

AUTOMATIC FOOD SERVICE EQUIPMENT

AUTOMATIC GAS BROILER MODEL 9025 (CCSI CONTROL)

### **OWNERS MANUAL**

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

#### FOR YOUR SAFETY:

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

WARNING: Improper installation, adjustment, alteration, maintenance can cause property damage, injury, or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

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.

In a prominent location, post instructions to be followed in the event the user smells gas. This information shall be obtained by consulting your local gas supplier.

#### TABLE OF CONTENTS

Α.	General Information	,
	A.1 Description	,
	A.2 Warranty Information	
	A.3 Service/Technical Assistance	
	A.4 Safety Information	•
в.	Machine Installation	
	B.1 Pre-Installation	
	B.2 Mounting	
	B.3 Leveling	
	B.4 Hood Requirements	
	B.5 Clearance	
	B.6 Gas Connection	
	B.7 Flexible Gas Line Installation	
	B.8 Restraining Device	
	B.9 Electrical Connection	
C.	Operation	)
•	C.1 Controls and Indicators	
	C.2 Step-by-Step Lighting Procedure	
	C.3 Shutdown Procedure	
	C.4 Control Operation	
_		
D.	Assembly/Disassembly and Cleaning	1
Ε.	Troubleshooting Guide	)
F.	Broil Chain Tension & Link Removal42	)
G	Parts and Locations	ł
0.	G.1 Main Chamber Removable Parts	
	G.2 Flex Chamber Removable Parts	
	G.3 Feed End View Components	
	G.4 Main Chamber Side View Components	
	G.5 Flex Chamber Side View Components	
	G.6 Model 9025 Parts List	;
н.	Wiring Diagram	)
I.	Specifications	)
	Warranty Information	,
υ.		•

2



#### A. GENERAL INFORMATION

#### A.1 Description

The Nieco® Model 9025 automatic broiler, utilizes dual broil chambers, high release convection burners, electric elements, a new, simplified ignition system, easy cleaning and a state-of-the-art computer control to help eliminate broiling problems and provide the operator with even greater control over the broiling environment. The 9025 is return-flow, with an automatic product return system, allowing for space savings, while delivering product to the feed end of the broiler. The 9025 is also equipped with a heated product holding unit which allows for limited product holding.

This manual provides the safety, installation and operating procedures for the Nieco Automatic Broiler Model 9025. 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 bellow 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.

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 (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.

#### CAUTION A

GENERAL CAUTION. Indicates information important to the proper operation of the equipment. Failure to observe may result in damage to the equipment.



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.



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 (Cont.)

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, close the main gas valve, 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.

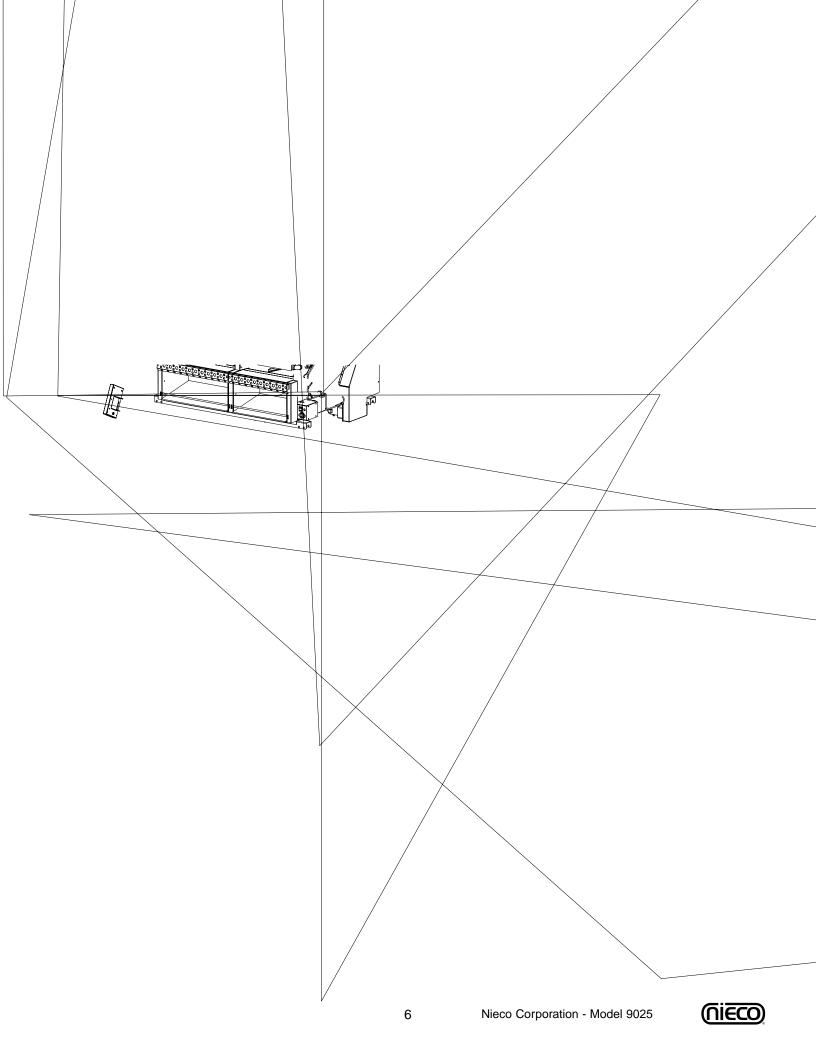
#### WARNING ELECTRICAL SHOCK HAZARD. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR DEATH:

- 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 located on the underside of the broiler for risk of serious injury or death due to electrical shock.

#### WARNING, HIGH TEMPERATURES WITH HOT SURFACES. FAILURE TO FOLLOW THESE PROCE-DURES 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.4 Hood Requirements**

This appliance must be installed under a ventilation hood of adequate size and the following minimum capacity:

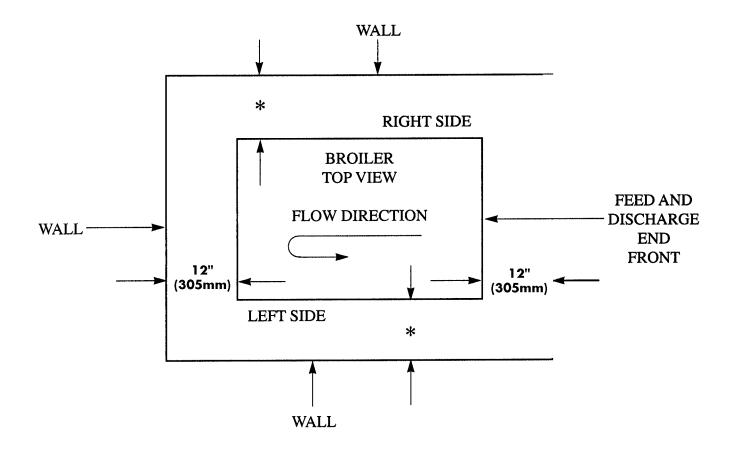
Model	SCFM
9025	1000

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**

For proper installation the minimum clearance from combustible and non-combustible construction must be 305 mm (12") from the back and 305 mm (12") from the front of the machine. Keep appliance area free from combustibles.

To facilitate disassembly and service of the unit a minimum of 610 mm (24") should be allowed on the control panel (feed end) of the broiler, as well as in front and back of the broiler.



\* 12" (305mm) Minimum, preferably 610 mm (24") or more for service. Location clearances are from walls of broiler height.



#### B.6 Gas Connection- 1" N.P.T. (Nieco P/N 11966; 1" Flexible Gas Line)

At rated input the gas supply should deliver a minimum pressure of at least 15 mbar (5" water column) at the broiler connection for natural gas. Incoming gas supply pressure must not exceed 50 mbar (14" water column).

**Note:** The installation of this appliance must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1, Natural Gas Installation Code, CAN/CGA-B149.1 including:

- 1. The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi (3.45 kPa).
- 2. The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psi (3.45 kPa).

By public initiative, the State of California has adopted legislation (Proposition 65) which requires manufacturers of many types of products, including gas appliances, to warn consumers of their products that contain chemicals or produce substances listed by the State of California to either cause cancer, birth defects or other reproductive harm.

WARNING

If not installed, operated and maintained in accordance with the manufacturers instructions, this product could expose you to substances in fuel or from fuel combustion which can cause cancer, birth defects or other reproductive harm.

