AUTOMATIC
FOOD SERVICE
EQUIPMENT

# FLEXI-CHEF SYSTEM®

# MODELS 615/815 GTR

## AUTOMATIC GAS BROILERS

# OWNER'S MANUAL

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

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 distributor.

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

**FOR YOUR SAFETY:**

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

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# A. INSTALLATION

**PRE-INSTALLATION**
Uncrate the Flexi-Chef, inspect for shipping damage. Contact the factory if there is obvious damage. Remove tape securing machine parts and install these parts in their proper location. Refer to parts and location section of this manual (pages 11-13 and 17-19). If you find concealed damage to any part of this unit contact your freight carrier immediately. The factory warranty does not cover freight damage.

**MOUNTING**
If the Flexi-Chef was shipped with a tubular stand refer to separate tubular stand assembly instructions.

The Flexi-Chef should be placed on a strong flat stand or table. Level the machine by turning the base of the adjustable legs with a wrench.

> **Note:** The four legs of the broiler should be installed in safety clips or rings on the counter or table to prevent the broiler from shifting during operation or cleaning.

**HOOD REQUIREMENTS**
This appliance must be installed under a ventilation hood of adequate size and capacity (approximately 600 CFM for Model 615 and 800 CFM for Model 815). The hood should be at least 6" larger in all dimensions than the appliance top, and be 12" to 18" above the top.

> **Note:** See the National Fire Prevention Association booklet on ventilation of cooking equipment. Write to NFPA, 470 Atlantic Avenue, Boston, MA 02210. Local codes on venting must also be complied with.

**CLEARANCE**
Minimum clearance from combustible and non-combustible construction of 6" must be provided on all sides. To facilitate disassembly and cleaning allow 24" clearance at the feed and discharge ends of the unit.

**GAS CONNECTION**
At rated BTUH capacity, the gas supply should deliver a pressure of at least 6.0" water column at the broiler connection for **natural gas** and 11.0" water column for **propane gas.** Incoming gas supply pressure must not exceed 14.0" water column for either type of gas.

This appliance was shipped from the factory ready for gas supply hook-up to the shutoff valve under the broiler. For disconnect, a manual valve must be located in the gas supply line upstream from the connector.

If the machine is installed on a movable stand; (1) the installation must be made with a connector that complies with the Standard for Connectors for Movable Gas Appliances, ANSI Z21.69-1987, and a quick disconnect device that complies with the Standard for Quick-Disconnect Devices for Use With Gas Fuel, ANSI Z21.41-1978, and Addenda, Z21.41a-1981 and Z21.41b-1983, and (2) adequate means must be provided to limit the movement of the appliance without depending on the connector and any quick-disconnect device or its associated piping to limit the appliance movement. (See figures 1 and 2 page 5).

> **Note:** Appliance installation must conform with all local codes, or in the absence of local codes, with the National Fuel Gas Code ANSI Z223.1-1988. Check all fittings for gas leaks, including pilot tubing and inlet connections, as soon as the appliance is connected to the gas supply.

> **Note:** This appliance and its individual shutoff valve must be disconnected from the gas supply piping systems during any pressure testing of that system at test pressures in excess of ½ psig (3.45 kPa).

This appliance must be isolated from the gas supply piping system by closing its individual manual shutoff during any pressure testing of that system at test pressures equal to or less than ½ psig (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 manufacturer's instructions, this product could expose you to substances in fuel or from fuel combustion which can cause death or serious illness and which are known to the State of California to cause cancer, birth defects or other reproductive harm.**

## ELECTRICAL CONNECTION

Power requirements are stated on the unit nameplate and must be connected accordingly. Before starting broiler, tighten all electrical connections in control box.

**Note:** This appliance must be electrically grounded in accordance with local codes or in the absence of local codes, the National Electrical Code ANSI/NFPA No. 70-1990. In Canada, in accordance with the Canadian Electrical Code CSA 22.1 part 1, or local codes.

**WARNING: If this appliance is equipped with a three prong (grounding) plug for your protection against shock hazard, it should be plugged directly into a properly grounded three-prong receptable. Do not cut or remove the grounding prong from this plug.**

**Note:** This appliance cannot be safely operated in the event of a power failure. No attempt should be made to operate the appliance during a power failure. Disconnect power supply before servicing.

A wiring diagram is located inside the appliance control panel and in this manual (pages 31-32).

## PRE-OPERATION CHECK

After the power has been turned on, cycle the main power and motor switches on. The red indicating light and the digital control timers should light and the conveyor belts should begin to move within 10-15 seconds

The cook time is adjusted by pressing the buttons immediately to the right of the digital display.

# 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.

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 must be disconnected prior to maximum movement. (Minimum movement is possible to disconnect hose.)*

**WRONG**

AVOID SHARP BENDS AND KINKS when pulling equipment away from wall. (Maximum pull will kink ends, even if installed properly, and reduce Connector life.)

**RIGHT**

MINIMUM PULL of equipment away from wall permissible for accessibility to Quick Disconnect Device.

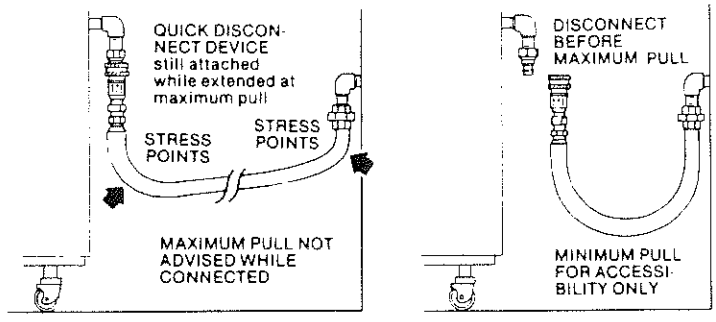



**FIGURE 1**

# RESTRAINING DEVICE INSTALLATION AND USE

This high strength Restrainer is to be used with all movable (castered) appliances. It fully complies with American Gas Association requirements. References: Z 21.69, Z 83.11, Z 21.41 with current revisions. Installation is quick and positive.

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 desirable length).

Carefully made of heavy duty steel cable, with a strong scissor hook (2) at one end and an equally strong spring hook (3) at the other. Cotter pin (4) is supplied to secure the installation.

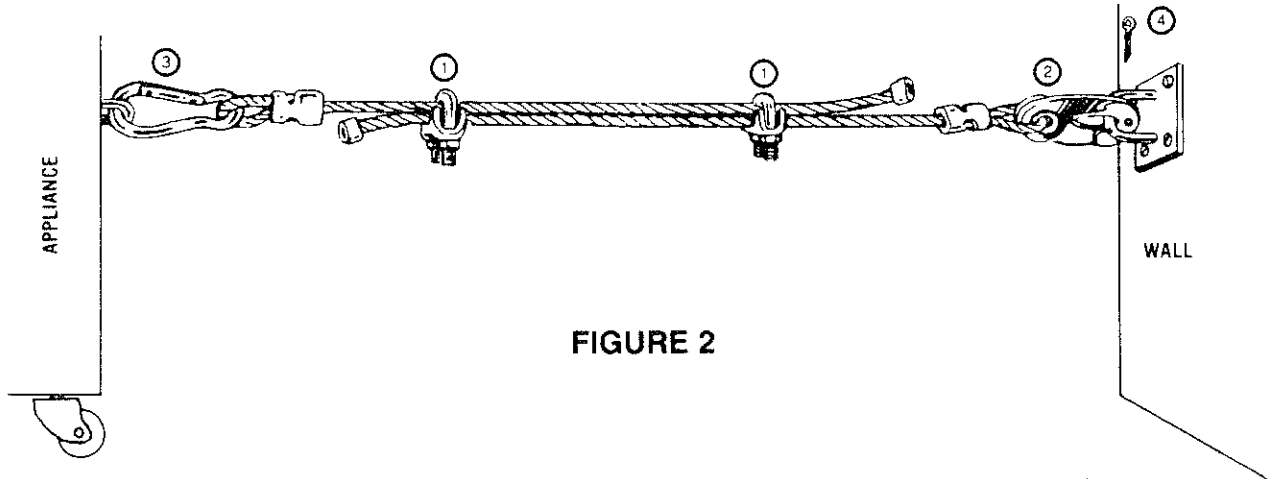
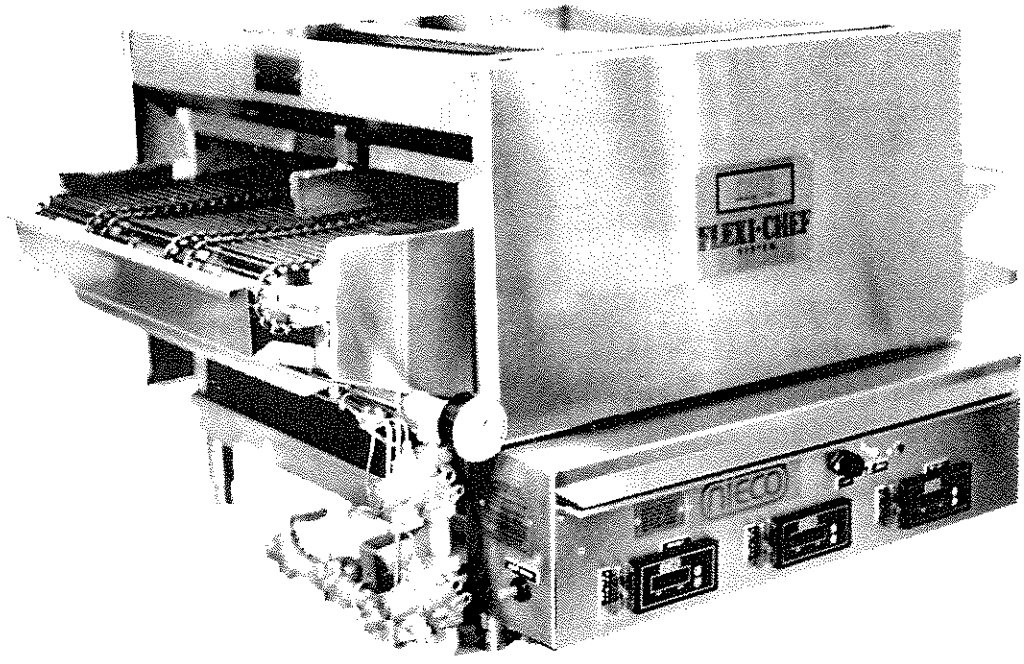



**FIGURE 2**

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

# B. GENERAL INFORMATION

## FLEXI-CHEF MODEL 815G




## DESCRIPTION

The Nieco Flexi-Chef System is an automatic broiler which offers an operator the option of a wide variety of cooking functions in a single piece of cooking equipment. The advantage of the Flexi-Chef System is its ability to be customized at the factory to meet a customers specific cooking needs.

Nieco developed the Flexi-Chef to answer the food service industries need for greater versatility from automatic equipment.

Two models of the Flexi-Chef are available. The Model 815 is equipped with three independently controlled cooking belts and six gas burners. The smaller Model 615 has two belts and four burners. Either model can be installed on a counter top or table stand. A tubular stand with locking casters is available for both models.

## HOW THE SYSTEM WORKS

The Standard Model 815 is factory equipped with three distinct heat zones. The Model 615 with two.

The High Heat Zone is located next to the gas input side of the machine. This belt is used for broiling meats, fish and chicken, and receives full radiant heat from upper and lower burners.

