CRES COR ®

5925 Heisley Road • Mentor, OH 44060-1833

INSTALLATION, OPERATION and MAINTENANCE MANUAL for Cres Cor AQUA-TEMP HUMIDITY CONVECTION and RETHERM OVENS with MICROPROCESSOR CONTROLS

RO151FW1332B-Q1
CO151FWUA12B-Q1
RO151FWUA18B-Q1

CO151XWUA5B-Q1
CO151HWUA6B-Q1

CO151FPWUA12B-Q1
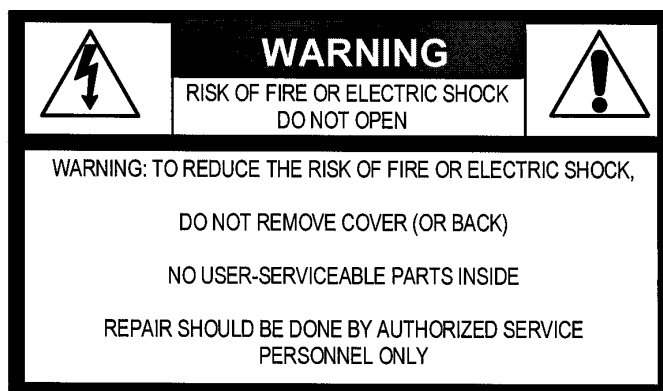**RO151FPWUA18B-Q1**

SANITATION CLASSIFIED

CLASSIFIED TO NSF4

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⚡ | **WARNING** | ⚠
RISK OF FIRE OR ELECTRIC SHOCK
DO NOT OPEN

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,

DO NOT REMOVE COVER (OR BACK)

NO USER-SERVICEABLE PARTS INSIDE

REPAIR SHOULD BE DONE BY AUTHORIZED SERVICE
PERSONNEL ONLY

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INSTALLATION INSTRUCTIONS

VENTING YOUR OVEN:

1. The purpose of ventilating hoods is to direct and capture smoke, grease-laden vapors, heat, odors, or fumes.

2. Low temperature equipment (maximum temperature 250°F/121°C) does not produce heat, odors, fumes, grease-laden vapors or smoke and is not required to be vented.

3. Most jurisdictions consider our low-temperature ovens (maximum temperature is 350°F/177°C) as low-heat appliances not requiring vent hoods.

4. Installation must conform with local codes. The authority having jurisdiction of enforcement of the codes will have the responsibility for making interpretations of the rules.

UNIT SPECIFICATIONS: All units use three (3) elements (2670 watts each).
All units are rated 8200 watts. Water units have one (1) immersion element (1850 watts).

CMP MODEL NOS.	ELECTRICAL SPECS (AC SERVICE)			ELEC. LOAD		POWER SUPPLY REQUIREMENT				
CONVECTION OVENS	Volts	Ph	Hz.	Amps	Volts	Amps	Ph	Wire	Volts	NEMA
CO151FWUA12B2081Q1	208	1	60	39	208	50	1	3	208	6-50P
CO151FWUA12B2401Q1	240	1	60	34	240	50	1	3	240	6-50P
CO151FWUA12B2083Q1	208	3	60	23	208	30	3	4	208	L15-30P
CO151FWUA12B2403Q1	240	3	60	20	240	30	3	4	240	L15-30P
RETHERM OVENS										
RO151FWUA18B2081Q1	208	1	60	39	208	50	1	3	208	6-50P
RO151FWUA18B2401Q1	240	1	60	34	240	50	1	3	240	6-50P
RO151FWUA18B2083Q1	208	3	60	23	208	30	3	4	208	L15-30P
RO151FWUA18B2403Q1	240	3	60	20	240	30	3	4	240	L15-30P
RO151FW1332B2081Q1	208	1	60	39	208	50	1	3	208	6-50P
RO151FW1332B2401Q1	240	1	60	34	240	50	1	3	240	6-50P
RO151FW1332B2083Q1	208	3	60	23	208	30	3	4	208	L15-30P
RO151FW1332B2403Q1	240	3	60	20	240	30	3	4	240	L15-30P
HALF-SIZE OVENS Are rated at 4950 watts (three [3] heaters at 1470 watts each)										
CO151HWUA6B2081Q1	208	1	60	24	208	30	1	3	208	6-30P
CO151HWUA6B2401Q1	240	1	60	21	240	30	1	3	240	6-30P
CO151HWUA6B2083Q1	208	3	60	15	208	20	3	4	208	L15-20P
CO151HWUA6B2403Q1	240	3	60	13	240	20	3	4	240	L15-20P
CO151XWUA5B2081Q1	208	1	60	24	208	30	1	3	208	6-30P
CO151XWUA5B2401Q1	240	1	60	21	240	30	1	3	240	6-30P
CO151XWUA5B2083Q1	208	3	60	15	208	20	3	4	208	L15-20P
CO151XWUA5B2403Q1	240	3	60	13	240	20	3	4	240	L15-20P

*All models are designed for AC Service. Model numbers may have the letters: **L**, **M**, **2M**, **Q5**, **Q10** or **S**.*

HOW TO INSTALL CABINETS:

1. Remove all packing material from inside and outside of cabinet.

2. Position cabinet on level floor; install the cabinet interior (pan slides) if not already installed.

3. Plug power cord into proper wall receptacle.

4. Fill water pan with three (3) gallons of HOT water (see CAUTION).

LOW WATER LIGHT:

When water needs to be added to the pan, the *Low* Water Light will stay on until the pan is refilled.