#### P/N 11966 - 1" Flexible Gas Line with Strain Relief Cable





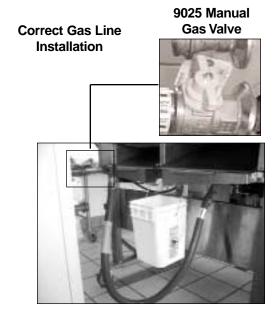


#### **B.7** Installing Gas Appliance Connectors and Flexible Gas Lines Correctly

For safety in the kitchen area, and to insure maximum service life, it is vitally important to correctly install connectors. The connector shall comply with the Standard for Connectors for Moveable Gas Appliances, ANSI Z21.69 or CAN/CGA-6.16 and a quick disconnect device that complies with the Standard for Quick-Disconnect Devices for use with gas fuel, ANSI Z21.41 or CAN1-6.9

In order to avoid sharp kinks or excessive bends that could have a damaging effect on the connector, it may be necessary to attach pipe elbows in order to bring the connector into its proper plane. For easy movement of the appliance, the connector should be installed with a "lazy" loop for minimum tension.

Note: Gas appliances should be disconnected prior to maximum movement. (Minimal movement is possible to connect hose.)





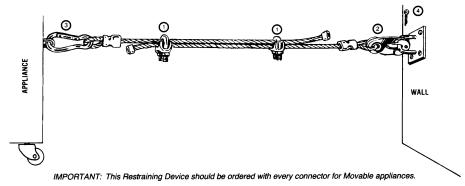
#### **B.8 Restraining Device Installation and Use**

This high strength restrainer is to be used with all moveable (castered) appliances. It fully complies with American Gas Association requirements. References: Z21.69, Z83.11, and Z21.41 with current revisions. Installation is quick and positive. In Canada, device is in accordance with CAN 1-6.9-M70 Quick Disconnect Devices for use with gas fuel, and CAN 1-6.10-88 metal connectors for gas appliances.

Correct length for any appliance is simply a matter of loosening two adjuster clips (1) and re-tightening. (3" to 6" shorter than appliance connector is desired length.)

Restrainer is made of heavy duty steel cable, with a strong scissor hood (2) at one end, and an equally strong spring hook (3) at the other. Cotter pin (4) is supplied to secure the installation. For proper attachment to the broiler, use the supplied hardware to attach the device to the holes in the shear plate of the broiler stand.

NOTE: If disconnection of the restraint is necessary, reconnect the restraint after the appliance has been returned to its originally installed position.

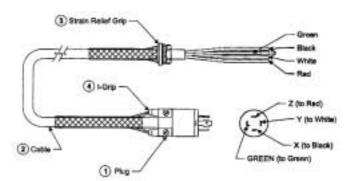


#### **B.9 Electrical Connection**

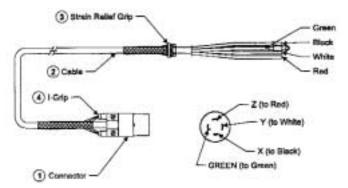
Power requirements are stated on the unit nameplate and must be connected accordingly. This appliance, when installed must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.2, as applicable. 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.





P/N 11961 - 3ft Female Power Cord 30A 250V 3-Pole 4-Wire Grounding - NEMA L15-30P



NOTE: If overhead power supply connection is not used; use power supply receptacle attached to the steamer table. The power supply receptacle will be supplied by your KES.

#### **B.10 Pre-Operation Check**

Be sure that all parts are installed in the proper location:

- Ventilation is turned on
- Broiler is plugged in
- Gas line is connected



#### **C. OPERATION**

#### **C.1 Controls and Indicators**

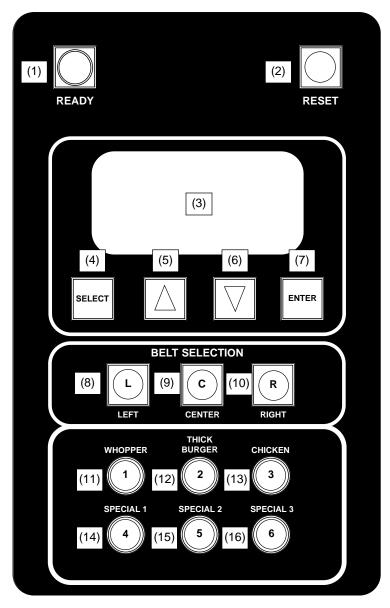
## ON THE FLEX CHAMBER SIDE Red Pilot Button (P/N 2123) Gas Pressure Gauge (P/N 2001)

Main On/Off Switch (P/N 10503) Ignitor Reset Button (P/N 11025)

## ON THE MAIN CHAMBER SIDE Upper Red Pilot Button (P/N 2123) Lower Red Pilot Button (P/N 2123) Gas Pressure Gauge (P/N 2001)



#### C.1 Controls and Indicators (Cont.)



- (1) **READY** Green indicator light when temperature set point is reached.
- (2) **RESET** Clears broil chain error and silences warning alarm.
- (3) LCD SCREEN
- (4) **SELECT** Used to access different menus, screens, and to move the cursor arrow. Used to enter program mode.
- (5) **SCROLL UP** Raises Time/Temperature settings.
- (6) SCROLL DOWN Lowers Time/Temperature settings.
- (7) **ENTER** Yes or Enter. Used to display different menu screens.
- (8) **LEFT** Left (MAIN CHAMBER) Broil Belt information will be displayed on LCD screen if pushed.

- (9) **CENTER** Center (FLEX) Broil Belt information will be displayed on LCD screen if pushed.
- (10) **RIGHT** Right (FLEX) Broil Belt information will be displayed on LCD screen if pushed.
- (11) WHOPPER® WHOPPER® preset times will be displayed on LCD screen if pushed.
- (12) **THICK BURGER** Thick burger preset time will be displayed on LCD screen if pushed.
- (13) CHICKEN Chicken preset time.
- (14) SPECIAL 1 For future use.
- (15) **SPECIAL 2** For future use.
- (16) SPECIAL 3 For future use.



#### C.2 Lighting Procedures

#### PRE-LIGHTING PREPARATION

- Broiler is centered under hood and plugged in
- Gas valve is open when handle is in line (parallel to) the pipe
- 3. Turn ventilation system on

#### A WARNING A

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

#### MAIN CHAMBER IGNITION

1

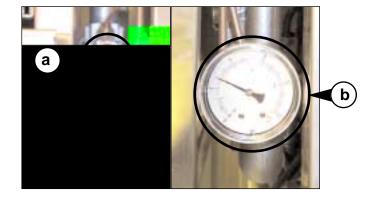
Turn the MAIN POWER SWITCH (a) on. Starting with the MAIN CHAMBER RED PILOT BUTTONS, press and hold the LOWER BUTTON FIRST (b) for 30 seconds after the pilot has lit. Then press the UPPER PILOT BUTTON (c) for 30 seconds after the pilot has lit.

After releasing red pilot buttons; check **GAS PRES-SURE GAUGE (a)** reading. Gauge should read 4". If not, follow troubleshooting tips in section E of this manual. Verify that main chamber burners - upper and lower - have lit.

#### FLEX CHAMBER IGNITION

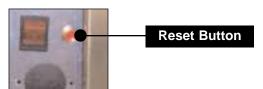


Move to the FLEX CHAMBER RED PILOT BUTTON (a), push and hold for 30 seconds after the pilot has lit. Release, and verify that the burners have lit, and that the GAS PRESSURE GAUGE (b) reads 4".

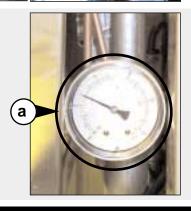




PILOTS MUST BE LIT WITHIN 5 MINUTES; IF YOU EXCEED 5 MINUTES, PRESS THE RESET BUTTON NEXT TO THE ON/OFF SWITCH AND REPEAT IGNITION PROCEDURES. IF REIGNI-TION FAILS, COMPLETELY SHUT OFF THE BROILER, WAIT 5 MINUTES AND REPEAT THE IGNITION PROCEDURES.



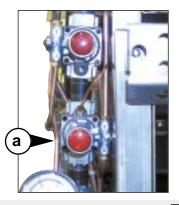




#### **MANUAL IGNITION - MAIN CHAMBER**

1

Press and hold the **LOWER PILOT BUTTON (a)**. Use match or long-stemmed lighter to light **PILOT TUBES (b)**. Light the pilot closest to the feed end of the broiler. After pilot has lit, hold pilot button for 30 seconds, release and verify that lower burners have lit. Repeat for the **UPPER PILOT BUTTON (c)**.