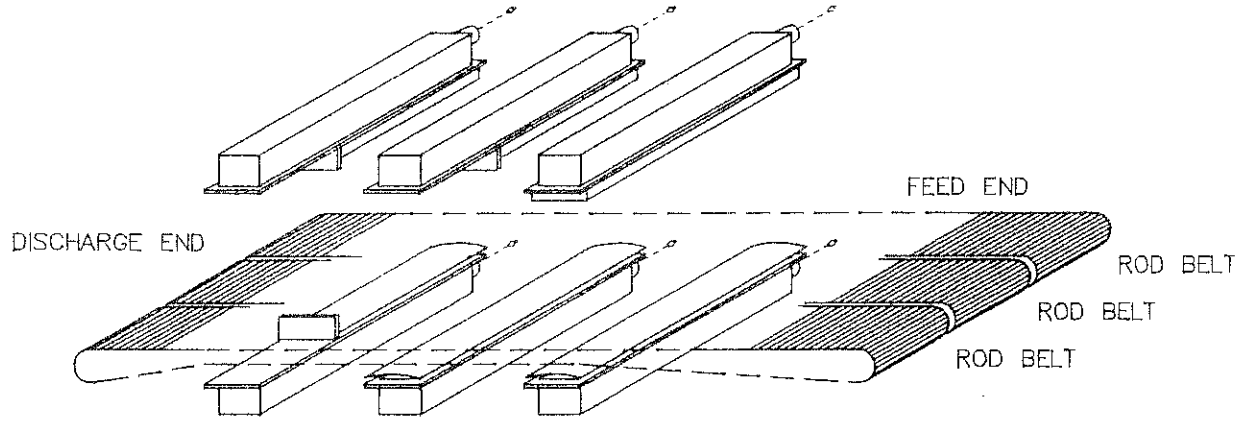
The Center Belt Heat Zone is identical to the high heat zone, but the belt speed can be adjusted to faciliate pan-broiling of products. Alternative burner configurations can be used to provide a Medium Heat Zone.

The Low Heat Zone receives full heat only from the first upper burner and the first two lower burners. Heat from the remaining burners is blocked off. Menu items such as personal size pizzas and omelets are cooked on this belt, where too much radiant heat is undesirable.

Once the exact cooking time for each menu item has been established and the digital timers set accordingly the operator simply places the product on the appropriate conveyor belt. The conveyor carries the product through the cook zone between the upper and lower gas burners where it is uniformly cooked on both sides by a combination of radiant, conduction and convection heat.

These standard machines will allow you to cook a wide variety of items, but a great deal of additional flexibility is available.

### TYPICAL CONFIGURATION — MODEL 815




## FOOD PREPARATION

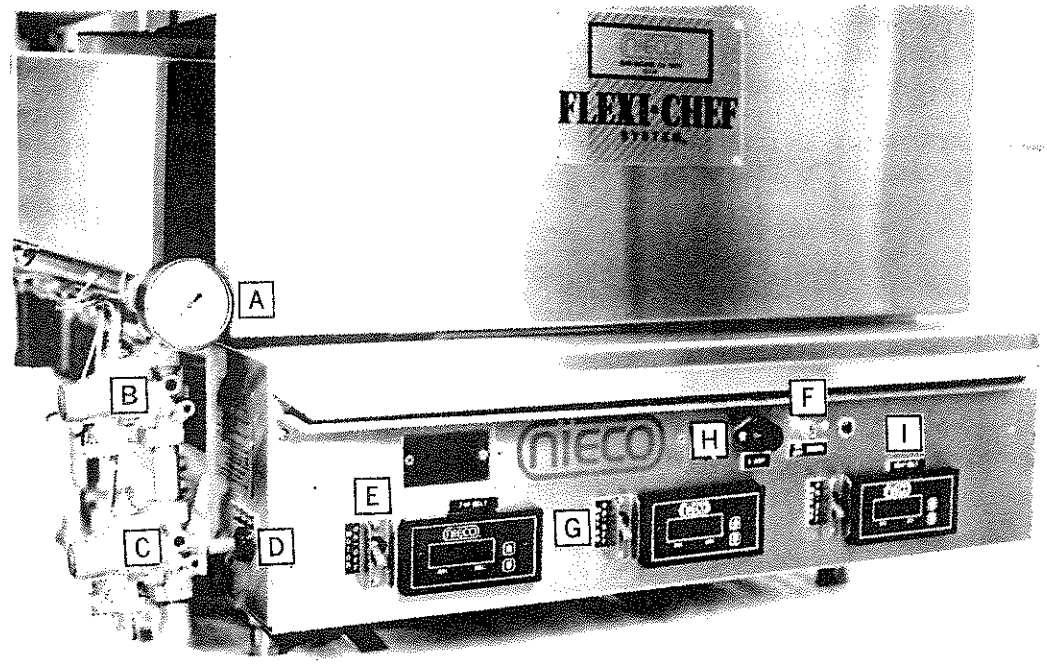
In order to cook properly in the Flexi-Chef, a customer must prepare his food items in a consistent and appropriate manner. The portions need to be uniform, product temperature uniform and, when used, the cooking pan or plate needs to be the same to achieve the consistent results that maximize the Flexi-Chef's benefits.

In automating the kitchen, individual portions of each dish are prepared for cooking in advance of demand. Items to be broiled are cut to appropriate portions, items to be baked or sauteed are portioned out in their cooking pans or dishes, and final pre-cooking preparations are made immediately before placing the dish on the appropriate cooking belt (for example, the addition of omelet fillings or pizza toppings).

Products ready for cooking are kept in a refrigerated state to insure freshness and uniform temperature upon entering the cooking zone. In some cases, such as hamburgers, frozen products are used; and in a few cases, such as fresh dough pizza, room temperature may be appropriate.

# C. OPERATION

## CONTROLS & INDICATORS




**A. Gas Pressure Gauge**

**B. Red Pushbutton Gas Valve**
Controls upper pilot burner.

**C. Red Pushbutton Gas Valve**
Controls lower pilot burner.

**D. Pilot Ignitor** (orange)
Push to ignite upper and lower pilots.

**E. Motor - Breaker/Switch**

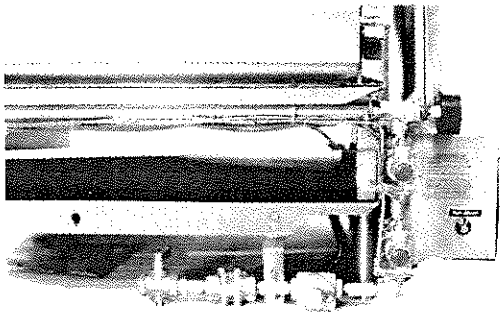
**F. Main On-Off Switch**

**G. Digital Speed Control**

**H. Fuse**

**I. Red Indicating Light**

## OPERATING PROCEDURE



1 2 3

1. **Main Gas Valve** controls gas input to equipment.
2. **Main Gas Solenoid Valve** opens when broiler main switch is turned on. Valve closes automatically if there is a power failure shutting off gas supply to broiler. (Not shown — located under base).
3. **Pressure Regulator** adjusts and maintains in-coming gas pressure to the level stated on the rating plate.

## STEP BY STEP INITIAL LIGHTING PROCEDURE

Before lighting ensure that all assemblies are correctly installed, all controls are turned off, and the ventilation hood fan is turned on.

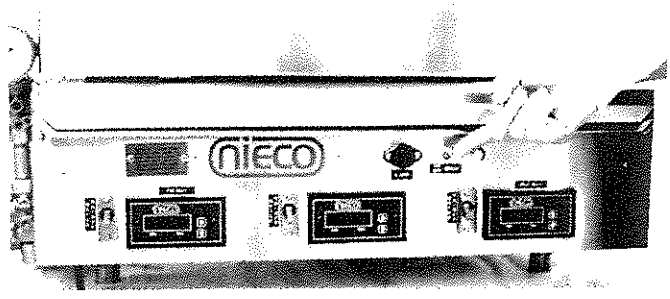
**CAUTION:** If relighting the broiler, avoid touching heated surfaces.

Turn gas off. Wait five minutes before re-lighting

1

Turn on MAIN POWER SWITCH

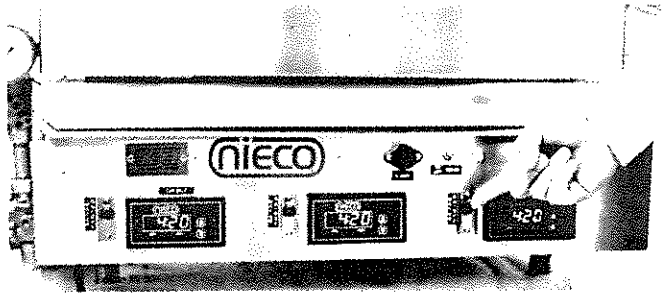
1




2

Turn on MOTOR POWER SWITCHES

2




3

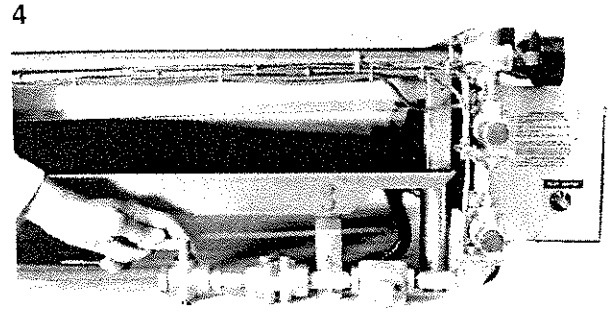
Set DIGITAL MOTOR SPEED CONTROLS to desired cook time.

3

4

Open MAIN GAS VALVE. Valve is open when handle is in line with valve.

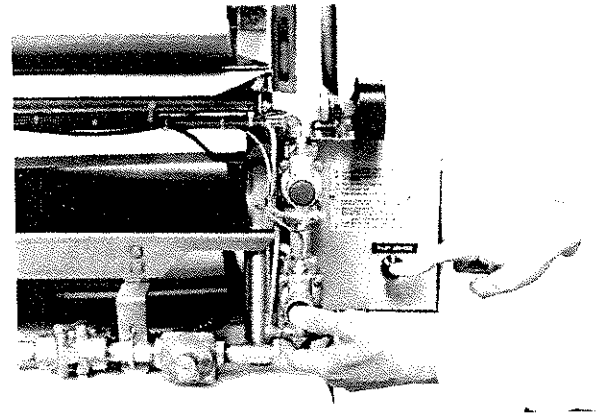
4



5

Always light the lower pilot burner first. To do this press in and hold the red button on the LOWER GAS SAFETY VALVE. At the same time press the orange pilot igniter button. After pilot ignites continue to hold the red push button on the gas safety valve for 20 seconds to insure pilot will remain lit.

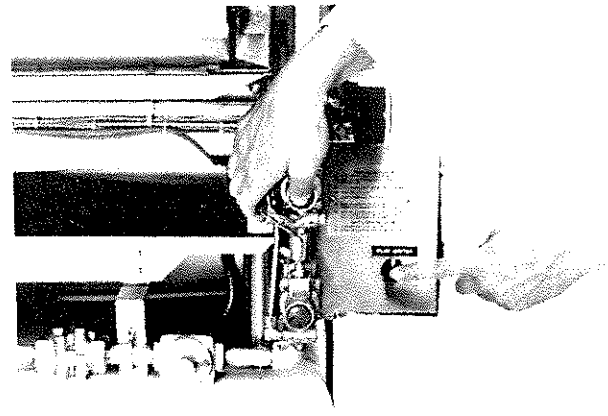
5



6

Move to the UPPER GAS SAFETY VALVE and repeat step #5 to light the upper pilot burner. After 20 seconds release the red button and the main burners will ignite. Check the gas pressure gauge. Pressure setting should be as stated on the machine rating plate.

6



## SHUTDOWN PROCEDURE

For EMERGENCY Shutdown, turn Main Power Switch and gas supply valve off.

