Model JF94E
Owner’s Manual

FOR CE APPROVED AUTOMATIC BROILERS

Revision History:

<table>
<thead>
<tr>
<th>Date</th>
<th>Notes</th>
<th>REV</th>
</tr>
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<tbody>
<tr>
<td>1/13/2010</td>
<td>Released</td>
<td>A</td>
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<tr>
<td>2/4/2010</td>
<td>Wiring Diagram 20110</td>
<td>B</td>
</tr>
<tr>
<td>8/15/2011</td>
<td>Updated wiring diagram to 20110-B, changed control instructions</td>
<td>C</td>
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<tr>
<td>10/25/2011</td>
<td>Added parts location drawings; parts replacement list</td>
<td>D</td>
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<tr>
<td>11/2/2011</td>
<td>Updated parts location drawings</td>
<td>E</td>
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<tr>
<td>12/20/2011</td>
<td>Updated wiring diagram/parts location drawings</td>
<td>F</td>
</tr>
<tr>
<td>2/9/2012</td>
<td>Updated Wiring diagram</td>
<td>G</td>
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</tbody>
</table>
WARNING

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

2. Broiler area must be kept free of combustible materials, and the flow of combustion and ventilation air must not be obstructed. Operating personnel must not perform any maintenance or repair functions. Contact your Nieco Authorized Dealer.

3. Do not use this appliance in an area where a water jet could be used.

4. Do not clean the appliance with a water jet.

5. If the power supply cord is damaged, it must only be replaced by a repair shop appointed by the manufacturer.

6. A switch with an all-pole disconnection and a contact separation of at least 3mm shall be included in the fixed wiring.

7. It is recommended that walls, etcetera, in the proximity of the appliance be made of non-combustible material, if not, they must be clad with a suitable non-combustible heat-insulating material and that the closest attention be paid to fire-prevention regulations.

8. 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.

IMPORTANT:
RETAIN THIS MANUAL IN A SAFE PLACE FOR FUTURE REFERENCE
INSTALLER NOTES

1. This appliance is rated IP 20, Degree of Protection obtained from Enclosure.

2. Nominal Power Rating: 380-415V 3Ø 25A

<table>
<thead>
<tr>
<th>Model</th>
<th>kW</th>
<th>Electrical Diagram</th>
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</thead>
<tbody>
<tr>
<td>JF94E</td>
<td>19</td>
<td>20110</td>
</tr>
<tr>
<td>Calculated Average Consumption</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

3. This appliance must be installed by a qualified installer, in compliance with all national, local regulations and institutions having jurisdiction.

4. This machine should be connected to the supply with a plug with proper grounding.
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A. GENERAL INFORMATION

A.1 Description

The Nieco Model JF94E automatic broiler features patented Jet-Flow™ air technology which uses waste heat to help broil the product creating large energy savings. The JF94 also has easy cleaning and a simple and intuitive control package to help eliminate broiling problems and provide the operator with even greater control over the broiling environment.

This manual provides the safety, installation and operating procedures for the Nieco Automatic Broiler Model JF94E. We recommend that all information contained in this manual be read prior to installing and operating the broiler.

A.2 Warranty Information

Please read the full text of the limited Warranty in this manual.

If the unit arrives damaged, contact the carrier immediately and file a damage claim with them. Save all packing materials when filing a claim. Freight damage claims are the responsibility of the purchaser and ARE NOT covered under warranty.

The warranty does not extend to:

- Damages caused in shipment or damage as a result of improper use.
- Installation of electrical service.
- Normal maintenance as outlined in this manual.
- Malfunction resulting from improper maintenance not in accordance with the steps contained in this manual and any applicable training.
- Damage caused by abuse or careless handling outside of the normal operating procedures contained in this manual.
- Damage from moisture into electrical components.
- Damage from tampering with or removal of any safety device.

IMPORTANT!
Keep these instructions for future reference. If the unit changes ownership, be sure this manual accompanies the equipment.

IMPORTANT

The Nieco Corporation reserves the right to change specifications and product design in accordance with the general terms and conditions outlined in the BURGER KING®/Vendor agreement. Such revisions do not entitle the buyer to corresponding changes, improvements, additions or replacements for previously purchased equipment.
A.3 Service/Technical Assistance

If you experience any problems with the installation or operation of your broiler, contact your local Authorized Nieco Distributor.

Fill in the information below and have it handy when calling your authorized service agency for assistance. The serial number is on the broiler rating plate on the side of the unit.

- Purchased from: __________________________
- Date of Purchase: _________________________
- Model No.: ______________________________
- Serial No.: ______________________________

For the name of your local Authorized Nieco Distributor, please call (800) 821-2141 (U.S. Only).

Use only genuine Nieco replacement parts in your broiler. Use of replacement parts other than those supplied by Authorized Nieco Distributors and Service Agencies will void the warranty and may significantly alter the performance of your broiler. Nieco and the Burger King Corporation have worked together to create a set of standards for broiler performance, food quality and food safety. The use of non-Nieco parts is capable of affecting these criteria, and may affect broiler performance, parts longevity and food safety. Your local Authorized Nieco Distributor and Service Agent has been factory trained and has a complete supply of parts for your Nieco Automatic Broiler.

You may contact the factory direct at +1-707-284-7100 if you have trouble locating your local Nieco Distributor.

