



AUTOMATIC
FOODSERVICE
EQUIPMENT

Automatic Cheese Melter
Model 820 & 1020 GAS

OWNER'S MANUAL

Schlotzsky's

Sandwiches ♦ Soups ♦ Salads

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 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.

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.

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AUTOMATIC CHEESE MELTER

Model 820



DESCRIPTION

The Nieco Model 820 and 1020 Cheese Melter is a compact, self contained, flow through unit that is designed to melt cheese and to toast buns. The unit employs dual 12" wide rod belts, or a single 24" wide belt that flow through the cheese melter in opposite directions between the three upper and one lower burner or four upper and two lower burners in the Model 1020. Each belt is independently driven and controlled.

INSTALLATION

PRE-INSTALLATION

Uncrate the machine, and inspect for shipping damage. Contact the factory if there is obvious 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 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 cheese melter was shipped with a tubular stand, refer to separate tubular stand assembly instructions.

HOOD REQUIREMENTS

This appliance must be installed under a ventilation hood of adequate size and capacity (approximately 600 CFM). The hood should be at least 6" larger in all dimensions than the appliance top, and be 12" to 18" above the top. Do not obstruct the flow of combustion and ventilation air. An adequate air supply must be available for safe and proper operation.

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

CLEARANCE

For proper installation, the minimum clearance from combustible and non-combustible construction is 6" from the back and 6" from the front of the machine. Keep appliance area free from combustibles.

To facilitate disassembly and service of the unit a minimum of 24" should be allowed on the control panel (right) side of the cheese melter, as well as on the feed and discharge ends of the cheese melter.

GAS CONNECTION

At rated BTU capacity, the gas supply should deliver a pressure of at least 6" water column at the cheese melter connection for natural gas, and 11" water column for propane gas. Incoming gas supply pressure must not exceed 14" 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 cheese melter. For disconnect, a manual valve must be located in the gas supply line upstream from the connector.

If the machine is installed on a moveable stand; (1) the installation shall be made with a connector that complies with the Standard for Connectors for Moveable Gas Appliances, ANSI Z21.69-1987, and Addenda, Z21.6a-1989, and a quick disconnect device that complies with the Standard for Quick-Disconnect Devices for Use With Gas Fuel, ANSI Z21.41-1989, and (2) adequate means must be provided to limit the movement of the appliance without depending on the connector and the quick-disconnect device or its associated piping to limit the appliance movement. (See figures on page 6.)

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 in excess of 1/2 psig (3.45 kPa).

Note: 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 1/2 psig (3.45) kPa).

In Canada, installation shall be in accordance with CAN/CGA-B149.1 Natural Gas or CAN/CGA-B149.2 Propane Gas, and local codes where applicable.

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 cancer, birth defects, or other reproductive harm.

ELECTRICAL CONNECTION

Power requirements are stated on the unit nameplate and must be connected accordingly. Before starting cheese melter, 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: This appliance should be connected with a three-pronged grounding plug for your protection against shock hazard. Be sure to plug directly into a properly grounded three-prong receptacle. Do not cut or remove grounding prong from plug.

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

PRE-OPERATION CHECK

Be sure that all parts are installed in the proper location. Refer to **OPERATION** section for lighting procedure. Start cheese melter and test for proper operation.

INSTALLING GAS APPLIANCE CONNECTORS AND FLEXIBLE GAS LINES CORRECTLY

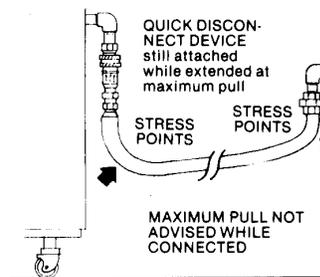
For safety in the kitchen area, and to insure maximum service life, it is vitally important to correctly install connectors.

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 should be disconnected prior to maximum movement. (Minimal movement is possible to connect hose.)

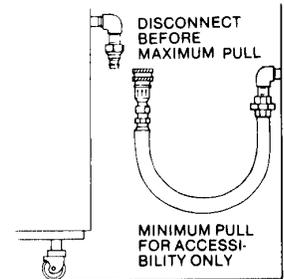
WRONG

Avoid sharp bends and kinks when pulling equipment away from wall.



RIGHT

Minimum pull of equipment is permissible for accessibility to quick disconnect device.



RESTRAINING DEVICE INSTALLATION AND USE

This high strength restrainer is to be used with all moveable (castered) appliances. It must fully comply with International Approval Services 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.

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

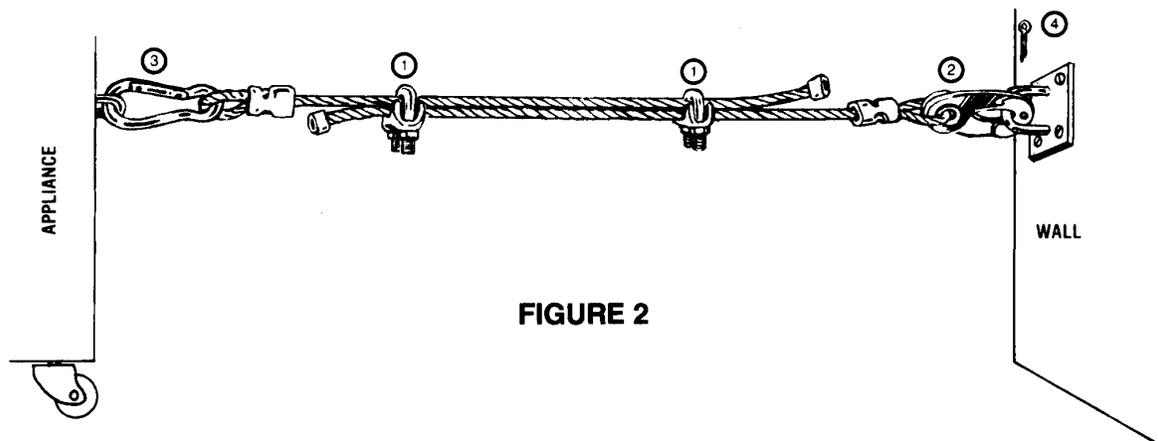
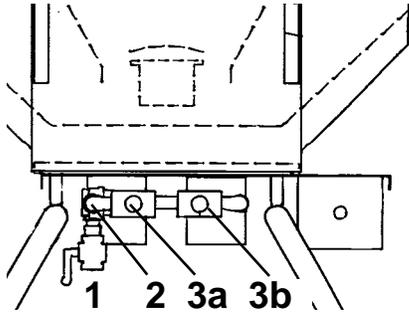


FIGURE 2

OPERATION



1. Main Gas Valve controls the flow of incoming gas. Valve is open when handle is in-line with the piping, and closed when it is perpendicular.

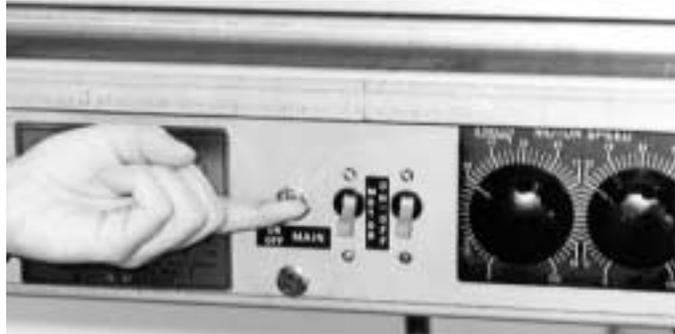
2. Solenoid Valve automatically shuts off gas supply if power fails.

