

# **Vertical Contact Toaster**

# Model VCT-20/25/50 owner's manual

### Manufacturing Numbers:

9200560, 9200600, 9200602, 9200606, 9200608, 9200609, 9200614, 9200616, 9200620, 9200622, 9200624, 9200625, 9200626, 9200628, 9200629, 9200630, 9200631, 9200632, 9200633, 9200634, 9200637, 9200638, 9200639, 9200640, 9200644, 9200646, 9200647



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# **OWNER INFORMATION**

### General

The Vertical Contact Toaster, Models VCT-20, VCT-25 and VCT-50 are designed for contact toasting of buns. The toaster design allows the operator to place buns on both sides of the heated platen at the same time. Buns are placed into the top of the toaster and uniform, golden brown, warm buns are then retrieved at the bottom of the toaster. The Model VCT-20 is equipped with an auxiliary heating system which provides additional heat to the buns.

This manual provides the safety, installation and operating procedures for the Vertical Contact Toaster. We recommend that all information contained in this manual be read prior to installing and operating the unit.

Your Vertical Contact Toaster is manufactured from the finest materials available and is assembled to our 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 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 Antunes Technical Service at +1-877-392-7854 (toll free).

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.:

#### 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 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 equipment.

# A WARNING A

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.

# 

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

# 

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.

# WARNING

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

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.



# **IMPORTANT SAFETY INFORMATION (continued)**

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 Antunes Technical Service 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 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 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.
- 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.
- Failure to use release sheets may result in damage to the equipment and loss of warranty coverage.
- All electrical connections must be in accordance with local electrical codes and any other applicable codes.
- 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 in doubt as to whether the appliance is properly grounded.



# SPECIFICATIONS

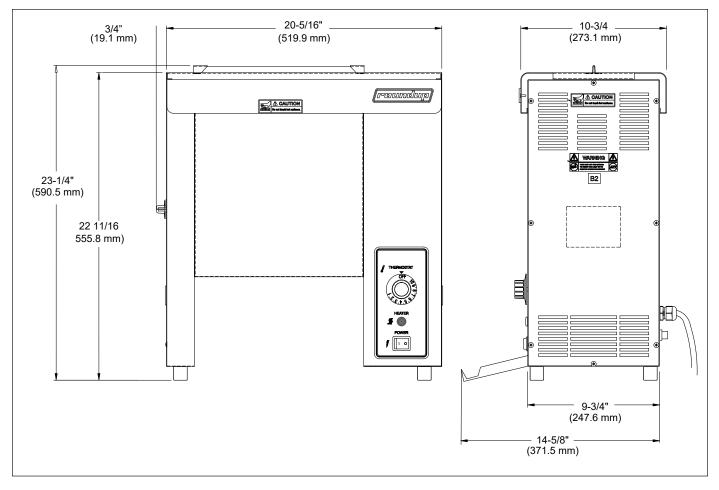
### **Electrical Ratings and Plug Configurations**

Model & Mfg. No.	Volts	Watts	Amps	Hz	Plug Description	
VCT-50 9200609	208-240	2600-3460	12.5-14.4	50/60	IEC-309,	
VCT-25 9200637	208-240	2600-3460	12.5-14.4	50/60	16 Amp., 250 VAC Pin & Sleeve (Assembly Only)	
VCT-50 9200602	120	1760	14.7	60	5-20P,	
VCT-25 9200622	120	1760	14.7	60	20 Amp., 120 VAC Non-Locking (Assembly Only)	
VCT-50 9200606	208-240	2600-3460	12.5-14.4	50/60	6-20P,	
VCT-50 9200614	208-240	2600-3460	12.5-14.4	50/60	20 Amp., 250 VAC	
VCT-25 9200626	208-240	2600-3460	12.5-14.4	50/60	Non-Locking	
VCT-25 9200632	208-240	2600-3460	12.5-14.4	50/60	(Assembly Only)	
VCT-50 9200608	208-240	2600-3460	12.5-14.4	50/60		
VCT-50 9200616	208-240	2600-3460	12.5-14.4	50/60		
VCT-25 9200625	208-240	2600-3460	12.5-14.4	50/60		
VCT-25 9200628	208-240	2600-3460	12.5-14.4	50/60	CEE 7/7,	
VCT-25 9200629	208-240	2600-3460	12.5-14.4	50/60	16 Amp., 250 VAC	
VCT-25 9600633	208-240	2600-3460	12.5-14.4	50/60	(Assembly Only)	
VCT-25 9200634	208-240	2600-3460	12.5-14.4	50/60		
VCT-25 9200639	230	3460	15	50/60		
VCT-25 9200640	230	2450	10.6	50/60		
VCT-50 9200600	120	1760	14.7	60		
VCT-25 9200620	120	1760	14.7	60	5-15P,	GRN
VCT-25 9200624	120	1760	14.7	60	15 Amp., 120 VAC	
VCT-25 9200630	120	1760	14.7	60	Non-Locking	
VCT-25 9200631	208-240	2600-3460	12.5-14.4	50/60	(Assembly Only)	WHT BLK
VCT-25 9200638	208-240	2600-3460	12.5-14.4	50/60		
VCT-20 9200560	280-240	3200-4257	15.4-17.3	50/60	LS-30P, 30 Amp., 120 VAC Straight Twist Lock	
VCT-25 9200647	230~	2450	10.6	50	Power Cord Assembly Australia AS3112)	
VCT-50 9200644	208-240~	2600-3460	12.5-14.4	50/60	Power Cord	
VCT-25 9200646	208-240~	2600-3460	12.5-14.4	50/60	AS3112 Australian Plug 20 Amp., 250 VAC.	



# **SPECIFICATIONS** (continued)

### Dimensions



# INSTALLATION

### Unpacking

- 1. Remove unit and all packing materials from shipping carton.
- 2. Open the large box. It should contain:
  - Bun chute (Figure 2)
  - Plastic bag containing the release sheet (Figure 4)
- 3. Remove all packing materials and protective coverings from the unit and parts.

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

### Assembling the Unit

- 1. Remove the Heat Shield and the front and rear Conveyor Covers (Figure 1).
- 2. Install the Damper Assembly. (Figure 1).

# NOTE: Make sure the damper assy. rests only on the bottom front and rear yellow support rods.

- 3. Install the Bun Chute (Figure 2).
- 4. Remove the Release Sheet from the plastic bag and lay it on a clean, flat surface. Fold the sheet exactly in half (Figure 3).
- 5. Crease the sheet at the fold using only your finger (Figure 3).

### NOTE: Do not use metal tools to crease the sheet.

6. Install the Release Sheet by draping it over both sides of the Platen surface. The crease should be centered directly on top of the Platen (Figure 4).

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

Failure to use release sheets may result in damage to the unit and loss of warranty coverage.

7. Re-install the front and rear Conveyor Covers (Figure 4).

### IMPORTANT: Make sure the Conveyor Covers rest only on both the top and bottom yellow support rods.

8. Install the Heat Shield so that the clips fit over the top of the Platen and retains the Release Sheet in place (Figure 4).

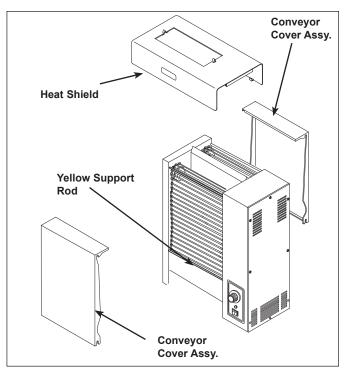


Figure 1. Installing Damper Assy.

