



PARTS & SERVICE MANUAL
for
RT-2AR
“ADJUSTABLE RANGE” TOASTER



The information found in this manual will prove very helpful. Although the instructions are easy to follow, all repair procedures should be carried out by a qualified Savory Certified Service Representative.

THIS MANUAL SHOULD BE RETAINED FOR FUTURE USE

BEFORE INSTALLATION

The RT-2AR should be placed in the most convenient location for ease of cleaning, maintenance, service and general operation. Careful consideration should be given to avoid drafts, close proximity to grease or vapor-producing appliances or other high ambient heat equipment. A minimum of ½" clearance is required for air circulation. This is assured by the rounded "acorn" nuts protruding from the sides and rear of the unit. Overhead clearance from the top of the toaster should be as much as possible and sufficient to allow heat dissipation.

REPLACEMENT PROCEDURES

A – CASE REMOVAL

1. Remove reflector tray, toast pan and delivery chute.
2. Remove the 2 screws along the front trim panel and remove.
3. Remove left front panel.
4. Remove the 4 screws holding control panel to unit and carefully pull panel towards you with all wires intact. Slide control panel towards center of unit.
5. With hands on each side of case, pull forward to remove.

B – CASE REPLACEMENT

1. Slide case over unit making sure tabs on the sides and top of case fit into grooves on back of unit.
2. Carefully replace control panel.
3. Replace left front panel and front trim panel.
4. Replace reflector tray, toast pan and delivery chute.

C – ON/OFF (MAIN POWER) SWITCH

1. With control panel removed (Section A), remove the 2 slotted screws holding the ON/OFF switch to the control panel.
2. Disconnect wires and remove switch.
3. Install new switch from rear of panel and reconnect wires. (Refer to appropriate wiring diagram)

D – CONVEYOR ON/OFF SWITCH

1. With the control panel removed (Section A), disconnect wires to switch noting proper orientation.
2. Remove bezel from front of panel and push switch through back of panel.
3. Insert new switch from back of panel. NOTE: Be sure terminals are in correct position.
4. Attach bezel on front of panel and tighten.
5. Re-attach wires to switch. (Refer to appropriate wiring diagram.)

E – INFINITE CONTROL SWITCH

1. With control panel removed (Section A), remove the infinite control knob to gain access to the 2 slotted screws that hold the control to the unit. Remove these 2 screws.
2. Disconnect wires from infinite switch terminals.
3. Install new switch from back of panel and reattach wires. (Refer to appropriate wiring diagram).

NOTE: The two (2) infinite controls on the RT-2AR model serve as on/off switches to the heating elements. The upper infinite knob controls the upper elements and the lower infinite knob controls the lower heating elements.

F – SPEED CONTROL / P.C. BOARD ASSEMBLY

NOTE: The speed control and P.C. board are wired together and must be replaced as an assembly.

1. With control panel removed (Section A), loosen set screws on speed control knob and remove.
2. Remove retaining nut that holds speed control in place and remove from back of panel.
3. Disconnect motor lead and on/off lead from P.C. board terminals.
4. Remove the 2 screws and nuts holding P.C. board terminals.
5. Reverse this procedure to install new assembly. (Refer to appropriate wiring diagram.)

P.C. BOARD ADJUSTMENT

The P.C. board is factory set and should not require adjustment. If speed control range appears faulty, the following procedure should be carried out:

1. Turn speed control knob clockwise until it stops.
2. Connect to power source and turn unit on.
3. Turn trimmer adjustment to right to start conveyor motor running. Now turn trimmer adjustment screw to the left to slow conveyor motor. Continue turning screw until motor just stops. Adjustment is now completed. All further adjustments can be made by operating at the speed control knob.

SPECIAL NOTICE: The RT-2AR is no longer built with the P.C. board installed. To wire or convert units with the old style assembly, which included a resistor and/or P.C. board, do the following: The gear motor, which has 2 black wires, one is plugged into the white side of the terminal block, and the other one is spliced together with the black wire off the Conveyor Speed Control POT. Then the blue wire off the Conveyor Speed Control POT is attached to the On/Off Switch.

