



INSTALLATION AND OPERATION MANUAL

HIGH EFFICIENCY RADIANT CHAR-BROILER

HEEGM24CE HEEGM48CE
HEEGM36CE HEEGM60CE



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, SERVICE OR MAINTENANCE
CAN CAUSE PROPERTY DAMAGE, INJURY,
OR DEATH. READ THE INSTALLATION,
OPERATING AND MAINTENANCE
INSTRUCTIONS THOROUGHLY
BEFORE INSTALLING OR
SERVICING THIS EQUIPMENT

PLEASE READ ALL SECTIONS OF THIS MANUAL
AND RETAIN FOR FUTURE REFERENCE.

THIS PRODUCT HAS BEEN CERTIFIED AS
COMMERCIAL COOKING EQUIPMENT AND
MUST BE INSTALLED BY PROFESSIONAL
PERSONNEL AS SPECIFIED.

For Your Safety:
In a clear and observable location, post
instructions to be followed if a user smells
gas. This information shall be obtained by
consulting your local gas supplier.

**KEEP APPLIANCE AREA FREE AND CLEAR OF
COMBUSTIBLES.**

Users are cautioned that installation, maintenance and repairs must be performed by a Garland authorized service agent using genuine Garland replacement parts. Garland will have no obligation with respect to any product that has been improperly installed, adjusted, operated or not maintained in accordance with national and local codes or installation instructions provided with the product, or any product that has its serial number defaced, obliterated or removed, or which has been modified or repaired using unauthorized parts or by unauthorized service agents.

For a list of authorized service agents in your region, please refer to the Manitowoc Foodservice web site at:
<http://www.ManitowocFoodservice.com>.

The information contained herein, including design and parts specifications, may be superseded and is subject to change without notice.

TABLE OF CONTENTS

DIMENSIONS AND SPECIFICATIONS	3
Shipping Dimensions, Weight and Size	3
Input Rates, Gas Pressures, Clearances	3
CE Approved Gas Categories	3
Electrical Requirements	3
Dimensions	4
PRE-INSTALLATION	5
Introduction	5
Damage Check	5
Rating Plate	5
INSTALLATION	6
General	6
Australia Specific Regulation	6
Positioning and Setup	6
Optional Stand	6
Air Supply and Ventilation	6
Electrical Connection	7
Gas Connection	7
Start Up	8
Operation	9
USE AND CARE	9
Warnings	10
Optional Equipment	11
CLEANING AND MAINTENANCE	12
General	12
Warnings	12
Cleaning During Operations	12
Daily Cleaning	13
Weekly/Periodic Cleaning	13
Maintenance	14
Service and Parts	14

DIMENSIONS AND SPECIFICATIONS

Shipping Dimensions, Weight and Size

Model	Shipping Dimensions: inch(mm)			Shipping Weight Lbs/Kg	Shipping Size CuFT/CuM
	Width	Depth	Height		
HEEGM24CE	40(1016)	45(1143)	25.5(648)	280/127	34.9/0.988
HEEGM36CE	52(1321)	45(1143)	25.5(648)	420/191	45.4/1.285
HEEGM48CE	64(1626)	45(1143)	25.5(648)	560/254	55.8/1.581
HEEGM60CE	72(1829)	45(1143)	25.5(648)	700/318	66.3/1.877

Input Rates, Gas Pressures, Clearances

Model	No. Of Burners	Total kW/mJ*		Models	Manifold Operating Pressure** W.C./mbar		Clearance to non-combustible material	
		Natural	Propane		Natural Gas	Propane	Rear(in/mm)	Sides(in/mm)
HEEGM24CE	4	17.0/61.2	15.2/54.9	All Models	4.5/11.2	10.0/25.0	0/0	0/0
HEEGM36CE	6	25.5/91.8	22.9/82.3					
HEEGM48CE	9	38.2/137.7	34.3/123.4					
HEEGM60CE	11	46.7/168.3	41.9/150.9					

* Total kW/mJ based on manifold operating pressure specified in table above and apply to installations up to 2000 ft (610m).