A.4 Important Safety Information

Throughout this manual, you will find the following safety words and symbols that signify important safety issues with regards to operating or maintaining the equipment:

- **WARNING**
  - GENERAL WARNING. Indicates information important to the proper operation of the equipment. Failure to observe may result in damage to the equipment and/or severe bodily injury or death.
  - ELECTRICAL WARNING. Indicates information relating to possible shock hazard. Failure to observe may result in damage to the equipment and/or severe bodily injury or death.

- **CAUTION**
  - GENERAL CAUTION. Indicates information important to the proper operation of the equipment. Failure to observe may result in damage to the equipment.
  - HOT SURFACE WARNING. Indicates information important to the handling of equipment and parts. Failure to observe caution could result in personal injury.
A.4 Important Safety Information (Continued.)

In addition to the warnings and cautions in this manual, use the following guidelines for safe operation of your Nieco Automatic Broiler:

- Read and follow all instructions before using this equipment.
- Install or locate broiler only for its intended use as described in this manual.
- Do not operate this equipment if it has a damaged cord or plug, if it is not working properly or if it has been otherwise damaged.
- This equipment should only be serviced by authorized personnel. Contact your local Nieco Distributor for adjustment or repair.
- Use only genuine Nieco replacement parts for your broiler. Failure to do so will void the warranty and may significantly alter the performance of your broiler. Nieco and the Burger King Corporation have worked together to create a set of standards for broiler performance, food quality and food safety. The use of non-Nieco parts is capable of affecting these criteria, and may affect broiler performance, parts longevity and food safety.

The following warnings and cautions appear throughout the manual and should be carefully observed:

- Turn the broiler off and disconnect the plug before performing any service, maintenance or cleaning on the broiler.
- Always allow the broiler to fully cool before performing any service, maintenance or cleaning. Failure to wait for the broiler to cool fully may result in personal injury.
- The procedures in this manual may include reference to the use of chemical products. The Nieco Corporation does not endorse the use of any particular cleaning/degreasing agent. Use only those chemicals that are approved for use in the BURGER KING® SYSTEM.
- The broiler should be grounded according to local electrical codes to prevent the possibility of electrical shock. It requires a grounded receptacle with separate electrical lines, protected by fuses or circuit breakers of the proper rating.
- All electrical connections must be in accordance with local electrical codes and any other applicable codes.
- The use of adequate ventilation (as rated in this manual) with this broiler is mandatory. Failure to adequately ventilate this unit and provide safe operating distances (as specified in this manual) is a fire safety hazard. Follow the instructions for emergency broiler shutdown in the event of an emergency.
- No attempt should be made to operate this appliance in the event of a power failure.

WARNING ELECTRICAL SHOCK HAZARD. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR DEATH:

- Electrical ground is required on this appliance.
- Check with a qualified electrician if you are in doubt as to whether the appliance is properly grounded.
- Do not use water on or near the control box for risk of serious injury or death due to electrical shock.

WARNING, HIGH TEMPERATURES WITH HOT SURFACES. FAILURE TO FOLLOW THESE PROCEDURES COULD RESULT IN SERIOUS INJURY:

- Do not attempt to clean, disassemble or perform maintenance on this broiler until it is fully cooled as per the instructions contained in this manual.
B. INSTALLATION

B.1 Pre-Installation
Uncrate the broiler and inspect for shipping damage. Remove the tape securing the machine parts, and install the parts in their proper location. If there are obvious or concealed damages to any part of the broiler, please contact your freight carrier. The factory warranty does not cover freight damage.

B.2 Mounting
Follow the mounting instructions if this function is not performed by the installer.

B.3 Leveling
The grease drain system is based on a gravity-flow design. Therefore, it is extremely important that the broiler be placed on a level surface.

B.4 Hood Requirements
This appliance must be installed under a ventilation hood of adequate size.

Do not obstruct the flow of combustion and ventilation air. An adequate air supply must be available for safe and proper operation.

B.5 Clearance
Keep appliance area free from combustibles.

To facilitate disassembly and service of the unit a minimum of 24” (610 mm) should be allowed on the control panel (feed end) of the broiler.

REQUIRED AND RECOMMENDED CLEARANCES

<table>
<thead>
<tr>
<th></th>
<th>REQUIRED for installation near combustible walls and construction</th>
<th>REQUIRED for installation near non-combustible walls and construction</th>
<th>RECOMMENDED by Nieco for proper disassembly and service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Back of broiler</td>
<td>12” (305 mm)</td>
<td>0” (0 mm)</td>
<td>0” (0 mm)</td>
</tr>
<tr>
<td>Sides of broiler</td>
<td>12” (305 mm)</td>
<td>0” (0 mm)</td>
<td>0” (0 mm)</td>
</tr>
<tr>
<td>Front of broiler (Feed end)</td>
<td>12” (305 mm)</td>
<td>0” (0 mm)</td>
<td>24” (610 mm)</td>
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</tbody>
</table>

B.6 Electrical Connection
Power requirements are stated on the unit nameplate and must be connected accordingly. Before starting broiler, tighten all electrical connections in control box. An electrical wiring diagram can be found inside the control box.

Note: Disconnect power before servicing.

B.7 Pre-Operation Check
Be sure that all parts are installed in the proper location.
C. OPERATION

C.1 Controls and Indicators

ON THE MAIN SIDE

1. Belt Speed Control (P/N 13727-B) - Used to set the broil time on the meat belt.

2. On/Off Indicator Light (P/N 4402) - Glows when the broiler is on.

3. Main On/Off Switch (P/N 15480) - Used to turn the main power supply to the broiler on or off.

4. Belt Reverse Button (P/N 13579) - In the event of a belt jam, push and hold the belt reverse button in to help free anything that may be caught in the belt to help clear a jam.

