

Star Manufacturing International Inc.

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2M-Z1383 Rev. B 3/27/03

# STAR-MAX GAS CHARBROILER MODELS

6015CBA 6024CBA

6036CBA 6048CBA

6115RCBA 6124RCBA

6136RCBA 6148RCBA



6048 CBA







#### 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. For equipment to be used by the general public, please contact the factory.

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-

INSTALLATION: 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.

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 the equipment.

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 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 6015CBA and 6115RCBA 25,000 BTU/HR Models 6024CBA and 6124RCBA 50,000 BTU/HR 25,000 BTU/HR/BURNER

Models 6036CBA and 6136RCBA 75,000 BTU/HR 25,000 BTU/HR/BURNER

Models 6048CBA and 6148RCBA 100,000 BTU/HR 25,000 BTU/HR/BURNER

#### **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 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 fro servicing and installation.

# 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.

# MANUAL SHUT OFF VALVE

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

#### **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 supplied behind the front panel 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.

#### CHECKING FOR GAS LEAKS

Soap and water solution or other material acceptable for the purpose, shall be used in locating gas leakage. Matches, candle flame or other sources of ignition shall not be used for this purpose. Check entire piping system for leaks.

# 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 and wait 5 minutes to clear gas.
- 2. Turn off all knobs and pilot valves.
- 3. Turn on main valve and light all pilots.
- 4. Turn burner knobs to desired setting.
- 5. To turn burners off, turn knobs off.

#### SHUTTING DOWN INSTRUCTIONS

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

#### PILOT LIGHT REGULATION

The pilot lights on this broiler have been turned off at the factory. 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. 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.

#### **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.

#### **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.

#### **OPERATING INSTRUCTIONS**

#### LIGHTING

When broiler is first lit, it will smoke 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 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 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 GRILL POSITION WHILE MEAT PRODUCTS ARE COOKING. FLARE-UPS CAN OCCUR UNEXPECTEDLY. TURN OFF THE CHARBROILER AND ALLOW IT TO COOL.

#### ADJUSTING HEAT PATTERN

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 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.

#### **WATER PAN**

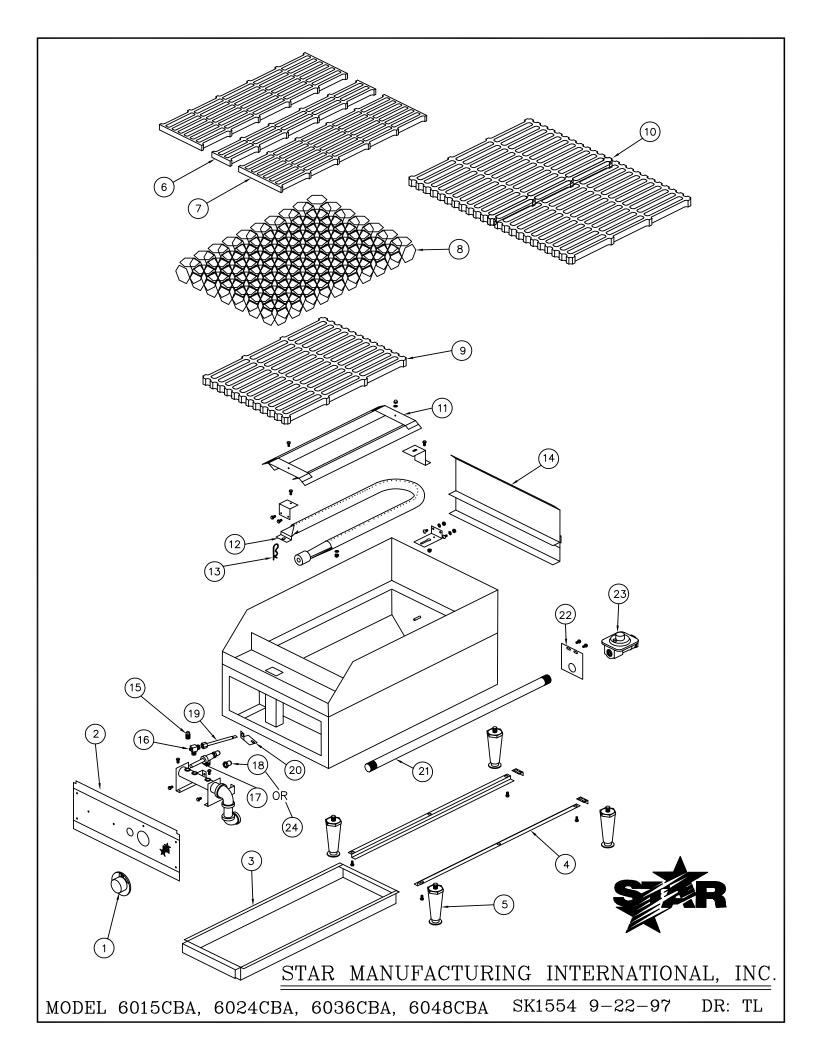
The water pan is located at the bottom of the unit, and is easily removed from the front of the unit. Water should be added to the water pan and replaced as necessary. The water pan helps prevent flare ups and catches grease.