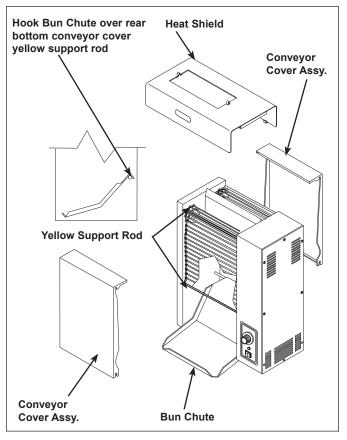


Figure 2. Installing Bun Chute



# **INSTALLATION** (continued)

NOTE: As of March 2017, the Interlock Switch was removed from use. If your toaster has the Interlock Switch, you will need to place the Heat Shield onto the toaster in order for the conveyors to turn. If your toaster <u>does not</u> have an Interlock Switch, the conveyors will turn as long as the unit is on.

NOTE: Check the release sheet to make sure it is not caught in the conveyor. Additional release sheets can be obtained through your authorized service agency under part no. 7000249 (3 pack) or 7000250 (10 pack).

### **Equipment Setup**

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

- Make sure power to the unit 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.

Connect the unit to the power supply. Refer to the specification plate for the proper voltage.

### 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 in doubt as to whether the appliance is properly grounded.

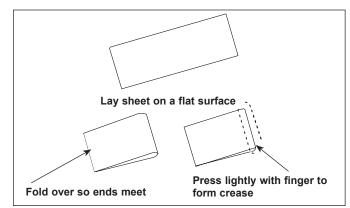


Figure 3. Folding Release Sheet

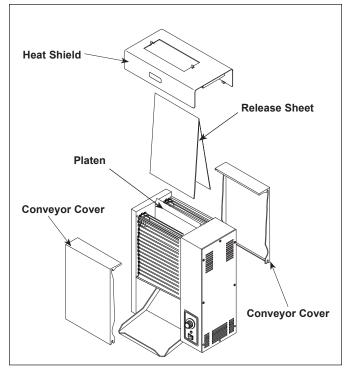


Figure 4. Installing Release Sheet

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

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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.

### OPERATION

### **Operating Instructions**

1. Set the Bun Thickness Adjustment Control knobs to the desired settings (Figure 6). The recommended setting is 6.

# NOTE: After initial run of 4-6 buns, adjust controls according to the desired finished product.

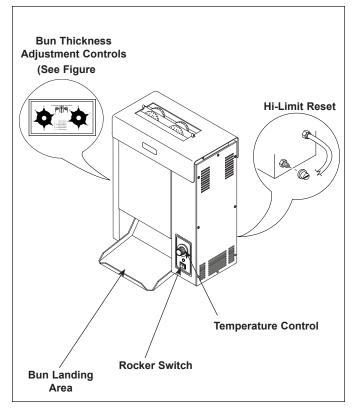
- 2. Turn the Rocker Switch (power On/Off) to ON (Figure 5).
- 3. Turn the Temperature Control to 10. Allow 30 minutes warm-up time before proceeding.
- 4. Drop buns into toaster with the cut sides of heel and crown facing each other (Figure 5).
- 5. Toasted product will drop into the Bun Landing Area (Figure 5).
- 6. Test at least 4 buns before putting toaster into service. Turn the Temperature Control to a lower setting for lighter toasting or to a higher setting for darker toasting.
- 7 Turn the unit off when finished toasting

### **Safety Features**

### HI-LIMIT RESET BUTTON

A hi-limit thermostat will turn off electrical power to the heater and control circuits if the unit overheats. To reset this thermostat, allow sufficient time (10-15 minutes) for the unit to cool down, then press and release reset button located at the rear of the unit (Figure 5).

If the unit requires continuous resetting, contact your Authorized Service Agency.





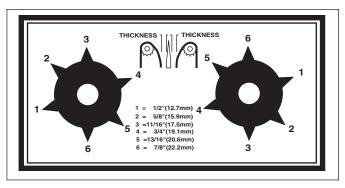


Figure 6. Bun Thickness Adjustment Controls



# MAINTENANCE

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Turn the power off, unplug the power cord, and allow the unit to cool down 30 minutes before performing any service or maintenance.

### A CAUTION A

To prevent damage to the unit, do NOT use abrasive cleaners on the Release Sheet or Belt Wrap.

### A CAUTION A

Failure to use Release Sheets may result in damage to the unit and loss of warranty coverage.

### Daily

Tools Required:

- Heat-Resistant Gloves
- Clean Towels
- Multipurpose Detergent Solution
- Sanitizer Solution
- 1. Turn the power off, unplug the power cord, and clean the Release Sheet and Belt Wraps while they are warm.
- 2. Put on heat-resistant gloves and remove the Butter Wheel (if equipped), Pan, and Heat Shield (Figure 1).
- 3. Wash the Butter Wheel, Pan, and Heat Shield in a sink and wipe them with a damp sanitized towel and allow them to air dry.
- 4. Remove the Release Sheet and place it on a clean, flat dry surface.
- Wipe the silver side of the Release Sheet with a *clean* towel dampened with Multipurpose Detergent Solution immediately followed by a second clean towel dampened with sanitizer and allow it to air dry before continuing.
- 6. Once the silver side is dry, repeat Step 5 on the black side of the Release Sheet.
- 7. Open the front Conveyor Cover and firmly wipe the Belt Wrap from left to right and top to bottom with a clean towel dampened with Multipurpose Detergent Solution immediately followed by a second clean towel dampened with sanitizer.
- 8. Close the front Conveyor Cover, open the rear Conveyor Cover, and clean the Belt Wrap as described in Step 7.

- 9. Close the rear Conveyor Cover. Reinstall the Heat Shield, plug in the power cord, turn the unit on, count 15 seconds, then turn the unit off and unplug the unit.
- 10. Open the rear Conveyor Cover again and clean the newly exposed section of the Belt Wrap in the same manner as before. Close the Conveyor Cover.
- 11. Open the front Conveyor Cover again and clean the newly exposed section of the Belt Wrap in the same manner as before.
- 12. Close the front Conveyor Cover and wipe down the outside of the toaster with a clean, damp, sanitized towel.
- 13. Install the Release Sheet by draping it over both sides of the Platen with the crease centered on the Platen.

#### NOTE: To prolong the life of the Release Sheet, rotate it from the black side to the silver side on a daily or weekly basis.

- 14. Install the Bun Chute so the hooks are installed over the lower rear Support Rod.
- 15. Install the Heat Shield with the Release Sheet retainer clips securely over the Release Sheet and Platen.
- 16. Reinstall the Butter Wheel and Pan, and plug in the unit.

NOTE: As of March 2017, the Interlock Switch was removed from use. If your toaster has the Interlock Switch, you will need to place the Heat Shield onto the toaster in order for the conveyors to turn. If your toaster <u>does not</u> have an Interlock Switch, the conveyors will turn as long as the unit is on.

NOTE: Check the Release Sheet to make sure it is not caught in the Conveyor. Additional Release Sheets can be purchased through your Authorized Service Agency under P/N 7000249 (3-Pack) or 7000250 (10-Pack).

# **MAINTENANCE** (continued)

### Replacing the Black and Silver Release Sheet (Every 4–6 Weeks)

NOTE: Depending on toaster usage and on how well it is cleaned daily, the black and silver Release Sheet should last between 4–6 weeks.

- 1. Remove and discard the Release Sheet.
- 2. Lay a new Release Sheet on a clean, dry surface and fold it in half lengthwise and gently crease it at the fold using only your fingers (Figure 5).
- 3. Install the Release Sheet just as you would after Daily Cleaning.

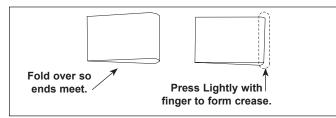


Figure 5. Folding the Release Sheet

# Replacing the Belt Wraps (Every 3–6 Months)

NOTE: Depending on toaster usage and how well they are cleaned daily, the Belt Wraps should last between 3–6 months. Additional Belt Wraps may be purchased from your Authorized Service Agency.

