



**Star  
Manufacturing  
International Inc.**

10 Sunnen Drive  
St. Louis, MO 63143

Phone: (314) 781-2777  
Fax: (314) 781-3636

**Installation and  
Operating Instructions**

**Instructions d'installation  
et d'opération**

2M-Z6390 Rev. -- 10/18/02

# **STAR-MAX GAS CHARBROILER MODELS**

## **BARBECUE A GAZ STAR-MAX MODELES**

**8H-6015CBZ**

**8H-6024CBZ**

**8H-6036CBZ**

**8H-6048CBZ**

**8H-6015CBZS**

**8H-6024CBZS**

**8H-6036CBZS**

**8H-6124RCBZS**

**8H-6115RCBZ**

**8H-6124RCBZ**

**8H-6136RCBZ**

**8H-6148RCBZ**



## SPECIFICATIONS

### 8H-6015CBZ

#### Type: Manual Control, Lava Rock

1 Control, 40,000\* BTU, 300 sq. in. (1935 sq. cm) Grid Area

Approximate weight: installed - 87 Lb (39.5 kg), shipping - 95 Lb, (43.2 kg)

Dimensions: 15" - Width, 25-3/4" - Depth, 18-7/8" - Height  
(38.1 cm - Width, 65.4 cm - Depth, 48 cm - Height)

---

### 8H-6024CBZ

#### Type: Manual Control, Lava Rock

2 Controls, 80,000\* BTU, 480 sq. in. (3097 sq. cm) Grid Area

Approximate weight: installed - 149 Lb (67.7 kg), shipping - 164 Lb, (74.5 kg)

Dimensions: 24" - Width, 25-3/4" - Depth, 18-7/8" - Height  
(61 cm - Width, 65.4 cm - Depth, 48 cm - Height)

---

### 8H-6036CBZ

#### Type: Manual Control, Lava Rock

3 Controls, 120,000\* BTU, 720 sq. in. (4645 sq. cm) Grid Area

Approximate weight: installed - 236 Lb (107.3 kg), shipping - 256 Lb, (116.4 kg)

Dimensions: 36" - Width, 25-3/4" - Depth, 18-7/8" - Height  
(91.4 cm - Width, 65.4 cm - Depth, 48 cm - Height)

---

### 8H-6048CBZ

#### Type: Manual Control, Lava Rock

4 Controls, 160,000\* BTU, 960 sq. in. (6194 sq. cm) Grid Area

Approximate weight: installed - 323 Lb (146.8 kg), shipping - 348 Lb, (158.2 kg)

Dimensions: 48" - Width, 25-3/4" - Depth, 18-7/8" - Height  
(122 cm - Width, 65.4 cm - Depth, 48 cm - Height)

---

### 8H-6115RCBZ

#### Type: Manual Control, Radiant

1 Control, 40,000\* BTU, 300 sq. in. (1935 sq. cm) Grid Area

Approximate weight: installed - 80 Lb (36.4 kg), shipping - 88 Lb, (40 kg)

Dimensions: 15" - Width, 25-3/4" - Depth, 18-7/8" - Height  
(38.1 cm - Width, 65.4 cm - Depth, 48 cm - Height)

---

### 8H-6124RCBZ

#### Type: Manual Control, Radiant

2 Controls, 80,000\* BTU, 480 sq. in. (3097 sq. cm) Grid Area

Approximate weight: installed - 140 Lb (63.5 kg), shipping - 155 Lb, (70.3 kg)

Dimensions: 24" - Width, 25-3/4" - Depth, 18-7/8" - Height  
(61 cm - Width, 65.4 cm - Depth, 48 cm - Height)

---

## **8H-6136RCBZ**

### **Type: Manual Control, Radiant**

3 Controls, 120,000\* BTU, 720 sq. in. (4645 sq. cm) Grid Area

Approximate weight: installed - 220 Lb (100 kg), shipping - 240 Lb, (109 kg)

Dimensions: 36" - Width, 25-3/4" - Depth, 18-7/8" - Height  
(91.4 cm - Width, 65.4 cm - Depth, 48 cm - Height)

---

## **8H-6148RCBZ**

### **Type: Manual Control, Radiant**

4 Controls, 160,000\* BTU, 960 sq. in. (6194 sq. cm) Grid Area

Approximate weight: installed - 300 Lb (136 kg), shipping - 325 Lb, (147.7 kg)

Dimensions: 48" - Width, 25-3/4" - Depth, 18-7/8" - Height  
(122 cm - Width, 65.4 cm - Depth, 48 cm - Height)

---

\* Units operate on Natural or Propane Gas - On propane gas: 35,000 BTU/HR for every 12" (30.5 cm).

