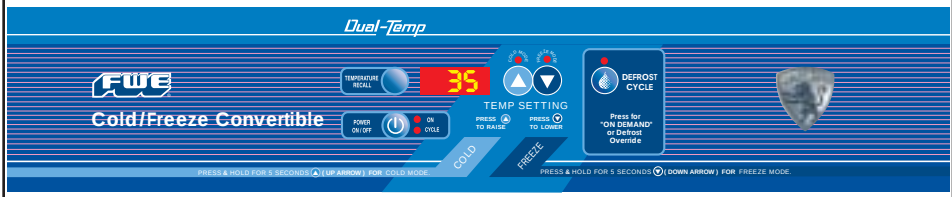
FOOD WARMING EQUIPMENT

OPERATING INSTRUCTIONS

COLD / FREEZE CONVERTIBLE



RF SERIES SRF SERIES URFS SERIES

USE AS MOBILE REFRIGERATOR OR FREEZER

COLD / FREEZE CONVERTIBLE CABINETS

Either a
Refrigerator
or a
Freezer
all in one unit!

Ultimate foodservice flexibility – change cabinet from refrigerated mode to freezer mode as your food service holding needs change.

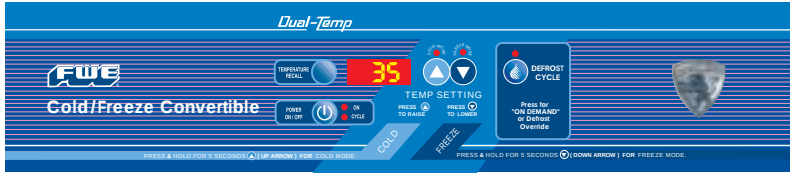
CONGRATULATIONS...

...and thank you for purchasing an FWE Mobile COLD / FREEZE Convertible cabinet. Your unit has been designed and manufactured under rigid controls to assure you the most efficient service. It is a full time unit, and may be used continuously.

Please take a moment to read through this booklet of important information pertaining to your cabinet. By following a routine of proper use and care described on the following pages, your cabinet will last for many years.

IMPORTANT: Your **Manufacturer Registration Card** must be returned within 30 days after initial delivery to put warranty into effect.

QUICK-START GUIDE



POWER ON / OFF - Turns cabinet ON and OFF.
Also Changes Display to °Celsius or °Fahrenheit Scale: You may change the Digital thermometer scale to either °C or °F as follows: While unit is OFF, press and hold the *"ON/OFF" key* for five (5) seconds. The display will then switch from *"dgF" to "dgC"*. Repeat to change scale again.

ON **Power Indicator Light -**
Indicates that the power is on.

COLD MODE FREEZE MODE

Mode Selection -
Press and hold 5 seconds the desired mode button. Indicator light will confirm selected mode.

REFRIGERATOR MODE:
Temperature Range: 33°F to 41°F (1°C to 5°C).

FREEZER MODE:
Temperature Range: 5°F to 32°F (-15°C to 0°C).

Temp Display -
Digital temperature display shows the temperature of the cabinet.

REFRIGERATOR MODE:	33°F to 40°F	(1°C to 4°C)
FREEZER MODE:	5°F to 32°F	(-15°C to 0°C)

Temp Display - Digital temperature display shows the temperature of the cabinet.
"dgF" *= Degrees* **Fahrenheit** ***"dgC"*** *= Degrees* **Celsius**

CYCLE **Cycling Indicator Light -**
When light is *"ON"*, this indicates that the cabinet is cooling down to desired temperature. When cooling elements are activated, light will come *"ON"* until cabinet has reached desired temperature, and go *"OFF"* when unit has reached desired temperature.

Mode Selection -
Press and hold 5 seconds to select **REFRIGERATOR** mode.

Use To Raise the Temperature in Either Mode -
Press to raise the temperature of the cabinet and scroll to desired temperature.

Mode Selection -
Press and hold 5 seconds to select **FREEZER** mode.

Use To Lower the Temperature in Either Mode -
Press to lower the temperature of the cabinet and scroll to desired temperature.

TEMPERATURE RECALL
Press to display either *"Actual Internal Cabinet"* actual temperature, or desired *"Set Point"* temperature.

Actual: The factory default setting shows the actual internal cabinet temperature and acts as a digital thermometer. A momentary touch of the *"Temp Recall"* key will recall the original dial setting. The display will then automatically return to the actual internal temperature.