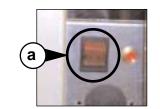
2

After releasing red pilot buttons; check **GAS PRESSURE GAUGE (a)** reading. Gauge should read 4". If not, follow troubleshooting tips in section E of this manual. Verify that main chamber burners upper and lower - have lit.



#### PLANNED SHUTDOWN

- 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 (a).



3. Wait for 30 minutes for the broiler to cool.

#### WARNING

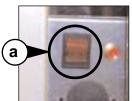
Always leave the ventilation hood on while the broiler is cooling. Failure to do so is both a fire risk and could result in damage to the broiler.

#### 🛃 CAUTION 🔜

Allow the broiler to fully cool BEFORE beginning disassembly and cleaning. Failure to do so could result in serious injury.

#### EMERGENCY SHUTDOWN

1. Turn off the MAIN POWER SWITCH (a)



2. Close the MAIN GAS VALVE (b) Valve is closed when it is perpendicular to pipe



Your Nieco Automatic Broiler is designed to automatically stop gas flow to the broiler in the event of power failure, gas pressure loss or any other related incident. No attempt to operate this appliance should be made in the event of a power failure.

#### CAUTION I

In a prominent location, post instructions to be followed in the event the user smells gas. This information shall be obtained by consulting your local gas supplier.

#### CAUTION I

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



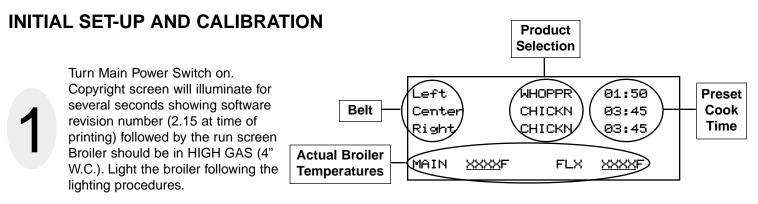
FOR YOUR SAFETY: In the event of a prolonged power failure, no attempt should be made to operate this appliance.



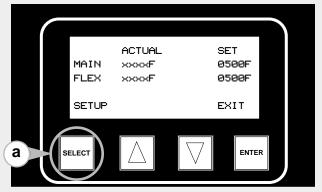
#### C.4 Control Operation

#### IMPORTANT: THIS BROILER IS SHIPPED WITH FACTORY PRESETS THAT MUST BE CHANGED.

If this is the initial start-up for your broiler, ALL control settings must be made according to BURGER KING® specifications. Follow the steps outlined for calibration, changing preset times and setting the flex chamber element heat settings to properly set up this broiler.



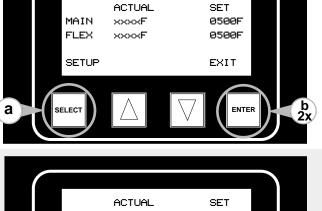
Calibrate by setting the main and flex temperatures to 500°F. Push and hold the SELECT (a) button for 5 seconds. LCD will show TEMP SET function.

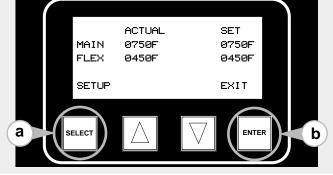


to save.

Use the SELECT (a) button to move the cursor. Use the up or down arrows to change the values. When both main and flex "set" temperatures read 500°F, press ENTER (b) twice

Allow the broiler 30 minutes to warm up. After warm up, press the SELECT (a) button to move the cursor to the set temperature. Use the up and down arrows to change the value so the set temperature is 20°F HIGHER than the actual temperature. Use the ENTER (b) button to save. NOTE: THIS IS ONLY AN EXAMPLE SHOWN; YOUR READ OUT WILL **BE DIFFERENT!** 





NOTE: If your broiler is equipped with a catalyst; be sure to verify that your broiler enters high gas mode (4" Gas pressure reading on gauge) when under load. If not, follow these procedures to raise the set point of the broiler by 10°F; then recheck.



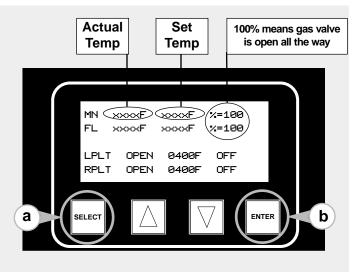
#### NORMAL RUN (OPERATING) SCREENS

The readout display actually has 8 lines, however only 4 are visible at a time. The first visible set shows cook times for the upper broil chains. The second set shows the return belt time and the time and date stamp. To switch between the sets press the SELECT button.



RUN SCREEN 1 Normal Run Screen Press the SELECT (a) or ENTER (b) button until the screen returns to the normal run screen. The normal run screen shows cook times and broiler temperatures.

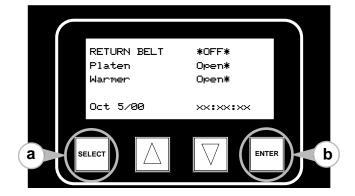




RUN SCREEN 2 From the NORMAL RUN Screen Press ENTER to get to Screen 2 Run screen 2 compares the actual chamber versus the programmed set points. This display is primarily used for service. To exit this screen and return to the normal operating screen press SELECT (a) or ENTER (b).



RUN SCREEN 3 From the NORMAL RUN Screen press SELECT to get to Run Screen 3 Run screen 3 is diagnostic for service. To exit this screen and return to the normal operating screen press SELECT (a) or ENTER (b).



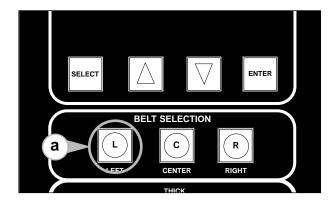
16

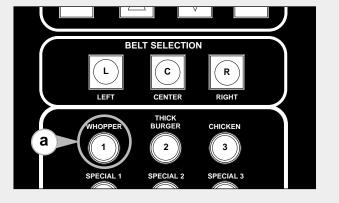
#### **CHANGING PRESET COOK TIMES**

The 9025 control allows you to program multiple belt speeds for each individual belt. Follow these steps to change the preset broil times for each product/belt.



From the normal operating screen - press and hold for 5 seconds the BELT you wish to change. For example press **LEFT (a)**. Belt selection choices are: LEFT (Main Chamber), CENTER and RIGHT (both Flex Chamber).







Then press the PRODUCT button you wish to change. For example select **WHOPPER®** (a). Product selection choices are: WHOPPER®, THICK BURGER, CHICKEN, SPECIAL 1, SPECIAL 2, SPECIAL 3.

3

After step 1, the screen will change to the edit mode with the cursor flashing on the preset time. Use the **UP** and **DOWN (a)** ARROWS to adjust the broil time. While in edit mode, any of the belts and product preset times can be changed. Simply press the BELT/PRODUCT you wish to change and use the UP/DOWN arrows to change the times. Cursor Belt Preset# Time Left WHOPPR @1:50 Htr1 Htr2 100% 100% Exit



When you are finished making changes, press the **ENTER (a)** button TWICE (2x) to save the changes and return to the normal operating screen.

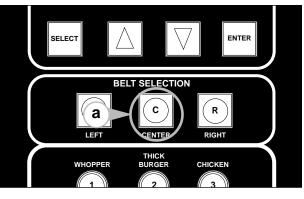


#### **CHANGING FLEX CHAMBER ELEMENT POWER SETTINGS**

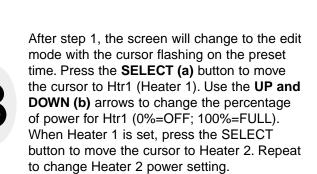
The flex chamber on the 9025 uses electric elements on the top and gas burners on the bottom. The elements are divided into 2 cook zones per belt. These are defined as HEATER 1 (Htr 1) and HEATER 2 (Htr 2). Heater 1 is the front or feed end elements; Heater 2 is the back or discharge end elements. These zones can be independently controlled. The heaters are set by percent of power ranging from 0% (OFF), to 100% (full power). NOTE: All elements are factory preset to 100% power.



Press and hold for 5 seconds the belt you wish to change. The Flex Chamber belts are controlled by the CENTER and RIGHT belt buttons. For example, press and hold the **CENTER (a)** button for 5 seconds.