For planned shutdowns, perform the following procedure:

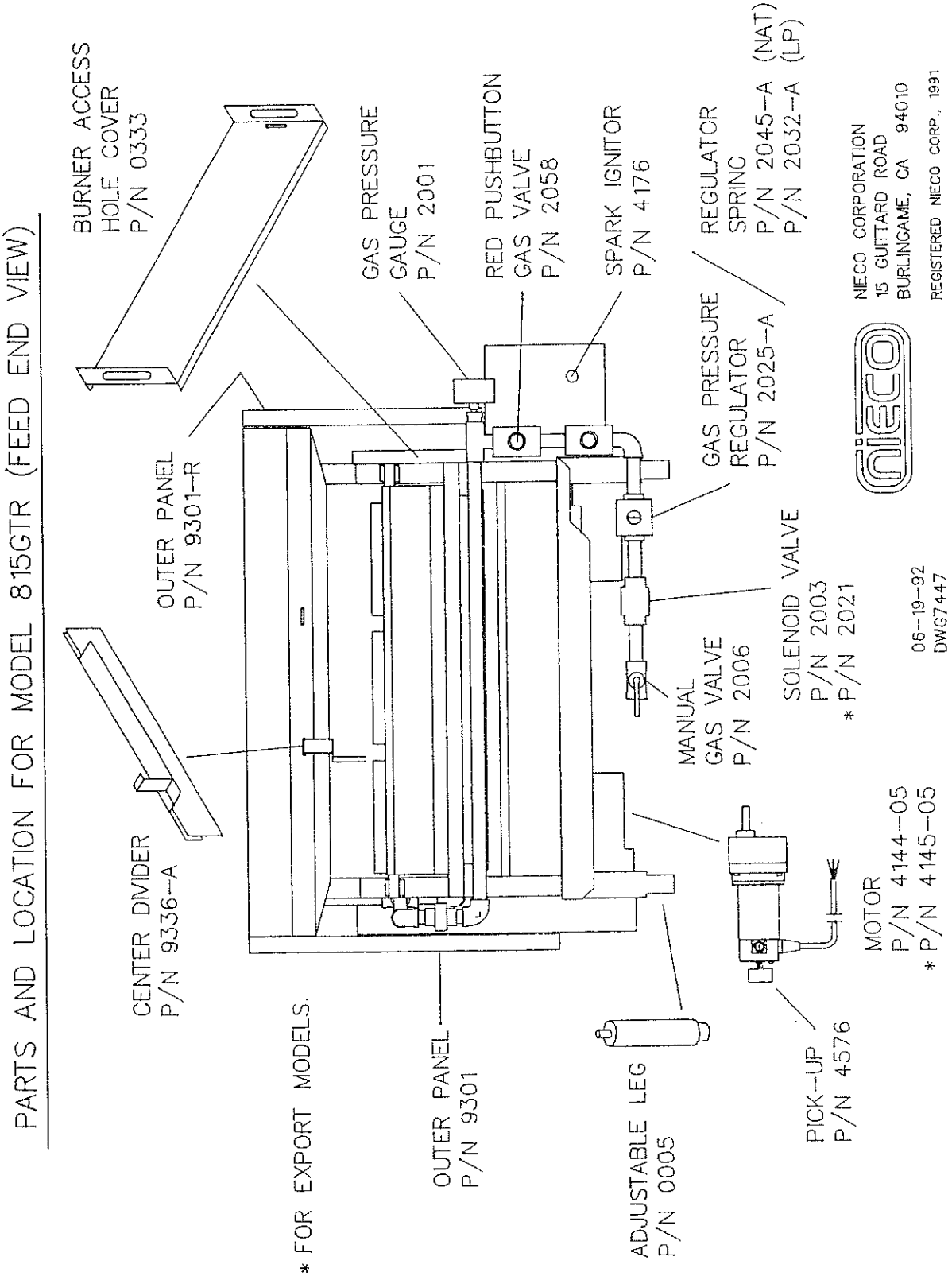
1) Clear machine of all food products.
2) Turn motor switch(es) off.
3) Turn main Power Switch off.

