

# PARTS AND SERVICE MANUAL FOR FRIED FOOD HOLDING STATION FFHS-27000 SERIES



MODELS 27000, 27002, 27003, 27011

Note: Images shown include additional dividers.



MODELS 27007, 27012

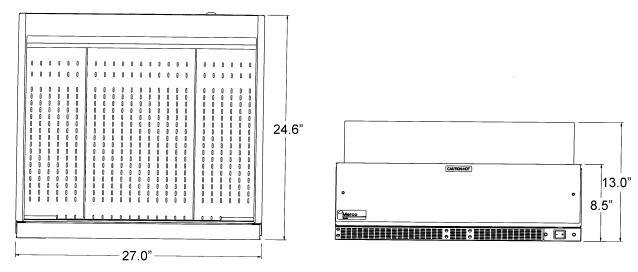
Merco/Savory, Inc.
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#### SEQUENCE OF OPERATION

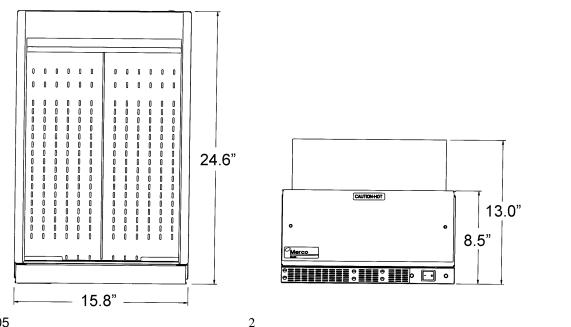
Power is permanently supplied to the normally open contacts of the main relay. Power is also supplied to the normally open power switch. Closing the power switch supplies power through the normally closed hi-limit thermostat to the electronic control board. Power is also supplied to the coil of the main relay. When the main relay is energized, the contacts close supplying power to the contacts of the solid state relay. When the electronic control is energized, voltage is supplied to the blower motor. The RTD probe senses air temperature. The electronic temperature control supplies power to the solid state relay. When the relay contacts close, power is supplied to the heating element. The solid state relay will cycle on and off to maintain the proper temperature.

#### **SPECIFICATIONS**

Item #	Voltage	Amps	Watts	Cord/Plug	Net Wt.
27000	208 VAC	24.0	5500	6' NEMA L6-30P	66 lbs.
27002	240 VAC	22.9	5500	6' NEMA L6-30P	66 lbs.
27003 (Canada)	208 VAC	26.4	5500	6' NEMA 6-50P	66 lbs.
27011 (CE)	230 VAC	23.9	5500	IEC Harmonized Cord	66 lbs.

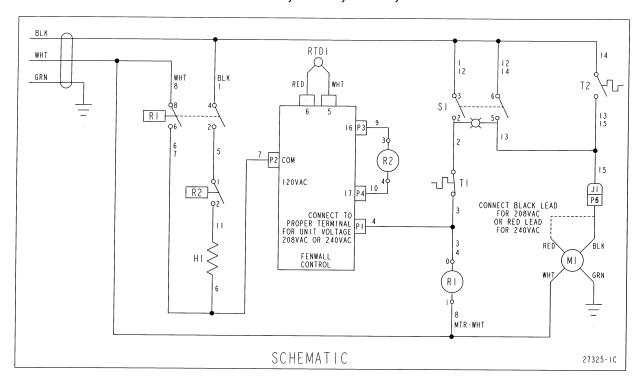


Item	Voltage	Amps	Watts	Cord/Plug	Net Wt.
27007	120 VAC	12.3	1450	5' NEMA 5-15P	44 lbs.
27012	120 VAC	15.7	1850	5' NEMA 5-20P	44 lbs.