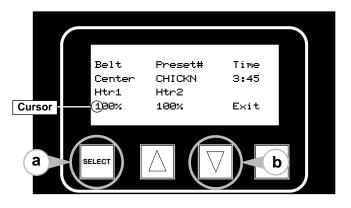




Then press the product button you wish to

press the CHICKEN (a) button.

change the power settings for. For example,





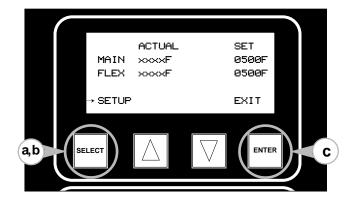
When you are finished making changes, press the ENTER (a) button TWICE (2x) to save the changes and return to the normal operating screen.

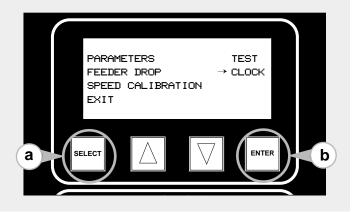


#### SETTING THE DATE AND TIME

1

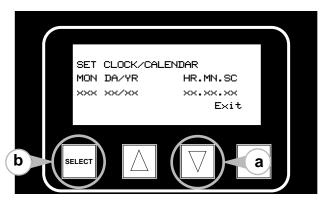
Press and hold **SELECT (a)** for 5 seconds to get to the TEMP SET screen. Press the **SELECT (b)** button to move the cursor to point at SETUP, then press the **ENTER (c)** button.





2

Press the **SELECT (a)** button to move the arrow to the CLOCK selection. Press the **ENTER (b)** button.



3

Use the **UP/DOWN (a)** arrows to set the date. Press the **SELECT (b)** button to move the cursor from month/day to time. Set the time using the UP & DOWN arrows.

4

When finished making changes, press **ENTER (a)** to save your changes and return to the normal run screen.





#### D. CLEANING AND DISASSEMBLY

Turn broiler off and close the main gas valve. Disconnect the power supply to the broiler before cleaning or servicing. If this broiler is connected using a restraint, and disconnection of the restraint is necessary for cleaning or moving the broiler, the restraint must be reconnected after the broiler has been returned to its originally installed position. 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.

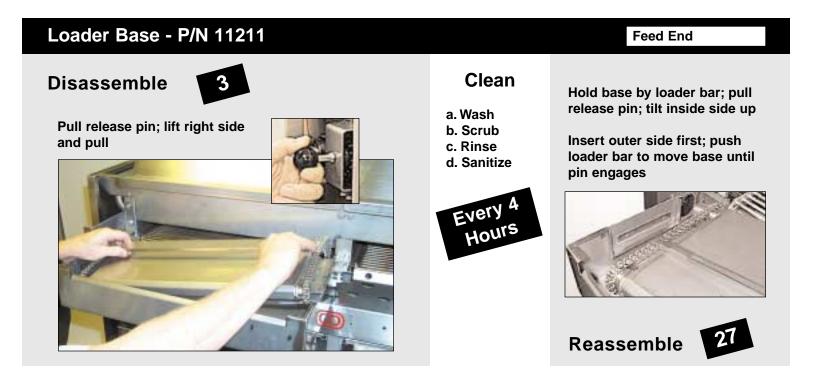


#### ALL PARTS ARE CLEANED ON A DAILY BASIS UNLESS OTHERWISE NOTED

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







<u>(nieco)</u>

#### Loader Housing - P/N 11389

Disassemble



#### Lift and pull



#### Clean

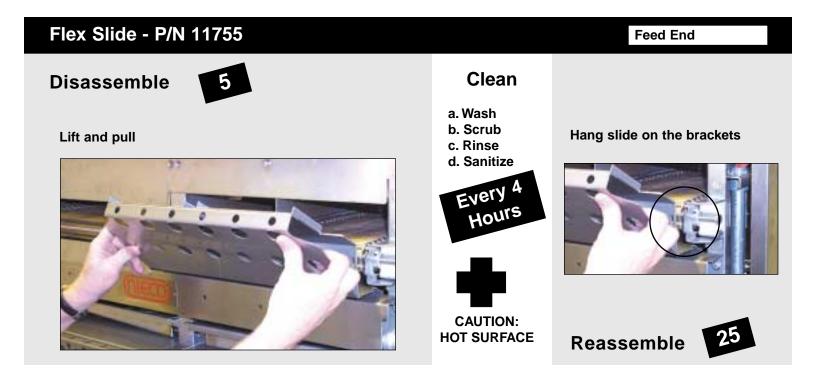
a. Wash

- b. Scrub
- c. Rinse
- d. Sanitize

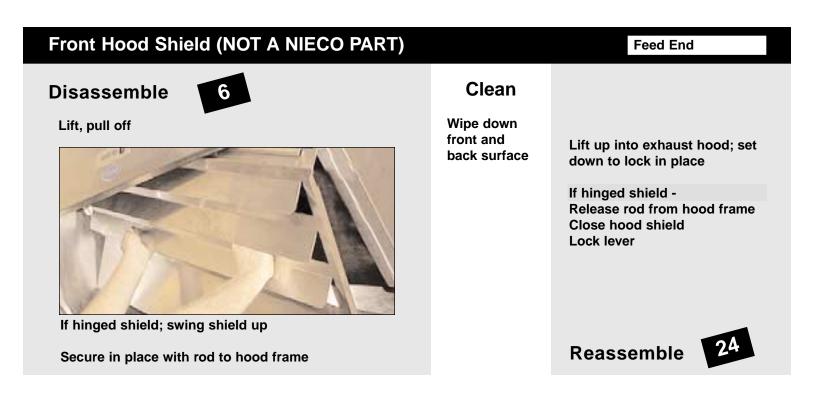
#### Hang housing on the brackets

Feed End











#### Upper Grease Pans (2) - MAIN P/N 10737/FLEX P/N 10452 Feed End Clean Disassemble 8 a. Wash b. Degrease Slide pan into slot Slide pan out c. Scrub Incorrect Correct d. Rinse e. Sanitize Reassemble 22

#### Warming Platens (2)



Clean with sanitized water after broiler cools but before grease becomes solid



#### Clean

a. Clean with sanitized water

Do not scrub Do not use degreaser Feed End

#### Feed End Grease Troughs (2) MAIN P/N 11540/FLEX P/N 11542 Feed End

Disassemble



Lift up and out



#### Clean

- a. Wash
- b. Degrease
- c. Scrub d. Rinse
- a. Rinse
- e. Sanitize

Hook in the slot



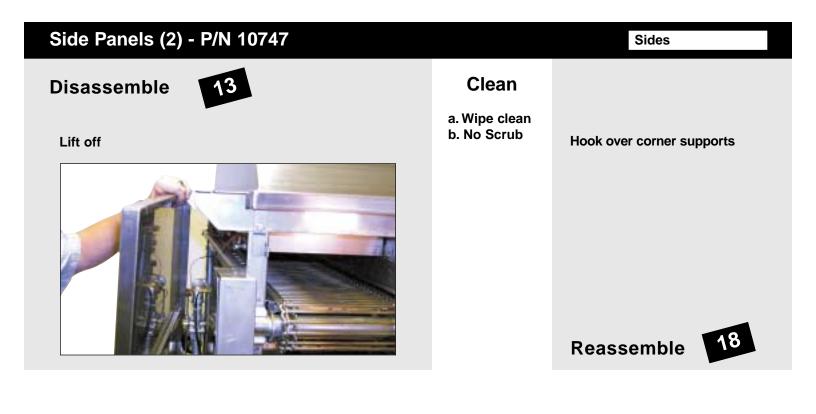
Reassemble



#### Feed End Ash Scraper Blades (2) - MAIN P/N 11016/FLEX P/N 11015 Feed End Clean Disassemble a. Wash b. Degrease Replace back under top Lift off pins and pull out c. Scrub chains; put notches on pins d. Rinse e. Sanitize Weekly · (iii 20 Reassemble



# Awnings (2) - MAIN P/N 11837/FLEX P/N 11830Discharge EndDisassemble12CleanTilt to unhook; lift pins off brackets; pull outa. Wash<br/>b. Scrub (on<br/>inside only);<br/>c. Rinse<br/>d. SanitizeSlide up and under frame;<br/>place pins in bracketsUnderstandCleana. Wash<br/>b. Scrub (on<br/>inside only);<br/>c. Rinse<br/>d. SanitizeSlide up and under frame;<br/>place pins in bracketsUnderstandReassembleTitle under frame;<br/>place pins in bracketsSlide up and under frame;<br/>place pins in brackets





