



AUTOMATIC
FOOD SERVICE
EQUIPMENT

AUTOMATIC GAS BROILER
MODEL 8025

DRAFT
REV. 2
4/16/02

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.

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A. GENERAL INFORMATION

A.1 Description

The Nieco® Model 8025 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 8025 is return-flow, with an automatic product return system, allowing for space savings, while delivering product to the feed end of the broiler. The 8025 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 8025. 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 without notice. 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. 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.

 WARNING 
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.

 WARNING 
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.

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 your kitchen.
- 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 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

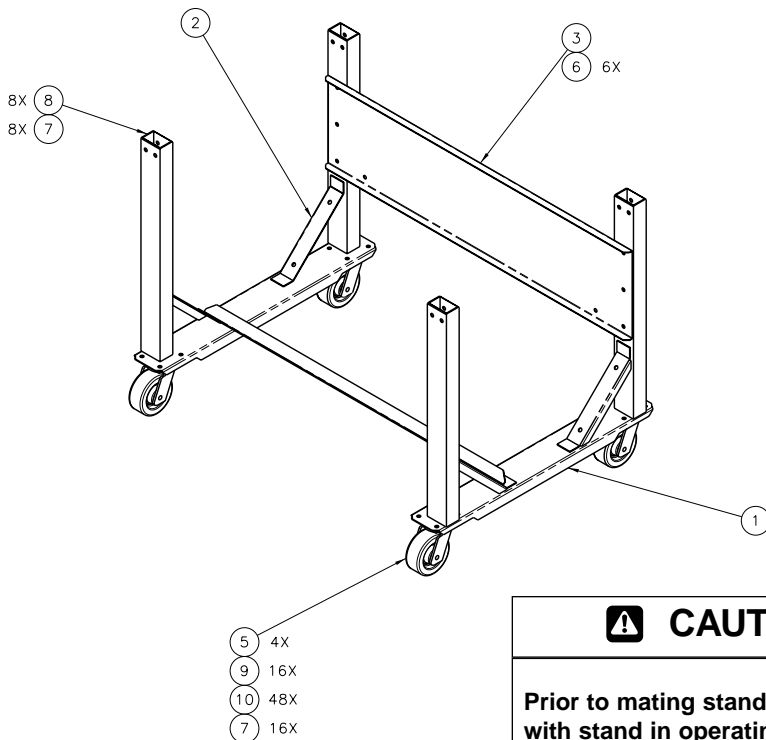
Uncrate the broiler and inspect for shipping damage. Remove the tape securing the machine parts, and install the parts in their proper location. Refer to the Parts and Location section of this manual. If there are obvious or concealed damages to any part of the broiler, please contact your freight carrier. The factory warranty does not cover freight damage.

B.2 Mounting

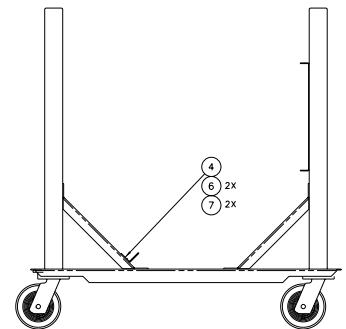
Follow the mounting instructions if this function is not performed by the installer.

B.3 Leveling

The grease drain system is based on a gravity-flow design. Therefore, it is extremely important to level the broiler during installation. Use levelling shims (P/N 11936).

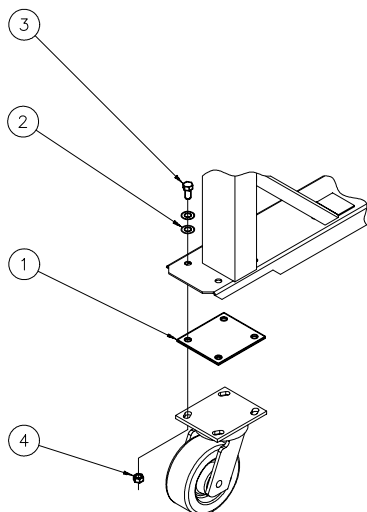


ITEM	P/N	QTY	DESCRIPTION
1	11939	1	Left Stand Leg Assembly
2	11940	1	Right Stand Leg Assembly
3	10803	1	Shear Plate
4	10410	1	Freezer Stop
5	95099	4	Caster
6	11881	1	Control Pad Bracket
7	11089	1	Quick Release Pin
8	10476	8	3/8X7/8" Bolt
9	11888	16	3/8X1 1/4" Bolt
10	10475	8	3/8X2" Bolt
11	10477	16	3/8" Lock Nut
12	5599	32	3/8" Washer



⚠ CAUTION ⚠

Prior to mating stand to broiler, and with stand in operating location, verify that stand is level within 1/8". If not, shim as required.



SHIM INSTALLATION:

1. Prior to mating stand to broiler and with stand in operating position, verify that stand is level within an 1/8" inch.
2. If shimming is required, determine which caster(s) should be shimmed.
3. Elevate side of stand to be shimmed off of floor.
4. Remove caster(s) to be shimmed.
5. When installing shims, remove existing hardware, discard washers (ITEM 2), and reuse nuts and bolts.
6. After adding shim(s) and securing caster(s), lower broiler.
7. Check to verify that broiler is now level.

ITEM	P/N	QTY	DESCRIPTION
1	11936	AR	Stand Shim
2	5599	REF	3/8" Washer
3	11888	REF	3/8X1 1/4" Bolt
4	10477	REF	3/8" Locknut

B.4 Hood Requirements

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

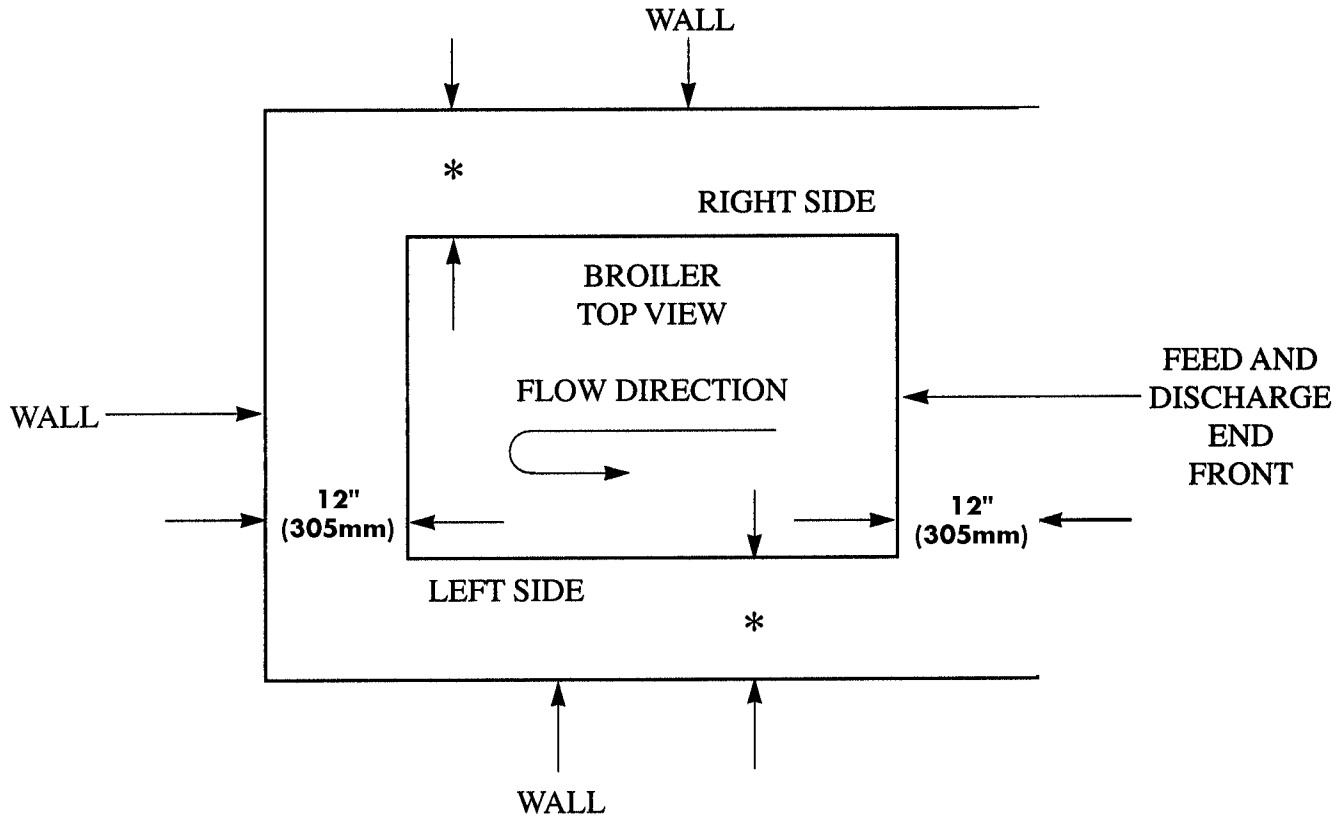
Model	SCFM
8025	1050

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



8025 Equipment Side Gas Connection



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.)