G – GEAR MOTOR

1. With outer case removed (Section A), disconnect motor leads from on/off switch and conveyor speed control and cut wire ties at floor panel.
2. Remove the 2 retaining bolts from the underside of the unit.
3. Remove the drive chain and lift out the motor.
4. Separate motor from motor mounting bracket by removing the 4 slotted screws on the bracket.
5. Using a 1/16" Allen wrench, remove the drive sprocket from the motor shaft.
6. Attach new gear motor to motor mounting bracket.
7. Install drive sprocket on motor shaft making sure the Allen screw rests on the flat of the shaft. Do not tighten set screw.
8. Install new motor with bracket attached. DO NOT tighten retaining bolts.
9. Replace drive chain over sprockets.
10. Slide motor to right until drive chain is taut. There should be approximately 1/4" play in the drive chain.
11. Check drive chain alignment. Tighten drive sprocket set screws.
12. Reattach motor leads to on/off switch and conveyor speed control. (Refer to appropriate wiring diagram).

H – DRIVE CHAIN

1. With outer case removed (Section A), loosen the 2 motor mounting bracket retaining bolts on underside of unit, but DO NOT remove.
2. Slide motor to the left to loosen drive chain tension.
3. Remove drive chain.
4. Install new chain over sprockets with open looped side of chain facing out
5. Slide motor to right to tighten drive chain tension. There should be approximately 1/4" play in the drive chain.
6. Check for proper drive chain alignment. (See figure 6 & 7)
7. Tighten motor mounting bracket retaining bolts on underside of unit.

I – DRIVE (MOTOR) SPROCKET

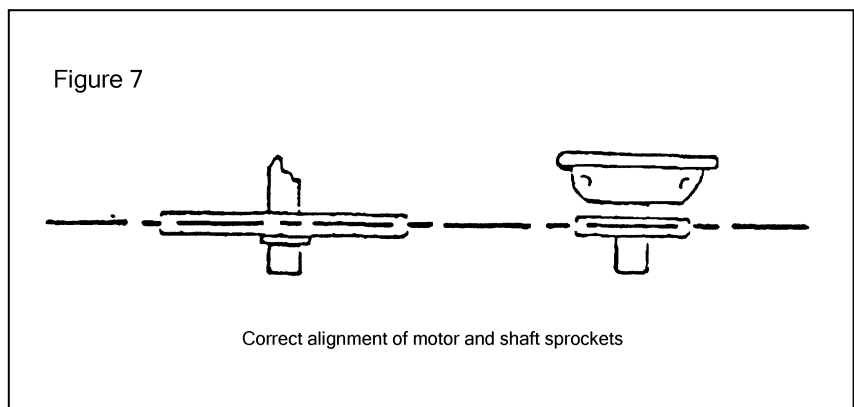
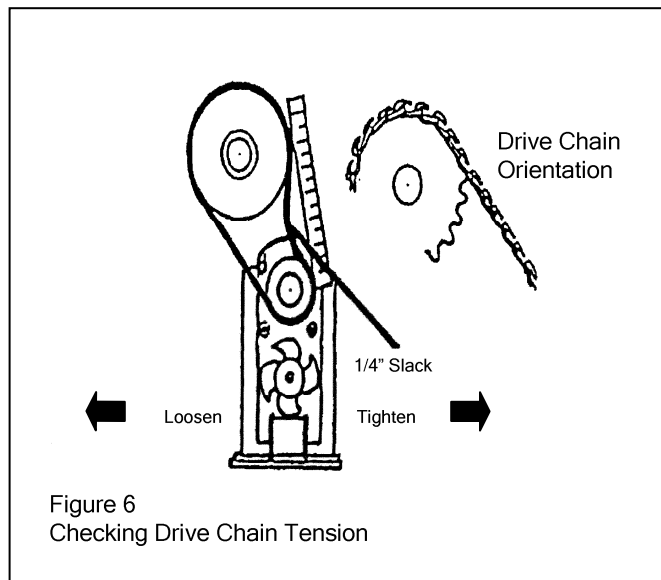
NOTE: RT-2AR models use a 10T sprocket

1. With outer case removed (Section A) and drive chain removed (Section H), loosen the set screw on sprocket with a 1/4" Allen wrench and removed sprocket.
2. Install new sprocket on motor shaft making sure Allen screw rests on the flat of the shaft.
3. Replace drive chain (Section H).

