

# Fry Warmer

MODEL KFW, KFW-21  
Service Manual



*Fresh ideas in foodservice equipment*

## BKI LIMITED WARRANTY

2812 Grandview Dr. • Simpsonville, SC 29680 • USA  
(864) 963-3471 • Toll Free: (800) 927-6887 • Fax: (864) 963-5316

|                   |   |
|-------------------|---|
| WHAT IS COVERED   | <p>This warranty covers defects in material and workmanship under normal use, and applies only to the original purchaser providing that:</p> <ul style="list-style-type: none"><li>☐ The equipment has not been accidentally or intentionally damaged, altered or misused;</li><li>☐ The equipment is properly installed, adjusted, operated and maintained in accordance with national and local codes, and in accordance with the installation and operating instructions provided with this product.</li><li>☐ The serial number rating plate affixed to the equipment has not been defaced or removed.</li></ul>  |
| WHO IS COVERED    | <p>This warranty is extended to the original purchaser and applies only to equipment purchased for use in the U.S.A.</p>  |
| COVERAGE PERIOD   | <ul style="list-style-type: none"><li>☐ Warranty claims must be received in writing by BKI within one (1) year from date of installation or within one (1) year and three (3) months from data of shipment from the factory, whichever comes first.</li><li>☐ COB Models: One (1) Year limited parts and labor.</li><li>☐ COM Models: Two (2) Year limited parts and labor. COM convection ovens also have a two (2) year door warranty.</li><li>☐ CO1 Models: Two (2) Year limited parts and labor. Five (5) Year limited door warranty.</li><li>☐ BevLes Products: Two (2) Year limited parts and labor.</li><li>☐ Warranty period begins the date of dealer invoice to customer or ninety (90) days after shipment date from BKI, whichever comes first.</li></ul>   |
| WARRANTY COVERAGE | <p>This warranty covers on-site labor, parts and reasonable travel time and travel expenses of the authorized service representative up to (100) miles round trip and (2) hours travel time and performed during regular, weekday business hours.</p>   |
| EXCEPTIONS        | <p>Any exceptions must be pre-approved in advance and in writing by BKI. The extended door warranty on convection ovens years 3 through 5 is a parts only warranty and does not include labor, travel, mileage or any other charges.</p>  |
| EXCLUSIONS        | <ul style="list-style-type: none"><li>☐ Negligence or acts of God,</li><li>☐ Thermostat calibrations after (30) days from equipment installation date,</li><li>☐ Air and gas adjustments,</li><li>☐ Light bulbs,</li><li>☐ Glass doors and door adjustments,</li><li>☐ Fuses,</li><li>☐ Adjustments to burner flames and cleaning of pilot burners,</li><li>☐ Tightening of screws or fasteners,</li><li>☐ Failures caused by erratic voltages or gas suppliers,</li><li>☐ Unauthorized repair by anyone other than a BKI Factory Authorized Service Center,</li><li>☐ Damage in shipment,</li><li>☐ Alteration, misuse or improper installation,</li><li>☐ Thermostats and safety valves with broken capillary tubes,</li><li>☐ Freight - other than normal UPS charges,</li><li>☐ Ordinary wear and tear,</li><li>☐ Failure to follow installation and/or operating instructions,</li><li>☐ Events beyond control of the company.</li></ul> |
| INSTALLATION      | <p>Leveling, as well as proper installation and check out of all new equipment - per appropriate installation and use materials - is the responsibility of the dealer or installer, not the manufacturer.</p>   |
| REPLACEMENT PARTS | <p>BKI genuine Factory OEM parts receive a (90) day materials warranty effective from the date of installation by a BKI Factory Authorized Service</p>  |

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## Introduction

Congratulations! You have chosen a **Fry Warmer** that will give you many years of fine service from the original manufacturer, **BKI**.

The **BKI** name and trademark on this unit assures you of the finest in design and engineering — that it has been built with care and dedication — using the best materials available. Attention to the operating instructions regarding proper installation, operation, and maintenance will result in long lasting dependability to insure the highest profitable return on your investment.

### NOTICE

PLEASE READ THIS ENTIRE MANUAL BEFORE OPERATING THE UNIT. If you have any questions, please contact your **BKI** Distributor. If they are unable to answer your questions, contact the **BKI** Technical Service Department, toll free: 1-800-927-6887. Outside the U.S., call 1-864-963-3471.

### Safety Precautions

Always follow recommended safety precautions listed in this manual. Below is the safety alert symbol. When you see this symbol on your equipment, be alert to the potential for personal injury or property damage.



### Safety Signs and Messages

The following Safety signs and messages are placed in this manual to provide instructions and identify specific areas where potential hazards exist and special precautions should be taken. Know and understand the meaning of these instructions, signs, and messages. Damage to the equipment, death or serious injury to you or other persons may result if these messages are not followed.

#### **⚠ DANGER**

This message indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.

#### **⚠ WARNING**

This message indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.

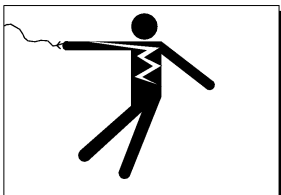
#### **⚠ CAUTION**

This message indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

### NOTICE

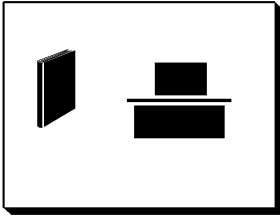
This message is used when special information, instructions or identification are required relating to procedures, equipment, tools, capacities and other special data.

