

# StarMax<sup>®</sup>

## GAS GRIDDLE

MODEL

615TF, 615MF

624TF, 624MF 624TSPF, 624TCHSF

636TF, 636MF, 636TSPF, 636TCHSF

648TF, 648MF, 648TSPF, 648TCHSF

### Installation and Operation Instructions

2M-Z16008 Rev.A 8/08/12



## SAFETY SYMBOL



These symbols are intended to alert the user to the presence of important operating and maintenance instructions in the manual accompanying the appliance.

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## RETAIN THIS MANUAL FOR FUTURE REFERENCE NOTICE

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

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.

Due to periodic changes in designs, methods, procedures, policies and regulations, the specifications contained in this sheet are subject to change without notice. While Star International Holdings Inc., Company exercises good faith efforts to provide information that is accurate, we are not responsible for errors or omissions in information provided or conclusions reached as a result of using the specifications. By using the information provided, the user assumes all risks in connection with such use.

## MAINTENANCE AND REPAIRS

Contact your local authorized service agent for service or required maintenance.

Please record the model number, serial number, voltage and purchase date in the area below and have it ready when you call to ensure a faster service.

Model No. \_\_\_\_\_

Serial No. \_\_\_\_\_

Voltage \_\_\_\_\_

Purchase Date \_\_\_\_\_

### Authorized Service Agent Listing

Reference the listing provided with the unit

OR

for an updated listing go to:

**Website:** [www.star-mfg.com](http://www.star-mfg.com)  
**E-mail** [Service@star-mfg.com](mailto:Service@star-mfg.com)

### Service Help Desk

**Business Hours:** 8:00 am to 4:30 p.m. Central Standard Time

**Telephone:** (314) 678-6303

**Fax:** (314) 781-2714

**E-mail** [Parts@star-mfg.com](mailto:Parts@star-mfg.com)  
[Service@star-mfg.com](mailto:Service@star-mfg.com)  
[Warranty@star-mfg.com](mailto:Warranty@star-mfg.com)

**Website:** [www.star-mfg.com](http://www.star-mfg.com)

**Mailing Address:** Star International Holdings Inc., Company  
10 Sunnen Drive  
St. Louis, MO 63143  
U.S.A

SPECIFICATION									
Model	Control	BTU	Grid Area	Plate Thickness	Weight		Dimensions		
					Installed	Shipped	Width	Depth	Height
615	1	20,000	304 sq. in (1961 sq. cm)	1" (2.54 cm)	83 lb (37.6 kg)	90 lb (4.8 kg)	15" (38.1 cm)	27.75" (70.5 cm)	15.5" (39.4 cm)
624	2	56,600	498 sq in (3213 sq. cm)		165 lb (74.8 kg)	175 lb (79.4 kg)	24" (61 cm)		
636	3	84,900	747 sq in (4820 sq cm)		247 lb (112 kg)	262 lb (118.8 kg)	36" (91.4 cm)		
648	4	113,200	996 sq in (6426 sq cm)		330 lb (144.7 kg)	350 lb (158.8 kg)	48" (122 cm)		

CONTROL TYPE	
MF	Manual Control
TF	Thermostat Control
TSPF	Thermostat & Safety Pilot Control
TCHSF	Thermostat & Safety Pilot Control with Chrome Plate

## GENERAL INSTALLATION DATA

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™ model griddles are equipped for use with the types of gas specified on the nameplate.

All units are shipped from the factory for use with natural gas. The unit can easily be converted for use on propane gas: See propane gas.



**CAUTION**

### **-IMPORTANT-**

**The installation of the Appliance should 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.**

**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 (3.45KPA).

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 (3.45KPA). 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.

#### **For your safety, if you smell gas -**

1. Do not touch electrical switches.
2. Extinguish any open flame.
3. Immediately call your gas company.

**KEEP THE APPLIANCE AREA FREE AND CLEAR FROM COMBUSTIBLES.**

### **CLEARANCE**

**For use on non-combustible countertops only.**

Combustible and non-combustible material must be at least 48" (120cm) from the top of the appliance and 6" (150mm) from the sides and back. Adequate clearance should also be provided for proper operation and servicing.

### **AIR SUPPLY**

Make certain not to obstruct the flow of combustion and ventilation air. Provisions for adequate air supply must be furnished. The legs supplied with the unit must be installed. Make certain that air intake openings in the bottom of the appliance are not obstructed. They are essential for proper combustion and operation of the appliance.

## EXHAUST CANOPY

It is essential that facilities be provided over the griddle to carry off fumes and gases. However, the unit should not be directly connected to a flue or stack.

## LEVELING UNIT

This griddle is supplied with (4) feet which must be screwed into the legs attached to the body. Level unit by adjusting the (4) feet which have an adjustment of 1-3/4" (43.75mm) for accurate and perfect lineup with other units.

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

## 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 LP 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 loose dirt.



**CAUTION**

## GAS PRESSURE REGULATOR

A convertible pressure regulator is provided with each griddle. 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" (15.24cm) water column manifold pressure for use with natural gas.

## MANUAL SHUT-OFF VALVE

A manual shut-off valve should be installed upstream from the union and within 6 feet (1.829m) of this appliance.

## GAS CONVERSION

This griddle is equipped with fixed orifice hoods and is shipped from the factory for use on either natural or LP gas. To convert to propane gas, install the burner orifice hoods, located in the grease drawer, (NAT orifices are not included) as follows:

1. Remove front panel by removing screws located on the front and the bottom.
2. Remove the burner(s) from the orifice hood(s). This is accomplished by removing the burner mounting screw(s) and sliding the burner(s) off the hood(s).
3. Remove natural gas orifice hood(s) and install the propane hood(s) furnished.
4. Reinstall burner(s).
5. Reinstall front panel.
6. Remove the slotted, or hex-threaded, plug from the pressure regulator. Invert the plug and re-install. The letters "LP or NAT" should now be visible on the plug. LP units the regulator is now set for 10" (25.4cm) water column, and NAT units the regulator is now set for 6" (15.24cm) water column.
7. For LP Gas, set manifold pressure to 10" (25.4cm) water column. A 1/8" pipe plug on the supply pipe can be removed for attaching a pressure gauge.