Correct Gas Line Installation

8025 Manual Gas Valve



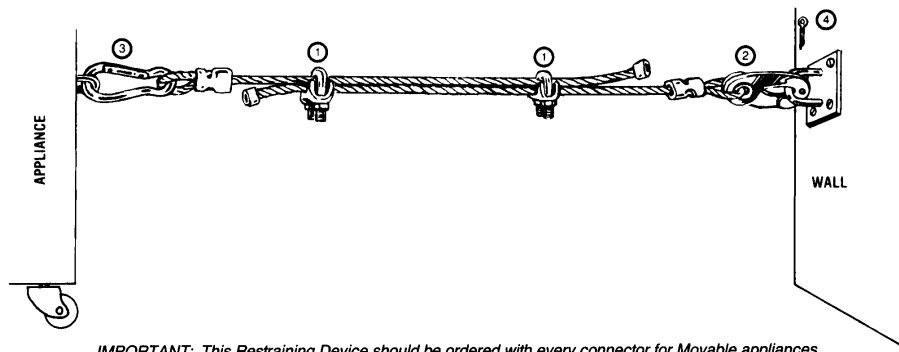
B.8 Restraining Device Installation and Use

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.



IMPORTANT: This Restraining Device should be ordered with every connector for Movable appliances.

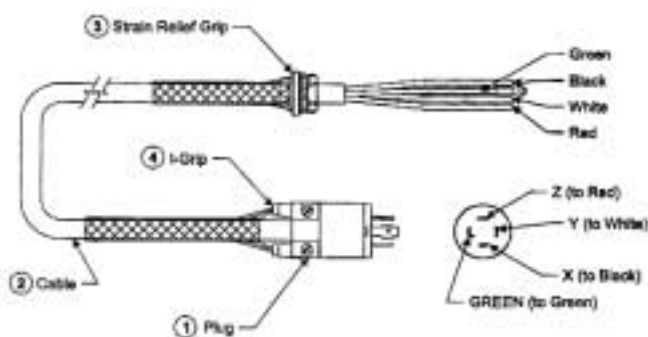
B.9 Electrical Connection

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.

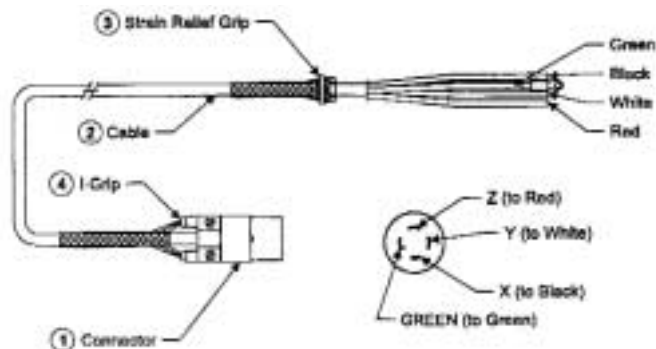
P/N 11960 - 6ft Male Power Cord

30A 3Ø 250V 3-Pole 4-Wire Grounding NEMA L15-30P



P/N 11961 - 3ft Female Power Cord

30A 250V 3-Pole 4-Wire Grounding - NEMA L15-30P



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. 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 style="list-style-type: none"> <input type="checkbox"/> Check that broiler is plugged in, gas valve is open and broiler is turned on <input type="checkbox"/> The 5-minute time limit was exceeded - press the timer reset button <input type="checkbox"/> Manually light if it is not a timer problem <input type="checkbox"/> Check for ignition <input type="checkbox"/> Check for clogged pilot
Burners not lighting	<ul style="list-style-type: none"> <input type="checkbox"/> Check for gas pressure, if there is pressure, use the manual lighting procedure <input type="checkbox"/> If no gas pressure, call for service <input type="checkbox"/> Check for proper burner installation <input type="checkbox"/> Check for plugged burner orifices <input type="checkbox"/> Check for plugged pilot burner
Pilot not staying lit	<ul style="list-style-type: none"> <input type="checkbox"/> Hold in red pilot button longer <input type="checkbox"/> Call for service as red pilot button or thermocouple may need replacing
Broil chain jams	<ul style="list-style-type: none"> <input type="checkbox"/> Procedure to correct: <ul style="list-style-type: none"> ___ Push reset button on keypad once to reverse chain ___ Push reset button a second time to run chain forward If chain jams again, check: <ul style="list-style-type: none"> ___ Arrestors for proper placement (Make sure flex chamber arrestors are under both chains) ___ For sag in the chain with arrestors in place (Chain may need a link removed) ___ For an obstruction
Return chains not moving	<ul style="list-style-type: none"> <input type="checkbox"/> Verify that return chains have correct side up with drive shaft coupling lined up with engagement pin <input type="checkbox"/> Check for sag in the return chain (May need to have a link removed)

Problem	Solution
No display on computer control keypad	<ul style="list-style-type: none"> <input type="checkbox"/> If there is no text displayed on the keypad but the backlighting is on, check the connection at the keypad <input type="checkbox"/> Call service if necessary
Alternative display shown on computer control keypad	<ul style="list-style-type: none"> <input type="checkbox"/> Depress select button on the keypad to change view
Return chain jams	<ul style="list-style-type: none"> <input type="checkbox"/> Remove any obstruction if needed <input type="checkbox"/> Press the black reset button located on the left (MAIN CHAMBER) side of the broiler control box (underneath). <input type="checkbox"/> Check the motor drive chain (bicycle chain) for any obstructions or jams
Product not cooking to proper temperature in cookouts	<ul style="list-style-type: none"> <input type="checkbox"/> Adjust cook time <input type="checkbox"/> Check that broiler is calibrated properly <input type="checkbox"/> Check that all burners are lit <input type="checkbox"/> Check that all parts are installed correctly, and that lower burner holes are facing up <ul style="list-style-type: none"> <input type="checkbox"/> Check that broiler is properly cleaned and assembled <input type="checkbox"/> Check ventilation <ul style="list-style-type: none"> ___ Make sure there isn't excessive exhaust or an air vent blowing on the broiler

Problem	Solution
Meat patties not returning	<ul style="list-style-type: none"> <input type="checkbox"/> Check that patties have not gotten stuck on the return slide <ul style="list-style-type: none"> ___ Remove awnings to check ___ Remove product from return slide if necessary ___ Proper cleaning of return slide is needed daily to remove buildup which can cause patties to stick <input type="checkbox"/> Check return chain to see if patties are stuck in chain <ul style="list-style-type: none"> ___ Remove product, then check to make sure the broiler has been assembled properly (Awnings, return slide and stripper blades)
Temperature on display reads “OPEN”	<ul style="list-style-type: none"> <input type="checkbox"/> Inspect wire leads coming out of temperature probe <ul style="list-style-type: none"> ___ Remove side panel located above thermocouple ___ If wire is cut or exposed (insulation), call service
Computer control freezes or locks up (screen doesn’t change when you press a button)	<ul style="list-style-type: none"> <input type="checkbox"/> Reset <ul style="list-style-type: none"> ___ Turn main power switch off ___ Push and hold red pilot button on main and flex chambers to relight ___ Turn on again; burners should relight automatically. If not, follow lighting procedure
Too much smoke/heat in the kitchen	<ul style="list-style-type: none"> <input type="checkbox"/> Check that hood and fan are working correctly <input type="checkbox"/> Check that broiler is properly positioned under the hood; check all sides of broiler <input type="checkbox"/> Check condition of catalyst (after broiler is turned off and cooled at end of night) clean if necessary <input type="checkbox"/> Check condition and placement of grease extractors; clean daily and position properly
Grease on floor from discharge end	<ul style="list-style-type: none"> <input type="checkbox"/> Check that grease troughs are facing into the grease bucket

D. OPERATION

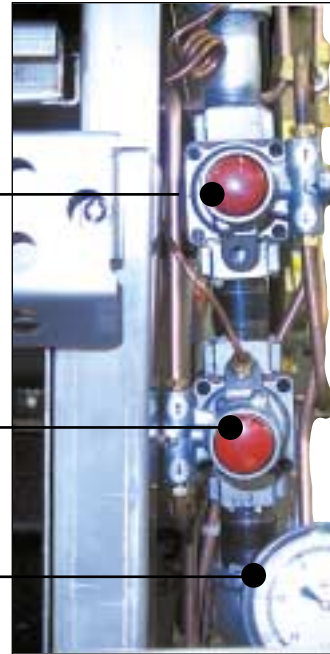
D.1 Controls and Indicators

ON THE FLEX CHAMBER SIDE

Upper Red Pilot Button (P/N 2123)

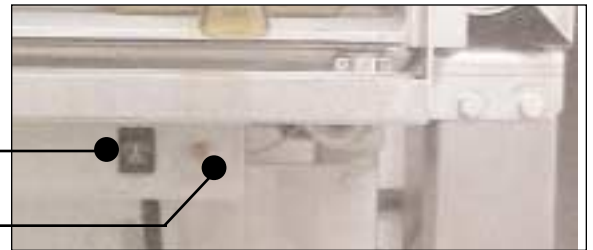
Lower Red Pilot Button (P/N 2123)

Gas Pressure Gauge (P/N 2001)



Main On/Off Switch (P/N 10503)

Ignitor Reset Button (P/N 11025)

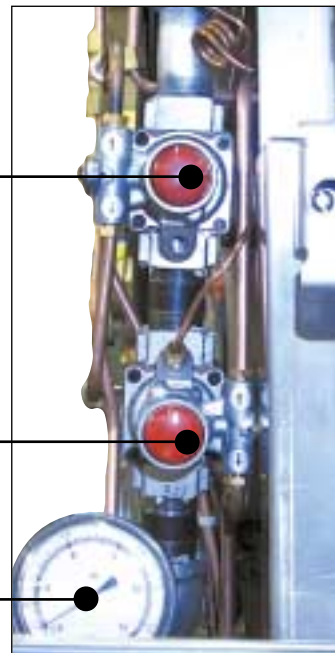


ON THE MAIN CHAMBER SIDE

Upper Red Pilot Button (P/N 2123)

Lower Red Pilot Button (P/N 2123)

Gas Pressure Gauge (P/N 2001)



D.1 Controls and Indicators (Cont.)