5. Temperature Control (P/N 19235) - Helps keep the broiler temperature stable when the broiler is under heavy load.

ON THE FLEX SIDE

1. Multi Product Control (P/N 15161-B) - Used to broil a variety of products that may require different settings (WHOPPERS®, Chicken, XT)

2. Belt Reverse Button (P/N 13579) - In the event of a belt jam, push and hold the belt reverse button in to help free anything that may be caught in the belt to help clear a jam.

3. Temperature Control (P/N 19235) - Helps keep the broiler temperature stable when the broiler is under heavy load.
C.1 Controls and Indicators (Continued.)

(1) LED DISPLAY - Shows current product selection and cook time.

(2) PRODUCT SELECTION BUTTONS - Press to select different presets for different products.

(3) ADJUSTMENT BUTTONS - Use to adjust product cook times, element settings and product names.

(4) SELECTION INDICATOR LIGHT - Lights up to show which button is selected.
C.2 Lighting Procedures

**PRE-LIGHTING PREPARATION**

1. Broiler is centered under hood and plugged in
2. Turn ventilation system on

**WARNING**

THE VENTILATION SYSTEM MUST BE ON AT ALL TIMES DURING BROILER OPERATION. OPERATING BROILER WITHOUT PROPER VENTILATION IS A SEVERE FIRE HAZARD.

**NORMAL IGNITION**

1. Turn the MAIN POWER SWITCH on.
2. Allow broiler to heat for 45 minutes before cooking. Do not cook during the warm up period.

C.3 Shutdown Procedures

**PLANNED SHUTDOWN**

1. Allow the broiler to run free of any product for 10 minutes. This will burn the chain clean.
2. Turn off the Main Power Switch.
3. Wait for 30 minutes for the broiler to cool.

**EMERGENCY SHUTDOWN**

1. Turn off the MAIN POWER SWITCH.

**CAUTION**

FOR YOUR SAFETY: Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

FOR YOUR SAFETY: In the event of a prolonged power failure, no attempt should be made to operate this appliance.
2. TEMPERATURE CONTROLS

Electric broilers are equipped with a Broil Temperature Stabilizer Control that senses when the broiler is being used, and adjusts the temperature to keep the broiler hot during heavy use. The control consists of two parts - a temperature probe to sense the internal temperature of the broiler, and the control itself.

3. SETTING THE TEMPERATURE CONTROL

In order to assure proper operation, the Temperature Control must be set for operation in the restaurant. Follow these step by step instructions when the broiler is new, and once per month after.

Step 1: Be sure all pieces of the broiler are in place. Make sure the broiler is plugged in and the exhaust hood is turned on. Turn the broiler on.

Step 2: MAIN SIDE OF THE BROILER: Set the temperature (bottom number) to 380°C (716°F). Use the up or down arrows on the control to set the temperature. The bottom number is the set temperature and the top number is the actual temperature.

FLEX SIDE OF THE BROILER: Set the temperature (bottom number) to 275°C (527°F). Use the up or down arrows on the control to set the temperature. The bottom number is the set temperature and the top number is the actual temperature.
1. Multi-Product Control
How it works: The multi-product control is designed to let you broil different products on the flex side of the broiler. The control allows you to have different broiler settings for each product selection button. Use a grease pen to mark the white area with the product name.

2. Normal Operation
Press the product selection button (number) for the product you wish to cook. The display will show the product name and cook time and the light next to the product selection button will be lit.

NOTE: Be sure the belt is clear of any products before pressing a new product selection button.

3. Changing Belt Speeds
Push the product selection button you want to adjust then push the up and down arrows to make changes, then press the center square button to save them.

4. Changing Upper Heat Element Settings
To adjust element settings press the product selection button you wish to change, then press the product selection button one more time. The screen will read Duty Cycle and show a percentage. Press the up and down buttons to adjust the element power up or down (0 = off; 100% = Full on). Press the center square button after you are done adjusting the duty cycle to save your changes.

5. Changing Product Names
Push the product selection button which you want to assign a name to. Press and hold the center square button for 15 seconds. The control will enter the edit name screen for that button. Use the up and down buttons to change the characters. Press the center square button once to move to the next character until you are finished editing the product name for that button (10 character limit). Press and hold the PRODUCT SELECTION BUTTON for 5 seconds to save the changes and return to normal operation.
D. CLEANING AND DISASSEMBLY

Turn broiler off. Disconnect the power supply to the broiler before cleaning or servicing. Allow to cool for 30 minutes prior to cleaning/disassembly. Leave the ventilation system on during cooling. Use only approved cleaning, degreasing and sanitizing solutions.

---

**WARNING**

LEAVE THE VENTILATION HOOD ON DURING COOLING. FAILURE TO DO SO COULD POSE A FIRE SAFETY HAZARD.

---

**CAUTION**

Follow the Disassembly and Reassembly steps to ensure proper operation of the broiler. Failure to do so may result in operational problems.

---

**WARNING**

BROILER PARTS ARE HOT. DO NOT ATTEMPT TO DISASSEMBLE THE BROILER UNTIL IT IS FULLY COOL. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN SEVERE INJURY.

---

**ALL PARTS ARE CLEANED ON A DAILY BASIS UNLESS OTHERWISE NOTED**

Follow the steps for proper disassembly. Reverse the order for reassembly.