**CAUTION:** Always turn machine completely off before disconnecting power plug.

**CAUTION:** If a flexible gas line is used, it must be disconnected before moving machine.

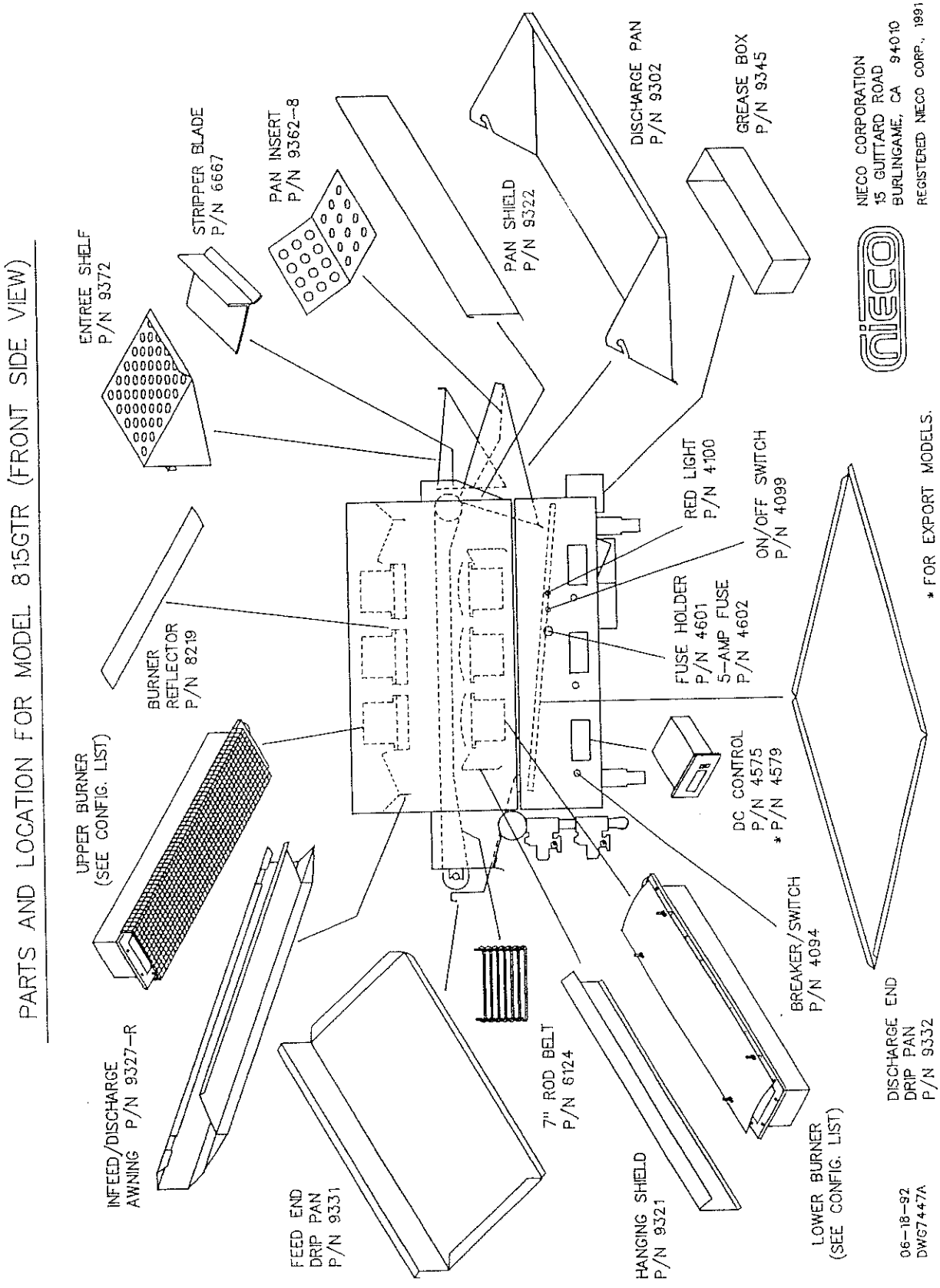
# D. PARTS AND LOCATION

## MODEL 815 GAS



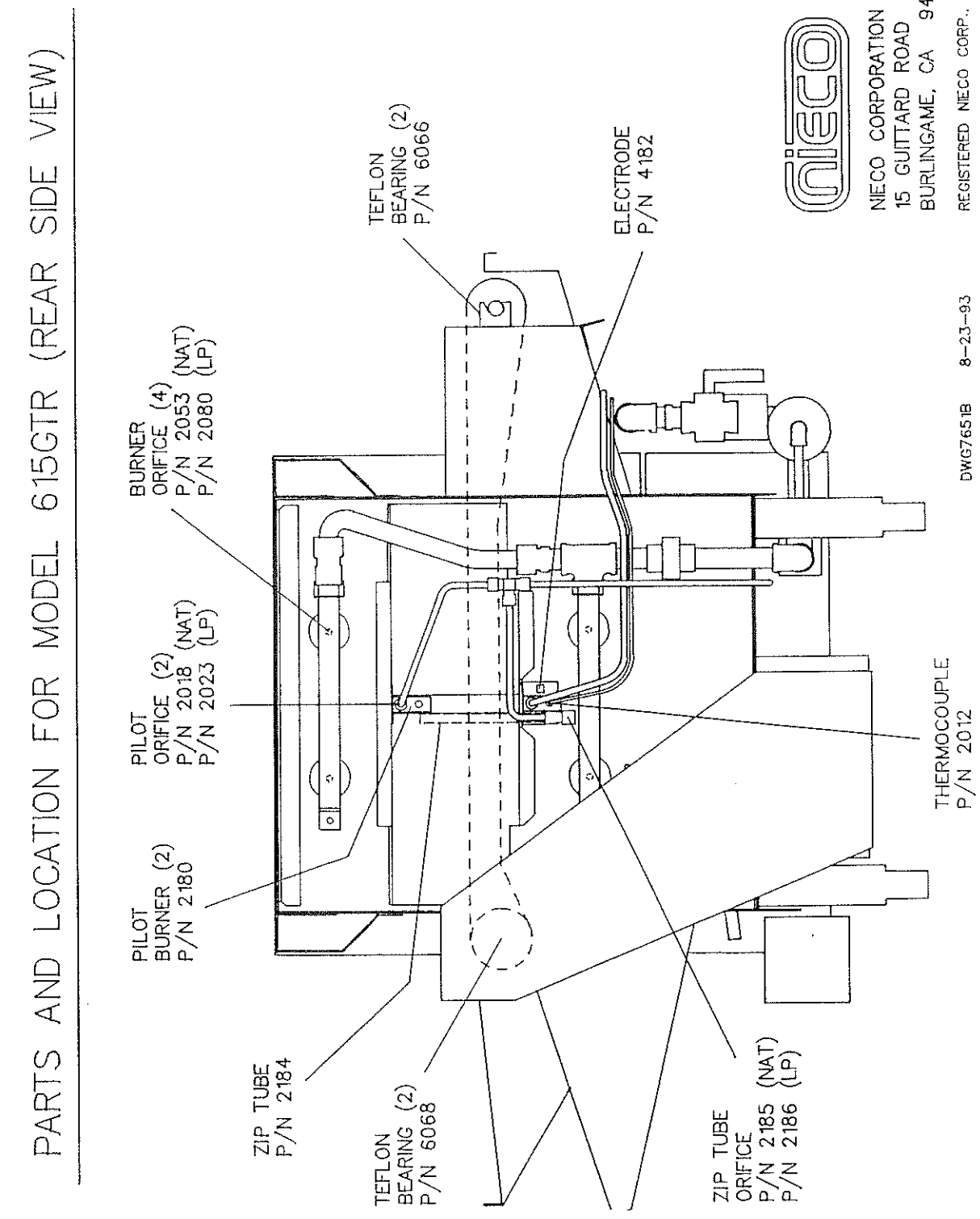
# D. PARTS AND LOCATION

## MODEL 815 GAS



# D. PARTS AND LOCATION

## MODEL 815 GAS



# D. PARTS AND LOCATION

## MODEL 815

## BURNER/DISCHARGE/BELT/ORIFICE CONFIGURATION CHECK-LIST



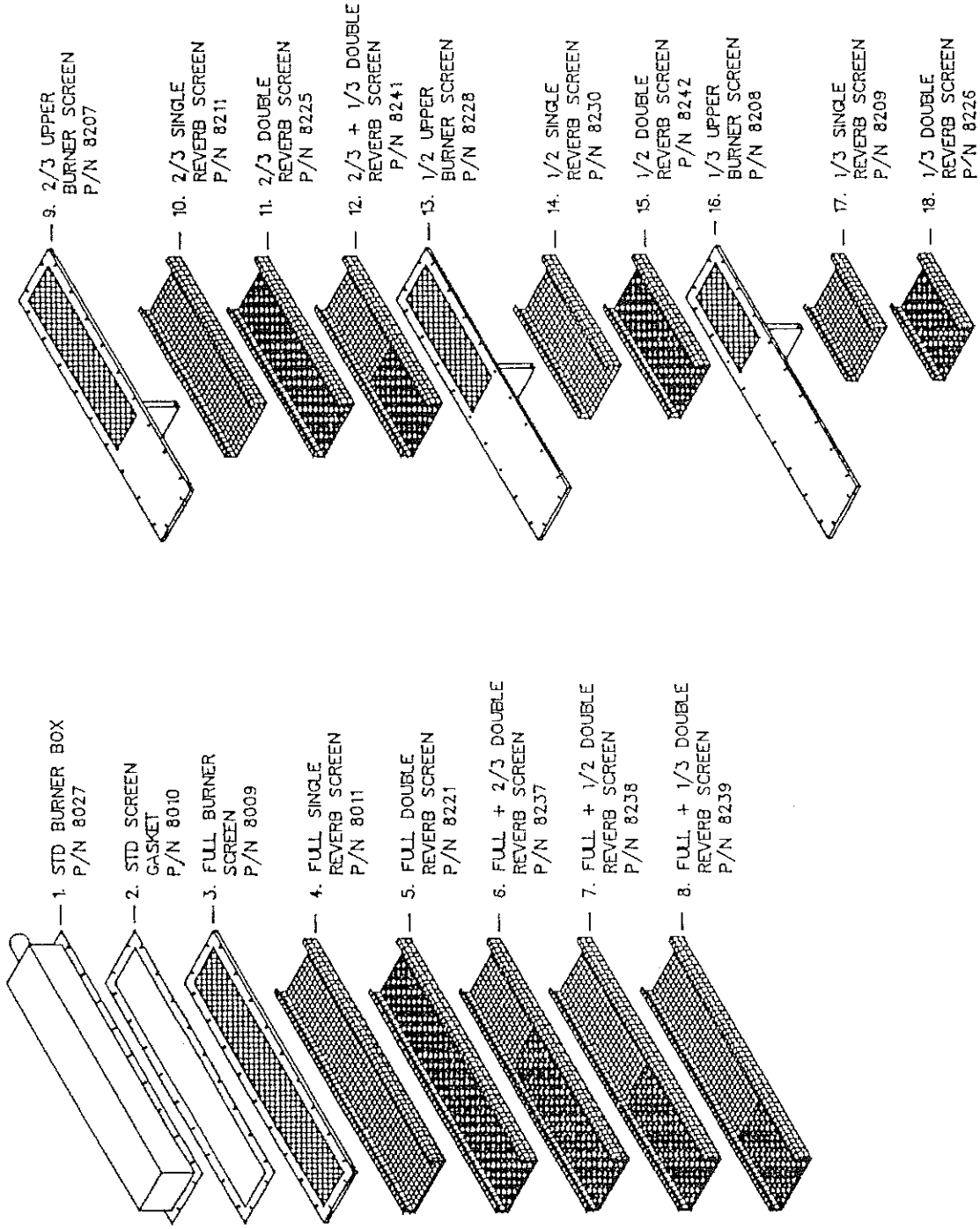

| BURNER | DESCRIPTION | SCREEN | REVERBERATOR | SHIELD | * COMPONENTS | ORIFICE SIZES NAT. | LP |
|---|---|---|---|---|---|---|---|
| A | UPPER BURNER | FULL | FULL SINGLE | | 1-2-3-4 | # 50 | # 58 |
| B | UPPER BURNER | FULL | FULL DOUBLE | | 1-2-3-5 | # 50 | # 58 |
| C | UPPER BURNER | FULL | FULL + 2/3 | | 1-2-3-6 | # 50 | # 58 |
| D | UPPER BURNER | FULL | FULL + 1/2 | | 1-2-3-7 | # 50 | # 58 |
| E | UPPER BURNER | FULL | FULL + 1/3 | | 1-2-3-8 | # 50 | # 58 |
| F | UPPER BURNER | 2/3 | 2/3 SINGLE | | 1-2-9-10 | # 54 | # 65 |
| G | UPPER BURNER | 2/3 | 2/3 DOUBLE | | 1-2-9-11 | # 54 | # 65 |
| H | UPPER BURNER | 2/3 | 2/3 + 1/3 | | 1-2-9-12 | # 54 | # 65 |
| I | UPPER BURNER | 1/2 | 1/2 SINGLE | | 1-2-13-14 | # 55 | # 67 |
| J | UPPER BURNER | 1/2 | 1/2 DOUBLE | | 1-2-13-15 | # 55 | # 67 |
| K | UPPER BURNER | 1/3 | 1/3 SINGLE | | 1-2-16-17 | # 57 | # 70 |
| L | UPPER BURNER | 1/3 | 1/3 DOUBLE | | 1-2-16-18 | # 57 | # 70 |
| M | LOWER BURNER | FULL | | FULL SINGLE | 1-2-3-19 | # 50 | # 58 |
| N | LOWER BURNER | FULL | | FULL DOUBLE | 1-2-3-20 | # 50 | # 58 |
| O | LOWER BURNER | FULL | | FULL + 2/3 | 1-2-3-21 | # 50 | # 58 |
| P | LOWER BURNER | FULL | | FULL + 1/2 | 1-2-3-22 | # 50 | # 58 |
| Q | LOWER BURNER | FULL | | FULL + 1/3 | 1-2-3-23 | # 50 | # 58 |
| R | LOWER BURNER | 2/3 | | 2/3 SINGLE | 1-2-24-25 | # 54 | # 65 |
| S | LOWER BURNER | 2/3 | | 2/3 DOUBLE | 1-2-24-26 | # 54 | # 65 |
| T | LOWER BURNER | 2/3 | | 2/3 + 1/3 "A" | 1-2-24-27 | # 54 | # 65 |
| U | LOWER BURNER | 2/3 | | 2/3 + 1/3 "B" | 1-2-24-28 | # 54 | # 67 |
| V | LOWER BURNER | 1/2 | | 1/2 SINGLE | 1-2-29-30 | # 55 | # 67 |
| W | LOWER BURNER | 1/2 | | 1/2 DOUBLE | 1-2-29-31 | # 55 | # 67 |
| X | LOWER BURNER | 1/3 | | 1/3 SINGLE | 1-2-32-33 | # 57 | # 70 |
| Y | LOWER BURNER | 1/3 | | 1/3 DOUBLE | 1-2-32-34 | # 57 | # 70 |

* SEE MODEL 815 BURNER COMPONENTS' LISTS.