#### Return Slides (2) - MAIN P/N 11495 (CENTER DIVIDER P/N 11493)/FLEX P/N 11497 Discharge End

#### Disassemble



#### Pull up and out



#### Clean

a. Wash

- b. Degrease c. Scrub
- d. Rinse
- e. Sanitize

Place bracket over broiler crossbar; set down

Make sure slide is on correct chamber

Incorrect



Position center guide on pan



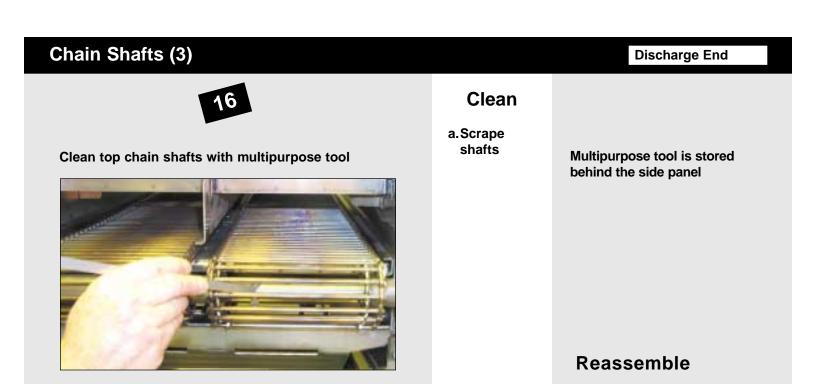
17

Reassemble

#### Stripper Blades (2) - MAIN P/N 10857/FLEX P/N 10856 **Discharge End** Clean 15 Disassemble Put blade notches on supports on broiler a. Wash b. Degrease Make sure blade is not hooked Tilt away from chain; lift off brackets c. Scrub on upper grease pan or burners d. Rinse and that it swings freely e. Sanitize Incorrect 16 Reassemble



27



Return Chains (2) - MAIN P/N 11412/FLEX P/N 11555 Discharge End						
Disassemble Pull and hold spring loaded pin	Different:       pull chain assembly toward you         Image:       Image:         Image:       Image:	<b>Clean</b> a. Wash b. Scrub c. Rinse d. Sanitize	Pull and hold spring loaded pin Slide chain assembly toward front; line up coupling with engagement pin; rotate return chain until fully engaged			
AL.			Reassemble 15			

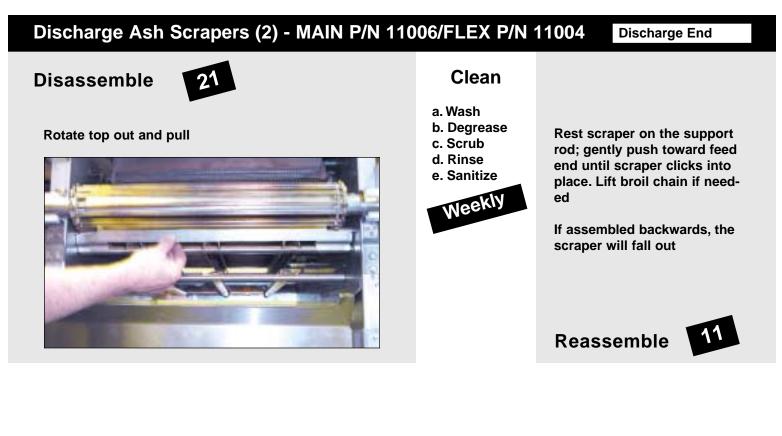




#### Grease Troughs (2) - MAIN P/N 10943/FLEX P/N 10943 **Discharge End** Clean Hook grease trough into slot Disassemble Make sure both are discharging a. Wash into grease bucket b. Degrease Lift front of lower grease tray, then lift grease c. Scrub trough to remove d. Rinse e. Sanitize Incorrect Correct Reassemble



#### Grease Bucket - P/N 9089 Discharge End Clean Disassemble 20 a. Wash b. Degrease Hang bucket by handle over Lift off c. Scrub hook on broiler d. Rinse e. Sanitize If used with liner -Remove and discard used liner: put in new liner 12 Reassemble



(nieco)



#### Lower Burners (6) - P/N 10532

Disassemble



Twist counterclockwise and pull



#### Clean

Brush with dry brush -NO WATER



Monthly

Install burner with round end facing feed end with holes up

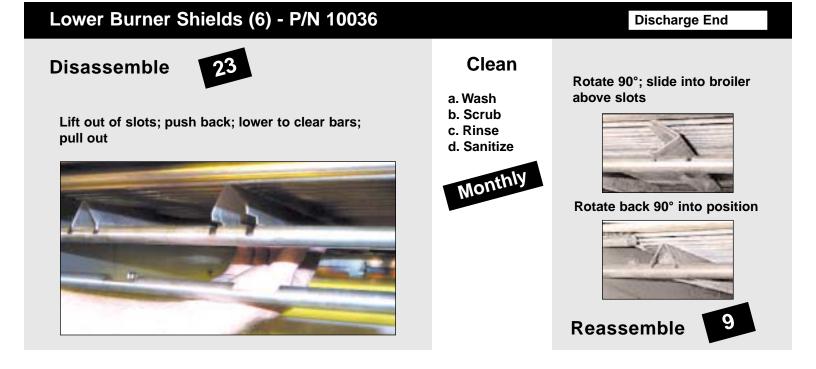
**Discharge End** 

Push and turn clockwise to make sure burner is secure and holes are facing up



10

Reassemble

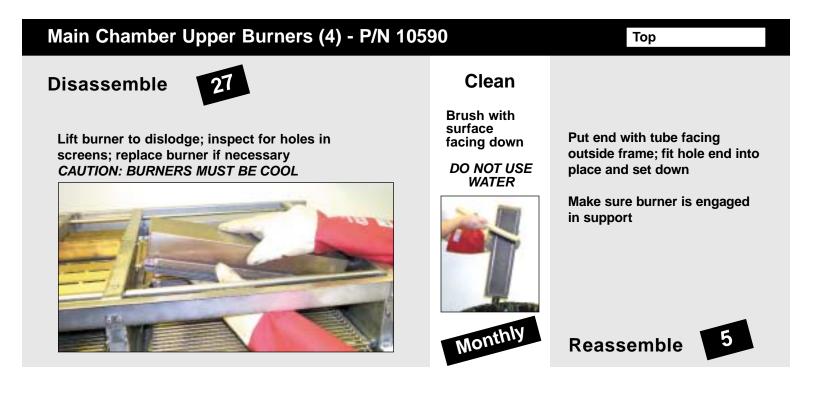






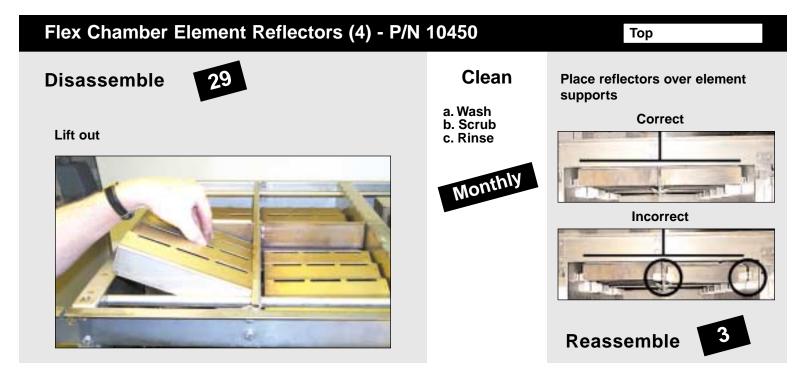






Nieco Corporation - Model 9025

Main Chamber Reverberators (4) - P/N 1015	Тор	
Disassemble 28	Clean	
Slide off; inspect for breaks/damage; replace if necessary	a. Wash b. Scrub c. Rinse	Slide onto upper burners Make sure reverberator is
	Monthly	Replace when any breakage occurs in screen surface
		Reassemble 4





