MODEL RT—2MBK FOR CROISSANTS AND MUFFINS

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INSTALLATION & OPERATION INSTRUCTIONS

For
Model RT-2MBK

The Savory RT-2MBK Horizontal Conveyor Toaster is designed especially for the Burger King Corporation for the toasting of muffins and croissants. It consists of a heating chamber with a conveyor belt passing through it, upon which the product is place CUT SIDE UP. Heating elements are located inside the chamber above and below the conveyor surface.

After toasting, the product slides down the delivery chute and into a receiving tray for easy retrieval.

The conveyor speed and toasting temperature are both regulated by means of the controls located on the front panel.

The unit is virtually maintenance free, requiring only routine cleaning procedures.

INSTALLATION INSTRUCTIONS:

This toaster 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 and vapor producing appliances or high ambient heat equipment.

A minimum of 1/2" clearance is required for air circulation at the sides and rear of the unit. Overhead clearance should be as much as possible and sufficient to allow for heat dissipation.

Position the unit on a level surface. Adjustments in height, up to 1", may be made by turning the adjusters on the toaster legs.

Check that the drop-in screen is in place in the receiving tray, and that the top shield is installed at the top of the case. Place rear (end with large flange) of receiving tray on bottom of lower opening and slide all the way in. Hold front end up to allow rear flange to clear lower retaining studs on inner walls. Insert delivery chute into lower opening with side flanges down and to the rear. Position notches in the side flanges over upper retaining studs on inner side walls.

ELECTRICAL INSTALLATION:

The RT-2MBK toaster is available in 208V or 240V units with single phase operation and is rated at a maximum of 4220 watts (actual power consumption is typically 2600 watts and varies according to heat setting). A 6' power cord, terminating in a NEMA 6-30P plug is supplied with the toaster. The circuit on which the receptacle is installed must be of adequate wiring size and sufficient capacity to meet the requirements indicated on the RT-2MBK toaster data plate.

OPERATING INSTRUCTIONS:

1. Set On-Off switch to the "ON" position.
2. Set Infinite Control to #9.
3. Turn Speed Control to maximum speed #10.
4. ALLOW A MINIMUM 20 MINUTE WARM-UP PERIOD.
5. After warm-up period has elapsed, set Infinite Control to #5 and wait an additional 5 minutes.
6. Place product, side by side, on the conveyor belt, CUT SIDE UP. Do NOT stagger product, as it is unnecessary and wastes space needed during heavy demand periods.
7. The product will be toasted with one pass through the heating chamber and delivered into the receiving tray. Leaving the product in the tray allows it to remain warm until needed.
8. If toasting is too dark, decrease the Infinite Control one number and wait one minute for heat dissipation. Repeat if necessary.
9. If toasting is too light, increase the Infinite Control one number and wait one minute for heat build-up. Repeat if necessary.
10. If product remains too light after increasing the heat, the conveyor speed may be reduced by turning the Speed Control to a lower number.

FOR PREPARING CROISSANTS:

Follow the above procedures for warm-up. Refer to Burger King Operations Manual for settings.

CLEANING INSTRUCTIONS:

Cleaning should be performed daily as outlined below.

1. Disconnect unit from power source.
2. Clear unit of all product, set all controls to "OFF" position and allow unit to cool.
3. Wipe all exterior panels with a soft damp cloth.
4. Wipe receiving tray, delivery chute, reflector pan, and receiving tray drop-in screen with a soft damp cloth. PLEASE NOTE: If reflector pan is dulled, it should be replaced to assure proper operation of elements.
5. Remove any excessive grease or dust build-up with hot sudsy water. DO NOT USE ABRASIVE CLEANERS, as they are damaging to the toaster finish.
6. Avoid contact of water or cleaners on conveyor chain.
7. WARNING: DO NOT DIRECT WATER SPRAYS AT UNIT.

TROUBLESHOOTING CHART

PROBLEM	POSSIBLE CAUSE	RECOMMENDED REPAIR
No heat, and conveyor belt does not run.	1. Defective or improper electrical outlet.	1. Check voltage at receptacle to be sure it conforms with that on Savory toaster data plate.
	2. Defective plug or power cord.	2. Check power cord and plug. Replace if needed.
	3. Defective On-Off switch.	3. Replace On-Off switch.
Unit fails to heat.	1. Defective Infinite Control switch.	1. Remove control panel and check switch. Replace if needed.
	2. Defective heating elements.	2. Replace heating elements.
	3. Defective, loose, or improper wiring or terminal block.	3. Check wiring and terminal block for loose or defective connections. Refer to wiring diagram.
Insufficient heat or no heat from upper or lower elements.	1. Defective heating elements.	1. Turn unit on and set heat to #9. Observe elements after 15 minutes. Check that voltage at receptacle conforms with that on toaster data plate. Check resistance of elements. Replace any defective elements.
	2. Defective or improper wiring or terminal block.	2. Check wiring and terminal block for loose or defective connections. Refer to wiring diagram.
Heat stays high, cannot be regulated.	1. Defective Infinite Control switch.	1. Replace switch.
Conveyor speed cannot be regulated.	1. Speed control may need trimmed (adjusted) to accommodate a voltage difference.	1. Refer to Trimmer Adjustment Installation Supplement for correct procedure.
	2. Defective Speed Control/ P.C. Board assembly	2. Replace Speed Control/P.C. Board assembly.