3. Pushbutton Gas Valves (2) control the flow of gas to the upper and lower burners. 3a is for the lower burner, and 3b is for the upper burners.

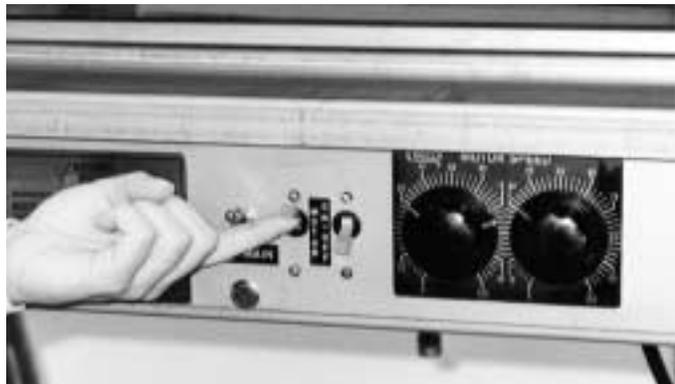
In the following section, a brief step-by-step sequence of lighting and operating procedure is given. For reference, a condensed lighting procedure is located on the front of the control panel.

Step-By-Step Lighting Procedure

1. Turn on Main Power Switch.



2. Turn on Motor Power Switches.

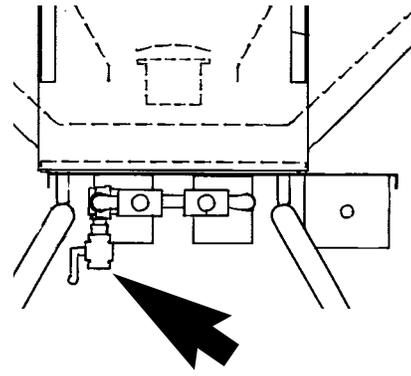


3. Set Motor Speed Controls to desired cook time.

Note: Your cheesemelter is equipped with a constant burning pilot. After the initial lighting, the cheesemelter is shut down and re-lit simply by turning the main power switch on and off.



4. Open Main Gas Valve located on the lower left side of the machine. Valve is open when the handle is in-line with the valve.



5. Light the Lower Pilot Burner by holding in the red button marked bottom pilot and simultaneously pressing the red Pilot Ignition button. After pilot ignites, continue to hold the bottom pilot button in for about 20 seconds to insure pilot remains lit.



6. Repeat step 5 with the Upper Pilot Burner. After 20 seconds release pilot button and the main burners will ignite.



If the pilot lights are burning:

1. Turn on the exhaust hood above the cheesemelter.
2. Turn on the Main Power Switch. At this time, the main burners should ignite.
3. Turn on the Motor Switches, and set the cook times with the Motor Speed Control Knobs.

If the pilot lights are not lit then follow the Step-by-Step Lighting Procedure starting on page 7 of this manual.

SHUTDOWN PROCEDURE

EMERGENCY SHUTDOWN: Turn Main Power Switch and gas supply off.

Daily Shutdown:

1. Clear machine of all food products.
2. Turn Main Power Switch off.

Interior Cleaning Shutdown:

1. Turn Motor Switches off.
2. Turn Main Gas Valve off.
3. Turn Motor Switches off.
4. Turn Main Gas Valve off.

Each time the main gas valve is turned off you must repeat the initial lighting procedure to re-light the cheesemelter.

CAUTION: Always turn machine completely off before pulling power plug.

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

The cheesemelter cannot be operated in the event of a power failure. Do not attempt to restart the machine until power is restored.

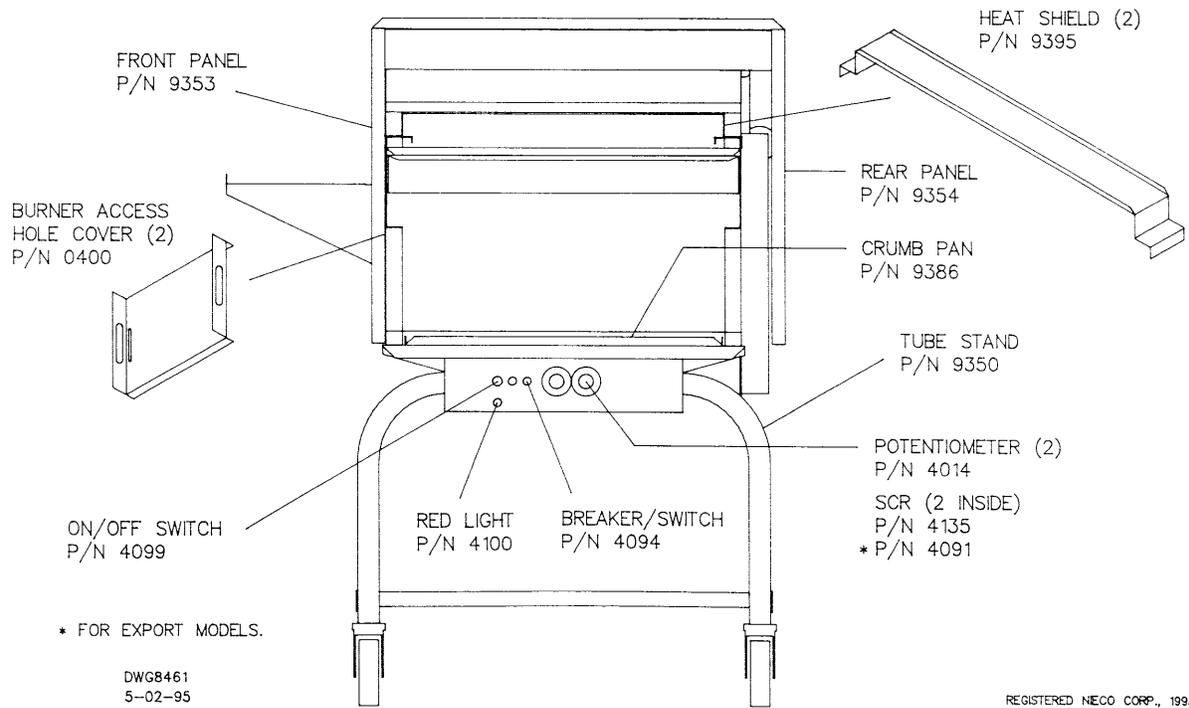
The cheesemelter will have to be completely shut off (including pilots) when the burners are removed for cleaning. To shut off the pilot lights, close the main gas valve by turning the handle perpendicular to the piping.

CAUTION!