Set Point: To have temperature read-out display the *"Set Point"* temperature, press and hold the *"Temp"* key for five (5) seconds. The fourth (4th) digit on the display will flash either *"S"* (Set), or *"A"* (Actual) to indicate which mode is active. To switch back again, repeat this step holding the *"Recall Temp Set"* key for five (5) seconds.

Activated red light indicates DEFROST is in progress.

DEFROST CYCLE - "ON DEMAND" DEFROST
Press to ACTIVATE DEFROST at any time.
Press to CANCEL DEFROST in progress (Defrost Override).

SERIAL AND MODEL NUMBER

These numbers are found on the nameplate (serial tag) affixed to the unit. The serial tag is located by the electrical cord. Please record them on the back of this booklet. When ordering parts and/or service, you will need to provide this information. The voltage and amperage of the unit are also stamped on the serial tag.

UNPACKING

After uncrating your cabinet, remove all tape and padding which held all doors, shelves, racks, cord, etc., in place during shipment.

ELECTRICAL REQUIREMENTS AND GROUNDING

FWE standard models operate on 110/120 volt, 60 Hz, 1 ph, A.C. (unless ordered otherwise), and are equipped with a three prong grounding cord plug for your protection against possible shock hazards. Be sure to plug only into a properly grounded three prong wall receptacle. If you have any questions with regard to adequate wiring or grounding in your building, a qualified electrician should be contacted before using your cabinet. The amperage of your cabinet is stamped on the name plate attached to the unit.

DO NOT, UNDER ANY CIRCUMSTANCES, CUT OR REMOVE THE GROUNDING PRONG FROM THE CORD PLUG.

WARNING: ONLY A QUALIFIED ELECTRICIAN SHOULD ATTEMPT TO REPAIR OR REPLACE ELECTRICAL COMPONENTS OR WIRING.

BE SURE THAT MODEL IS UNPLUGGED FROM ELECTRICAL SOURCE BEFORE REMOVING CONTROL PANEL.

PARTS LIST

FWE PARTS DEPARTMENT: 815 459 7500

DESCRIPTION	PART NUMBER
BUMPER INSERT, BLACK	VINYL BMPR INSERT
DOOR HINGE, EDGEMOUNT	HNG-217
DOOR LATCH, EDGEMOUNT, NON-LOCKING	LTH-DR
DOOR LATCH, EDGEMOUNT, LOCKING W/KEYS	LTH-DR-MAG-MECH
DOOR LATCH, PADDLE LTH	PDL-STD 125
DOOR GASKET (URFS-14)	GSKT MAG2436
DOOR GASKET (RF-30,SRF-30,RF-60,SRF-60)	GSKT MAG2248
DOOR GASKET (URFS-10,URFS-20)	GSKT MAG2648
PUSH HANDLE - 1" X 12"	HDL 12.5 AL
PUSH HANDLE - 1" X 21.5"	HDL 215 AL
SPACER FOR PUSH HANDLE	SPCR125X.330
6" POLY CASTER, RIGID	CSTR-6-R-2
6" POLY CASTER, SWIVEL W/BRAKE	CSTR-6-SB-2
POWER CORD, 115 VOLT, 10'	CRDSET 10/115
POWER CORD, 220 VOLT, 10'	CRDSET 10/220
TRAY SLIDES, PR (RF-30,RF-60)	SLD TS245
TRAY SLIDES, PR (URFS-10,URFS-14,URFS-20)	SLD UHS245
WIRE SHELF (SRF-30,SRF-60)	SHLF SR30
EVAPORATOR MOTOR	EVAP TL12-16AG MOTOR
EVAPORATOR FAN BLADE (RF-30,SRF-30,URS-10)	EVAP TL12-16AG FAN BLD
EVAPORATOR FAN BLADE (RF-60,SRF-60,URFS-14,URFS-20)	EVAP KMK FAN BLD
EVAPORATOR MOTOR MOUNT	EVAP TL12-16AG MOUNT
GRILL FAN GUARD / EVAPORATOR (RF-30,SRF-30,URFS-10)	EVAP TL12-16AG FAN GRD
GRILL FAN GUARD / EVAPORATOR (RF-60,SRF-60,URFS-14,URFS-20)	EVAP KMK FAN GRD
DE-ICE CONTROL SWITCH (FOR UNITS WITH ELECTRICAL DEFROST)	T-STAT-DEFROST-SL55
DEFROST HI-LIMIT SWITCH (FOR UNITS WITH ELECTRICAL DEFROST)	SNAP DISC
CONTROLLER	CNTRL-REFRIG-6MOD
TEMPERATURE PROBE	THERMISTOR-PROBE-REF-37
CATCH ALL FILTER DRIER	FLTR-DRY-BRZ
CONTACTOR RELAY	CONTACT-2 POLE-120V-40AMP
EVAPORATOR ASSEMBLY W/ELECTRICAL DEFROST (RF-30,SRF-30,URFS-10)	EVAP TL12AG
EVAPORATOR ASSEMBLY W/ELECTRICAL DEFROST (RF-60,SRF-60,URFS-14,URFS-20)	EVAP KMK23AG
CONDENSER / COMPRESSOR ASSEMBLY (FOR 404A SYSTEM)	COND-UNIT-F-404
COMPRESSOR ONLY (FOR 404A SYSTEM)	COMP-F-404
THERMAL EXPANSION VALVE 1/2 TON (FOR 404A SYSTEM)	VLV-EXP-R3-BRZ
COMPRESSOR RELAY (FOR 404A SYSTEM)	COND-UNIT-F-404-RELAY
COMPRESSOR OVERLOAD (FOR 404A SYSTEM)	COND-UNIT-F-404-OVERLOAD
COMPRESSOR START CAPACITOR (FOR 404A SYSTEM)	COND-UNIT-F-404-ST-CAPAC
DEFROST ELEMENT (FOR EVAP TL12AG)	EVAP TL12AG HEATER
DEFROST ELEMENT (FOR EVAP KMK23AG)	EL500-115V-SEALED END

