

### BUN TOASTER BUN TOASTER HEBT-3V 9210859, 9210860, 9210861 & 9210863



Place this manual in the Toaster section of your Equipment Manual. Manufactured exclusively for McDONALD'S<sup>®</sup> BY ANTUNES 180 KEHOE BLVD. CAROL STREAM, ILLINOIS 60188, U.S.A. PHONE: +1-630-784-1000 TOLL FREE: +1-877-392-7854 FAX: +1-630-784-1650 www.antunes.com





HEBT-3V Scan with mobile device or enter URL for product and service information. http://tinv.cc/aiaHEBT3V

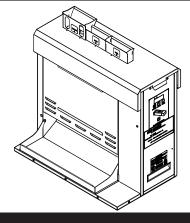


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#### LIMITED WARRANTY

A.J. Antunes & Co. provides the following limited warranty to the original purchaser of all McDonald's Equipment.

All components are warranted against defects in the material and workmanship for a period of two (2) years. If any part becomes inoperable during the period of this warranty, A.J. Antunes & Co. will pay labor costs to an Authorized Service Agent to replace the part plus travel expenses.

#### WARRANTY EXCLUSIONS

- · The cost of installation.
- Equipment that has been damaged due to shipment. Purchaser should make damage claim directly upon carrier.
- Alteration, misuse, abuse.
- Improper storage or handling
- Improper maintenance.
- Failure to follow proper installation instructions, including electrical connection.
- · Improper or unauthorized repairs.
- Scheduled Maintenance procedures as outlined in your MRC Card.
- Consumables such as Grill Covers (Release Sheets), gaskets, Conveyor Belt Wraps, O-rings, removal of links, and light bulbs.
- Freight, foreign, excise, municipal, or other sales or use taxes.
- Consequential damages such as loss of profit, loss of time, the cost of repairing or replacing other property which is damaged, or any other incidental damage of any kind.

A.J. Antunes & Co. reserves the right to make changes in design or add improvements on any products. The right is always reserved to modify Equipment because of factors beyond our control and government regulation. Changes to Equipment do not constitute a warranty charge. This warranty is exclusive and is in lieu of all other warranties, expressed or implied, including any implied warranty of merchantability or fitness for a particular purpose, each of which is expressly disclaimed. The remedies described above are exclusive, and in no event shall A.J. Antunes & Co. or any of its Divisions be liable for special consequential or incidental damages for the breach or delay in the performance of this warranty.

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### **OWNER INFORMATION**

#### General

This manual provides the safety, installation, and operating procedures for this unit. Please read this manual prior to installing and operating the unit.

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

#### Service/Technical Assistance

If you experience any problems with the installation or operation of your unit, contact Antunes Technical Service at +1-877-392-7854 (toll free).

#### 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 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.

Fill in the information below and have it handy when calling Antunes Technical Service 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.:          |  |
| Network ID Number: |  |

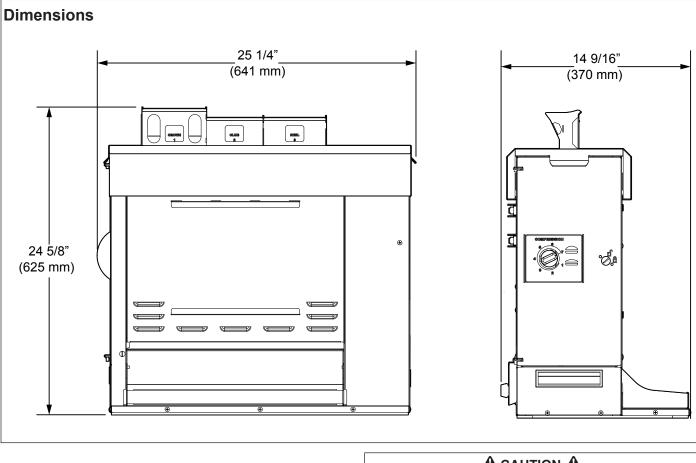
Use only genuine Antunes replacement parts in this unit. Use of replacement parts other than those supplied by the manufacturer will void the warranty.

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

## SPECIFICATIONS

### **Electrical Specifications & Plug Configuration**

| =  |         | U         |       |  |                       |
|--|---------|-----------|-------|--|-----------------------|
| Model &<br>Mfg. No                             | Volt    | Watts     | Hz.   | Plug<br>Description                                  | Plug<br>Configuration |
| HEBT-3V<br>9210859 (Korea)<br>9210861 (Europe) | 220-240 | 3300      | 50/60 | IEC-309 Pin & Sleeve,<br>16 Amp., 230 Volt           |                       |
| HEBT-3V<br>9210860<br>(Australia)              | 220-240 | 3180-3750 | 50/60 | Marechal<br>Pin & Sleeve<br>32 Amp.,<br>220-250 Volt |                       |
| HEBT-3V<br>9210863<br>(New Zealand)            | 220-240 | 3180-3750 | 50/60 | Marechal<br>Pin & Sleeve<br>32 Amp.,<br>220-250 Volt |                       |



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



### **IMPORTANT SAFETY INFORMATION**

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 and/or on 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 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.
- Do NOT clean this appliance with a water jet.

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

• Turn the unit off, wait for the cool-down procedure to complete its cycle, and disconnect the power cord before performing any service or maintenance on the unit.

NOTE: Turning off the power switch does NOT turn off all power to the unit. When the unit is plugged in and turned off, an LED light flashes to indicate that the power cord is plugged in.

- The procedures in this chapter 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 appropriated 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.

• Bread may burn. Therefore toasters must not be used near or below curtains or other combustible walls and materials. Failure to maintain safe operating distances may cause discoloration or combustion.

### AWARNING A

To avoid possible personal injury and/or damage to the unit, all inspections, tests, and repair of electrical equipment should be performed by QUALIFIED SERVICE PERSONNEL. The unit MUST be <u>completely shut down and unplugged</u> before any internal servicing, except when electrical tests are required. Use extreme care during electrical circuit tests. Live circuits will be exposed.

#### **A**CAUTION **A**

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

### 

Bread may burn. Therefore toasters must not be used near or below curtains or other combustible walls and materials. Failure to maintain safe operating distances may cause discoloration or combustion.

### **A**CAUTION **A**

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

### A WARNING A

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 toaster 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

#### Unpacking

- 1. Open the large box. It contains:
  - HEBT-3V toaster
  - Accessories box
- 2. Remove the accessories box from the large box.
- 3. With the help of another person, carefully remove the HEBT-3V from the large box.
- 4. Remove all protective coverings from the unit.
- 5. Open the Accessories Box. It contains:
  - Owner's Manual
  - Bun Buffer Frame
- 6. Wipe the entire exterior of the toaster and the accessories mentioned above with a clean towel sprayed with a McDonald's approved sanitizer. Allow to air dry.

NOTE: Handle accessories with care. If an accessory becomes bent or damaged, it may not attach to the unit correctly, which may affect normal operation.

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

### Location

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

- Make sure power is off and the toaster 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.
- 1. Place the toaster in the required position designated by McDonald's.
- 2. Attach the Bun Feeder, Bun Buffer Frame, and Crown\Heel Separator accessories (Figure 1.)
- Plug the power cord into an appropriate power outlet. Refer to the specification plate for the proper voltage.