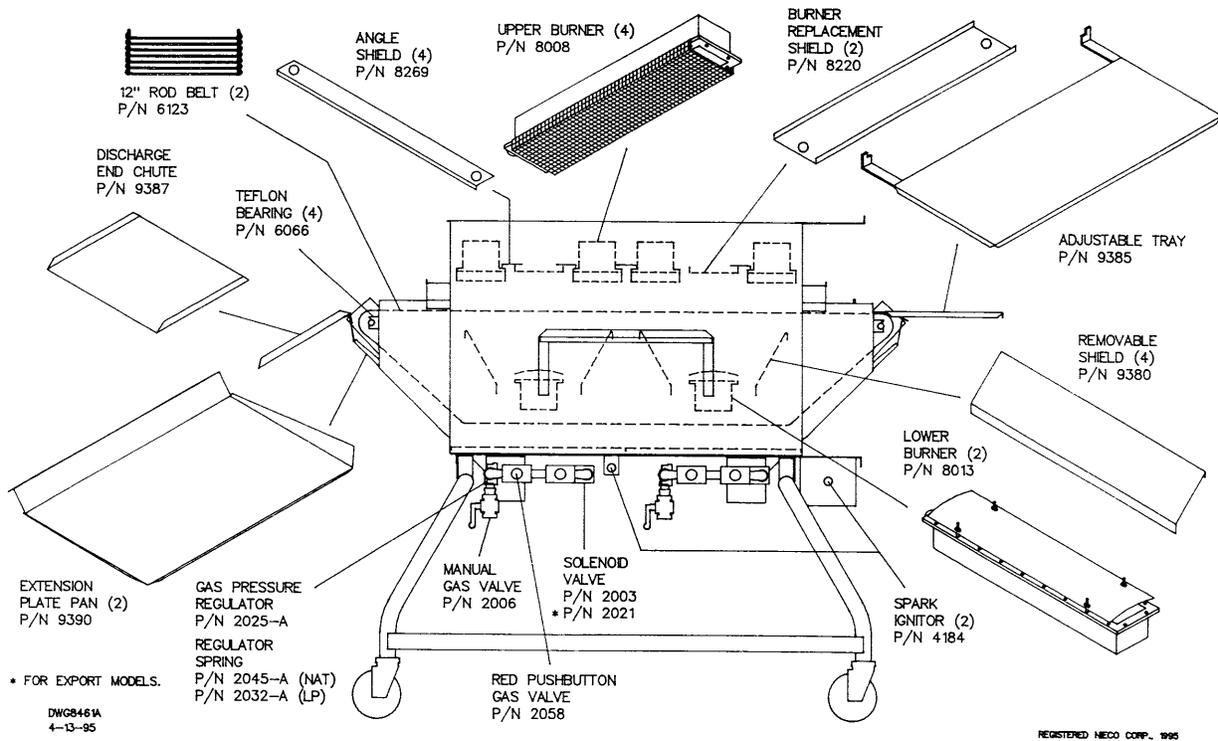
Do not remove the burners while the pilots are lit. Before removing burners, turn off the gas supply by closing the main gas valve and unplug the electrical supply.