⚠ **CAUTION** **Use of treated water is recommended for proper operation and to maintain warranty. It will reduce scaling.**

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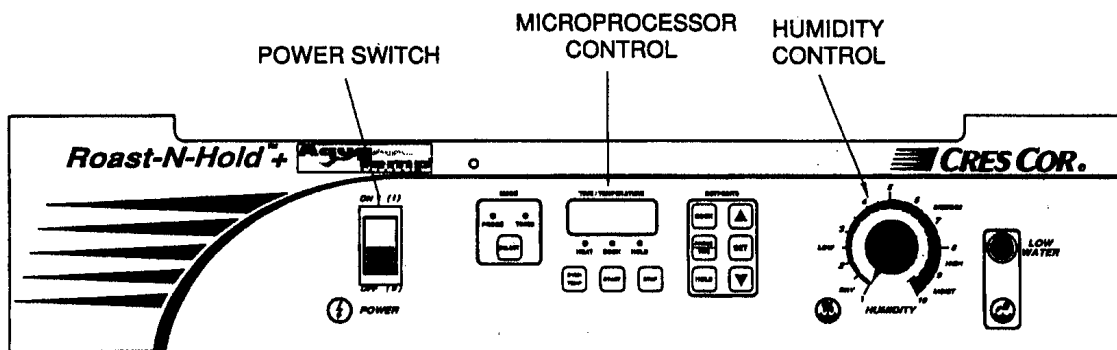# OPERATING INSTRUCTIONS

Figure 1: Control Panel

HOW TO START UNIT:
(for first-time operation only)
A new oven needs to "burn off" factory oils and glue before it's first use. ***Do NOT load food into oven until this has been done!***

1. Push power switch to "ON".

2. Press the SELECT button; choose the TIMED mode.

3. Press the *COOK* button and set the temperature to 350°F/177°C.

4. Press the *HOLD* button and set the temperature to 150°F/66°C.

5. Press the PROBE/TEMP button and set the timer to one (1) hour.

Allow oven to run automatically for one (1) hour of ***COOK/RETHERM*** cycle and 30 minutes of ***HOLD*** cycle.

HOW TO SET THE CONTROL
FOR *TIMED COOK* OPERATION:
Press the SELECT button to choose the TIMED mode.

COOKING TIME:
1. Press the PROBE/TIME button. The display will show the cook/retherm time.

2. Use the UP and DOWN arrows to set the desired time.

3. Press the SET button to enter the time into the control.

NOTE: Cold food is **NOT** to be added when unit is operating in *HOLD* mode.

COOKING TEMPERATURE:
1. Press the COOK button and the display will show the cook/retherm temperature.

2. Use the UP and DOWN arrows to set the desired temperature.

3. Press the SET button to enter the temperature into the control.

NOTE: Press the OVEN TEMP button at any time to view the actual oven temperature.

HOLDING TEMPERATURE:
1. Press the HOLD button; the display will show the holding temperature.

2. Use the UP and DOWN arrows to set the desired temperature.

NOTE: Proper food holding temperature is 140°F/60°C or higher.

3. Press the SET button to enter the temperature into the control.

4. Press the START button and the display shows the remaining time in the cook/retherm cycle.

NOTES: The control will beep after it times down to zero; it will then automatically switch to the HOLD mode. The display will then show the hold setpoint temperature. For HOLD mode, preheat unit to 180°F/82°C for 60 minutes.

OPERATING INSTRUCTIONS, continued

HOW TO SET THE CONTROL, continued

FOR PROBE COOK OPERATION:
Press the SELECT button to choose the probe mode.

PROBE TEMPERATURE:
1. Press the PROBE/TIME button. The display will show the probe setpoint temperature.
2. Use the UP and DOWN arrows to set the desired temperature.
3. Press the SET button to enter the temperature into the control.

NOTE: Press the OVEN TEMP button at any time to view the actual oven temperature. Press the START button and the display will show the actual probe temperature.

NOTE: The control will beep when the probe setpoint temperature has been reached and then will automatically switch to HOLD mode. The display will then show the hold setpoint temperature.

To manually end the COOK/RETHERM, PROBE, or HOLD mode:
Press the STOP button during any of the above modes and the control will end that mode. If in the Cook/Retherm or Probe mode, the control will automatically switch into the HOLD mode.

HOW TO OPERATE WITH FOOD:
Manual (Timed mode) Operation
See "HOW TO SET CONTROL" (on page 4) for programming instructions.
1. Push power switch to "ON".
2. Press the SELECT button and choose the TIMED mode.
3. Press the COOK button and set to desired temperature.
4. Press the PROBE/TIME button and set to the desired time.
5. Press the HOLD button; set desired temperature.

6. Place the food into oven. Close door and double check cooking time and temperatures. Then press the START button to start the cooking/retherm cycle and the Cook LED will light up.
7. The oven will beep and automatically switch to the HOLD mode at the end of the cooking cycle. The Cook lamp will go out and the Hold lamp will light up.