## SAFETY SYMBOL



This symbol is intended to alert the user to the presence of important operating and maintenance instructions in the manual accompanying the appliance.

---

## RETAIN THIS MANUAL FOR FUTURE REFERENCE

### NOTICE

Using any part other than genuine Star factory supplied parts relieves the manufacturer of all liability.

### NOTICE

Star 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.

## MAINTENANCE AND REPAIRS

Contact your local authorized service agent for service or required maintenance. Refer to the authorized service center listing provided with the unit. The Star Service Help Desk (1-800-807-9054) is available during normal business hours to answer any questions that may arise. Please have your model number and serial number for faster service.

## 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.

The Star-Max™ series gas charbroiler is equipped for the type of gas indicated on the nameplate mounted on the front panel. All units are shipped from the factory for use with natural gas. The unit can easily be converted for use with propane gas: see propane gas.

### **-IMPORTANT-**

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

The installation of the Appliance must conform to the NATIONAL FUEL GAS CODE "ANSI Z223.1 - LATEST EDITION" AND ALL LOCAL GAS COMPANY RULES AND REGULATIONS.

IN CANADA INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT CAN/CGA-B149.1 NATURAL GAS INSTALLATION CODE OR CAN/CGA-B149.2 PROPANE INSTALLATION CODE AND LOCAL CODES WHERE APPLICABLE.



### CAUTION

**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 the equipment.**



### CAUTION

**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.**

**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.**

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.

### 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. Exhaust installation must conform to local codes.

### AIR SUPPLY

Provisions for adequate air supply must be provided.

### LEVELING UNIT

This charbroiler is supplied with 4 feet which must be screwed into the body. Level unit by adjusting the (4) feet which have an adjustment of 1-3/4" for accurate and perfect line-up with other units.



## CAUTION

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

#### GAS INPUT TO CHARBROILER:

Models 6015CBC and 6115RCBC 40,000 BTU/HR, NAT  
35,000 BTU/HR, PROP  
Models 6024CBC and 6124RCBC 80,000 BTU/HR, NAT  
70,000 BTU/HR, PROP  
40,000/35,000 BTU/HR/BURNER, NAT/PROP  
Models 6036CBC and 6136RCBC 120,000 BTU/HR, NAT  
105,000 BTU/HR, PROP  
40,000/35,000 BTU/HR/BURNER, NAT/PROP  
Models 6048CBC and 6148RCBC 160,000 BTU/HR, NAT  
140,000 BTU/HR, PROP  
40,000/35,000 BTU/HR/BURNER, NAT/PROP

#### 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 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 this appliance will damage the valve and affect its operation. When installing this appliance, all pipe and fittings must be free from all internal loose dirt.

#### GAS PRESSURE REGULATOR

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

#### MANUAL SHUT OFF VALVE

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

#### CONNECTING GAS SUPPLY LINE

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

## PROPANE GAS

This charbroiler is equipped with fixed orifice hoods and is shipped from the factory for use with natural gas. To convert to propane gas, install the burner orifice hoods, located in the grease drawer, as follows:

1. Remove grill, radiants and burners.
2. Remove the burner orifice hoods and install the orifice hoods supplied.
3. Replace the burners, radiants, and grill.
4. Set manifold pressure to (10) inch water column. A 1/8" pipe plug on the burner manifold can be removed for attaching a pressure gauge. Remove the slotted, or hex-threaded plug from the pressure regulator. Invert the plug and re-install. The letters "LP" should now be visible on the plug. The regulator is now set for 10" (25.4 cm) water column. Attach the conversion label, supplied with the unit, close to the nameplate.