J – REAR (CONVEYOR) SHAFT SPROCKET

NOTE: RT-2AR models use a 40T sprocket.

1. With outer case removed (Section A) and drive chain removed (Section H), loosen the 2 set screws on sprocket with a 1/16" Allen wrench and remove sprocket.
2. Install new sprocket on conveyor shaft aligning the 2 set screws with the holes on the shaft.
3. Replace drive chain (Section H).



K – CONVEYOR CHAIN

Figure 8

5. With outer case removed (Section A), loosen motor mounting bracket retaining bolts on underside of unit, and slide motor to the left.
6. Loosen rear shaft adjusting bracket nuts and bearing retaining bracket nuts on both sides of unit.
7. Slide rear conveyor shaft forward to loosen tension.
8. Separate the chain at any link and slide out from front of unit.
9. Before installing new chain, check for proper orientation (See Figure 8) and correct number of links.
10. Starting at front of unit, slide chain under front shaft and push towards rear of unit. Bring chain up and over rear shaft assembly and pull towards front. Connect links. CAUTION: MAKE SURE CHAIN IS NOT INSTALLED AT AN ANGLE.
1. Push back on rear shaft assembly until excess slack is removed from chain. Holding tension, tighten both the rear shaft adjusting brackets and bearing retaining brackets on both sides of unit.
2. Check for proper tension. There should be approximately $\frac{3}{8}$ " to $\frac{3}{4}$ " space between the conveyor chain and the ledge on the inside of the unit cavity.
3. Slide motor to the right to tighten drive chain tension. There should be approximately $\frac{1}{4}$ " play in the drive chain.
4. Tighten motor mounting bracket retaining bolts on underside of unit.

