



**Star
Manufacturing
International Inc.**

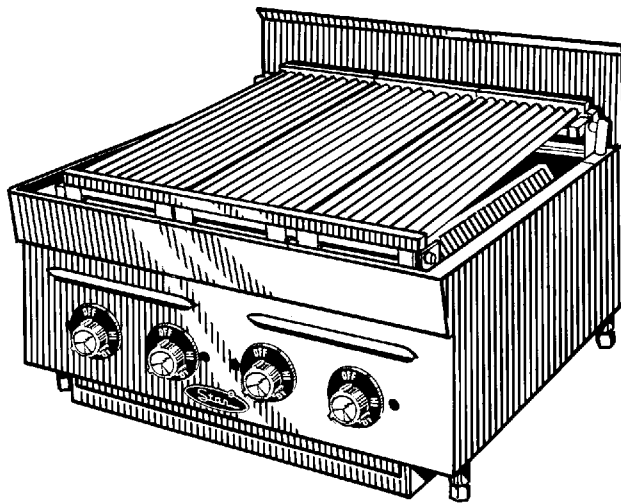
10 Sunnen Drive
St. Louis, MO 63143

Phone: (800) 264-7827
FAX: (800) 264-6666

**Installation
and
Operating
Instructions**

2M-Y3213 Rev. G 10/2/95

**DESIGNER SERIES
GAS CHARBROILER
MODELS 255B and 257**



Model 255B



GENERAL INSTALLATION DATA



CAUTION

This equipment is designed and sold for commercial use only by personnel trained and experienced in its operation and is not sold for consumer use in and around the home nor for use directly by the general public in food service locations. For equipment to be used by the general public, please contact the factory.

This Star Designer Series Gas Broiler is equipped for the type of gas indicated on the nameplate mounted on the inside of the door.

-IMPORTANT-

INSTALLATION: INSTALL IN NON-COMBUSTIBLE LOCATIONS ONLY!
Clearance from non-combustible construction must be 6" from back and sides.

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

The installation of the appliance must conform with the local codes, NATIONAL FUEL GAS CODES "ANSI Z223.1 - LATEST EDITION" AND ALL LOCAL GAS COMPANY RULES AND REGULATIONS.

FOR YOUR SAFETY

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE. KEEP THE APPLIANCE AREA CLEAR AND FREE FROM COMBUSTIBLES.

This appliance, its pressure regulator 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 PSIG. This appliance and its pressure regulator 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 PSIG. For your protection, we recommend a qualified installing agency install this appliance. They should be familiar with gas installations and your local gas requirements. In any case, your gas company should be called to approve the final installation. In addition, there should be posted, in a prominent location, detailed instructions to be followed in the event the operator smells gas. Obtain the instructions from the local gas supplier.

LEVELING UNIT

This broiler is supplied with 4 feet which must be screwed into the legs attached to the body. Level unit by adjusting the 4 feet which must have an adjustment of 1" for accurate and perfect line-up with other Designer Series Units.



CAUTION

DO NOT INSTALL WITHOUT ATTACHING THE FEET - DO NOT REMOVE FEET.

GAS INPUT TO BROILER

90,000 BTU/HR total, or 15,000 BTU/HR for one burner for Model 257. 60,000 BTU/HR total, or 15,000 BTU/HR for one burner for Model 255B.

GAS PIPING

Gas piping shall be of such size and so installed as to provide a supply of gas sufficient to meet the full gas input of the appliance. If the appliance is to be connected to existing piping, it shall be checked to determine if it has adequate capacity. Joint compound (pipe dope) shall be used sparingly and only on the male threads of the pipe joints. Such compounds shall be resistant to the action of L.P. gases. **WARNING:** Any loose dirt or metal particles which are allowed to enter the gas lines on the appliance will damage the automatic valve and affect its operation. When installing this appliance, all pipe and fittings must be free from all internal loose dirt.