Probe Cooking
See "HOW TO SET CONTROL" (on page 5) for programming instructions.
1. Push power switch to "ON".
2. Press the SELECT button and choose the Probe mode.
3. Insert the probe jack into the receptacle located inside the oven top, near the fans. The probe temperature display will show the digital temperature of the probe.
4. Put sanitized probe into center of food product. Make sure food is in the center of the pan and the pan is centered in the oven.
5. Press the start button. The cook lamp will light up and the display will show the internal temperature of the food being cooked.

NOTE: Do NOT change the mode of the controls (probe or timed) while oven is operating in a Cook/Retherm cycle. Oven must be in the HOLD cycle to change the timer or probe operation.

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OPERATING INSTRUCTIONS, continued

HOW TO OPERATE WITH FOOD, continued

HOW TO SET HOLD-ONLY MODE:
1. Push power switch to "ON".
2. Press the STOP button and oven will switch to HOLD cycle.
3. Press the HOLD button and set the desired hold temperature.

NOTES: Cold food is **NOT** to be added when unit is operating in *HOLD* mode.

For *HOLD* mode, preheat unit to 180°F/82°C for 60 minutes.

HOW TO SHUT DOWN OVEN:
Push switch to "OFF".

⚠ **CAUTION**

Ventilating fans will continue to run until the cabinet is cool. Do **NOT** disconnect the power supply to the cabinet while the ventilating fan is still operating.

HOW TO OPERATE WITH HUMIDITY:

⚠ **WARNING**

Air is <u>VERY HOT</u> when door is opened.
- Humidity control is on the right of the control panel. See Figure 1
- Humidity may be used in all control modes.
- Turn control knob to extreme counter-clockwise position when humidity is not needed.
- Make sure there is water in the water pan.

HOW TO PROOF:
1. Fill the water pan with three (3) gallons of HOT water.
2. Set the humidity control at low to mid-range.
3. Set the Hold control to Nominal 120°F/49°C.
4. Preheat the oven at this setting for ½ hour.
5. Put in product. **DO NOT** use frozen product.

Listed below are typical thermostat settings. Experiment with different settings to get the temperature and humidity you need.

TEMPERATURE / HUMIDITY SETTINGS

HOLD Dial Setting	HUMIDITY Dial Setting									
Temp.,°F/°C	1	2	3	4	5	6	7	8	9	10
140/60	15	20	25	35	50	65	85	100	100	100
150/66	10	15	20	25	35	55	70	100	100	100
160/71	5	10	15	20	30	40	60	80	100	100
180/82	5	5	10	15	20	25	30	50	70	95
200/93	5	5	5	10	15	20	25	35	50	75

Values Listed are % Relative Humidity.

MAINTENANCE INSTRUCTIONS
HOW TO CLEAN THE UNIT

MAINTENANCE: WATER PAN

Drain, wipe and fill water pan daily.

(Clear vinyl drain-hose is provided).

1. Push hose onto drain nozzle under the base.
2. Turn knob to open the drain.

To fully Dry Out:

1. Drain until 1/8" of water is left in pan bottom.
2. Turn humidity Thermostat to *"High"* until water is gone.
3. Wipe out pan.

⚠ **CAUTION** **Delime or descale water pan parts as required,** to prevent damaging build-up. WARRANTY COVERAGE MAY BE AFFECTED WITHOUT PROPER CLEANING.

MAINTENANCE: CABINET

1. Wipe the inside of cabinet after daily use.
2. Leave doors slightly open to fully dry interior.

⚠ **WARNING**

BEFORE cleaning the cabinet:

1. **Unplug cord from wall. Allow cabinet to cool.**

2. **Do NOT hose cabinet with water.**

3. **Do NOT get water on controls.**

4. **Do NOT use abrasives or harsh chemicals.**

Cleaning Hints:

1. Use the mildest cleaning procedure that will do the job.
2. Always rub in the direction of the polish lines to avoid scratching the surface.
3. Use only a soft cloth, sponge, fibrous brushes, plastic or stainless steel pad for cleaning and scouring.
4. Rinse thoroughly with fresh water after every cleaning operation.
5. Always wipe dry to avoid water marks.

HOW TO CLEAN THE UNIT:

	SOIL	CLEANER	METHOD
CABINET Inside and Outside (Stainless Steel)	ROUTINE CLEANING	Soap, ammonia or mild detergent* and water.	1. Sponge on with cloth 2. Rinse
	STUBBORN SPOTS, STAINS	Mild abrasive made for Stainless Steel.	1. Apply with damp sponge or cloth. 2. Rub lightly.
	BURNT ON FOODS OR GREASE	Chemical oven cleaner made for Stainless Steel.	Follow oven cleaner manufacturer's directions.
	HARD WATER SPOTS & SCALE	Vinegar	1. Swab or wipe with cloth. 2. Rinse and dry.
*** Mild detergents include soaps and non-abrasive cleaners***			

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MAINTENANCE INSTRUCTIONS
TROUBLE-SHOOTING GUIDE

⚠ WARNING

IF UNIT GETS TOO HOT OR WON'T SHUT OFF, DISCONNECT POWER AT BRANCH PANEL. DO <u>NOT</u> UNPLUG CORD!