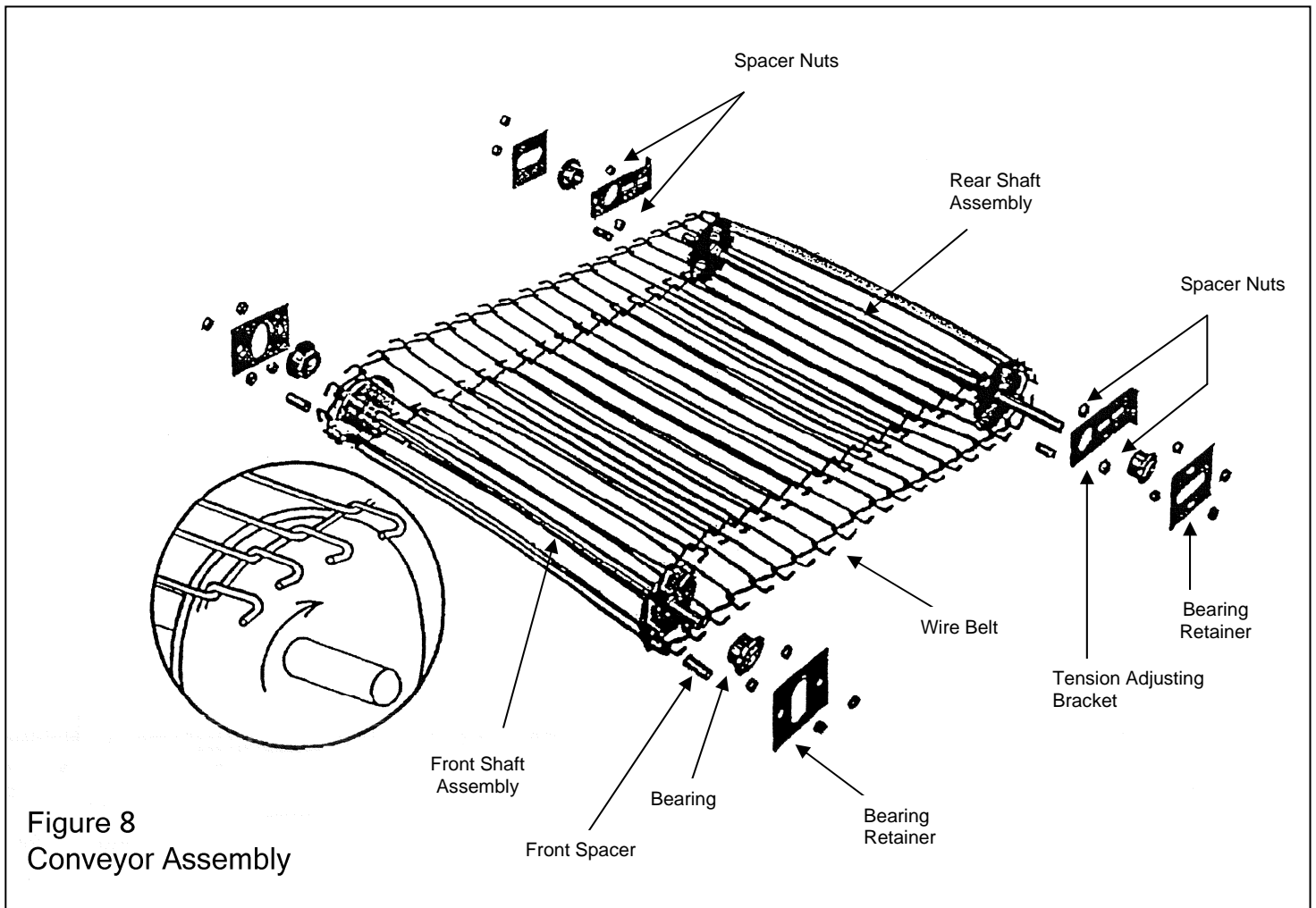


Figure 8
Conveyor Assembly

L – FRONT AND REAR SHAFT AND BEARINGS

Figure 8

1. Remove outer case (Section A) and conveyor chain (Section K).
2. To remove front shaft bearings: first, remove the bearing retainers on both sides of unit.
3. With retainers removed, slide bearing out (with shaft if necessary). Note proper location of the spacer washers on the front bearing retainer studs.
4. Replace bearings (and front shaft if necessary).
5. To remove rear shaft bearings: remove drive chain (Section H) and conveyor shaft sprocket (Section J).
6. Remove bearing retainer brackets at both sides of unit and slide bearings out. Shaft can be replaced at this time if needed. Note proper orientation of hex head spacers.
7. Replace bearings (and rear shaft if necessary), shaft sprockets and drive chain (Section H).
8. Replace conveyor chain (Section K).

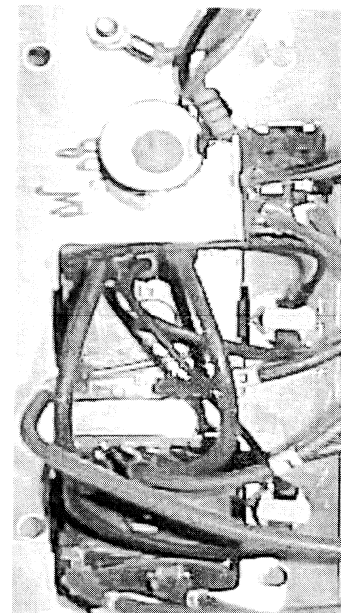
M – POWER-ON LIGHT

1. With control panel removed (Section A), disconnect wire leads from back of light.
2. Press spring loaded tabs on back of light and push light through front of panel.
3. Insert new light from front of panel and snap into place.
4. Reattach wire leads (Refer to appropriate wiring diagram).