### Safe Work Practices



#### **Beware of High Voltage**

This equipment uses high voltage. Serious injury can occur if you or any untrained or unauthorized person installs, services, or repairs this equipment. Always Use an Authorized Service agent to Service Your Equipment.



### Keep this manual with the Equipment

This manual is an important part of your equipment. Always keep it near for easy access. If you need to replace this manual, contact:

#### **BKI**

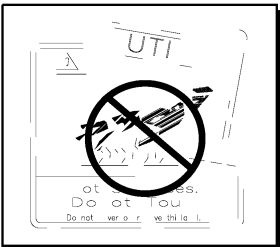
Technical Services Department  
2812 Grandview Drive  
Simpsonville, S.C. 29680  
Or call toll free: 1-800-927-6887  
Outside the U.S., call 864-963-3471



### Protect Children

Keep children away from this equipment. Children may not understand that this equipment is dangerous for them and others.

NEVER allow children to play near or operate your equipment.

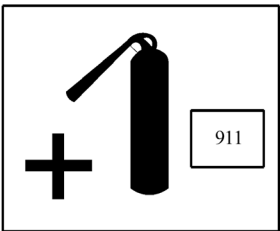


### Keep Safety Labels Clean and in Good Condition

Do not remove or cover any safety labels on your equipment. Keep all safety labels clean and in good condition. Replace any damaged or missing safety labels. Refer to the Safety Labels section for illustration and location of safety labels on this unit. If you need a new safety label, obtain the number of the specific label illustrated on page **Error! Bookmark not defined.**, then contact:

#### **BKI**

Technical Services Department  
2812 Grandview Drive  
Simpsonville, S.C. 29680  
Or call toll free: 1-800-927-6887  
Outside the U.S., call 864-963-3471

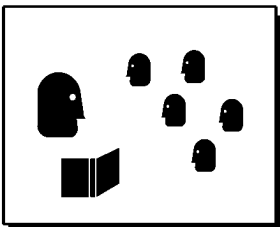


### Be Prepared for Emergencies

Be prepared for fires, injuries, or other emergencies.

Keep a first aid kit and a fire extinguisher near the equipment. You must use a 40-pound Type BC fire extinguisher and keep it within 25 feet of your equipment.

Keep emergency numbers for doctors, ambulance services, hospitals, and the fire department near your telephone.



### Know your responsibilities as an Employer

- Make certain your employees know how to operate the equipment.
- Make certain your employees are aware of the safety precautions on the equipment and in this manual.
- Make certain that you have thoroughly trained your employees about operating the equipment safely.
- Make certain the equipment is in proper working condition. If you make unauthorized modifications to the equipment, you will reduce the function and safety of the equipment.

## Installation

### **⚠ WARNING**

Serious injury, equipment damage or death could result if attempting to install this unit yourself. Ensure that an authorized BKI service agent install the oven.

### **Instructions For Shipping Damage**

You are responsible for filing all freight claims with the delivering truck line. Inspect all cartons and crates for damage when they arrive. If there is damage noted to shipping crates or cartons, or, if a shortage is found, note this on the bill of lading (all copies) before signing.

If damage is detected when the equipment is uncrated, immediately call the delivering truck line and follow up the call with a written report indicating concealed damage to your equipment. Ask for an immediate inspection of your concealed damage item. Crating material **MUST** be retained to show the inspector from the truck line.

### **Electrical Information And Grounding**

### **⚠ WARNING**

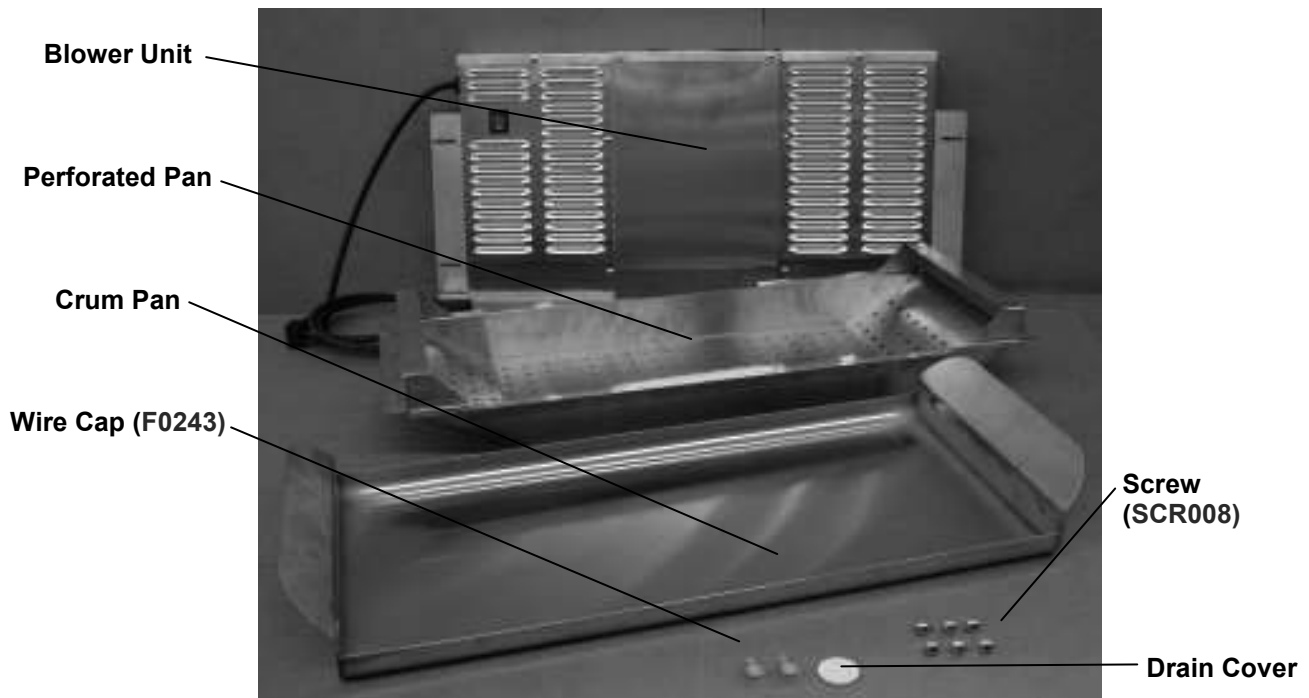
Electrocution, equipment failure or property damage could result if an unlicensed electrician performs the electrical installation. Ensure that a licensed electrician perform the electrical installation in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI NFPA 70-20XX.