---

**How to read the cleaning section**

- **Meat Guides**
  - The name of the part to be cleaned.
  - The location of the part.
  - When to clean the part.
  - The tools needed to clean the part.
  - How to remove and clean the parts.
  - Picture of the part to be removed and cleaned.

- **Tools**
  - Clean: Every 4 hours

- **Instructions**
  - 1. Pull each meat guide out slightly from the bottom, then lift off.
  - 2. Wash, rinse, and sanitize in the 3-compartment sink.

---

Nieco Corporation - Model JF94E CE
Cleaning the Broiler

Tools Needed

- 3-Compartment Sink
- Degreaser
- Heat Resistant Gloves
- Utility Knife
- No-Scratch Pad
- Scrub Pad
- Soft Bristle Brush
- Towel
- Small Orifice Brush
- Large Orifice Brush
- Shaft Cleaning Tool

Instructions

1. Allow the broiler to run free of product for 10 minutes before turning it off. This allows any residue to burn off the chains.
2. Shut the broiler off and let it cool for 30 minutes before disassembly and cleaning.
3. Close the main gas valve and unplug the broiler before cleaning.
4. Always leave the ventilation hood on during the 30 minute cool down period.
5. Use only approved cleaning solutions.
6. Allow parts to air dry after cleaning.

STOP

Important Symbols

This “Stop” sign shows a step in the procedure that must be followed exactly or personal safety could be affected.

This warning symbol shows a step in the procedure that must be followed exactly or broiler performance could be affected.

This “puzzle” symbol shows a step in the reassembly procedure that must be followed.

Meat Guide - P/N 19762

Clean: Every 4 hours

Tools

- 3-Compartment Sink
- Scrub Pad

Instructions

1. Pull the meat guide out slightly from the bottom, then lift off.
2. Wash, rinse, and sanitize in the 3-compartment sink.

Feed End

[Image of a person cleaning the broiler]
Feeder Cover - P/N 17066

Tools

- 3-Compartment Sink
- Scrub Pad

Instructions

1. Slide the feeder cover towards you until it comes off.
2. Wash, rinse, and sanitize in the 3-compartment sink.

Push Bar P/N 22348/Wire Belt Feeder Base - P/N 22353

Tools

- 3-Compartment Sink
- Scrub Pad

Instructions

1. Pull the release pin.
2. Lift push bar and wire belt feeder bases up and off.
3. Wash, rinse, and sanitize in the 3-compartment sink.

- DO NOT lift the feeder base by the feeder bar or the chains. This will damage the feeder base.
- REASSEMBLY: Pull the release pin and place feeder base in position.
**Feeder Housing - P/N 22295**

**Tools**
- 3-Compartment Sink
- Scrub Pad

**Instructions**

1. Lift and remove.
2. Wash, rinse, and sanitize in the 3-compartment sink.

*REASSEMBLY:* Hang feeder housing on brackets.

---

**Front Heat Shield - P/N 20468**

**Tools**
- Heat Resistant Gloves
- Scrub Pad
- Degreaser
- 3-Compartment Sink

**Instructions**

1. Lift shield up and off.
2. Take to sink area and spray with degreaser.
3. Wash with a scrub pad, rinse, and sanitize in the 3-compartment sink.
**Grease Pan - P/N 18546**

**Tools**
- Heat Resistant Gloves
- Scrub Pad
- Degreaser
- 3-Compartment Sink

**Instructions**
1. Slide grease pan out.
   - Make sure grease pan is cool before putting in water or it may warp the pans.
2. Take to sink area and spray with degreaser.
3. Wash with a scrub pad, rinse, and sanitize in the 3-compartment sink.

**Warming Pan Shield - P/N 16840**

**Tools**
- Heat Resistant Gloves
- Scrub Pad
- Degreaser
- 3-Compartment Sink

**Instructions**
1. Slide warming pan shield out.
2. Take to sink area and spray with degreaser.
3. Wash with a scrub pad, rinse, and sanitize in the 3-compartment sink.
Lower Heat Reflectors - P/N 20472

Clean: Monthly

**Tools**
- Heat Resistant Gloves
- Scrub Pad
- Degreaser
- 3-Compartment Sink

**Instructions**
1. Slide reflectors out.
2. Take to sink area and spray with degreaser.
3. Wash with a scrub pad, rinse, and sanitize in the 3-compartment sink.

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Holding Pan Bracket - P/N 16946

Clean: Daily

**Tools**
- Heat Resistant Gloves
- Scrub Pad
- Degreaser
- 3-Compartment Sink

**Instructions**
1. Lift and slide bracket out.
2. Take to sink area and spray with degreaser.
3. Wash with a scrub pad, rinse, and sanitize in the 3-compartment sink.
**Product Holding Area**

**Tools**

- Soapy Towel
- Sanitized Towel

**Instructions**

1. Clean product holding area while still warm.
2. Wring out a soapy towel and wash product holding area.
3. Wring out a sanitized towel and wipe product holding area.

**Feed End Grease Trough - P/N 17052**

**Tools**

- Scrub Pad
- 3-Compartment Sink

**Instructions**

1. Slide grease trough towards you.
2. Take to sink area and spray with degreaser.
3. Wash with a scrub pad, rinse, and sanitize in the 3-compartment sink.
Discharge Heat Shield - P/N 20469

Tools

- Heat Resistant Gloves
- Scrub Pad
- Degreaser
- 3-Compartment Sink

Instructions

1. Lift up and off broiler.
2. Take to sink area and spray with degreaser.
3. Wash, rinse, and sanitize in the 3-compartment sink.