PARTS AND LOCATION

1020G Feed End View

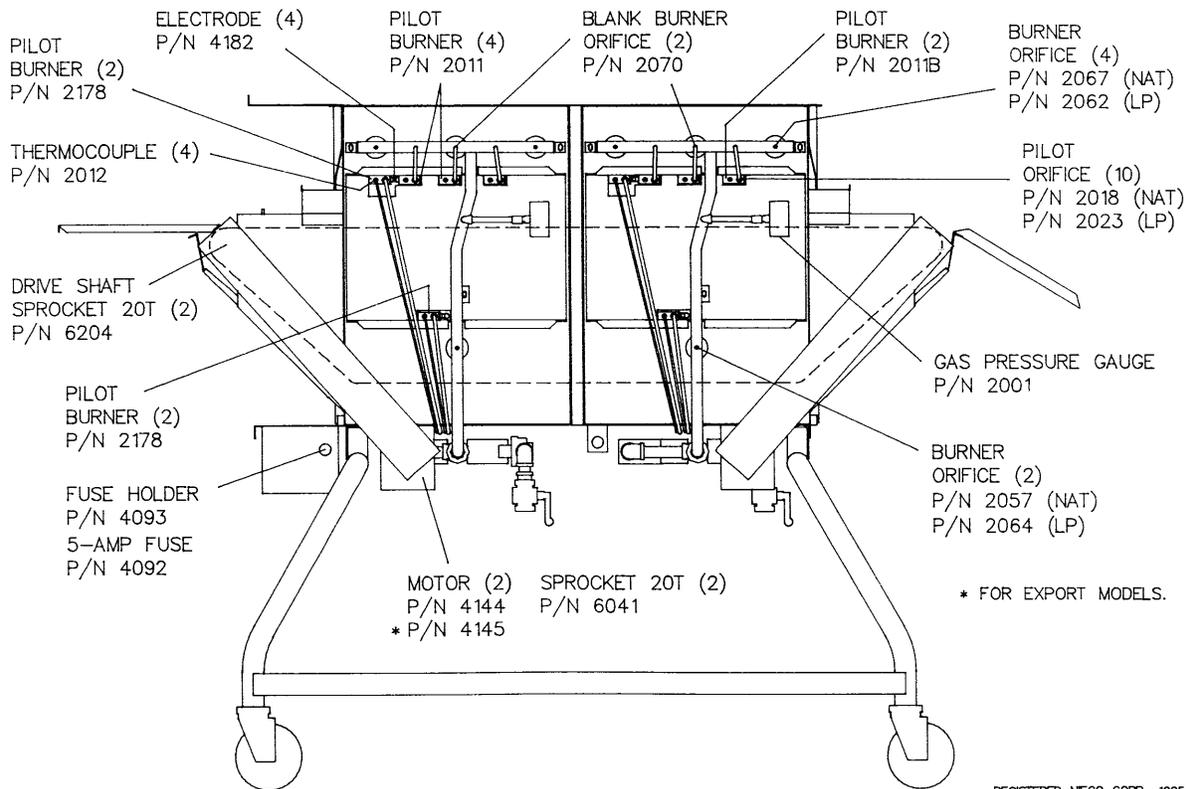


1020G Front Side View



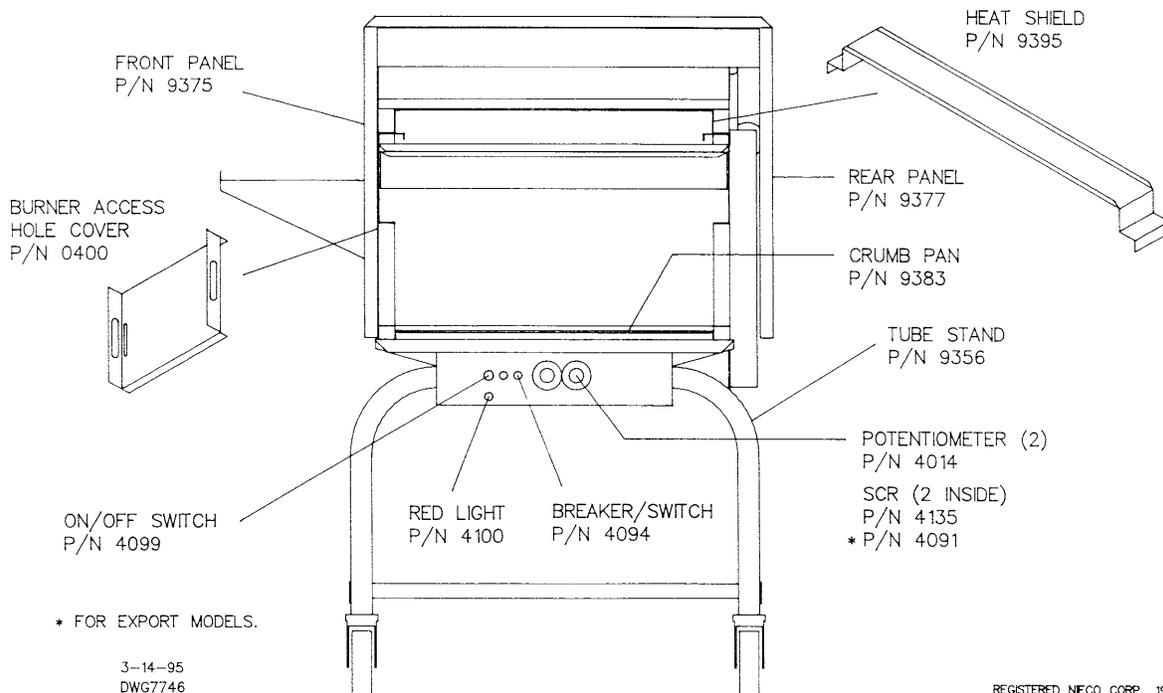
PARTS AND LOCATION

1020G Rear Side View



REGISTERED NIECO CORP., 1995

820G Feed End View

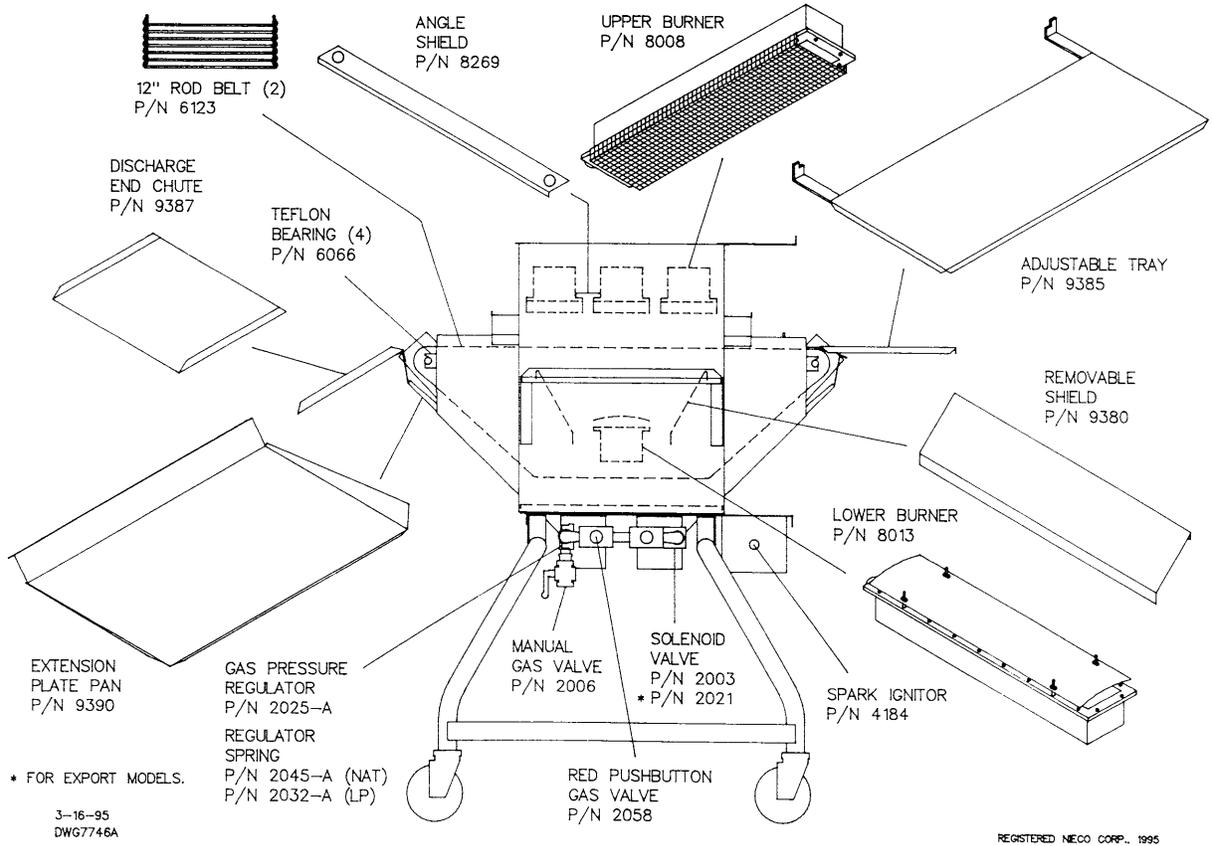


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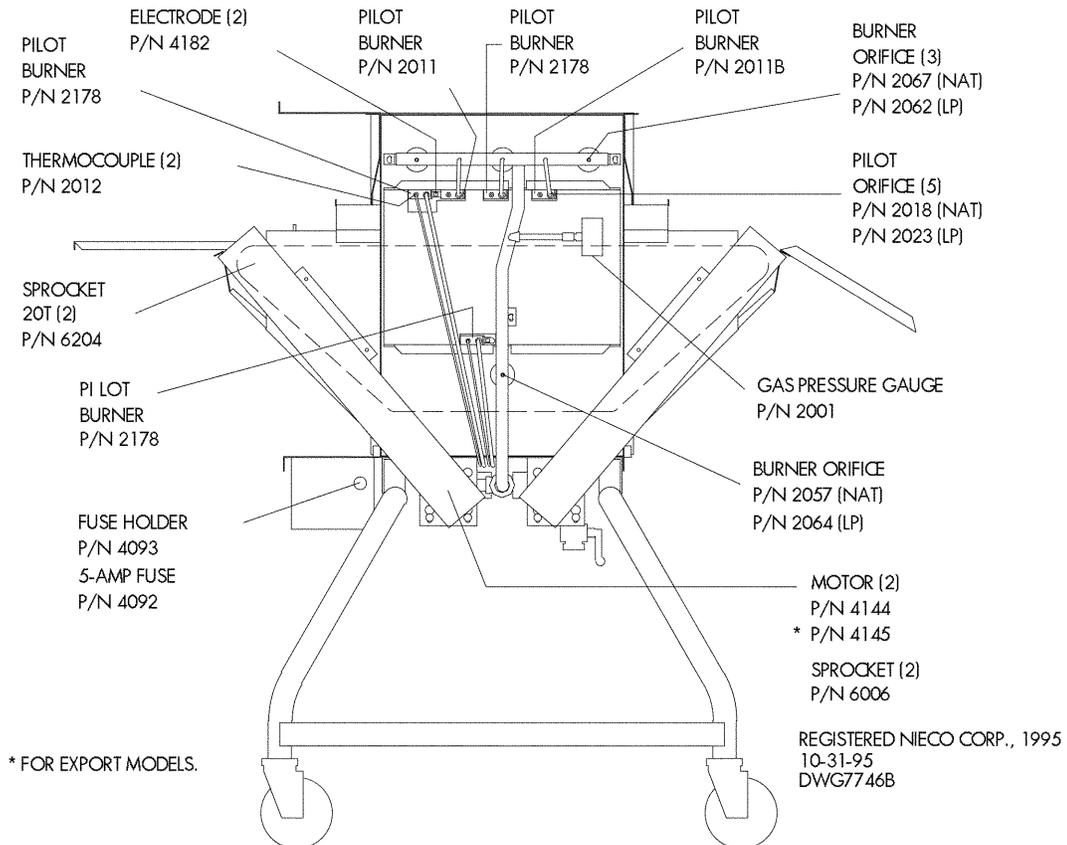
REGISTERED NIECO CORP., 1995

PARTS AND LOCATION

820G Front Side View



820G Rear Side View



CLEANING INSTRUCTIONS

1. Turn off machine following the shutdown procedures on page 8.

2. Remove Side Panel by lifting up and off. Clean daily using soap and water.

2



3



3. Remove Adjustable Tray located on the feed end of machine. Clean daily with soap and water.

4



5



4. Remove Discharge End Chute. Clean daily with soap and water.

5. Remove Extension Plate Pans located on both the feed and discharge ends of the machine. Clean daily with soap and water.

6



7



6. Remove Access Hole Cover. Clean with soap and water.

7. Remove the Interior Removable Shields. Clean daily with soap and water.

8. Remove the Lower Burner located in the access hole in front of the machine. Clean once per week as follows:

- a. Remove Protective Shields and clean with soap and water.
- b. Clean Distributor Screen and Venturi in the same fashion as Upper Burners.