- (1) IR READY - Infra-red port for remote control programming (not currently used).
- (2) LED DISPLAY
- (3) LEFT MENU SELECTION BUTTON
- (4) RIGHT MENU SELECTION ARROW
- (5) UP PRODUCT SELECTION BUTTON - Press to change active product selected.
- (6) DOWN PRODUCT SELECTION BUTTON- Press to change active product selected.
- (7) SELECT BUTTON - Press to enter selection.
- (8) HEAT BUTTON - Press to change top heat settings for Flex chamber (belt 2) ONLY.
- (9) TIME BUTTON - Press to change cook time of active chain.

D.2 Lighting Procedures

PRE-LIGHTING PREPARATION

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

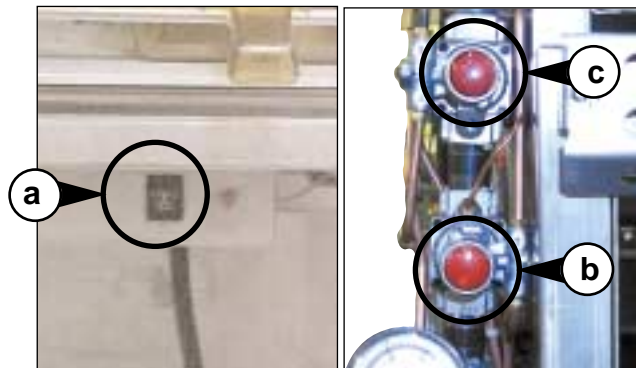
⚠ WARNING ⚠

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

MAIN CHAMBER IGNITION

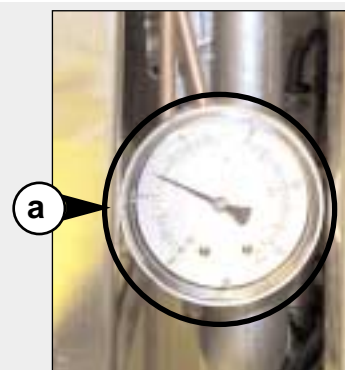
1

Turn the **MAIN POWER SWITCH (a)** on. Starting with the **MAIN CHAMBER RED PILOT BUTTONS**, push 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.



2

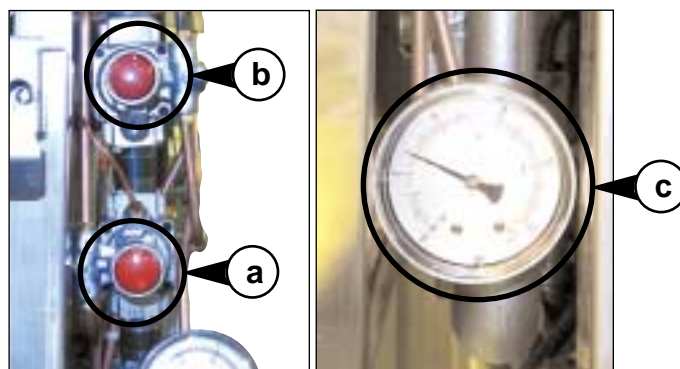
After releasing red pilot buttons; check **GAS PRESSURE GAUGE (a)** reading. Gauge should read 4". If not, follow troubleshooting tips in section E of this manual. Verify that main chamber burners - upper and lower - have lit. **NOTE: GAS PRESSURES ARE YET TO BE DETERMINED.**



FLEX CHAMBER IGNITION

3

Move to the **FLEX CHAMBER RED PILOT BUTTONS**, push and hold the **LOWER RED PILOT BUTTON (a)** for 30 seconds after the pilot has lit. Release, and verify that the burners have lit. Then press and hold the **UPPER RED PILOT BUTTON (b)** for 30 seconds after the pilot has lit. Release, and verify that the burners have lit. Verify that the **GAS PRESSURE GAUGE (c)** reads 4". **NOTE: GAS PRESSURES ARE YET TO BE DETERMINED.**



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 REIGNITION FAILS, COMPLETELY SHUT OFF THE BROILER, WAIT 5 MINUTES AND REPEAT THE IGNITION PROCEDURES.



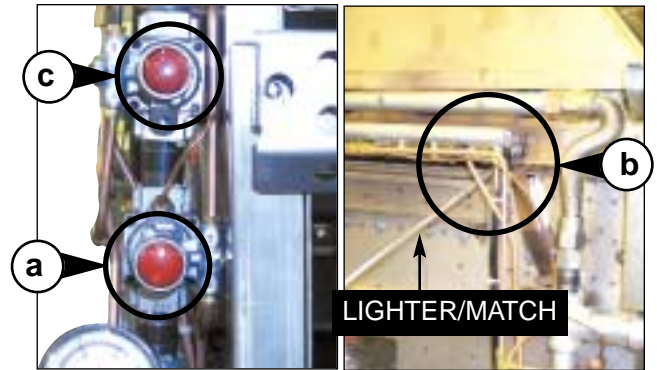
Reset Button

D.2 Lighting Procedures (Cont.)

MANUAL IGNITION - MAIN CHAMBER

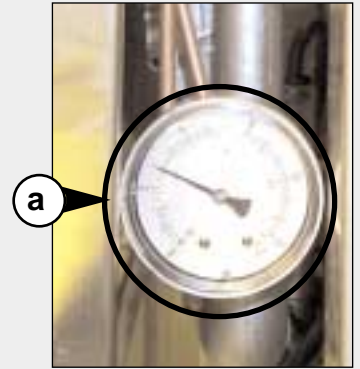
1

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

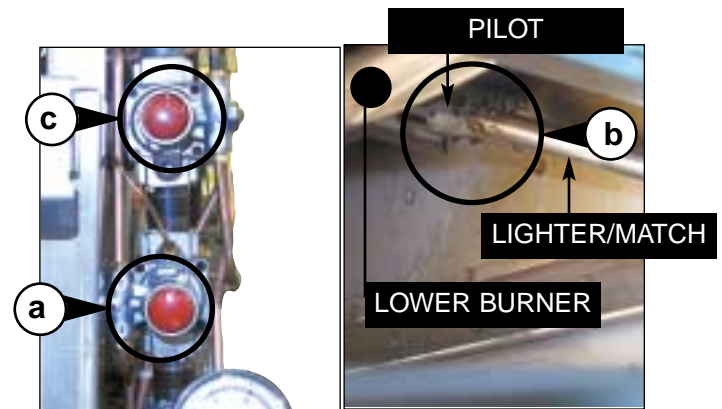
After releasing red pilot buttons; check **GAS PRESSURE GAUGE (a)** reading. Gauge should read 4". If not, follow troubleshooting tips in section E of this manual. Verify that main chamber burners - upper and lower - have lit. **NOTE: GAS PRESSURES ARE YET TO BE DETERMINED.**



MANUAL IGNITION - FLEX CHAMBER

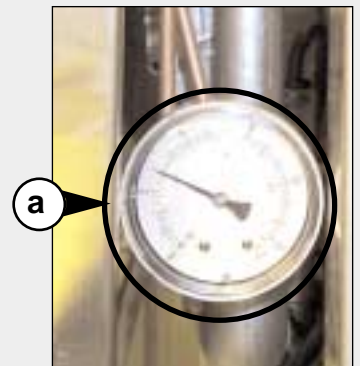
1

Remove the **UPPER GREASE PAN** (not pictured - see DISASSEMBLY). Press and hold the **LOWER RED PILOT BUTTON (a)** and place the long stemmed lighter or match on the **PILOT BURNER (b)** located on the outboard (manifold) side of the flex chamber. After pilot is lit, hold pilot button for 30 seconds and release. Repeat for the **UPPER PILOT BUTTON (c)**.



2

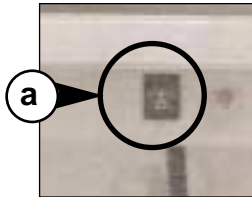
After releasing pilot button, verify that **LOWER BURNERS** have lit and that the **GAS PRESSURE GAUGE** reads 4" (a). **NOTE: GAS PRESSURES ARE YET TO BE DETERMINED.**



D.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 (a)**.
3. Wait for 30 minutes for the broiler to cool.



WARNING

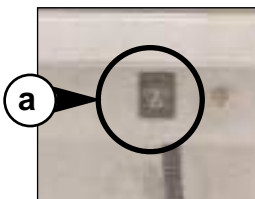
Always leave the ventilation hood on while the broiler is cooling. Failure to do so is both a fire risk and could result in damage to the broiler.

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

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

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

CAUTION

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

D.4 Control Operation

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

Follow the steps outlined for calibration, changing preset times to properly set up this broiler.