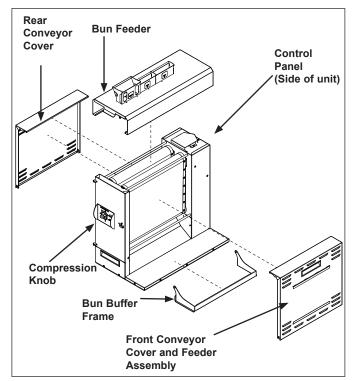


Figure 1. HEBT-3V Components

### OPERATION

### **Operating Instructions**

The HEBT-3V toasts Crowns, Heels, Clubs, and other products. Follow these steps to start the HEBT-3V:

- 1. Turn on the toaster and wait for warm-up to complete.
- Set the Compression Knob to 4 (recommended). If further adjustments are required see page 8 under Adjusting Toast Quality. Refer to the figure on page 7.
- 3. When the unit reaches operating temperature, the control panel displays "Ready".
- 4. Insert product into the designated area of the Bun Feeder Assembly with the cut side of the bun facing towards the front. Toasted product drops into the Bun Buffer.

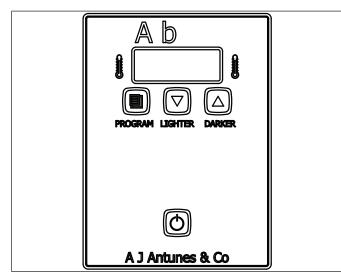


Figure 2. HEBT-3V Control Panel and Display

#### User Mode

User Mode allows an operator to view the toaster settings but does not permit any adjustments.

- 1. Press and hold the **PROGRAM** button for 5 seconds. After 5 seconds, the display will show the actual temperature of Platen A (front).
- 2. Press the **LIGHTER** button to toggle between the setpoint and actual temperature of Platen A (front).
- Press the **PROGRAM** button to proceed to the Front Platen Heater menu. The display shows the actual temperature of Platen B (rear).
- 4. Press the **LIGHTER** button to toggle between the setpoint and actual temperature of Platen B (rear).
- 5. Press the **PROGRAM** button to proceed to the Motor Menu. The display shows the actual speed of the motor.
- 6. Press the **LIGHTER** button to toggle between the setpoint and actual speed of the Motor.

# NOTE: The unit will exit User Mode after 5 seconds of keypad inactivity.

### Manager Mode

Manager Mode allows an operator to view and adjust the following settings:

- Platen A Temperature
- Platen B Temperature
- Motor Speed
- Temperature Units (Celsius or Fahrenheit)
- Current Selection: 208 or 240 volts

Manager Mode also allows an operator to view (but not adjust) the Ambient Temperature of the Control Compartment as well as the number of days of operation.

- 1. Turn the unit off.
- 2. Turn the power on while holding the **PROGRAM** button. Hold the button for 5 seconds until the display shows "EnA." Release the button.
- To adjust the Platen A (front) Setpoint Temperature, press the LIGHTER or DARKER buttons to reach the desired temperature.

NOTE: The recommended temperature setting for Platen A (front) is 271° C (520° F).

### **OPERATION** (continued)

- 4. Press the **PROGRAM** button to proceed to the Platen B (rear) Setpoint Temperature.
- To adjust the Platen B (rear) Setpoint Temperature, press the LIGHTER or DARKER buttons to reach the desired temperature.

# NOTE: The recommended temperature setting for Platen B (rear) is 271° C (520° F).

- 6. Press the **PROGRAM** button to procedure to the Motor Speed Setpoint.
- Adjust the Motor Speed Setpoint by pressing the LIGHTER or DARKER buttons to reach the desired speed.

# NOTE: The Motor Speed is adjustable from 1-100. The recommended setting is 66.

- 8. Press the **PROGRAM** button to proceed to the Temperature Units.
- To change the Temperatures units from Fahrenheit or Celsius, press the LIGHTER or DARKER buttons.
- 10. Press the **PROGRAM** button to proceed to the Ambient Temperature of the Control Compartment.

#### NOTE: No changes can be made to the Ambient Temperature of the Control Compartment. Temperatures under 150° F (66° C) are acceptable.

11. Press and hold the **PROGRAM** button to save any changes.

NOTE: The unit exits Manager Mode after 30 seconds of keypad inactivity.

There are variations in bun products Worldwide that are used on the Antunes HEBT toaster such as moisture content, bun formulations, age, tolerances etc. The HEBT was designed to compensate for bun variations by allowing user to adjust the compression, light/dark (speed) & temperatures settings in order to achieve a Gold Standard toasted product.

1.LIGHT DARK ADJUSTMENT: Adjust the light dark setting with the ▲ or ▼ buttons. The default light/dark setting on the HEBT from the factory is 0 but can be adjusted from Lighter 0-10 to Darker 0-10. Light 10 is the lightest setting and dark 10 is the darkest. Each increase in "lighter" value will increase the pass through time and each increase in "darker" value will decrease the pass through time.

#### Safety Features

#### **HI-LIMIT CONTROL**

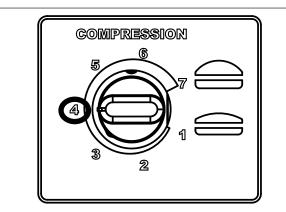
A Hi-Limit Control turns off electrical power to the heaters and control circuits if the unit overheats. To reset the control:

- 1. Allow 10 15 minutes for the unit to cool.
- 2. Locate the two Hi-Limit Controls on the rear of the unit. Remove the two black protective caps.
- 3. Press and release both buttons. Reinstall the protective caps.

# NOTE: If the Hi-Limit Controls require continuous resetting, contact your Authorized Service Agency.

### Purging buns from Toaster

If buns get stuck in the toaster, press and hold both the **UP** and **DOWN** arrow buttons to increase the belt speed until the buns are purged from the toaster.



2.**TEMPERATURE ADJUSTMENT**: Adjust the set point temperature on the platens in the program menu. The default temperature settings on the HEBT are A Platen: 271°C (520°F) and B Platen: 271°C (520°F). The temperatures can be increased to +/- 50°F (10°C) if needed to achieve an acceptable toast quality.

3.**COMPRESSION ADJUSTMENT**: Adjust the compression knob on the left side of the unit. The default compression setting on the HEBT is 4 but is adjustable from 1-7. It is acceptable to adjust the compression from 1-7 as needed to achieve the desired toast quality and bun compression.



### MAINTENANCE

### **Daily Cleaning**

#### **Clean the Toaster and Belt Wraps**

- 1. Turn the toaster's power switch to the off position. The toaster enters a cool-down mode and will automatically shut down when complete.
- 2. Remove the bun feeder and bun stop with heat-resistant gloves.
- 3. Remove the front and rear conveyor covers with heat resistant gloves.
- 4. Inspect the front belt for any tears, discoloration, or dam-age to the Belt Wrap snaps. Replace any damaged Belt Wrap as needed. With with proper maintenance the belt can six months or longer. Refer to PR 68 Q1 and PR 68 Q2 for belt replacement instructions.
- 5. If the front belt is in good condition, spray a clean, damp sanitized towel with Sink Detergent solution. Wipe the front belt clean. Rinse the front belt with a separate clean, damp sanitized towel. Allow to air dry.