- 1. Turn the power off, unplug the power cord, and allow the unit to cool.
- 2. Remove the Bun Feeder, Butter Wheel, Pan, and Heat Shield (Figure 1) and set the Bun Thickness Compression Knobs to 6 & 6.
- 3. Open both Conveyor Covers and pull the Belt Wrap Pin out of the zipper (Figure 7).
- 4. Remove and discard the old Belt Wrap(s).
- 5. Clean both Conveyor Belt Chains just as you would clean the Belt Wraps during Daily Cleaning.
- Install the new Belt Wraps around the Conveyor Belt Chains inside the Upper and Lower Support Rods with the zipper flap exposed and hanging down (Figures 7 & 8).
- 7. Close the Conveyor Cover(s), set the Bun Thickness Compression Knobs back to their normal settings and reinstall the Heat Shield, Butter Wheel, Pan, and Bun Feeder.

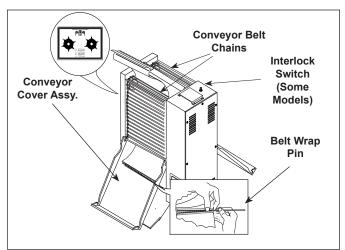


Figure 6. Removing Belt Wrap

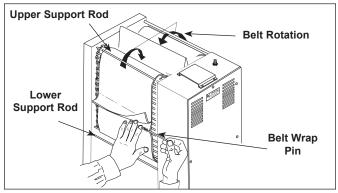


Figure 7. Installing Belt Wrap

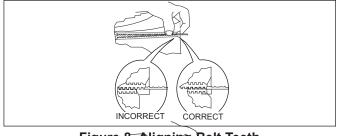


Figure 8. Aligning Belt Teeth

# Align the ends of the Belt Wrap properly (Figure 11) or the Belt Wrap may be damaged.

ACAUTION A

Position the Belt Wrap between the Upper and Lower Support Rods or damage to the unit may occur.



### **MAINTENANCE** (continued)

# Checking the Conveyor Belt Chains (Every 3–6 Months)

NOTE: The Bun Thickness Compression Knobs (Figure 3) must be set to "6 & 6" prior to measuring or removing or reinstalling the Conveyor Belt Chains.

#### MEASURING CONVEYOR BELT CHAINS

- 1. Turn the unit off, unplug the power cord, and allow the unit to cool.
- 2. Remove the Bun Feeder, Butter Wheel, Pan, and Heat Shield (Figure 1) and set the Bun Thickness Compression Knobs to 6 & 6.
- 3. Open both Conveyor Covers and pull the Belt Wrap Pin out of the zipper (Figure 6).
- 4. Remove the Belt Wrap.
- 5. Facing the toaster, locate the approximate centerpoint of the Conveyor Chain.
- 6. Pull the Conveyor Chain away from the edge of the toaster (Figure 9).
- 7. Stand a U.S. Dime on end between the frame and the chain (Figure 9).
- 8. If the gap is significantly wider than the coin, REMOVE links as described below.
- 9. Disconnect the Conveyor Belt Chain by squeezing any two links together and unhooking both ends one link (Figure 10). Needle-nose pliers may be used.

#### NOTE: There are two small 1/2" links on each side of the Conveyor Belt Chain. The rest are large 3/4" links.

- 10. Remove one 1/2" link from the belt.
- 11. Reassemble the Conveyor Belt Chain onto the sprockets as described in Replacing Conveyor Belt Chains.
- 12. Measure the gap again to ensure it is not too tight.
- 13. Check the opposite side of the toaster using the same steps.

NOTE: If the Conveyor Belt Chain is too tight to be reassembled, remove an additional small 1/2" link and install a large 3/4" link in its place. This will increase the length of the Conveyor Belt Chain by 1/4" overall.

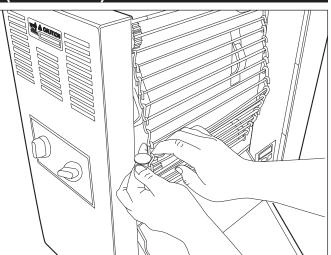
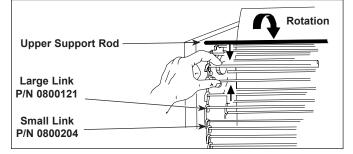


Figure 9. Measuring Conveyor Belt Chain



#### Figure 10. Removing Conveyor Belt Chain

#### **REPLACING CONVEYOR BELT CHAINS**

- 1. Turn the power off, unplug the power cord, and allow the unit to cool.
- 2. Remove the Butter Wheel, Pan, and Heat Shield and set the Compression Control Knobs to 6 & 6.
- 3. Open both Conveyor Covers and pull the Belt Wrap Pin out of the zipper.
- 4. Remove and discard the old Belt Wrap(s).
- 5. Disconnect the Conveyor Belt Chain by squeezing any two links together and unhooking both ends of one link (Figure 10).
- 6. Place the replacement Conveyor Belt Chain on the top sprockets with hook ends down.

# NOTE: The ends of the hooks must point down (Figure 10).

7. Wrap the Conveyor Belt Chain around the top and lower sprockets and connect by hooking both ends together.

NOTE: Make sure the Conveyor Belt Chain is installed between the Upper Support Rod and the Lower Support Rod.

### **MAINTENANCE** (continued)

NOTE: Check the Release Sheet to make sure it is not caught in the Conveyor Belt Chain. Additional Release Sheets can be obtained through your Authorized Service Agency under part no. 7000249 (3 pack) or 7000250 (10 pack).

### **Conveyor Belt Chains**

#### MEASURING THE CONVEYOR BELT CHAINS

- 1. Facing the toaster, locate the approximate centerpoint of the Conveyor Chain.
- 2. Pull the Conveyor chain away from the edge of the toaster. Stand a U.S. Dime, 11/16" (1.8 cm) coin on end between the frame and the chain.

If the gap is significantly wider than the coin, REMOVE links as described in the section titled **Adjusting The Conveyor Belt Chains**. Then, measure the gap again to make sure it is not too tight.

Check the opposite side of the toaster using the same measurements.

#### ADJUSTING THE CONVEYOR BELT CHAINS

After a period of time, the conveyor belt links will wear and the conveyor belt will stretch. This will eventually cause the conveyor to jam as it rotates on the sprockets. This is easily remedied by removing one or more conveyor links from each side of the belt.

There are four 1/2" pitch links on each conveyor belt. The rest of the links are 3/4".

- 1. Remove the Conveyor Belt Chain as described in the section titled **Removing the Conveyor Belt Chains**.
- 2. To shorten a stretched Conveyor Belt chain, remove one 1/2" link from the belt.
- 3. Reassemble the Conveyor Belt Chain to the sprockets as described in the section titled **Replacing the Conveyor Belt Chains**.

NOTE: If the belt is too short (tight) to be reassembled, remove an additional 1/2" link and install a 3/4" link. This will make the conveyor belt 1/4" shorter and enable it to be reassembled.

# IMPORTANT: This is not covered under warranty. It is a user responsibility.

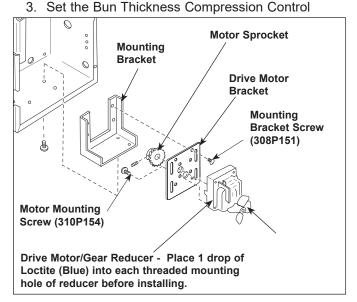
### REMOVING THE CONVEYOR BELT CHAINS

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

the unit to cool down.

2. Remove the Heat Shield, front and rear Conveyor Covers, and Release Sheet (Figure 4).

# NOTE: When replacing the Conveyor Belt chain, be sure to clean the Release Sheet as well.



#### Figure 10. Replacing Drive Motor and Fan Blade

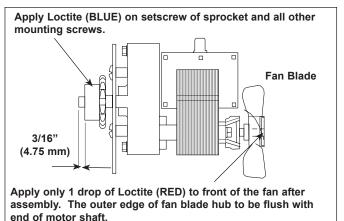


Figure 11. Replacing Drive Motor and Fan Blade

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# **MAINTENANCE** (continued)

# Checking the Roller Tensioners (every 3–6 months)

### MEASURING THE ROLLER TENSIONERS

- 1. Measure the Roller Tensioner on both inner Conveyor Covers (Figure 11) using a U.S Nickel.
- The space between the inner Conveyor Cover and bottom of the Tensioner wheel should be 13/16" (2.1 cm) or the height of a U.S. Nickel.
- 3. Adjust or replace any damaged ones as recommended.