TROUBLESHOOTING
(Continued)

PROBLEM	POSSIBLE CAUSE	RECOMMENDED REPAIR
Conveyor belt does not run.	1. Defect in one or more of the following: a) wiring b) terminal block c) speed control d) p.c. board e) fan blade f) gearmotor	1. Connect AC voltmeter to gearmotor terminals. Rotate speed control to #10. Meter reading of 208V/240V indicates problem is NOT with items a) through d). Check that fan blade spins freely. Replace gearmotor if all the above check out. If reading of 208V/240V is NOT obtained, check in sequence starting with item a) until defect is isolated. Replace defective part. Check for proper connections. Refer to wiring diagram.
Conveyor belt is excessively noisy and/or does not run smoothly.	1. Worn shaft bearing(s) 2. Incorrect conveyor belt tension. 3. Incorrect alignment of drive chain, gearmotor, and sprockets. 4. Worn sprockets and/or drive chain. 5. Insufficient drive chain lubrication.	1. Replace shaft bearing(s). 2. Adjust tension. 3. Adjust alignment. 4. Replace sprockets and/or drive chain. 5. Lubricate drive chain.
Gearmotor runs but conveyor belt slips or does not run.	1. Loose sprocket(s). 2. Broken drive chain. 3. Disengaged drive chain. 4. Conveyor belt off track.	1. Tighten sprocket(s). 2. Replace drive chain. 3. Adjust drive chain. 4. Re-position conveyor belt and adjust tension.

PARTS REPLACEMENT INSTRUCTIONS

CAUTION

DISCONNECT UNIT FROM POWER SOURCE BEFORE ATTEMPTING ANY SERVICE PROCEDURES.

A. CASE COVER REMOVAL:

1. Remove reflector tray, delivery chute, and receiving tray.
2. Remove the 2 screws holding front trim panel to case cover and remove panel.
3. Remove the 3 screws holding the left side trim panel to case cover and remove panel.
4. Remove the 4 screws holding the control panel to case cover. Pull panel out and towards center of toaster. (Do not disconnect wires).
5. Pull case cover forward and slide off base.

CASE COVER REPLACEMENT:

1. Align rear edges of case cover with front of base.
2. Slide case cover to the back of toaster, keeping rear edge clear of all screws and wires. Engage slots at rear edge of case cover with flanges on back.
3. Re-position control panel on front of unit and secure with the 4 screws.
4. Replace left side trim panel and secure with the 3 screws.
5. Replace front trim panel and secure with the 2 screws.
6. Replace reflector tray, delivery chute, and receiving tray.

B. INFINITE CONTROL SWITCH REPLACEMENT:

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

C. ON-OFF SWITCH REPLACEMENT:

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 the switch.
3. Install the new switch from rear of panel and re-attach wires. Refer to wiring diagram.

D. SPEED CONTROL/P.C. BOARD ASSEMBLY REPLACEMENT:

1. NOTE: The speed control and p.c. board are wired together and must be replaced as an assembly.
2. With case cover removed (Section A), loosen the set screw on the speed control knob and remove.
3. Disconnect motor lead and the on-off lead from the p.c. board terminals.
4. Remove the 2 screws and nuts holding the p.c. board to floor of unit, and remove entire assembly.
5. Reverse this procedure to install new assembly. Refer to wiring diagram.
6. NOTE: The p.c. board is factory pre-set and should nor require adjustment. If speed control range appears faulty, refer to the Speed Control Installation Supplement included in this manual for correct adjustment procedures. (Refer to Page 11)

E. GEARMOTOR REPLACEMENT: (Figures 1 & 2)

1. With case cover removed (Section A), disconnect motor leads from p.c. board and terminal block and cut wire ties at floor panel.
2. Remove the 2 retaining bolts from the underside of toaster.
3. Remove the drive chain and lift out 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 motor to the motor mounting bracket. Make sure fan blade spins freely.
7. Install drive sprocket on motor shaft, making sure 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 the right until the drive chain is taut. There should be approximately 1/4" play in the drive chain. Tighten retaining bolts on underside of toaster.
11. Check drive chain alignment. Tighten drive chain sprocket set screw.
12. Re-attach motor leads to p.c. board and terminal block, Refer to wiring diagram.