REASSEMBLY: Make sure brackets go over the frame of the broiler.

Discharge End

---

Product Slide - P/N 20474

Tools

- Heat Resistant Gloves
- Scrub Pad
- Degreaser
- 3-Compartment Sink

Instructions

1. Tilt and lift pins off hooks; lift off.
2. Take to sink area and spray with degreaser.
3. Wash, rinse, and sanitize in the 3-compartment sink.

REASSEMBLY: Make sure return pan hangs on brackets.

Discharge End
1. Tilt stripper blade away from chain; lift off brackets.  
   **Make sure stripper blade is cool before putting in water or it may warp.**
2. Take to sink area and spray with degreaser.
3. Wash with a scrub pad, rinse, and sanitize in the 3-compartment sink.

**REASSEMBLY:** Hang stripper blade on brackets.

---

**Chain Shafts**

**Tools**

- Heat Resistant Gloves
- Scrub Pad
- Degreaser
- 3-Compartment Sink
- Shaft Cleaning Tool P/N 91120

**Instructions**

1. Scrape each shaft of both belts on the discharge end with the wide end of the shaft cleaning tool. The tool is located on the clip on main side control box.
2. Wipe shaft cleaning tool with a towel.
Grease Trough - P/N 16307

Tools

- Heat Resistant Gloves
- Scrub Pad
- Degreaser
- 3-Compartment Sink

Instructions

1. Lift and slide the grease trough out of the broiler.
2. Take to sink area and spray with degreaser.
3. Wash with a scrub pad, rinse, and sanitize in the 3-compartment sink.

REASSEMBLY: Be sure grease trough is pushed all the way into the broiler.

Grease Box - P/N 16382

Tools

- Scrub Pad
- Degreaser
- 3-Compartment Sink

Instructions

1. Lift grease box off.
2. Take to sink area and spray with degreaser.
3. Wash with a scrub pad, rinse, and sanitize in the 3-compartment sink.

REASSEMBLY: Put grease box on before the grease trough.
**Incendalyst™ P/N 20860**

**Tools**
- Heat Resistant Gloves

**Instructions**

**EXTREMELY HOT!** Be careful not to burn yourself.

1. Grasp lifting pin and lift catalyst off to remove from chimney.
2. SOAK IN WARM WATER FOR 1 HOUR. RINSE WITH WATER ONLY. NEVER USE ANY CHEMICALS ON THE CATALYST.
3. Lay flat to drain water and let air dry overnight.
4. Make sure catalyst is dry before putting back on broiler.

**Incendalyst™ Chimney P/N 22293**

**Tools**
- Heat Resistant Gloves
- Scrub Pad
- Degreaser
- 3-Compartment Sink

**Instructions**

**EXTREMELY HOT!** Be careful not to burn yourself.

1. Lift chimney from top of broiler.
2. Take to sink area and spray with degreaser.
3. Wash with a scrub pad, rinse, and sanitize in the 3-compartment sink.

![Image of hands wearing heat resistant gloves lifting a chimney]

![Image of a chimney being washed and sanitized]
EXTREMELY HOT! Be careful not to burn yourself.

1. Lift reflector from the top of the air boxes.
2. Take to sink area and spray with degreaser.
3. Wash with a scrub pad, rinse, and sanitize in the 3-compartment sink.

**CAUTION:**
Extremely Hot
Air Boxes P/N 19040 (Front); 19022 (Back)  
Clean: Weekly

**Tools**
- Heat Resistant Gloves
- Soft Bristle Brush
- Large Orifice Brush

**Instructions**

**EXTREMELY HOT!** Be careful not to burn yourself.

1. Loosen and remove hoses as marked by the arrows.

2. Lift the air boxes from the broiler. Note that the front air box has two (2) inlet valves and the back air box only has one (1).

3. Clean the air holes (example shown with an arrow) on both boxes with a brush or an orifice brush if they are badly clogged.

4. Reassemble making sure the front air box with two inlet valves is in the front side of the broiler.

**CAUTION:** Extremely Hot

---

- BACK OF BROILER
- FRONT OF BROILER
- AIR HOLES
# E. TROUBLESHOOTING

Always verify that the broiler is properly assembled, the hood is on and broiler is plugged in.

| No power to broiler when the switch is turned on. | Check: Broiler is plugged in. Ventilation hood is on. Circuit Breaker on wall panel is on. |
| Power is on, broiler is lit, but the conveyor belts are not turning. | Check for a jam in the conveyor belt. Check the stripper blade to make sure it is installed properly. |
| Feeder belt not moving. | Make sure the feeder is assembled properly. Check for jam. Make sure the drive pin is engaged. |
| Feeder jams. | Make sure the burgers are not frozen together. |
| Burgers sticking to slide or stripper blade. | Clean the slide and stripper blade very thoroughly. Check cookout temperature (undercooking). |

**COOKING PROBLEMS**

| Burgers under or over cooked. | Main side: adjust conveyor belt speed. Flex side: adjust conveyor belt speed and duty cycle. |
| Excessive flaming in broiler. | Clean the catalyst if equipped. Check the hood for proper operation. Check product for overcooking. |
F. PARTS LOCATION DRAWINGS

