



MODEL REO-1620
ELECTRIC ULTRATHERM 3
CE RETHERMALIZER

OPERATIONS MANUAL



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30A243

PREFACE

This manual was written and published by the Engineering Department, Ultrafryer Systems, for use by store employees who will operate and maintain the Electric Ultratherm 3 Rethernalizer. Proper use of this manual will allow store employees to properly operate, clean and maintain this equipment which will reduce service call expenses

ENGINEERING DEPARTMENT
ULTRAFRYER SYSTEMS
302 SPENCER LANE
SAN ANTONIO, TEXAS 78201

NOTICE

IF, DURING THE WARRANTY PERIOD, THE CUSTOMER USES A PART FOR THIS ULTRAFRYER EQUIPMENT OTHER THAN AN UNMODIFIED NEW OR RECYCLED PART PURCHASED DIRECTLY FROM ULTRAFRYER SYSTEMS OR ANY OF ITS AUTHORIZED SERVICE CENTERS, AND/OR THE PART BEING USED IS MODIFIED FROM ITS ORIGINAL CONFIGURATION, THIS WARRANTY WILL BE VOID. FURTHER, ULTRAFRYER SYSTEMS AND ITS AFFILIATES WILL NOT BE LIABLE FOR ANY CLAIMS, DAMAGES, OR EXPENSES INCURRED BY THE CUSTOMER WHICH ARISE DIRECTLY OR INDIRECTLY, IN WHOLE OR IN PART, DUE TO THE INSTALLATION OF ANY MODIFIED PART AND/OR PART RECEIVED FROM AN UNAUTHORIZED SERVICE CENTER.

DANGER

The electrical power supply for this appliance must be the same as indicated on the rating and serial number plate located on the outside of the rethermalizer door.

DANGER

All wiring connections for this appliance must be made in accordance with the wiring diagrams furnished with the equipment.

DANGER

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

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WARNING

Do not attach accessories to this rethermalizer unless rethermalizer is secured from tipping. Personal injury may result.

WARNING

Do not use water jets to clean this equipment.

WARNING

This equipment is intended for indoor use only. Do not install or operate this equipment in outdoor areas.

DANGER

The front apron of this appliance is not a step! Do not stand on the appliance, Serious injury can result from slips or contact with the hot oil.

DANGER

Do not store or use gasoline or other flammable liquids or vapors of this or any other appliance.

NOTICE

Safe and satisfactory operation of Ultrafryer equipment depends upon its proper installation. Installation MUST conform with local codes, or in the absence of local codes, to European Community (CE) Standards.

DANGER

Adequate means must be provided to limit the movement of this appliance without depending on or transmitting stress to the electrical conduit. A strain relief is provided with the Rethermalizer.

CAUTION

Prior to movement, testing, maintenance and any repair on your Rethermalizer disconnect all electrical power.

NOTICE

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

NOTICE

Supply cord wire should not be less than No. 8 AWG copper wire. This must conform with local and national codes, or in the absence of local codes to European Community

WARNING

The earthing in a supply cord is not considered to be an equipotential bonding conductor. The appliance must be connected to an unipotential system.

INSTALLATION

All installation and service on Ultrafryer equipment must be performed by qualified, certified, licensed, and /or authorized installation or service personnel. Qualified personnel must be experienced in such work, be familiar with all electrical precautions involved, and have complied with all requirements of applicable national and local codes.

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GENERAL INFORMATION

TECHNICAL ASSISTANCE - Contact an authorized service agent or the Customer Service Department, Ultrafryer Systems at 1-800-525-8130 for technical assistance.
E-Mail technical assistance at: techserv@ultrafryer.com

A. ORDERING INFORMATION:

1. **REPLACEMENT PARTS** - Provide the following information when ordering replacement parts by phone, fax or mail:

Your company name and phone number
Your company purchase order number
Bill-to address
Ship-to address
Quantity desired
Part number and description of the desired-item Your name or signature of authorized-buyer

Phone in order to: 954-202-7336
FAX order to: 954-202-7337
Mail order to: Greenfield World Trade
U.S. Office
3355 Enterprise Ave. Suite 160
Ft Lauderdale, FL 33331
Website: www.Greenfieldworld.com

2. **DAMAGES** - Ultrafryer Systems is not responsible for damage occurring in transit. All deliveries must be inspected for damage to shipping containers prior to departure of the delivering carrier. Any damage must be notated on the receiving document to facilitate filing of freight claims. Carriers must be notified immediately and freight inspections must be requested from the carrier. Ultrafryer Systems can and will gladly assist you in preparing and processing of the necessary claims only if proper notification has been accomplished on the carrier delivery document. Damaged equipment and or containers must be available for the claims inspector to inspect.