PRESSURE REGULATOR

A convertible pressure regulator is provided with each broiler. It should be connected to the inlet pipe at the rear of the unit. The gas supply line is then connected to it. It is shipped set for 6" W.C. manifold pressure for use on natural gas. Allow 6" clearance from back of unit to wall for servicing and installation.

CONNECTING GAS SUPPLY LINE

The gas inlet of the broiler is sealed at the factory to prevent entry of dirt. Do not remove this seal until actual connection is made to the gas supply line.

MANUAL SHUT OFF VALVE

A manual shut off valve should be installed upstream from the manifold and within six feet of the broiler.

NATURAL/LP GAS

This broiler is equipped with fixed orifice hoods and is shipped from the factory for use on Natural Gas. To convert to LP gas, install the black burner orifice hoods

supplied in cloth bag attached on or near the front panel (See directions below).

"For natural gas when equipped with no. 52 drill size orifice."

"For LP gas when equipped with no. 56 drill size orifice."

"For your safety refer to installation instructions for conversion procedure."

1. Remove grill, radiants and burners.
2. Remove the burner orifice hoods and install the black orifice hoods supplied.
3. Replace the burners, radiants and grill.
4. Set manifold pressure to (10) inchwater column. A 1/8" pipe plug on the burner manifold can be removed for attaching a pressure gauge. Remove the slotted cover from the pressure regulator and invert the plug. Replace the cover on the regulator andthe manifold plug. Regulator is now set at 10" W.C.

CHECKING FOR GAS LEAKS

Soap and water solution, or other material acceptable for the purpose of locating gas leaks shall be used. **MATCHES, CANDLES, FLAME OR OTHER SOURCES OF IGNITION SHALL NOT BE USED FOR THIS PURPOSE.** Check entire piping system for leaks.

PILOT LIGHTING INSTRUCTIONS

The broiler is equipped with (6) standing pilots Model 257 and (4) on Model 255B and should be lighted immediately after the gas is turned on.

1. Turn the burner valve knobs to "OFF" position. **CAUTION:** If gas valves have been on and gas has escaped through the burners, turn unit off and wait 5 minutes to clear gas.
2. Remove valve knobs by pulling off.
3. Open front door panel.
4. Light pilots with match, using match holder furnished with unit.

SHUTTING DOWN INSTRUCTIONS

Turn the burner valve knobs to the off position to turn burners off.

PILOT LIGHT REGULATION

The pilot lights on this broiler have been adjusted at the factory. However, due to variations of gas pressure in different locations, the pilot light flames may have to be adjusted at installation location. Adjust pilot light flames as small as possible, but high enough to light burner immediately when burner valve is turned on high.

BURNER OPERATION

To ignite burners, turn burner valve knob to "HI" position. There are (6) burners for Model 257 and (4) for Model 255B, and each one is controlled by an individual high-low, on-off valve. An infinite number of broiling temperatures may be obtained by turning the burner valve knob to any position between high and low.

BURNER ADJUSTMENT

1. Turn burner valve knob to "HI" position.
2. Slowly decrease openings of air shutters to give a soft blue flame having luminous tips, then slowly increase openings to a point where the yellow tips disappear and a hard blue flame is obtained.
3. Set the low adjustment to maintain approximately 1/8" high flame by turning the screws inside the valve shafts when the knob is turned to low.

EXHAUST CANOPY

Open hearth broilers inherently create a good deal of heat and smoke and should be installed under an efficient exhaust hood with flame proof filters. A vertical distance of not less than 48" shall be provided between the top of the appliance and filters or any other combustible material.

AIR SUPPLY

Provisions for adequate air supply must be provided.

AIR INTAKES IN BOTTOM

Air for combustion enters from the bottom of the unit. Do not obstruct this area.

OPERATING INSTRUCTIONS

LIGHTING

When broiler is first lighted, it will smoke until the preservation oils and impurities are burned off. When it stops smoking, it is ready to use.