KFW's are wired for use in accordance with all applicable local, state, and federal codes. For specific electrical requirements and connections refer to the wiring diagram attached to the unit.

### **Installation Instructions**

#### **KFW**

This section provides procedures on how to install a KFW Fry Warmer into a KFC® K46HS Heated Storage Table Hot Well (12" x 27"). Refer to the picture below for identification of specific parts to be used during installation.



Below is a list of tools and material that will be used during installation:

- DOW CORNING RTV sealant 732
- Handheld Drill (12 VDC)
- 9/64" drill bit (for metal)



High Voltage. Remove power from the KFC® K46HS Heated Storage Table. This unit may have more than one disconnect switch. Failure to do this will result in death or serious injury.

1. DISCONNECT POWER TO THE TABLE.
2. Remove screws holding control panel into place. Carefully pull the control panel away from the unit to obtain access to the wiring.



3. Depending on whether the Right Side well or the Left Side well is to be disabled, remove the power wires from the back of the power switch for that well. This would be wires #1 and #2 for the Left Side or wires #5 and #6 for the Right Side. Using the male connectors provided (F0243), cap these wires individually creating a dead end on each wire.



4. Replace control panel into unit and install screws.
5. Restore power to the table.
6. Remove the strainer from the drain in which the KFW will be mounted.



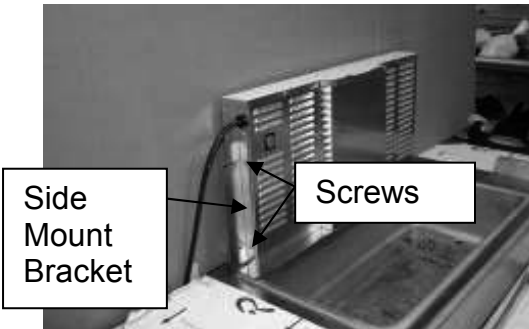
7. Liberally place silicone sealant (recommend DOW CORNING RTV sealant 732) around the edge of the drain.



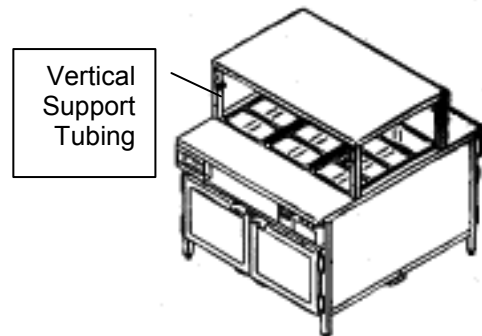
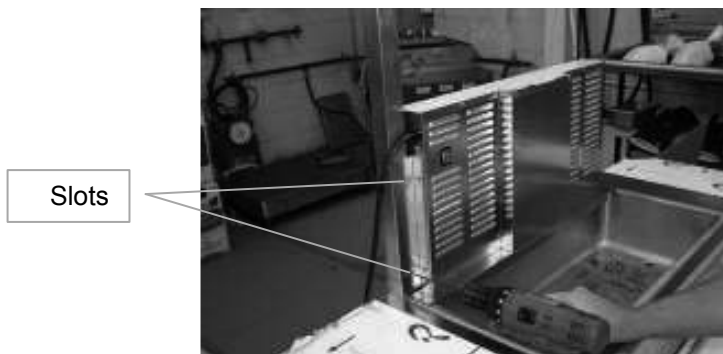
8. Press Drain Cover onto sealant firmly. Then clean any excess sealant from around the Drain Cover. Allow sufficient time to cure (at least 12 hours).



9. Loosen side mount bracket screws on each side of the blower unit. Place the blower unit in the well making sure to slide it flush against the wall of the well.