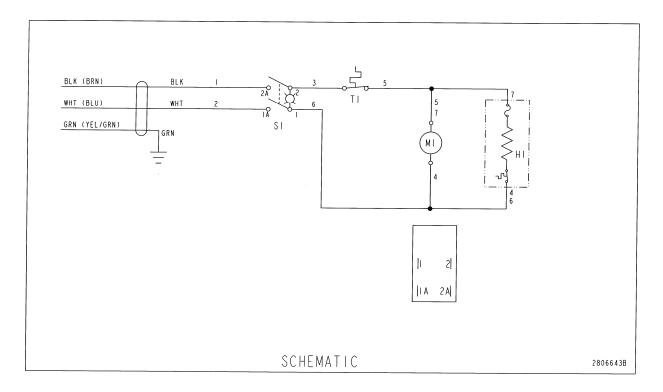


MAY/05

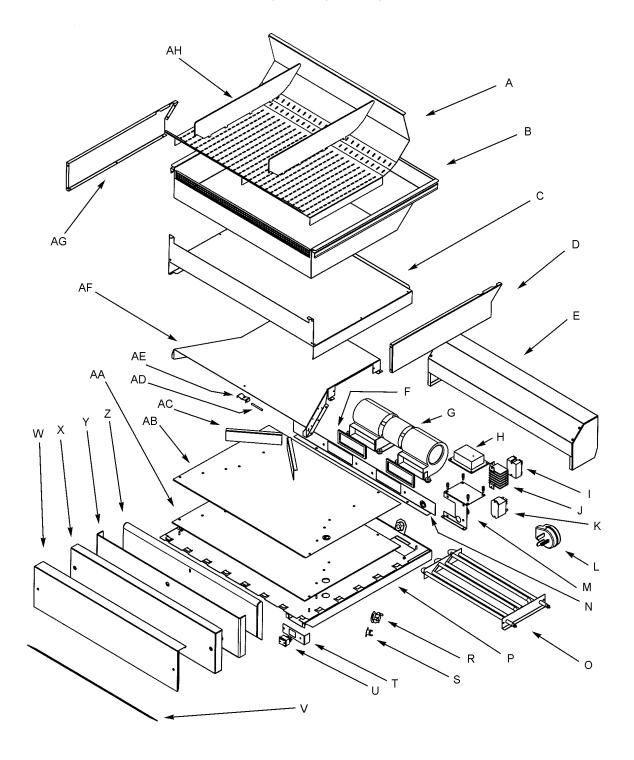
#### WIRING DIAGRAM - MODELS 27000, 27002, 27003, 27011



#### WIRING DIAGRAM - MODELS 27007, 27012



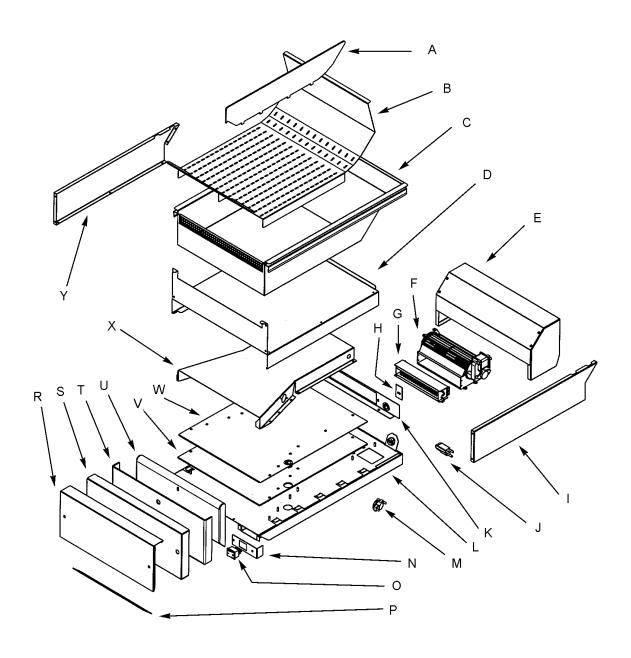
# **GENERAL VIEW – MODELS 27000, 27002, 27003, 27011**



## PARTS BREAKDOWN - MODELS 27000, 27002, 27003, 27011

Α	27155	Tray, Full Pan	
В	27370-1	Grease Pan Weldment Collapsed	
С	27080-1	Inner Base, Formed	
D	27125	Outer Panel, Right, Formed	
E	27115-1	Blower Cover Weldment	
F	27113	Gasket, Blower	
G	27075	Blower, 208/240V	
Н	27185	Control Electronic, 230F	
I	27180	Solid State Relay, 240V	
J	27182	Heat Sink	
K	27240	Power Relay	
L	27230	Plug, Twist Lock, 30A, 250V	
M	7008234	Bracket, Electronics	
N	7008233-1	Bracket, Blower Seal	
0	27111	Element, Heater 208V	
	27112	Element, Heater 240V	
Р	27010-1	Base Cover Welment	
R	27485	Switch, Cool Down Motor	
S	27055	Thermostat, Hi Limit 300F	
Т	7008236	Plate, Switch Mounting	
U	369805	Switch, Rocker, Lighted (old style)	
	27511	Switch, Rocker, Lighted (new style)	
V	(see W)	Baffle Air Intake	
W	27225-1	Exhaust Panel Guard, Formed	
X	27200-1	Exhaust Panel, Formed	
Υ	27035-1	Insulation, Air Scoop C & F	
Z	27195-1	Air Scoop, Formed	
AA	27114	Insulation, Base, Cut	
AB	27020-1	Spacer Plate, Insul, Bottom	
AC	7008239-1	Baffle Air Duct	
AD	27205	Probe, 1000 OHM 1/8" DIA	
AE	27105	RTD Holding Bracket Nest	
AF	7008238-1	Duct, Air	
AG	27120	Outer Panel, Left, Formed	
AH	27045	Divider Pan	