A. SAFETY

The Electric Rethermalizer operates on 230 volts single phase electrical power and NO CLEANING OR REPAIR to any component should be attempted without FIRST disconnecting electrical power. When in use the Rethermalizer will maintain water temperature above 150°F (66°C) which can cause severe **burns**. **ALLOW METAL SURFACES TO COOL BEFORE CLEANING THE RETHERMALIZER** which can cause severe burns.

B. DESCRIPTION

The Electric Ultratherm 3 Rethermalizer was designed by Ultra-fryer Systems to operate as a commercial warmer to thaw, heat and hold frozen products such as rice, macaroni and beans for up to eight (8) hours. It is constructed from 16 and 18 gauge type 304 stainless steel with a #3 finish and is built as a table model. The Model REO-1620 Electric Ultratherm 3 Rethermalizer is equipped with a Thermostat, twin stainless steel chub baskets, self-filling water float valve and a water overflow drain. The Rethermalizer was designed to accommodate 12 Product Bags simultaneously. Each chub basket may be divided into six (6) compartments separated by the stainless dividers provided with the baskets. Embossed on the Top Rim of the Rethermalizer are the numerals with 1-6 on the left and 7-12 on the right.



C: SPECIFICATIONS:

**Water Inlet Pressure range is as follows: Min: 34.5 kPa (5psi)
Max : 930.8 kPa (135 psi)**

Caution: Do not exceed maximum pressure.

Dimensions	Width	Depth	Height
	30" (762 mm)	29" (737 mm)	37 1/2" (953 mm)

Capacity	16 Gallons (60L)	
Shipping Weight	181 LB (82 Kg)	

ELECTRICAL	
Double Element 240V	9.8 KW, 42.6 Amps 50 Hz Single Phase

INSTALLATION

A. INSTALLATION

1. Place the Rethermalizer in the location where it is to be operated.
2. Have a licensed plumber level the Rethermalizer and connect a 1/2" (13 mm) copper water line equipped with a **WATER SHUT-OFF VALVE** to the **WATER SOLENOID VALVE** mounted to the rear of the Rethermalizer.
3. **NOTE: A provision for all pole disconnection from supply mains must be incorporated for fixed wiring**

NOTE: Water hardness may affect the performance and longevity of component parts coming in direct contact with the water. Therefore, the local water supplier should be contacted **TERMINALS** to determine if the water to be used with the appliance should be treated with a filter, strainer, softener, and/or descaler.

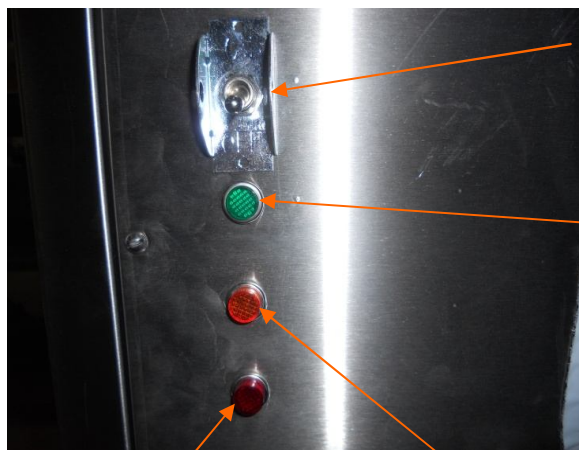
3. Have a licensed electrician perform the following:
 - a. Connect an CE approved 3 wire electrical cord to the terminals inside the units electrical box shown to the right:
 - b. Install an approved electrical plug on the electrical cord.
 - c. Install a "mating" rated electrical receptacle on the wall behind the Rethermalizer operating location.
 - d. Connect the building ground to the ground lug located on the outside of the unit.