NOTE: The belt rollers will continue turning while in cool-down mode. This allows you to clean the entire belt. Only clean the belt where it is in front of the Backing Plate to avoid causing dam-age to the belt. Repeat this step several times if there is heavy carbon buildup on the conveyor belt.

- Inspect the rear belt for any tears, discoloration, or damage to the Belt Wrap snaps. Replace any damaged Belt Wrap as needed. With with proper maintenance the belt can six months or longer. Refer to PR 68 Q1 and PR 68 Q2 for belt replacement instructions.
- If the rear belt is in good condition, spray a clean, damp sanitized towel with Sink Detergent solution. Wipe the rear belt clean. Rinse the rear belt with a separate clean, damp sanitized towel. Allow to air dry.

NOTE: The belt rollers will continue turning while in cool-down mode. This allows you to the entire belt.

NOTE: Only clean the belt where it is in front of the Backing Plate to avoid causing damage to the belt.

- Wash, rinse, and sanitize the bun feeder and bun stop in the three-compartment sink. Allow to air dry
- 9. Wash, rinse, and sanitize the front and rear conveyor covers in the three-compartment sink.
- 10. Reinstall the clean front and rear conveyor covers.
- 11. Reinstall the clean bun feeder and clean bun stop.
- 12. Clean the outside surfaces of the toaster with clean, damp sanitized towel sprayed with Heavy Duty Degreaser Solution. Rinse with a clean, sanitizer soaked towel and allow to air dry.
- 13. Turn the unit on.
- 14. Place all used towels into the soiled towel bucket.

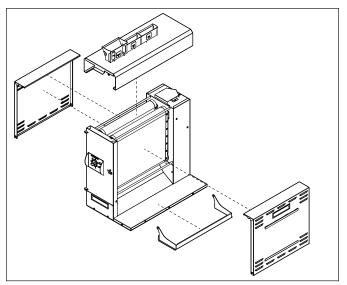


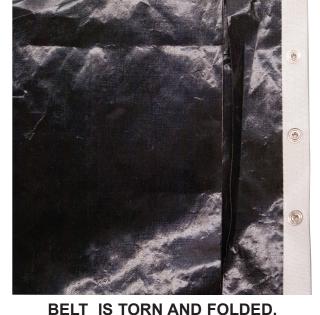
Figure 3.



Figure 4. Examples of Damaged Belts



### MAINTENANCE (continued)



BELT IS TORN AND FOLDED. REPLACE BELT.

Figure 5. Example of Damaged Belt

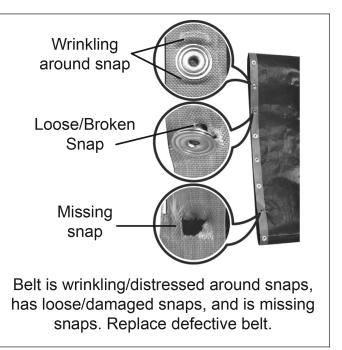


Figure 7. Example of Damaged Belt



BELT IS MISSING SNAPS AND IS DAMAGED. REPLACE BELT.

Figure 6. Example of Damaged Belt



### **MAINTENANCE** (continued)

#### Quarterly

#### **Remove Belt Wraps and Clean Rollers**

- Turn the toaster's power switch to the off position. The toaster enters a cool-down mode and will automatically shut down when complete.
- 2. Unplug the power cord once the cool-down period is complete.

# NOTE: Wait for the cool-down period to complete before unplugging the power cord.

- 3. Remove the bun feeder using heat-resistant gloves.
- 4. Remove the front and rear conveyor covers by lifting up and away from the unit. Set the compression knob to 7.

# NOTE: Reposition the toaster as needed to perform these steps.

- 5. Unlock the lock on the left side panel with a flathead screwdriver and open the panel. Set the bun compression knob to 7.
- 6. Push down on the front and rear belt rollers and move them away from the center of the toaster. Use both hands. This removes tension and locks the rollers in place.
- 7. Lift the upper belt frame lock. Then rotate down so it rests on the camshaft of the rear belt roller.
- 8. Pull down the lower belt frame lock. This provides access to the front and rear belt rollers and belts.
- 9. Carefully remove both of the belts from the toaster.
- 10. Wipe all four rollers and backing plates with a clean, damp sanitized towel. Make sure to remove all debris from the rollers and the backing plates so they are as clean as possible.
- 11. Use a dry cloth towel or nylon-bristled brush to remove all debris from both side compartments, inside of the toaster, and underneath the rollers.

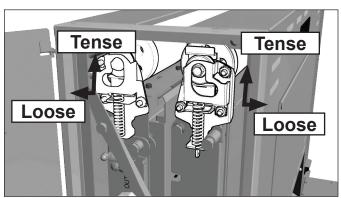


Figure 8. Conveyor Rollers

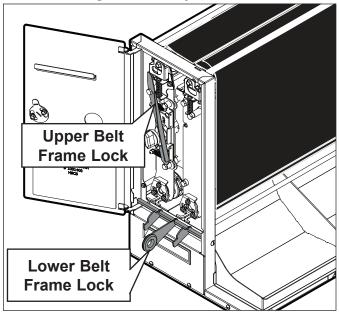


Figure 9. Conveyor Locks

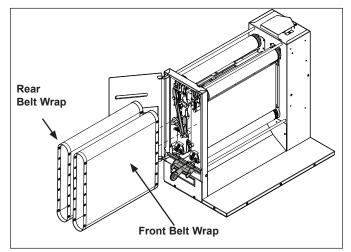


Figure 10. Belt Wraps



### **MAINTENANCE** (continued)

#### Install Belt Wraps

- If you are installing the existing belt wraps, inspect the belts. Replace belt wraps if worn or damaged. If the belt wraps are in good condition put them back on the toaster.
- 2. For new or existing belts, wipe both sides of the belts with a clean, damp sanitized towel. Allow to air dry.
- 3. Slide the belts gently over the appropriate top and bottom roller. Make sure the belt lines up properly on the rollers. The snaps on the belts should face the inside of the roller.
- 4. Lift up the front and rear belt roller. Use both hands. This will add tension and lock them in place.
- 5. Lift the lower conveyor lock to lock the rollers into place.

# NOTE: Lift up on the camshaft of the rear conveyor roller while lifting the conveyor lock.

- Lift the upper belt frame lock and lock in place on the conveyor assembly. Set the compression knob to 4.
- 7. Close the side panel and lock the lock using a flathead screwdriver on the side panel.
- 8. Re-install the front and rear conveyor covers so they lock into place.
- 9. Re-install the bun feeder and bun stop onto the top of the unit.
- 10. Plug in the power cord and turn the unit on.