BROILING

Turn valves on and pre-heat unit on "HI" before attempting to broil. You will have to experiment with the grill settings and the valve settings for your particular meat products. We recommend that you set the grate at the full tilt position to start with. This position allows the grease to run down the rods into the grease tray, reducing flare ups.



CAUTION

Hot fat that drips onto the radiants causes some flare ups. Check water pans frequently and add a sufficient amount of water when necessary. Hot water vapors rising from the water pans and through the combustion chamber, helps reduce flare ups. Exercise care when using your broiler.

TILTING THE GRILL



CAUTION

Charbroilers are hot! Never attempt to change the grill position while meat products are cooking. Flare ups can occur unexpectedly. Turn off charbroiler and allow the charbroiler to cool.

Raise or lower grill by lifting the rod, at the back of the charbroiler, on which the grill rests, by its handles and placing the rod on the next step of the rod brackets. Use potholders or gloves to reposition the rod.

ADJUSTING HEAT PATTERN

The broiler has six (6) heat zones on Model 257 and four (4) on Model 255B, controlled by individual valves. It is possible through this arrangement to have a high heat or searing section, while having a low heat finishing or holding section. For the searing operation, set the valves for the section at a position of "HI" or close to it. For holding or finishing, set the valves closer to the "LOW" position on the dial. You select the heat pattern you like, and set the valves accordingly.

CLEANING

Clean regularly; remove grate sections to sink for washing. Rods rotate for easy scraping. Brush out carboned particles from the radiant area. Remove and wash water pan and grease trough. Wipe exterior stainless surfaces with detergent and a cloth. A non-abrasive cleaner can be used on caked areas.

LOCKING STRIPS

Grease tight locking strips are available to join this broiler to any other Designer Series units to form a solid bank. Specify which models are to be banked and their order in the line up when ordering strips.

WATER PAN

There are (2) water pans on Model 257 and (1) on Model 255B which are located at the bottom of the unit, and are easily removed from the front of the unit. Water should be added to the water pans and replaced as necessary. The water pans help prevent flare ups and catch any grease that drips past the radiants.

GREASE PAN

A grease pan is located at the front, inside the water pan and can be removed from the front for cleaning. This pan should be checked and emptied when necessary.



CAUTION

EXERCISE CARE IN HANDLING THE GREASE PAN SINCE IT CONTAINS HOT GREASE.

AIR INTAKES IN BOTTOM

Air for combustion enters from the bottom of the unit. Do not obstruct this area.

