follow all of the warnings and precautions listed in the Important Safety Information section of this manual.

⚠ WARNING

Turn the unit off, disconnect the power source and allow the unit to cool down before performing any service or maintenance on the unit.

⚠ CAUTION

Do not remove crumb tray while unit is hot or burns or other personal injury may result.

⚠ WARNING

All glass surfaces must be cool before cleaning. Once cool, wipe glass with a clean cloth. Do not attempt to clean glass when hot or with cold towel as shattering glass may occur.

Daily Cleaning

The unit requires a minimum amount of maintenance. To ensure proper operation, clean the unit at the end of each serving day.

1. Turn unit off, unplug the power cord, and allow the unit to cool to room temperature.
2. Once cooled, remove all components.
3. Wash all components in soap and water. Wipe all surfaces of the unit with a damp cloth.

NOTICE: Do not use a dripping wet cloth. Wring the cloth out before use.

4. Install components in unit.

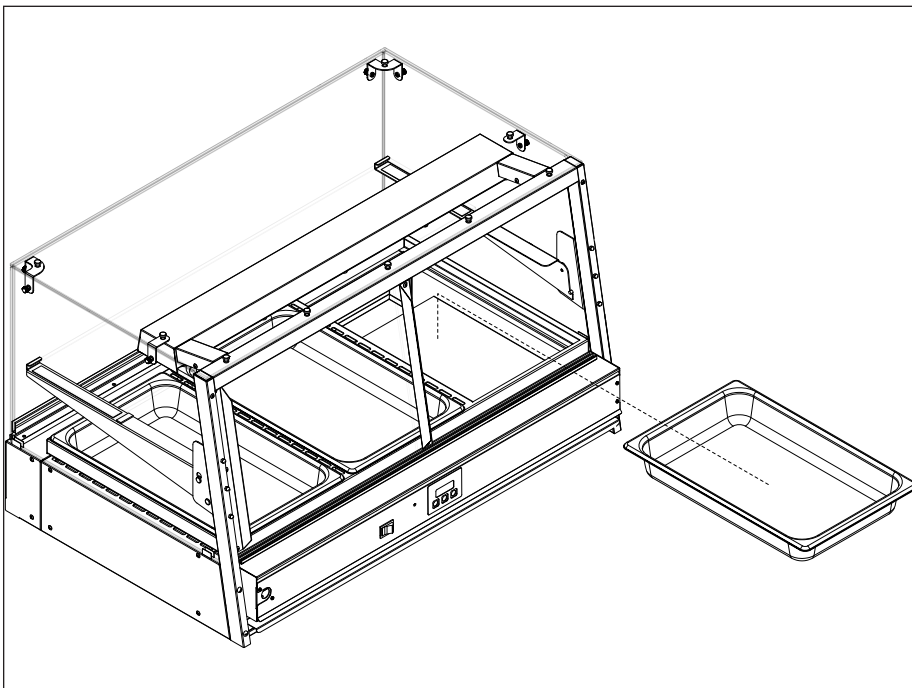


Figure 5. Remove Components

Parts Replacement

Halogen Quartz Bulb Replacement

CAUTION

Do not handle halogen bulbs with bare hands. Use a tissue or clean cloth to handle halogen bulbs

CAUTION

Use 1000 Watt (Max.) Quartz tungsten halogen lamp (T4 Bulb/'RSC' Base) only. To reduce the risk of electric shock when replacing bulbs, turn display switch to OFF position.

1. Turn the unit off.
2. Unplug the power cord from the electrical outlet and allow the unit to cool to room temperature before proceeding.
3. Gently, but firmly, press the lamp socket sideways and remove the bulb (Figure 6).
1. Install a new 100 watt bulb while pressing the socket sideways. Make sure bulb is fully seated before releasing socket.

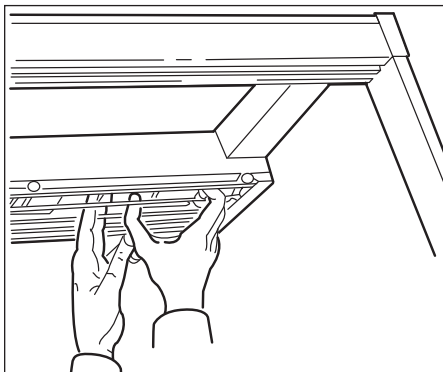


Figure 6. Halogen Bulb Replacement

Front Glass Replacement

1. Turn the unit OFF, unplug the power cord from the electrical outlet, and allow the unit to cool to room temperature before proceeding.
2. Turn the two security paddles to align with the slot of brackets at each corner (Figure 8).
3. Tilt the front glass away from the unit on the hinge plate and remove the panel from the unit.
4. (See Caution note).
5. To reinstall, be sure the front glass is fully seated in the hinge plate. Then, tilt the glass into place and install the nylon spacers, washers, and thumb screws.