## CONNECTING GAS SUPPLY LINE

The gas inlet of the griddle 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.

## 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.

## LIGHTING INSTRUCTIONS

When griddle is first lit, it will smoke until the preservation oils and impurities are burned off.

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.

**NOTE: The griddles are equipped with standing pilots and should be lit immediately after the gas is turned on.**

Pilot flames can be lit and observed through the front panel view ports. However, best access for lighting the pilot is from the bottom of the unit just behind the center wall.

## LIGHTING INSTRUCTIONS (TCHSD and TSPD SERIES)

1. Turn the control knobs to the "OFF" position.

**If the gas valves have been on and gas has escaped through the burners, turn the burners "OFF" and wait 5 minutes to clear the gas.**

2. Turn the control knob to the "PILOT" position, depress and hold the knob while lighting the pilot. Hold the knob in for 60 seconds or until the pilot stays lit. (Repeat for all burner sections.)
3. Depress and turn the control knob to the desired temperature.
4. To turn the burners off turn the knob to the "PILOT" position.
5. To turn off all gas turn the knob to the "OFF" position. The pilots must be relit to resume cooking settings.



## PILOT LIGHT REGULATION

Adjust pilot light flames as small as possible, but high enough to light burner immediately when burner valve is turned on high.

## ADJUSTING SAFETY PILOTS (SERIES TCHSF and TSPF ONLY)

A manual pilot valve is provided on the left side of the control to adjust the pilot flame. Adjust the pilot flame so that it is approximately 3/8 to 1/2" tall and a uniform cone shape.

## BURNER ADJUSTMENT (MODELS MF ONLY)

1. Remove the front panel.
2. Turn burner valve knob to "HI" position.
3. Close the air shutter on the front of the burner to give a soft blue flame having luminous tips and open to a point where the yellow tips disappear and a hard blue flame is obtained. Repeat for all burners.

## BURNER ADJUSTMENT (MODELS TF, TCHSF and TSPF ONLY)

1. Remove the front panel.
2. Push dial in and set thermostat of one burner to 450°F (229.9°C).
3. Close the air shutter on the front of the burner to give a soft blue flame having luminous tips and open to a point where the yellow tips disappear and a hard blue flame is obtained. Repeat for all burners.

## BURNER OPERATION (MODELS MF)

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 temperatures may be obtained by turning the burner valve knob to any position between high and low. For overnight shutdown, turn the valves to the "OFF" position.



## **SEASONING THE GRIDDLE HEATING SURFACE (NON-CHROMIUM SURFACES)**

Clean the griddle surface thoroughly. After the griddle has been thoroughly cleaned, it should be seasoned to prevent food from sticking. Before using, and after each thorough scouring, season the griddle heating surface in the following manner:

1. Turn the temperature control dial to 350°F (174.9°C).
2. Using a clean cloth, not a spatula, spread a thin film of cooking oil over the griddle cooking surface. This film should remain on the hot griddle surface 1/2 hour.
3. Remove excess oil and wipe clean.
4. Apply another film of cooking oil over the hot cooking area for another 1/2 hour and again remove excess oil and wipe clean. The griddle surface should now be ready for use.

**Even with careful seasoning food may, to some extent, stick to the griddle cooking surface until griddle plate is "broken in."**

## **COOKING (MODELS TF, TCHSF and TSPF ONLY)**

Set the thermostat dial knob to the temperature desired. After a short preheating period, the thermostat will automatically maintain the selected temperature.

## **GREASE PAN**

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

**EXERCISE EXTREME CARE IN HANDLING THE GREASE PAN CONTAINING HOT GREASE.**

## **GRIDDLE CARE (NON-CHROMIUM AREAS)**

It takes very little time and effort to keep the griddle attractive and performing at top efficiency. If grease is permitted to accumulate, it will form a gummy cake and then carbonize into a hard substance which is extremely difficult to remove. To prevent this condition, the following suggestions for cleanliness should be followed:

1. After each use, scrape the griddle with a scraper or flexible spatula to remove excess grease and food. A waste drawer is provided for the scrapings. If there is an accumulation of burned on grease and food, the griddle should be thoroughly scoured and reseasoned. Use pumice or griddle stone while the griddle is warm. **DO NOT** use steel wool because of the danger of steel slivers getting into the food.
2. Daily-use a clean cloth and good non-abrasive cleaner to clean the stainless steel body of the griddle. Wipe the polished front with a soft cloth.
3. At least once a day remove the waste drawer and wash in the same way as an ordinary cooking utensil. The drawer is removed by pulling forward, up and out.

## **GRIDDLE CARE (CHROMIUM AREAS)**

It takes very little time and effort to keep this Chromium griddle surface sparkling clean and performing at top efficiency. **DO NOT** allow grease to accumulate as it will carbonize, becoming difficult to remove. To prevent this condition the following cleaning suggestions should be followed.

1. Remove excess oil and food regularly with a 4" (100mm) wide Razor Sharp type scraper and wipe surface with a damp cloth.
2. Following the scraping, a damp cloth and a non-silicated, non-abrasive, non-chlorinated cleaner such as Bon-Ami may be used to wipe surface clean, followed by wiping with clean wet cloth.
3. Follow steps 2 and 3 from above section.