If hot unit is *NOT* working, first check the following causes:

1. Cord is unplugged from wall outlet.
2. Circuit breaker/fuse to wall outlet is blown.
3. Switch is turned off.
4. Thermostat is turned off, or is set too low.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Cabinet does not heat, or doesn't heat properly	1. Fuse 2. Control 3. Sensor 4. Heater contactor 5. Loose wiring at heater contactor 6. On/Off Switch	1. Replace 2. Replace 3. Replace 4. Replace 5. Replace 6. Replace
Blowers do not operate	1. On/Off Switch 2. Fuse 3. Blower 4. Control	1. Replace 2. Replace 3. Replace 4. Replace
Heater will not shut off	1. Control defective	1. Replace
Vent fans do not shut off	1. Vent fan switch defective 2. Control compartment is still hot.	1. Replace 2. Wait until it cools Check "Heaters will not shutoff"
Vent fans do not operate (See Note)	1. Fuse 2. Vent fan switch defective 3. Vent fan defective	1. Replace 2. Replace 3. Replace
Control will not switch from "COOK" to "HOLD" (timer mode)	1. Oven is in "PROBE" mode. 2. Control defective	1. Switch to "TIMED" mode 2. Replace
Control will not switch from "COOK" to "HOLD" (probe mode)	1. Oven is in the "TIMED" mode 2. Probe not plugged in 3. Control defective	1. Switch to "PROBE" mode 2. Plug in probe 3. Replace
Control will not switch to "COOK" (probe mode)	1. Oven in "TIMED" mode 2. Probe temperature setting lower than probe temperature 3. Probe not plugged in 4. Control defective	1. Switch to "PROBE" mode 2. Set probe temperature to desired temperature 3. Plug in probe 4. Replace
No Humidity	1. Water element defective 2. Humidity control	1. Replace 2. Replace

NOTE: Vent fans will not operate until the control compartment requires ventilation to limit temperatures. Replacement of electrical components must be done by a qualified electrician.
Refer to our *Service Agency list, FL-1400* (found in the back of this manual), of authorized service centers.
Instructions for replacing parts are included in replacement parts list.

MAINTENANCE INSTRUCTIONS
TROUBLE-SHOOTING GUIDE, continued

HOW TO ADJUST THE DOOR LATCH:

1. For vertical (up and down movement) adjustment:
   a) Loosen (2) screws located in magnetic strike.
   b) Move strike up or down for alignment to magnet on latch.
   c) Tighten screws to secure

2. For horizontal (greater or lesser magnetic draw) adjustment:
   a) Loosen (4) screws in door latch.
   b) Move latch forward or backward to adjust magnetism.
   c) Tighten screws to secure.

HOT UNIT REMOVAL:

1. Disconnect power cord from wall outlet.
2. For half-size model: CO151HW Series, remove screws around top cover.
3. Disconnect the yellow cord between top and bottom, in the back of the cabinet (see Figure 2).
4. Lift off Hot Unit.
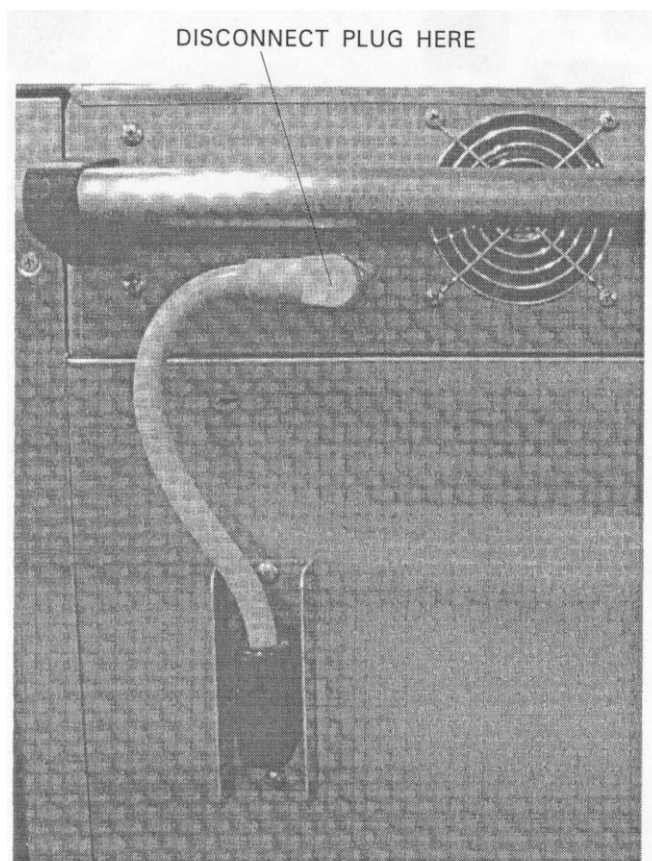
FIGURE 2
HOT UNIT REMOVAL

