



PARTS & SERVICE MANUAL

for

RT-2VSE & RT-2VSHO

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 Merco Savory Certified Service Representative.

THIS MANUAL SHOULD BE RETAINED FOR FUTURE USE

PARTS REPLACEMENT (For models: RT-2VSE & RT2-VSHO)



WARNING: Disconnect unit from power source before attempting any service.

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, 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, 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, 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).

F – BUN-TOAST SWITCH

1. Remove control panel.
2. The bun-toast switch is held in place by a spring clip on the back of the control panel. Pry this clip from the 2 switch tabs and remove.
3. Squeeze the spring clip together and push it through the front of the control panel.
4. Disconnect wires from switch.
5. Install new switch from front of panel. (NOTE: New switch has spring clip already attached.)
6. Re-attach wires to switch. (Refer to appropriate wiring diagram.)

G – SPEED CONTROL

1. With control panel removed, 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 speed control.
4. Reverse this procedure to install new assembly. (Refer to appropriate wiring diagram.)

H – GEAR MOTOR

1. With outer case removed, disconnect motor leads from on/off switch and terminal block 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 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 remaining 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.)

I – DRIVE CHAIN

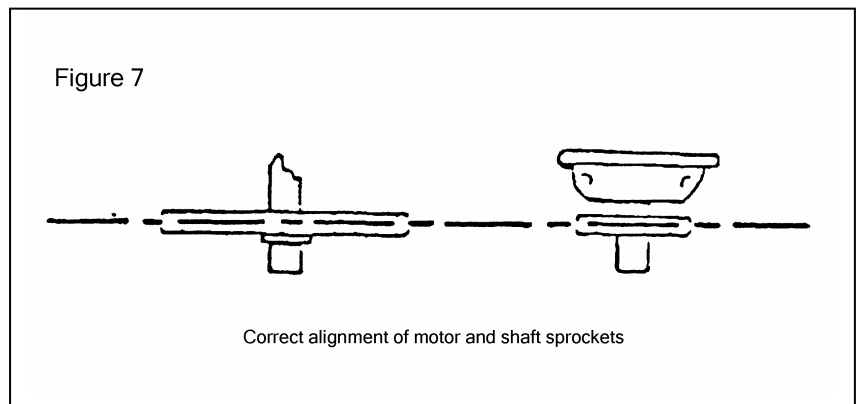
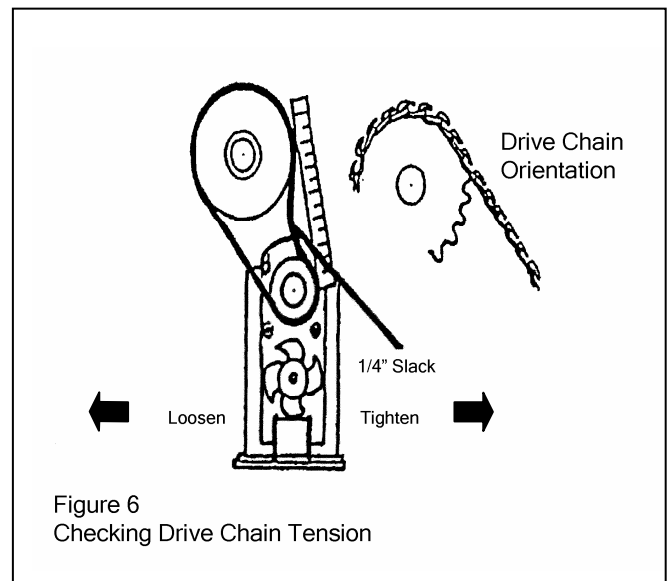
1. With outer case removed, loosen the two motor mounting bracket retaining bolts on underside of unit, but DO NOT remove.
2. Slide motor to the left to loosen drive chain tension.
3. Remove drive chain.
4. Install new chain over sprockets with open looped side of chain facing out.
5. Slide motor to 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 figures 6 and 7).
7. Tighten motor mounting bracket retaining bolts on underside of unit.

J – DRIVE (MOTOR) SPROCKET

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

K – REAR (CONVEYOR) SHAFT SPROCKET

1. With outer case removed and drive chain removed, loosen the two set screws on sprocket with a 1/16" allen wrench 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.