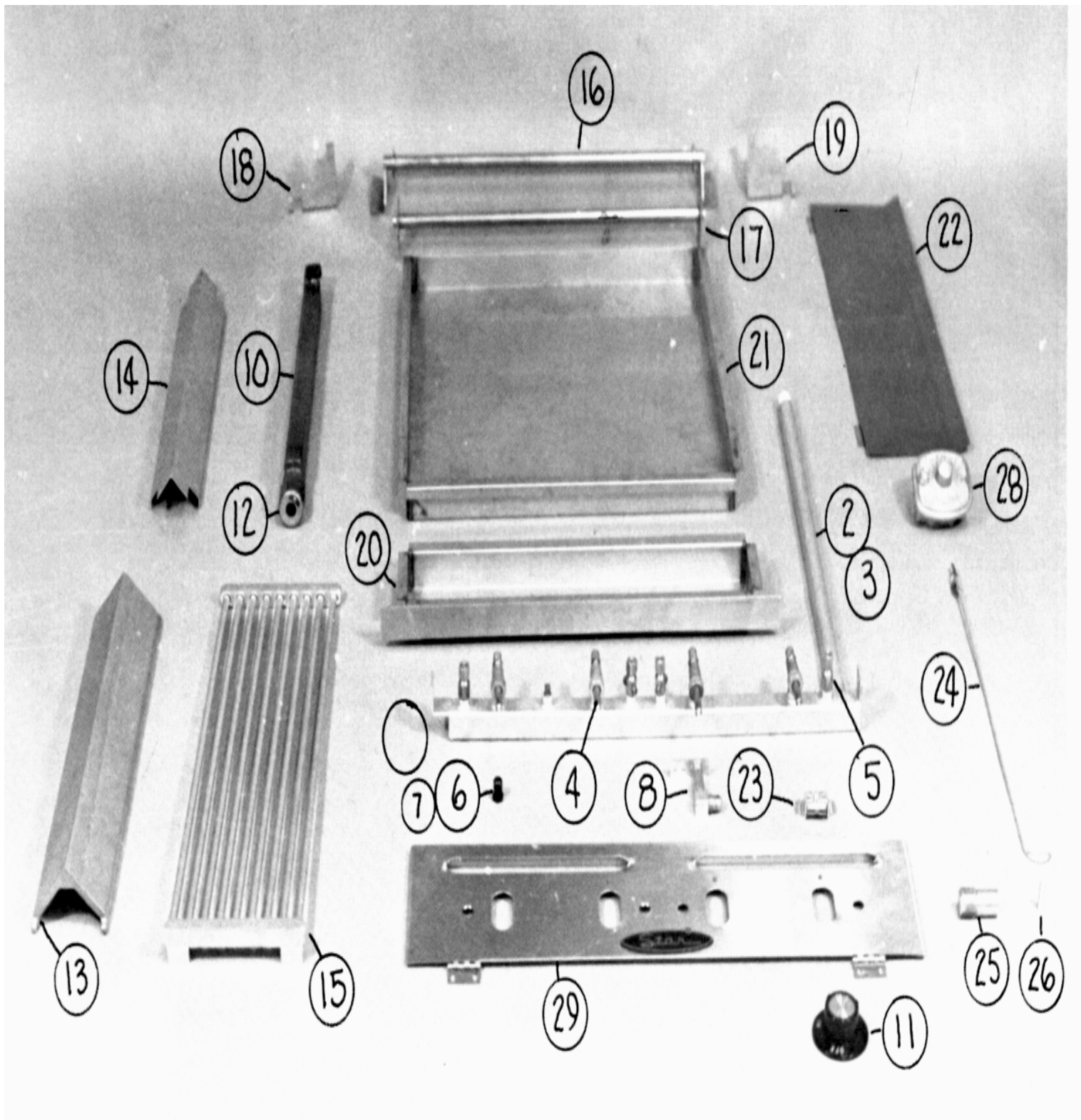
REPAIRS AND SERVICE

This appliance should only be repaired or serviced by the factory or factory authorized personnel. Contact the factory or one of its representatives or a local service company for service or maintenance if required.