4. Test the Rethermalizer as follows:
 - a. Ensure the controls listed below are in the proper position:

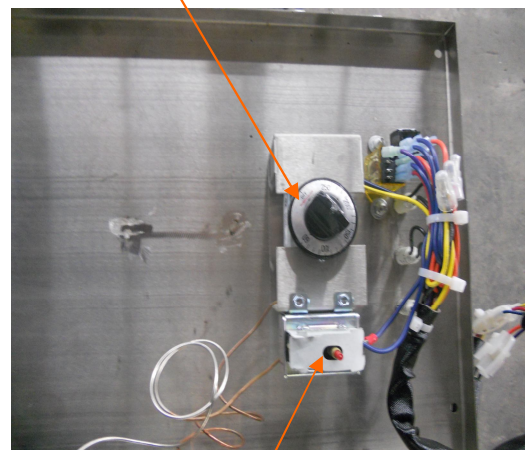
1. APPLICABLE CIRCUIT BREAKER IS ON
2. ELECTRICAL PLUG IS CONNECTED TO ELECTRICAL WALL RECEPTACLE

THE THERMOSTAT TEMPERATURE DIAL



RED HEAT INDICATOR

AMBER POWER ON LED



VALVE

HI LIMIT SWITCH

LEVER IS CLOSED

FRONT PANEL (FRONT & BACK)

CLEANING

CAUTION: ALLOW ALL METAL SURFACES OF THE RETHERMALIZER TO COOL PRIOR TO PROCEEDING.

A. CLEANING

1. INITIAL CLEANING

A. Remove and **THOROUGHLY** wash the following items in a 3 compartment sink with **HOT** water and soap, rinse these parts with **HOT** water and allow them to air dry:

STAINLESS STEEL CHUB BASKET
STAINLESS STEEL BASKET DIVIDERS
STAINLESS STEEL TUB GRILL

B. **THOROUGHLY** wash the Rethermalizer tub with **HOT** water and soap; then rinse the tub with **HOT** water and allow it to air dry.

C. Wipe the top, side and front surfaces of the Rethermalizer with a **HOT** damp cloth.

D. When the chub baskets, dividers, grill and tub are dry, replace the grill , baskets and dividers into the tub.

2. DAILY CLEANING

A.. Prepare a six (6) quart (5.7 liters) container of sanitized warm water, in the proper ratio, for use in cleaning soiled surfaces.

B. Periodically throughout the day soak a cloth towel in the sanitized solution, wring out the towel until it is damp and clean any soiled surface.

C. Perform the following routines at store closing:

- 1) Allow **ALL** metal surfaces and the water to **COOL**, remove the electrical plug from the electrical receptacle, and **CAREFULLY** drain the water from the Rethermalizer tub.
- 2) Remove the two (2) Chub baskets, dividers, and grill from the Rethermalizer tub; wash them with dish wash solution, **THOROUGHLY** rinse; and allow these items to air dry.
- 3) Clean the Rethermalizer tub with dish wash solution, **THOROUGHLY** rinse and allow it to air dry.
- 4) Clean all exterior surfaces with a reusable towel dampened with sanitizer and buff dry.
- 5) Reassemble the Rethermalizer.

3. WEEKLY

A. Perform daily cleaning routines listed above.

B. Place the Chub Baskets, Dividers, and Grill in a fryer with **BOIL-OUT SOLUTION** for cleaning.

C. After the baskets, dividers, and grill have been cleaned **ENSURE** they are **THOROUGHLY** sprayed with a solution of **1 PART** vinegar to **25 PARTS** water to **NEUTRALIZE** the boil-out solution; then allow these items to air dry.