### REPLACING THE ROLLER TENSIONERS

- 1. Push down on retaining tab of the tensioner.
- 2. While keeping pressure on the retaining tab, slide the tensioner out of the guide plate.
- 3. Replace the tensioner by sliding the new one into the retainer plate.

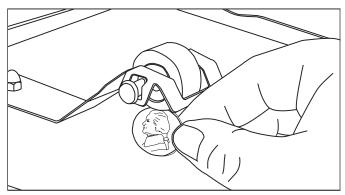


Figure 11. Measuring Roller Tensioner

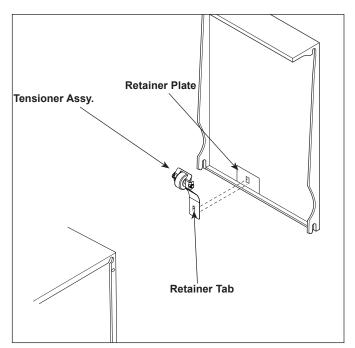


Figure 12. Replacing Roller Tensioner Assy.

### TROUBLESHOOTING

### AWARNING A

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. Use extreme care during electrical circuit tests. Live circuits will be exposed.

Problem	Possible Cause	Corrective Action
No heat and conveyor belts do not move.	Toaster is installed incorrectly.	Perform the installation and operating procedures found in the Installation section of this manual.
	Not enough voltage, defective power cord, defective rocker switch.	Check receptacle for correct voltage. See Specifications (page 5). With unit plugged in and rocker switch on, check for correct voltage into rocker switch. If low or zero volt- age, replace power cord. If voltage is correct, check for correct voltage out of rocker switch. If low or no voltage, replace rocker switch.
	Hi-limit switch tripped open.	Reset hi-limit switch (Fig. 5, page 9).
	Wiring problem.	Check all electrical connections for burns, discolor- ation or arcing. Replace all connections or compo- nents with damaged terminals. Replace all damaged wiring with the same (or higher) rated wire.
No heat and conveyor belts move.	Wiring problem.	Check all electrical connections for burns, discolor- ation or arcing. Replace all connections or compo- nents with damaged terminals. Replace all damaged wiring with the same (or higher) rated wire.
	Inoperative platen.	To check platen:
		Use an Ohm meter to test resistance of the platen heater (disconnect 1 wire to isolate heater). Correct cold resistance for heating element of platen are as follows: 120 Volts, 1750 Watts - 7.8 Ohms 208 Volts, 2550 Watts - 16.2 Ohms 230 Volts, 1900 Watts - 26.5 Ohms
		VCT-20 only. The auxiliary heaters are 144.2 Ohms at 208V/300 Watts.

TROUBLESHOOTING (continued)					
Problem	Possible Cause	Corrective Action			
Platen is hot and the Conveyor Belt chains are not rotating.	Toaster is installed incorrectly.	Refer to the Installation and Operation sec- tions of this manual for proper installation and operating procedures.			
	Wiring problems.	Check all electrical connections for burns, discoloration or arcing. Replace all connec- tions or components with damaged terminals. Replace all damaged wiring with the same (or higher) rated wire.			
	Drive motor inoperable or	To check drive motor:			
	incorrect conveyor drive motor.	<ol> <li>Measure resistance of motor coil. Replace motor if coil measures either open circuit or zero resistance.</li> </ol>			
		<ol> <li>Mark the drive motor sprocket and count the turns per minute. Correct drive motor speed is nine (9) turns per minute for VCT- 20; three (3) turns per minute for VCT-25; one (1) turn per minute for VCT-50.</li> </ol>			
	Broken Drive Chain or loose sprocket.	Check the Drive Chain for kinks, broken or bent links, or other damage. Check the motor sprocket and drive sprockets (on drive shaft); tighten setscrew on flat of shaft if required. Check for damaged/worn sprockets and replace as required.			
	Conveyor Belt chains installed incorrectly.	Install the Conveyor Belt chains according to the Maintenance Section of this manual. Be sure that ends of the hooks are facing down.			
	RollerTensioner Assembly or Tensioner bent or missing.	Replace the Roller Tensioner assembly(s) (item 29, page 22) or Tensioners (item 4, page 24) if damaged or loose. Replace the Slide Rails (item 40, page 24) if worn or missing.			
	Conveyor Belt chains too loose or missing links (41 links required when new). When new, conveyor has 37 large links and 4 small links.	Adjust or replace the Conveyor Belt chains according to the Maintenance section of this manual.			

TROUBLESHOOTING (continued)					
Problem	Possible Cause	Corrective Action			
Product is over-toast-	Temperature set too high.	Set temperature control at a lower setting.			
ed, Platen heat is too high, or drop time is	Bun Thickness Adjustment Control knobs set incorrectly.	Measure bun thickness and set bun adjustment controls correctly (Fig. 6, page 9).			
too slow	Buns sticking on Release Sheet.	Clean or replace the Release Sheet or conveyor belt wrap.			
	Conveyor Covers not installed.	Install the Conveyor Covers.			
	Conveyor Belts chains installed incorrectly	Install conveyor belt to match diagram in Fig. 8 (page 11). Be sure that ends of the hooks are facing down.			
	Defective Platen.	To check platen:			
		Use an Ohm meter to test resistance of the platen heater (disconnect 1 wire to isolate heater). Correct cold resis- tance for heating element of platen are as follows: 120 Volts, 1750 Watts - 7.8 Ohms 208 Volts, 2550 Watts - 16.2 Ohms 230 Volts, 1900 Watts - 26.5 Ohms			
		VCT-20 only. The auxiliary heaters are 144.2 Ohms at 208V/300 Watts.			
	Defective or wrong drive	To check drive motor:			
	motor.	1. Measure resistance of motor coil. Replace motor if coil measures either open circuit or zero resistance.			
		2. Mark the drive motor sprocket and count the turns per minute. Correct drive motor speed is nine (9) turns per minute for VCT-20; three (3) turns per minute for VCT-25; one (1) turn per minute for VCT-50.			
	Defective Drive Chain or loose sprocket.	Check drive chain for kinks, broken or bent links or other damage. Check motor sprocket and drive sprockets (on drive shaft); tighten setscrew on flat of shaft if required. Check for damaged/worn sprockets and replace as required.			
	Wiring problem.	Check all electrical connections for burns, discoloration or arcing. Replace all connections or components with damaged terminals. Replace all damaged wiring with the same (or higher) rated wire.			
	Conveyor belt too loose or missing links (41 links required when new). When new, con- veyor has 37 large links and 4 small links.	Remove conveyor belt (page 11). Lay belt flat and count links. Replace entire belt if links are damaged. If conveyor belt has too much play, it will jam. Adjust belt length as described under Servicing the Conveyor Belt (page 10).			