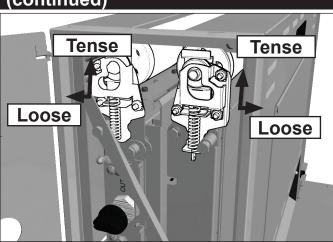


Figure 11. Conveyor Rollers

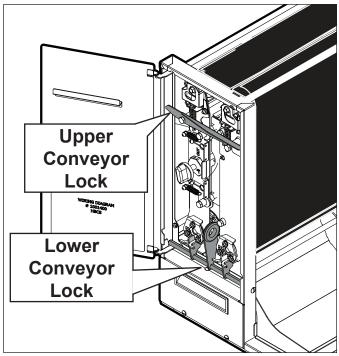


Figure 12. Conveyor Locks

### **MAINTENANCE** (continued)

# Clean Cooling Fans and Electrical Housings (Annually)

- 1. Turn the toaster's power switch to the off position. The toaster enters a cool-down mode and will automatically shut down when complete. Unplug the power cord.
- 2. Remove the bun feeder and set aside.
- 3. Remove the top two screws from the control housing cover and slowly lower the cover.
- 4. Remove any debris or dust from the cooling fan with a small brush. Wipe away any debris with a clean, dry towel Inspect the electrical compartment for crumbs and debris. Clean out all crumbs and debris using a clean, dry towel or nylon bristled brush. Be careful not to disrupt any of the electrical wiring.
- 5. Slowly close the control housing cover. Reconnect with the screws.
- 6. Remove the screws from the bottom plate on the rear of the unit and slowly lower the cover.
- 7. Remove any debris or dust from the cooling fan with a small brush. Wipe away any debris with a clean, dry towel. Inspect the electrical compartment for crumbs and debris. Clean out the crumbs and debris using a clean, dry towel or nylon bristled brush. Be careful not to disrupt any of the electrical wiring.
- 8. Close the bottom plate and re-install the screws.
- 9. Reattach the bun feeder. Plug in the power cord, turn the power on, and test the unit before returning it to service.

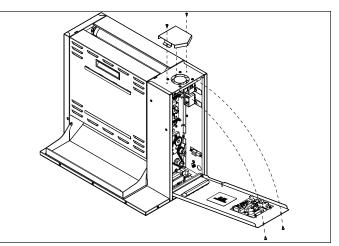


Figure 13. Accessing Top Cooling Fan

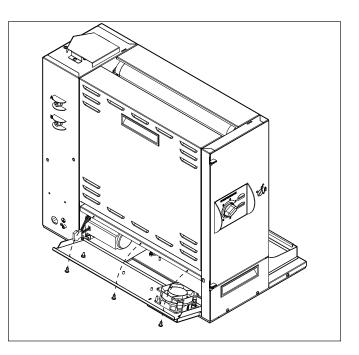


Figure 14. Accessing Rear Cooling Fan



### TROUBLESHOOTING

| Problem   | Possible Cause  | Corrective Action  |  |  |
|---|---|--|--|--|
| Control Display flashes<br><b>Err 5</b> continuously. Buns<br>not toasting properly.      | The A Platen temperature has not reached the setpoint temperature within 20 minutes.                      | Allow the unit to warm up for 30 minutes and then recheck. If the Control Display still flashes <b>Err 5</b> , contact your maintenance person or Antunes Technical Service for service.                       |  |  |
|   | Failed A Platen Thermocouple.<br>Failed Control Board   | Contact your maintenance person or Antunes<br>Technical Service for service.   |  |  |
| Control Display flashes<br><b>Err14</b> continuously.<br>Buns not toasting prop-<br>erly. | The B Platen temperature has not reached the setpoint temperature within 20 minutes.                      | Allow the unit to warm up for 30 minutes and<br>then recheck. If the Control Display still reads <b>Err</b><br><b>14</b> , contact your maintenance person or Antunes<br>Technical Service for service.        |  |  |
|   | Failed Rear Platen Thermocouple.  | Contact your maintenance person or Antunes   |  |  |
|   | Failed Control Board.   | Technical Service for service.   |  |  |
| Control Display flashes<br>Err 9 continuously.  | Control Compartment ambient tem-<br>perature is above 150° F (66° C)                                      | Verify side vents on toaster are unblocked and not<br>near other heating appliances. If problem persists,  |  |  |
|   | Failed Cooling Fan.   | contact your maintenance person or Antunes<br>Technical Service for service.   |  |  |
|   | Failed Control Board  |  |  |  |
| Control Display Flashes   | Failed A Platen Solid State Relay.  | Contact your maintenance person or Antunes   |  |  |
| Err 19 continuously.<br>Buns Burn.  | Failed Control Board.   | Technical Service for service.   |  |  |
|   | Failed A Platen Thermocouple.   |  |  |  |
| Control Display flashes   | Failed B Platen Solid State Relay.  | Contact your maintenance person or Antunes   |  |  |
| Err 18 continuously.<br>Buns Burn.  | Failed Control Board.   | Technical Service for service.   |  |  |
|   | Failed B Platen Thermocouple.   |  |  |  |
| Control Display flashes<br>Err 13 continuously.<br>Buns not toasting prop-                | Loose A Platen Thermocouple con-<br>nection on Control Board or the<br>Front Platen Thermocouple is open. | Re-secure the A Platen Thermocouple to the<br>Control Board. If the Control Display still reads<br><b>Er 13</b> , check the front Thermocouple for continu-  |  |  |
| erly.   | Failed Control Board.   | ity. Contact your maintenance person or Antunes<br>Technical Service for service.  |  |  |
| Control Display flashes<br>Err 11 continuously.<br>Buns not toasting prop-<br>erly.       | Loose B Platen Thermocouple con-<br>nection on Control Board or the<br>Rear Platen thermocouple is open.  | Re-secure the B Platen Thermocouple connection<br>to the Control Board. If the Control Display still<br>reads <b>Er 11</b> , check the Rear Thermocouple for<br>continuity. Contact your maintenance person or |  |  |
|   | Failed Control Board.   | Antunes Technical Service for service.   |  |  |
| Control Display flashes<br>Err 12 continuously.   | Shorted A Platen Thermocouple to ground.  | Disconnect and re-secure the A Platen<br>Thermocouple connection to the Control Board.   |  |  |
| Buns not toasting prop-<br>erly.  | Failed Control Board  | If the Control Display still reads <b>Er 12</b> , check the<br>Rear Thermocouple for continuity. Contact your<br>maintenance person or Antunes Technical Service<br>for service.                               |  |  |
| Control Display Flashes<br>Err 10 continuously.<br>Buns not toasting.                     | Shorted B Platen Thermocouple to ground.<br>Failed Control Board.   | Re-secure the B Platen Thermocouple connection<br>to the Control Board. If the Control Display still<br>reads <b>Er 10</b> , check the Rear Thermocouple for   |  |  |
| , , , , , , , , , , , , , , , , , , ,   |   | continuity. Contact your maintenance person or Antunes Technical Service for service.  |  |  |