REPLACEMENT PARTS: *Include all information on nameplate when ordering parts.*

Cabinet Replacement Parts

MODEL PREFIX CO-151, RO-151 ("Q" SERIES)				
DESCRIPTION	**-FPWUA (12), (18)**	**-FWUA (12), (18)**	**-FW1332**	**-HWUA6**	**-XWUA5**
Hot Unit, 208V, 1 Ph	HU675013Q1	HU675025Q1	HU675029Q1	HU675037Q1	HU675037Q1
Hot Unit, 208V, 3 Ph	HU675015Q1	HU675027Q1	HU675031Q1	HU675039Q1	HU675039Q1
Hot Unit, 240V, 1 Ph	HU675014Q1	HU675026Q1	HU675030Q1	HU675038Q1	HU675038Q1
Hot Unit 240V, 3 Ph	HU675016Q1	HU675028Q1	HU675032Q1	HU675040Q1	HU675040Q1
Door Latch Kit	1006-120-001 K	1006-120-01 K	1006-120-001 K	1006-120-01 K	1006-120-01 K
Door Strike	1006-120-02 K	1006-120-02 K	1006-120-02 K	1006-120-02 K	1006-120-02 K
Door Hinge	0519-074 K	0519-074 K	0519-074 K	0519-074 K	0519-074 K
Door Assembly	1221-525	1221-525	1221-543	1221-525	1221-545
Door Gasket	0861-185	0861-185	0861-184	0861-185	0861-250
Angles or Racks	0621-281-SS	0621-281-SS	1104-108	0621-281-SS	0621-281-SS

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REPLACEMENT PARTS
Include all information on nameplate when ordering parts
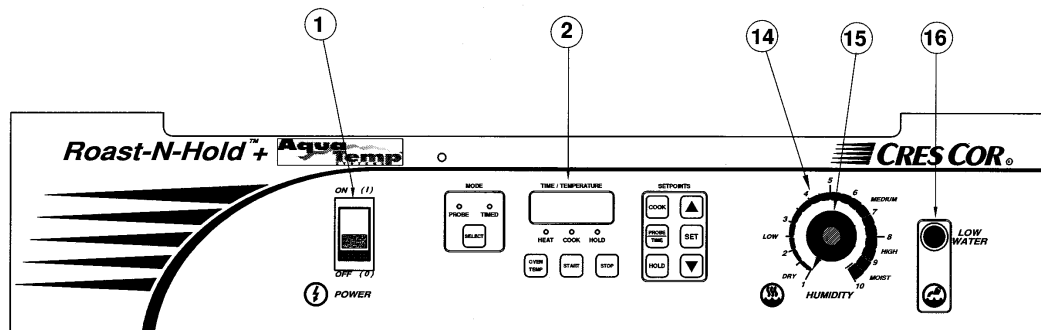


FIGURE 2: CONTROL PANEL

Hot Unit Replacement Parts

ITEM DESCRIPTION	CMP Part No.
1. Switch (On/Off)	0808-113-01
2. Microprocessor Control	0848-070-03
3. Vent Fan	0769-174
4. Fan Guard	0769-167
5. Fuse	0807-058
Fuse Holder	0807-048
6. Blower Kit	0769-182-01SSK
7. Contactor	0857-026
8. Terminal Block, front	0852-096
9. Terminal Block, rear	0852-091
10. Switch, Fan	0848-034
11. Hi Limit Switch (Pass-thru)	0848-077
Hi Limit Switch	0848-079
12. Sensor	0848-073-01
13. Sensor Bushing	0818-014
14. Connector, probe	0848-059-01
Probe 1.5" long	0848-059-02
Probe 6" long	0848-059-04
15. Relay	0857-125
16. Thermostat, Humidity	0848-008-1AC
17. Knob	0595-061
18. Pilot Light	0766-095
19. Receptacle (6 pin)	0810-154-02
20. Resistor	0857-129
• Float Switch	0857-122
• Water pan Kit, 208V	0756-030
Heater, 208V	0811-278
• Water pan Kit, 240V	0756-031
• Heater, 240V	0811-271

ITEM DESCRIPTION	CMP Part No.
PARTS for 8200W, 1-PH UNITS	
21. Power Cord	0810-124
Power Cord (Pass-thru)	0810-161
22. Heater Kit, 208V	0811-261
Heater Kit, 240V	0811-262
23. Strain Relief	0818-061
PARTS for 8200W, 3-PH UNITS	
21. Power Cord	0810-132
Power Cord (Pass-thru)	0810-162
22. Heater Kit, 208V	0811-261
Heater Kit, 240V	0811-262
23. Strain Relief	0818-050
PARTS for 4950W, 1-PH UNITS	
21. Power Cord	0810-163
22. Heater Kit, 208V	0811-020
Heater Kit, 240V	0811-020-01
23. Strain Relief	0818-050
PARTS for 4950W, 3-PH UNITS	
21. Power Cord	0810-164
22. Heater Kit, 208V	0811-020
Heater Kit, 240V	0811-020-01
23. Strain Relief	0818-050