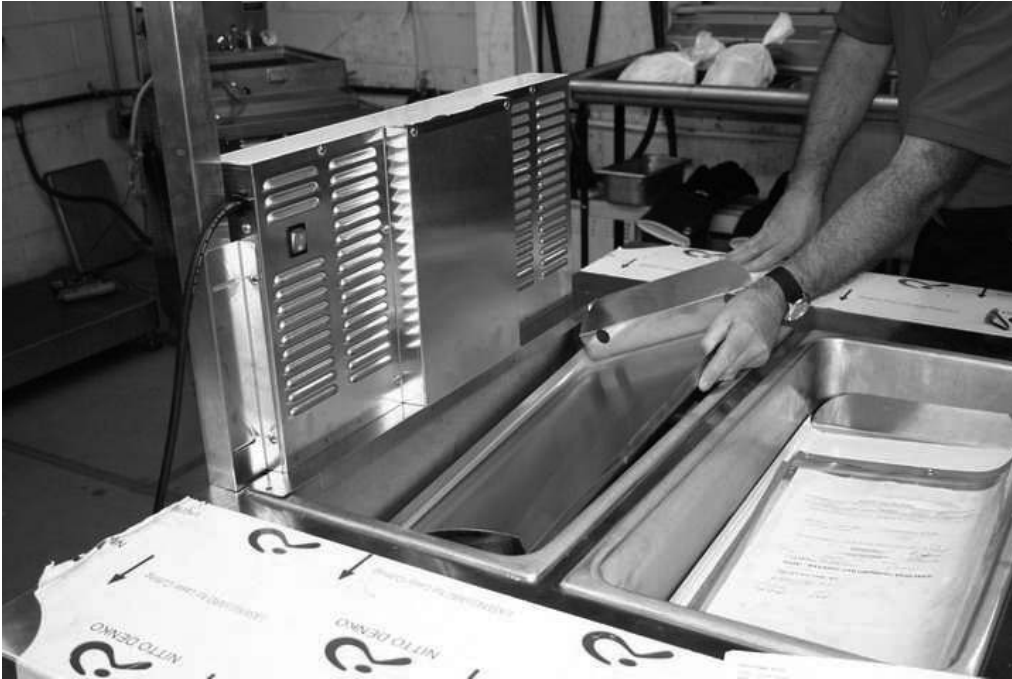


10. Hold the side mount bracket firmly against the Vertical Support Tubing and mark the holes in the center of each slot to be drilled with a 9/64" bit. Once drilled, insert and tighten screws provided (SCR008).