F. DRIVE CHAIN REPLACEMENT: (Figures 1 & 2)

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

G. DRIVE (MOTOR) SPROCKET REPLACEMENT: (Figures 1 & 2)

1. With case cover removed (Section A), and drive chain removed (Section F), loosen set screw on sprocket and remove sprocket.
2. Install new sprocket on motor shaft making sure allen screw rests on flat of the shaft.
3. Replace drive chain (Section F).

H. REAR (CONVEYOR) SHAFT SPROCKET REPLACEMENT: (Figures 1 & 2)

1. With case cover removed (Section A), and drive chain removed (Section F), loosen the two set screws on sprocket and remove sprocket.
2. Install new sprocket on conveyor shaft aligning the two set screws with the holes on the shaft.
3. Replace drive chain (Section F).

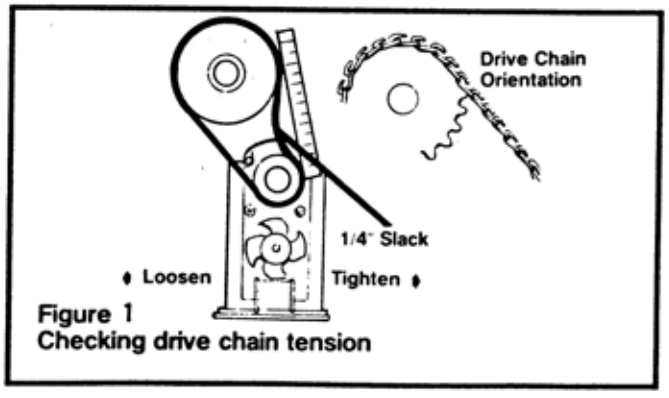


Figure 1
Checking drive chain tension

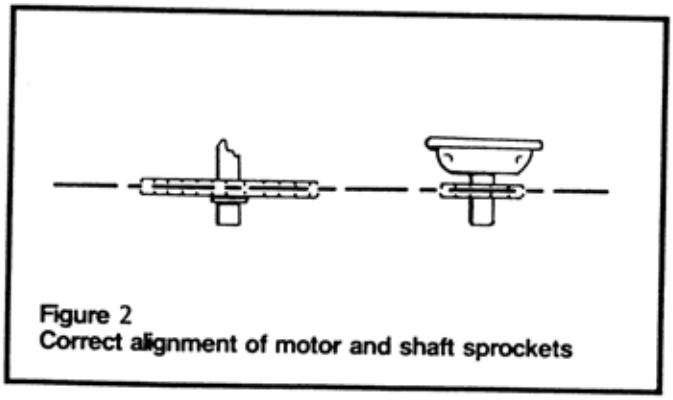


Figure 2
Correct alignment of motor and shaft sprockets

I. CONVEYOR CHAIN REPLACEMENT: (Figures 1 & 3)

1. With case cover removed (Section A), loosen motor mounting bracket retaining bolts on underside of toaster, and slide motor to the left.
2. Loosen rear shaft adjusting bracket nuts and bearing retaining bracket nuts on both sides of toaster.
3. Slide rear conveyor shaft forward to loosen tension.
4. Separate the chain at any link and slide out from front of unit.
5. Before installing new chain, check for proper orientation and correct number of links.
6. Starting at front of toaster, 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.
7. Push back on rear shaft assembly until excess slack is removed from chain. Holding tension, tighten the rear shaft adjusting brackets and bearing retaining brackets on both sides of toaster.
8. Check for proper tension. There should be approximately 3/8" to 3/4" space between the conveyor chain and the ledge on the inside of the toaster cavity.
9. Slide motor to right to tighten drive chain tension. There should be approximately 1/4" play in the drive chain.
10. Tighten motor mounting bracket retaining bolts on underside of toaster.