8



9. Remove the Upper Burners by lifting out of the top of the machine.

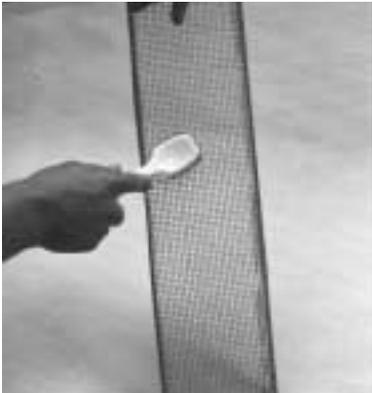
9



9. The procedure for cleaning the Upper Burners is as follows:

WARNING: Do not get burners wet. Water will damage the gaskets and may ruin the burners.

9A. Remove the Reverberator Screen and clean using a bristle brush. Be sure all built up grease is removed.
Warning: Replace Reverberator at first sign of wire breakage.



9B. Clean Distributor Screen with a stiff bristle brush. Hold the burner with the screen facing down while brushing, to prevent particles from dropping into the burner box.



9C. Clean the Burner Venturi with a stiff bristle brush or towel. Hold the burner so particles will not fall inside.



10. Clean the Conveyor Belt Shaft with the special tool provided. Clean as needed to remove build-up.

10

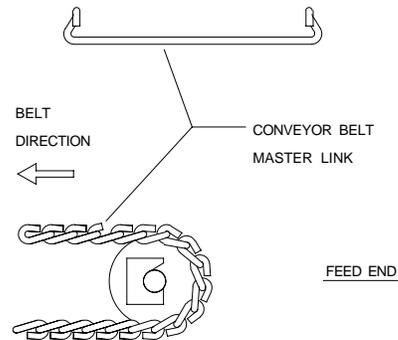


11. To reassemble, reverse the procedure.

Conveyor Belt Removal

1. Run Conveyor Belt until the Master Link is located near the idler shaft.

1



2. Lift shaft and slide out bearing blocks.

2



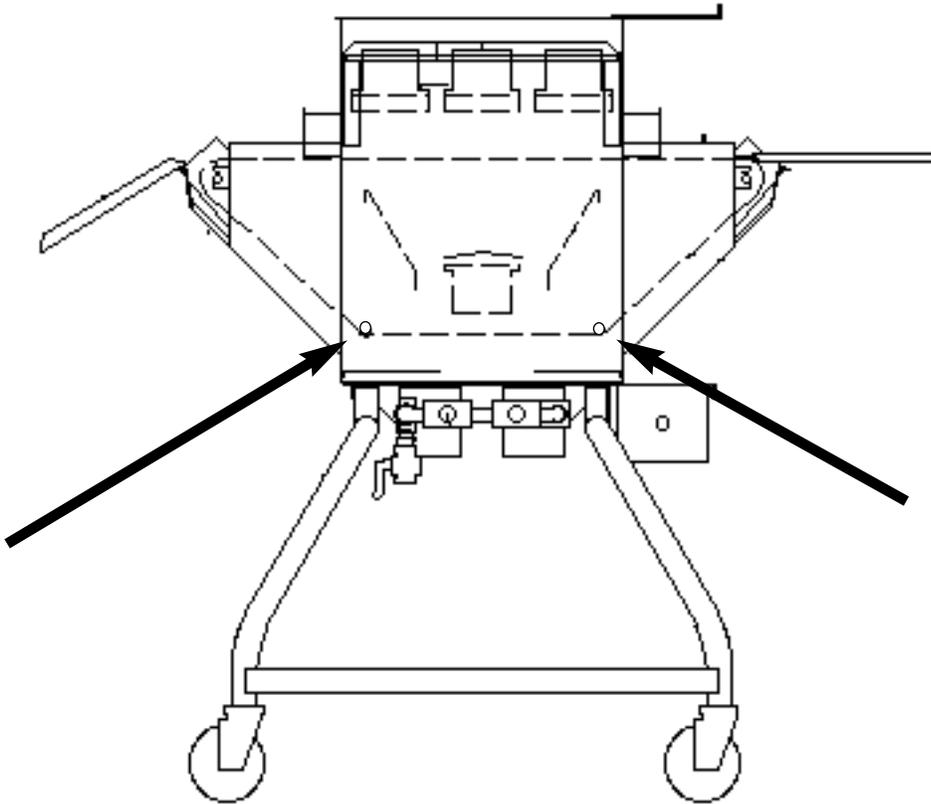
3. Unhook the Master Link.

3



4. To Reassemble, reverse the procedure.

CONVEYOR BELT TIGHTENING INSTRUCTIONS



Loosen bolts and push rods down for more tension or up for less tension. Tighten both sides equally so that the belt does not wear unevenly.

The tension on the conveyor belt can be adjusted by following these simple steps:

1. Remove the front and rear panels.
2. On the frame, locate the two cross rods that the chain wraps around. These two rods are near the bottom, and secured by a bolt and lock washer. (See diagram above)
3. Loosen the bolts and push the rods down. The holes are slotted to allow for minor tension adjustments.
4. Tighten the bolts and repeat on the other side of the machine. On the “rear” of the machine, you may have to remove the chain gaurds for easier access.
5. If the rods do not go down far enough to properly increase the tension, then remove a link from the conveyor belt. This is easiest to accomplish with a special chain tool, which is available from your distributor or sevice people.

CONDENSED CLEANING INSTRUCTIONS

Daily Cleaning

- Shut down machine and allow to cool before handling parts.
- Scrape clean the shafts if necessary.
- Remove all sheet metal pieces - trays, pans, etc. and clean daily with soap and water or degreaser.
- Wipe the conveyor belt with a wet towel.

Weekly cleaning

- Burners: Brush the distributor screen (mesh) with a stiff bristle brush.

Do not get the burners wet, as water will damage the gaskets.

- Clean the venturi tube and keep free from obstruction.
- Clean the Protective Shields and Reverberators frequently. Doing so will prolong the life of the burners and keep the machine performing properly.
- Wipe down the frame of the machine as necessary.
- Clean the gas orifices with a toothpick or pipe cleaner. Do this once per month.

Caution: The orifices are sized specifically for this machine. Do not insert any thing metal (i.e. paper clip) into the orifice. Doing so will resize the orifice and affect the performance of the machine.