#### Orifices (10)

Inside



Clean main burner orifices with Nieco brush P/N 11731



#### Clean

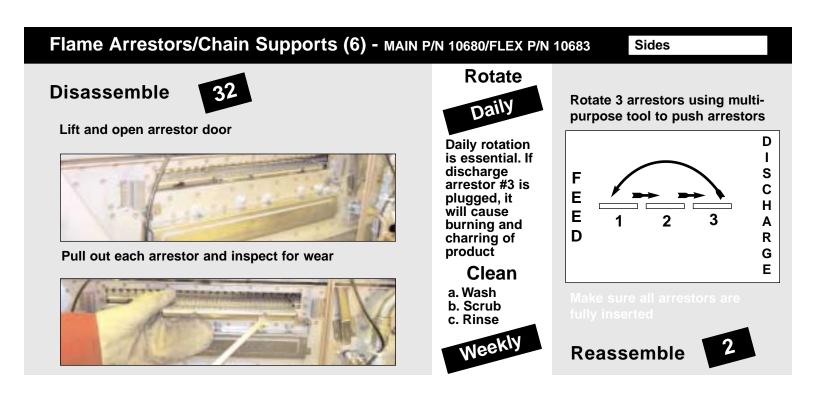
Clean 4 upper burner orifices and 6 lower burner orifices

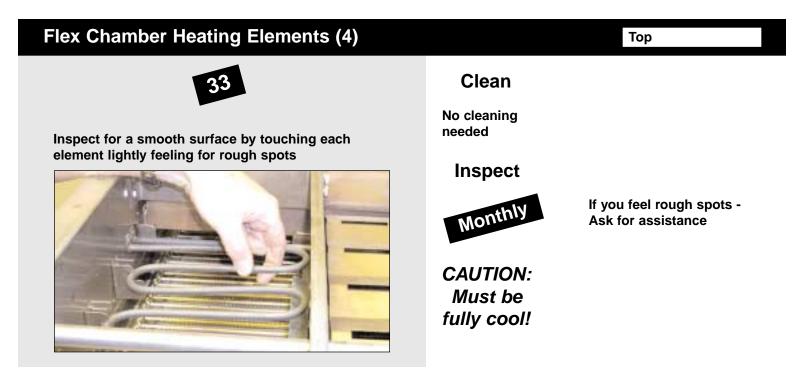


## Pilot Burners (4) Top 31 Clean Clean slot with a utility knife blade; clean orifices with Nieco Brush P/N 11731 Clean all pilot burners and orifices Image: Clean slot with a utility knife blade; clean orifices Clean all pilot burners and orifices Image: Clean slot with a utility knife blade; clean orifices Clean slot with a utility knife blade; clean orifices Image: Clean slot with a utility knife blade; clean orifices Clean slot with a utility knife blade; clean orifices Image: Clean slot with a utility knife blade; clean orifices Clean slot with a utility knife blade; clean orifices Image: Clean slot with a utility knife blade; clean orifices Clean slot with a utility knife blade; clean orifices Image: Clean slot with a utility knife blade; clean orifices Clean slot with a utility knife blade; clean orifices Image: Clean slot with a utility knife blade; clean orifices Clean slot with a utility knife blade; clean orifices Image: Clean slot with a utility knife blade; clean orifices Clean slot with a utility knife blade; clean orifices Image: Clean slot with a utility knife blade; clean orifices Clean slot with a utility knife blade; clean orifices Image: Clean slot with a utility knife blade; clean orifices Clean slot with a utility knife blade; clean orifices Image: Clean slot with a utility knife blade; clean orifices Clean slot with a ut

35

(NIEC





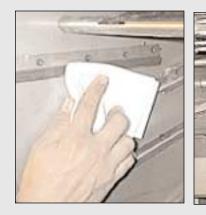


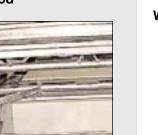
### Frame and Cross Rod



Frame

**Cross Rod** 





### Clean

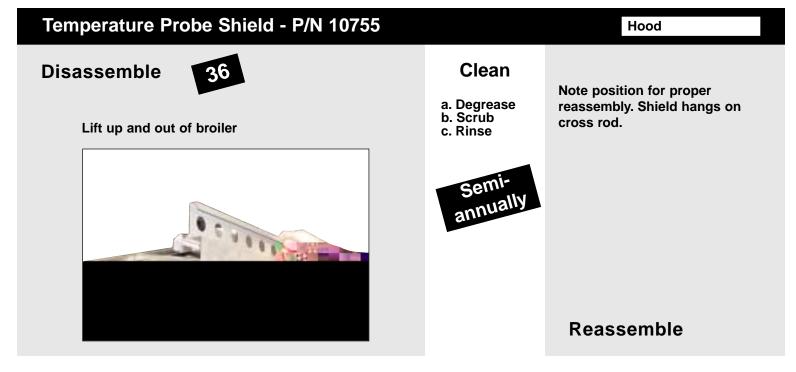
Using multipurpose tool for cross rod

Inside

Wipe down frame

## **Grease Extractors - NOT A NIECO PART** Hood Clean Disassemble 35 Insert extractor; lift and secure in a. Degrease b. Scrub position Lift and pull to remove each extractor Correct c. Rinse Incorrect Reassemble

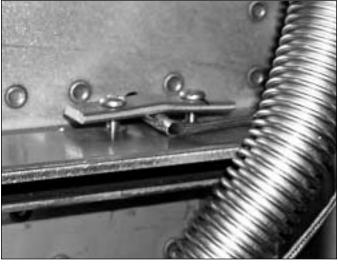




# Use a cloth with rubbing alcohol to clean the temperature probes (Main and Flex) on a monthly basis.

38

Main Chamber



FEED END

**Flex Chamber** 



- FEED END

## E. TROUBLESHOOTING

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

Problem	Solution
Pilots not lighting	<ul> <li>Check that broiler is plugged in, gas valve is open and broiler is turned on</li> <li>The 5-minute time limit was exceeded - press the timer reset button</li> <li>Manually light if it is not a timer problem</li> <li>Check for ignition</li> <li>Check for clogged pilot</li> </ul>
Main burners not lighting	<ul> <li>Check for gas pressure, if there is pressure, use the manual lighting procedure</li> <li>If no gas pressure, call for service</li> <li>Check for proper burner installation</li> <li>Check for plugged burner orifices</li> <li>Check for plugged pilot burner</li> </ul>
Pilot not staying lit	<ul> <li>Hold in red pilot button longer</li> <li>Call for service as red pilot button or thermocouple may need replacing</li> </ul>
Broil chain jams	<ul> <li>Procedure to correct:         <ul> <li>Push reset button on keypad once to reverse chain</li> <li>Push reset button a second time to run chain forward</li> <li>If chain jams again, check:                 <ul></ul></li></ul></li></ul>
Return chains not moving	<ul> <li>Verify that return chains have correct side up with drive shaft coupling lined up with engagement pin</li> <li>Check for sag in the return chain (May need to have a link removed)</li> </ul>



Problem	Solution
No display on computer control keypad	<ul> <li>If there is no text displayed on the keypad but the backlighting is on, check the connection at the keypad</li> <li>Call service if necessary</li> </ul>
Alternative display shown on computer control keypad	Depress select button on the keypad to change view
Return chain jams	<ul> <li>Remove any obstruction if needed</li> <li>Press the black reset button located on the left (MAIN CHAMBER) side of the broiler control box (underneath).</li> <li>Check the motor drive chain (bicycle chain) for any obstructions or jams</li> </ul>
Product not cooking to proper temperature in cookouts	<ul> <li>Use proper cookout procedures per OPS Manual (12/00)</li> <li>Adjust cook time</li> <li>Check that broiler is calibrated properly</li> <li>Check that all burners are lit</li> <li>Check that all parts are installed correctly, and that lower burner holes are facing up</li> <li>If on the flex chamber, inspect elements for rough spots or damage</li> <li>If flex chamber; check that electric elements are heating:</li> <li>Select WHOPPER® setting for chain (right or center)</li> <li>After 2 minutes observe top elements and verify that front and back elements are glowing. If glowing, elements are operating properly, check parts assembly. If not glowing, call service</li> <li>Check that broiler is properly cleaned and assembled</li> <li>Check ventilation</li> <li>Make sure there isn't excessive exhaust or an air vent blowing on the broiler</li> </ul>