L – CONVEYOR CHAIN

Figure 8

1. With outer case removed, loosen motor mounting bracket retaining bolts on underside of unit and slide motor to the left.
2. Loosen rear shaft adjusting bracket nuts and bearing retaining bracket nuts on both sides of unit.
3. Slide rear conveyor shaft forward to loosen the tension.
4. Separate the chain at any link and slide out from front of unit.
5. Before installing new chain, check for proper orientation (see Figure 8) and correct number of links.
6. 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.**
7. 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.
8. 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.
9. Slide motor to the right to tighten drive chain tension. There should be approximately $\frac{1}{4}$ " play in the drive chain.
10. Tighten motor mounting bracket retaining bolts on underside of unit.

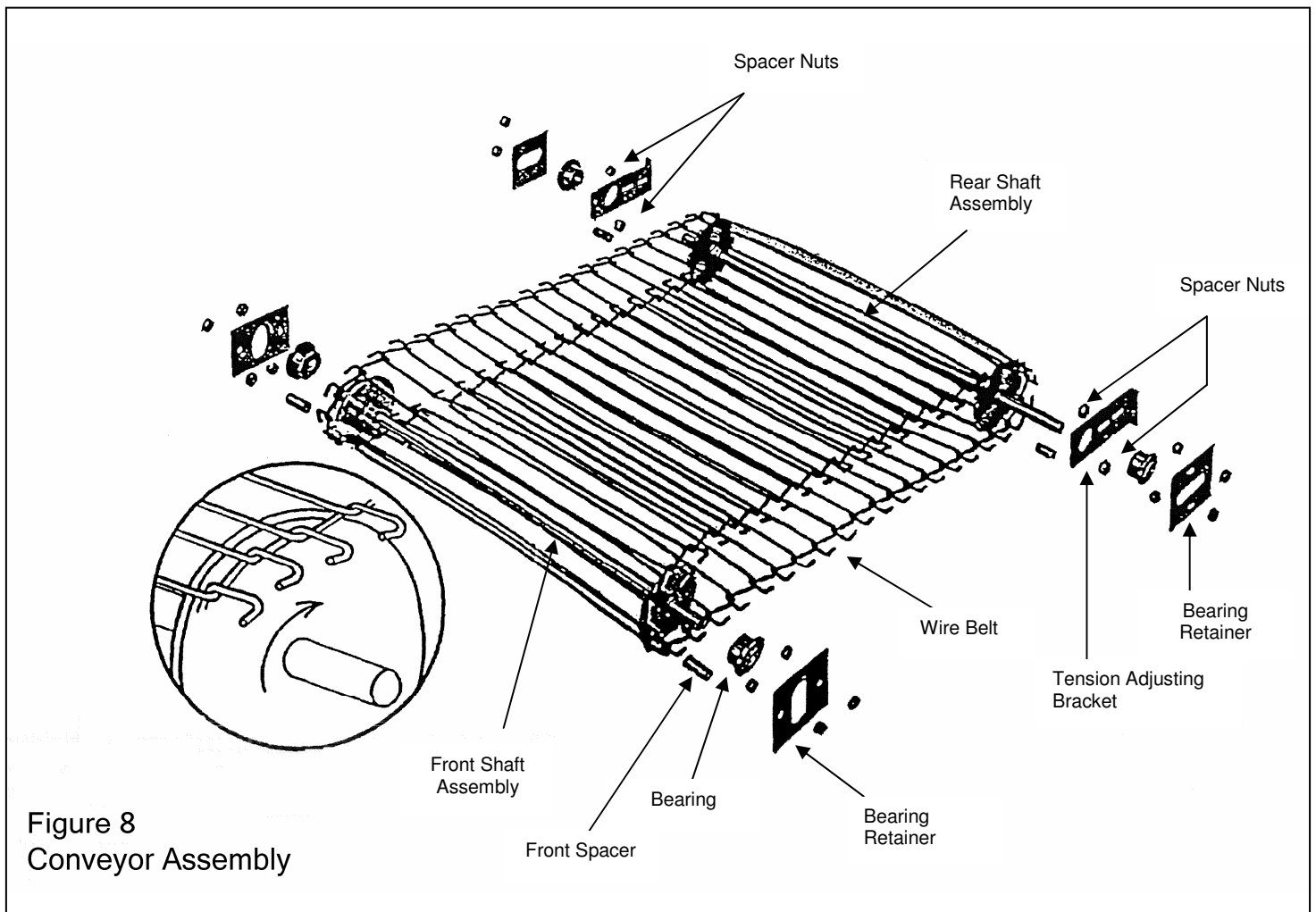


Figure 8
Conveyor Assembly

M – FRONT & REAR SHAFT BEARINGS

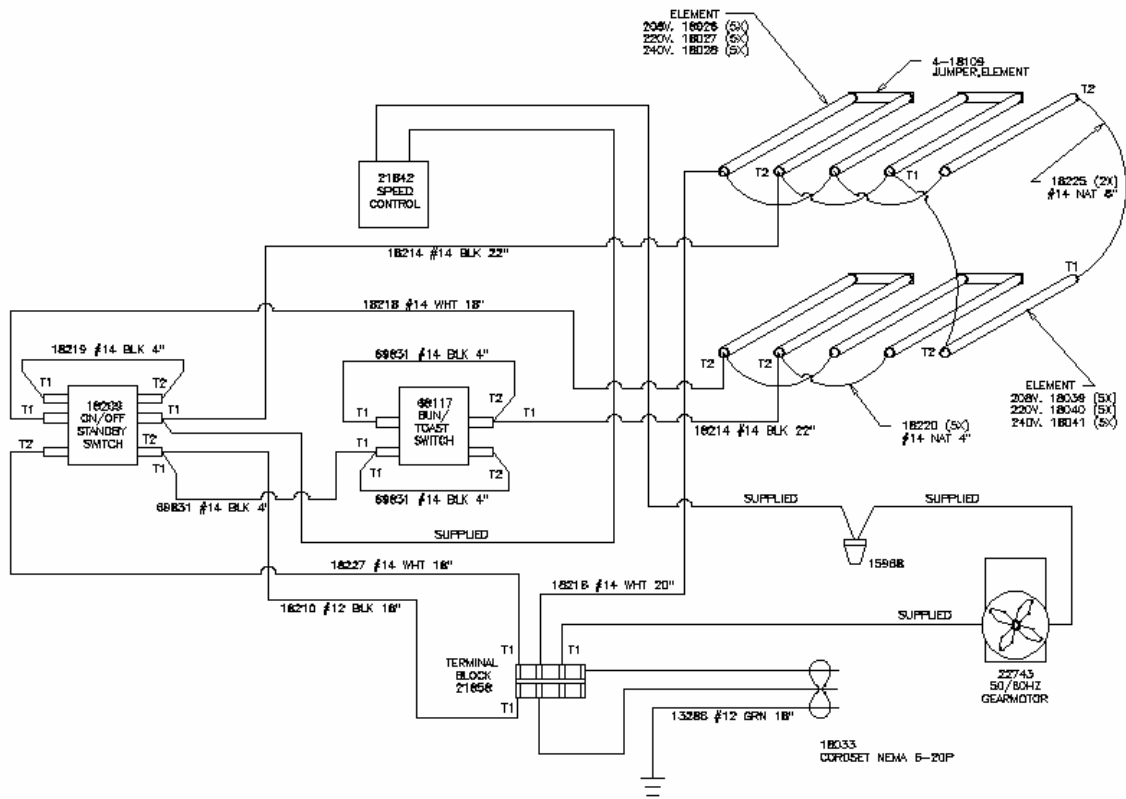
Figure 8

1. Remove outer case and conveyor chain.
2. To remove front shaft bearings: first, remove the bearing retainers on both sides of the 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 and conveyor shaft sprocket.
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.
8. Replace conveyor chain.