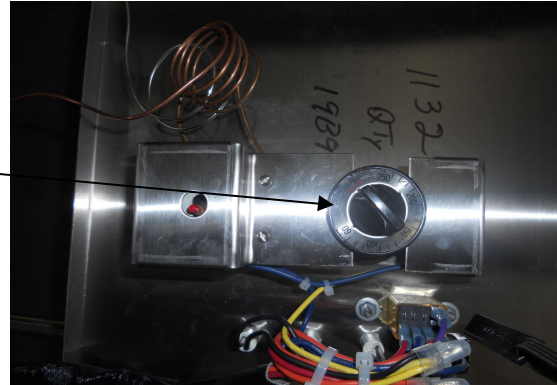
D. Reassemble the Rethermalizer.

RETHEMALIZER OPERATION

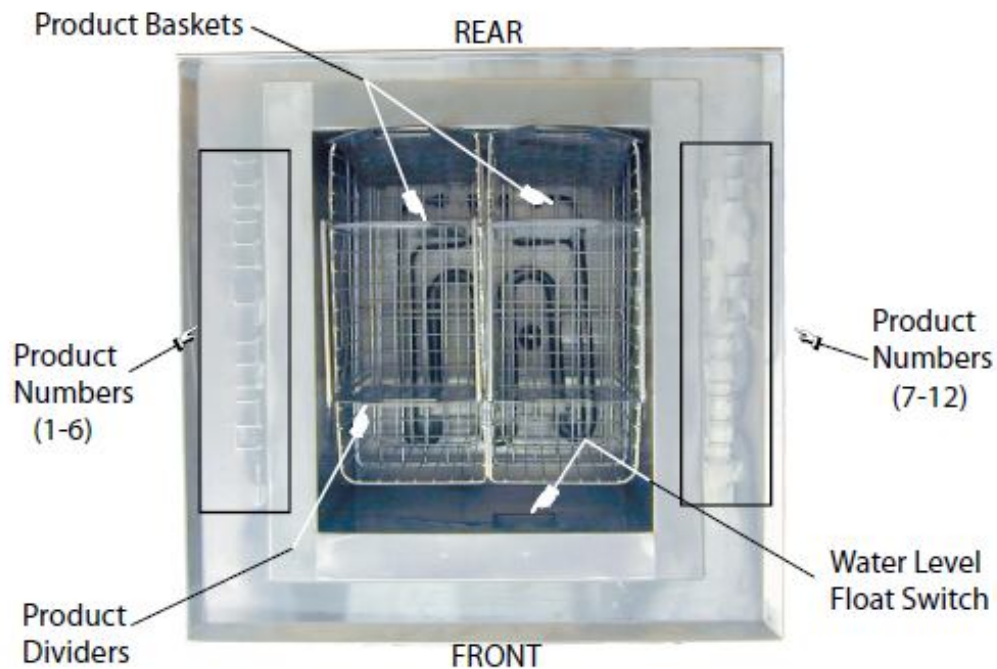
A. GENERAL

1. **THERMOSTAT** - The Model S-23-48 Robertshaw SPST Thermostat Temperature Dial can be adjusted to heat water in the Rethermalizer tub from 60°F (16°C) to 212°F (100°C). The recommended **COOK** temperature is 180°F (82°C) and the suggested **HOLD** temperature is 180°F (82°C). The Thermostat is located on the backside of the front panel.

THERMOSTAT TEMPERATURE
DIAL



- B. **COOKING—THE FOLLOWING STEPS MUST BE PERFORMED TO START A COOK CYCLE.**



B. CONTINUED

ITEM	ACTION	RESPONSE
1	Ensure the Drain Valve Lever is in the CLOSED position; then OPEN the water shut-off valve to the Rethermalizer.	A. Water will not begin to fill the tank until the solenoid valve is activated by the toggle switch.
2	Turn the Toggle ON/OFF switch to the ON position.	A. The AMBER power lamp will LIGHT. B. The GREEN water flow lamp will LIGHT. C. Water will begin flowing into the Rethermalizer tub. D. When water reaches the fill level, the water flow will STOP. The FLOAT of the Liquid Level Switch will shut off the solenoid valve and the GREEN lamp will turn OFF.
3	When the GREEN lamp turns OFF, electrical power will be applied to the thermostat to start heating the water to 180°F (82°C).	A. The RED Heat Element Indicator Lamp will LIGHT indicating electrical power has been connected to the heat elements to heat the water.