#### CHECKING FOR GAS LEAKS

Check entire piping system for leaks. Soap and water solution or other material acceptable for the purpose, shall be used in locating gas leakage.



## CAUTION

**Matches, candle flame or other sources of ignition shall not be used for this purpose.**

#### PILOT LIGHTING INSTRUCTIONS

The charbroiler is equipped with standing pilots, and should be lit immediately after the gas is turned on.

1. Turn off main valve to unit.
2. Turn off all knobs and pilot valves and wait 5 minutes to clear gas.
3. The pilot lights on this broiler have been turned off at the factory. Turn the adjustable screw 3-4 times counterclockwise to open.
4. Turn on main valve and light all pilots.
5. Adjust pilot light flames as small as possible, but high enough to light burner immediately when burner valve is turned on high.
6. Turn burner knobs to desired setting.
7. To turn burners off, turn knobs off.

## SHUTTING DOWN INSTRUCTIONS

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

## PLACING LAVA ROCK ON GRATES

Open the lava rock bags and place rock evenly on grates. Do not cover the grates with more than two layers of lava rock. **DO NOT PUT MORE THAN 5 LBS. OF ROCK PER EACH BURNER!**

## PLACING RADIANTS

After the unit is unpacked and installed, place 2 radiants above each burner. Install each radiant on 3 pins of the rear wall and on 1 pin of the front wall of the liner weld assembly. Refer to the exploded view in this manual for orientation of the radiants.

## BURNER IGNITION AND ADJUSTMENT

1. To ignite burners 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.

## BURNER OPERATION

Each burner 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. 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.

## OPERATING INSTRUCTIONS

### WATER PAN

The water pan is located at the bottom of the unit, and is easily removed from the front of the unit. Water should be added to the water pan and replaced as necessary. The water pan helps prevent flare ups and catches grease.

## LIGHTING

When broiler is first lit, it will smoke for approximately 20-30 minutes until the preservation oils and impurities are burned off.

## 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 food products. We recommend that you set the grate at the full tilt position to start. This position allows the grease to run down the grate into the grease tray, reducing 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 GRATE

Raise or lower the grate to the next step by lifting the grate at the back of the charbroiler where the grate rests. Use potholders or gloves to reposition.



### CAUTION

**CHARBROILERS ARE HOT! NEVER ATTEMPT TO CHANGE THE GRATE POSITION WHILE FOOD PRODUCTS ARE COOKING. FLARE UPS CAN OCCUR UNEXPECTEDLY. TURN OFF CHARBROILER, AND ALLOW THE CHARBROILER TO COOL.**

## CLEANING

Clean regularly. Remove grate section to sink for washing. Brush out carboned particles. Remove and wash water pan. Wipe exterior surfaces with detergent and a cloth. A non-abrasive cleaner can be used on caked areas.