Droblem	Dessible Course	Corrective Action
Problem	Possible Cause	Corrective Action
Product is over-toasted or platen heat is too high or drop time is too slow.	Roller tensioner assy(s). or tensioner bent or missing.	Replace roller tensioner assy(s). (29, page 20) or ten- sioners (4, page 24) if damaged or loose. Replace slide rails (40, page 24) if worn or missing.
(Continued).	Bun adjustment controls set incorrectly.	Measure bun thickness and set bun adjustment con- trols correctly (page 9).
Product is under toasted or platen heat is too low or	Not enough voltage, defective power cord, defective rocker	Confirm platen temperature reading with a pyrometer or other temperature source.
drop time is too fast.	switch.	Check receptacle for correct voltage. See Specifications (page 5).
		With unit plugged in and rocker switch on, check for correct voltage into rocker switch. If low or zero volt- age, replace power cord. If voltage is correct, check for correct voltage out of rocker switch. If low or no voltage, replace rocker switch.
	Wiring problem.	Check all electrical connections for burns, discolor- ation or arcing. Replace all connections or compo- nents with damaged terminals. Replace all damaged wiring with the same (or higher) rated wire.
	Platen inoperative.	To check platen:
		Use an Ohm meter to test resistance of the platen heater (disconnect 1 wire to isolate heater). Correct cold resistance for heating element of platen are as follows: 120 Volts, 1750 Watts - 7.8 Ohms 208 Volts, 2550 Watts - 16.2 Ohms 230 Volts, 1900 Watts - 26.5 OhmsVCT-20 only. The auxiliary heaters are 144.2 Ohms at 208V/300 Watts.
	Conveyor drive motor inop- erative or incorrect conveyor motor installed in toaster.	<ul> <li>To check drive motor:</li> <li>1. Measure resistance of motor coil. Replace motor if coil measures either open circuit or zero resistance.</li> </ul>
		2. Mark the drive motor sprocket and count the turns per minute. Correct drive motor speed is nine (9) turns per minute for VCT-20; three (3) turns per minute for VCT-25; one (1) turn per minute for VCT-50.
Product is getting stuck or conveyor belts stop when	Bun adjustment controls set incorrectly.	Measure bun thickness and set bun adjustment con- trols correctly (page 9).
product is toasting.	Conveyor release sheet not clean or missing.	Clean respective items. Refer to Maintenance Schedule (page 10).

# **TROUBLESHOOTING(continued)**

# TROUBLESHOOTING (continued)

Problem	Possible Cause	Corrective Action
Product is getting stuck or conveyor belts stop when product is toasting (continued).	Not enough voltage, defective power cord or rocker switch.	Check receptacle for correct voltage. See Specifications (page 5).
		With unit plugged in and rocker switch on, check for correct voltage into rocker switch. If low or zero volt- age, replace power cord. If voltage is correct, check for correct voltage out of rocker switch. If low or no voltage, replace rocker switch.
	Wiring problem.	Check all electrical connections for burns, discolor- ation or arcing. Replace all connections or compo- nents with damaged terminals. Replace all damaged wiring with the same (or higher) rated wire.
	Conveyor drive motor inop-	To check drive motor:
	erative or incorrect conveyor motor installed on toaster.	1. Measure resistance of motor coil. Replace motor if coil measures either open circuit or zero resistance.
		<ol> <li>Mark the drive motor sprocket and count the turns per minute. Correct drive motor speed is nine (9) turns per minute for VCT-20; three (3) turns per minute for VCT-25; one (1) turn per minute for VCT-50.</li> </ol>
	Conveyor Belt chain is loose, worn, or broken or the motor drive sprocket is loose	Check drive chain for kinks, broken or bent links or other damage. Check motor sprocket and drive sprockets (on drive shaft); tighten setscrew on flat of shaft if required. Check for damaged/worn sprockets and replace as required.
	The Conveyor Covers are not installed or are improperly installed.	Install conveyor cover assy(s).
	Conveyor Belts chains are installed incorrectly.	Install conveyor belt to match diagram in Fig. 8 (page 11). Be sure that ends of the hooks are facing down.
	Conveyor Belt Chains are too loose or are missing links (41 links required when new). When new, the Conveyor Belt chain has 37 large links and 4 small links.	Remove conveyor belt (page 11). Lay belt flat and count links. Replace entire belt if links are damaged. If conveyor belt has too much play, it will jam. Adjust belt length as described under Servicing the Conveyor Belt (page 11).
	The Roller tensioners or Tensioners are bent or miss- ing.	Replace roller tensioner assy(s). (29, page 22) or ten- sioners (4, page 24) if damaged or loose. Replace slide rails (40, page 24 worn or missing.

Problem	Possible Cause	Corrective Action
Problem	Possible Cause	Corrective Action
Conveyor belts are "jumping" or "snapping".	Toaster is installed incor- rectly.	Perform installation and operating procedures (pages 7-9).
	Bun adjustment controls set incorrectly.	Measure bun thickness and set bun adjustment con- trols correctly (page 9).
	Conveyor drive motor inop-	To check drive motor:
	erative or incorrect conveyor motor installed on toaster.	1.Measure resistance of motor coil. Replace motor if coil measures either open circuit or zero resis- tance.
		2. Mark the drive motor sprocket and count the turns per minute. Correct drive motor speed is nine (9) turns per minute for VCT-20; three (3) turns per minute for VCT-25; one (1) turn per minute for VCT-50.
	Conveyor drive chain loose, worn or broken. Loose motor drive sprocket.	Check drive chain for kinks, broken or bent links or other damage. Check motor sprocket and drive sprockets (on drive shaft); tighten setscrew on flat of shaft if required. Check for damaged/worn sprockets and replace as required.
	Conveyor belts installed incorrectly.	Install conveyor belt to match diagram. Be sure that ends of the hooks are facing down.
	Conveyor belt too loose or missing links (41 links required when new). When new, conveyor has 37 large links and 4 small links.	Remove conveyor belt (page 11). Lay belt flat and count links. Replace entire belt if links are dam- aged. If conveyor belt has too much play, it will jam. Adjust belt length as described under Servicing the Conveyor Belt (page 11).
	Roller tensioner assy(s). or tensioner bent or missing.	Replace roller tensioner assy(s). or tensioners if damaged or loose. Replace slide rails if worn or missing.
Crown and/or heel must be forced into toaster.	Heat shield improperly installed.	Remove and reposition heat shield.
	Crown and/or heel improp- erly inserted into toaster.	Buns must be inserted with cut faces facing each other; heel in front slot and crown in rear slot.