Feed End View

- Feed End Heat Shield P/N 20468
- Meat Guide P/N 19762
- Patty Shield P/N 19681
- Feeder Cover P/N 17066
- Push Bar Feeder P/N 22348
- Wire Belt Feeder P/N 22383
- Feeder Housing P/N 22295
- Lower Heat Reflector P/N 20472
- Grease Pan P/N 18546
- Warming Pan Shield P/N 16440
F. PARTS LOCATION DRAWINGS

Right Side Control Box
F. PARTS LOCATION DRAWINGS
Left Side Control Box

- SCR BASE P/N 4136
- THERMOCOUPLE P/N 18861
- BLOWER P/N 18447
- SPROCKET, 35B32 P/N 13699
- SPROCKET, 35C19 P/N 11081
- SPROCKET, 35B10 P/N 17899
- CONTROL, BELT SPEED P/N 13721-8
- ELEMENT, 1000W, 380V P/N 25265
- RELAY P/N 15329
- SWITCH, 50A P/N 15480
- INDICATOR LIGHT P/N 4402
- CIRCUIT BREAKER, 25A P/N 19161
- CIRCUIT BREAKER, 25A P/N 19161
- RELAY P/N 15329
- CONTROL, TEMP P/N 19235
- BLOWER P/N 18447
- SPROCKET, 35B10 P/N 17899
- SPROCKET, 35C19 P/N 11081
- SPROCKET, 35B32 P/N 13699
- ELEMENT, 1000W, 380V P/N 25265
F. PARTS LOCATION DRAWINGS
Motor Control Box (On discharge of broiler)
F. PARTS LOCATION DRAWINGS
Clutch Assembly

CLUTCH ASSEMBLY
PN 15882

SPROCKET, CLUTCHED, BELLEVILLE SPRING
PN 14900

BEARING, SHOULDER, LARGE, FEEDER DRIVE
PN 14900
## G. PARTS REPLACEMENT LIST

**OCTOBER 11, 2011**

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td><strong>AIR SYSTEM</strong></td>
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<tr>
<td>20909</td>
<td>CONNECTOR, FLEX, 3/4 X 16” - ASSY</td>
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<td>20821</td>
<td>AIR TUBE, MANIFOLD, BLOWER - WLDMT</td>
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<td>19764</td>
<td>HEATER HOSE, 3/4” ID X 2”</td>
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<td>19040</td>
<td>AIR BOX, FRONT, 13.38”, JF-G/E - WLDMT</td>
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<td>19022</td>
<td>AIR BOX, REAR, FLAT, 13.38” , JF-E - WLDMT</td>
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<td>18447</td>
<td>BLOWER, HIGH PRESSURE, 24VDC, 2 WIRE</td>
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<tr>
<td><strong>BELT DRIVE SYSTEM &amp; BEARINGS</strong></td>
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<tr>
<td>17932</td>
<td>GEAR MOTOR, DC, BRUSHLESS, OFFSET SHAFT</td>
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<tr>
<td>17907</td>
<td>BEARING, SLEEVE, 3/8”, SNAP-IN</td>
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<td>17906</td>
<td>BRACKET, SUPPORT, 3/8” MOTOR SHAFT</td>
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<td>17899</td>
<td>SPROCKET, 35B10, 3/8” BORE</td>
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<tr>
<td>20430</td>
<td>COVER, CHAIN/FINGER GUARD, DRIVE SHAFT, JF</td>
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<tr>
<td>17907</td>
<td>BEARING, SLEEVE, 3/8”, SNAP-IN</td>
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<td>18998</td>
<td>DRIVE SHAFT, DUAL 13” BELT, JF - ASSY</td>
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<td>13699</td>
<td>SPROCKET, 35B32, 3/4” ID</td>
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<td>18997</td>
<td>DRIVE SHAFT, OUTER TUBE, 13” BELT - WLDMT</td>
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<td>18996</td>
<td>DRIVE SHAFT, 33.33” , 13” BELT, JF - WLDMT</td>
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<td>STRIPPER BLADE, FIXED, DUAL 13” BELT, JF</td>
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<td>15655</td>
<td>ROD, KEYED 5/8” X 16-3/4“ LONG, 13” BELT - WLDMT</td>
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<td>BEARING, PTFE,1”W X 1-7/8”H, Ø5/8” SHAFT</td>
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<td>BEARING, PTFE,1”W X 1-7/8”H, Ø3/4” SHAFT</td>
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<td>6046</td>
<td>BEARING, PTFE,1”W X 1-7/8”H, Ø1-1/4” SHAFT</td>
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<td>6035</td>
<td>ROD BELT,7GA,5/8”PITCH,13” WIDE</td>
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<td>CHAIN, ROLLER, #35</td>
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<td>COVER, CHAIN/FINGER GUARD, DRIVE SHAFT, JF</td>
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<td>22293</td>
<td>HOOD, CHIMNEY, INCENDALYST, JF - WLDMT</td>
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<td>22291</td>
<td>HEAT REFLECTOR, ELEMENTS, UPPER, JF94/84</td>
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<td>20474</td>
<td>SLIDE, 4 LANE, 28.5” FRAME, JF - WLDMT</td>
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<td>20472</td>
<td>REFLECTOR, ELEMENT, LOWER, 12.5” W - WLDMT</td>
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<td>HEAT SHIELD, REAR, 28.5” FRAME, JF</td>
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<td>20468</td>
<td>HEAT SHIELD, FEEDER/FRAME, 28.5” FRAME, JF</td>
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<td>HEAT REFLECTOR, UPPER, JF94E</td>
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<td>18546</td>
<td>GREASE PAN, NON VENTED - 28.5” FRAME</td>
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<td>17052</td>
<td>TRAY, GREASE DRIP - 28.5” FRAME</td>
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<td>16946</td>
<td>FRAME, SUPPORT, HOLDING PAN, 4 LANE, MPB</td>
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<td>16840</td>
<td>SHIELD, HEAT, SHUTTLE</td>
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<tr>
<td>16794</td>
<td>RACK, STACKING, PATTY PAN</td>
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<tr>
<td>16382</td>
<td>PAN, HOTEL, 1/9 X 4” DEEP</td>
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<tr>
<td>16307</td>
<td>TRAY, SLUDGE - 28.5” FRAME - WLDMT</td>
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<tr>
<td>9128</td>
<td>TOOL, SHAFT CLEANING</td>
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# G. PARTS REPLACEMENT LIST