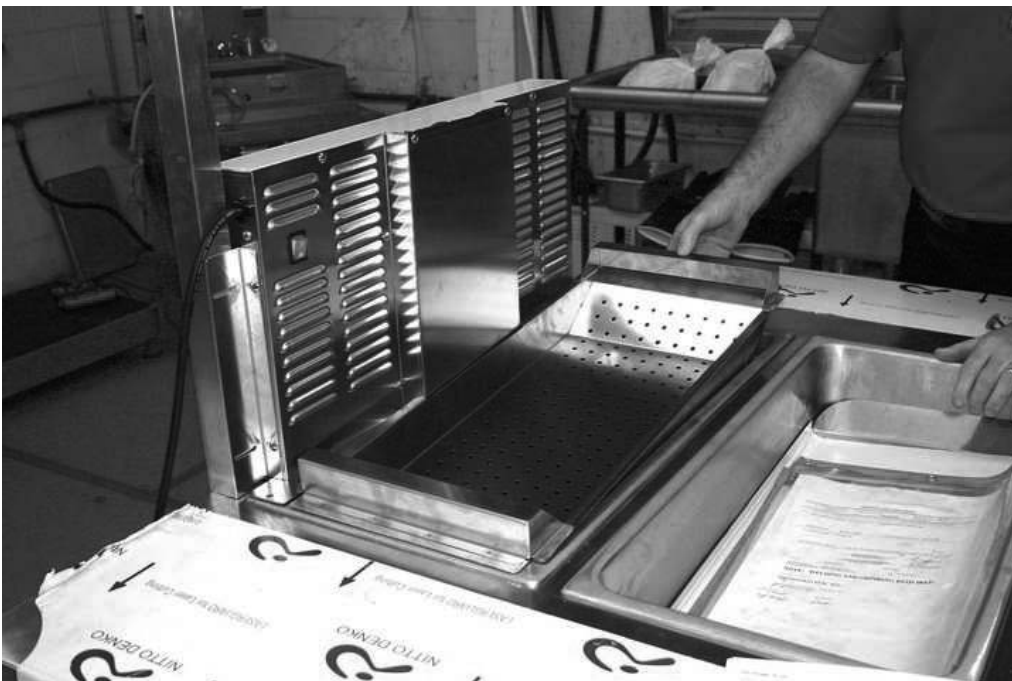




11. Place Crumb Pan into bottom of well.



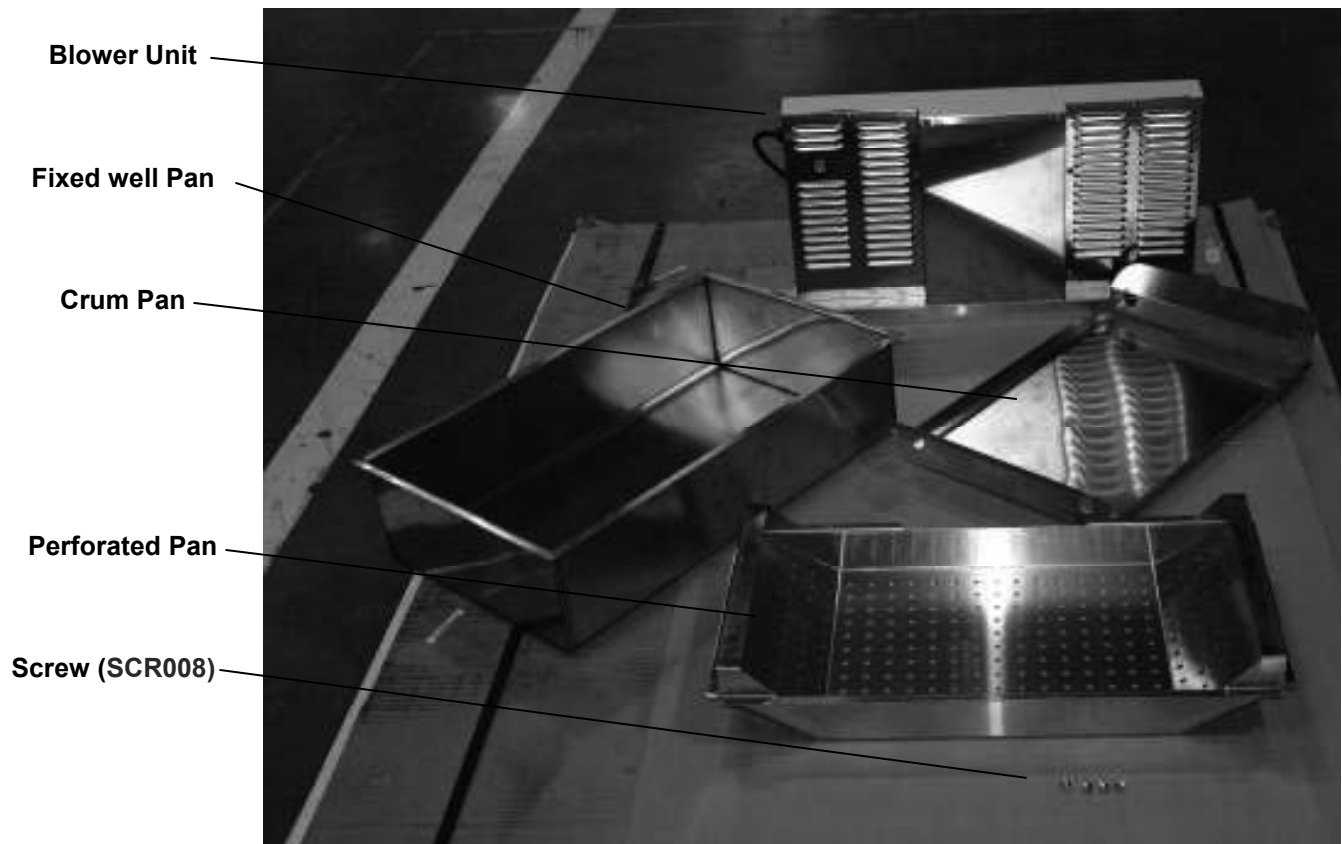
12. Place Perforated Pan into well.



13. Plug electrical cord into power receptacle of the table.

**KFW-21**

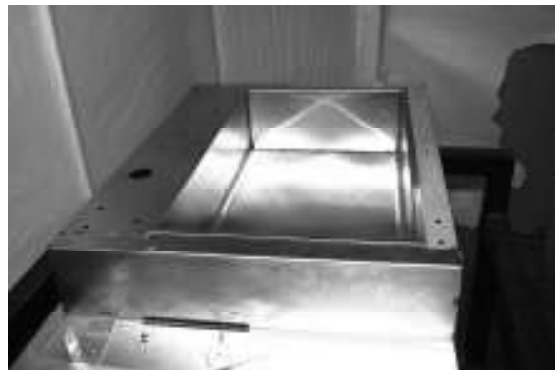
This section provides procedures on how to install a KFW-21 Fry Warmer into a KFC® FRY-21 Table. Refer to the picture below for identification of specific parts to be used during installation.



Below is a list of tools that will be used during installation:

- Handheld Drill (12 VDC)
- 9/64" drill bit (for metal)

1. Place the Fixed Well Pan into bottom of well.



2. Place the blower unit in the well making sure to slide it flush against the wall of the well.



3. Mark the holes in the center of each slot as shown below.



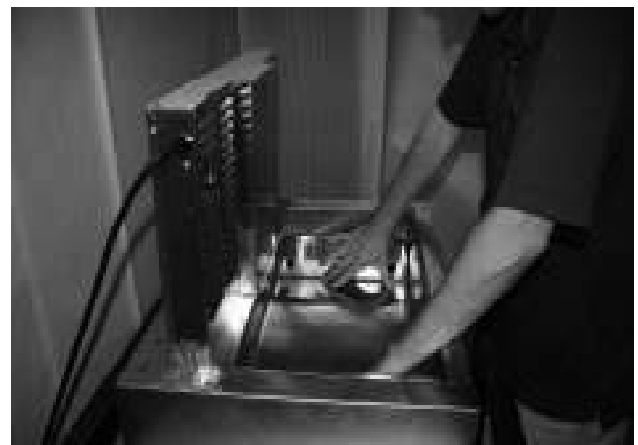
4. Drill holes with a 9/64" bit.



5. Insert and tighten screws provided (SCR008).



6. Place Crumb Pan into well.



7. Place Perforated Pan into well.



8. Plug electrical cord into power receptacle of the table.

## Operation

### ***Unit Startup and Preheating***

1. Turn on power to the unit.
2. Allow the equipment to preheat for ten (10) minutes before loading it with product.

### ***Operational Guidelines***

- Foods should be a minimum of 195° F. before being placed in the warmer.
- Foods loaded in first should be served first as much as is practical.
- Check Federal and State Health and Sanitation Regulations for internal temperature required for holding cooked foods for sale. Maintaining these temperatures often tends to continue to cook certain products. Therefore, smaller amounts of bulk foods should be displayed at non-peak periods and the warmer refilled as needed.