CAUTION

When unlocking or locking the Front Glass Security Paddles (Figure 8), make sure another person is holding the Front Glass in place to prevent tipping that may result in personal injury or damage to glass.

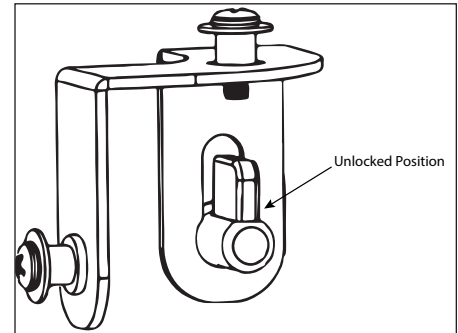


Figure 8. Security Paddles (Front Corners Only)

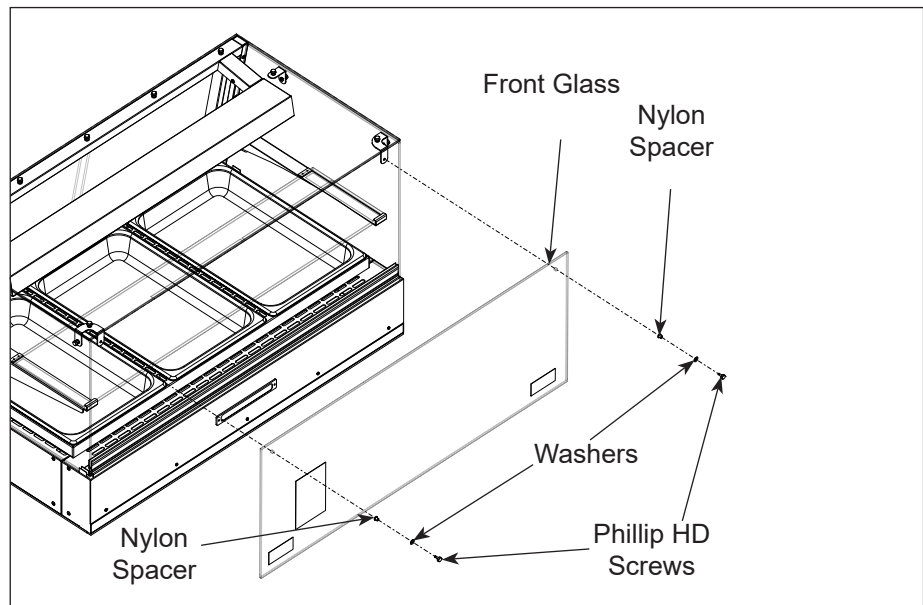


Figure 7. Front Glass Replacement

Top Glass Replacement

1. Turn the unit OFF, unplug the power cord from the electrical outlet, and allow the unit to cool to room temperature before proceeding.
2. Remove the top Phillips head screws, washers, and nylon spacers securing the top glass (Figure 9).
3. Remove the top glass from the unit.
4. To reinstall, position the top glass panel into place and install the nylon spacers, washers, and Phillips head screws.

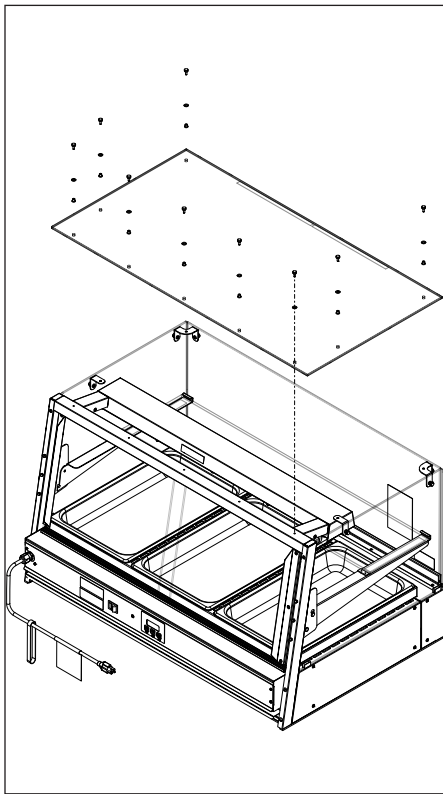


Figure 9. Top Glass Replacement

Rear Door Replacement

1. Turn unit off, unplug the power cord, and allow the unit to cool to room temperature.
2. Firmly grasp the sides of one glass door. Lift the door up and out of the bottom track (Figure 10). Repeat for the other door.
3. Place new door in the inside upper track. Push up firmly and slide bottom of door into bottom inside track. Install other door into outside tracks the same way.