## **TROUBLESHOOTING** (continued)

| Problem  | Possible Cause   | Corrective Action   |
|--|--|---|
| Control Display flashes <b>Err 20</b> .  | Mechanical bind in one or both con-<br>veyors.   | Enter "user mode" to check the motor speed.<br>Check both conveyors for mechanical binds. Test  |
|  | Worn or damaged Ball Bearings.   | the motor. Replace necessary parts. Contact your maintenance person or Antunes Technical Service  |
|  | Drive chain or sprockets damaged.  | for service.  |
|  | Failed Motor.  |   |
|  | Failed Control Board.  |   |
| Control Display flashes Err 8  | Motor is running when it shouldn't be.   | Contact your maintenance person or Antunes<br>Technical Service for service.  |
| Crowns and/or Heels must be forced into the  | Belts not cleaned properly.  | Clean the Belts as described in the Maintenance section of this manual.   |
| toaster. Buns sticking and burning.  | Belts are dirty, worn, or damaged (replace every 4-6 months).  | Clean or replace Belts as described in the Maintenance section of this manual.  |
| Buns not toasting ade-<br>quately.   | One of the Conveyor top shafts is stuck in the lower lock position.  | Inspect positions of the shafts as described in the Maintenance section of this manual.   |
|  | Either both Upper/Lower Conveyor<br>locks are not properly locked in<br>place.   | Inspect the proper position of the locks as described in the Maintenance section of this manual.  |
| Compression side door will not close.  | Either both Upper/Lower Conveyor<br>Locks are not properly locked in<br>place.   | Inspect the proper position of the locks as described in the Maintenance section of this manual.  |
|  | The lock on the Compression Side<br>Door is in the locked position when<br>trying to close the door.                   | Turn the lock to the unlocked position before clos-<br>ing the door.  |
| Fan is making an unusu-  | Failed Cooling Fan.  | Verify vents on toaster are unblocked and not   |
| al sound.  | Cooling Fan is dirty and needs to be cleaned.  | near other heating appliances. Clean fans as<br>described in the Maintenance section of this man-<br>ual. If problem persists, contact your maintenance<br>person or Antunes Technical Service for service. |
| Control Display flashes<br><b>Err 17</b> continuously.<br>Buns are not toasting<br>properly. | A platen Hi-Limit Control is tripped.  | Allow the unit to cool and reset the A platen<br>Hi-Limit Control. If it trips again, contact your<br>maintenance person or Antunes Technical Service<br>for service.                                       |
| Control Display flashes<br><b>Err 16</b> continuously.<br>Buns are not toasting<br>properly. | B Platen Hi-Limit Control is tripped.  | Allow the unit to cool and reset the B platen<br>Hi-Limit Control. If it trips again, contact your<br>maintenance person or Antunes Technical Service<br>for service.                                       |
| Control Display is blank.  | Power Cord is not plugged in.  | Plug the Power Cord into the appropriate out-<br>let. Turn the toaster on. If the Control Display is<br>still blank, contact your maintenance person or<br>Antunes Technical Service for service.           |
|  | Circuit Breakers turned off or<br>tripped. Damaged electrical outlet,<br>plug, or Power Cord. Power Switch<br>damaged. | Reset Circuit Breakers. If they trip again, check<br>the Power Cord, Plug, and outlet for damage.<br>Contact your maintenance person, Authorized<br>Service Agency, and Electrician for service.            |
|  | Faulty Transformer.  | Replace Transformer.  |



## **TROUBLESHOOTING** (continued)

| Problem  | Possible Cause                                | Corrective Action   |
|--|---|---|
| Conveyors not turning.   | Motor Drive Chain is detached from sprockets. | Reinstall the Drive Chain.  |
|  | Drive Chain needs lubrication.                | Lubricate Drive Chain with Lubit-8 (P/N 2140152).   |
|  | Failed Drive Motor.                           | Contact your maintenance person or Antunes<br>Technical Service for service.                                      |
| Control Display flashes<br>Err 1, 2, 3, 5, 6, 7, or<br>any number above Err<br>20. | Internal Control Board fault.                 | The Control Board needs to be replaced. Contact your maintenance person or Antunes Technical Service for service. |



## **REPLACEMENT PARTS**

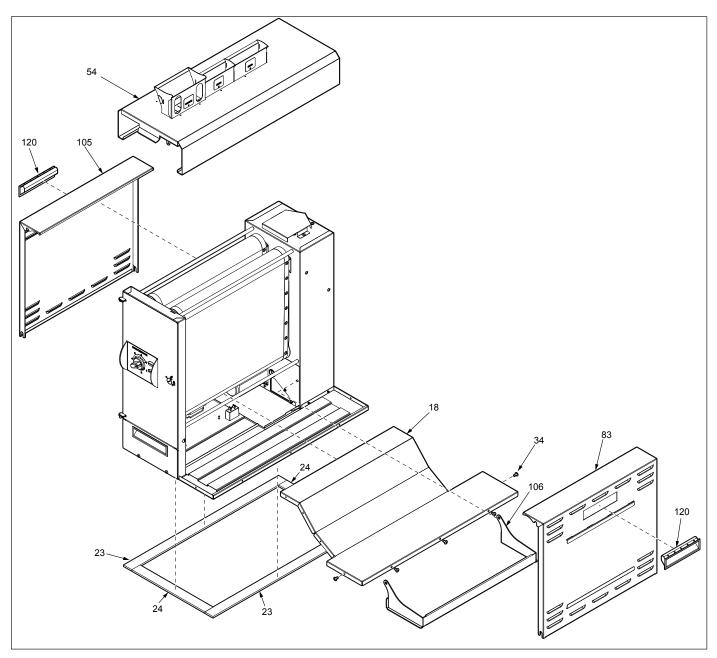
| Item | Part No. | Description 0                                  | Qty. |
|------|----------|--|------|
| 1    | 0012603  | Sprocket / Tensioner Bracket Assy              | 1    |
| 2    | 0012592  | Sprocket /Bearing Assembly                     | 1    |
| 3    | 0506185  | Bracket, Chain Tensioner                       | 1    |
| 4    | 2140109  | Loctite # 242 (Blue)                           | 1    |
| 5    | 3310101  | Nut, Hex 5/16 - 18                             | 1    |
| 6    | 3310103  | Shoulder Bolt 3/8" X 1"                        | 1    |
| 7    | 3310106  | Lock Washer                                    | 1    |
| 8    | 0012604  | Sprocket / Retainer Assy                       | 1    |
| 9    | 0012592  | Sprocket /Bearing Assembly                     | 1    |
| 10   | 0506146  | Retainer Idler                                 | 1    |
| 11   | 2120118  | Washer, Flat                                   | 1    |
| 12   | 2140109  | Loctite # 242 (Blue)                           | 2    |
| 13   | 331P101* | Nut, Hex 5/16 - 18                             | 1    |
| 14   | 3310103  | Shoulder Bolt 3/8" X 1"                        | 1    |
| 15   | 331P106* | Lock Washer                                    | 1    |
| 16   | 0012814  | Cam Bracket And Thrust                         | 1    |
|      |          | Strip Assembly, LH                             |      |
| 17   | 0013167  | Housing Assembly                               | 1    |
| 18   | 0013166  | Base / Heater Assembly                         | 1    |
| 19   | 0021689  | Weldment, End Housing                          | 1    |
| 20   | 0021714  | Weldment, End Housing Rod Support              | 1    |
| 21   | 0022117  | Weldment, Inner Base                           | 1    |
| 22   | 0022118  | Weldment, Control Housing                      | 1    |
| 23   | 0200345  | Base Gasket, 23.94" LG                         | 2    |
| 24   | 0200355  | Base Gasket, 11.30" LG                         | 2    |
| 25   | 0400119  | Bushing, Shorty 5/8"                           | 2    |
| 26   | 0400418  | Push In Grommet For 1-1/8" Dia. Hole           |      |
| 27   | 0506083  | Spacer   | 2    |
| 28   | 0506174  | End Covr Bottom                                | 1    |
| 29   | 0800474  | Rod, Belt Cover                                | 4    |
| 30   | 2100212  | Handle, Pocket Pull, Snap-In                   | 1    |
| 31   | 2140101  | Adhesive/ Sealant - RTV                        | 1    |
| 32   |          | Loctite # 242 (Blue)                           | 1    |
| 33   |          | Screw, #8-32 X 1/4" (#6 Head)                  | 1    |
| 34   | 308P157* | Screw, Tap 8-32 X 3/8"LG                       | 1    |
| 35   | 3080203  | Screw, Tap 8-32 X 3/8" W/Int.<br>Tooth Washer  | 11   |
| 36   | 310P102* | Washer, Int. Tooth-Lock,#10                    | 1    |
| 37   |          |  | 1    |
| 38   |          | Scr, #10-32 X 3/8 Lg Socket HD Cap             | 1    |
| 39   | 310P204* | Fillister Head Phillips Screw<br># 10-32 X .25 | 1    |
| 40   | 0013178  | Adj. Platen Assembly                           | 1    |
| 41   | 0013181  | Relay - Sink Bracket Assy                      | 1    |
| 42   | 0507247  | Heat Sink, Relay                               | 1    |
| 43   | 308P157* | Screw, Tap 8-32 X 3/8"LG                       | 1    |
| 44   | 4010187  | Transformer, 240 Vac/12Vac                     | 1    |
| 45   | 4050240  | Relay, Solid State Dual Pole<br>W/Conn-Recept  | 1    |
| 46   | 0013183  | Motor / Sprocket Assembly                      | 1    |
| 47   | 0506157  | Motor Plate                                    | 1    |