CLEANING

Keep your cabinet clean by simply wiping the interior and exterior, as needed, with a damp cloth or sponge and a mild soapy solution. **NEVER USE ABRASIVES, ACIDS, OR STRONG CLEANERS.** Do not flood or allow electrical parts to become wet. The interior tray slide assemblies and humidifier pans are removable for easy cleaning. A stainless steel cleaner/polish is recommended for the exterior to maintain a "like-new" appearance.

DO NOT USE WAX OR STRONG CLEANERS ON DOOR GASKETS OR VINYL TRIM.

FOOD SENTRY CONTROLS

The control panel, recessed at the top of the unit above the door, is equipped with an adjustable thermostat for temperature selection, a digital thermometer to show the actual internal temperature of the cabinet, ON/OFF switch, a red power indicating light to tell you when the cabinet is on, and an indicating light which illuminates when the compressor or heating element is activated and cycling.

Recall Temp Set Point -
Unit may display either *"Actual Internal Cabinet"* actual temperature, or desired *"Set Point"* temperature.

Actual: The factory default setting shows the actual internal cabinet temperature and acts as a digital thermometer. A momentary touch of the *"Temp Recall"* key will recall the original dial setting. The display will then automatically return to the actual internal temperature.

Set Point: To have temperature read-out display the *"Set Point"* temperature, press and hold the *"Temp"* key for five (5) seconds. The fourth (4th) digit on the display will flash either *"S"* (Set), or *"A"* (Actual) to indicate which mode is active. To switch back again, repeat this step holding the *"Recall Temp Set"* key for five (5) seconds.

CLEANING THE CONDENSER FOR BEST PERFORMANCE

WARNING: RISK OF ELECTRICAL SHOCK. DISCONNECT ELECTRICAL POWER SUPPLY BEFORE CLEANING ANY PARTS OF THE UNIT OR PRIOR TO ANY SERVICE.

CLEANING THE CONDENSER:

The most important thing you can do to insure a long, reliable service life for your FWE Cold / Freeze Convertible is to ***regularly clean the refrigerator condenser (compressor) coil.*** The condensing unit requires regularly scheduled cleaning to keep the finned condenser clean of lint and dust accumulation. Keeping the condenser clean allows the cabinet to operate efficiently, use less energy, and achieve top performance values.

To clean the condenser, first disconnect electrical power to the cabinet and remove the front and/or rear louver assembly. To remove this, remove the screws located on louver assembly. Once the screws are removed, the panel can be removed allowing full access to the front facing condenser. Vacuum any dirt, lint, or dust from the finned condenser coil, the compressor and other cooling system parts. If significant dirt is clogging the condenser fins*, use brush or compressed air to blow this clear.