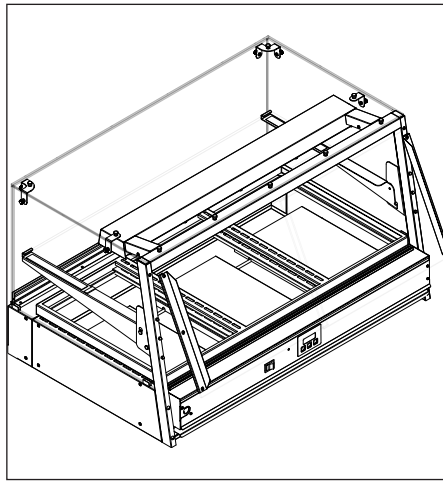


Figure 10. Rear Door(s) Removal/Installation

Side Glass Replacement

1. Turn the unit OFF, unplug the power cord from the electrical outlet, and allow the unit to cool to room temperature before proceeding.
2. Remove the two Phillips head screws, washers, and nylon spacers securing the side glass (Figure 11).
3. Remove the side glass from the unit.
4. To reinstall, position the side glass panel into place and install the nylon spacers, washers, and Phillips head screws.

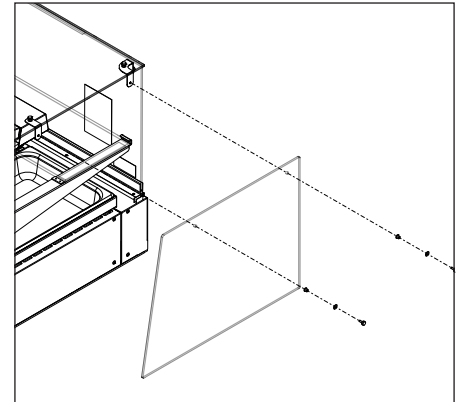


Figure 11. Side Glass Replacement

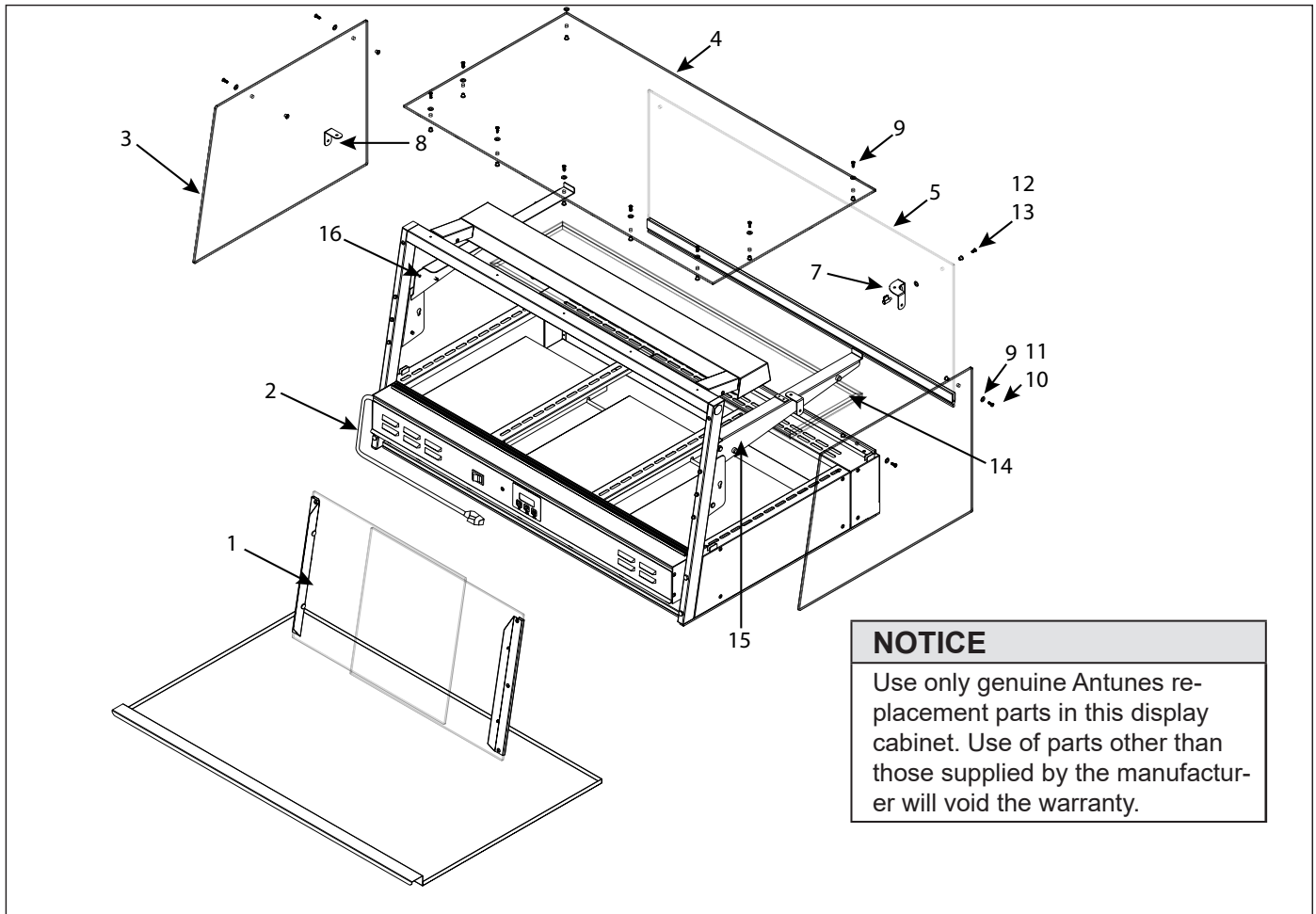
Troubleshooting

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.

Problem	Possible Cause	Corrective Action
No heat and lights do not turn on when power switch is set to on.	Power cord is not plugged in.	Plug the power cord into the appropriate outlet.
	Circuit breaker is off or has been tripped.	Reset circuit breaker, contact your maintenance person or Authorized Service Agency if it trips again.
	No power at receptacle.	Contact your maintenance person or Authorized Service Agency for service.
	Inoperable power cord.	
	Inoperable power switch.	
	Loose, burnt, broken wiring in the circuit.	
	Inoperable Transformer.	Contact your maintenance person or Authorized Service agency for service.
Inoperable Control Board.		
Display flashes " LO " and the cabinet does not heat up.	Inoperable Solid State Relay.	Contact your maintenance person or Authorized Service Agency for service.