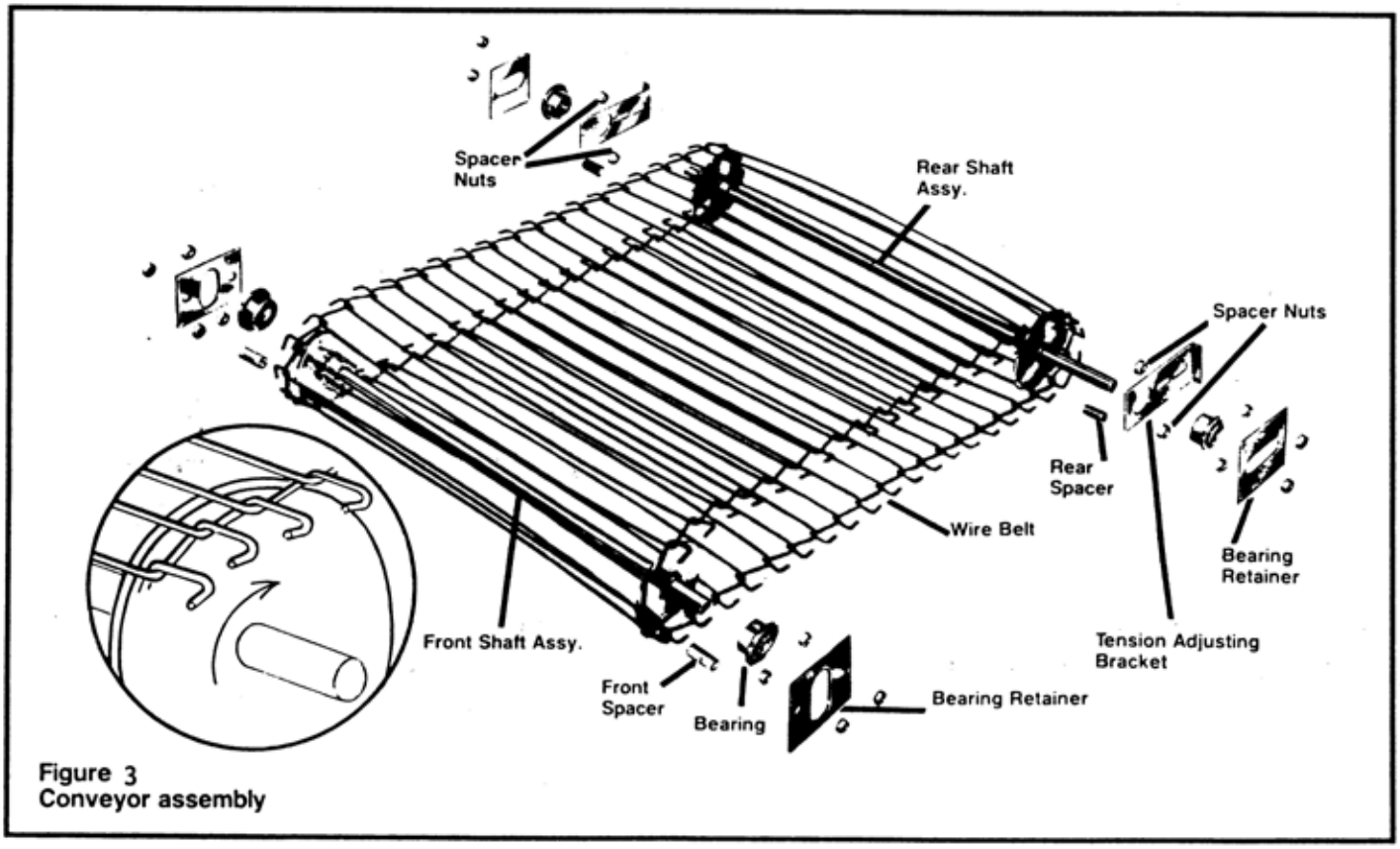


Figure 3
Conveyor assembly

J. FRONT AND REAR SHAFT & BEARINGS REPLACEMENT:

1. Remove case cover (Section A) and conveyor chain (Section I).
2. To remove FRONT SHAFT BEARINGS: Remove bearing retainers on both sides of toaster.
3. Slide bearings out (with shaft if needed). Note proper location of the front spacer washers on the front bearing retainer studs.
4. Replace bearings (and front shaft if needed).
5. To remove REAR SHAFT BEARINGS: Remove drive chain (Section F) and conveyor shaft sprocket (Section H).
6. Remove bearing retainer brackets on both sides of toaster and slide bearing out. Shaft can be replaced at this time if needed. Note proper orientation of hex head spacers.
7. Replace bearings (and rear shaft if needed), conveyor shaft sprocket (Section H), and drive chain (Section F).
8. Replace conveyor chain (Section I).

K. LOWER HEATER ELEMENT ASSEMBLY REPLACEMENT: (Figures 4 & 5)

1. With case cover removed (Section A), disconnect wires from upper and lower heater terminals.
2. At left side of toaster, bend the two protruding tabs to achieve clearance through slots.
3. Slide out assembly from right side of toaster.
4. Reverse this procedure to install replacement assembly.

L. UPPER HEATER ELEMENT ASSEMBLY REPLACEMENT: (Figures 4 & 5)

1. With case cover removed (Secion A), disconnect wires from upper heater terminals.
2. Remove the 6 hex head screws located on the top edge of the toaster.
3. Lift off assembly.
4. Reverse this procedure to install replacement assembly.