# D. PARTS AND LOCATION

## MODEL 815

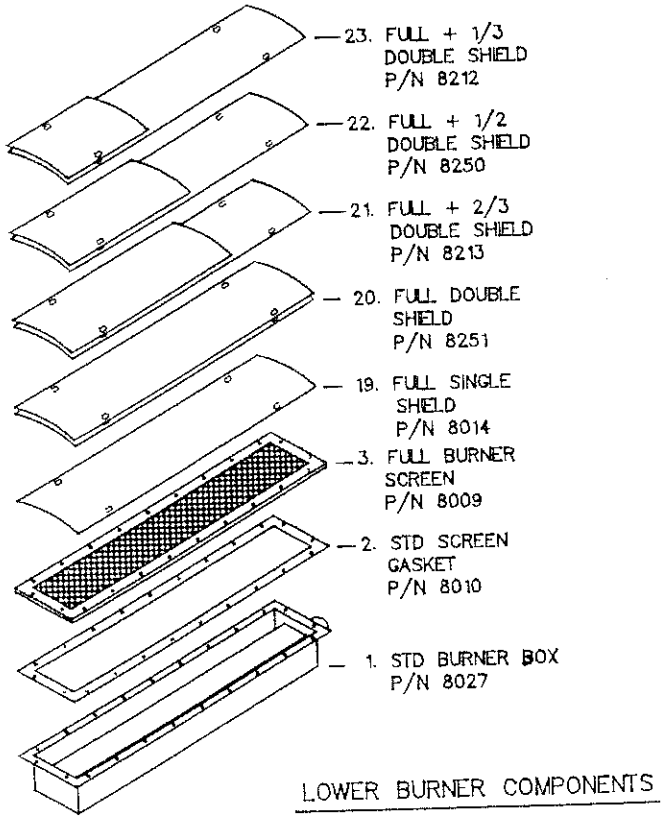
## UPPER BURNER COMPONENTS



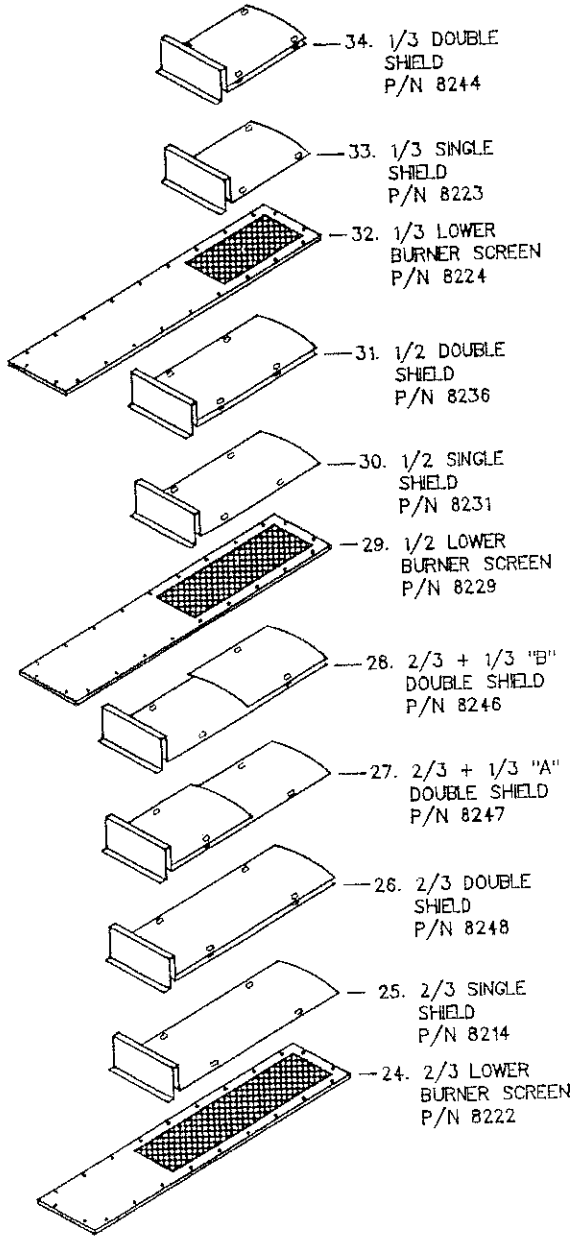
# D. PARTS AND LOCATION

## MODEL 815

## LOWER BURNER COMPONENTS



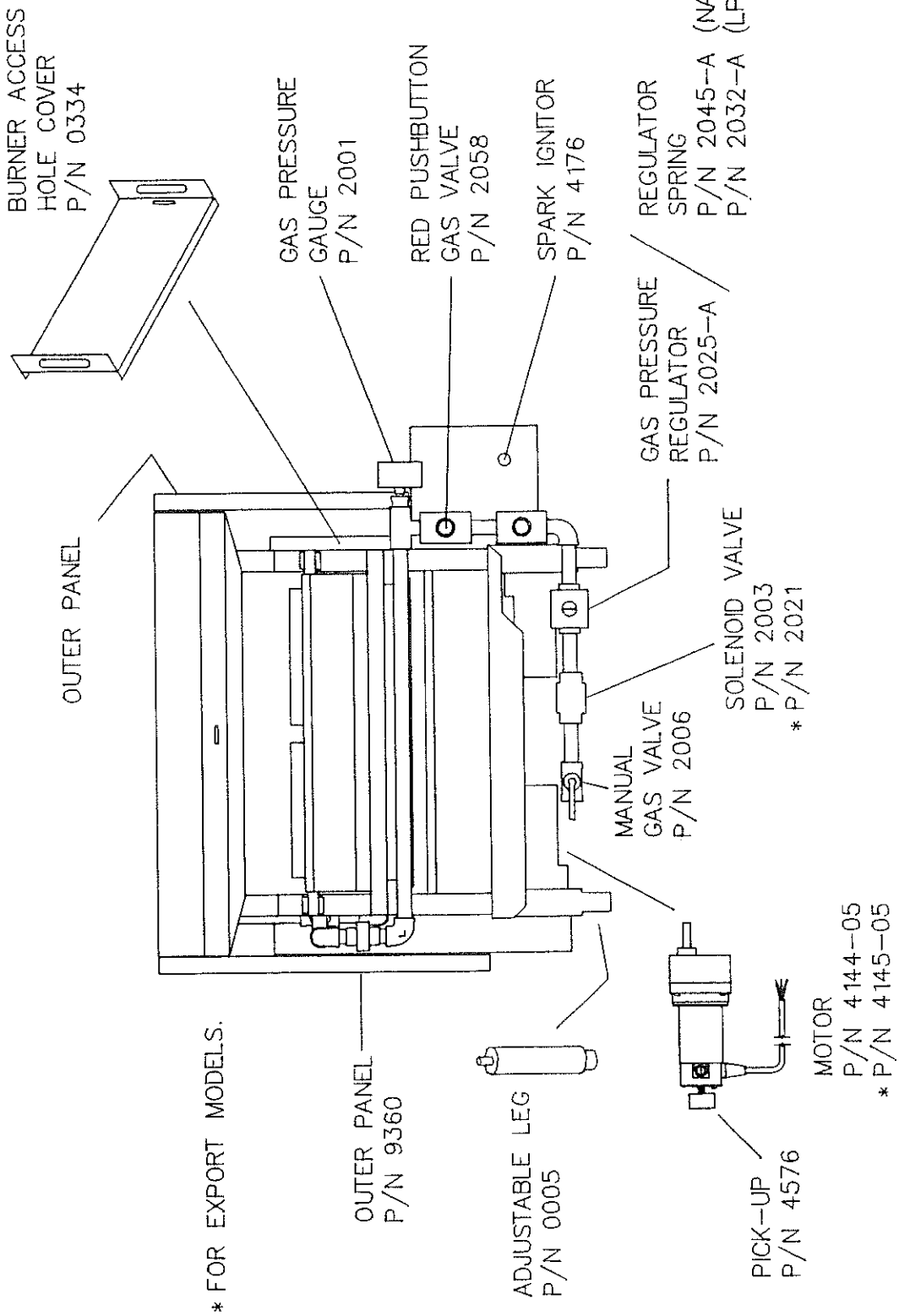

LOWER BURNER COMPONENTS



# D. PARTS AND LOCATION

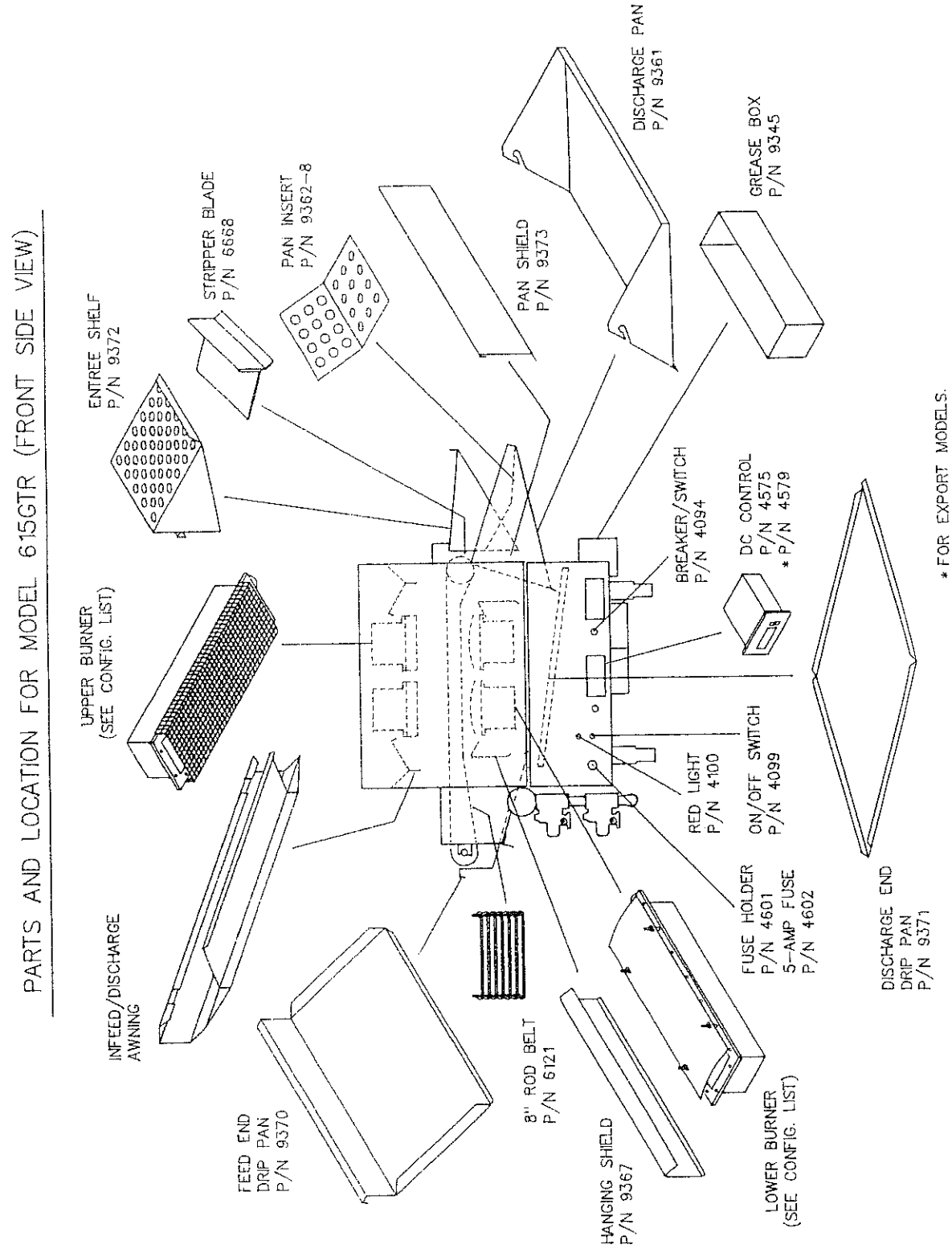
## MODEL 615 GAS

PARTS AND LOCATION FOR MODEL 615GTR (FEED END VIEW)



# D. PARTS AND LOCATION

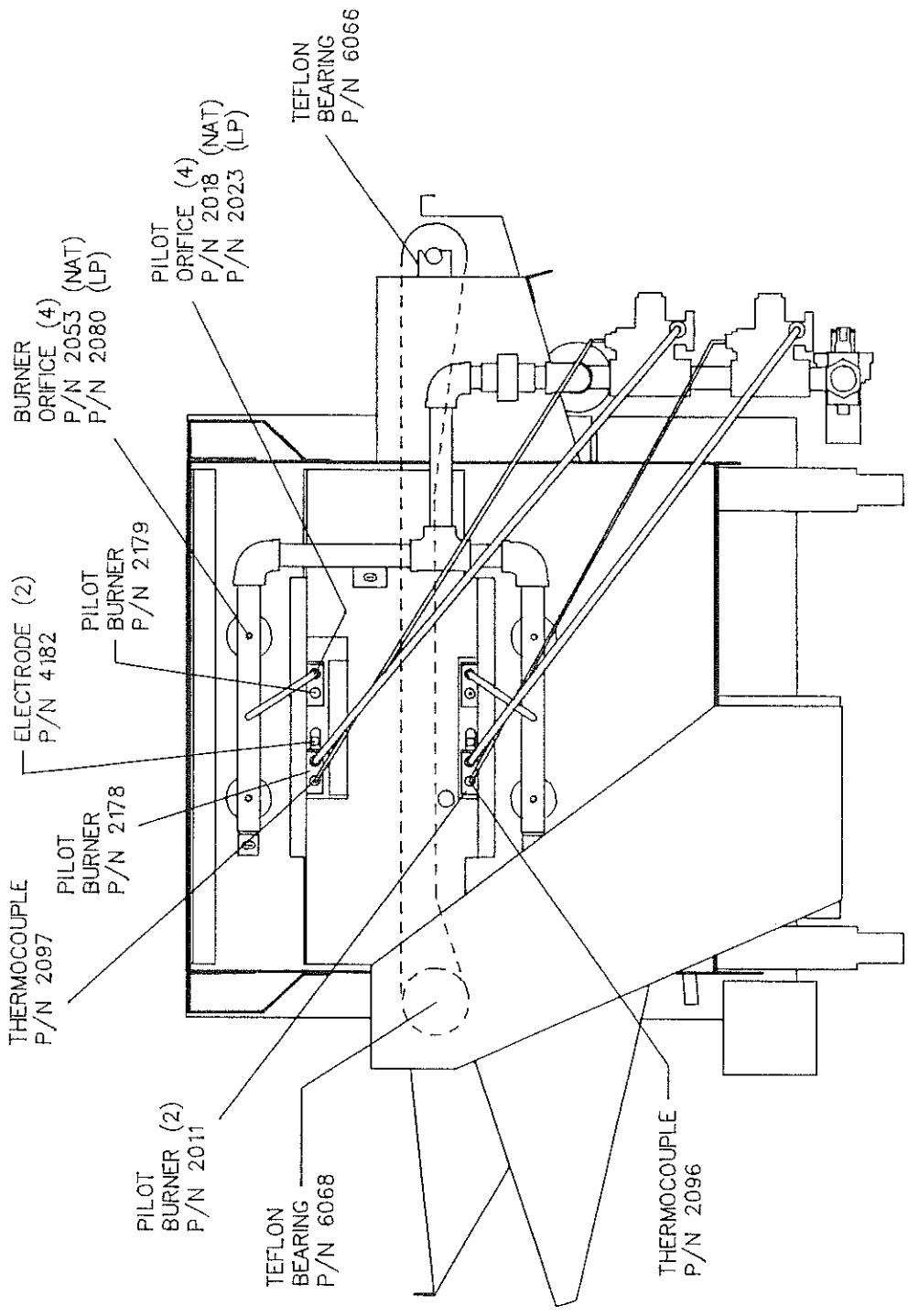
## MODEL 615 GAS



# D. PARTS AND LOCATION

## MODEL 615 GAS

PARTS AND LOCATION FOR MODEL 615GTR (REAR SIDE VIEW)