WARMING UP

1

Turn Main Power Switch on. Light the broiler following the lighting procedures. The broiler will be in 'Fast Warm' mode. This will quickly heat the broiler to the Automatic Temperature Control set point. Allow the broiler 30 minutes to get to proper cooking temperature. During the warm-up period the broil chains will move at their slowest speed.

DO NOT COOK DURING WARM-UP!



CALIBRATION

2

If necessary, the broiler can automatically calibrate itself to a new Automatic Temperature Control (ATC) set point. Press the right hand Menu Selection button, which is pointing to "calibrate" on the display. The broiler will be in calibration mode for 60 minutes. During this time the conveyor will move at the slowest possible speed.

DO NOT COOK DURING CALIBRATION!



NORMAL OPERATION

3

After warming up or calibrating, the broiler will switch into "Cooking" mode. The conveyors will adjust to their set speeds and the broiler is ready for normal use. B1 is the large "Main" or left chain; B2 is the small "Flex" or right chain.



SELECTING PRODUCTS

4

Each belt has four preset products. Each of these can be programmed for different cook times and heater settings. To change the current product, first choose which belt to change. Press the left Menu Selection button to switch between Belt 1 (Main) and Belt 2 (Flex). When the proper belt has been selected, press the up or down Product Selection buttons to scroll through the list of products. Press "SELECT" to make the change. The broiler will return to "Cooking" mode.



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.

D.4 Control Operation

CHANGING BELT SPEEDS

1

Press "Time" to change the belt speed for the active product. The control will go into "Edit" mode. Use the UP or DOWN ARROWS to change the cook time. Press "Save" or "SELECT" to lock in the change and return to cook mode. Press "Exit" if no change is desired.



PROGRAMMING MENU

2

To enter the programming menu, press the two MENU SELECTION BUTTONS simultaneously. This will put the control in programming mode.

1. Sleep Mode: NOT CURRENTLY USED
2. Set ATC Temp: Used to change ATC settings (see CHANGING ATC SET POINT).
3. Calibrate Probes: FOR FACTORY USE ONLY!
4. Belt Cook Rev.:FOR FACTORY USE ONLY!



CHANGING ATC SET POINT

3

If it is necessary to change the ATC set point for either chamber, choose option #2 on the programming menu. The display will read as follows:

T1 = Actual temperature, Main Chamber
T2 = Actual temperature, Flex Chamber
T3 = Not used

ATC1 = Set point, Main Chamber

ATC2 = Set point, Flex Chamber

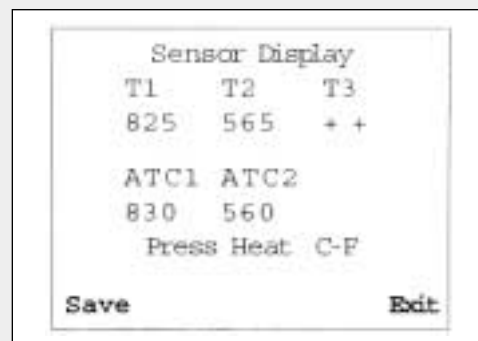
Press the UP or DOWN ARROWS to change temperature set point.

Press "SELECT" to change from ATC1 to ATC2.

Press "Save" to save changes.

Press "Heat" to change display from F to C.

Press "Exit" to leave without changes.



D.4 Control Operation

PROGRAMMING PRODUCT NAMES

1

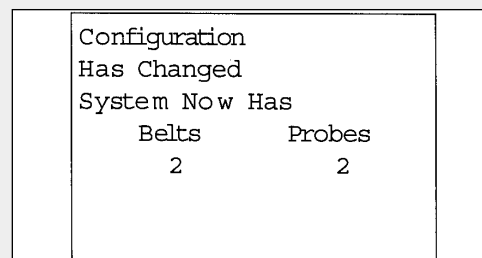
To change the names of products in the memory, press the TIME and HEAT buttons simultaneously. This will get you into edit mode. Starting with the first letter, use the up or down arrows to scroll through the alphabet to choose upper or lower case letters, symbols or numbers. Press SELECT to move to the next space. When finished, press SAVE to store the new names in memory. Press EXIT to return to cooking mode without saving changes.



SYSTEM CONFIGURATION

2

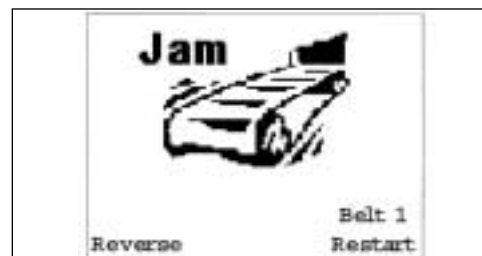
The control will automatically detect the number of motors and temperature probes connected. Upon start-up for the first time, the 'System Configuration' will be displayed. Verify that it is correct, and push the upper left MENU SELECTION button and the HEAT button simultaneously. This will store the configuration in memory. If the configuration is not correct, cycle the main power to reset the control.



BELT JAM

3

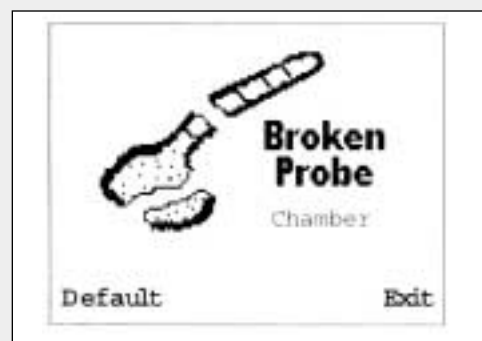
If one of the conveyors jams, the BELT JAM screen will be displayed. The options are to reverse the motor, which may be necessary to remove the jam, or to reset and continue normal operation. To reverse the motor, press and hold the MENU SELECTION button labeled reverse. To continue operation without restarting the control, press the SELECT button. This will allow the broiler to continue operating, however, if the problem is not resolved, each time the broiler is started up, the screen will flash the 'Belt Jam' screen.



BROKEN PROBE

4

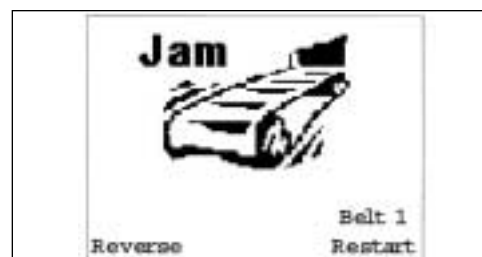
The 'Broken Probe' screen indicates that the control is not getting a signal from one of the connected temperature probes. Check the connections in the control box, and replace is necessary. Press the SELECT button to continue normal operation.



REQUIRED BOARD NOT PRESENT - SYSTEM STOPPED

5

This means that the display board or one of the other boards lost communication temporarily. Cycle the power to reset. If the problem reoccurs, then replace the patch cord connecting the display to the main board.



E. 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.

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.

Meat Guides (3) - P/N 11387

Feed End

Disassemble

1

Pull out slightly at bottom, then lift up



Clean

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

Ensure that hinge is engaged in slot



Reassemble

26

Loader Cover - P/N 11386

Feed End

Disassemble

2

Slide towards yourself



Clean

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

Slide on; the fit is very tight



Reassemble

25

Loader Base - P/N 11211

Feed End

Disassemble

3

Pull release pin; lift right side and pull



Clean

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

Hold base by loader bar; pull release pin; tilt inside side up

Insert outer side first; push loader bar to move base until pin engages



Reassemble

24

Loader Housing - P/N 11389

Feed End

Disassemble

4

Lift and pull



Clean

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

Hang housing on the brackets



Reassemble

23

Flex Slide - P/N 11755

Feed End

Disassemble

5

Lift and pull



Clean

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



CAUTION:
HOT SURFACE

Hang slide on the brackets



Reassemble

22

Main Chamber Ash Scraper Tray P/N 11014

Feed End

Disassemble

6

Pull out



Clean

- Wash
- Scrub
- Rinse
- Sanitize

Push in place and secure over channel

Reassemble

21

Upper Grease Pans (2) - MAIN P/N 10737/FLEX P/N 10452

Feed End

Disassemble

7

Slide pan out



Clean

- Wash
- Degrease
- Scrub
- Rinse
- Sanitize

Slide pan into slot

Incorrect

Correct



Reassemble

20

Warming Platens (2)

Feed End

8

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

Feed End

Disassemble

9

Lift up and out



Clean

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

Hook in the slot



Reassemble

19

Feed End Ash Scraper Blades (2) - MAIN P/N 11016/FLEX P/N 11015

Feed End

Disassemble

10

Lift off pins and pull out



Clean

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

Weekly

Replace back under top chains; put notches on pins



X Make sure part swings freely

Reassemble

18

Awnings (2) - MAIN P/N 11837/FLEX P/N 11830

Discharge End

Disassemble

11

Tilt to unhook; lift pins off brackets; pull out



Clean

- a. Wash
- b. Scrub (on inside only)
- c. Rinse
- d. Sanitize

Slide up and under frame; place pins in brackets



Reassemble

17

Side Panels (2) - P/N 10747

Sides

Disassemble

12

Lift off



Clean

- a. Wipe clean
- b. No Scrub

Hook over corner supports

Reassemble

16

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

Discharge End

Disassemble

13

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



Reassemble

15

Stripper Blades (2) - MAIN P/N 10857/FLEX P/N 10856

Discharge End

Disassemble

14

Tilt away from chain; lift off brackets



Clean

- Wash
- Degrease
- Scrub
- Rinse
- Sanitize

Put blade notches on supports on broiler

Make sure blade is not hooked on upper grease pan or burners and that it swings freely