TROUBLESHOOTING GUIDE

PROBLEM	PROBABLE CAUSES	SOLUTION
Pilot Burners won't light.	<ol style="list-style-type: none"> 1. Pilot Burner dirty, or orifice plugged. 2. Pushbutton valve not fully depressed. 3. Air in pilot line. 4. Electric spark igniter dislocated. 5. Electric power not on, or machine not plugged in. 6. Gas not hooked up or on. 	<ol style="list-style-type: none"> 1. Clean pilot burner, replace orifice. 2. Repeat start-up procedure. 3. Purge line by holding down red pushbutton before igniting. 4. Position white electrode so the tip is 1/4" from the pilot burner. 5. Plug in/turn on. 6. Check Gas Supply
Pilots won't stay lit when pushbutton is released.	<ol style="list-style-type: none"> 1. Thermocouple not hot yet. 2. Weak pilot flame. 3. Thermocouple dirty or defective. 4. Pushbutton power unit defective. 	<ol style="list-style-type: none"> 1. Repeat starting procedure, and hold the pushbutton in longer. 2. See Below. 3. Clean or replace. 4. Replace.
Pilot flame weak or yellow.	<ol style="list-style-type: none"> 1. Dirty pilot or orifice. 2. Pilot tubing plugged or pinched off. 3. Incoming gas pressure too low. 	<ol style="list-style-type: none"> 1. Clean or replace. 2. Check line. Pilot tubing can be removed with a wrench. 3. Adjust pressure regulator.
Main Burners won't light, or they go out during operation.	<ol style="list-style-type: none"> 1. Pilot flame too small. 2. Air draft blowing pilot flame out. 3. Electrical supply interruption. 	<ol style="list-style-type: none"> 1. Replace pilot orifice. See Above. 2. Check for drafts. 3. Secure power supply.
Burner appears dim (cooler).	<ol style="list-style-type: none"> 1. Burner orifices dirty. 2. Gas pressure too low. 3. Gas line partially blocked. 4. Pressure regulator defective. 5. Burners not installed properly. 6. Burner venturi dirty. 7. Main gas valve partially closed. 8. Burner distributor screen dirty. 	<ol style="list-style-type: none"> 1. Clean or replace. 2. Adjust pressure regulator. 3. Check line and clear. 4. Replace. 5. Remove and install properly. 6. Clean. See Cleaning Instructions. 7. Open fully so that handle is in line with the valve. 8. Clean.
Burners backfire or sputter.	<ol style="list-style-type: none"> 1. Gas pressure too high. 2. Burners have gotten wet. 3. Burner venturi dirty. 	<ol style="list-style-type: none"> 1. Adjust pressure regulator. 2. Dry thoroughly, replace gasket. 3. Clean.
Conveyor belts won't advance.	<ol style="list-style-type: none"> 1. Machine not plugged in. 2. Wall circuit breaker off. 3. Motor control switch off. 4. Drive chain broken. 5. Gear motor defective. 6. Loose or broken wire. 7. Motor unplugged. 8. Drive sprocket loose. 	<ol style="list-style-type: none"> 1. Plug in. 2. Turn on. 3. Turn on. 4. Replace or repair. 5. Replace. 6. Tighten or replace. 7. Plug in. 8. Tighten sprocket set screw.
Motor Switch Trips	<ol style="list-style-type: none"> 1. Conveyor chains jammed. 2. Drive chain binding. 3. Defective Switch. 4. Shorted wire to motor. 5. Motor defective. 	<ol style="list-style-type: none"> 1. Remove jam. 2. Adjust chain tension. 3. Replace. 4. Repair Wire. 5. Replace.

SPECIFICATIONS

1020G

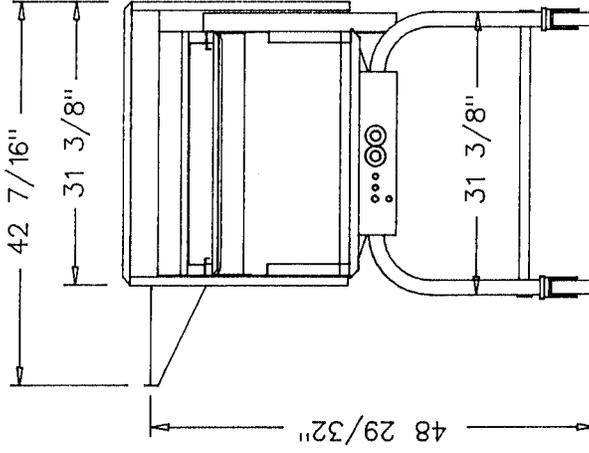
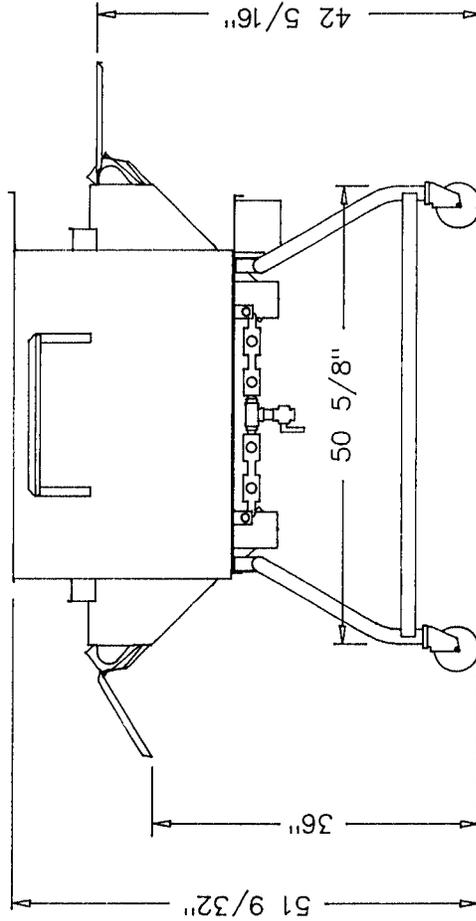
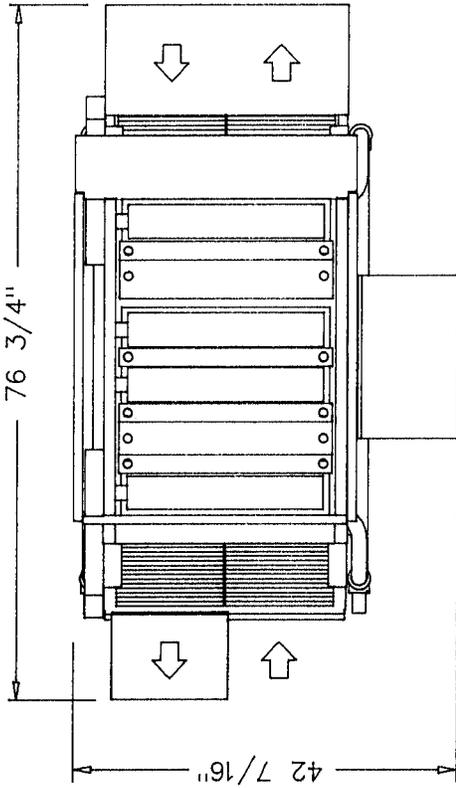
MODEL 1020G CHEESE MELTER

DWG6791C 11-08-95

GAS REQUIREMENTS: 83,000 BTU/HR • 4" W.C. NATURAL GAS
 • 11" W.C. PROPANE GAS
 ELECTRICAL REQUIREMENT: 120V 1PH 60HZ 5A
 CONSTRUCTION: STAINLESS STEEL