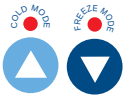
NOTE: Care should be taken not to bend any of the condenser fins, as this will reduce performance and compressor life. Replace louver assembly and screws which hold it in place.

GENERAL OPERATING INSTRUCTIONS

OPERATING THE CABINET

1) PLUG CABINET INTO A PROPERLY GROUNDED POWER RECEPTACLE. Press ON/OFF Icon to “ON” position. The red indicating light will come on and remain on until power button is pressed to “OFF”, or the unit is unplugged.

2) SELECT MODE: PRESS AND HOLD 5 seconds the desired mode button. Indicator light will confirm selected mode.



REFRIGERATOR MODE:
Temperature Range: 33°F to 40°F (1°C to 4°C)
FREEZER MODE:
Temperature Range: 5°F to 32°F (-15°C to 0°C)

3) SELECT A TEMPERATURE SETTING.

Pre-Set at 35°F **for REFRIGERATOR:**
Temperature Range: 33°F to 41°F (1°C to 5°C)
Pre-Set at 15°F **for FREEZER:**
Temperature Range: 5°F to 32°F (-15°C to 0°C)

Press ▲ to raise the temperature of the cabinet and scroll to desired temperature. **Press** ▼ to lower the temperature of the cabinet and scroll to desired temperature.

4) PRE-CONDITION CABINET FOR 30-60 MINUTES.
Your cabinet should be pre-cooled 30-60 minutes before loading at your desired set temperature.

AVOID PUTTING HOT FOODS INTO A COLD CABINET!

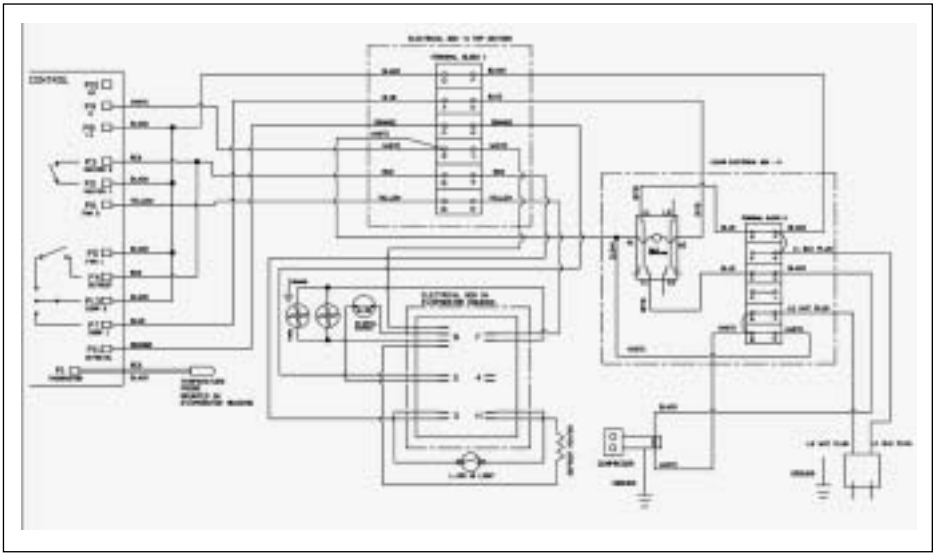
5) LOADING THE CABINET - During the loading procedure, keep the doors closed as much as possible. After loading is completed, do not open doors again until you are ready to serve.

6) TRANSPORTING FOODS - Your cabinet is equipped with a positive transportation latch to assure safety during transportation. After loading the cabinet, keep it plugged in with the door closed and wait 15 - 20 minutes before moving it, to allow it to reach maximum holding temperature. Then wheel to serving area, and plug the cabinet into an electrical outlet at the serving location (if available), so that the compressor will re-activate and automatically hold at the pre-selected temperature.