### **NOTICE**

This equipment is designed to hold foods for a short period of time only.

### ***Unit Shutdown***

1. Remove all food from the equipment.
2. Turn off power to the unit.
3. Allow the equipment to cool to room temperature.
4. Remove any residue and clean the equipment thoroughly.

---

## Maintenance

**⚠ CAUTION**

Failure to comply with the maintenance below could result in a serious accident.

**⚠ WARNING**

Electrocution, equipment failure or property damage could result if an unlicensed electrician performs electrical repair. Ensure that a licensed electrician perform electrical repair.

### ***Scheduled Maintenance***

#### **Cleaning**

This unit should be cleaned at the end of each working day. Use the following procedure:

**⚠ DANGER**

Failure to remove power from this unit may cause severe electrical shock. This unit may have more than one disconnect switch.

**⚠ CAUTION**

Never use abrasive cleaners that may damage the finish.

Never steam clean the interior.

Avoid getting excess water in the interior of the unit.

Do not clean the heater/blower assembly by applying compressed air.

Do not leave this unit on and unattended after business hours.

1. Turn the unit off and allow it to cool down to room temperature.
2. Remove any food.
3. Remove the perforated pan and crumb pan and clean around the slotted holes at the air discharge. Clean the perforated pan and crumb pan.
4. Clean the air intakes (louvers) using a mild soap and water solution.
5. Sponge the inside and outside of the unit with a mild soap and water solution, being sure to clean all areas. Avoid getting water in the interior of the unit.
6. Wipe the parts and unit dry with a soft, clean cloth and replace the pans.

## Troubleshooting

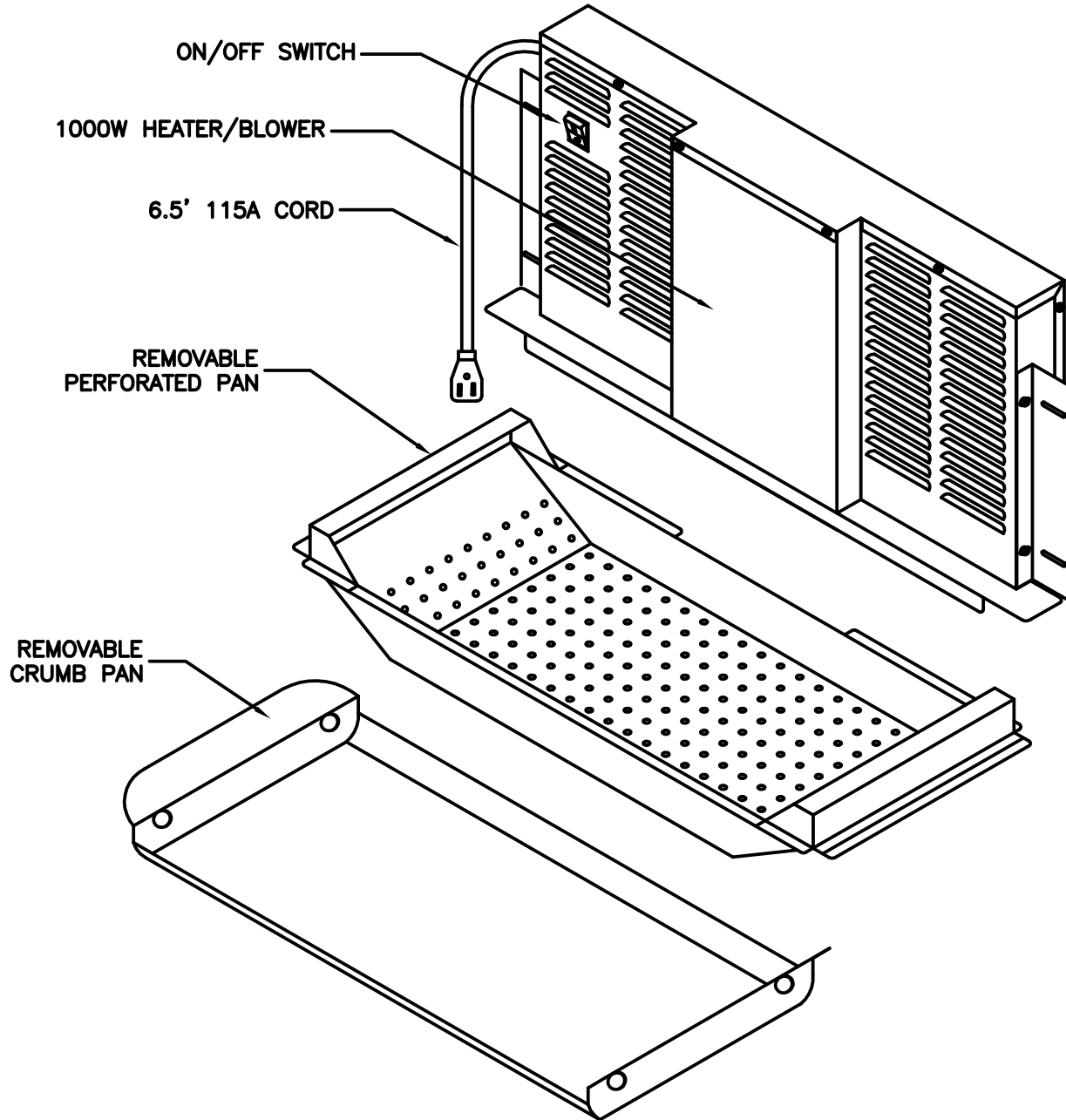
Refer to the table below for troubleshooting information.