NECO CORPORATION
 15 GUTTARD ROAD
 BURLINGAME, CA 94010



SPECIFICATIONS

820G

MODEL 820G CHEESE MELTER

DWG6791 10-30-95

GAS REQUIREMENTS: 55,000 BTU/HR • 4" W.C. NATURAL GAS

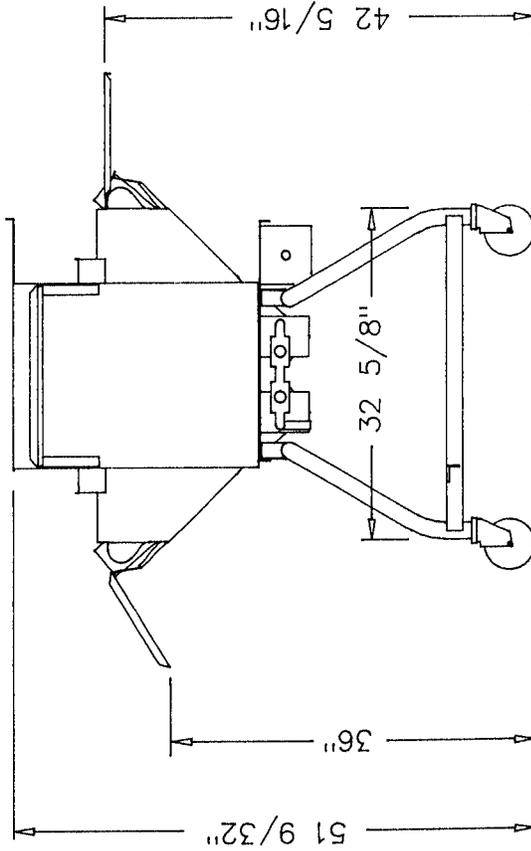
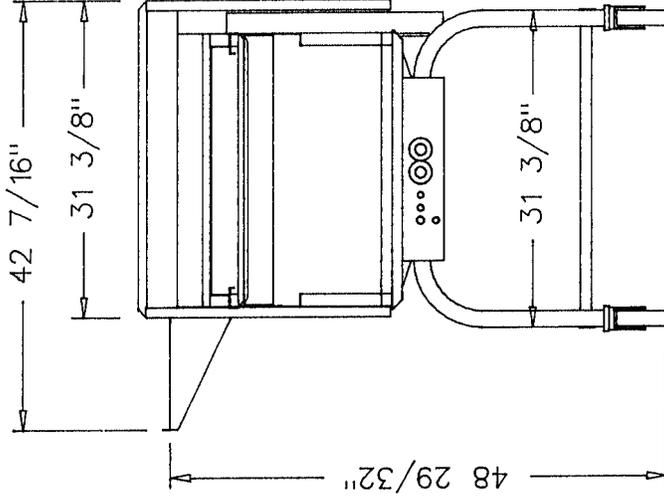
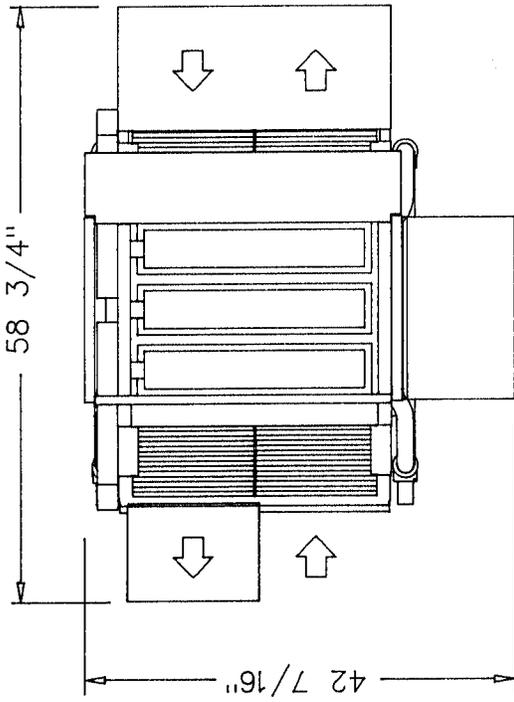
- 1" W.C. PROPANE GAS