THE RECOMMENDED HOLD TEMPERATURE IS 180°F (82°C).

4	When the RED heat element indicator lamp turns OFF indication the water is at the desired HOLD temperature: 1) place the product to be cooked into the appropriately NUMBERED section of the Chub Baskets Time the products corresponding to the numbered sections.	<p>The HOLD time of that product will need to be activated on a timing device.</p> <p>B. When product is placed into the water, the water temperature will DROP and the RED lamp will cycle ON and OFF, indicating the heat elements are being turned ON and OFF to maintain water at the desired HOLD TEMPERATURE.</p> <p>Note: The rethermalizer is designed to thaw pre-cooked, pre-frozen product, and HOLD the product until it is ready to be used once the product reaches the holding temperature.</p>
5	As the HOLD time for each product expires:	A. Remove the product when ready
6	Repeat steps 4 & 5 (above) to cook additional products.	

CAUTION: WATER LEVEL WILL DROP ABOUT 4" (102 mm) EVERY 4 HOURS DUE TO EVAPORATION. VISUALLY CHECK THE RETHERMALIZER TUB PERIODICALLY TO ASSURE WATER IS ABOVE THE HEAT ELEMENT AND THE PRODUCT IS BEING HEATED OR HELD SATISFACTORILY.

PREVENTIVE MAINTENANCE & TROUBLESHOOTING CHART

A. **PREVENTIVE MAINTENANCE** - Although the Rethermalizer only requires minimal preventive maintenance, the need to keep it clean cannot be over-stressed. The food product comes in bags, but food may come in contact with the inside of the unit and **MUST** be **THOROUGHLY** cleaned each evening. If the Rethermalizer is kept clean and the following inspections are performed, this unit will provide many years of trouble free service.

B. INSPECTION REQUIREMENTS

ITEM	DAILY	WEEKLY	MONTHLY	CORRECTIVE ACTION
Electrical Plug, Cord, and Toggle ON/OFF Switch	X			Inspect the Electrical Cord, Plug, and the Toggle ON/OFF Switch for and physical damage. Replace damaged item.
Chub Basket, Divider, and Grill			X	Inspect the Chub Basket, Divider and Grill for damage (broken welds, burrs, sharp edges that would tear chub bags). If applicable order and/or replace damaged items.
Drain Lever and Float		X		Inspect the drain lever and float for free movements and check for accumulation of debris.

C. TROUBLESHOOTING CHART

PROBLEM	PROBLEM CAUSE	CORRECTIVE ACTION
Water will not flow into Rethermalizer Tub	A. Water shut-off valve in the closed position. B. Electrical plug not connected to electrical receptacle. C. ON/OFF switch in the OFF position. D. Circuit breaker in the main electrical panel tripped. E. Defective ON/OFF switch. F. Defective water float liquid level switch. G. Defective water solenoid valve.	A. Place shut-off valve in the open position. B. Connect plug to receptacle. C. Place switch in the ON position. D. Reset circuit breaker and check for cause that made breaker trip. E. Replace Toggle ON/OFF switch. F. Replace water float liquid level switch. G. Replace water solenoid valve.
Water fills to the float level but is not heated.	A. Defective control relay. B. Defective Thermostat. C. Defective heat element contactor. D. Defective heat elements.	A. Replace control relay. B. Replace Thermostat. C. Replace heat element contactor. D. Replace heat element.
GREEN fill lamp lights but there is no water flow.	A. Water shut-off valve closed. B. Defective water float liquid level switch C. Defective water solenoid valve.	A. Turn valve to open position. B. Replace water float liquid level switch. C. Replace water solenoid valve.