Incorrect



Reassemble

14

Chain Shafts (3)

Discharge End

15

Clean top chain shafts with multipurpose tool



Clean

- Scrape shafts

Multipurpose tool is stored behind the side panel

Reassemble

Return Chains (2) - MAIN P/N 11412/FLEX P/N 11555

Discharge End

Disassemble

16

Pull and hold spring loaded pin



Lift front; pull chain assembly toward you



Clean

- 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

Reassemble

13

Lower Grease Trays (2) - MAIN P/N 11553/FLEX P/N 11551

Discharge End

Disassemble

17

Lift from grease trough slot; slide out



Clean

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

Slide into place; fit bracket into slot

Reassemble

12

Grease Troughs (2) - MAIN P/N 10943/FLEX P/N 10943

Discharge End

Disassemble

18

Lift front of lower grease tray, then lift grease trough to remove



Clean

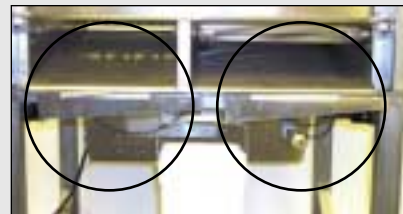
- Wash
- Degrease
- Scrub
- Rinse
- Sanitize

Hook grease trough into slot

Make sure both are discharging into grease bucket

Incorrect

Correct



Reassemble

11

Grease Bucket - P/N 9089

Discharge End

Disassemble

19

Lift off



Clean

- Wash
- Degrease
- Scrub
- Rinse
- Sanitize

If used with liner -
Remove and discard used liner; put in new liner

Hang bucket by handle over hook on broiler

Reassemble

10

Discharge Ash Scrapers (2) - MAIN P/N 11006/FLEX P/N 11004

Discharge End

Disassemble

20

Rotate top out and pull



Clean

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

Weekly

Rest scraper on the support rod; gently push toward feed end until scraper clicks into place. Lift broil chain if needed

If assembled backwards, the scraper will fall out

Reassemble

9

Lower Burners (6 Main & Flex Chambers) - P/N 10532

Discharge End

Disassemble

21

Twist counterclockwise and pull



Clean

Brush with dry brush - NO WATER



Monthly

Install burner with round end facing feed end with holes up

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



Reassemble

8

Lower Burner Shields (6 Main & Flex Chambers) - P/N 10036

Discharge End

Disassemble

22

Lift out of slots; push back; lower to clear bars; pull out



Clean

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

Monthly

Rotate 90°; slide into broiler above slots



Rotate back 90° into position



Reassemble

7

Catalyst (if available) - NOT A NIECO PART

Top

Disassemble

23

Grasp handle and lift up to remove from shroud collar



Rotate

Weekly

Clean

Monthly

Rinse with water only; air dry

Do not use chemicals on a catalyst

Lift up, rotate 1/2 turn and fit over shroud

Handle should be at top

CAUTION:
EXTREMELY HOT

Reassemble

6

Perforated Cap (2 if no catalyst) - P/N 11863

Top

Disassemble

24

Lift from shroud collar



Clean

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

Monthly

Fit into shroud collar



Check that the panel with the holes is at the top

Reassemble

5

Shrouds (2) - MAIN P/N 11706/FLEX P/N 11704

Top

Disassemble

25

Lift from broiler



Clean

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

Monthly

Place shroud properly on broiler

Main Side (Wide Shroud) Flex Side (Narrow Shroud)



Check that the wide shroud is on the main side and the narrow shroud is on the flex side of the broiler

Reassemble

4

Upper Burners (8 Main & Flex Chambers)

Top

Disassemble 26

Lift burner to dislodge; inspect for holes in screens; replace burner if necessary
CAUTION: BURNERS MUST BE COOL



Clean

Brush with surface facing down

DO NOT USE WATER



Monthly

Put end with tube facing outside frame; fit hole end into place and set down

Make sure burner is engaged in support

Reassemble 3

Reverberators (8)

Top

Disassemble 27

Slide off; inspect for breaks/damage; replace if necessary



Clean

- a. Wash
- b. Scrub
- c. Rinse

Monthly

Slide onto upper burners

Make sure reverberator is loose

Replace when any breakage occurs in screen surface

Reassemble 2

Orifices (10)

Inside

28

Clean main burner orifices with Nieco brush
P/N 11731



Clean

Clean 4 upper
burner
orifices and 6
lower burner
orifices

Monthly

Pilot Burners (4)

Top

29

Clean slot with a utility knife blade; clean orifices
with Nieco Brush P/N 11731



Clean

Clean all pilot
burners and
orifices

Monthly

Flame Arrestors/Chain Supports (6) - MAIN P/N 10680/FLEX P/N 10683

Sides

Disassemble

30

Lift and open arrestor door



Pull out each arrester and inspect for wear



Rotate

Daily

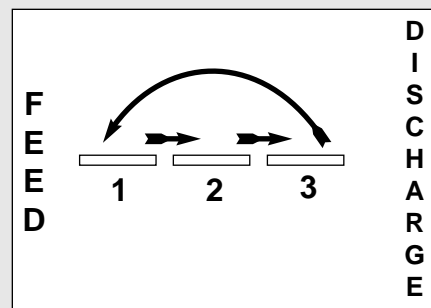
Daily rotation is essential. If discharge arrester #3 is plugged, it will cause burning and charring of product

Clean

- Wash
- Scrub
- Rinse

Weekly

Rotate 3 arrestors using multi-purpose tool to push arrestors



Make sure all arrestors are fully inserted

Reassemble

1

Frame and Cross Rod

Inside

31

Frame

Cross Rod



Clean

Using multipurpose tool for cross rod

Wipe down frame

Disassemble

32

Lift up and out of broiler



Clean

- Degrease
- Scrub
- Rinse

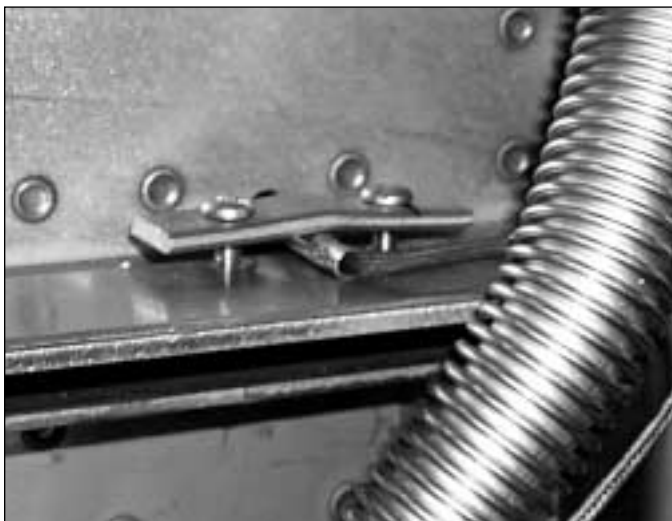
Semi-
annually

Note position for proper reassembly. Shield hangs on cross rod.

Reassemble

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

Main Chamber



FEED END →

Flex Chamber



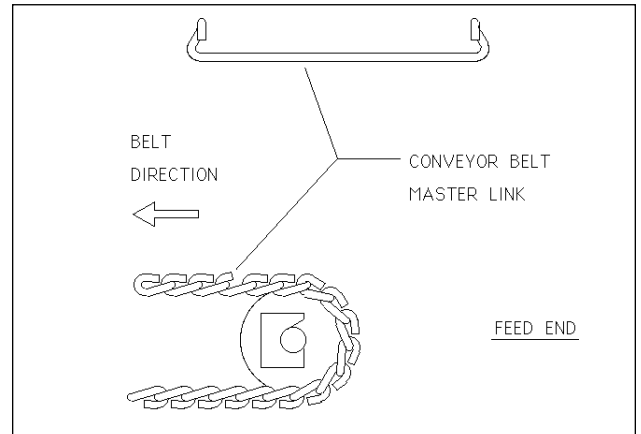
← FEED END

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.

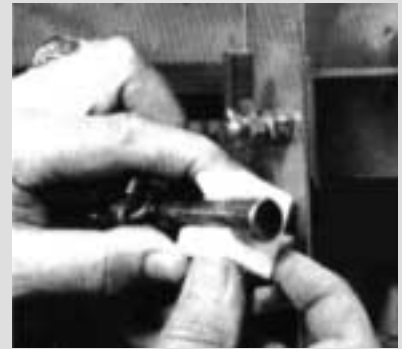
1

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.



3

Unhook the master link.