# D. PARTS AND LOCATION

## MODEL 615

## BURNER/DISCHARGE/BELT/ORIFICE CONFIGURATION CHECK-LIST



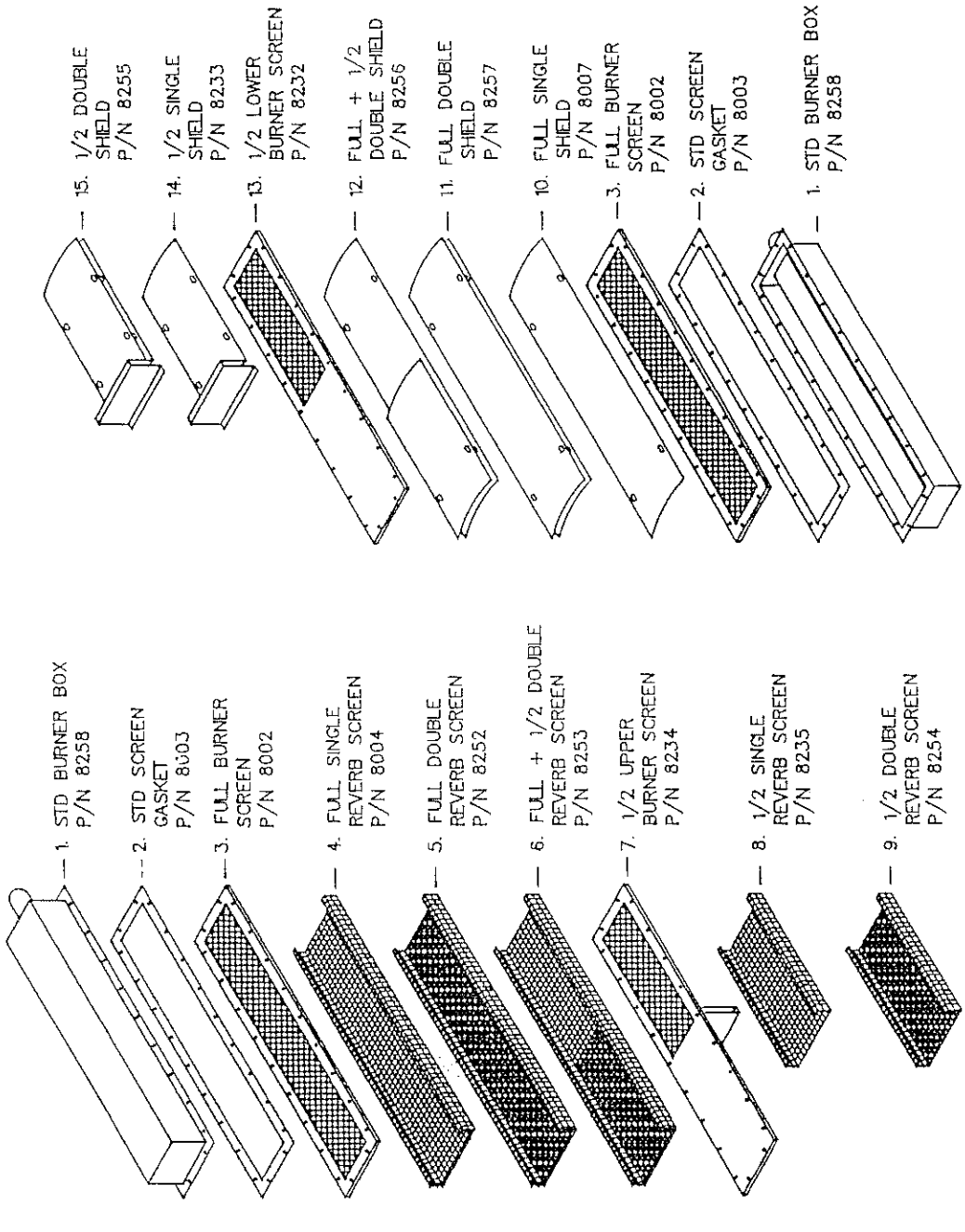

| BURNER | DESCRIPTION | SCREEN | REVERBERATOR | SHIELD | * COMPONENTS | ORIFICE SIZES NAT. | LP |
|---|---|---|---|---|---|---|---|
| A | UPPER BURNER | FULL | FULL SINGLE | | 1-2-3-4 | # 52 | # 61 |
| B | UPPER BURNER | FULL | FULL DOUBLE | | 1-2-3-5 | # 52 | # 61 |
| C | UPPER BURNER | FULL | FULL + 1/2 | | 1-2-3-6 | # 52 | # 61 |
| D | UPPER BURNER | 1/2 | 1/2 SINGLE | | 1-2-7-8 | # 56 | # 70 |
| E | UPPER BURNER | 1/2 | 1/2 DOUBLE | | 1-2-7-9 | # 56 | # 70 |
| F | LOWER BURNER | FULL | | FULL SINGLE | 1-2-3-10 | # 52 | # 61 |
| G | LOWER BURNER | FULL | | FULL DOUBLE | 1-2-3-11 | # 52 | # 61 |
| H | LOWER BURNER | FULL | | FULL + 1/2 | 1-2-3-12 | # 52 | # 61 |
| I | LOWER BURNER | 1/2 | | 1/2 SINGLE | 1-2-13-14 | # 56 | # 70 |
| J | LOWER BURNER | 1/2 | | 1/2 DOUBLE | 1-2-13-15 | # 56 | # 70 |

* SEE MODEL 615 BURNER COMPONENTS' LIST.

# D. PARTS AND LOCATION

## MODEL 615

## BURNER COMPONENTS



# E. REPLACEMENT PARTS LIST

For location of parts refer to page number listed under model numbers

Burner Parts: See Burner Component Chart
Gas Orificies: See Burner/Belt/Orifice Chart

| PART NO. | DESCRIPTION | PAGE MODEL 615 | PAGE MODEL 815 |
|---|---|---|---|
| 0005 | 6" Adjustable Leg | 17 | 11 |
| 0333 | Access Hole Cover | — | 11 |
| 0334 | Access Hole Cover | 17 | — |
| 2001 | Gas Pressure Gauge | 17 | 11 |
| 2001-01 | Lens Only, For Pressure Gauge | 17 | 11 |
| 2003 | ½" Main Gas Solenoid Valve | 17 | 11 |
| 2006 | ¾" Manual Gas Valve | 17 | 11 |
| 2011 | Pilot Burner ... Identify From Drawing Page | 19 | 13 |
| 2011-A | Pilot Burner ... Identify From Drawing Page | 19 | 13 |
| 2018 | Pilot Orifice - N.G. | 19 | 13 |
| 2025-A | Gas Pressure Regulator - RV-47D | 17 | 11 |
| 2058 | Red P.B. Gas Valve | 17 | 11 |
| 2059 | Power Unit Only For 2058 Valve | 19 | 13 |
| 2096 | 72" Thermocouple | 19 | 13 |
| 2178 | Pilot Burner ... Identify From Drawing Page | — | 13 |
| 2179 | Pilot Burner ... Identify From Drawing Page | 19 | 13 |
| 4094 | Breaker/Switch, Motor-Green | 18 | 12 |
| 4099 | Switch, Main On-Off | 18 | 12 |
| 4100 | Red Light | 18 | 12 |
| 4144-05 | Drive Motor | 17 | 11 |
| 4176 | Pilot Igniter - 84" Leads | 17 | 11 |
| 4182 | Electrode | 19 | 13 |
| 4575 | Motor Speed Controller - 120V | 18 | 12 |
| 4576 | Pick-Up - For 4575 Controller | 17 | 11 |
| 4601 | Fuse Holder | 18 | 12 |
| 4602 | Fuse, 5A-250V | 18 | 12 |
| 6006 | 10T Sprocket ... Not Pictured | — | — |
| 6027 | #35 Drive Chain ... Not Pictured | — | — |
| 6038 | 30T Sprocket ... Not Pictured | — | — |
| 6048 | Master Link - #35 Chain ... Not Pictured | — | — |

| PART NO. | DESCRIPTION | | PAGE MODEL 615 | 815 |
|---|---|---|---|---|
| 6053 | Off-Set Link, #35 Chain | Not Pictured | — | — |
| 6066 | 5/8" Teflon Bearing | | 19 | 13 |
| 6068 | 1 1/8" Teflon Bearing | | 19 | 13 |
| 6121 | 8" Rod Belt | | 18 | — |
| 6124 | 7" Rod Belt | | — | 12 |
| 6652 | Idler Shaft - Specify Belt Width - 815 | Not Pictured | — | — |
| 6654 | Idler Shaft - 615 | Not Pictured | — | — |
| 6656 | Inner Drive Shaft - Specify Belt Width - 815 | Not Pictured | — | — |
| 6661 | Outer Drive Shaft - Backside - Specify Belt Width - 815 | Not Pictured | — | — |
| 6663 | Inner Drive Shaft - 615 | Not Pictured | — | — |
| 6667 | Stripper Blade - 7" Rod Belt | | — | 12 |
| 6668 | Stripper Blade - 8" Rod Belt | | 18 | — |
| 6675 | Outer Drive Shaft - 615 | Not Pictured | — | — |
| 8217 | Top Burner Reflector Strip, 9" | Not Pictured | — | — |
| 8219 | Top Burner Reflector Strip, 17 1/4" | | — | 12 |
| 9302 | Discharge Pan | | — | 12 |
| 9321 | Hanging Shield - 2 Per Machine | | — | 12 |
| 9322 | Discharge Pan Shield | | — | 12 |
| 9327-R | Awning - Feed And Discharge End | | — | 12 |
| 9331 | Drip Pan, Feed End | | — | 12 |
| 9332 | Drip Pan, Discharge End | | — | 12 |
| 9336-A | Center Divider, 15" - Feed End | | — | 11 |
| 9345 | Grease Box | | 18 | 12 |
| 9361 | Discharge Pan | | 18 | — |
| 9362-8 | Pan Insert - 8" 615/815 GTR | | 18 | — |
| 9367 | Hanging Shield - 2 Per Machine | | 18 | — |
| 9369-R | Awning - Feed And Discharge End | | 18 | — |
| 9370 | Drip Pan - Feed End | | 18 | — |
| 9371 | Drip Pan - Discharge End | | 18 | — |
| 9372 | Entree Shelf - 8" | | 18 | 12 |
| 9373 | Discharge Pan Shield | | 18 | — |

# F. ASSEMBLY/DISASSEMBLY & CLEANING

If this appliance is connected to the gas supply by a flexible gas line and quick disconnect coupling it must also be connected to a restraining device (see installation instructions). If the appliance is moved and then returned to its original position it must be reconnected to the restraining device and the casters locked before resuming operation.

**NOTE: Parts that require daily cleaning are identified by a "D" next to the photo. All other parts should be cleaned weekly or as needed.**

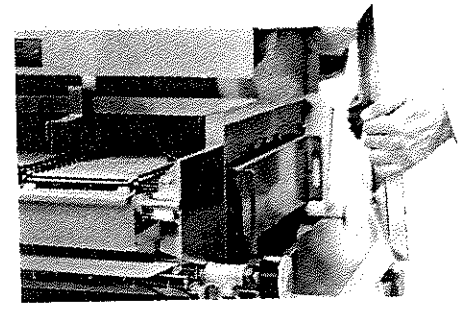
1

Turn main power and motor switches OFF. Allow machine to cool before you disassemble and clean.

2

Remove SIDE PANELS.

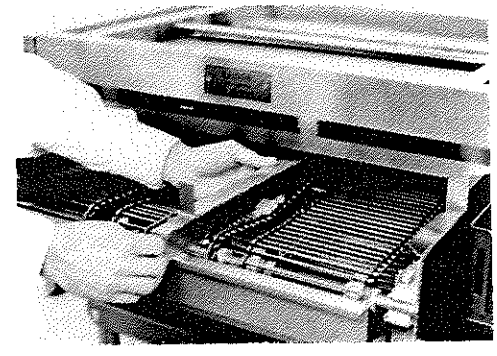
2



3

Remove CENTER GUIDE
Model 815 only.

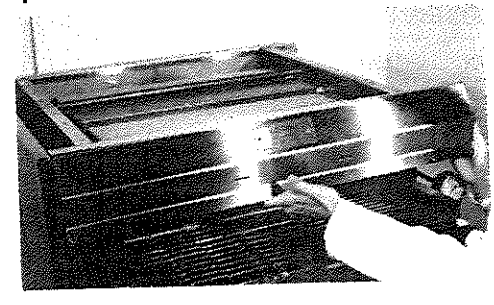
3



4

Remove FEED AND
DISCHARGE END AWNINGS.

4

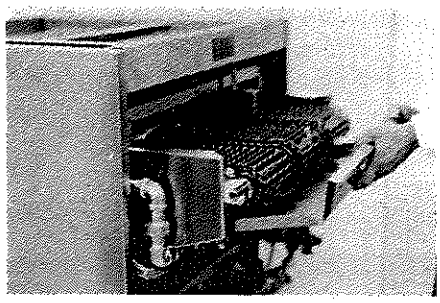


5

Remove FEED END DRIP PAN.

5

D

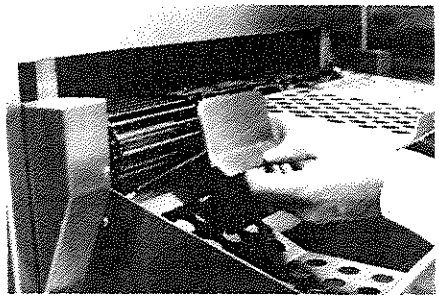


6

Remove STRIPPER BLADE.

6

D

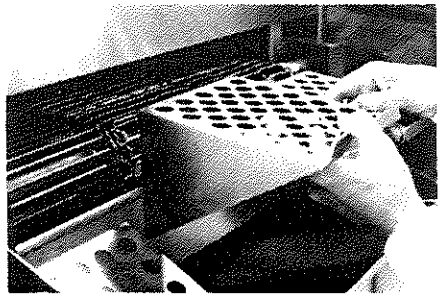


7

Remove ENTREE SHELVES.