	Inoperable Control Board.	
	Inoperable Heater(s).	
	Loose, burnt, broken wiring in circuit.	
Display flashes " HI " and the cabinet does not heat up.	Inoperable Thermistor.	Contact your maintenance person or Authorized Service Agency for service.
	Inoperable Control Board.	
Display flashes " HI " and the cabinet is very hot.	Solid State Relay contacts shorted closed.	Contact your maintenance person or Authorized Service Agency for service.
	Inoperable Control Board.	
Display flashes " OPEN " and the cabinet does not heat up.	Thermistor is disconnected or open.	Re-secure the Thermistor onto the Control Board. If this problem persists, contact your maintenance person or Authorized Service Agency for service.
	Inoperable Control Board.	
Display flashes " PO " and the cabinet does not heat up.	Inoperable Control Board.	Contact your maintenance person or Authorized Service Agency for service.
Product dries out quickly.	Setpoint temperature is set too high.	Lower the Setpoint temperature.
	Incorrect wattage halogen bulb(s) being used.	Use only 100 watt halogen bulb(s).
Halogen Bulb(s) do not light up.	Bulb(s) burnt out.	Replace bulb(s)
	Bulb(s) not seated properly into spring loaded sockets.	Remove and reinstall bulb(s) so that the ends snap into the socket(s).
	Inoperable Resistor Assembly.	Contact your maintenance person or Authorized Service Agency for service.
	Loose, burnt, or broken wiring in Circuit.	
	Inoperable Bulb Sockets(s).	

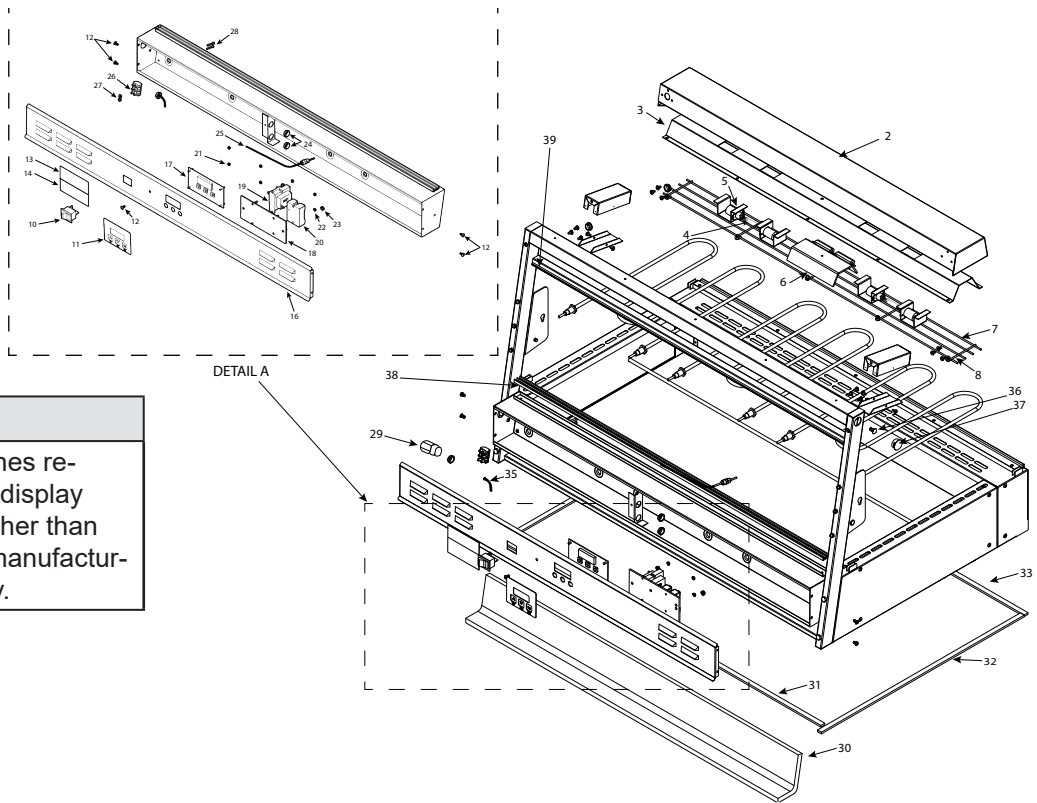
Replacement Parts (Sheet 1)