** Gas inlet pipe is 3/4" NPT on all models. NPT to ISO adapter & gas pressure regulator supplied with all models.

CE Approved Gas Categories

Country	Gas Category	Gas Type	Pressure (mbar)
AT, CH, CZ, DK, ES, FI, GB, GR, IE, IT, NO, PT, SE, LU	I _{2H}	G20	20
DE	I _{2E}	G20	20
BE, FR	I _{2E+}	G20	20/25
NL	I _{2L}	G25	25
CZ, GR, IT, NL	I _{3P}	G31	30
BE, CH, CZ, ES, FR, GB, GR, IE, IT, PT	I _{3P}	G31	37
AT, CH, CZ, DE, ES, FR, GB, NL	I _{3P}	G31	50
CH, CZ, ES, GB, GR, IE, IT, PT	II _{2H3P}	G20	20
		G31	37
AT, CH, CZ, ES, GB	II _{2H3P}	G20	20
		G31	50

Electrical Requirements

Model	Voltage	Frequency	Current
HEEGM24CE	220-240	50-60 Hz	0.31 A
HEEGM36CE	220-240	50-60 Hz	0.33 A
HEEGM48CE	220-240	50-60 Hz	0.46 A
HEEGM60CE	220-240	50-60 Hz	0.47 A

Cord & Plug Options	
Cord	Plug
10 ft (3m) Long, 250 VAC, 6 Amp, 90°C Cord (CE Standard)	none
	CEE 7/7
	BS 1363/A

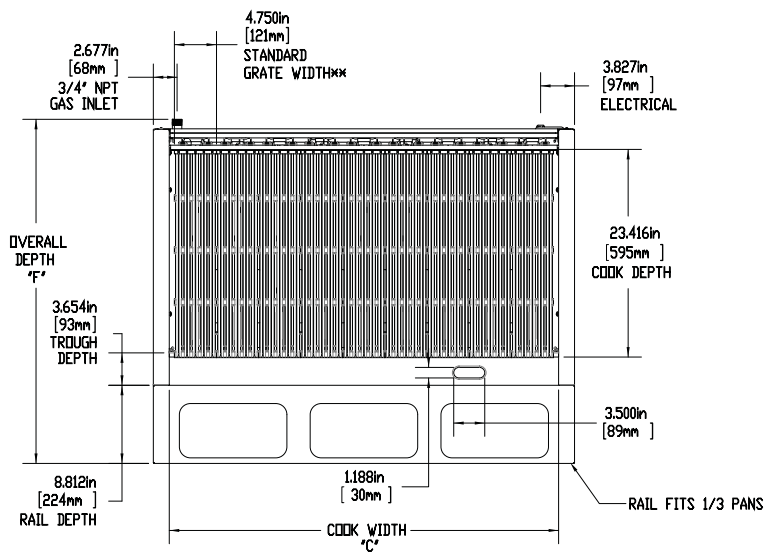
Note: Wiring Diagrams provided with each unit.

DIMENSIONS AND SPECIFICATIONS continued

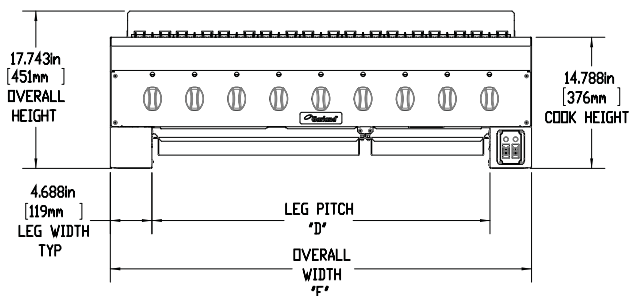
Dimensions

Width Measurements				
Model	Cook Width "C"	Leg Pitch "D"	Overall Width "E"	Grease Tray
HEEGM24CE	19.906in (506mm)	14.124in (359mm)	23.500in (597mm)	SINGLE
HEEGM36CE	29.906in (760mm)	24.124in (613mm)	33.500in (851mm)	SINGLE
HEEGM48CE	43.906in (1115mm)	38.124in (968mm)	47.500in (1207mm)	DUAL
HEEGM60CE	53.906in (1369mm)	48.124in (1222mm)	57.500in (1461mm)	DUAL

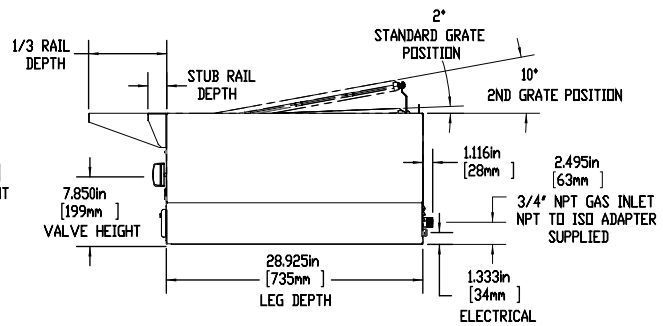
Rail Option	Rail Depth	Overall Depth "F"
Stub Rail	2.125in (54 mm)	32.119in (816 mm)
1/3 Pan Rail	8.812in (224mm)	38.806in (986mm)