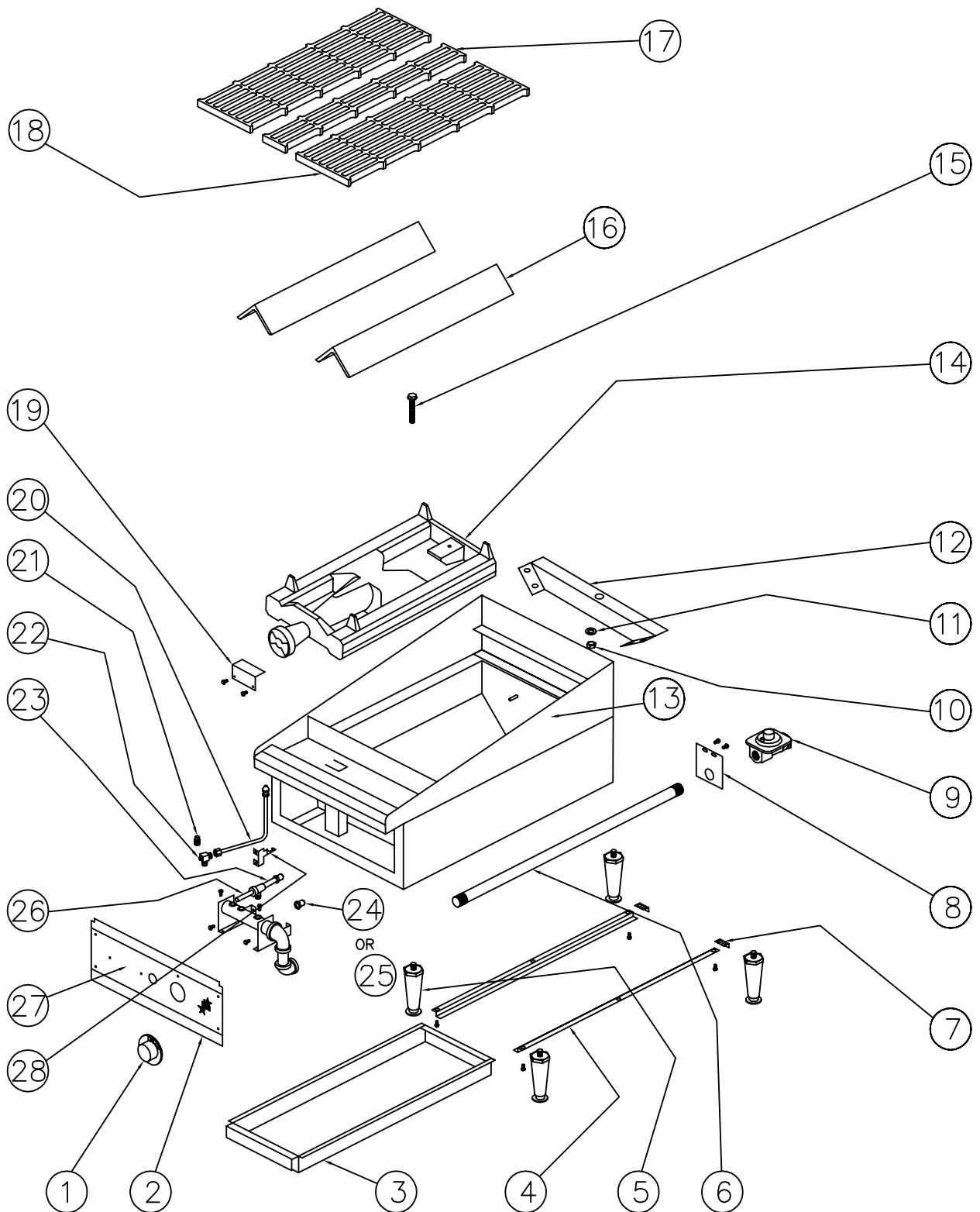


### CAUTION

## AIR INTAKES IN BOTTOM

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

RETAIN THIS MANUAL FOR FUTURE REFERENCE  
PART NO. 2M-Z6390 Rev. -- 10/18/02



STAR MANUFACTURING INTERNATIONAL, INC.

MODEL 6115RCBC, 6124RCBC, 6136RCBC, 6148RCBC SK1844a 01-11-01DR: M.P.

# PARTS LIST

EFFECTIVE 10/18/02

Updated 03-08-04 rb

8H-6115RCBZ, 8H-6124RCBZ, 8H-6136RCBZ and 8H-6148RCBZ  
 MODEL Star-Max™ Gas Radiant Charbroiler-15", 24", 36", 48"