Item No.	Part #	Description	QTY.
1	0013062	Door Assembly Rear	2
2	0700451	Power Cord 14/3 5-20P (Mfg. No. 9500558 Only)	1
	0700453	Power Cord CEE 7/7 (Mfg. No. 9500733 Only)	1
3	0900316	Side Glass	2
4	0900318	Top Glass	1
5	0013155	Front Glass Assembly	1
6	0022701	Weldment, Corner Bracket RH	1
7	0022702	Weldment, Corner Bracket LH	1
8	0022021	Glass Clip Weldment	2
9	3080359	#8-32 x 1/2 C6 PHL HD Screw	15
10	3250207	Washer, Flat 1/4 x 1/32 Thick Delirn	15

Item No.	Part #	Description	QTY.
11	2150410	Spacer, #10 SH 1/4" LG Nylon	15
12	0013450	Glass Lock	2
13	3080358	Screw, #8-32 Phillips x 3/8 LG	2
14	0013399	Glass Shelf with Edging	1
15	0013400	Glass Shelf Support LH	1
16	0013401	Glass Shelf Support RH	1

Replacement Parts (Sheet 2)



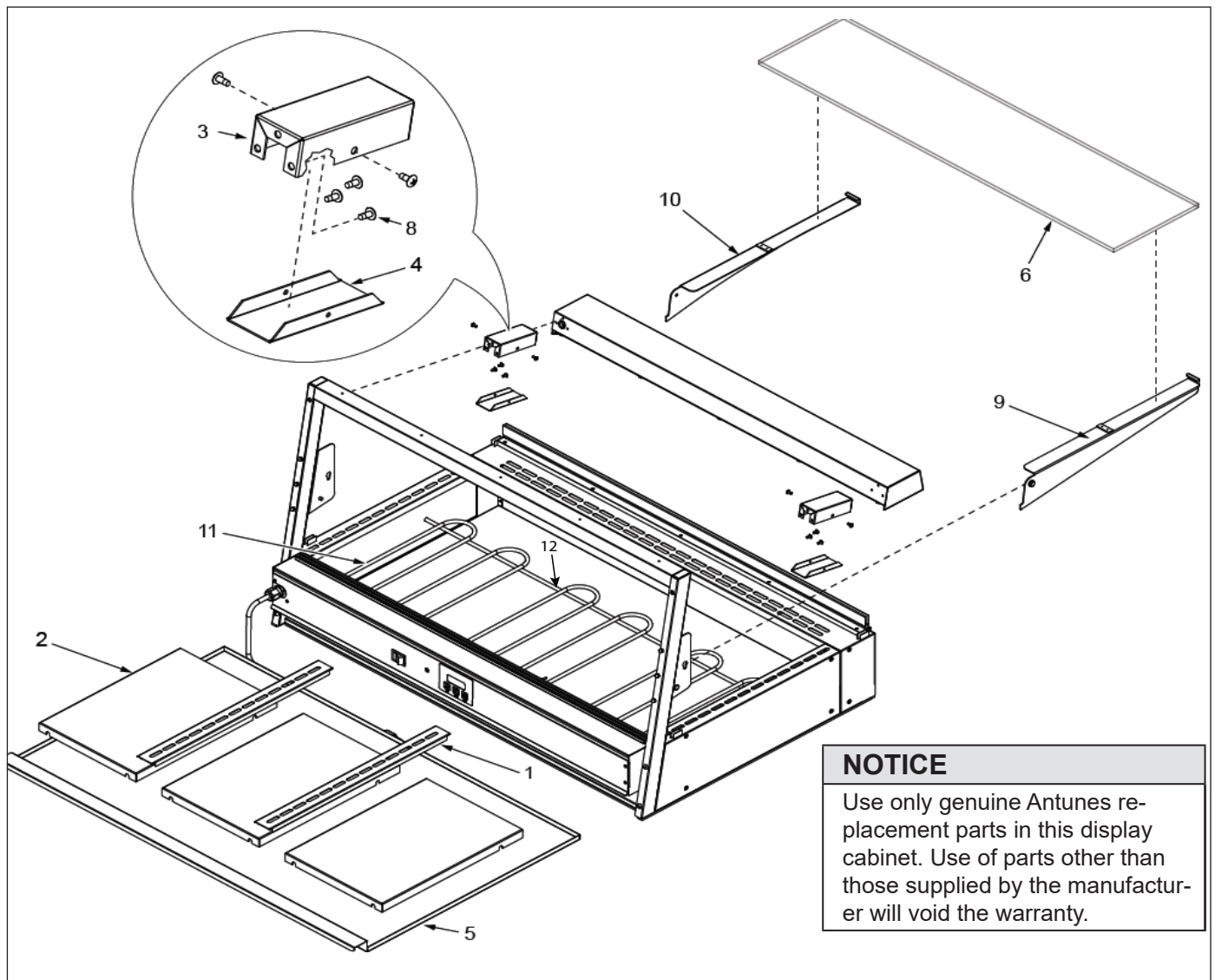
NOTICE
 Use only genuine Antunes replacement parts in this display cabinet. Use of parts other than those supplied by the manufacturer will void the warranty.