|      | ARIS      |                                     |      |
|------|-----------|-------------------------------------|------|
| ltem | Part No.  | Description                         | Qty. |
| 48   | 2140109   | Loctite # 242 (Blue)                | 2    |
| 49   | 2150316   | Sprocket, 25B12 3/8" Bore           | 1    |
| 50   | 310P199*  | Scr, #10-32 X 3/8 LG Socket HD Cap  | ) 1  |
| 51   | 4000186   | Motor, 230V                         | 1    |
| 52   | 0013184   | Cam Brkt & Thrust Strip Assy, Rh    | 1    |
| 53   | 7001628   | End Cover Assembly Kit              | 1    |
| 54   | 0013217   | Bun Feeder Assembly                 | 1    |
| 55   | 0013250   | Electrical Panel Assembly           | 1    |
| 56   | 0022185   | Electrical Panel Wldmnt             | 1    |
| 57   | 0506170   | Fan Cover                           | 1    |
| 58   | 1000900   | Label - Warning                     | 1    |
| 59   | 1001213   | Label - Shock Hazard                | 1    |
| 60   | 21000-004 | 3 Spacer, 3/8 CBS Thread Female     | 2    |
| 61   |           | Screw, Mach One-Way #8-32           | 1    |
| 62   | 308P143*  |                                     | 1    |
| 63   | 310P213*  | •                                   | 1    |
|      |           | #10-16 X 3/4" Thrd Form             |      |
| 64   | 4000202   | Fan, Axial - 230V, Metal Hsg & Imp  | 1    |
| 65   | 4050236   | Contactor, 2 Pole No                | 1    |
| 66   | 4070198   | Snubber Board                       | 1    |
| 67   | 0013307   | Control Cover Assembly              | 1    |
| 68   | 0022110   | Weldment, Control Housing Cover     | 1    |
| 69   | 1000900   | Label - Warning                     | 1    |
| 70   | 1001213   | Label - Shock Hazard                | 1    |
| 71   | 1001561   | Label, ID - A                       | 1    |
| 72   | 1001562   | Label, ID - B                       | 1    |
| 73   | 1001599   | Label, Control                      | 1    |
| 74   | 1001650   | Label Korean Translation            | 1    |
| 75   | 1002650   | Wiring Diagram Label                | 1    |
| 76   | 2100212   | Handle, Pocket Pull, Snap-In        | 1    |
| 77   | 2180445   | Edge Trim Piece, 7"                 | 1    |
| 78   | 304P105*  | Nut, Hex 'Keps' #4-40               | 1    |
| 79   | 4070230   | Asy-Pcb, Main Go To Market (MCD)    | 1    |
| 80   | 0021983   | Weldment, Thermocouple Tube         | 1    |
| 81   | 0022101   | Weldment, Idler Roller Front Top    | 2    |
| 82   | 0022103   | Weldment, Drive Roller Front Bottom | 2    |
| 83   | 0022111   | Weldment, Conveyor Cover - Front    | 1    |
| 84   | 0022114   | Cover Weldment                      | 1    |
| 85   | 0022115   | Weldment, Adj. Platen Frame         | 1    |
| 86   | 0022116   | Weldment, Fixed Platen Frame        | 1    |
| 87   | 0022283   | Wment, Bearing Brkt &               | 2    |
|      |           | Spring Guide- LG                    |      |
| 88   | 0022284   | Wment, Bearing Brkt &               | 2    |
|      |           | Spring Guide - RG                   | -    |
| 89   | 0022294   | Weldment, Filter Bracket            | 1    |
| 90   | 0100292   | Platen, Main 230V, 2300W            | 1    |
| 91   | 0400147   | Bushing, Shorty 7/8"                | 1    |
| 92   | 0400427   | Insulation, Main Platen             | 1    |
| 93   | 0504320   | Spacer 0.781 X 1.125 X 0.06"        | 10   |
| 94   | 0506144   | Plate, Tensioner RG                 | 2    |
| 95   | 7001431   | Tensioner Bracket Kit               | 1    |
|      |           |                                     |      |