#### GENERAL VIEW - MODELS 27007, 27012



#### PARTS BREAKDOWN – MODELS 27007, 27012

Α	27501	Divider Pan
В	27502	Tray, Full Pan
С	27503	Grease Pan Weldment
D	27080-3	Inner Base, Formed
Е	27115-3	Blower Cover Weldment
F	4060505-1	Blower Tangentail
G	27504	Heater, 120V
Н	27505	Filler Air Duct
I	27125	Outer Panel, Right, Formed
J	27506	Cord, Power 120V
K	27507	Bracket, Blower Seal
L	27508	Base Cover Weldment
M	27485	Switch, Cool-Down Motor
N	7008236	Plate, Switch Mounting
0	27511	Switch, Rocker, Lighted
Р	10000166-3	Baffle Air Intake
R	27225-3	Exhaust Panel Guard, Formed
S	27095-3	Exhaust Panel
Т	27035-3	Insulation, Air Scoop
U	27509	Air Scoop, Formed
V	27090-3	Insulation, Base, Cut
W	27020-3	Spacer Plate, Insul. Bottom
X	27510	Duct, Air
Υ	27120	Outer Panel, Left, Formed

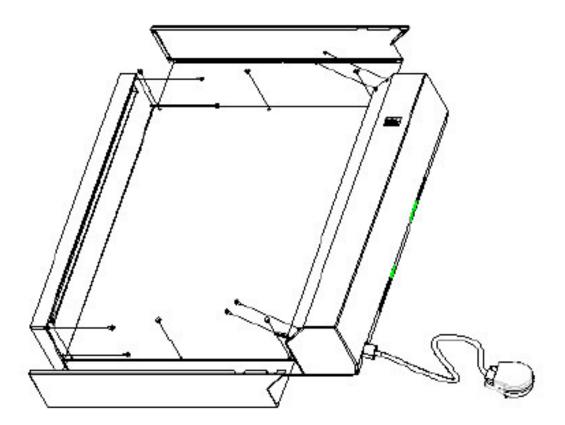
#### REMOVAL, INSTALLATION AND ADJUSTMENTS



# BLOWER MOTOR, POWER RELAY, CONTROL BOARD, SOLID STATE RELAY, POWER CORD, ON/OFF SWITCH

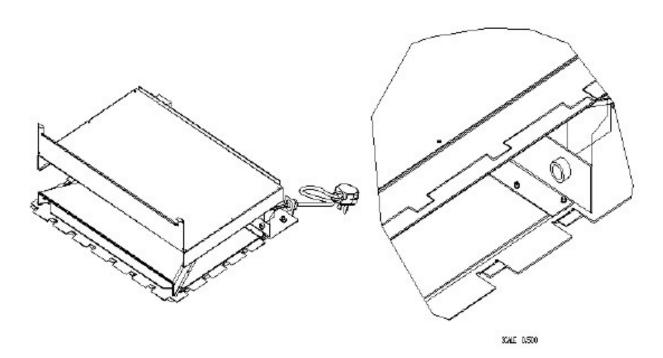
#### REFER TO PAGE 4 FOR PARTS IDENTIFICATION

- 1. Remove the two side grease deflectors from the side panels. Remove the holding tray and the drip pan from the unit well (Parts A & B).
- 2. Remove the two inner side panels (Part C). These two panels must be pried from the outside panels at the two notches on the top back side.
- 3. Fourteen (14) self-tapping screws will now be exposed for removal of the outer panels (Part D). See Figure 1.
- 4. Rotate the back motor housing (Part L) towards the back of the unit to expose the above components.
- 5. Reassemble in reverse order.



# B HEATING ELEMENT, HI-LIMIT THERMOSTAT

- 1. Complete steps 1-4 in Section A.
- 2. Remove Inner Base (Part E) by sliding towards the front of the unit. This piece is held in place by offset tabs (See Figure 2). If resistance occurs, bend the two outside front tabs down to allow more clearance.
- 3. Remove the left and right side Divider Plates (Part I) from the push on studs. See Figure 2.
- 4. Remove the insulation (Part F), the Air Baffle from the push on studs (Part G), and the Element Top Panel (Part H). The Hi-Limit will be mounted on the side of the Air Baffle and the Heating Element is under the Element Top Panel.
- 5. Reassemble in reverse order.



### C RTD PROBE

- 1. Complete steps 1-4 in both sections A & B.
- 2. Remove the Captive Screws (Part AA) on the Exhaust Panel Guard (Part Z).
- 3. Loosen the RTD Probe Bracket on the back side of the Air Scoop Panel (Part W). The RTD probe runs from this panel through the Inner Base (Part E) back of the Control Board.
- 4. Reassemble in reverse order.