RETAIN THIS MANUAL FOR FUTURE
REFERENCE

Part No. 2M-Y3213

Rev. G 10/2/95



PARTS LIST

EFFECTIVE 07-08-02 RB

8H

MODEL 255B Gas Charbroiler

Key Number	Part Number	Number Per Unit	Description
<i>Serial # 2552450 and ABOVE</i>			
2	H2-255072	1	Manifold Assembly Complete
3	H2-255065	1	Manifold
4	2V-Y2406	4	Hi-Lo Valve
5	2V-Y1177	4	Pilot Valve
6	G2-Y5357	4	Hood-Orifice (NAT) (<i>Drilled #52</i>) (for burner)
7	H2-3668	4	Hood-Orifices (LP) (<i>Drilled #56</i>) (for burner) (not shown)
8	2J-Y2391	4	Standing Pilot
8a	2A-Y1212	4	Pilot Orifice (not shown)
9	H2-Y2503	4	Pilot Tube (<i>6", 1/4" o.d. tubing</i>) (not shown)
10	H2-255067	4	Burner Assembly
11	2R-9785	4	Hi-Lo Valve Knob
12	H2-Y2409	4	Air Mixer Cap
13	2F-Y2392	4	Upper Radiant
14	H2-Y2369	3	Lower Radiant
15	H2-255064	3	Grate (<i>20-7/8" x 8"</i>)
16	H2-255082	1	Grate Lift Assembly
17	H2-255061	1	Grate Support
18	H2-Y2662	1	Left Grate Lift Support
19	H2-Y2661	1	Right Grate Lift Support
20	H2-255079	1	Grease Drawer
21	H2-Y2380	1	Drip Pan
22	H2-255078	1	Rear Splash Guard
23	2C-9788	2	Magnetic Door Catch
24	2J-7961	1	Lighter Rod
25	2A-7612	4	Foot
26	2C-9348	4	Stud
	2A-9347	4	Foot Extension (not shown)
	Z1-115006	4	Leg Assembly (not shown)
28	2J-Y3947	1	Pressure Regulator
29	H2-255068	1	Door Assembly

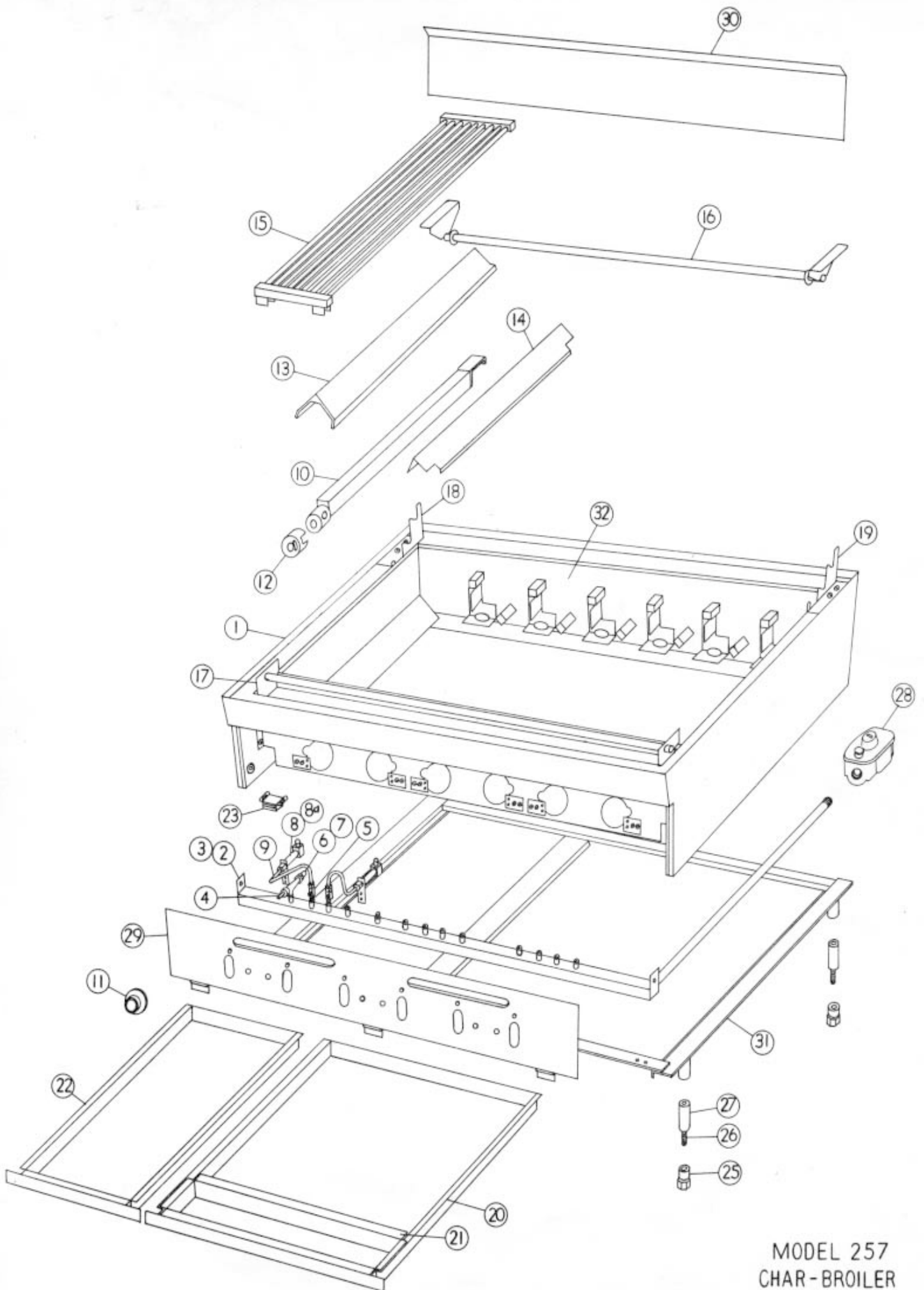
**IMPORTANT: WHEN ORDERING, SPECIFY VOLTAGE OR TYPE GAS DESIRED
INCLUDE MODEL AND SERIAL NUMBER**