CONTROL PANEL FRONT VIEW



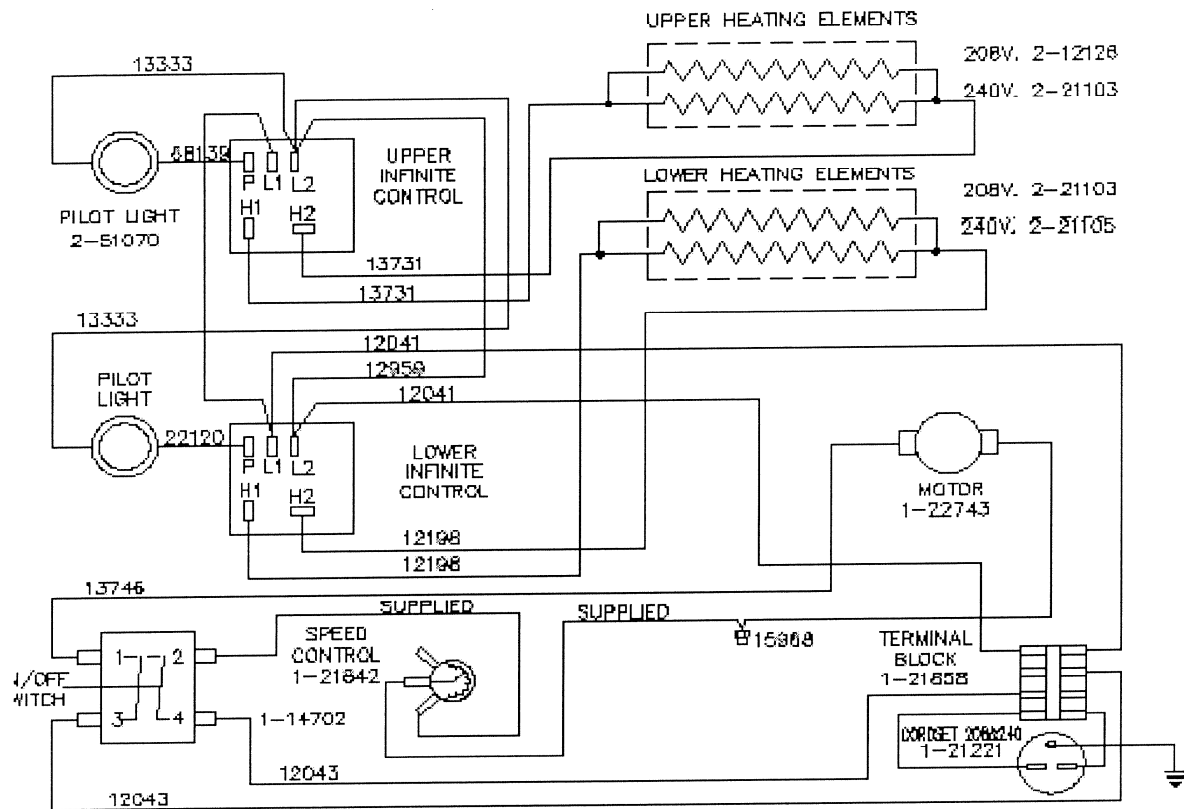
CONTROL PANEL REAR VIEW



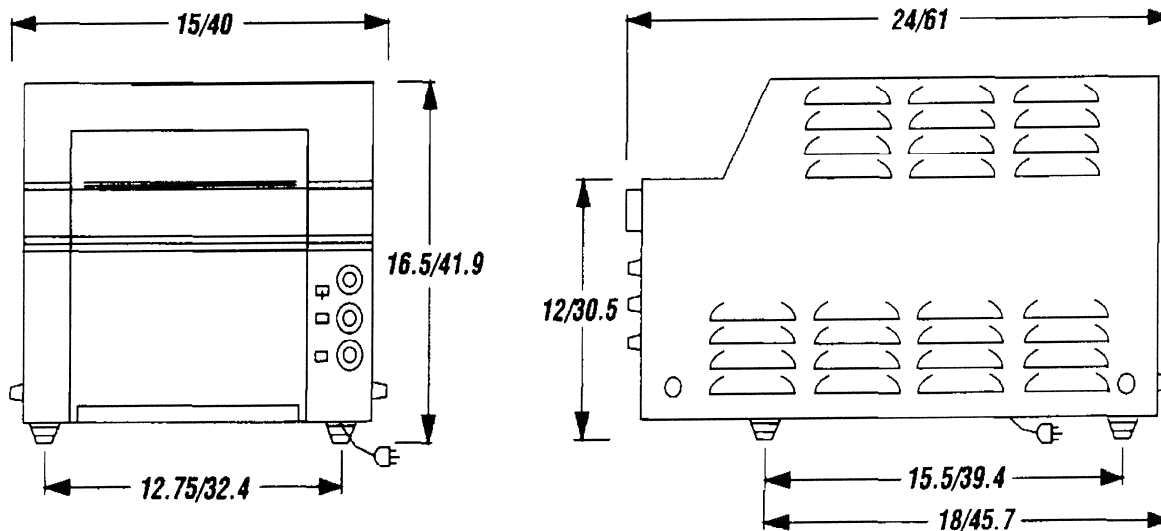
PROBLEM	POSSIBLE CAUSES	SUGGESTED REMEDIES
No heat, conveyor belt doesn't run	1. Defective or improper electrical outlet.	1. Check voltage at receptacle. Check that voltage conforms to Savory specifications on unit data plate.
	2. Defective plug or line cord	2. Check plug and line cord. Replace if necessary.
	3. Defective on/off switch	3. Replace switch.
Unit fails to heat	1. Defective infinite control switch	1. Replace switch
	2. Defective heating elements	2. Replace elements
	3. Defective, loose or improper wiring or terminal block.	3. Check wiring and terminal block for improper connections or defects. Refer to wiring diagram.
Insufficient heat or no heat from upper or lower heaters	1. Defective heating elements	1. Turn unit on and set heat at #9. Observe elements after a 15-minute warm-up period. Replace any element that does not glow.
	2. Defective or improper wiring or terminal block	2. Check wiring and terminal block for improper connections or defects. Refer to wiring diagram.
Heat stays high, cannot be regulated	1. Defective infinite control switch	1. Replace switch
Conveyor belt is excessively noisy and/or does not run smoothly	1. Worn shaft bearing(s)	1. Replace bearing(s)
	2. Incorrect conveyor belt tension	2. Adjust tension
	3. Incorrect alignment of drive chain, gear motor, or sprockets	3. Adjust alignments
	4. Worn sprockets and/or drive chain	4. Replace sprockets and/or drive chain
Conveyor belt does not run	1. Misaligned or bent motor fan blade.	1. Check for proper alignment of fan blade. Adjust or replace if necessary.
	2. Defect in one or more of the following: a. wiring b. terminal block c. speed control d. printed circuit board e. gear motor f. conveyor on/off switch	2. Connect AC voltmeter to gear motor terminals. Rotate speed control to maximum. Meter reading of 208/240V indicates problem is NOT items (a) through (d). Replace gear motor. If reading of 208/240V is not obtained, check in sequence starting with item (a) until defect is isolated. Replace any defective components. Refer to wiring diagrams. Check all connections.