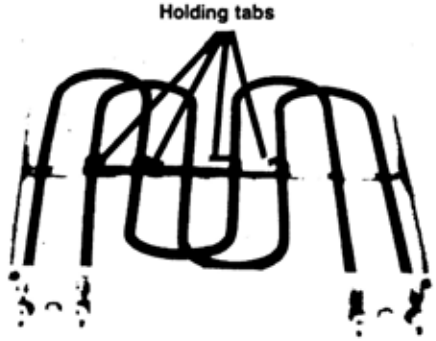


Figure 4
Heating element assembly

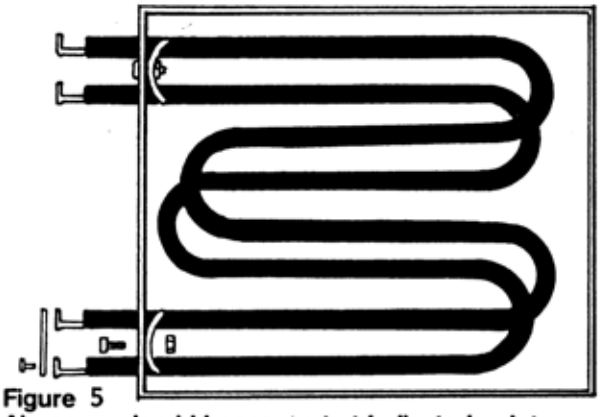


Figure 5
Air space should be present at indicated points when elements are properly installed in assembly

M. INDIVIDUAL ELEMENT (UPPER & LOWER) REPLACEMENT: (Figure 5)

1. With case cover removed (Section A), remove the heater element assembly (Section K or L).
2. Remove the two hex head screws holding elements to the end plate. Note proper orientation of spacers, nuts, and retainer bars. (Upper heater assembly does not have spacers).
3. Bend holding tabs to achieve clearance of each individual element.

CAUTION: CHECK FOR PROPER VOLTAGE AND WATTAGE STAMPED ON EACH ELEMENT BEFORE INSTALLATION.

4. When installing new elements, make sure element with raised bend is placed on top and the flat element is on bottom. There should be air space between the two elements.
5. Replace element assembly (Section K or L).

N. TOP SHIELD REPLACEMENT:

1. Remove the four screws and lockwashers from sides of top shield and remove shield and four spacers.
2. Position new top shield on top of case cover and secure with four screws and lockwashers, installing spacers between shield and case cover sides.

O. LUBRICATION INSTRUCTIONS:

It is strongly recommended that you lubricate the conveyor chain and the front and rear bearings periodically with Savory Lubricant (Part #30042). This is a high temperature oil mixed with graphite and not available in local hardware supply outlets. Any other lubricant will burn off immediately with no lubrication results. LUBRICATION IS NOT COVERED UNDER WARRANTY.

To Lubricate Conveyor Chain: Remove case cover (Section A) and drive chain (Section F). Apply no more than two drops of oil on each conveyor chain link. Rotate conveyor to lubricate all links and work in oil. Lubrication of chains will prevent stiffness and rust and decrease wear on shaft sprockets.

To Lubricate Bearings: Remove case cover (Section A). Apply a few drops of oil to inner race of bearings. Oil will work itself into bearings. Lubricating the bearings periodically will prevent wear, squeaking, and unnecessary seizing which puts a strain on the gearmotor.

INSTALLATION SUPPLEMENT

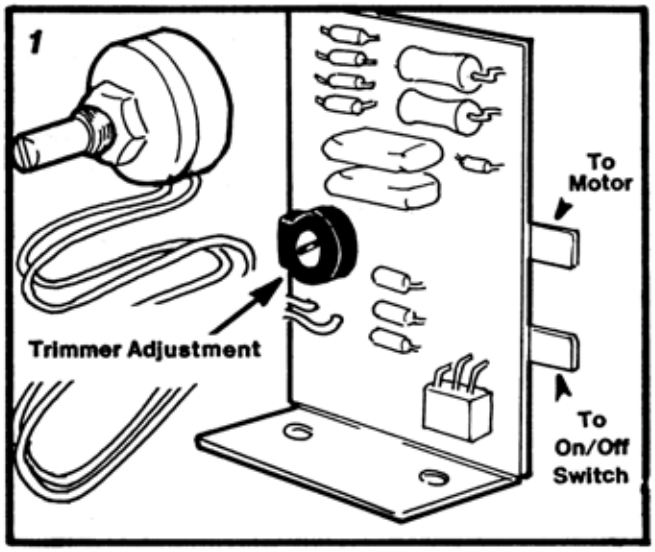
SPEED CONTROL (POTENTIOMETER) & P.C. BOARD W/TRIMMER ADJUSTMENT

(This procedure should be carried out by a qualified service technician)