ELECTRICAL REQUIREMENT: 120V 1PH 60HZ 5A

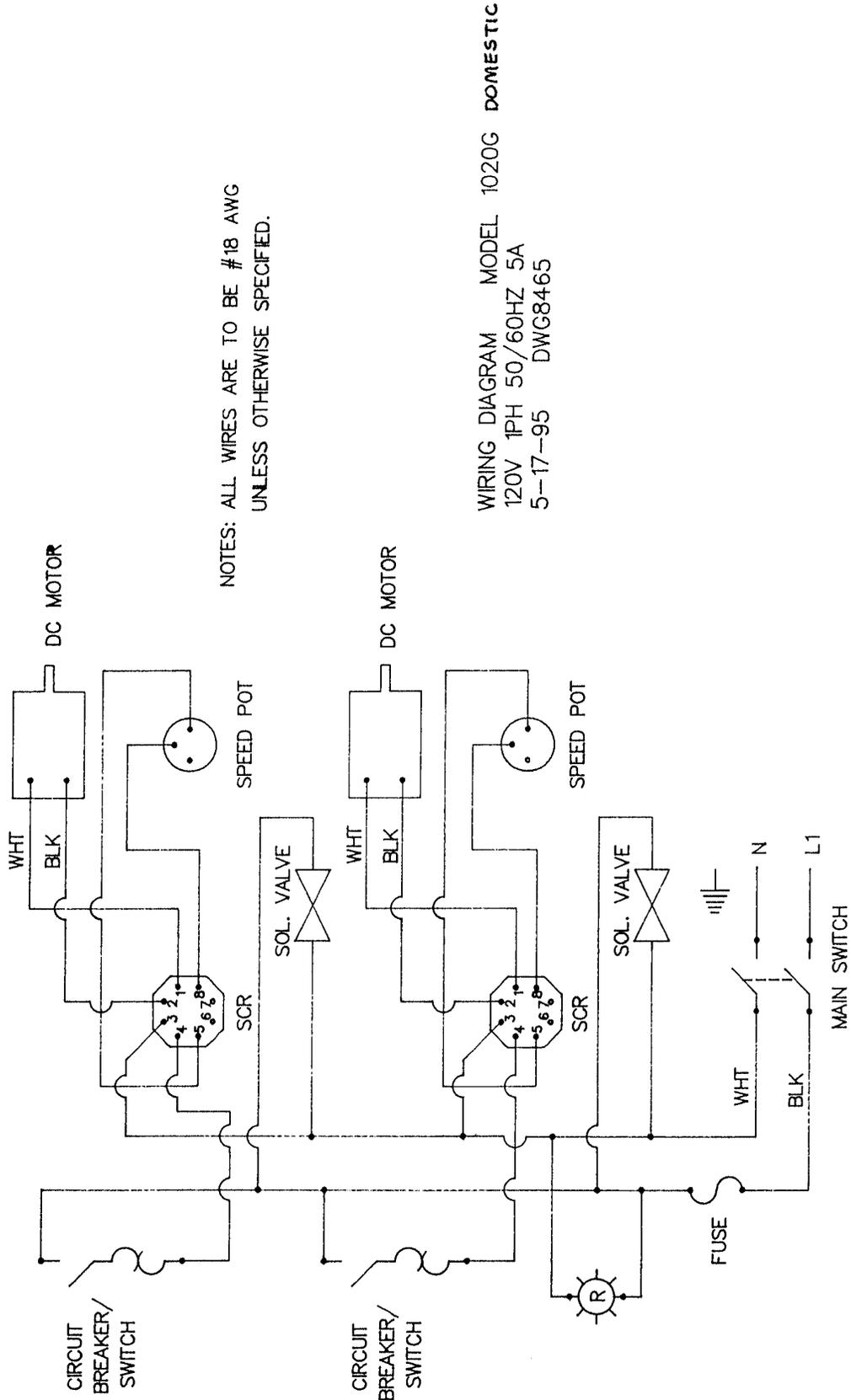
CONSTRUCTION: STAINLESS STEEL



NIECO CORPORATION
15 GUITTARD ROAD
BURLINGAME, CA 94010



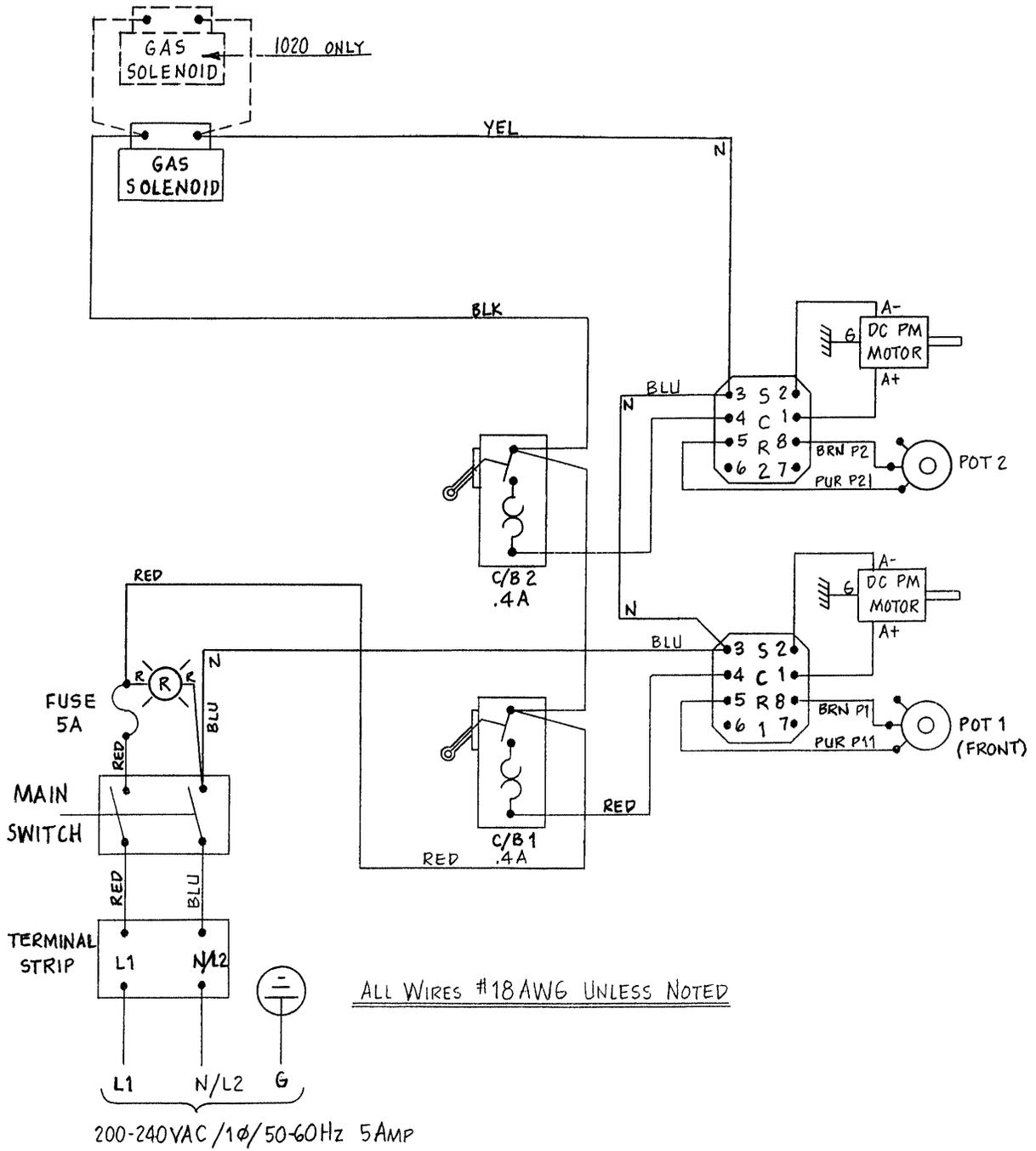
WIRING DIAGRAM 1020G Domestic U.S.A.



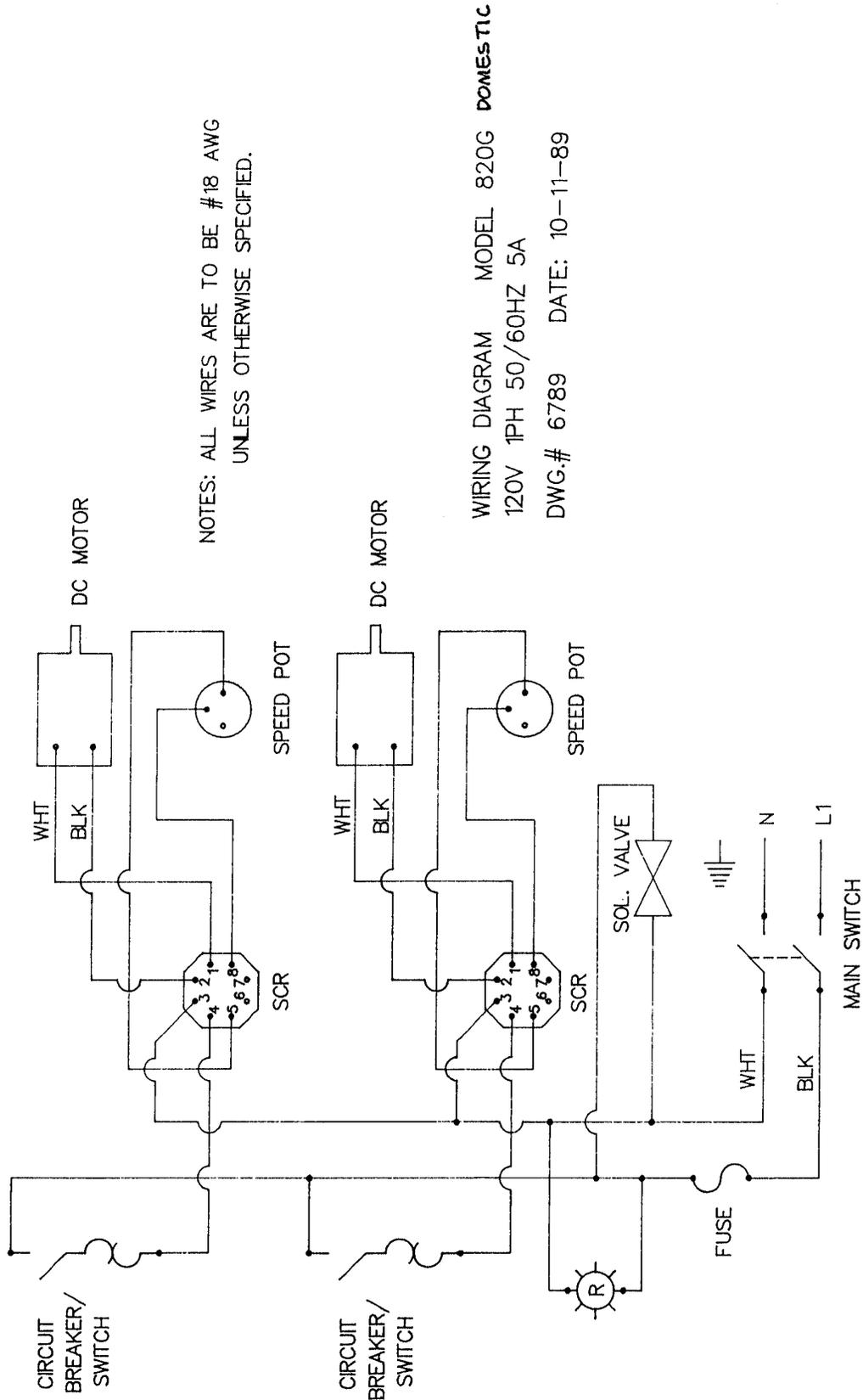
NOTES: ALL WIRES ARE TO BE #18 AWG
UNLESS OTHERWISE SPECIFIED.

WIRING DIAGRAM MODEL 1020G DOMESTIC
120V 1PH 50/60HZ 5A
5-17-95 DWG8465

WIRING DIAGRAM 820/1020G Export



WIRING DIAGRAM 820G Domestic U.S.A.



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

WIRING DIAGRAM MODEL 820G DOMESTIC
120V 1PH 50/60HZ 5A
DWG.# 6789 DATE: 10-11-89



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