7

D

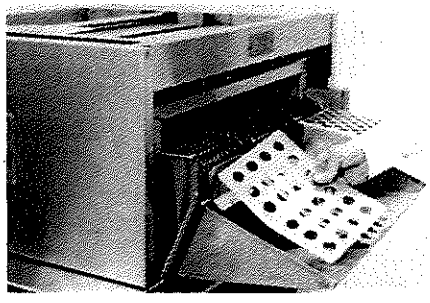


8

Remove DISCHARGE PAN INSERT.

8

D

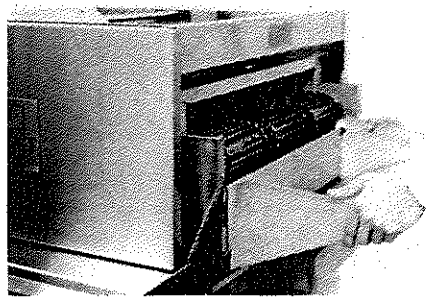


9

Remove DISCHARGE PAN.

9

D

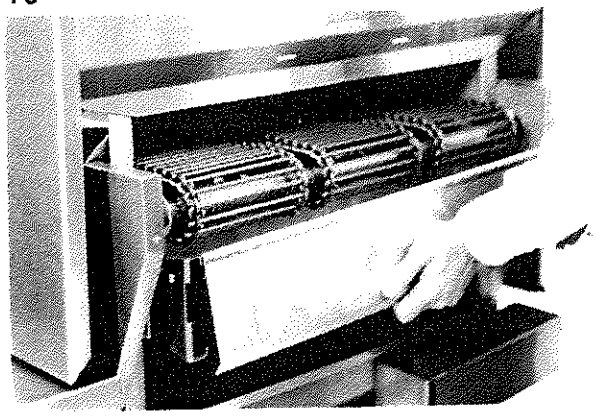


10

Remove DISCHARGE PAN HANGING SHIELD.

10

D

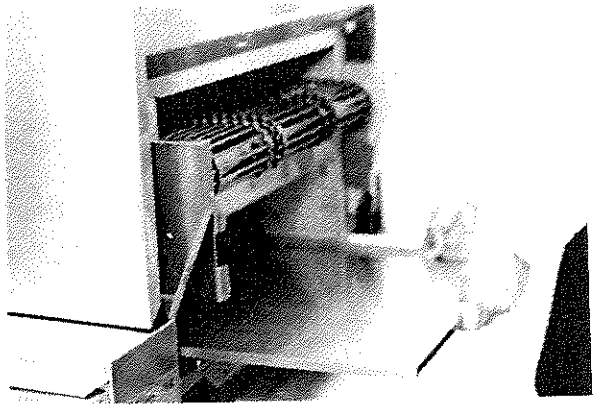


11

Remove GREASE DRIP PAN by sliding it out of the discharge end of machine.

11

D

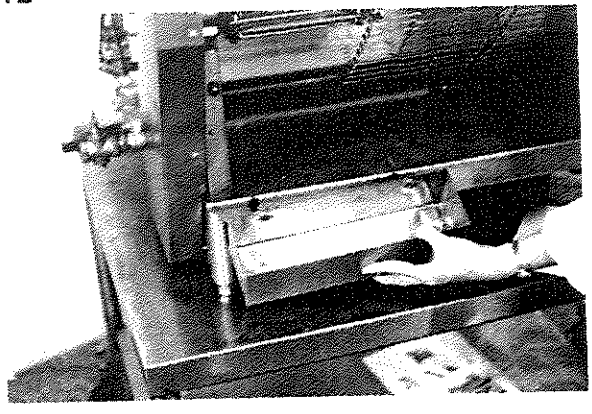


12

Remove GREASE BOX.

12

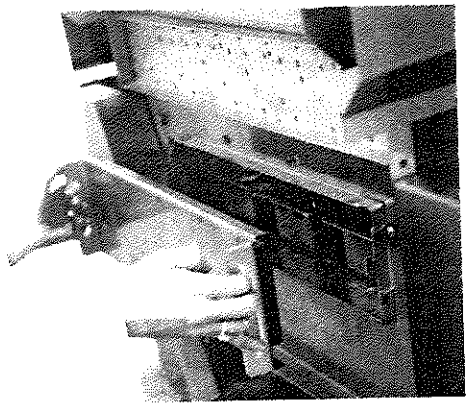
D



13

Remove ACCESS HOLE COVER.

13



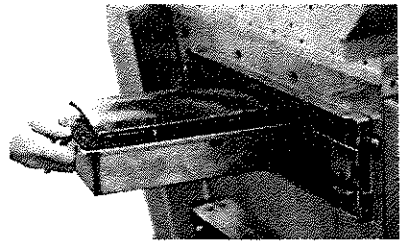
**14**

Remove LOWER BURNERS through the access hole in side of machine. Clean weekly as follows:

a. Remove PROTECTIVE SHIELDS and clean weekly with soap and water or grease remover.

b. Clean DISTRIBUTOR SCREEN and VENTURI weekly in the same fashion as upper burners.

**14**



**15**

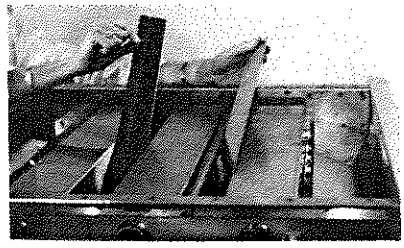
Remove FEED END and DISCHARGE END LOWER HEAT SHIELDS. Clean with soap and water daily or as needed.

**15**

**16**

Remove UPPER BURNER REFLECTOR SHIELDS and clean weekly.

**16**



**16A**

Remove UPPER BURNERS and clean weekly as follows:

**16a1.** Remove REVERBERATOR and clean with stiff bristle brush.

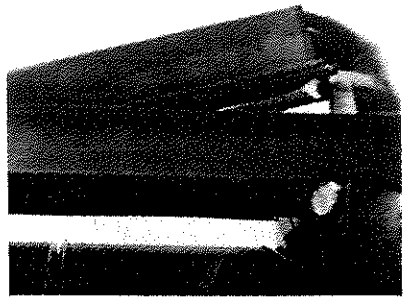
**WARNING:** Replace reverberator at first sign of wire breakage.

**16a2.** Clean DISTRIBUTOR SCREEN on burner with stiff bristle brush.

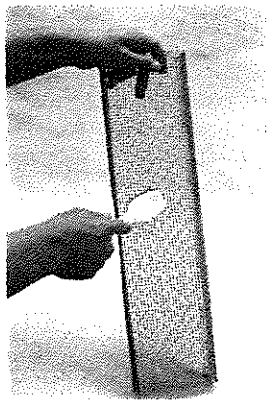
**CAUTION:** HOLD BURNER WITH SCREEN FACING DOWN while brushing. This prevents particles from dropping and lodging inside the burner.

**16a3.** Clean BURNER VENTURI with stiff bristle brush. Hold burner so particles WILL NOT DROP INSIDE.

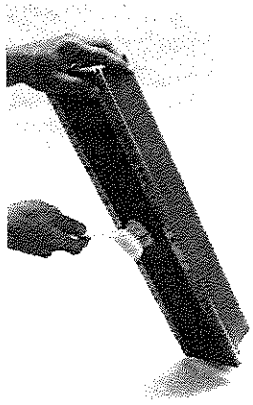
**16a**



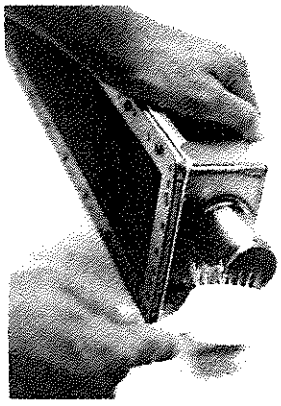
**16a1.**



**16a2.**



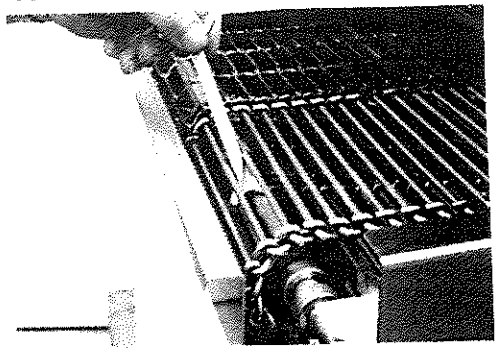
**16a3.**



17

Clean CONVEYOR BELT SHAFT weekly. It can be scraped clean of drippings and carbon with the special tool supplied with the broiler.

17



18

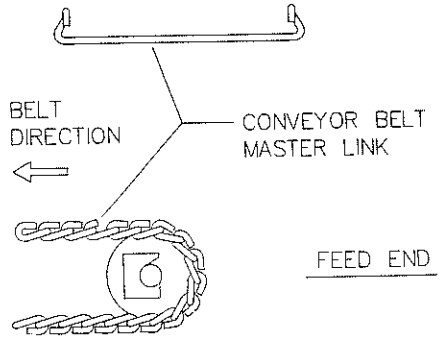
To reassemble the Flexi-Chef repeat the procedure sequence in reverse order.

# G. TO REMOVE CONVEYOR BELTS

19

Run belt until Master Link is located near the Idler Shaft.

19




20

Lift Shaft and Bearing Block Up.

21

Slide Bearing Block Out.

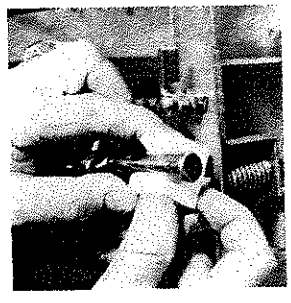
22

Unhook the Master Link.

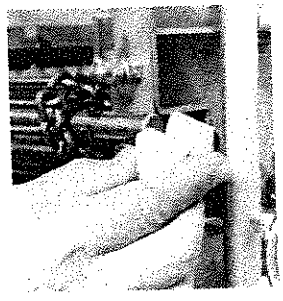
23

To reassemble, reverse the procedure.

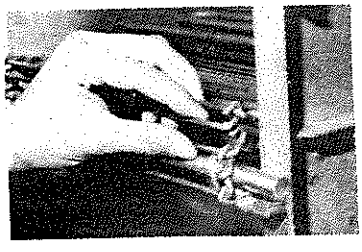
20



21



22

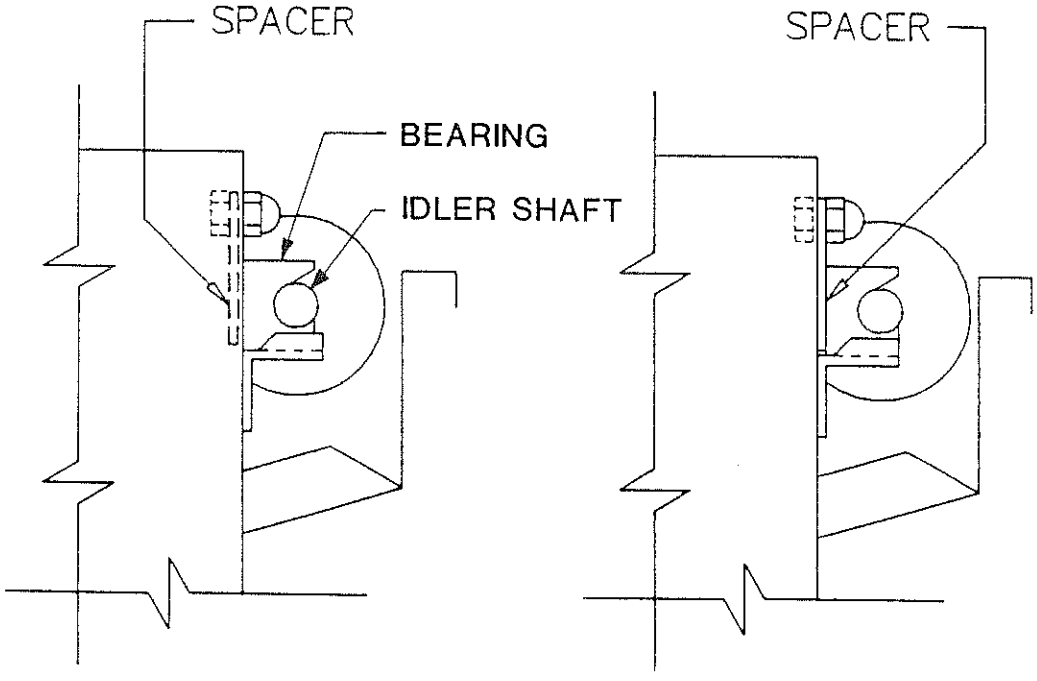


# H. CONVEYOR BELT TENSION

Maintain proper tension on the conveyor belts to prevent jamming. Bearing spacers (pictured below) are supplied with the broiler to make minor tension adjustments. Major tension adjustments are made by removing link(s) from the belts.