## ELECTRICAL ELEMENTS & CONTROLS

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
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<tbody>
<tr>
<td>22288</td>
<td>COVER, ENCLOSURE, ELEC/MOTORS, REAR, JF</td>
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<td>22287</td>
<td>COVER, ENCLOSURE, ELEC/AIR, JF-E, R</td>
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<tr>
<td>22286</td>
<td>COVER, ENCLOSURE, ELEC/AIR, JF-E, L</td>
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<td>22285</td>
<td>ENCLOSURE, ELEC/MOTOR, REAR, JF-E - ASSY</td>
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<tr>
<td>22278</td>
<td>ENCLOSURE, ELEC/AIR, JF94/84E, RIGHT - ASSY</td>
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<tr>
<td>20876</td>
<td>CONTROL GUARD, 7&quot; LONG, ELECTRICAL BOX</td>
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<tr>
<td>20724</td>
<td>RELAY, SOLID STATE, 20A, 600V, DC COIL</td>
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<tr>
<td>19161</td>
<td>CIRCUIT BREAKER, 277/480V, 25A, 3 POLE</td>
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<tr>
<td>19235</td>
<td>CONTROL, DIGITAL TEMP, 24VAC, SSR OUT</td>
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<tr>
<td>15161-B</td>
<td>CONTROL, SPEED MULTI-CHANNEL, VERTICAL</td>
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<tr>
<td>19161</td>
<td>CIRCUIT BREAKER, 277/480V, 25A, 3 POLE</td>
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<tr>
<td>11965</td>
<td>CIRCUIT BREAKER, 20A</td>
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<tr>
<td>18092</td>
<td>RELAY BASE, DIN MOUNT, 8 PIN</td>
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<tr>
<td>18093</td>
<td>RELAY, 250VAC, 24V COIL, 8A, 8 PIN</td>
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<tr>
<td>18666</td>
<td>TERMINAL BLOCK, 4 X 4MM, SC, GRAY</td>
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<tr>
<td>4621-02</td>
<td>FUSE, 2 AMP</td>
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<td>4405-31</td>
<td>TERMINAL BLOCK, FUSE HOLDER, TYPE M</td>
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<td>19001</td>
<td>TRANSFORMER, 230/115-24V, 7.3A</td>
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<td>18889</td>
<td>CONTACTOR, 4 POLE, 24V, COIL</td>
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<td>12725</td>
<td>RECTIFIER, SINGLE PHASE BRIDGE, 25A 200V</td>
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<td>4621-02</td>
<td>FUSE, 2 AMP</td>
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<td>15480</td>
<td>SWITCH, ROCKER, 50A CIRCUIT BREAKER</td>
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<td>13727-B</td>
<td>CONTROL, BRUSHLESS MOTOR</td>
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<td>IDLER</td>
<td>SPROCKET, 35C19, 3/8&quot; BORE</td>
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<td>INDICATOR LIGHT, GREEN, 28V</td>
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<td>4136</td>
<td>SCR BASE</td>
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<tr>
<td>20418</td>
<td>ELEMENT - 31&quot;, 1000W, 230V, Ø.55</td>
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<td>20295</td>
<td>ELEMENT - 17.5&quot;&quot;, 1000W, 380V, Ø.49 - WLDMT (CE)</td>
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<td>20291</td>
<td>ELEMENT - 17.5&quot;&quot;, 1000W, 208V, Ø.49 - WLDMT (DOMESTIC)</td>
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<td>18168</td>
<td>CABLE, MOTOR, 4 WIRE W/CONNECTOR</td>
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<td>18861</td>
<td>THERMOCOUPLE PROBE, 1.88&quot;, TYPE J, 48&quot; LEADS</td>
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<tr>
<td>13579</td>
<td>SWITCH, MOTOR REVERSING</td>
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<tr>
<td>18687</td>
<td>END COVER, 2 X 4MM, SC, GRAY</td>
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<td>4405-01</td>
<td>END STOP, GRAY (103 002.26)</td>
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<tr>
<td>22269</td>
<td>ENCLOSURE, ELEC/AIR, JF94/84E, LEFT - ASSY</td>
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## SHEET METAL PARTS

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<tr>
<th>Part No.</th>
<th>Description</th>
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<tr>
<td>16403</td>
<td>BRACKET, MOUNTING, STRIPPER BLADE - RIGHT</td>
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<tr>
<td>16402</td>
<td>BRACKET, MOUNTING, STRIPPER BLADE - LEFT</td>
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<tr>
<td>15689</td>
<td>ROD, CROSS SUPPORT - .63&quot; X 28.5&quot;</td>
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<tr>
<td>6300</td>
<td>ROD, CROSS SUPPORT - 5/8&quot; X 26,875&quot;</td>
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<td>6028</td>
<td>COLLAR, SET, 5/8&quot; BORE</td>
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<td>16838</td>
<td>BRACKET, TENSIONING, ROD BELT</td>
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## G. PARTS REPLACEMENT LIST