The speed control/p.c. board with trimmer adjustment on all Savory electric toasters is designed to increase the range of the conveyor speed. Replacing the original speed control/p.c. board requires no alterations and is a simple "bolt-in" procedure. On C-20VS and C-40VS toasters, the right side panel must be removed. On the RT-2VS and RB-33VS type toasters, the case cover must be removed. (Refer to the Parts/Service Manual)

INSTALLATION PROCEDURE:

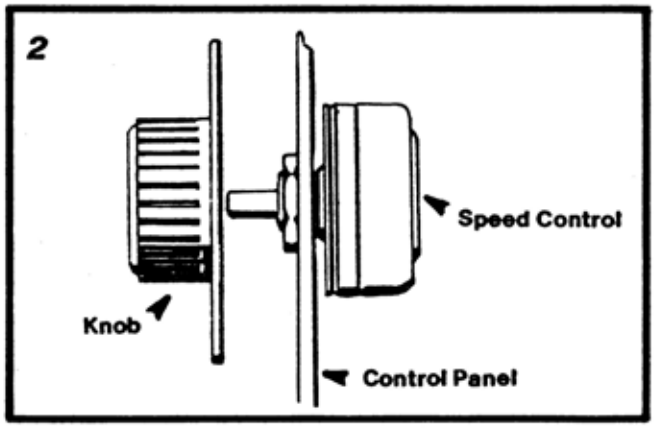
1. Disconnect power source.
2. Loosen set screw and remove speed control knob.
3. Remove nut which holds speed control to control panel.
4. Disconnect the 2 wire leads from p.c. board and remove the screws attaching it to toaster.
5. Lift our board and speed control with attaching wires.
6. Install new p.c. board and speed control.
7. Attach retaining nut to speed control after inserting it through the hole in control panel. (Figure 2)
8. Connect wires to new p.c. board. (Figure 1)

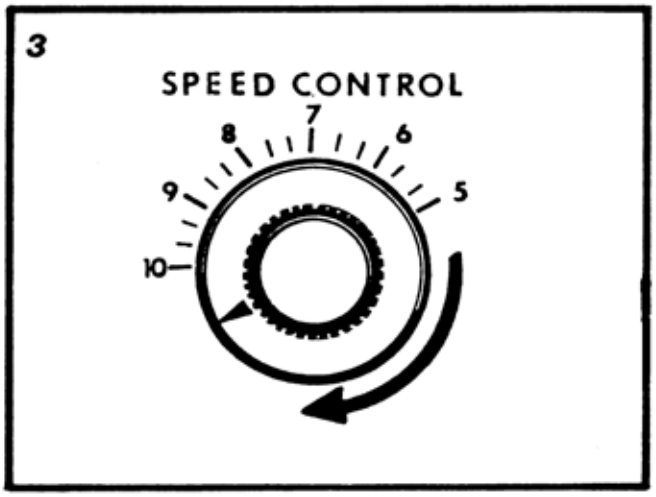


ADJUSTMENTS:

To obtain maximum control of conveyor speed, the two speed controls must be syncronized. Follow directions carefully.

1. Turn speed control knob clockwise until it stops. (Figure 3)
2. Connect to power source and turn toaster on.
3. Turn trimmer adjustment (Figure 1) to the 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. (Figure 3)