Item No.	Part #	Description	QTY.
2	0011622	Housing, Lamp Assy (Mfg. No. 9500558 Only)	1
	0011879	Housing, Lamp Assy (Mfg. No. 9500733 Only)	1
3	0020676	Inner Lamp Housing Weldment	1
4	4060252	Lamp - Quartz Halgn 100w	2
5	4060189	Lamp Holder, Quartz	4
6	0010706	Resistor Assembly 120V (Mfg. No. 9500558 Only)	1
	0010644	Resistor Assembly 120V (Mfg. No. 9500773 Only)	1
7	0800229	Lamp Guard	1
8	308P203*	Screw, 8-32 x 3/8 LG Phillips	5
9	0400119	Bushing, Shorty 5/8"	4
10	7000882	Rocker Switch Replacement Kit	1
11	1001037	Label, Control Panel	1
12	308P157*	Screw, 8-32 x 3/8 LG Phillips	5
13	1000900	Label - Service	1
14	1001213	Label - Shock Hazard	1
16	0022981	Control Panel Weldment (Mfg. No. 9500558 Only)	1
	0024210	Control Panel Weldment (Mfg. No. 9500733 Only)	1
17	4070225	Assy - PCB, Control Temp 38-74C/100-165F	1
18	0024115	Heat Sink	1

Item No.	Part #	Description	QTY.
19	4010199	Transformer 120V (Mfg. No. 9500558 Only)	1
	4010259	Transformer 230V (Mfg. No. 9500733 Only)	1
20	4050231	Relay, Zero Cross, Solid State - 50A	1
21	304P105*	Nut, Hex "KEPS" #4-40	4
22	306P130*	Nut, hex "KEPS #06-32 Steel, Zinc Plated	4
23	308P143*	Nut, Hex "KEPS" #8-32	2
24	0400119	Bushing, Shorty - 5/8"	2
25	7000369	Thermistor Replacement Kit	1
26	4060304	Terminal Block 3-Pole	1
27	306P101*	Hex Nut #6-32	2
28	306P123*	Screw, 6-32 x 7/8 LG	2
29	0400354	Strain Relief	1
30	5040002	Insulation, CERA Blanket	1
31	0200193	Gasket, Strip	1
32	0200191	Gasket, Strip	2
33	0200157	Gasket, Strip	1
35	0700937	Wire Set	1
36	21800-0120	Hole Plug - 7/8	2
37	3250223	Screw Soc HD 1/4-20x3/8	2

* Available in packages of 10 (ten)

Replacement Parts (Sheet 3)