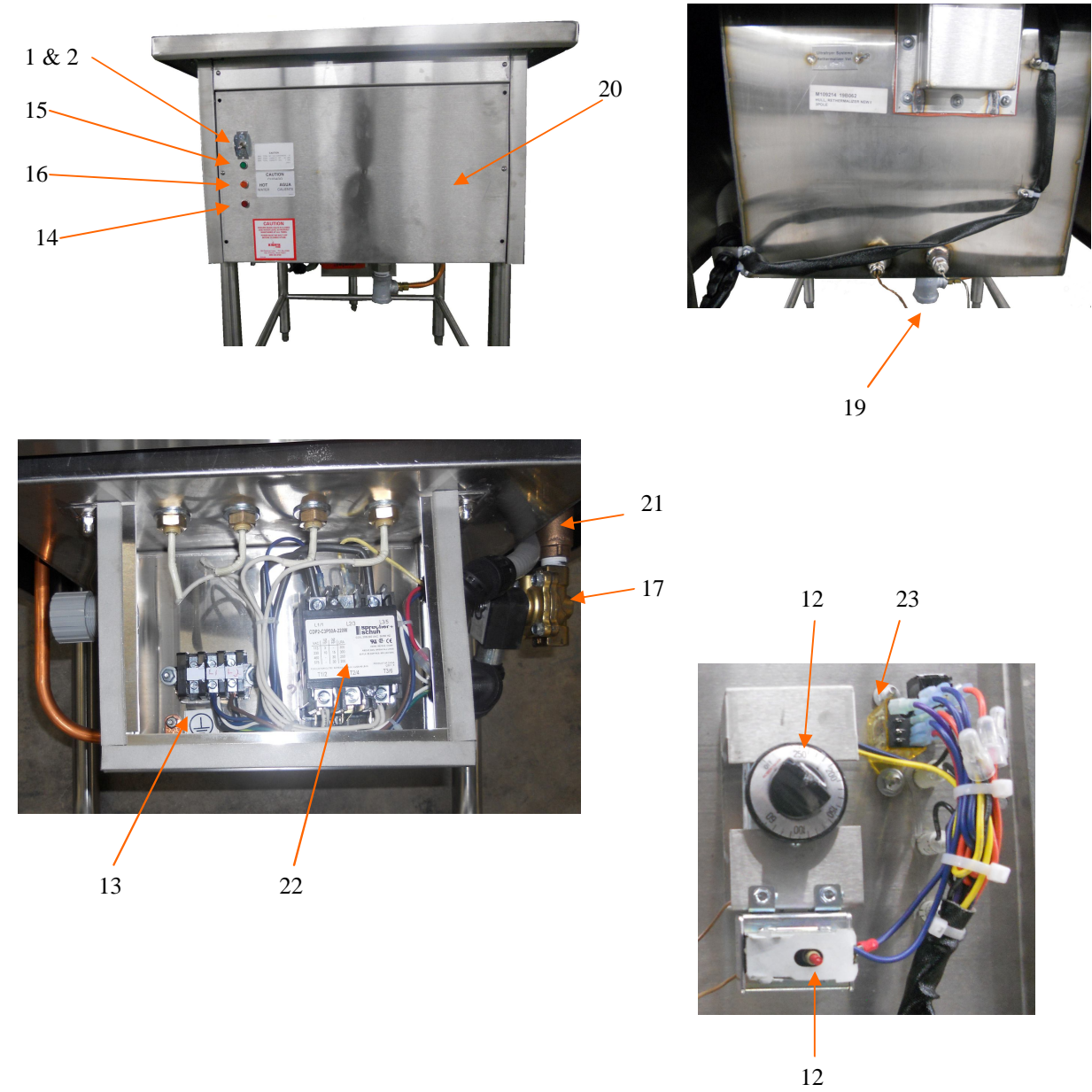
D. RECOMMENDED SPARE PARTS: To minimize downtime on this Rethermalizer upon a failure, at least one (1) of the following items should be kept in stock as a spare part in the local area:

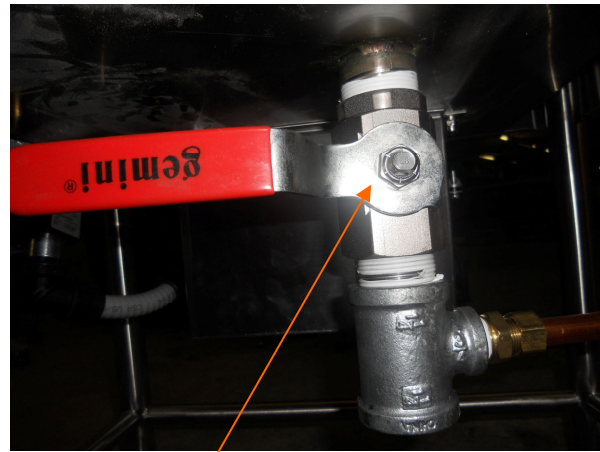
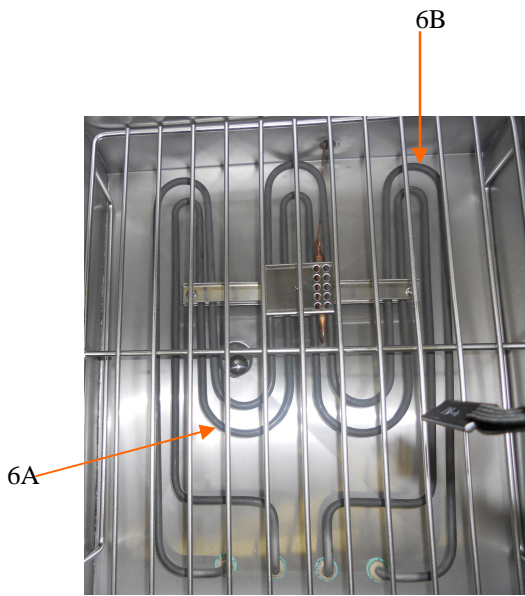
RECOMMENDED SPARE PARTS ULTRATHERM 3 MODEL REO-1620 RETHERMALIZER	
DESCRIPTION	PART NUMBER
Liquid Level Float Switch	18A004
240 Control Relay	60A014
230 SPST Water Solenoid Valve	24348
230V Contactor , Mechanical 3 Pole	18A106
30 AMP, 120-277 VAC 2 Pole 60°F (16°C) to 250°F (121°C) Thermostat	22A148

PARTS IDENTIFICATION

PARTS IDENTIFICATION – Locate the part on the following sketches and note the index number i.e, 1, 2, etc; then obtain the part number and description for that index number on the page facing the sketches. Use that part number and description when ordering a replacement part