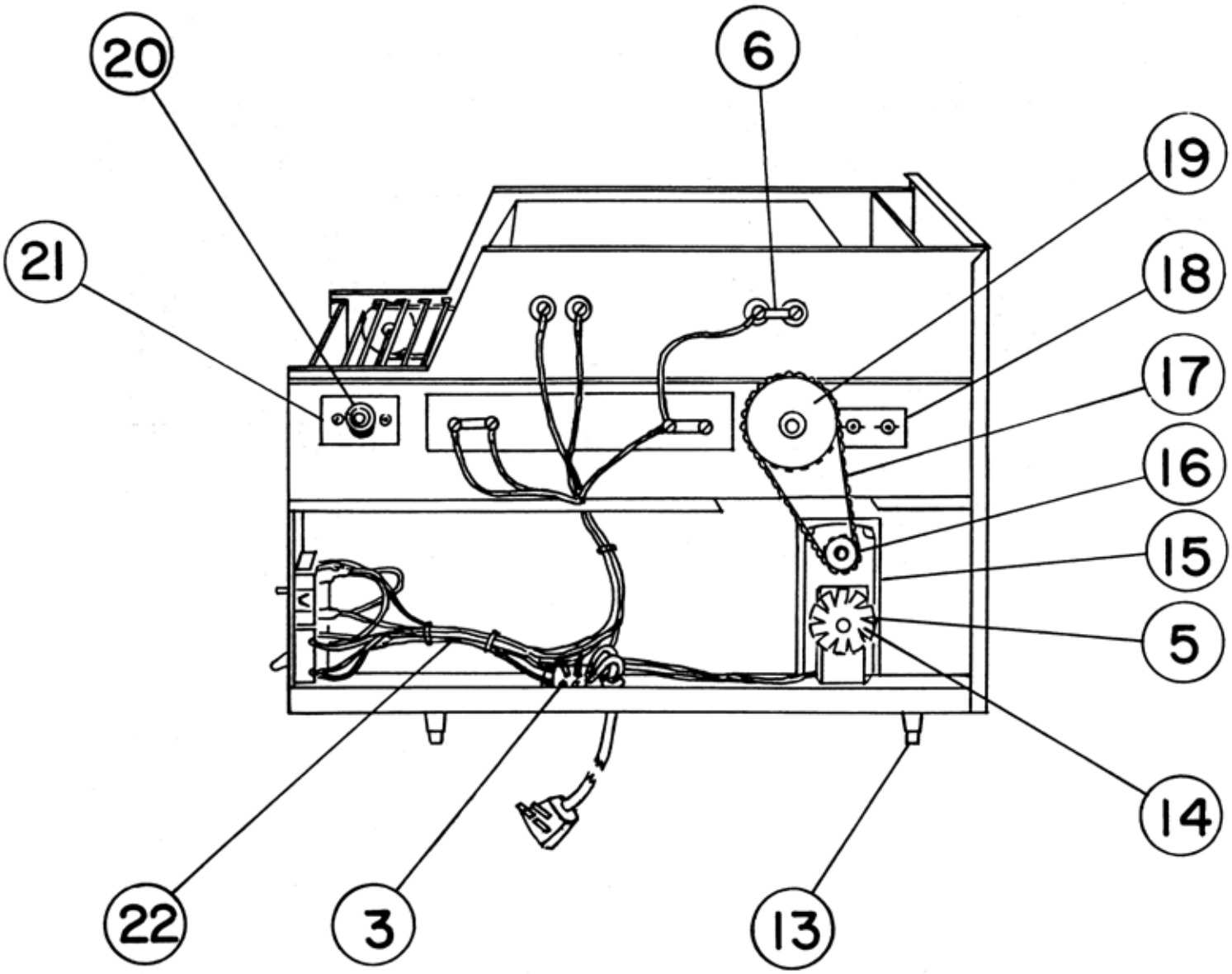
REPLACEMENT PARTS LISTING - ILLUSTRATED			
ILLUS. #	**DESCRIPTION**	**# REG.**	**SAVORY PART #**
1	Circuit board assembly	1	12425
2	Cord set with plug	1	12707
3	Terminal block	1	21858
4	Bushing, strain relief	1	12596
*5	Gearmotor assembly	1	22743
6	Jumper (strap)	3	21358
7	Bottom heater assembly 208V	1	12618
8	Top heater assembly 208V	1	12494
7	Bottom heater assembly 240V	1	12620
8	Top heater assembly 240V	1	12149
8A	Top heating elements 208V	2	12126
7A	Bottom heating elements 208V	2	21103
8A	Top heating elements 240V	2	21103
7A	Bottom heating elements 240V	2	21105
11	Infinite control switch 240V	1	12355
11	Infinite control switch 208V	1	14702
12	On-Off switch	1	21213
13	Leg, adjustable	4	12668
14	Fan, motor	1	21714
15	Gearmotor bracket	1	21849
16	**14 Tooth sprocket	1	13300
17	*** Drive chain	1	13301
18	Tension adjusting bracket	2	12508
19	32 Tooth sprocket	1	21319
20	Bearing	2	22754
21	Bearing retainer	2	12381
22	Wire harness kit	1	12708
REPLACEMENT PARTS LISTING - NOT ILLUSTRATED			
	Cleaning tool	1	12692
	Drop in screen/toast tray	1	12610
	Stainless steel link	1	12611
	Receptacle 208/240V (NEMA 6-30R)	1	21444
	Conveyor belt (uncoated old style)	1	12578
	Conveyor belt retrofit kit (3 space chain)	1	12507
	Front shaft assembly	1	12549
	Rear shaft assembly	1	12548
	Reflector tray	1	12542
	Delivery chute	1	12386
	Receiving tray	1	12075
	Front trim panel	1	12569
	Left trim panel	1	12219
	Case cover	1	12594
	Speed control decal	1	12442
	Speed control knob	1	12447
	Infinite control knob	1	12919
	Top screen	1	12636
	Spacer, bright finish (front)	2	12533
	Spacer, black finish (rear)	2	12534