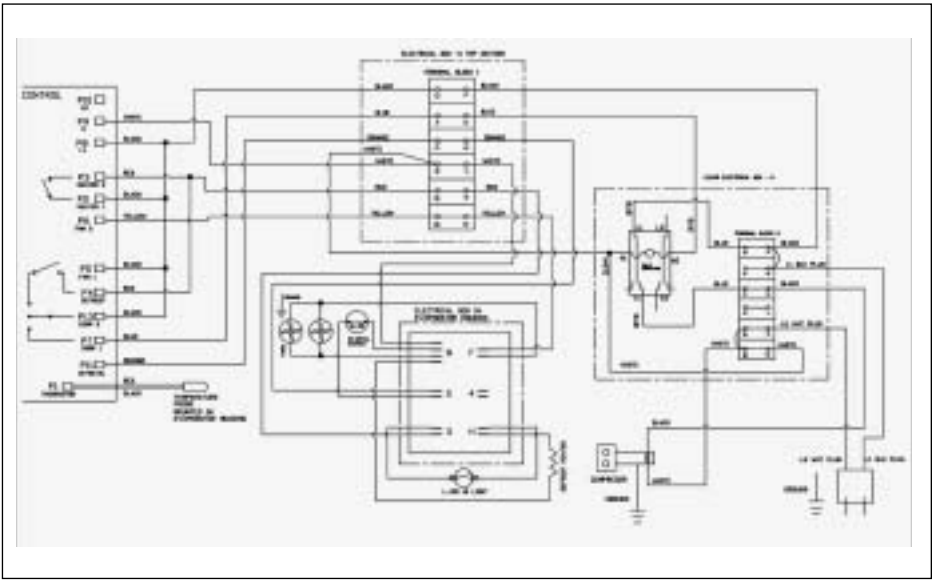
FWE MOBILE COLD / FREEZE CONVERTIBLE SERIES

WIRING DIAGRAM

115v /120v Models
RF-30, SRF-30, URFS-10



115v /120v Models
RF-60, SRF-60, URFS-14, URFS-20



TROUBLE-SHOOTING CHART

Check this list first before you call for service...

PROBLEM	REMEDY
Control panel will not light up.	Cabinet not plugged into outlet or check fuse to power outlet. Plug cabinet into properly grounded electrical outlet. **Press "ON" button.**
Cabinet will not reach desired temperature.	Opening door unnecessarily. Keep door closed and latched shut after loading. Set temperature to **Display to °Celsius or °Fahrenheit Scale:**
	You may change the Digital thermometer scale to either °C or °F as follows: While unit is OFF, press and hold the *"ON/OFF" button* for five (5) seconds. The display will then switch from *"dgF" to "dgC"*. Repeat to change scale again.
Display reads *"dgF"*	Temperature is set to **°Fahrenheit Scale**
Display reads *"dgC"*	Temperature is set to **°Celsius Scale**

Activated red light indicates DEFROST mode is in progress.

DEFROST CYCLE - "ON DEMAND" DEFROST
Press to ACTIVATE DEFROST at any time.
Press to CANCEL DEFROST in progress (Defrost Override).

It is possible that the unit will self-initiate a defrost if excessive ice is on coil. NOTE: If the coil is not defrosted, temperatures will rise and reduced performance will be noticeable. If the unit is in a defrost cycle, it can be cancelled by pushing the defrost button. This will force the unit out of the defrost cycle. The unit will await 30 to 60 seconds at the end of a defrost before the compressor and or the fans will return to normal operation, achieving the best restart performance and cooling temperatures. In addition to a self-initiated defrost, the unit is supplied with a forced "on demand" defrost cycle. It is located on the front control, and by depressing the switch, the unit will be forced into a self-defrost (maximum of 20 minutes). During a defrost cycle, the indicator light will illuminate above the switch and the controller display will show "Def" and momentarily disable the compressor, the coil and the fans. Defrost feature allows proper defrosting of the accumulated condensation and ice build-up on the coil. As with the self-initiated defrost, if the unit is in a defrost cycle, it can be cancelled by pressing the defrost button. Wait approximately 60 seconds for defrost to end. During the defrost cycle or the "Off Cycle" of the compressor, the evaporator coil will defrost. The condensation from the evaporator coil flows from the top of the unit down a drain in the back to a condensate pan. Vapor escapes through the back grill. **The vapor can sometimes be visible** and should be considered a normal operating condition. Proper attention should be given to defrosting your unit. Every "event" or time the unit is used with the door open, the coil will build-up ice, reducing the effectiveness of the overall operation of the unit.