PROBLEM	POSSIBLE CAUSES	SUGGESTED REMEDIES
Cannot regulate speed of conveyor belt	1. Defective speed control and P.C. board assembly	1. Replace speed control and P.C. board. NOTE: Speed control and P.C. board should be replaced as an assembly.
Gear motor runs but conveyor belt slips or doesn't run	1. Loose sprocket(s)	1. Tighten sprocket(s)
	2. Broken drive chain	2. Replace drive chain
	3. Disengaged drive chain	3. Adjust drive chain
Cannot adjust heat for bun toasting (For buns, only the upper heaters should function)	1. Defective bun/toast switch	1. Replace switch

SCHEMATIC



DIMENSIONAL DRAWING



PARTS

DESCRIPTION	PART #	QUANTITY
Infinite Control 208V	14702	2
Infinite Control 240V	12355	2
Knob, Infinite Control	12919	2
Element, Upper 890W 208V *	21103	2
Element, Upper 890W 240V *	21105	2
Element, Assembly Lower 208V	12618	1
Element, Assembly Lower 240V	12620	1
Element, Lower 1200W 208V *	12126	2
Element, Lower 1185W 240V *	21103	1
Element, Assembly Upper 208V	12254	1
Element, Assembly Upper 240V	12266	1
Motor 208/240V	22743	1
Speed Control 208/240V	21842	1
Switch, Toggle DPST 20a	68117	1
Knob, Speed Control	12447	1
Cordset, 6-30P	21221	1
Light, Pilot 208/240V	51070	2
Bearings	22754	4
Wire Harness Kit (wires only)	12933	1
Jumper	21358	4
Terminal Block	21858	1
Drive Chain, 54 Links	12412	1
40T Sprocket Assembly	21320	1
10T Sprocket Assembly	30495	1
Front Trim, Left Side	12219	1
Legs, 1" Plastic	12668	4
Control Panel	12060	1
Control Panel Decal	12061	1
Savory Logo	12523	1
Savory Lubricant	21720	1
Reflector Tray	12542	1
Toast Receiving Tray	12105	1
Conveyor Belt	12551	1

LIMITED WARRANTY FOR COMMERCIAL PRODUCTS

LIMITED WARRANTY

Lincoln Foodservice Products, LLC, ("Lincoln") warrants this product to be free from defects in material and workmanship for a period of:

- One (1) year from the date the product is installed or eighteen (18) months from the date of shipment from our facility, whichever comes first.
- Heating elements only – two (2) year warranty against burnout (excluding breakage) from date of shipment from our facility.
- Hot Food Server products only – one (1) year labor, two (2) years parts from the date of shipment from our facility.