MODEL REO-1620 ELECTRIC ULTRATHERM3 RETHERMALIZER





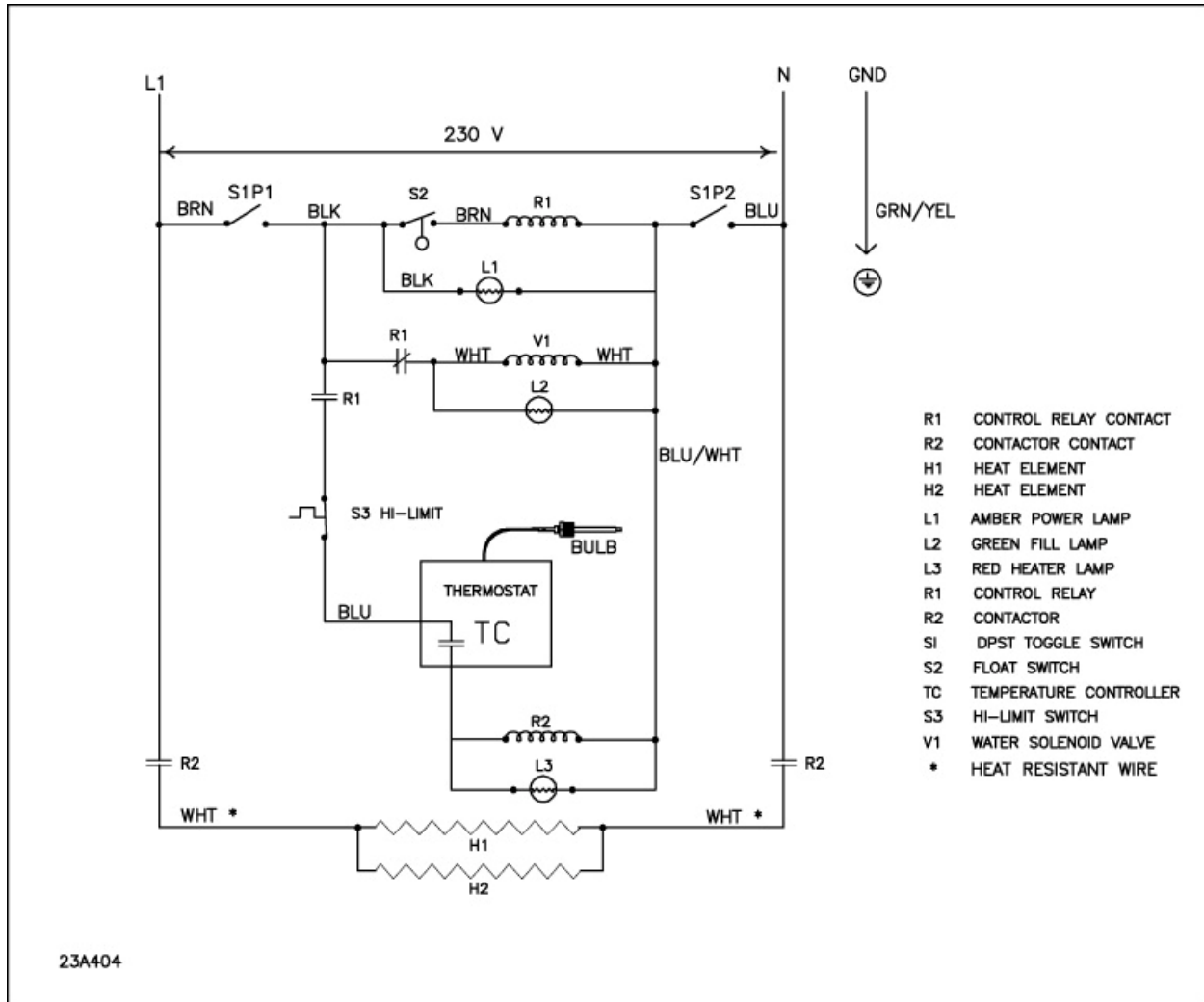
MODEL REO-1620 ELECTRIC ULTRATHERM3 RETHERMALIZER

ITEM	DESCRIPTION	PN
1	Toggle ON/OFF Switch Guard	18129
2	SPST ON/OFF Switch DPST 10A/250V	18A356
3	Float Liquid Level Switch	18A004
4	230 VAC Control Relay	60A014
5	60 Amp 3 Pole Contactor 240V	18A106
6A	240 VAC 4.9 KW Inner Electric Heat Element	18A347
6B	240 VAC 4.9 KW Outer Electric Heat Element	18A348
*	7 8" (203mm) x 18" (157mm) Chub Basket 12" (305mm) Deep With Handle	21A305
*	8 Vat Grill 18 1/2" (470mm) W x 16 1/2" (419mm) L With 3 1/4" (83mm) Handle	19A880
*	9 Chub Basket S/S Divider	19A697
10	Hi-Limit Switch	19B781
11	Adjustable S/S Bullet Feet	22022
12	30 Amp, 120 - 277 VAC 2 Pole 60°F (16°C) to 250°F (121°C) Thermostat	22A148
13	Electrical Terminal Block	23015
14	240 Volt 3 Watt Snaplight w/Red Lens	60059
15	240 Volt 3 Watt Snaplight w/Green Lens	23A235
16	240 Volt 3 Watt Snaplight w/Amber Lens	23432
17	230 Volt SPST Water solenoid Valve	24348
18	1 1/4" (32 mm) Chrome Drain Ball Valve	24A057
19	1 1/4" (32 mm) x 1 1/4" (32 mm) x 1 1/4" (32 mm) FPT Galvanized Tee	24A060
20	CE Door Assembly with out TIMER	12C828
21	Check Valve	22A417
22	Contactor, Mech, 3 pole 240 Volt Coil	18A106
23	Cord Grip Liquid Tight 3/4"	23A414
24	Cord Grip Lock Nut	23A415

* Not Shown

WIRING DIAGRAMS

WIRING DIAGRAM - Since minor wiring changes may occur in the future. USE the diagram pasted to the Rethermalizer for circuit tracing and/or troubleshooting the Rethermalizer.



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