**OPTIONAL FAJITA RACK REQUIRES THE REMOVAL OF 2 STANDARD GRATES



HEEGM48CE SHOWN WITH 1/3 PAN RAIL OPTION
SEE TABLE FOR OTHER RAIL TYPES



Standard and Optional Features

Standard Features

- All stainless steel construction.
- Front rail with cut outs to hold 1/3 size food pans (pans not included).
- Heavy duty reversible cast iron grates with wide edge on one side and fine edge on the other. Included: brush and scraper combination tool for cleaning grates.
- Two grate positions to choose from: the standard position, with a slight 2° slope to the front or the second position, with a 10° slope to the front and more distance between the product and the burner.
- Large capacity, removable grease tray(s). HEEGM24CE & 36CE models have one tray and HEEGM48CE & 60CE have two trays.
- Energy efficient cast iron burners.
- Complete system ON/OFF power switch(es), which ignites burners and shuts them down. HEEGM24CE & 36CE models have one switch and HEEGM48CE & 60CE have two switches.
- Complete flame failure protection.
- Each burner outputs 14,500 BTU for natural gas & 13,000 BTU for propane gas, and is individually controlled by a manual high-low valve. Reference the "CE Approved Gas Category" table for applicable gas category, gas type and supply pressure.
- 24" and 36" units are direct spark to the main burner. 48" and 60" units are direct spark to a pilot which then lights a pair of main burners.
- 10-foot (3 meters) power cord with no plug head.
- 3/4" (19.1mm) gas regulator for applicable gas type, and NPT to ISO adapter supplied with all units.

Optional Features

- 2-1/8" solid stub front rail, in lieu of standard 1/3 pan rail N/C
- Fajita pan grate designed specifically for holding/warming fajita pans, in lieu of two reversible or single sided grates N/C.
- Equipment Stands are available, see HEMST specification sheet.
- 10-foot (3 meters) power cord with CEE7/7 plug head or BS1363/A plug head.

PRE-INSTALLATION

INSTALLATION, MAINTENANCE AND REPAIRS SHOULD BE DONE BY AN AUTHORIZED SERVICE AGENCY. FOR A LIST OF AUTHORIZED SERVICE AGENTS, REFER TO THE MANITOWOC WEBSITE AT www.ManitowocFoodservice.com

Introduction

Garland manufactures the HEEGM series broilers in several sizes. While service and customer operation may vary from size to size, installation is similar for each. All units are shipped fully assembled, except for the radiants and top grates, which are packaged in separate boxes. Each unit is tested, adjusted and inspected at the factory prior to shipment.

Damage Check

After unpacking the unit, carefully inspect the unit for visible and concealed damage. Report any damage

immediately to your carrier to file the appropriate freight claims.

Rating Plate

The rating plate can be found on the inside face of the left leg. If necessary, remove the grease drawer to read the information. If service or replacement parts are needed, refer to the FULL model number (prefix, suffix, letters and numbers) AND serial number on the rating plate when contacting the factory or authorized service agency. These numbers ensure proper unit identification and aid in providing faster and accurate service.

The rating plate contains other important information critical to the proper installation of the unit. It specifies the gas type; gas pressure; voltage and clearance requirements for the appliance.

INSTALLATION

THIS PRODUCT IS NOT AUTHORIZED FOR HOME OR RESIDENTIAL USE. GARLAND WILL NOT PROVIDE SERVICE, WARRANTY, MAINTENANCE OR SUPPORT OF ANY KIND OTHER THAN IN COMMERCIAL APPLICATIONS.

General

Installation must be carried out by a competent person, in accordance with the relevant regulations; codes of practice and the related publications of the country of destination.

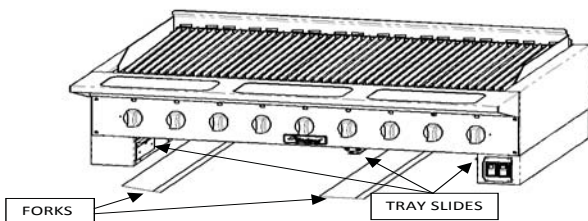
If you have any questions regarding the installation of this unit, contact your Factory Authorized Service Agent. To locate a service agent in your area, visit our website at <http://www.ManitowocFoodservice.com>

Australia Specific Regulation

This appliance must be installed in accordance with the manufacturer's instructions, local gas fitting regulations and requirements of AS 5601/AG 601 installation code. All burner adjustments and setting should be made by a qualified gas technician.