#### AIR INTAKES IN BOTTOM

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

# MAINTENANCE AND REPAIRS

Contact the factory or one of its representatives or a local service company for service or maintenance if required.



# 6015CBA, 6024CBA, 6036CBA and 6048CBA MODEL Star-Max Gas Lava Rock Charbroiler-15", 24", 36", 48"

		Number		
Key	Part	Per		
Number	Number	Unit	Description	n and Model Designation
1	2R-Z0934	1/2/3/4	KNOB-CONTROL	ALL
2	H3-Z1322	1	FRONT PANEL	6015CBA
	H3-Z1321	1 1	FRONT PANEL FRONT PANEL	6024CBA 6036CBA
	H3-Z1320 H3-Z1264	1 1	FRONT PANEL	6048CBA
3	H3-T1026	1 1	GREASE DRAWER	6015CBA
	H3-Y7045	1/2	GREASE DRAWER	6024CBA/6048CBA
	H3-Y7044	1	GREASE DRAWER	6036CBA
4	G3-Y7047	2/2/2/4	SLIDE DRAWER	ALL
5	2A-Z0314	4	LEG	ALL
6	<mark>2F</mark> -Y8831	1	GRATE 3"	6015CBA
7	2F-Y8830	2/4/6/8	GRATE 6"	ALL
8	2F-Y7193	1/2/3/4	LAVA ROCK 2" 8 LBS.	ALL
9	2F-Y7141	1/1/2	GRATE LAVA ROCK 15"	6015CBA/ 6036CBA/6048CBA
10	2F-Z3273	2/2/2	GRATE LAVA ROCK 24"	6024CBA/ 6036CBA/6048CBA
11	H3-624086	1/2/3/4	BURNER GUARD ASSEMBLY	ALL
12	2F-Y7052	1/2/3/4	BURNER ASSEMBLY	ALL
13 14	2A-Y6694	1/2/3/4	CLIADD WELD ASSEMBLY	ALL
14	G3-624038 G3-624037	1 1	GUARD WELD ASSEMBLY GUARD WELD ASSEMBLY	6015CBA AGA 6024CBA AGA
	G3-624037 G3-624039	1 1	GUARD WELD ASSEMBLY	6036CBA AGA
	H3-624106	1 1	GUARD WELD ASSEMBLY	6015CBA CGA
	H3-624107	1 1	GUARD WELD ASSEMBLY	6024CBA CGA
	H3-648007	1 1	GUARD WELD ASSEMBLY	6048CBA AGA
	H3-624108	1	GUARD WELD ASSEMBLY	6036CBA CGA
	H3-648010	1	GUARD WELD ASSEMBLY	6048CBA CGA
15	2P-1453	1	PLUG-PIPE	ALL
16	2V-6671	1/2/3/4	VALVE-PILOT	ALL
17	2V-Y8832	1/2/3/4	VALVE-BURNER	ALL
18	2J-Y8838	1/2/3/4	HOOD BURNER NAT. #45	ALL
19	G3-Y7355	1/2/3/4	TUBE-PILOT	ALL
20	G3-Y7356	1/2/3/4	PILOT BRACKET	ALL
21 22	2K-Y7123 G3-Y7252	1 1	INLET PIPE INLET PIPE SUPPORT	ALL ALL
23	2J-Y7589	1 1	PRESSURE REGULATOR	ALL
24	2J-Y7136	1/2/3/4	HOOD BURNER LP # 53	ALL
27	23 17130	1727374	HOOD BORNER EI # 33	ALL

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

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