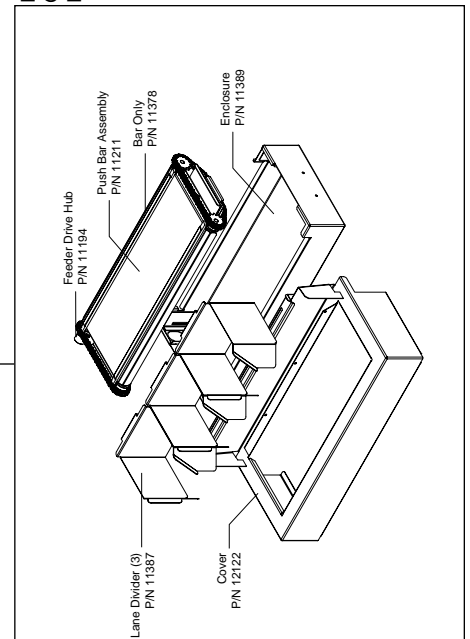
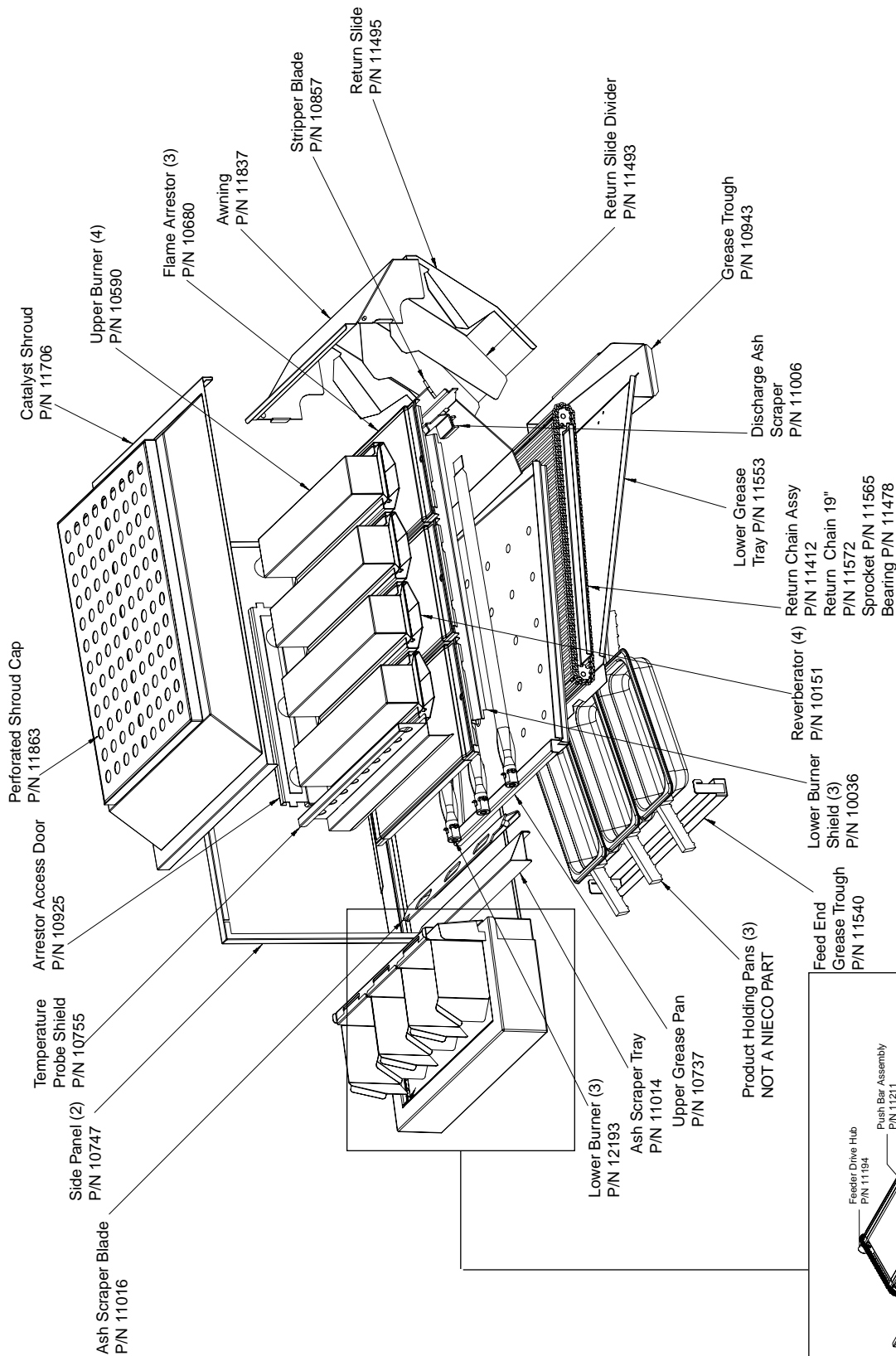


⚠ CAUTION ⚠

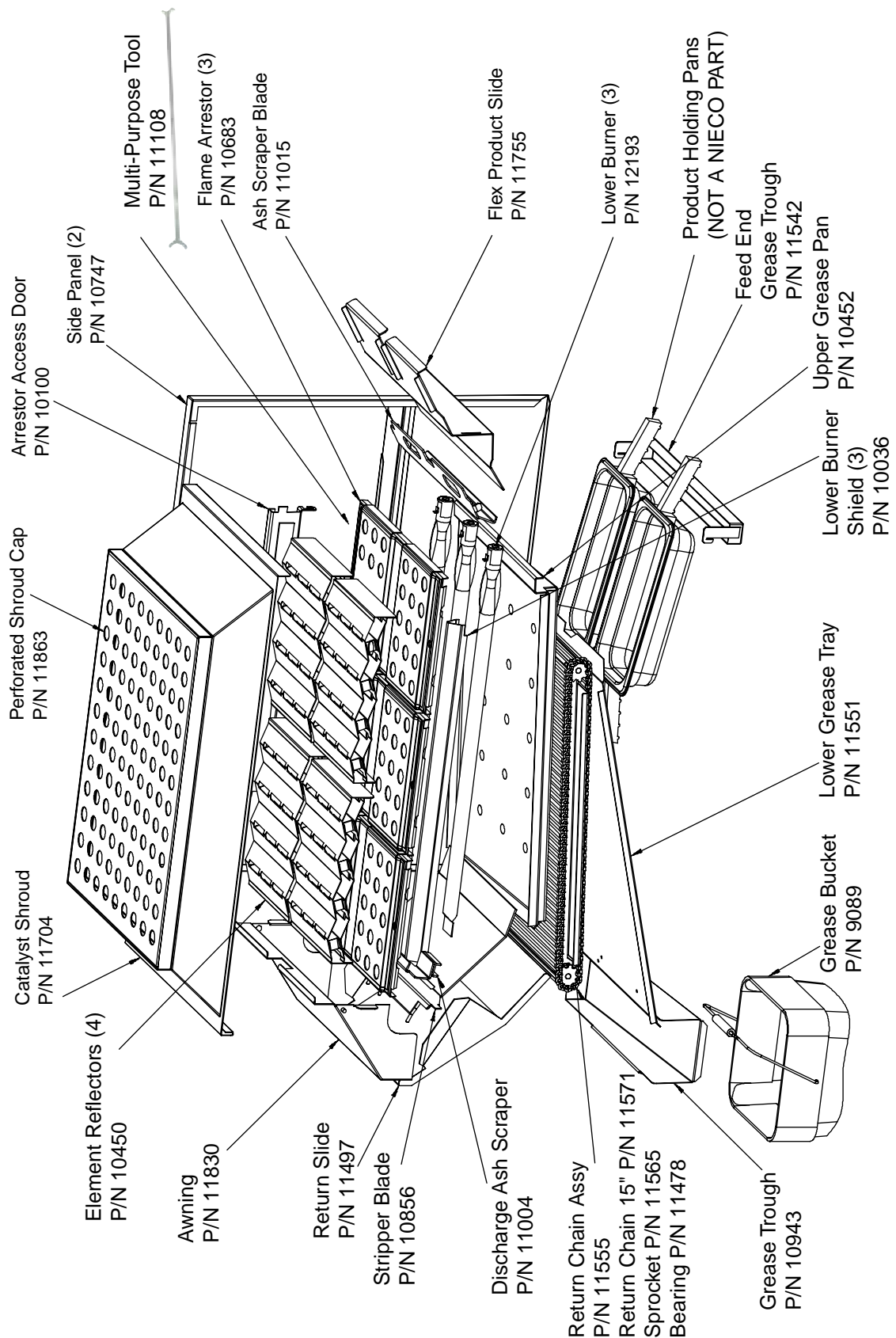
To ensure proper broiler operation be sure to reassemble the chain with the knuckle opening facing away from the direction of travel.