If the temperature zone is too high and cabinet will not chill to desired temperature:
1) The evaporator coil needs defrosting. Press the "ON DEMAND DEFROST" button on the control panel. Unit will defrost in approximately 20 minutes. Display will show "Def". The unit will automatically return to normal operation after a defrost cycle, having a transition time of 60 seconds.**Certain conditions may require 3 repeated sequential defrosts.**
2) Dirt, lint, and/or dust are on the condenser (compressor) coil. To clean the condenser, first disconnect electrical power to the cabinet and remove the screws on the front and/or rear louver assembly. Removed louvered panel allowing full access to the front facing condenser. Vacuum any dirt, lint, and/or dust from the finned condenser coil, the compressor and other cooling system parts. If significant dirt is clogging the condenser fins, use brush or compressed air to blow this clear. **NOTE: Care should be taken not to bend any of the condenser fins, as this will reduce performance and compressor life.** Replace louver assembly and screws which hold it in place.

FWE MOBILE COLD / FREEZE CONVERTIBLE SERIES

LIMITED TWO YEAR WARRANTY

FWE / Food Warming Equipment Company, Inc. (Seller) warrants to the original purchaser, subject to the exceptions and conditions below, that FWE manufactured equipment shall be free from defects in material or factory workmanship, under ordinary use for the purpose for which it is designed. The effective warranty period is as follows:

PARTS: Seller will furnish without charge to the original purchaser, FOB Sellers' factory, replacement parts for repairs to all new standard catalog products and factory custom / modified units, which in Seller's sole judgement, prove defective in materials or workmanship under normal and proper use with the reserved right to request the return of any part claimed to be defective, prior to issuing replacement part or authorizing warranty service, for a period of two (2) years from date of original shipment from Seller's plant, *except for equipment used in a **Correctional Environment / Facilities**, which is warranted for a period of one (1) year from date of original shipment from Seller's plant.*

LABOR: Seller's labor warranty shall be performed by a Seller-approved Service Agency who must contact Seller to obtain a Warranty Service Authorization (WSA) number prior to performing any repairs. If service is required during overtime periods, the difference between overtime and standard labor rates shall be paid by the purchaser. Seller does not assume any responsibility for any charges not expressly authorized, incidental to the repair or replacement of equipment covered by this warranty, nor charges exceeding, in Sellers sole judgement, normal and customary amounts. Only approved travel charges will be allowed. Seller's labor warranty shall be from the date of original shipment date from Seller's plant for a period of one (1) year, *except for equipment used in a **Correctional Environment / Facilities** which is warranted for a period of six (6) months.*

This warranty is for normal usage and does not apply to any product or parts thereof that have been misused, altered, or where Seller's operating instructions or specific voltage is not observed; nor shall this warranty apply to defective products or parts resulting from accident following date of original shipment, nor extend to or cover removal, installation, reinstallation or calibration, or service calls or cost of repairs undertaken by a customer. This warranty is also subject to the following:

1.] Customer returning the warranty registration card, accompanying Sellers original shipment, to Seller within thirty (30) days of receipt;

2.] Giving immediate notice of any allegedly defective part or product to Seller; and

3.] Customer, at Sellers request, returning said defective parts or product to Seller.

This is the sole warranty applicable to the merchandise. It is expressly understood that Seller's liability hereunder is limited to the repair or replacement, at Seller's option, of products or parts, defective materials or workmanship as provided above. Seller's judgement as to the cause and nature of any defect will be final.Seller shall in no case be responsible for special or consequential damages or any other obligation or liability with respect to products sold by Seller.

This warranty, as stated above, applies to equipment installed in the Continental United States. FWE equipment installed outside the Continental United States shall carry parts coverage only. All labor costs are approved on a discretionary basis, based on like repairs in the Continental U.S. This warranty shall stand in whole or in part as allowed by law. Any exclusion of a part of this warranty, as may be allowed by law, shall not void balance of warranty.

This is a limited warranty pursuant to the Consumer Product Warranties Act, 15 U.S. Code. section 2303.
© 2004 Food Warming Equipment Co., Inc.

FWE MOBILE COLD / FREEZE CONVERTIBLE SERIES

SERVICE RECORD

Model Number _____

Serial Number _____

Date of Purchase _____

Notes:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

WE OFFER SALES AND SERVICE WORLDWIDE
Food Warming Equipment Company, Inc.
P.O. Box 1001
Crystal Lake, IL 60039-1001

FWE
Parts Department:
815 459 7500

Errors subject to correction. All specifications subject to change without notice.
© 08 Food Warming Equipment Company. Inc.

FAX:
815 459 7989

© 2008 Food Warming Equipment Co., Inc.