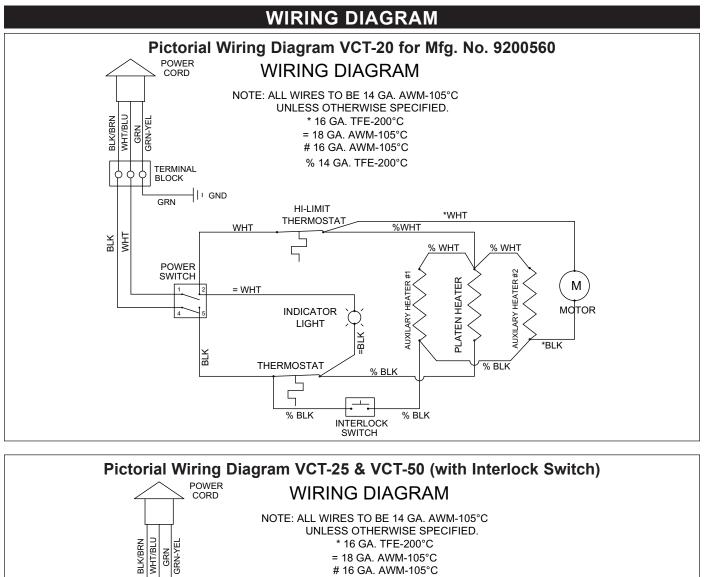
# **TROUBLESHOOTING (continued)**

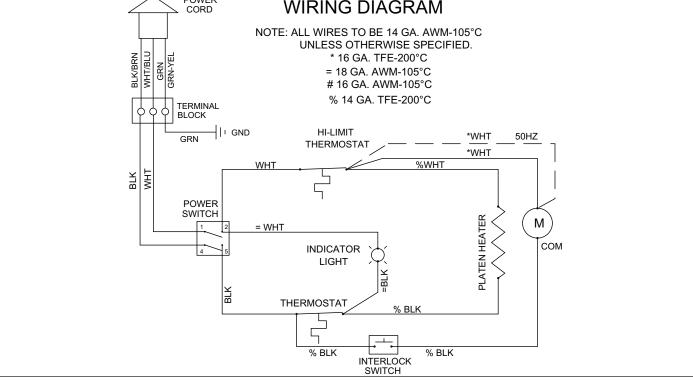
# **TROUBLESHOOTING (continued)**

Problem	Possible Cause	Corrective Action
Crowns and/or Heels must be forced into	Belt Wraps not being cleaned properly.	Clean Belt Wraps as described in the Maintenance section of this manual.
the toaster. Buns sticking and burning.	Conveyor Belt Wraps are not tacky/ sticky (replace every 3–6 months).	Clean Belt Wraps. If the Belt Wraps are too worn, replace them as described in the Maintenance section of this manual.
	Belt Wraps are dirty, worn, or dam- aged (replace every 3–6 months).	Clean or replace Belt Wraps as described in the Maintenance section of this manual.
	Release Sheet is not being cleaned properly.	Clean both sides of the black and silver Release Sheet as described in the Maintenance section of this manual.
	Release Sheet is not being reversed as required.	Reverse the Release Sheet or replace Release Sheet as described in the Maintenance section of this manual.
	Release Sheet is dirty, worn, or damaged (replace every 4–6 weeks).	Clean or replace Release Sheet as described in the Maintenance section of this manual.
	Conveyor Belt Chains are skipping on Sprockets.	Measure and adjust the Conveyor Belt Chains as described in the Maintenance section of this manual.
	Conveyor Safety Interlock Switch (some models) is not being activated by the Heat Shield.	Heat Shield is ajar. Reposition Heat Shield. If the Interlock Switch has failed, order kit 7001436 to remove and bypass the Interlock Switch.
		Heat Shield is damaged. Replace if necessary. If the Conveyor Safety Interlock Switch is dam- aged, order kit 7001436 to remove and bypass the Interlock Switch.
	Belt Wraps slipping over Conveyor Belt Chains.	Remove Belt Wraps and clean the Conveyor Belt Chain links and Belt Wraps as described in the Maintenance section of this manual.
	Roller Tensioner(s) damaged or missing.	Reinstall or replace Roller Tensioner(s) as described in the Maintenance section of this manual.
	Drive Motor stalls intermittently.	Contact your maintenance person or an Authorized Service Agency for service.
	Compression Settings are incorrect.	Use the recommended settings. Set Heel to 2 and Crown to 6.
	Buns are not inserted into the toaster properly.	Buns must be inserted with the cut sides facing each other on the correct Heel or Crown side.
	Non OEM or damaged Belt Wraps used.	Use only OEM Belt Wraps (P/N 7000416).
New Conveyor Belt Wraps do not fit.	Compression Settings are incorrect.	Set Compression Knobs to 6 and 6 when replac- ing Belt Wraps or when adjusting Conveyor Belt Chains.
	Belt Wraps not installed correctly.	Install Belt Wraps inside the Support Rods with the zipper flap exposed and hanging down.
	Non OEM or damaged Belt Wraps used.	Use only OEM Belt Wraps (P/N 7000416).



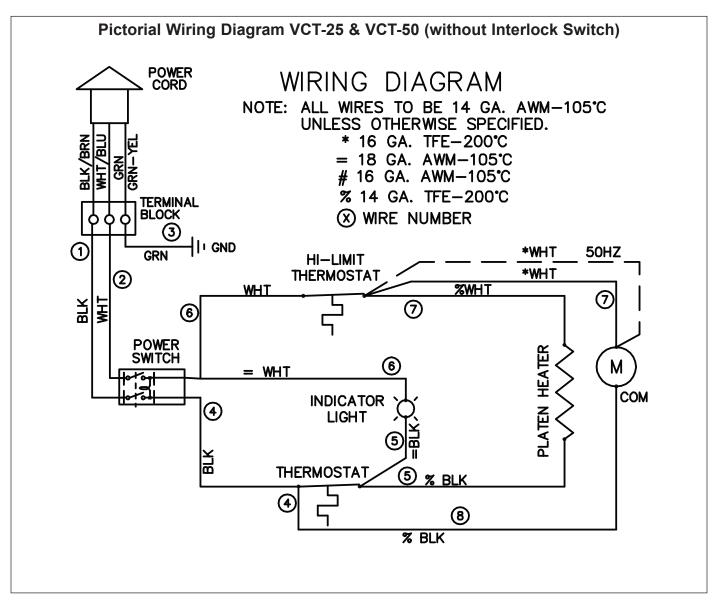
TROUBLESHOOTING (continued)				
Problem	Possible Cause	Corrective Action		
Toaster makes unusual sounds.	Compression Settings are too tight.	Set Compression Settings to the correct (or larger) setting.		
	Conveyor Belt Wrap is installed incorrectly.	Belt Wraps must be installed as described in the Maintenance section of this manual.		
	Belt Wrap Pin rubbing on housing.	Center the Pin in the Belt Wrap zipper.		
	Roller Tensioner(s) bent or missing.	Measure, adjust, or replace the Roller Tensioner(s) as described in the Maintenance section of this manual.		
	Conveyor Belt Chains have stretched.	Measure and adjust the conveyor Belt Chains as described in the Maintenance section of this		
	Conveyor Belt Chains adjusted incorrectly.	manual.		
	Sugar and/or carbon has accumu- lated inside the Conveyor Belt Wrap and between the Conveyor Belt chain and Tensioner Slide Rails.	Remove Belt Wraps, clean conveyor Belt Chain links just as you clean the Belt Wraps daily, and then clean the Slide Rails on the Tensioners. Next, clean the Belt Wrap on both sides before reinstalling it.		
	Motor Drive Chain needs lubrication.	Lubricate the Drive Chain carefully with P/N 2140152 at least once a year.		
	A Conveyor Shaft bearing is binding.	Contact your maintenance person or Authorized Service Agency for service.		

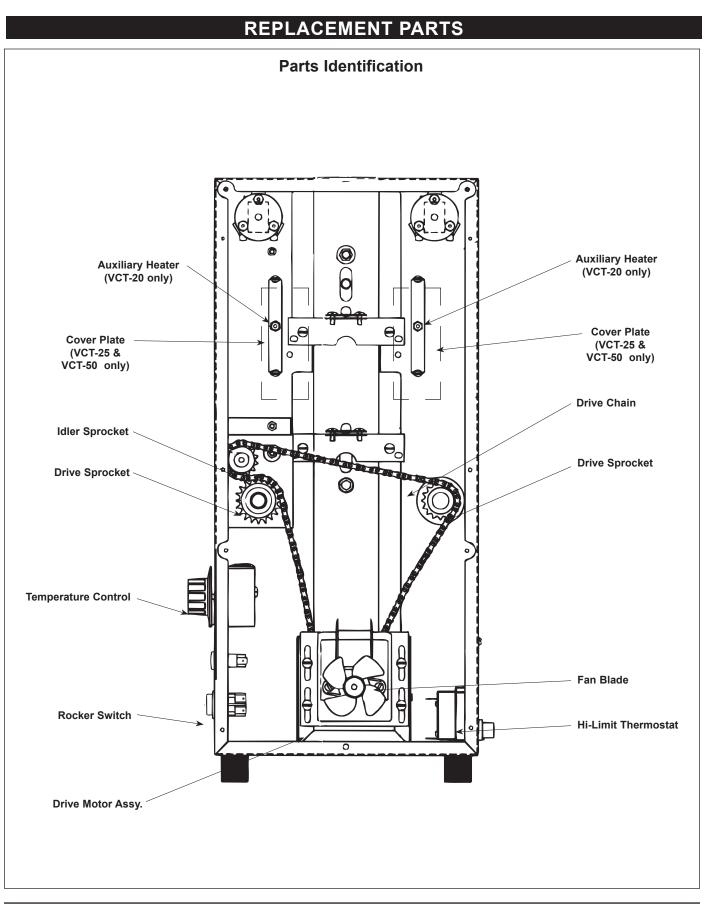






### WIRING DIAGRAM (continued)





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# **REPLACEMENT PARTS (continued)**