G. PARTS AND LOCATIONS

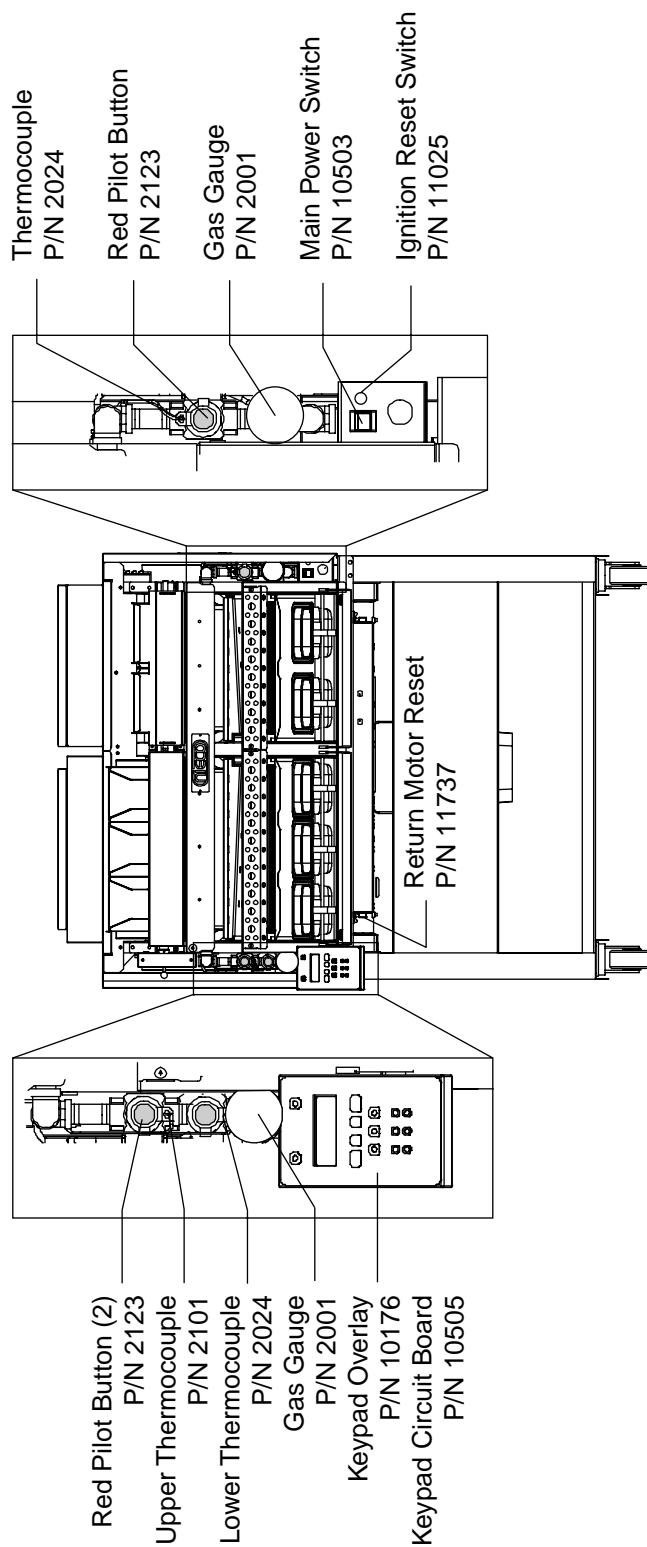
G.1 Main Chamber Removable Parts



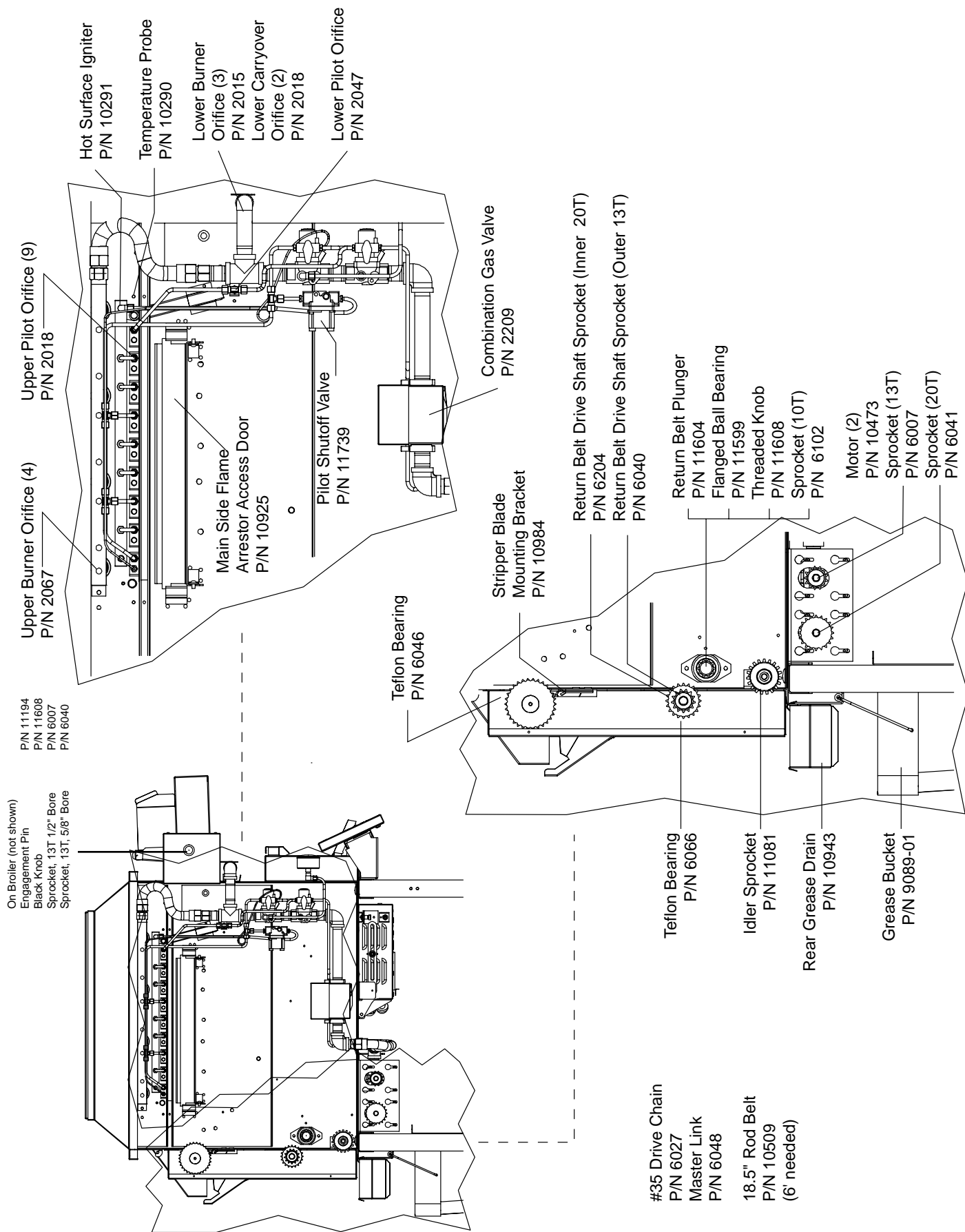
G.2 Flex Chamber Removable Parts



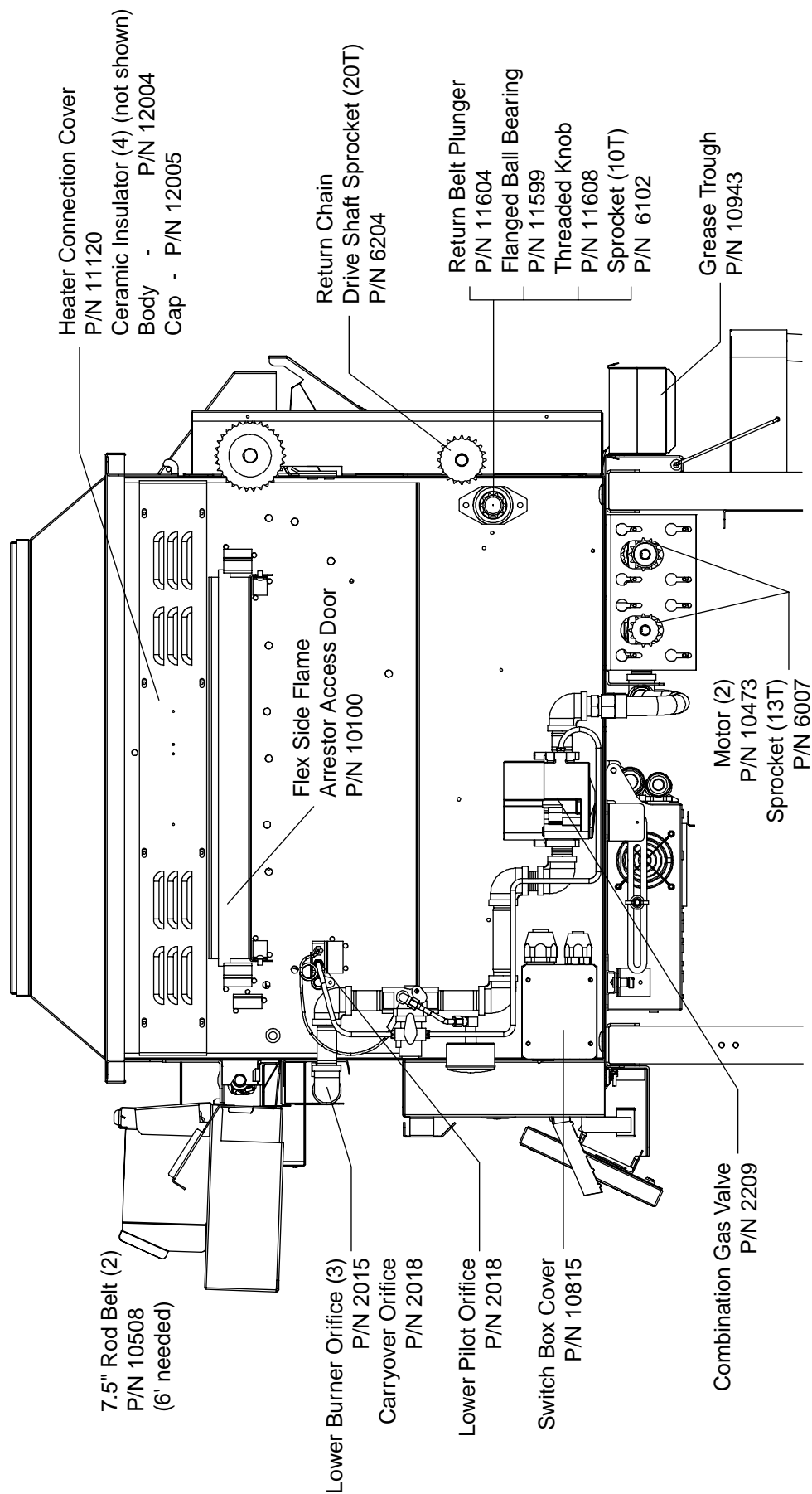
G.3 Feed End View Components



G.4 Main Chamber Side View Components



G.5 Flex Chamber Side View Components



G.6 Model 8025 Parts List

Nieco P/N

Item

8025G GAS BURNER COMPONENTS

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

8025G IGNITION & GAS SYSTEM

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

8025G DRIVE MOTOR & ELECTRICAL COMPONENTS

4067-230	Contactors 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)