NOTICE

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

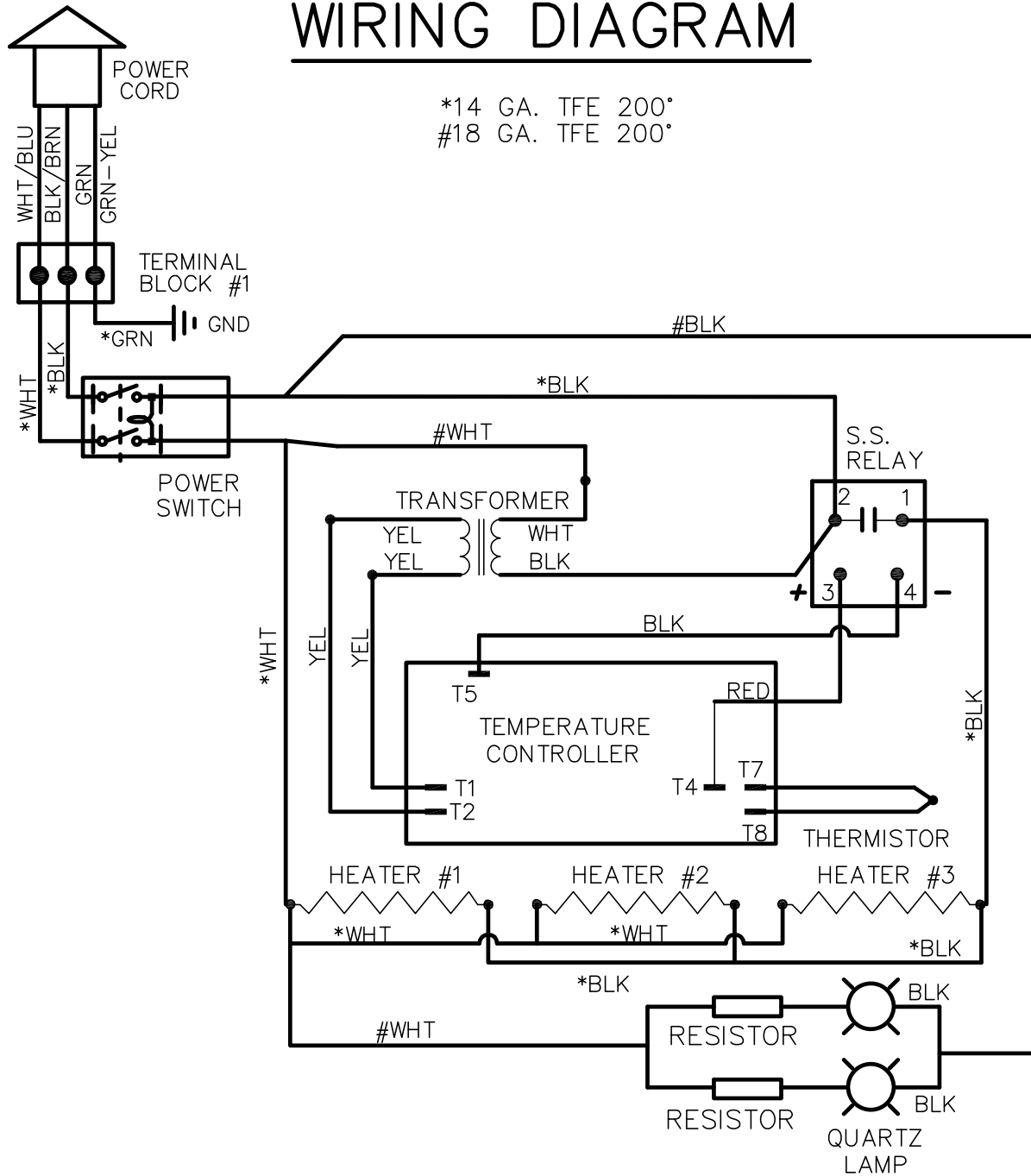
Item No.	Part #	Description	QTY.
1	0501869	Pan Support	2
2	0502172	Heat Shield	3
3	0502865	Bracket, Lamp Housing	2
4	0502866	Cover Plate	2
5	0507014	Crumb Tray	1
6	0013399	Glass, Middle Shelf with Edging	1
8	308P157*	Screw, 8-32 x 3/8 LG Phillips	8
9	0013401	Glass Support, LH	1
10	0013400	Glass Support, RH	1
11	4030304	Heating Element (Mfg. No. 9500558 Only)	3
	4030239	Heating Element (Mfg. No. 9500733 Only)	3
12	0800231	Support Rod	1

* Available in packages of 10 (ten)