Problem	Solution
Meat patties not returning	<ul> <li>Check that patties have not gotten stuck on the return slide         <ul> <li>Remove awnings to check</li> <li>Remove product from return slide if necessary</li> <li>Proper cleaning of return slide is needed daily to remove buildup which can cause patties to stick</li> </ul> </li> <li>Check return chain to see if patties are stuck in chain         <ul> <li>Remove product, then check to make sure the broiler has been assembled properly (Awnings, return slide and stripper blades)</li> </ul> </li> </ul>
Temperature on display reads "OPEN"	<ul> <li>Inspect wire leads coming out of temperature probe</li> <li> Remove side panel located above thermocouple</li> <li> If wire is cut or exposed (insulation), call service</li> </ul>
Computer control freezes or locks up (screen doesn't change when you press a button	<ul> <li>Reset         <ul> <li>Turn main power switch off</li> <li>Push and hold red pilot button on main and flex chambers to relight</li> <li>Turn on again; burners should relight automatically. If not, follow lighting procedure</li> </ul> </li> </ul>
Too much smoke/heat in the kitchen	<ul> <li>Check that hood and fan are working correctly</li> <li>Check that broiler is properly positioned under the hood; check all sides of broiler</li> <li>Check condition of catalyst (after broiler is turned off and cooled at end of night) clean if necessary</li> <li>Check condition and placement of grease extractors; clean daily and position properly</li> </ul>
Grease on floor from discharge end	Check that grease troughs are facing into the grease bucket

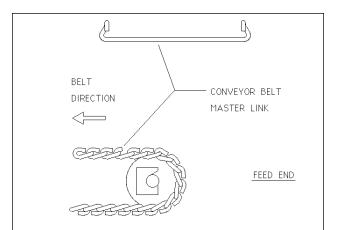


## F. BROIL CHAIN REMOVAL

Maintain proper tension on the conveyor chains to prevent jamming. Major tension adjustments are made by removing a link or links from the chain. Broil belt tension should be checked monthly. To do this, allow the machine to cool, then grip the idler shaft at each end and pull on it. If the shaft and bearings move 1/2" or more, remove a link from the conveyor belt. Before beginning, notice the way the broil chain runs through the broiler. Also, notice the direction the chain knuckles face. Be sure to reassemble the same way.

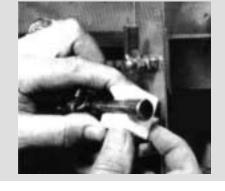
1

Run chain until the master link is near the front idler shaft.



2

Remove the loader bracket and lift shaft and teflon bearings up, and slide the bearings out.





Unhook the master link.



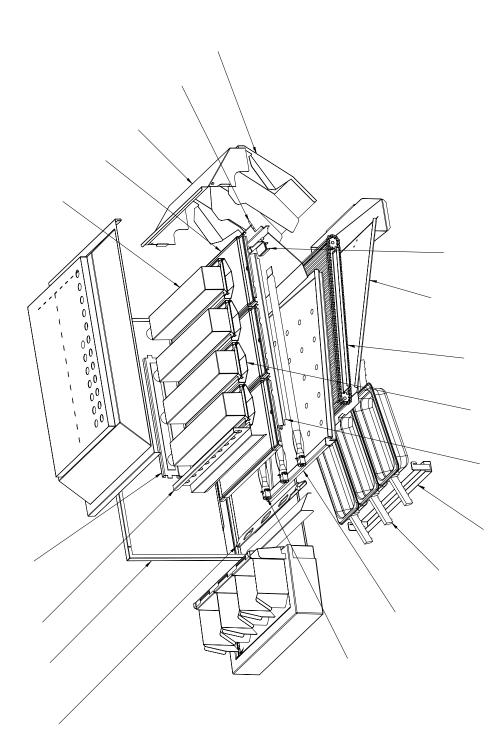
Nieco Corporation - Model 9025

## 

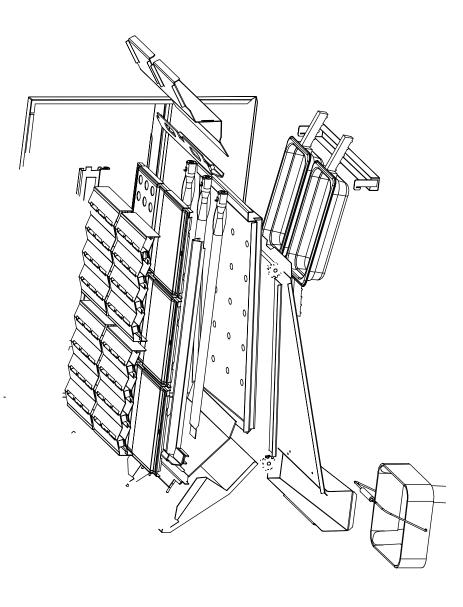
To ensure proper broiler operation be sure to reassemble the chain with the knuckle opening facing away from the direction of travel.

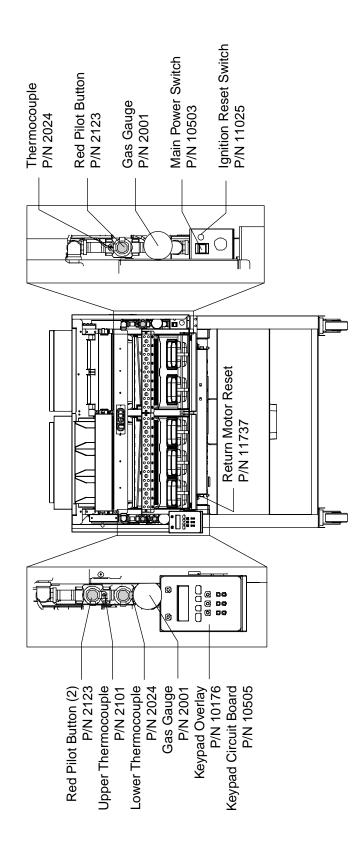
## **G. PARTS AND LOCATIONS**

### G.1 Main Chamber Removable Parts



### G.2 Flex Chamber Removable Parts

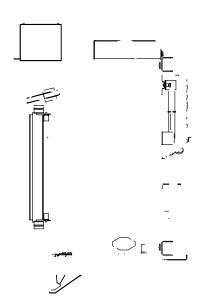






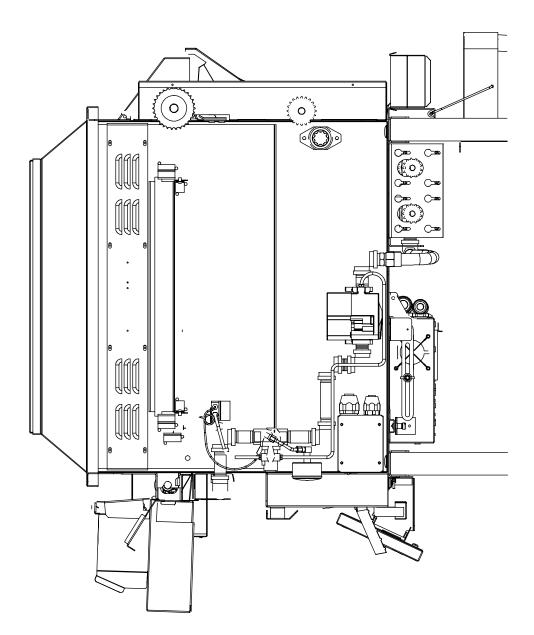
Nieco Corporation - Model 9025

### G.4 Main Chamber Side View Components





### G.5 Flex Chamber Side View Components





### G.6 Model 9025 Parts List

Nieco	P/N	
-------	-----	--

Item
------

#### 9025G GAS BURNER COMPONENTS

- 10590 Burner Box Assembly 21"
- 12193 Lower Tube Burner 10036 Shield 28" Tube Burner
- 10151 Reverberator Perforated 21"

#### 9025G IGNITION & GAS SYSTEM

Orifice, Upper Burner #51 2067 Orifice, Lower Burner #48 2015 Pilot Orifice (3223) Natural gas 2018 Pilot Orifice (3215) Natural gas 2183 Thermocouple 24" 2024 Pilot Orifice (5232) Natural gas 2047 2086 Main Gas Solenoid Valve; 240V 2123 Push Button Gas Valve (Main Chamber) 2209-05 Combination Gas Valve; 24VDC (Main & Flex) Thermocouple, "J", Ungrounded 60" leads (Main) 10290 Glow Plug (24VAC) 10291