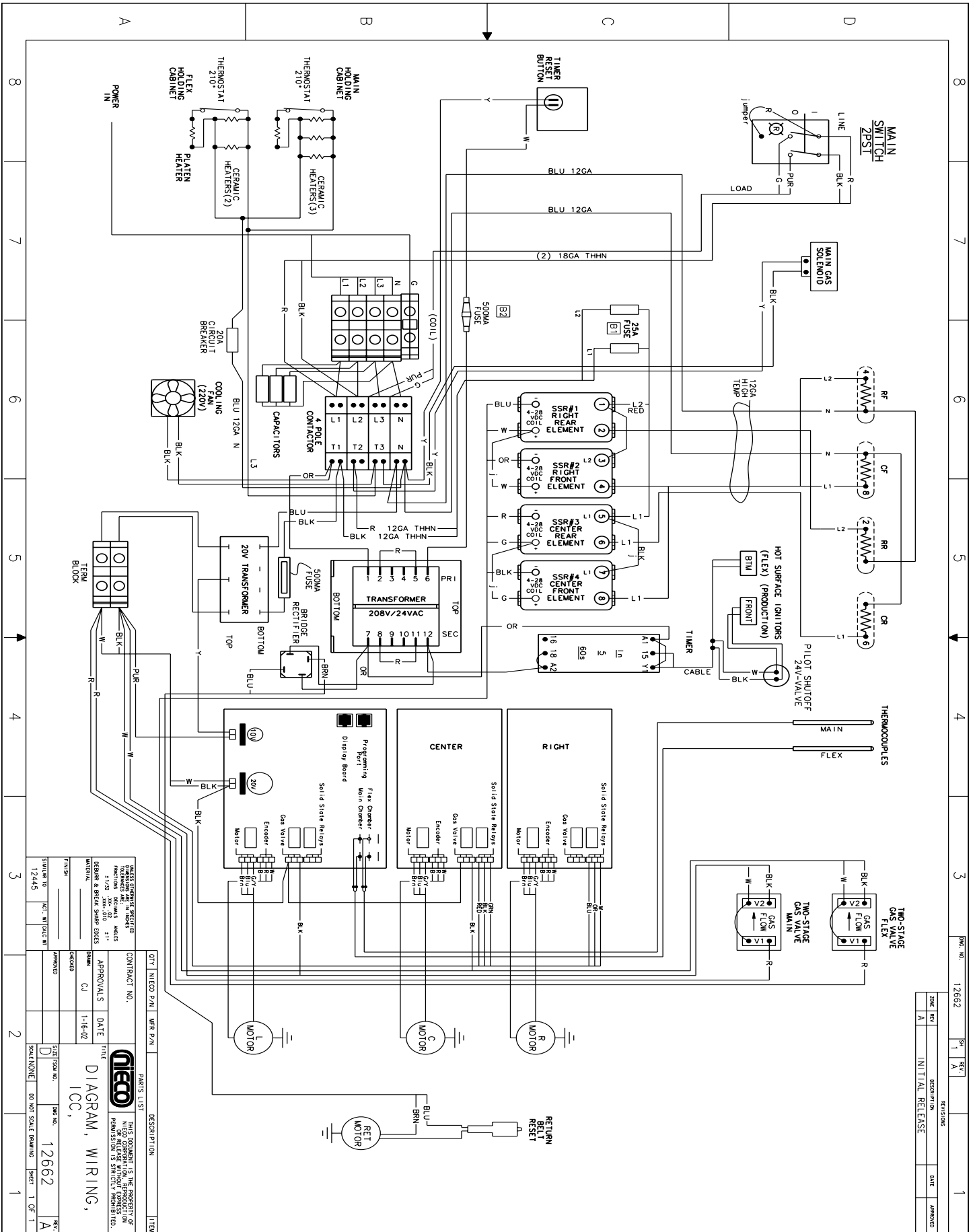
8025G BROIL CHAMBER COMPONENTS

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)
10683	Flame Arrestor 7.5" (Flex Chamber)

8025G BROILER INSTALLATION/SOLD WITH BROILER

11966	1", 5FT. Gas Connection Kit w/one Swivel
11961	Electrical Plug (female) and 3ft. Power Cord
11960	Electrical Plug (male) and 6ft. Power Cord

H. WIRING DIAGRAM



I. SPECIFICATIONS



AUTOMATIC BROILER **MODEL 8025**

ITEM NO. _____
AIA 11400



Model 8025

The Nieco Model 8025 is the state of the art broiling system designed for maximum versatility.

The 8025 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.

Benefits of Automation

Consistency Versatility
Speed Quality
Flexibility



AUTOMATIC BROILER

MODEL 8025

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.

ENERGY

Gas connection: 1" N.P.T.

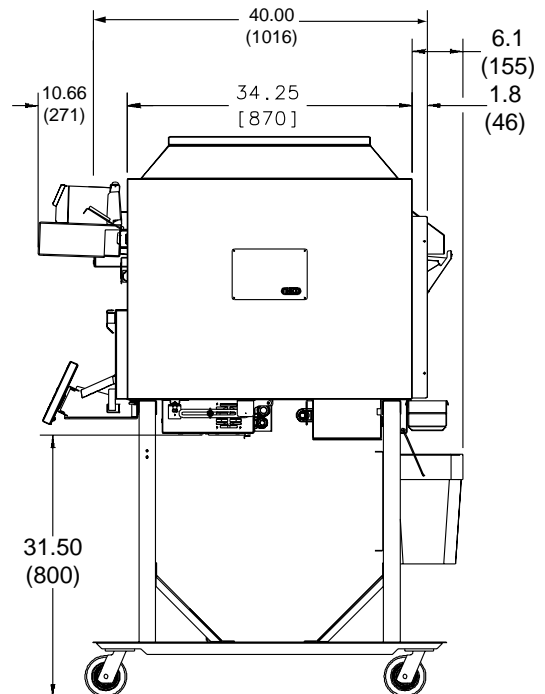
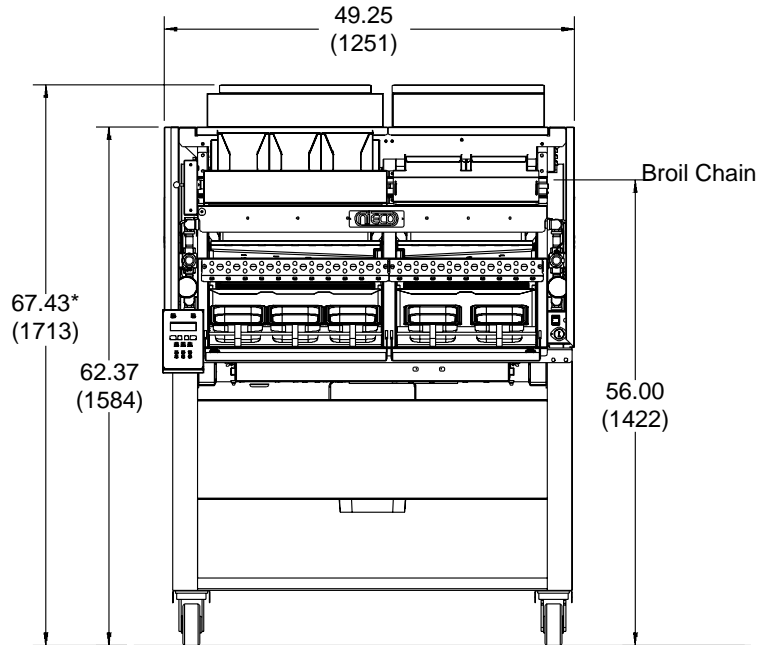
Electrical Connection (specify exact voltage):
208-240V 3Ø 50/60Hz 23A

Natural Gas	3" W.C.	4.5" W.C.
BTU/hr	137,000	157,000

WEIGHT -	LB	KG
Shipping	920	414

EXHAUST	SCFM
Typical	1050

NOTE: GAS PRESSURES ARE YET TO BE DETERMINED.



⚠ **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.

J. WARRANTY INFORMATION

1. 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.
2. 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 without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions or replacements for previously purchased equipment.