During the warranty period, Lincoln shall, at Lincoln's option, repair, or replace parts determined by Lincoln to be defective in material or workmanship, and with respect to services, shall re-perform any defective portion of said services. The foregoing shall be the sole obligation of Lincoln under this Limited Warranty with respect to the equipment, products, and services. With respect to equipment, materials, parts and accessories manufactured by others, Lincoln's sole obligation shall be to use reasonable efforts to obtain the full benefit of the manufacturer's warranties. Lincoln shall have no liability, whether in contract, tort, negligence, or otherwise, with respect to non-Lincoln manufactured products.

WHO IS COVERED

This Limited Warranty is available only to the original purchaser of the product and is not transferable.

EXCLUSIONS FROM COVERAGE

- Repair or replacement of parts required because of misuse, improper care or storage, negligence, alteration, accident, use of incompatible supplies or lack of specified maintenance shall be excluded
- Normal maintenance items, including but not limited to, light bulbs, fuses, gaskets, O-rings, interior and exterior finishes, lubrication, delimiting, broken glass, etc.
- Failures caused by improper or erratic voltages
- Improper or unauthorized repair
- Changes in adjustment and calibration after ninety (90) days from equipment installation date
- This Limited Warranty will not apply to any parts subject to damage beyond the control of Lincoln, or to equipment which has been subject to alteration, misuse or improper installation, accidents, damage in shipment, fire, floods, power changes, other hazards or acts of God that are beyond the control of Lincoln.
- This Limited Warranty does not apply, and shall not cover any products or equipment manufactured or sold by Lincoln when such products or commercial equipment is installed or used in a residential or non-commercial application. Installations not within the applicable building or fire codes render this Limited Warranty and any responsibility or obligations associated therein null and void. This includes any damage, costs, or legal actions resulting from the installation of any Lincoln commercial cooking equipment in a non-commercial application or installation, where the equipment is being used for applications other than those approved for by Lincoln.

LIMITATIONS OF LIABILITY

The preceding paragraphs set forth the exclusive remedy for all claims based on failure of, or defect in, products or services sold hereunder, whether the failure or defect arises before or during the warranty period, and whether a claim, however instituted, is based on contract, indemnity, warranty, tort (including negligence), strict liability, implied by statute, common-law or otherwise, and Lincoln its servants and agents shall not be liable for any claims for personal injuries, incidental or consequential damages or loss, howsoever caused. Upon the expiration of the warranty period, all such liability shall terminate. THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, ORAL, IMPLIED OR STATUTORY. NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE SHALL APPLY. LINCOLN DOES NOT WARRANT ANY PRODUCTS OR SERVICES OF OTHERS.

REMEDIES

The liability of Lincoln for breach of any warranty obligation hereunder is limited to: (i) the repair or replacement of the equipment on which the liability is based, or with respect to services, re-performance of the services; or (ii) at Lincoln's option, the refund of the amount paid for said equipment or services.

Any breach by Lincoln with respect to any item or unit of equipment or services shall be deemed a breach with respect to that item or unit or service only

WARRANTY CLAIM PROCEDURE

Customer shall be responsible to:

- Immediately advise the Dealer or Lincoln's Authorized Service Agent of the equipment serial number and the nature of the problem.
- Verify the problem is a factory responsibility. Improper installation or misuse of equipment, are not covered under this Limited Warranty.
- Cooperate with the Service Agency so that warranty service may be completed during normal working hours.
- Travel Time not to exceed two hours and mileage not to exceed one hundred (100) miles.
- Portable equipment weighting less than ninety (90) pounds must be delivered to the Service Agent at Customer's expense.

GOVERNING LAW

This Limited Warranty shall be governed by the laws of the state of Delaware, USA, excluding their conflicts of law principles. The United Nations Convention on Contracts for the International Sale of Goods is hereby excluded in its entirety from application to this Limited Warranty

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