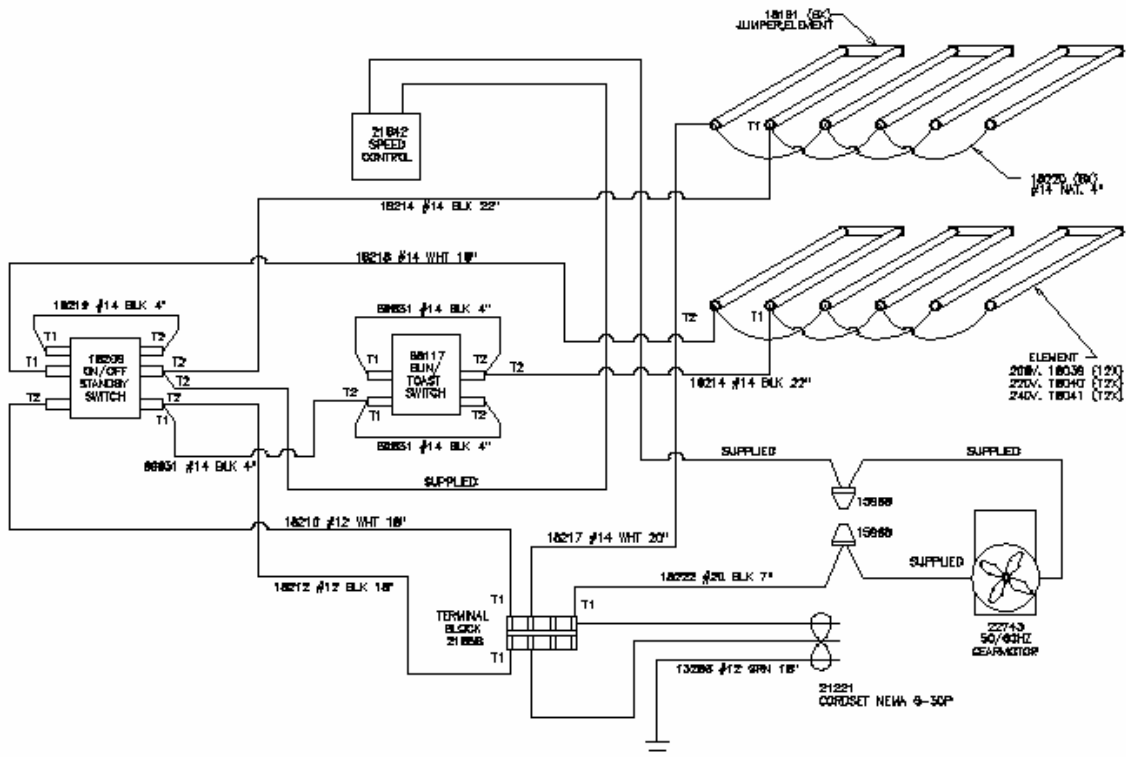
PROBLEM	POSSIBLE CAUSES	SUGGESTED REMEDIES
No heat, conveyor belt doesn't run	1. Defective or improper electrical outlet.	1. Check voltage at receptacle. Check that voltage conforms to Savory specifications on unit data plate.
	2. Defective plug or line cord	2. Check plug and line cord. Replace if necessary.
	3. Defective on/off switch	3. Replace switch.
Unit fails to heat	1. Defective heating elements	1. Replace elements
	2. Defective, loose or improper wiring or terminal block.	2. 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.
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. gear motor e. 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	1. Replace speed control
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