Positioning and Setup

1. Carefully remove the unit from the crate base. Some form of mechanical assistance may be required to lift and position the broiler. With the grease drawers removed, the unit is designed to be lifted with a pallet or lift jack as shown in the image below.



DO NOT LIFT BY GREASE DRAWER SLIDES. CARE SHOULD BE TAKEN TO AVOID THE LEFT, RIGHT AND/OR CENTER GREASE DRAWER SLIDES WHEN POSITIONING LIFTING EQUIPMENT.

2. The unit is designed to sit flush on a counter, stand or refrigerated base. Leveling of the unit is done through adjustment of the stand casters/legs, refrigerated base legs/casters or using shims for countertop installation.

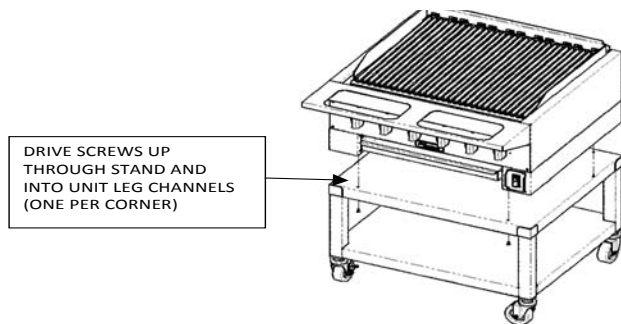
IT IS IMPERATIVE THAT THE UNIT IS PROPERLY LEVELED DURING INSTALLATION TO ENSURE OPTIMAL PERFORMANCE OF THE PRODUCT.

3. For cleanliness, the unit can be sealed to the mounting surface with silicone. If sealing the unit to the surface, avoid sealing lower stainless steel panels to the surface, as these may need to be removed for service.
4. Position the appliance in an area that is free and clear of all combustibles. This unit is for use in non-combustible locations only.
5. For service, this unit may need to be accessed from the side. An adequate service clearance should be provided in front of the unit to enable the unit to be brought forward for access to serviceable components. Keep this in mind when determining the installation location.

Optional Stand

HEEGM Equipment Stands are available for purchase. Use the appropriate stand for the size of unit. For your safety, be sure to secure the unit to the stand with 4 screws, as shown below.

Stand assembly instructions are provided with each stand.



Air Supply and Ventilation

VENTILATION REQUIREMENTS MAY BE SUBJECT TO LOCAL BUILDING AND FIRE CODES. CONSULT LOCAL AUTHORITIES HAVING JURISDICTION.

1. For any commercial cooking appliance, means must be provided to exhaust combustion waste products to the outside of the building. This is especially important for broilers, since they generate substantial amounts of smoke when in operation.
2. A properly designed ventilating canopy should be used for this appliance, which extends at least 6" (152mm) beyond each side of the appliance (except against the wall if the canopy is a wall installation) and is equipped with filters and drip troughs.

INSTALLATION continued

3. Air movement should be checked during installation. There must be adequate air intake into the building to compensate for the amount of air removed by the ventilation system. Without a proper balance, abnormal atmospheric pressure will occur, affecting burner and appliance performance. If air movement is a concern, adjustments should be made to correct the problem by a qualified technician.

HAVING DIFFICULTY OPENING DOORS THAT EXIT THE BUILDING, IS AN INDICATION THAT THE BUILDING HAS A PROBLEM WITH AIR MOVEMENT.

4. Do not permit fans to blow directly at the appliance and avoid opening windows behind or beside the appliance. This can create air cross-currents and/or excessive drafts that interfere with the operation of the unit.

Electrical Connection

DISCONNECT THE POWER SUPPLY BEFORE SERVICING.

Standard units are supplied with a 10 feet (3 meter) power cord with appropriate strain relief and either a CEE7/7, BS1363/A or no plug. If no plug is supplied, have a certified technician install the appropriate plug in accordance with local regulations. A suitable outlet is required in close proximity to the appliance. Consult a certified technician if you have concerns about the suitability of the outlet.

DO NOT USE AN EXTENSION CORD TO CONNECT THIS UNIT TO A POWER SUPPLY. DO NOT USE THIS APPLIANCE IF THE POWER CORD IS DAMAGED. DO NOT ATTEMPT TO REPAIR A DAMAGED POWER CORD. TAKE CARE NOT TO EXPOSE THE POWER CORD TO HEAT OR SHARP EDGES.

Gas Connection

ENSURE THE GAS METER AND GAS PIPING ARE SIZED CORRECTLY FOR THE AMOUNT OF GAS FLOW AND PRESSURE THAT WILL BE NEEDED TO RUN ALL APPLIANCES IN THE KITCHEN. UNDERSIZED GAS PIPING INTO THE KITCHEN MAY AFFECT THE PERFORMANCE OF THIS AND/OR OTHER EQUIPMENT. IF IN DOUBT, CONSULT YOUR LOCAL GAS AUTHORITY.