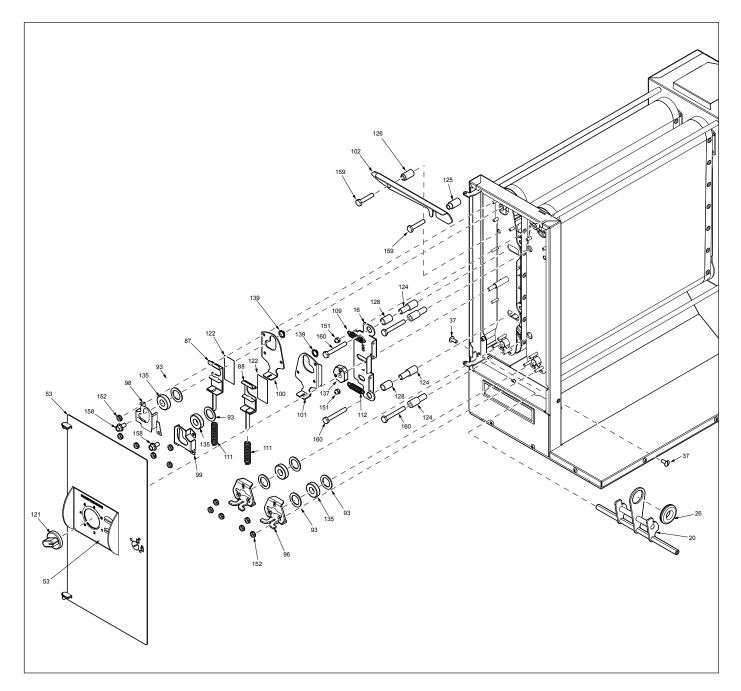


| ltem | Part No. | Description                        | Qty. |  |
|------|----------|------------------------------------|------|--|
| 96   | 0506167  | Bracket, Bearing                   | 2    |  |
| 97   | 0506278  | Spacer, .312 X .187 X .105         | 3    |  |
| 98   | 7001431  | Tensioner Bracket Kit              | 1    |  |
| 99   | 0506292  | Bracket, Tensioner- End Hsg, Front | 1    |  |
| 100  | 0506293  | Plate, Tensioner - End Hsg, Rear   | 1    |  |
| 101  | 0506294  | Plate, Tensioner - End Hsg, Front  | 1    |  |
| 102  | 0506736  | Bracket, Housing Locking           | 1    |  |
| 103  | 0507112  | Support Bracket, RG                | 1    |  |
| 104  | 0507113  | Support Bracket, LG                | 1    |  |
| 105  | 0507114  | Back Conveyor Cover                | 1    |  |
| 106  | 0507115  | Bracket, Bun Stop                  | 1    |  |
| 107  | 0507129  | Insulation Plate                   | 1    |  |
| 108  | 0507246  | Cover, Duct Fan                    | 1    |  |
| 109  | 0600143  | Spring, Compression Setting        | 2    |  |
| 110  | 0600157  | Spring, Chain Tension              | 2    |  |
| 111  | 0600158  | Spring, Roller Tension             | 4    |  |
| 112  | 0600159  | Spring, Cam Adj                    | 2    |  |
| 113  | 0700956  | Cable Assembly - Gnd               | 1    |  |
| 114  | 0700963  | Wire Set, SSR Hi Voltage           | 1    |  |
| 115  | 0700964  | Wire Set, Club Voltage             | 1    |  |
| 116  | 0700965  | Wire Set, Control                  | 1    |  |
| 117  | 0700966  | Wire Set, Fan Xfmr                 | 1    |  |
| 118  | 0700967  | Wire Set, Line Filter              | 1    |  |
| 119  | 1001452  | Label, Pvc Removal                 | 1    |  |
| 120  | 2100212  | Handle, Pocket Pull, Snap-In       | 2    |  |
| 121  | 2100253  | Knob, 1/4" Shaft, Push-On          | 1    |  |
| 122  | 2100334  | Thrust Strip, Teflon               | 4    |  |
| 123  | 2110197  | Clip, Steel Cable                  | 1    |  |
| 124  | 2120213  | Spacer, Frame & Platen LG          | 4    |  |
| 125  | 2120216  | Spacer, Upper Locking Plate, Front | 1    |  |
| 126  | 2120217  | Spacer, Upper Locking Plate, Rear  | 1    |  |
| 127  | 2120221  | Spacer, 0.69 X 0.503 X 0.359       | 2    |  |
| 128  | 2120223  | Sleeve Bearing, .50" Od X .75" LG  | 2    |  |
| 129  | 2120224  | Sleeve Bearing, .50" Od X .375" LG | 2    |  |
| 130  | 2120260  | Spacer, Adjustable Frame Rh        | 2    |  |
| 131  | 2120263  | Spacer, Platen RH                  | 2    |  |
| 132  | 2140109  | Loctite # 242 (Blue)               | 1    |  |
|      | 2140125  | Lubricant, White, PTFE             | 1    |  |
| 134  | 2150185  | Sprocket, 25B18, 1/2" Bore         | 2    |  |
|      | 2150285  | Bearing, Single Groove S/S         | 8    |  |
|      | 2150324  | Chain, Drive                       | 1    |  |
|      | 2150362  | Cam, HBCS                          | 2    |  |
|      | 2150406  | Cam Shaft                          | 1    |  |

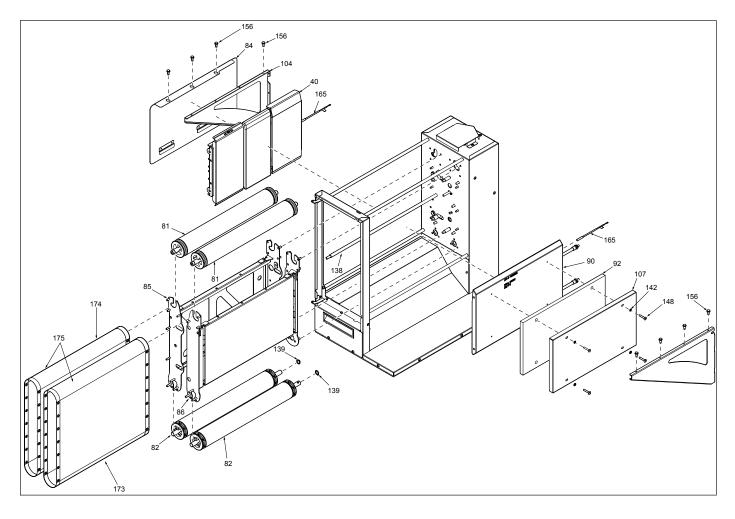
| ltem  | Part No.           | Description   | Qty.   |
|-------|--------------------|---|--------|
| 139   | 300P123*           | Ring, Retaining, External                                   | 1      |
| 140   | 304P105*           | Nut, Hex 'Keps' #4-40                                       | 1      |
| 141   | 306P130*           | Nut, Hex Keps #6-32 (Small Pattern)                         | 1      |
| 142   | 308P102*           | Washer, Int. Tooth #8                                       | 1      |
| 143   | 308P124*           | Screw, Mach One-Way #8-32                                   | 1      |
| 144   | 308P142*           | Washer, Flat #8   | 1      |
| 145   | 308P143*           | Nut, Hex 'Keps' #8-32                                       | 1      |
| 146   | 308P145*           | Nut, Hex Acorn #08-32 Low Crown                             | 1      |
| 147   | 308P157*           | Screw, Tap 8-32 X 3/8"LG                                    | 1      |
| 148   | 308P164*           | Screw, Mach. #8-32 X 1"                                     | 1      |
| 149   | 308P193*           | Scr, Mach #8-32 X 1 1/4" SLTFLTHD                           | 1      |
| 150   | 308P203*           | Screw, Tap 8-32 X 3/8"                                      | 1      |
|       |                    | W/Int. Tooth Washer   |        |
| 151   | 308P340*           | Nut, Hex Acorn Lock #8-32                                   | 1      |
| 152   | 310P146*           | Nut, Hex 'Keps' #10-32                                      | 1      |
| 153   | 310P187*           | Screw Set, #10-32 X 3/8                                     | 1      |
|       |                    | Hex Socket-Cone Point                                       |        |
|       | 310P199*           | ··· · · · · · · · · · · · · · ·                             |        |
| 155   | 310P213*           |   | 1      |
| . – . |                    | Thrd Form   | .      |
|       | 310P214*           | Screw, Hex #10-32 X 1/2"                                    | 1      |
|       | 325P109*           | Screw, Hexcap 1/4-20 X 1/2"                                 | 1      |
|       | 325P176*           | Screw, Flange Hex Head Cap                                  | 1      |
| 159   | 325P193*           | Screw, Hex Head,  | 1      |
| 400   | 2050404*           | #1/4-20 X 1.375", S.S.                                      |        |
|       | 325P194*           | Screw, Hex Hd, #1/4-20 X 2.00", S.S                         |        |
|       | 4000202            | Fan, Axial - 230V, Metal Hsg & Imp                          | 1      |
|       | 4010221            | Cap-Mp, Motor Run   | 1      |
|       | 4030352            | Thermostat, Hi-Limit 700°F                                  | 2<br>1 |
|       | 4050229            | Filter, Line  |        |
|       | 4051045<br>4060107 | Thermocouple Type "K" (Open End)                            | 2<br>1 |
|       | 4060107            | Cable Tie, 1/8W X 5"<br>Ground Lug                          | 1      |
|       | 4060374            |   | 1      |
|       | 4000398            | Terminal Block, S-Series<br>Varistor Board                  | 1      |
|       | 0700947            | Power Cord IEC-309 Pin & Sleeve,                            | 1      |
| 170   | 0700947            | 16 Amp., 230 Volt   | '      |
|       |                    | (Mfg. No. 9210859 & 9210861)                                |        |
|       | 0700970            | Power Cord Marechal Pin & Sleeve                            | 1      |
|       | 0100010            | 32 Amp., 220-250 Volt                                       | ·      |
|       |                    | (Mfg. No. 9210860)  |        |
|       | 0700998            | Power Cord Marechal Pin & Sleeve                            | 1      |
|       |                    | 32 Amp., 220-250 Volt                                       |        |
|       |                    | (Mfg. No. 9210863)  |        |
|       | 0400375            | Strain Relief   | 1      |
|       | 0400376            | Lock Nut, Conduit 3/4" NPT                                  | 1      |
|       | 7001070            | Main (Front) Belt   | 1      |
|       | 7001071            | Rear Belt   | 1      |
| 175   | 7001072            | Belt Replacement Kit  | 1      |
| * 1+~ | me availab         | (Incl. 1 of 173 and 1 of 174)<br>le in packages of ten (10) |        |
| ne    | iiiə avallaD       | ic in packages of ten (10)                                  |        |
|       |                    |   |        |