| <b>Problem</b>                       | <b>Cause</b>                                   | <b>Possible Solution</b>  |
|--------------------------------------|--|---|
| <b>Noisy fan</b>                     | Fan blade is dirty or fan bearings are failing | Contact an authorized BKI service agent for corrective action.  |
| <b>Perforated pan is not heating</b> | No power to unit.                              | Make sure that the circuit breaker and switch at the power supply are supplying power to the unit. If problem persists, contact licensed electrician.                     |
|                                      | Fan has overheated and cut off                 | Wipe the dust from the air intake louvers to allow proper airflow and prevent fan overheating. Turn the power switch off. Wait 60 seconds. Turn the power switch back on. |
|                                      | Heating coil has failed                        | Contact an authorized BKI service agent for corrective action.  |

## Replacement Parts

Use the information in this section to identify replacement parts. To order replacement parts, call your local BKI sales and service representative. Before calling, please note the serial number on the rating tag affixed to the unit.

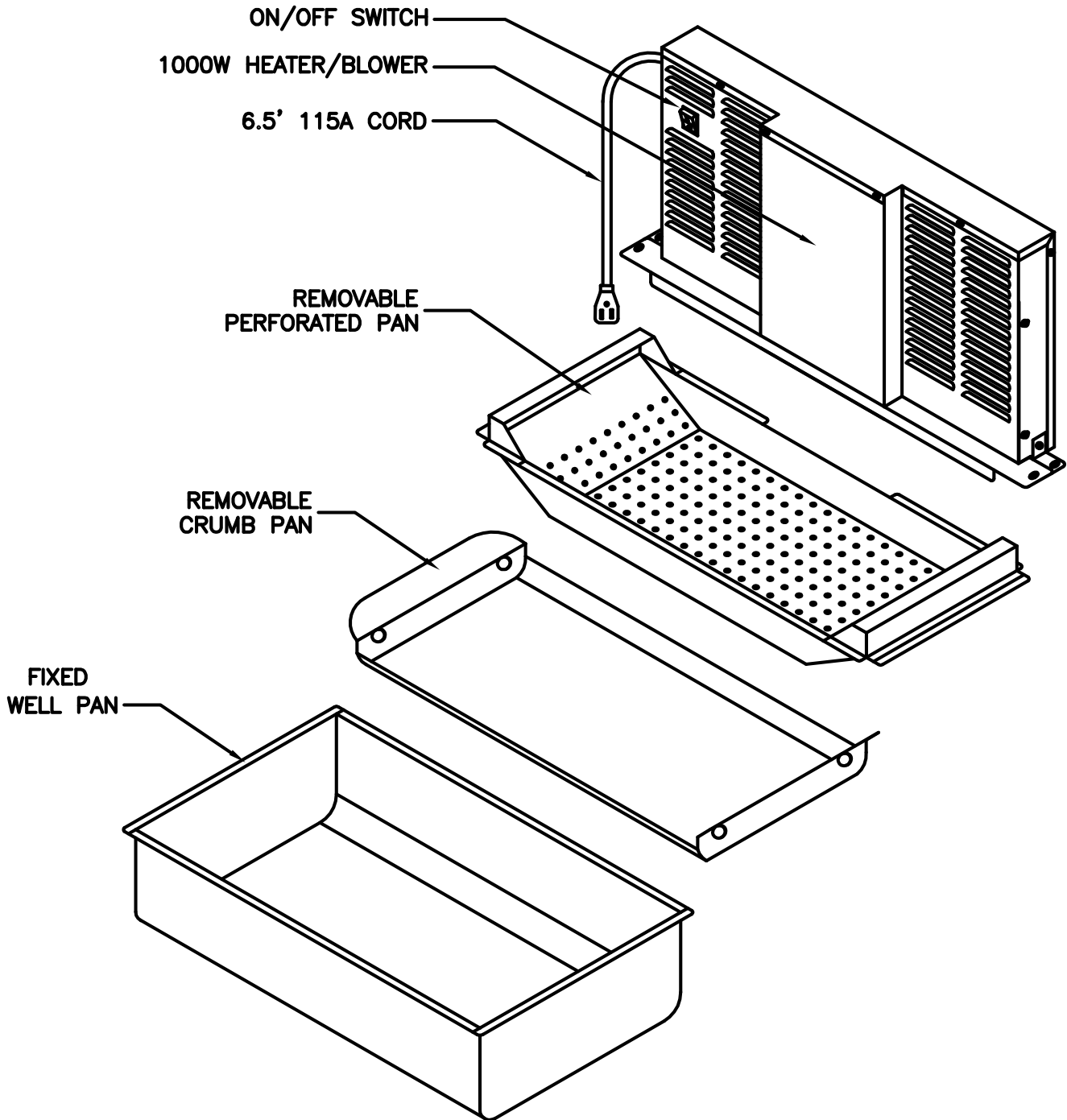
### KFW



| PART #     | QTY | DESCRIPTION                    |
|------------|-----|--------------------------------|
| S0356      | 1   | SWITCH, ROCKER 16A 250V        |
| C0340      | 1   | 1000W HEATER                   |
| M0093      | 1   | MOTOR BLOWER ASSY 120V         |
| CS0005     | 1   | CORD SET, 12/3 SJTO 8' 30"LEAD |
| WB31221100 | 1   | PERFORATED PAN                 |
| WB31222200 | 1   | CRUMB PAN                      |