Item	Part No.	Description	Qty.
1	0011266	Conveyor Belt	2
	0800204	1/2" Pitch Link, Small	4
	0800121	3/4" Pitch Link, Large	37
2	2150117	Idler Shaft	2
3	0011375	Conveyor Cover Assy.	2
4	0010475	Tensioner Assy. (Incl. #40, 76, 85)	4
5	0800332	Rod, Conveyor Cover	4
6	2150190	Sprocket	8
8	0503362	Control Cover	1
9	2150118	Drive Shaft	2
10	0700452		1
		(Mfg. No. 9200606, 9200614,	•
		9200626, & 9200632)	
	0700463	,	1
		(Mfg. No. 9200600, 9200620,	
		9200624, 9200630, 9200631,	
		& 9200638)	
	0700451	0,	1
		(Mfg. No. 9200602 & 9200622)	
	0700453	Power Cord/Plug, CEE 7/7	1
		(Mfg. No. 9200608, 9200616,	
		9200625, 9200628, 9200629,	
		9200633, 9200634, 9200639,	
	0700004	& 9200640)	
	0700694	Power Cord Assembly	1
		Australia AS3112)	
	0700607	(Mfg. No. 9200647 Only) Power Cord AS3112 Australian	1
	0700097	Plug 20 Amp., 250 VAC.	I
		(Mfg. No. 9200644 & 9200646)	
	0700437	Power Cord, Harmonized	1
	0100401	16 Amp., IEC 309	'
		(Mfg. No. 9200609 & 9200637)	
11	4030235	Thermostat, 530° F	1
		Thermostat, 122F-600F Adjustable	-
		(Mfg. No. 9300639 only)	
12	2150158		2
13	2150186	Bearing	6
		Bearing Retainer/Spacer	6
	0503376		6
	7000167	Bearing & Retainer Kit	1
-		(Includes #13,14,15 & 59)	
17	2150193	Drive Sprocket, VCT-20	2
	2150109	Drive Sprocket, VCT-25/VCT-50	2
18	2150187	Drive Chain	1
	0011299	Idler Sprocket & Bearing	1
	0501232		1
21		•	1
			•

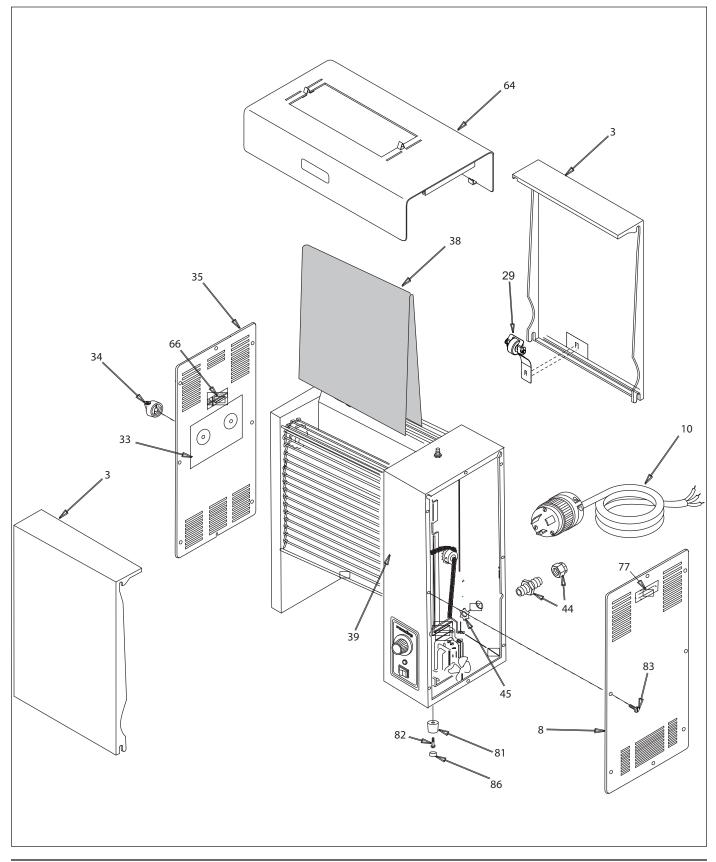
		indoa)	
Item	Part No.	Description	Qty.
22	7000204	Drive Motor Kit, VCT-20 (Incl. #58)	1
	400K150	Drive Motor Kit, VCT-50 (120V)	
		(Incl. #58)	1
	400K151	Drive Motor Kit, VCT-50 (230V)	
		(Incl. #58)	1
	400K152	Drive Motor Kit, VCT-25 (120V)	
	40014450	(Incl. #58)	1
	400K153	Drive Motor Kit, VCT-25 (230V)	4
00	2150172	(Incl. #58)	1 1
23		Sprocket, Motor, VCT-20	1
		Sprocket, Motor, VCT-50	1
24		Sprocket, Motor, VCT-25 Rocker Switch Kit, On/Off	1
		Terminal Block	1
			2
		Retainer, Tension Bracket, RH	
		Retainer, Tension Bracket, LH	2 1
20		Indicator Light, Amber (250V)	1
20		Indicator Light, Amber (125V) Roller Tensioner Assembly	2
		Tensioner Bracket, Right	2
31		Tensioner Bracket, Left	2
		Label, Control	2
		Label, Dial (Pack of 10)	1
		Knob, Cam	2
	0503390		2
		Knob, Thermostat Control	1
		Weldment, End Housing	1
		Release Sheet (Pack of 3)	-
50		Release Sheet (Pack of 10)	_
30		Weldment, Control Housing	1
		Slide Rail Kit (Incl. Qty. 2	1
40	1000121	slide rails for tensioners)	2
41	0021207	Conveyor Cam	2
		Thermocouple Retainer Kit	2
		High Limit Thermostat	1
		Strain Relief	1
		Locknut, 1/2"	1
		Bracket, Motor	1
		Wire Set, VCT-20 (not shown)	1
ŤĬ		Wire Set, VCT-25/VCT-25	•
	5100000	(Not shown)	1
48	0503385	Bun Chute	1
		Auxiliary Heater, 300W	
10		VCT-20 only MFG# 9200560	2
50	331P101*	Nut, Hex, 5/16 x 18"	1
51		Platen (120 Volt)	1
01		Platen (208-240 Volt)	-

# **REPLACEMENT PARTS (continued)**

Item	Part No.	Description	Qty.				
	7000288	Platen (230 Volt)					
		(Mfg. No. 9200640 only)					
53	4010107	Interlock Switch (Some Models)	1				
54	0503150	Heater Clip, VCT-20 only	2				
57	0503608	Cover Plate	2				
58	4000165	Fan Blade, Motor	1				
59	2100256	Tape, Hi-Temp	8				
61	212P118*	Flat Washer, 5/16"	1				
62	0500464	Retainer, Bearing	1				
64		Heat Shield Assy.	1				
	7000707	Heat Shield with Dampers	1				
	0040040	(Mfg. No. 9200629 Only)					
	0013013	Heat Shield With Dampers					
GE	2050462	(Mfg. No. 9200625 Only)	0				
65 66		Setscrew, 1/4-28 x 5/16"	8 1				
		Label, Caution Hot Screw, #10-32 x 3/8"	2				
67 68		Screw, #6-32 x 1/4"	2 8				
	406P107*		0 1				
		Nut, #8-32, "KEPS"	6				
		Screw, #10-32 x 1/4"	4				
		Washer, #10	6				
		Nut, #8-32	3				
		Nut, Hex, #6-32	2				
		Screw, #6-32 x 7/8"	2				
		Nut, Hex Acorn, #8-32	10				
		Label, Service	1				
78		Washer, 1/4"	4				
79		Screw, 1/4-20 x 1/2"	4				
		Screw, 1-Way, #8-32 x 1/2"	1				
		Bumper, Recess Leg, 1"	4				
		Screw, #10-32 x 1-1/4"	4				
		Screw, #8-32 x 1/4"	12				
84		Screw, SEMS, #8-32 x 5/16"	4				
85		Screw, Flat Hd., #8-32 x 3/8"	4				
86		Cover, Leg, Bumper	4				
87		Shoulder Bolt, 5/16-18 x l"	1				
88		Screw, #6-32 x 1/2"	1				
89		Tension Spring, Inner	4				
	2100259	1 0,	4				
		Silicone Belt Replacement	1				
	-	(Package of 2)					
92	7001852	Silicone Belt Replacement	1				
		(Single Pack)					
Mfg. No. 9200633 & 9200638 only							
* Only available in packages of 10.							