PAGE 1 OF 1

Some items are included for illustrative purposes only and in certain instances may not be available.



Star Manufacturing International, Inc.



MODEL 257
 CHAR-BROILER

PARTS LIST

EFFECTIVE 07-10-02 RB

8H

MODEL 257 Gas Charbroiler

Key Number	Part Number	Number Per Unit	Description
1	H2-257003	1	Body Casing Assembly
2	H2-257015	1	Manifold Assembly Complete
3	H2-257010	1	Manifold
4	2V-Y2406	6	Hi-Lo Valve
5	2V-Y1177	6	Pilot Valve
6	G2-Y5357	6	Hood-Orifice (NAT) (<i>Drilled #52</i>) (for burner)
7	H2-3668	6	Hood-Orifices (LP) (<i>Drilled #56</i>) (for burner) (not shown)
8	2J-Y2391	6	Standing Pilot
8a	2A-Y1212	6	Pilot Orifice (not shown)
9	H2-Y2503	6	Pilot Tube (<i>6", 1/4" o.d. tubing</i>) (not shown)
10	H2-255067	6	Burner Assembly
11	2R-9785	6	Hi-Lo Valve Knob
12	H2-Y2409	6	Air Mixer Cap
13	2F-Y2392	6	Upper Radiant
14	H2-Y2369	5	Lower Radiant
15	H2-257009	5	Grate (<i>21-5/8" x 6-3/8"</i>)
16	H2-257011	1	Grate Lift Assembly
17	H2-257012	1	Grate Support
18	H2-Y2662	1	Left Grate Lift Support
19	H2-Y2661	1	Right Grate Lift Support
20	H2-Y2380	1	Drip Pan (<i>18-11/16" x 20-5/32"</i>)
21	H2-255079	1	Grease Drawer
22	H2-257014	1	Small Water Pan (<i>9-9/16" x 20-5/32"</i>)
23	2C-9788	3	Magnetic Door Catch
24	2J-7961	1	Lighter Rod
25	2A-7612	4	Foot
26	2C-9348	4	Stud
	2A-9347	4	Foot Extension (not shown)
	Z1-115006	4	Leg Assembly (not shown)
28	2J-Y3947	1	Pressure Regulator
29	H2-257001	1	Door Assembly
30	H2-257013	1	Rear Splash Guard
31	H2-257008	1	Bottom Frame Assembly
32	H2-257006	1	Liner Assembly

**IMPORTANT: WHEN ORDERING, SPECIFY VOLTAGE OR TYPE GAS DESIRED
INCLUDE MODEL AND SERIAL NUMBER**

PAGE 1 OF 1

Some items are included for illustrative purposes only and in certain instances may not be available.



Star Manufacturing International, Inc.