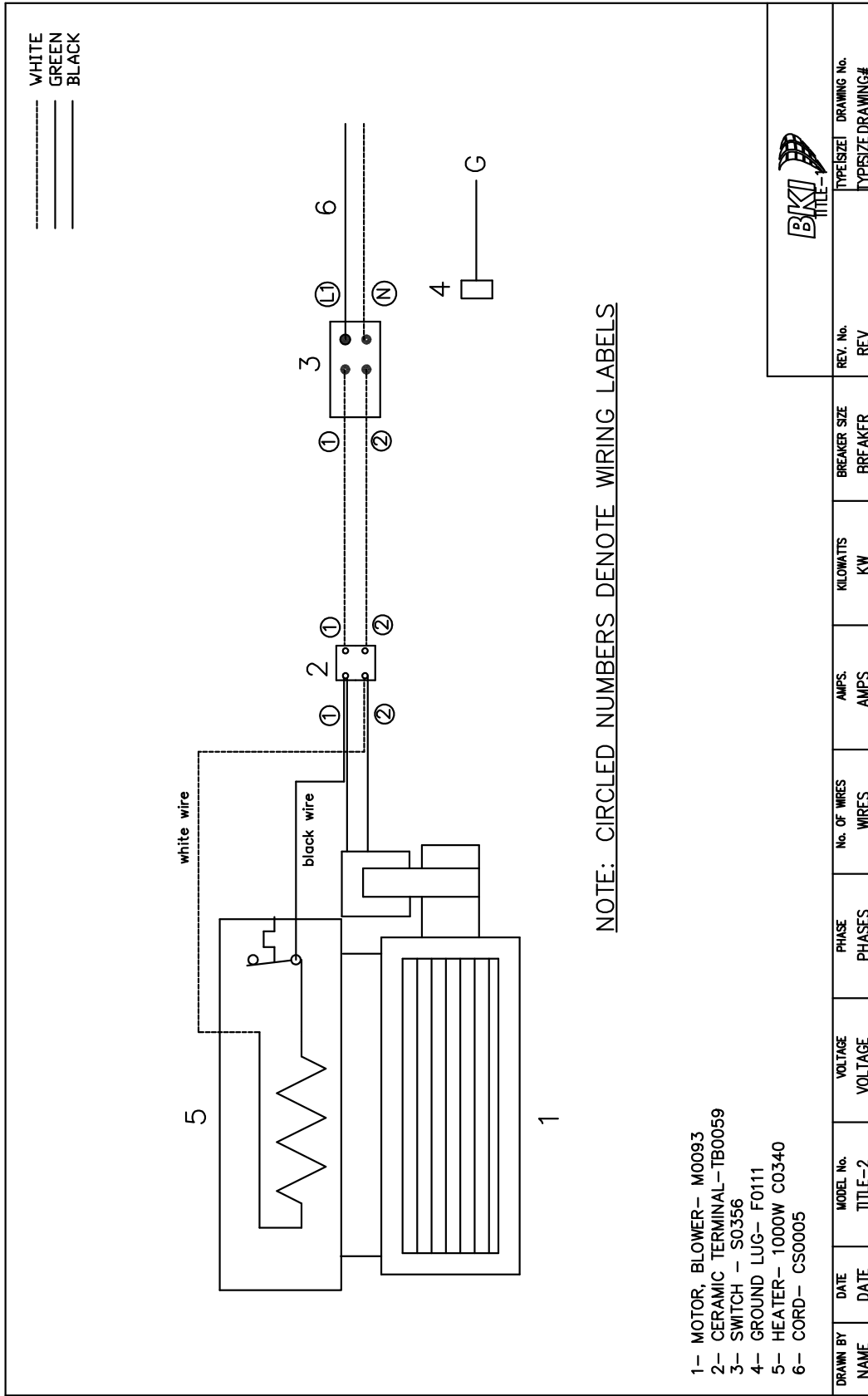


**KFW-21**



| PART #     | QTY | DESCRIPTION                    |
|------------|-----|--------------------------------|
| S0356      | 1   | SWITCH, ROCKER 16A 250V        |
| C0340      | 1   | 1000W HEATER                   |
| M0093      | 1   | MOTOR BLOWER ASSY 120V         |
| CS0005     | 1   | CORD SET, 12/3 SJTO 8' 30"LEAD |
| WB31222800 | 1   | PERFORATED PAN                 |
| WB31222100 | 1   | CRUMB PAN                      |
| WB31222300 | 1   | FIXED WELL PAN                 |

# Wiring Diagrams



- 1- MOTOR, BLOWER- M0093
- 2- CERAMIC TERMINAL- TB0059
- 3- SWITCH - S0356
- 4- GROUND LUG- F0111
- 5- HEATER- 1000W C0340
- 6- CORD- CS0005

# Notes



2812 Grandview Dr., Simpsonville, S.C. 29680, USA  
<http://www.bkideas.com>

Made and printed in the U.S.A  
LI0311/1008

CS-TM-036.01

Revised 3/28/13

**Fry Warmer**

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**REVISION HISTORY**

| <b><u>REVISION</u></b> | <b><u>DATE</u></b> | <b><u>REVISED BY</u></b> | <b><u>DESCRIPTION</u></b>                        |
|------------------------|--------------------|--------------------------|--|
| 01                     | 03/28/13           | KW                       | Initial Release-Supersedes all previous releases |