REPLACEMENT PARTS
for OVENS CO or RO151F SERIES
Include all information on nameplate when ordering parts
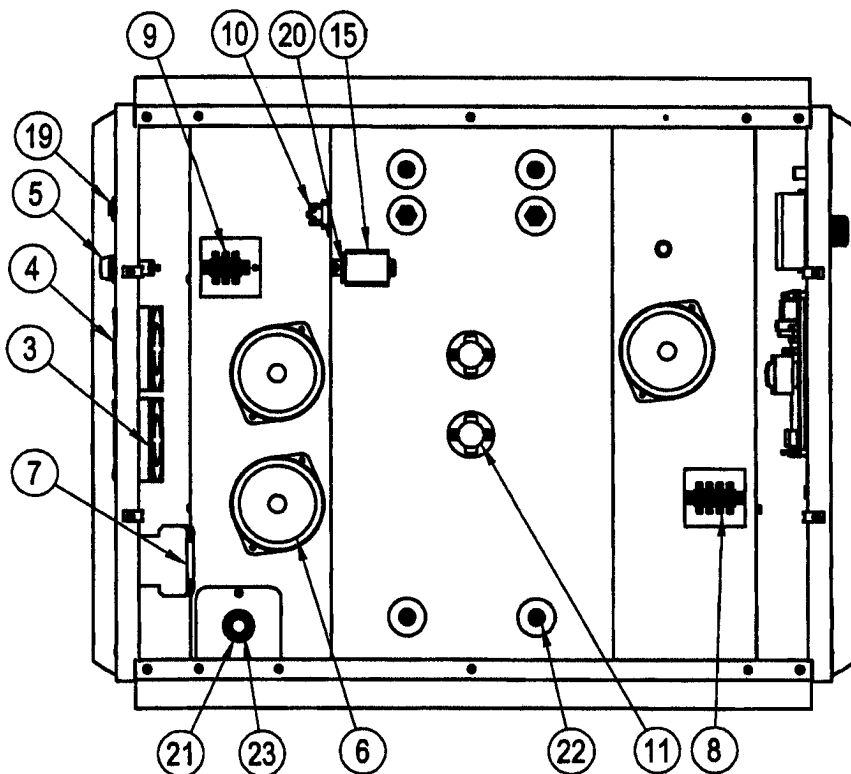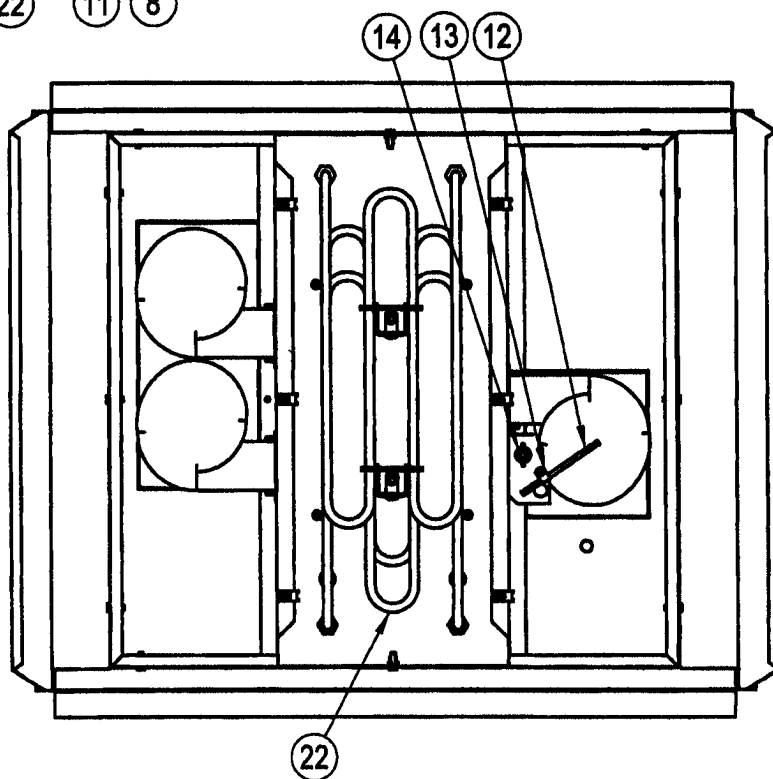
FIGURE 3;
Hot Unit w/o Top cover
(For parts description, refer to page 10.)