#### 9025G ELECTRIC ELEMENTS

10495Element, Flex Outer 1430W, 208V11230Element, Flex Middle 1400W 208V

#### 9025G DRIVE MOTOR & ELECTRICAL COMPONENTS

4067-230	Contactor 4-Pole 230V		
4164	Fan axial 230VAC (control box)		
4412-DC	Relay (3-32VDC/240V/25A) elements		
4467	Noise Filter RF		
10473	Gear Motor (24VDC)		
10474	Motor Brush Set		
10503	Main on/off Switch w/light 16 Amp, 250VAC		
10504	Circuit Board (CPU)		
10505	Circuit Board (Display & Keypad complete)		
10506	Circuit Board (Motor)		
10527	Timer Solid State, 230VAC /120 sec (glow plug)		
10529	Transformer 240VAC/24VDC		
10542	Relay, 24v Input, 380/25A Output		
10977	Power Supply (208-240VAC/24VDC-4.5 Amp)		
11737	Circuit Breaker 1 Amp		
11965	Circuit Breaker 20 Amp (for holding unit)		
11025	Push Button for Ignitor		
11964	Fuseholder for 25Amps		
11963	Fuse 25Amps		
10528	Thermocouple "J" Ungrounded 78" (Main)		

#### 9025G BROIL CHAMBER COMPONENTS

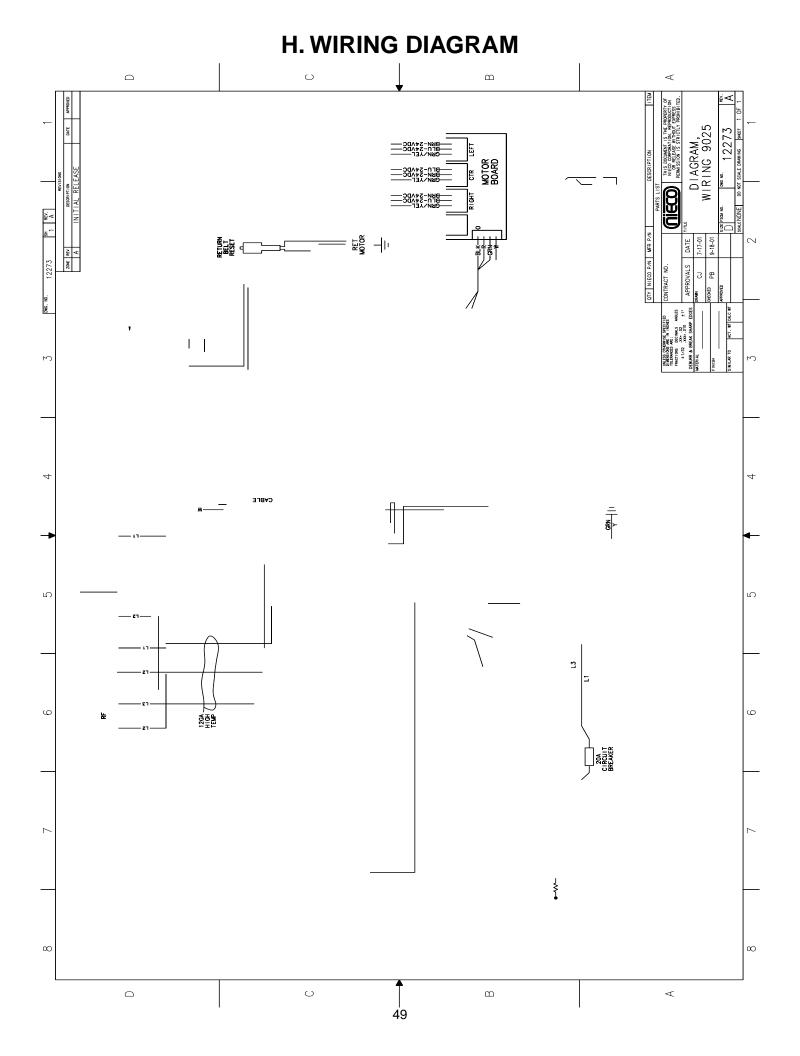
- 10509 Broil Chain 18-1/2, 6.146 ft, (Main Chamber)
- 10508 Broil Chain 7-1/2, 6.146 ft, (Flex Chamber)
- 10680
   Flame Arrestor 18.5" (Main Chamber)
- 10683Flame Arrestor 7.5" (Flex Chamber)

#### 9025G BROILER INSTALLATION/SOLD WITH BROILER

119661", 5FT. Gas Connection Kit w/one Swivel11961Electrical Plug (female) and 3ft. Power Cord11960Electrical Plug (male) and 6ft. Power Cord

48





## **I. SPECIFICATIONS**





## **Benefits of Automation**

Consistency Versatility Speed Quality Flexibility





## AUTOMATIC BROILER MODEL 9025

Ітем No. \_\_\_\_ AIA 11400

### Model 9025

The Nieco Model 9025 is the state of the art broiling system designed for maximum versatility.

The 9025 features an automatic loader, computerized control, simplified ignition, dual broil chambers, automatic product return chain and heated holding section.

### Included

- Stand
- Automatic Loader
- Catalyst Ready Hood

### The Nieco Advantage

All Nieco equipment is backed by a world-wide sales and service network, with local parts inventories and 24-hour emergency service. Included in the price of the Nieco broiler is a visit by an authorized distributor representative to start-up the broiler, activate the warranty, and train store personnel on cleaning and operating the broiler.

Nieco Corporation - Model 9025



## AUTOMATIC BROILER MODEL 9025

DIMENSIONS	INCH	MM
Length	40.00	1016
Height	67.43*	1712
Width	49.25	1251

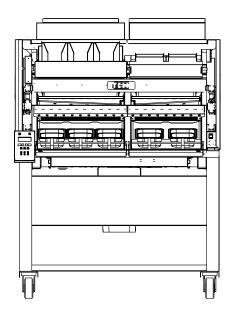
\* If your broiler is equipped with a catalyst add 1.5" to the overall height. A 2" stand extension is available for improved freezer clearance.

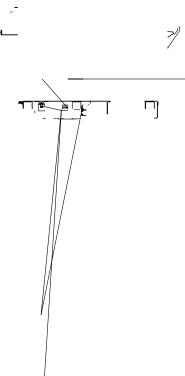
#### ENERGY

Gas connection: 1" N.P.T.

# Electrical Connection (specify exact voltage): 208-240V 3Ø 50/60Hz 23A

Natural Ga	•	3" W.C.	4.5" W.C.
BTU/hr		137,000	157,000
WEIGHT -	LB	KG	
Shipping	920	414	
Exhaust Typical	SCFM 1050		





## J. WARRANTY INFORMATION

- Seller guarantees new Nieco automatic infrared equipment against defective workmanship and materials for a period of twelve months from the date of installation with the exception of the inconel radiant surfaces, protective shields, reverberators, and electric broiling elements which are guaranteed for a period of six months from date of installation. The results of ordinary wear, neglect or misuse, accident or excessive deterioration from any cause are not considered defects. Seller's liability for defective parts is f.o.b. the factory where originally manufactured.
- We guarantee the correct mechanical operation of the equipment at time of installation, however, we make no warranty expressed or implied of cooking effect or of exact capacity as subjective judgements and product variations will alter evaluation of such performance.
- 3. Our warranty includes field labor for the replacement of guaranteed parts by an authorized Nieco Distributor for a period of 90 days after start-up. This labor service warranty is provided in all areas covered by an Authorized Nieco Distributor.
- 4. We specifically do not warrant any production or product losses or other consequential damages which may occur as a result of equipment malfunction or failure, whether the cause of malfunction or failure is otherwise covered by our warranty or not.
- 5. Seller makes no other representations or warranties of any kind, express or implied, relating to the material and equipment herein described, not expressly set forth in the agreement or any written modification. Any and all implied warranties of suitability or fitness for a particular purpose which exceed the above obligation are hereby disclaimed by Seller and excluded. Seller will not be liable for any consequential damages, loss or expense arising in connection with the use of, or the inability to use its goods for any purpose whatever. In any event, any liability of the Seller shall be limited to the purchase price of the materials and equipment herein described. Guarantee valid only if guarantee registration card is filled out and mailed to manufacturer within fourteen (14) days after machine is installed.

#### 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.





Nieco Corporation • 7950 Cameron Drive • Windsor, CA 95492 • (707) 284-7100 Office • (707) 284-7430 Fax Reorder # 9999-25 3/02 www.nieco.com • e-mail: nieco@nieco.com Printed in the USA © 2002 Nieco Corporation