* New motor does NOT require a fan

** For units prior to S/N 6125151 use Part 30494 (8T sprocket)

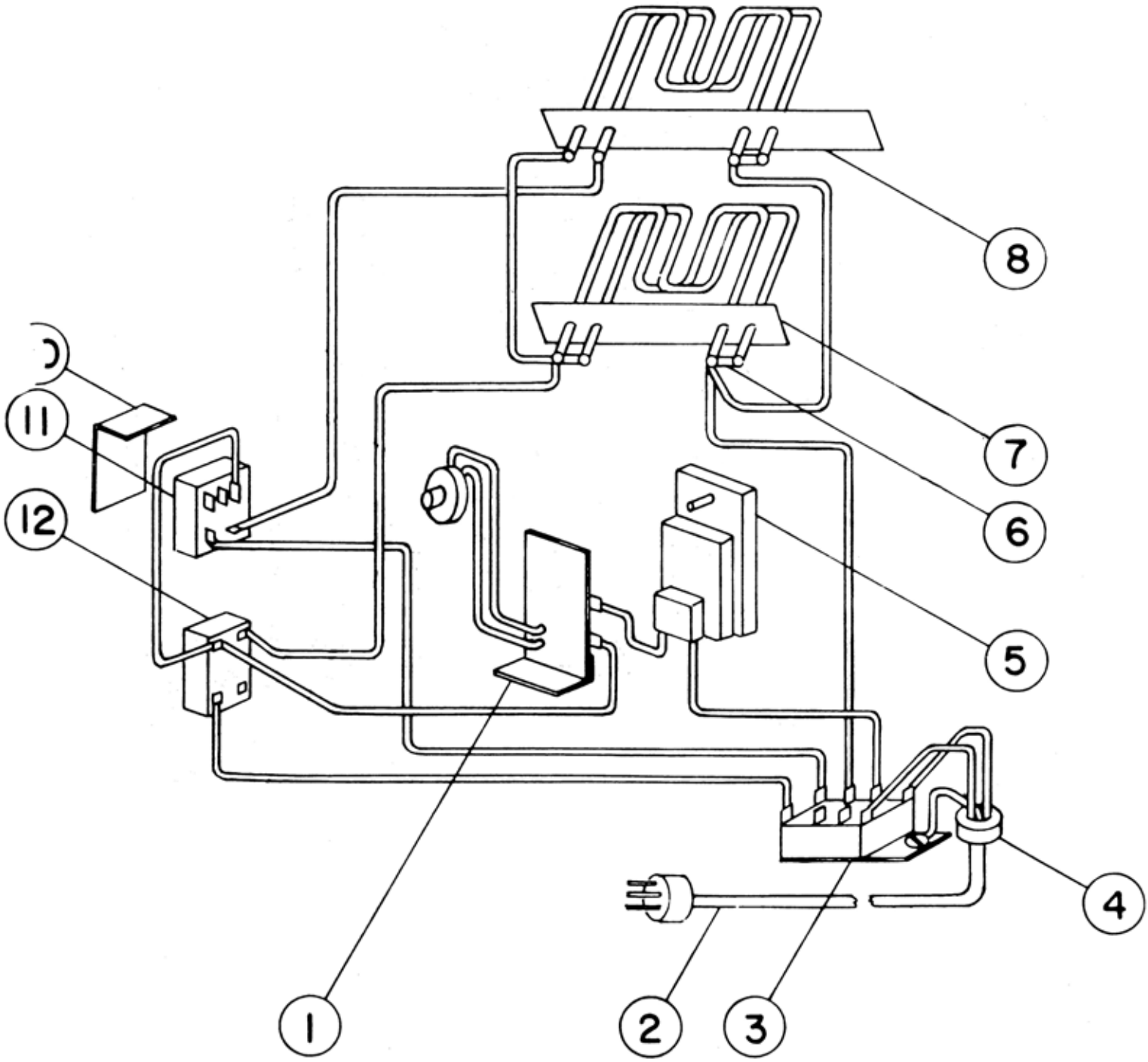
*** For units prior to S/N 6125151 use Part #12412 (Drive chain)

RT-2MBK
ELECTRICAL COMPONENTS



RT-2MBK
WIRING DIAGRAM

FOR UNITS MANUFACTURED PRIOR TO AND INCLUDING S/N 6125150



RT-2MBK
WIRING DIAGRAM

FOR UNITS MANUFACTURED AFTER AND INCLUDING S/N 6125151