RT-2VSE SCHEMATIC



RT-2VSHO Schematic



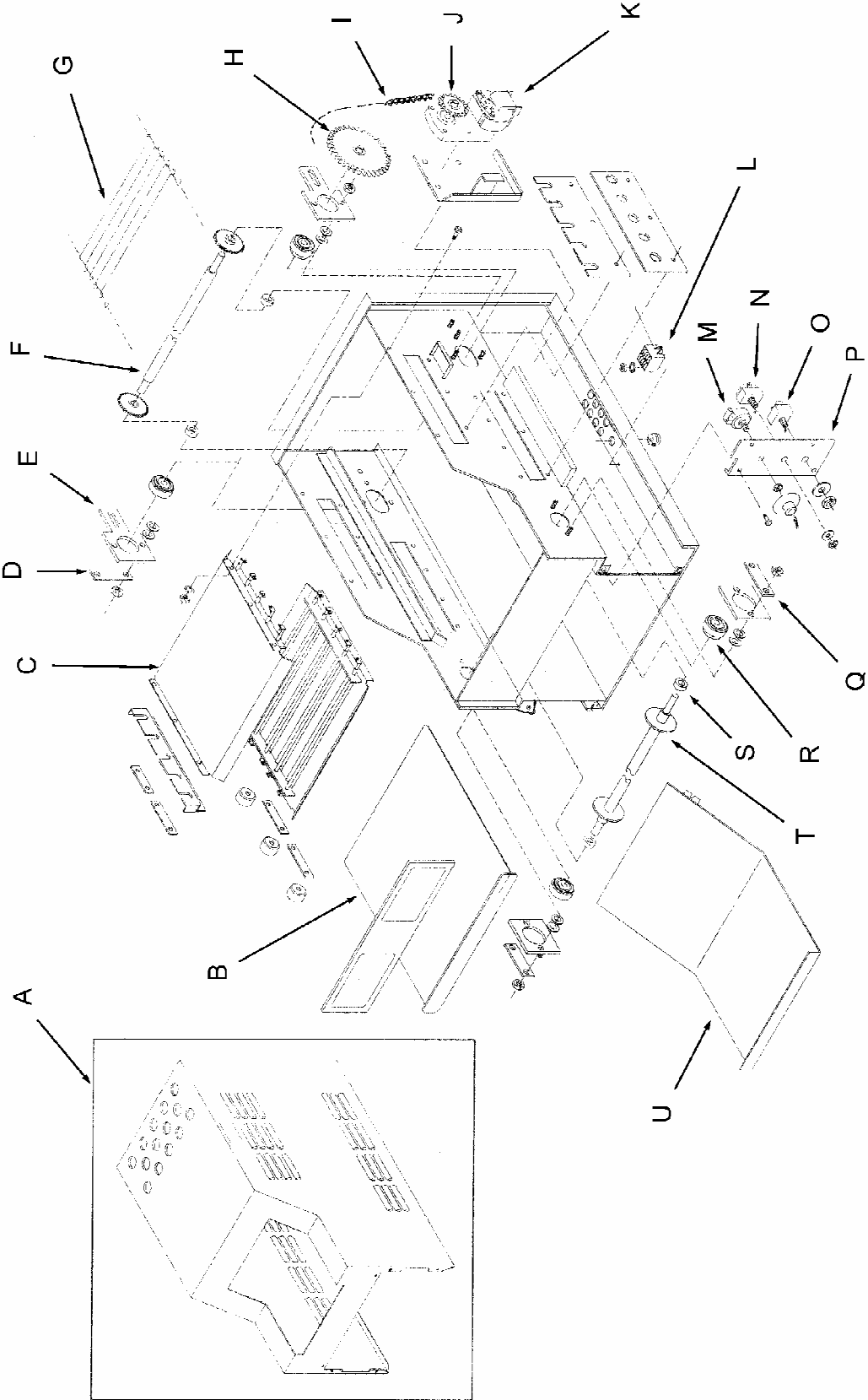
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PARTS LIST

RT-2VSE (208/240V)		
LETTER	PART #	DESCRIPTION
B	12542	Reflector Tray
C	18026	Element – 300W 104V, Upper (208V)
	18027	Element – 300W 110V, Upper (220V)
	18028	Element – 300W 120V, Upper (240V)
	18039	Element – 335W 104V, Lower (208V)
	18040	Element – 335W 110V, Lower (220V)
	18041	Element – 335W 120V, Lower (240V)
D	12381	Bearing Retainer
E	12508	Tension Adjusting Bracket
F	12548	Rear Shaft Assembly
G	12551	Wire Conveyor Belt, S.S.
H	21319	32T Sprocket Assembly
I	12412	Drive Chain (55 links)
J	69787	12T Sprocket Assembly
K	22743	Gear Motor Assembly (208/240V)
L	21858	Terminal Block
M	21842	Speed Control
N	68117	Bun/Toast Switch – Toggle
O	18209	On/Off Switch
P	18197	Control Panel
Q	22754	Bearings
R	12533	Front Spacer
S	12549	Front Shaft Assembly
Not Shown	12219	Trim, Left Side
Not Shown	12534	Rear Spacers
Not Shown	12543	Front Shelf
Not Shown	12668	Legs, 1" Plastic Adjustable
Not Shown	21219	Cordset 208/220/240V, NEMA 6-20P
Not Shown	21849	Gear Motor Mounting Bracket
Not Shown	22178	Insulator, Ceramic Stand Off
Not Shown	30042	Savory Lubricant

RT-2VSHO (208/240V)		
(All parts are the same as above except the following)		
LETTER	PART #	DESCRIPTION
A	12530	Case Cover, RT-2VSHO
C	18039	Element – 335W 104V (208V)
	18040	Element – 335W 110V (220V)
	18041	Element – 335W 120V (240V)
J	21448	16T Sprocket Assembly
Not Shown	21221	Cordset – 208/220/240V, NEMA 6-30P

EXPLODED VIEW





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