The picture on the left shows the spacer in the stored position. The picture on the right shows the spacer behind the teflon bearing tightening the belts.

Belt tension should be checked monthly. To do this allow the broiler to cool then grip the idler shaft at each end and pull out on it. If the shaft and bearings move 3/16" or more the spacers should be placed behind the bearings to tighten the belts. If the spacers are already behind the bearings return them to the stored position and remove a link from each conveyor belt.



# I. TROUBLE SHOOTING GUIDE

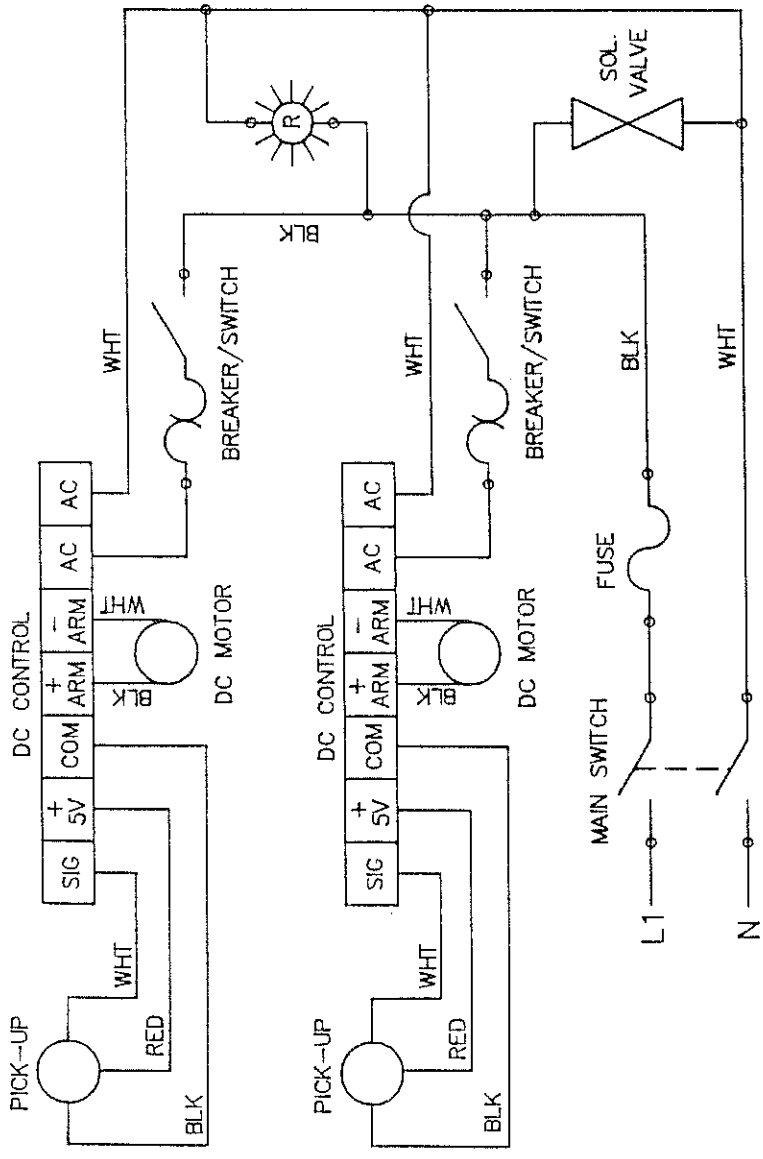
Identify problem in the left column, then look for probable causes and solutions in the center and right hand columns. Probable causes are listed in order of "most likely to happen." This sequence should be used to isolate the problem.

Once the cause is found, refer to OPERATION OR PARTS & LOCATION section for explanation of function or repair part needed.

| PROBLEM | PROBABLE CAUSES | SOLUTION |
|---|---|---|
| **1. Pilot burners won't light.** | 1. Pilot burner dirty or orifice plugged.<br>2. Pushbutton valve not fully depressed.<br>3. Main gas supply not on or not connected properly.<br>4. Air in pilot line.<br>5. Electric spark dislocated.<br>6. Electrical power not on or plugged in. | 1. Clean pilot burner, replace orifice.<br>2. Repeat starting procedure.<br>3. Check gas supply.<br>4. Purge line.<br>5. Check spark position.<br>6. Plug in/Turn on. |
| **2. Pilots won't stay lit when pushbutton valve is released.** | 1. Thermocouples not hot yet.<br>2. Weak pilot flame.<br>3. Thermocouple dirty or defective.<br>4. Power unit defective. | 1. Repeat starting procedure.<br>2. See PROBLEMS #3 & 4.<br>3. Clean or replace.<br>4. Replace. |
| **3. Pilot flame weak or yellow.** | 1. Dirty pilot or venturi.<br>2. Dirty pilot orifice.<br>3. Pilot line plugged or pinched off.<br>4. Incoming gas pressure too low. | 1. Clean.<br>2. Replace.<br>3. Check line.<br>4. Adjust pressure. |
| **4. Main burners won't light, or they go out during operation.** | 1. Pilot flame too small.<br>2. Air draft blowing pilot flame out.<br>3. Electrical supply interruption.<br>4. See #2 & #3 above. | 1. Replace pilot orifice.<br>2. Check for drafts.<br>3. Secure power supply |
| **5. Burner(s) appear dim (cooler).** | 1. Orifices dirty.<br>2. Gas pressure too low.<br>3. Main gas valve partially closed.<br>4. Gas line partially blocked.<br>5. Pressure regulator defective.<br>6. Burners not installed properly.<br>7. Burner venturi dirty.<br>8. Burner mesh dirty. | 1. Clean<br>2. Check pressure.<br>3. Open fully.<br>4. Clear gas line.<br>5. Replace.<br>6. Remove and replace properly.<br>7. Clean.<br>8. Clean. |
| **6. Burner(s) make popping or fluttering noise and may go out.** | 1. Gas pressure too high.<br>2. Burner mesh defective.<br>3. Orifices or venturis dirty. | 1. Adjust pressure.<br>2. Replace.<br>3. Clean. |
| **7. Conveyor belts won't advance.** | 1. Machine not plugged in.<br>2. Wall circuit breaker off.<br>3. Motor control switch off.<br>4. Digital control not set properly.<br>5. Digital control defective.<br>6. Drive chain broken.<br>7. Drive sprocket loose.<br>8. Gear motor defective.<br>9. Loose or broken wire.<br>10. Motor unplugged.<br>11. Pick-up for digital control loose or defective. | 1. Plug in.<br>2. Turn on.<br>3. Turn on.<br>4. Reset cook time.<br>5. Replace digital control.<br>6. Replace or repair.<br>7. Tighten.<br>8. Replace.<br>9. Tighten or replace.<br>10. Plug in.<br>11. Tighten or replace. |
| **8. Motor control switch trips.** | 1. Conveyor chains jammed.<br>2. Switch defective.<br>3. Drive chain binding.<br>4. Shorted wire to motor.<br>5. Gear motor defective. | 1. Remove jam<br>2. Replace.<br>3. Adjust chain tension.<br>4. Repair wire.<br>5. Replace. |
| **9. Conveyor belt speeds are erratic.** | 1. Drive chain binding.<br>2. Gear motor defective.<br>3. Loose drive sprockets.<br>4. Loose pick-up on motor shaft. | 1. Adjust tension.<br>2. Replace.<br>3. Tighten.<br>4. Tighten. |
| **10. Broiled product over or under cooked.** | 1. Wrong conveyor belt speed.<br>2. Product portion or temperature not consistent. | 1. Reset cook time.<br>2. Re-portion product. Hold product at consistent temperature. |

# WIRING DIAGRAM MODEL 615G

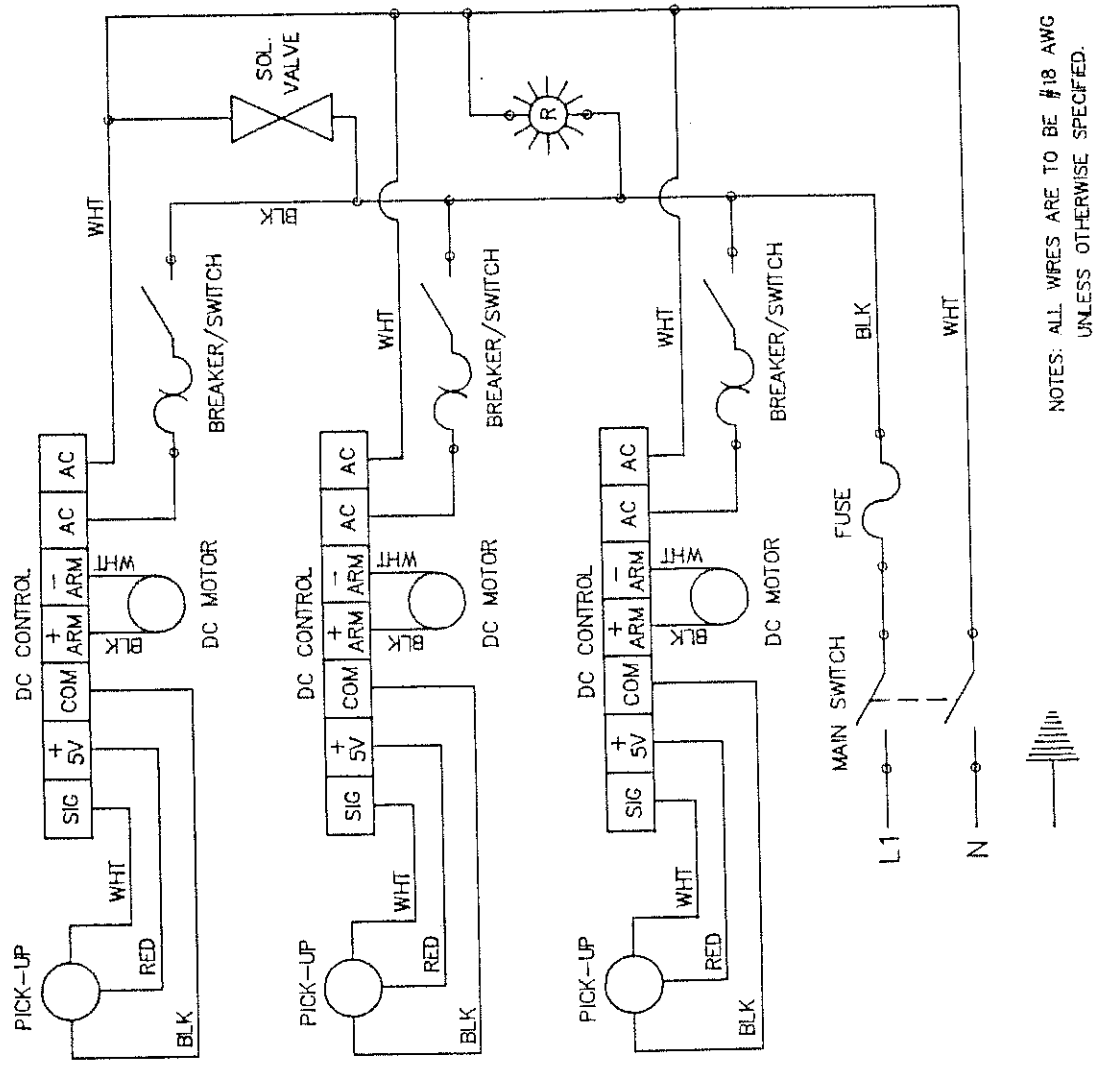
## 120V 1PH 50/60Hz 5A




NOTES: ALL WIRES ARE TO BE #18 AWG
UNLESS OTHERWISE SPECIFIED.

# WIRING DIAGRAM MODEL 815G

## 120V 1PH 60Hz 5A



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