FIGURE 4;
Bottom of Hot Unit, Cover Removed
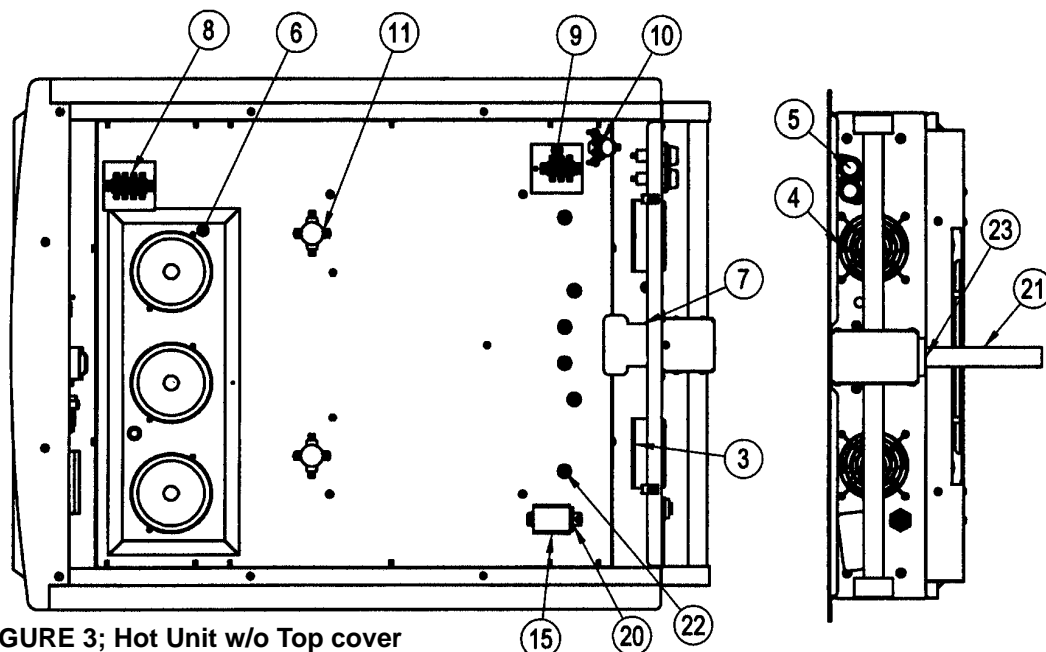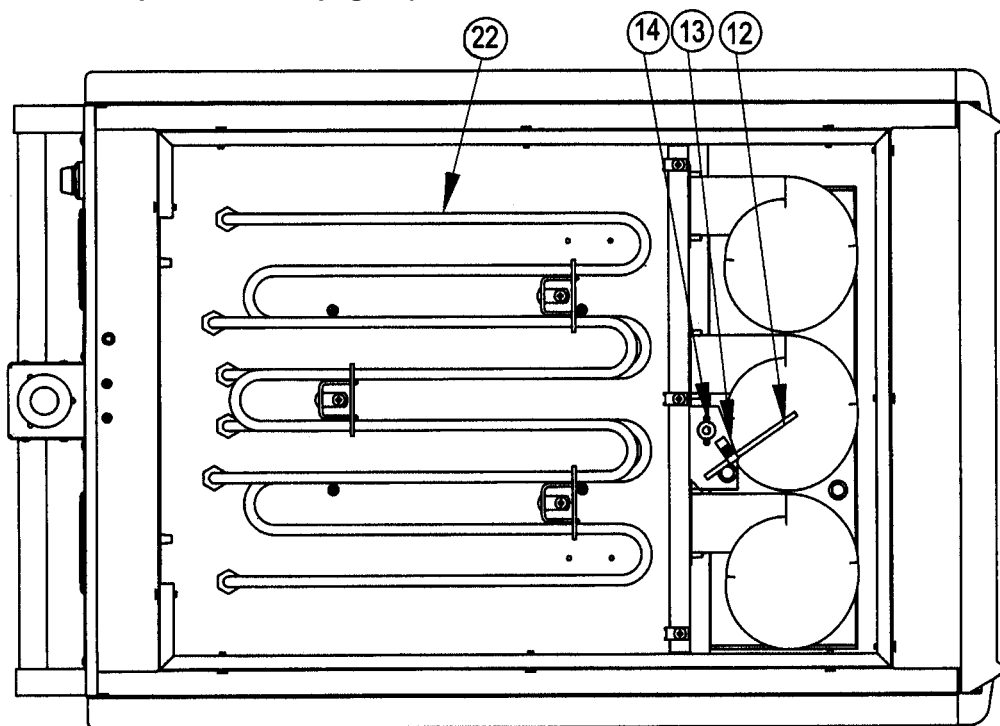**(For parts description, refer to page 10.)**