Key Number	Part Number	Number Per Unit	Description
1	2R-Z0934 (6115RCBZ/6124RCBZ/6136RCBZ/6148RCBZ)	1/2/3/4	KNOB-CONTROL
2	H3-Z6333 (6115RCBZ)	1	FRONT PANEL
	H3-Z6332 (6124RCBZ)	1	FRONT PANEL
	H3-Z6334 (6136RCBZ)	1	FRONT PANEL
	H3-Z6335 (6148RCBZ)	1	FRONT PANEL
3	H3-T1026 (6115RCBZ)	1	GREASE DRAWER
	H3-Y7045 (6124RCBZ/6148RCBZ)	1/2	GREASE DRAWER
	H3-Y7044 (6136RCBZ)	1	GREASE DRAWER
4	G3-Y7047 (6115RCBZ/6124RCBZ/6136RCBZ/6148RCBZ)	2/2/2/4	SLIDE DRAWER
5	2A-Z0314	4	LEG
6	2K-Z3017	1	INLET PIPE
7	H3-Z3082 (6115RCBZ/6124RCBZ/6136RCBZ/6148RCBZ)	2/2/2/4	DRAWER STOP
8	H3-Z3020	1	INLET PIPE SUPPORT
9	2J-Z3199	1	PRESSURE REGULATOR
10	2C-6517 (6115RCBZ/6124RCBZ/6136RCBZ/6148RCBZ)	1/2/3/4	NUT 1/4-20
11	2C-Y9714 (6115RCBZ/6124RCBZ/6136RCBZ/6148RCBZ)	2/4/6/8	WASHER 1/4
12	H3-Z3100 (6115RCBZ)	1	BRACKET BURNER REAR
	H3-Z3041 (6124RCBZ)	1	BRACKET BURNER REAR
	H3-Z3101 (6136RCBZ)	1	BRACKET BURNER REAR
	H3-Z3102 (6148RCBZ)	1	BRACKET BURNER REAR
13	H3-CB0037 (6115RCBZ)	1	GUARD WELD ASSY
	H3-CB0038 (6124RCBZ)	1	GUARD WELD ASSY
	H3-CB0039 (6136RCBZ)	1	GUARD WELD ASSY
	H3-CB0040 (6148RCBZ)	1	GUARD WELD ASSY
14	2F-Z3035 (6115RCBZ/6124RCBZ/6136RCBZ/6148RCBZ)	1/2/3/4	BURNER
15	2C-3155 (6115RCBZ/6124RCBZ/6136RCBZ/6148RCBZ)	1/2/3/4	BOLT 1/4-20 x 1 1/2
16	H3-Z3202 (6115RCBZ/6124RCBZ/6136RCBZ/6148RCBZ)	2/4/6/8	RADIANT
17	2F-Y8831 (6115RCBZ)	1	GRATE 3"
18	2F-Y8830 (6115RCBZ/6124RCBZ/6136RCBZ/6148RCBZ)	2/4/6/8	GRATE 6"
19	H3-Z3040 (6115RCBZ/6124RCBZ/6136RCBZ/6148RCBZ)	1/2/3/4	BRACKET - BURNER FRONT
20	H3-624219 (6115RCBZ/6124RCBZ/6136RCBZ/6148RCBZ)	1/2/3/4	TUBE - PILOT ASSY
21	2P-1453	1	PLUG-PIPE
22	2V-6671 (6115RCBZ/6124RCBZ/6136RCBZ/6148RCBZ)	1/2/3/4	VALVE-PILOT
23	2A-Z3010 (6115RCBZ/6124RCBZ/6136RCBZ/6148RCBZ)	1/2/3/4	FITTING-ORIFICE
24	2J-Z3032 (6115RCBZ/6124RCBZ/6136RCBZ/6148RCBZ)	1/2/3/4	ORIFICE NATURAL # 36
25	2J-Z3033 (6115RCBZ/6124RCBZ/6136RCBZ/6148RCBZ)	1/2/3/4	ORIFICE PROPANE # 50
26	2V-Y8832 (6115RCBZ/6124RCBZ/6136RCBZ/6148RCBZ)	1/2/3/4	VALVE-BURNER
27	2M-Z6361 (6115RCBZ)	1	SIGN 15" CHARBROILER
	2M-Z6360 (6124RCBZ)	1	SIGN 24" CHARBROILER
	2M-Z6362 (6136RCBZ)	1	SIGN 36" CHARBROILER
	2M-Z6363 (6148RCBZ)	1	SIGN 48" CHARBROILER
	2M-Z6403 (6124RCBZS)	1	SIGN 24" CHARBROILER "SUPERIOR"
28	H3-Z3196 (6115RCBZ/6124RCBZ/6136RCBZ/6148RCBZ)	1/2/3/4	BRACKET-PILOT

**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.**