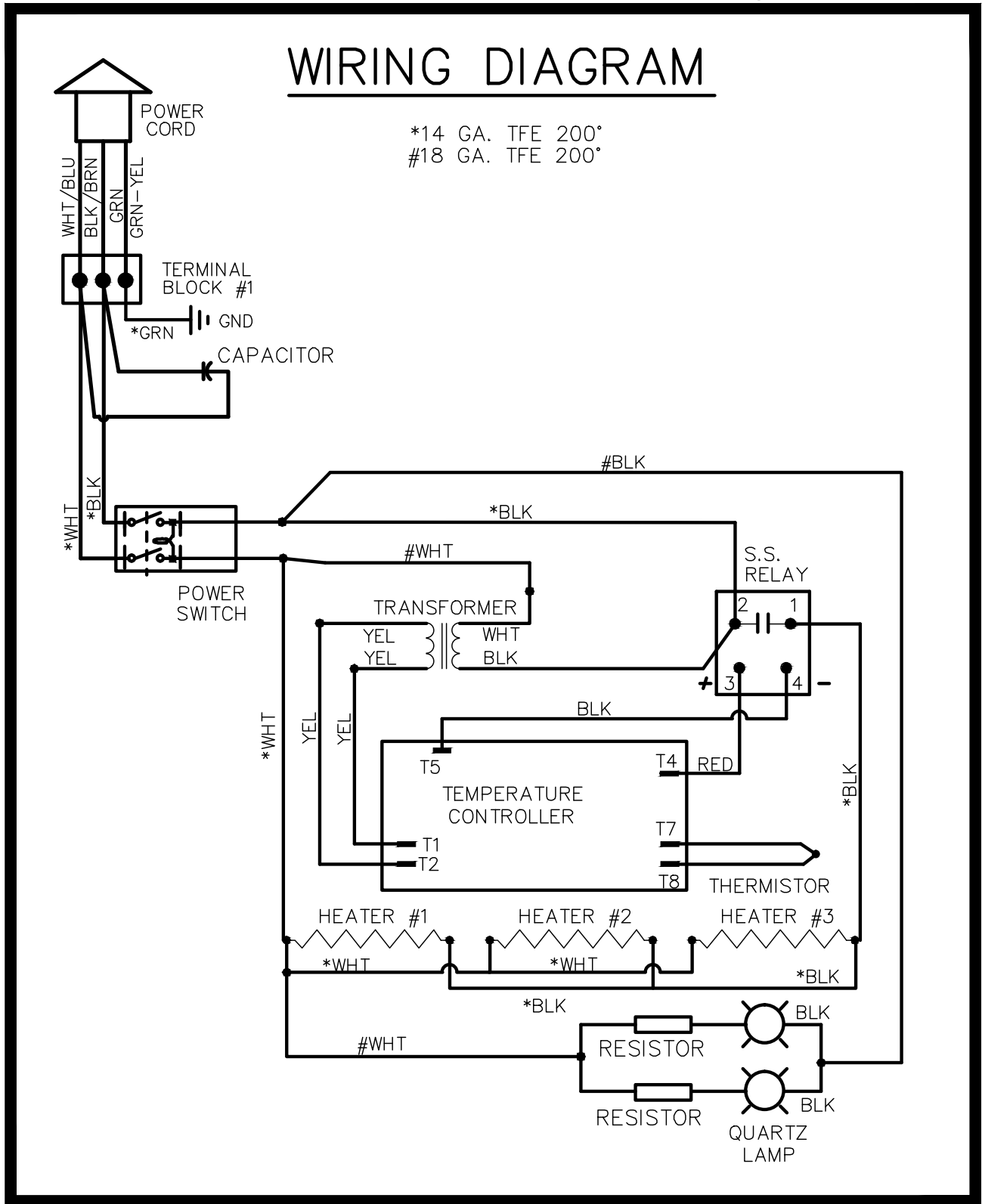
Wiring Diagram (120V)

WIRING DIAGRAM

*14 GA. TFE 200°
 #18 GA. TFE 200°



Wiring Diagram (230V)



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 mechanical and electrical defects for a period of one year from date of purchase or 18 months from shipment from factory, whichever occurs first, under normal use and service, and when installed in accordance with manufacturer's recommendations.

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

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 include overtime charges or work done by unauthorized service agencies or personnel. This warranty does not cover normal maintenance, calibration, or regular adjustments as specified in operating and maintenance instructions of this manual, and/or labor involved in moving adjacent objects to gain access to the Equipment. This warranty does not cover consumable items such as gaskets and light bulbs, nor does it cover water contaminant 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.

For the first 90 (ninety) days after installation (in the U.S. ONLY), the unit will be repaired in-store (subject to the terms of the limited warranty) by our Authorized Service Agency at no charge for parts and non-overtime labor. Travel time and mileage charges in excess of 2 hours (100 miles round-trip) from the nearest Authorized Service Agency is not covered under this warranty and is the responsibility of the end user.

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:

- Normal maintenance outlined in this manual.
- Malfunction resulting from improper service or maintenance.
- Damage from moisture getting into electrical components.
- Damage from tampering with, removal of, or changing any preset control or safety device.
- Damage caused by parts or components not provided by Antunes



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