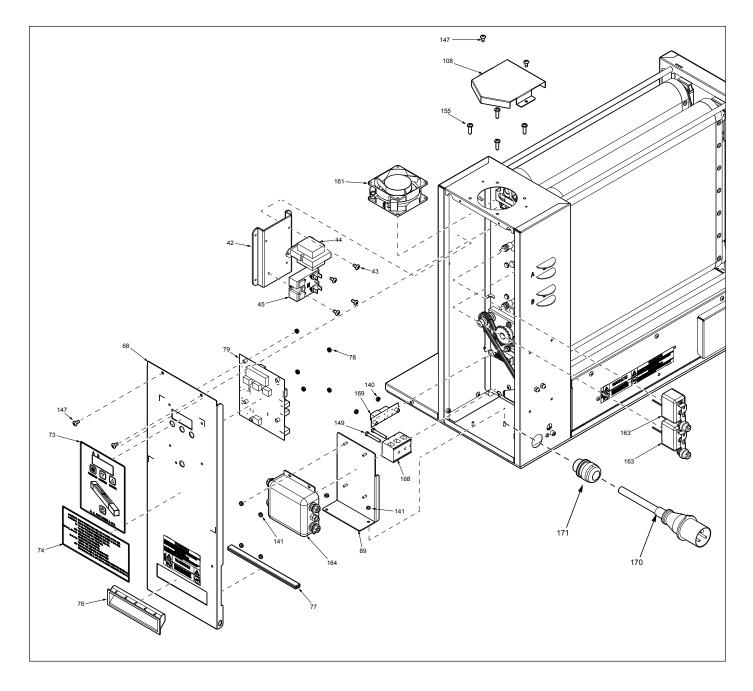


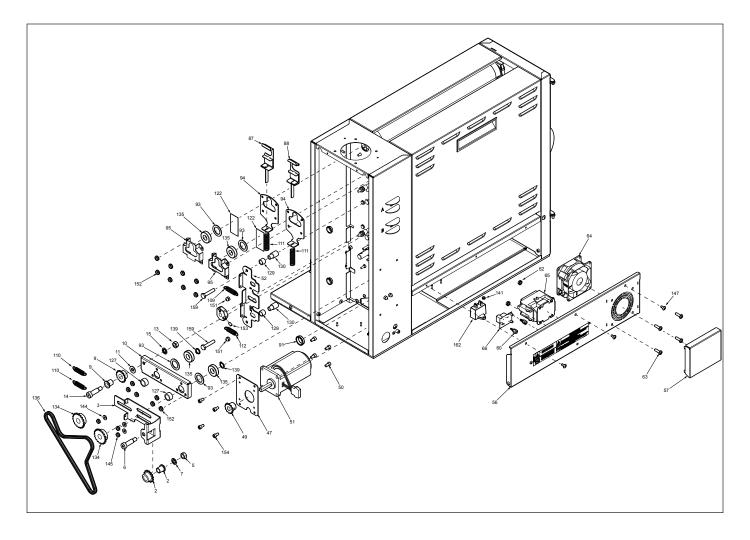






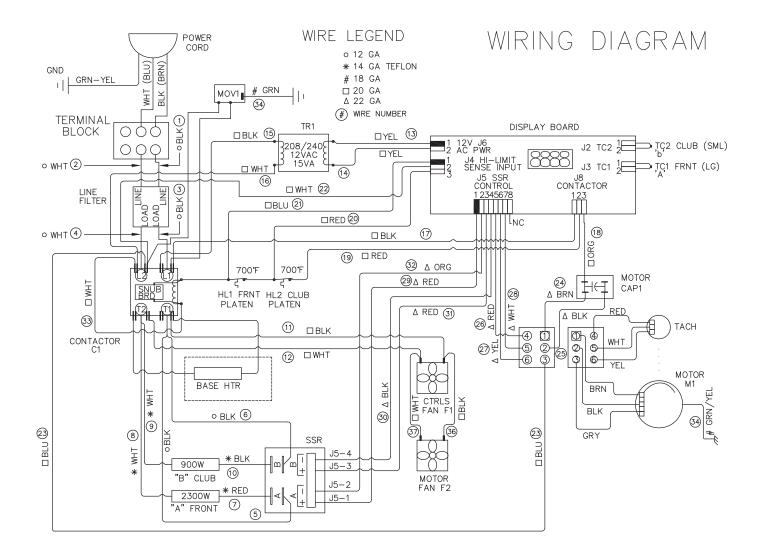








### WIRING DIAGRAM



NOTES

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