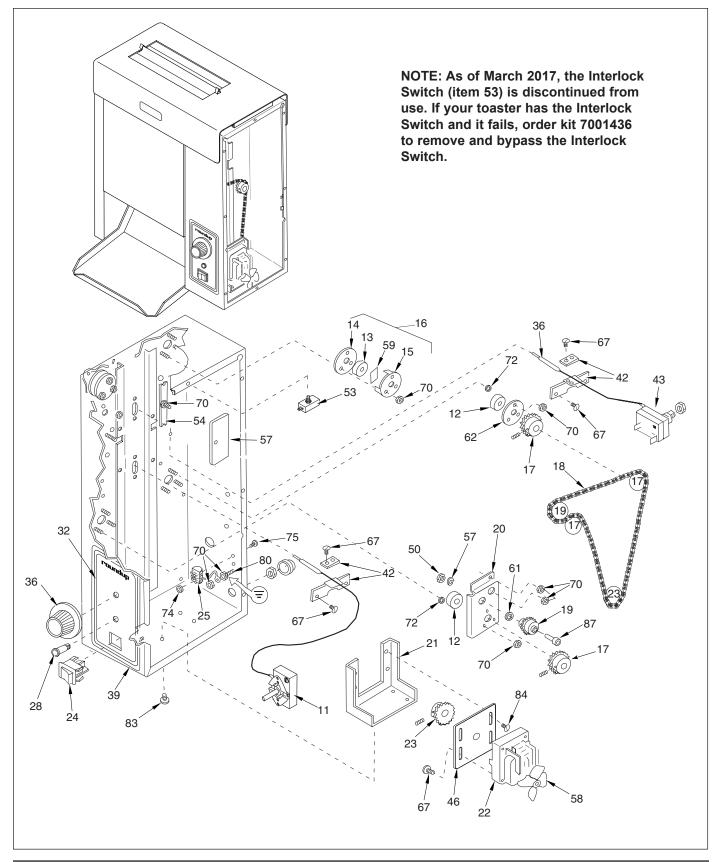


# **REPLACEMENT PARTS (continued)**



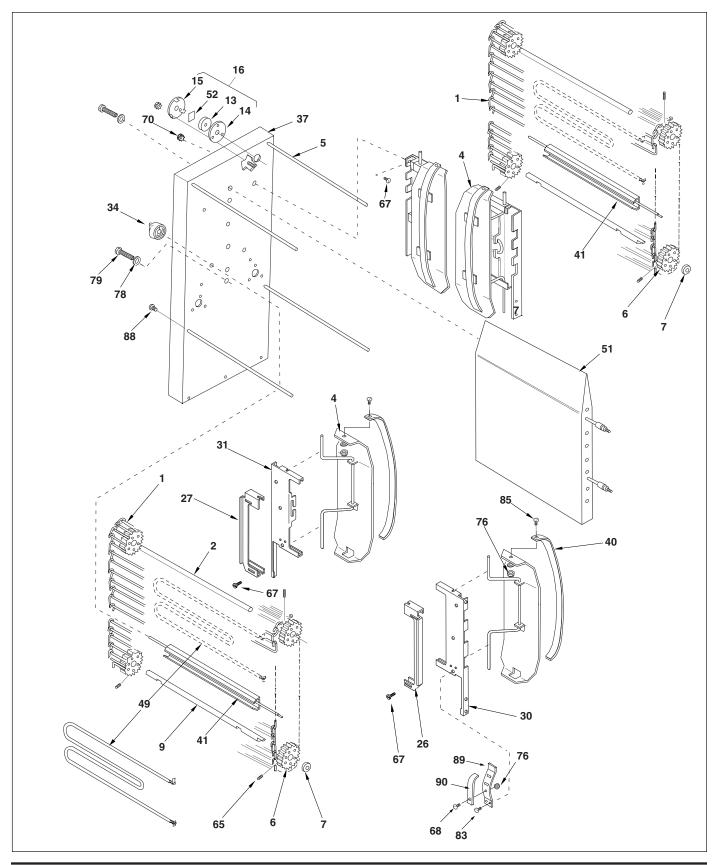
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### **REPLACEMENT PARTS (continued)**

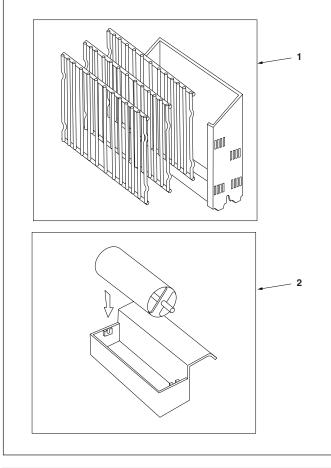


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# **REPLACEMENT PARTS (continued)**



# **OPTIONAL PARTS – VCT-25 & VCT-50**



art No.	Description	Qty.
00236	Bun Feeder	1
00238	Butter Wheel Kit	1
(	00236	00236 Bun Feeder



#### LIMITED WARRANTY

Equipment manufactured by A.J. Antunes & Co. (Antunes) has been constructed of the finest materials available and manufactured to high quality standards. These units are warranted to be free from electrical and mechanical defects for a period of one (1) year from date of purchase under normal use and service, and when installed in accordance with manufacturer's recommendations. To insure continued operation of the units, follow the maintenance procedures outlined in the Owner's Manual. During the first 12 months, electromechanical parts, non-overtime labor, and travel expenses up to 2 hours (100 miles/160 km), round trip from the nearest Authorized Service Center are covered.

- 1. This warranty does not cover cost of installation, defects caused by improper storage or handling prior to placing of the Equipment. This warranty does not cover overtime charges or work done by unauthorized service agencies or personnel. This warranty does not cover normal maintenance, calibration, or regular adjustments as specified in operating and maintenance instructions of this manual, and/or labor involved in moving adjacent objects to gain access to the equipment. This warranty does not cover consumable/ wear items. This warranty does not cover damage to the Load Cell or Load Cell Assembly due to abuse. misuse, dropping of unit/shock loads or exceeding maximum weight capacity (4 lbs). This warranty does not cover water contamination problems such as foreign material in water lines or inside solenoid valves. It does not cover water pressure problems or failures resulting from improper/incorrect voltage supply. This warranty does not cover Travel Time & Mileage in excess of 2 hours (100 miles/160 km) round trip from the nearest authorized service agency.
- 2.Antunes reserves the right to make changes in design or add any improvements on any product. The right is always reserved to modify equipment because of factors beyond our control and government regulations. Changes to update equipment do not constitute a warranty charge.
- 3. If shipment is damaged in transit, the purchaser should make a claim directly upon the carrier. Careful inspection should be made of the shipment as soon as it arrives and visible damage should be noted upon the carrier's receipt. Damage should be reported to the carrier. This damage is not covered under this warranty.
- 4. Warranty charges do not include freight or foreign, excise, municipal or other sales or use taxes. All such freight and taxes are the responsibility of the purchaser.
- 5. THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED.INCLUDINGANYIMPLIEDWARRANTYORMERCHANTABILITYORFITNESSFORAPAR-TICULAR PURPOSE, EACH OF WHICH IS HEREBY EXPRESSLY DISCLAIMED. THE REMEDIES DESCRIBED ABOVE ARE EXCLUSIVE AND IN NO EVENT SHALL ANTUNES BE LIABLE FOR SPE-CIAL CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR THE BREACH OR DELAY IN PERFOR-MANCE OF THIS WARRANTY.



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