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<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tr>
<td>18910</td>
<td>SUPPORT, ELEMENT/AIR, UPPER, REAR, JF-E</td>
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<td>19610</td>
<td>BEARING, ALUM/BRZ, 5/8&quot; SHAFT X 1.44&quot; WIDE</td>
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<td>BRACKET, FEEDER SUPPORT, JF, LEFT</td>
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<td>BRACKET, FEEDER SUPPORT, JF, RIGHT</td>
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<td>20312</td>
<td>SUPPORT, BEARING, CENTER, JF-E - WLDMT</td>
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<td>20417</td>
<td>SHIELD, PATTY WARMER, JF - WLDMT</td>
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<td>20419</td>
<td>SUPPORT, BELT (1/8&quot; SS PIPE, 2&quot; LONG)</td>
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<tr>
<td>20309</td>
<td>BRACKET, REFLECTOR/SCRAPER, JF-E - WLDMT</td>
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### FEEDER

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<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>22214</td>
<td>FEEDER W/DRIVES, DUAL 13&quot;, PB/WB, JF</td>
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<tr>
<td>22353</td>
<td>DRIVE UNIT, WIREBELT, 13&quot; BELT, RH - ASSY</td>
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<tr>
<td>22298</td>
<td>SHAFT, DRIVE, PB/WB, 14.53&quot; L, 13&quot; ROD BELT</td>
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<tr>
<td>22297</td>
<td>TENSIONER, PUSH BAR, PTFE, RIGHT - ASSY</td>
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<td>22296</td>
<td>TENSIONER, PUSH BAR, PTFE, LEFT - ASSY</td>
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<td>20883</td>
<td>SPROCKET, ROLLER CHAIN, 12T, 3/8&quot; BORE</td>
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<td>15617</td>
<td>PUSH-BAR, 13&quot; ROD BELT - WLDMT</td>
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<tr>
<td>11478</td>
<td>BUSHING, FLANGED, 3/8&quot; SHAFT, W/FLAT</td>
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<td>11381</td>
<td>CHAIN, LADER, 353&quot; PITCH, 13 GA</td>
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<tr>
<td>11194</td>
<td>COUPLER, DRIVE, 1/4&quot; SQ X 3/8&quot; ID</td>
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<td>22347</td>
<td>PLATFORM, TRIPLE PUSH-BAR, 13&quot; BELT</td>
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<td>22353</td>
<td>DRIVE UNIT, WIREBELT, 13&quot; BELT, RH - ASSY</td>
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<td>SHAFT, Ø1/2&quot;, 1/4-20 TAPPED X 12.88&quot;</td>
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<td>TENSIONER, WIREBELT, 13&quot; BELT - WLDM</td>
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<td>WIRE BELT, 72 X .050 MESH X 12&quot; WIDE X 3 SPACES</td>
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<td>ROLL PIN, Ø1/8 X 1&quot;.SS</td>
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<td>FRAME, 1/2&quot; TO 1&quot; PATTY, 13&quot; BELT - ASSY</td>
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<td>COVER, FEEDER, 2 LANE, FLEX SIDE</td>
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<td>ENCLOSURE, DUAL 13&quot; FEEDER, JF - WLDMT</td>
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<td>20884</td>
<td>DRIVE ASSY W/CLUTCH, 15T FEEDER, UNIV</td>
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<tr>
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<td>COVER, FEEDER DRIVE/CLUTCH ASSY, JF</td>
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<td>OFFSET LINK, #35 ROLLER CHAIN</td>
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<td>MASTER LINK, #35 ROLLER CHAIN</td>
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<td>CHAIN, ROLLER, #35</td>
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<td>SPROCKET, CLUTCHED, 13T, BELLEVILLE SPRING</td>
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<td>BEARING, SHOULDER WASHER, LARGE, FEEDER DRIVE</td>
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<td>BEARING CLIP, 1/2&quot; ID, 12 THK</td>
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# G. PARTS REPLACEMENT LIST

**MISCELLANEOUS**

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<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
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<tbody>
<tr>
<td>20860</td>
<td>INCENDALYST, 15.19&quot; X 8&quot; X 1.5&quot;, 29 CPI</td>
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<tr>
<td>22400</td>
<td>SPARE KIT</td>
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<tr>
<td>22342</td>
<td>HEAVY DUTY SPARES KIT</td>
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H. WIRING DIAGRAM - Flex Side
I. SPECIFICATIONS

AUTOMATIC BROILER
Model JF94E

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<tr>
<th>DIMENSIONS</th>
<th>INCH</th>
<th>MM</th>
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<td>Height</td>
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<tr>
<td>Width</td>
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ENERGY

Electrical connection (specify exact voltage)
CE  380-415V 3Ø 25A 19kW
Calculated average consumption: 16kW

WEIGHT

LBS   KG
Shipping  690   313
Broiler on Stand  565   256

CAUTION

All electrical connections must be in accordance with local electrical codes and any other applicable codes.

CAUTION

Do not operate the broiler at gas pressures other than those stated here. Doing so will affect the operation of your broiler.