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REPLACEMENT PARTS
for "PASS-THRU" OVENS CO or RO151FPUA SERIES
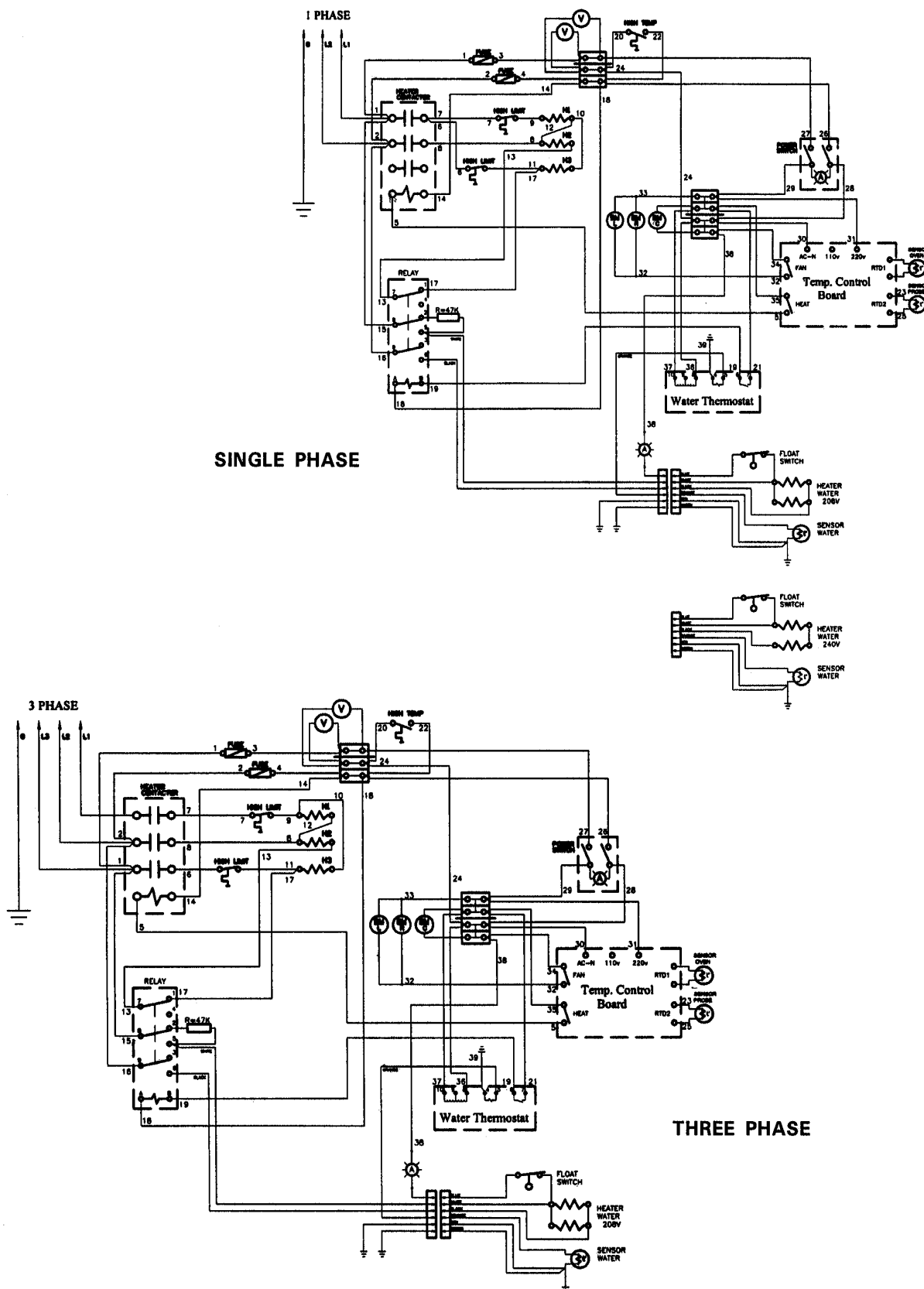### Include all information on nameplate when ordering parts

FIGURE 3; Hot Unit w/o Top cover
(For parts description, refer to page 7.)

FIGURE 4; Bottom of Hot Unit, Cover Removed
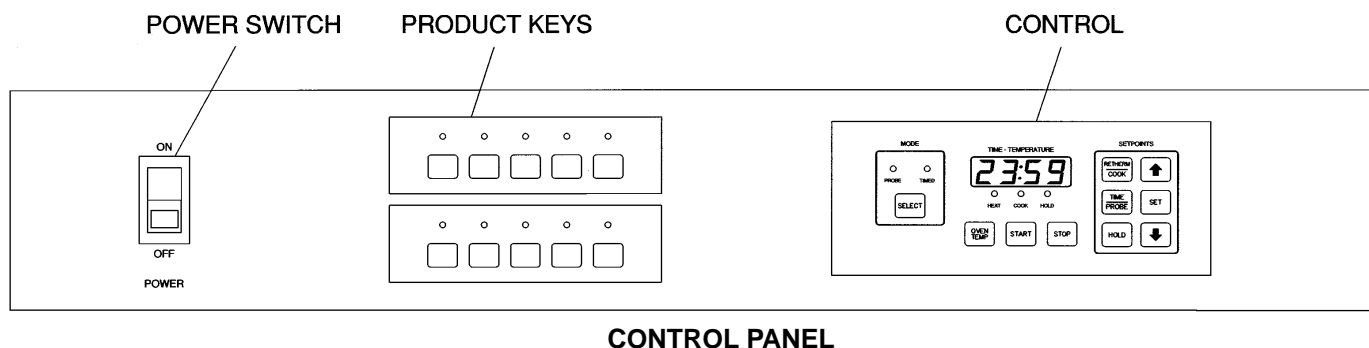**(For parts description, refer to page 7.)**

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WIRING DIAGRAM

SINGLE PHASE

THREE PHASE

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OPERATING INSTRUCTIONS
FOR OVENS WITH OPTIONAL PRODUCT KEYS

POWER SWITCH   PRODUCT KEYS   CONTROL

CONTROL PANEL

The Product Keys provide automatic menu selections (arranged in banks of 5 keys, max. 10 keys). Each Product Key can be user programmed for desired mode (PROBE or TIMED) and the required COOK, HOLD, and PROBE or TIME setpoints.

Each Product Key Lights up when pressed *"ON".* The Product Key Light will go *"OFF"* when pressed a second time or when changing any setpoint value. This returns the control to manual operation.

Product Key Programming

1. Press the desired Product Key.
2. Press and hold the SET key until the Product Key light begins to flash.
3. Enter the desired Mode, Cook, Hold and Probe/Time values.

NOTE: Press the SET key after each value is changed or added to accept and store a new setpoint.

4. To exit; Press the SET key for a few seconds until the Product Key light is extinguished.

Extra Replacement Parts:
Product Key (5 Keys) 0848-072
For Hot Unit Replacement, See Page 9:
The Hot Unit suffix number will be Q5 (5 Keys)
or Q10 (10 Keys) instead of Q1