A MANUAL OR AUTOMATIC ISOLATION VALVE MUST BE INSTALLED ON THE GAS SUPPLY TO THE KITCHEN FOR ACCESS IN THE EVENT OF AN EMERGENCY. THE MANUAL VALVE OR AUTOMATIC VALVE ACCESS POINT SHOULD BE READILY ACCESSIBLE AND LOCATED EITHER OUTSIDE THE KITCHEN OR CLOSE TO AN EXIT. POST THE FOLLOWING NOTICE AT THE MANUAL VALVE OR AUTOMATIC VALVE ACCESS POINT:

“ALL DOWNSTREAM BURNER AND PILOT VALVES MUST BE TURNED OFF PRIOR TO RESTORING THE GAS SUPPLY. AFTER AN EXTENDED SHUT OFF, PURGE BEFORE RESTORING GAS.”

1. A manual gas shut-off valve must be installed in the gas supply line ahead of the appliance for safety and ease of future service. The shut-off valve should be located such that it can be reached quickly in the event of an emergency. The shut-off valve is normally supplied by the installer.
2. This unit is shipped with a gas pressure regulator. It must be installed at the appliance prior to connecting the equipment to the gas line. Each appliance must have its own pressure regulator. Be sure to install the regulator according to the gas flow direction and verify that the pressure marking corresponds with the gas type. Failure to install a regulator will void the equipment warranty.

PRIOR TO CONNECTING THE REGULATOR, CHECK THE GAS SUPPLY LINE PRESSURE. THE REGULATOR SUPPLIED WITH THE UNIT IS RATED FOR A MAXIMUM OF ½ PSI (14" WC, 34.9mbar). IF THE GAS SUPPLY LINE PRESSURE EXCEEDS THIS MAXIMUM, A STEP DOWN REGULATOR WILL BE REQUIRED AND MUST BE INSTALLED IN ACCORDANCE WITH LOCAL CODES.

THE RED AIR-VENT CAP IS PART OF THE REGULATOR AND SHOULD NOT BE REMOVED, UNLESS LOCAL CODES REQUIRE EXTERNAL VENTING. IF EXTERNAL VENTING IS REQUIRED, INSTALL IN ACCORDANCE WITH LOCAL CODES.

3. A certified flexible gas hose and quick disconnect assembly with suitable strain relief is recommended for connection from the gas supply line to the unit. This will allow the unit to be moved for future service.

FLEXIBLE HOSES & QUICK DISCONNECT DEVICES MUST COMPLY WITH ALL LOCAL AUTHORITIES AND CODES.

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.

4. Only connect this unit to the type of gas shown on the rating plate. Operating this unit with the wrong gas type can result in abnormal performance, property damage, injury or death.
5. Ensure that any new piping, joints and connections have been made in a clean manner, so that dirt, threading chips and/or other foreign matter will not clog pilots, valves and/or controls. If necessary, purge new piping prior to connecting the appliance. Use pipe sealant that is certified for use with liquefied petroleum, for new joints and/or connections, where sealant is required.

INSTALLATION Continued

6. When pressure testing the gas supply piping to a maximum of ½ psi (14"WC, 34.9mbar), the appliance must be isolated from the supply line by closing the manual shut-off valve.
7. To ensure optimal operation of this unit, it is recommended that the dynamic gas supply pressure into the appliance regulator is a minimum of 1"WC(2.5mbar) higher than the pressure stated on the rating plate.

Start Up

1. Inside the unit, ensure the burners are in the correct position and the shields hanging under the burners have not rotated out of position during transit.
2. Install cast radiants over each burner and place the cooking grates in position on the unit.
3. Ensure the gas supply to the appliance is open and the unit is connected to the power supply. Activating the one or two power switches on the right leg operates the unit.
4. Check all gas connections for leaks using a soap solution. Do not use an open flame to check for leaks. Be sure to inspect connections outside and inside the unit (ie: valves, manifold fittings and connections in the left leg channel) to make certain all connections are gas tight after shipping.
5. Verify the unit is running at the pressure stated on the rating plate as follows:

FOR HEEGM24 & 36 SIZE UNITS

- Connect a manometer to the test spigot on the manifold.
- Turn on the unit and adjust the burners so that they are all set to high.
- If necessary, adjust the pressure so that the reading on the manometer matches the pressure value stated on the rating plate. To adjust the pressure, access and rotate the pressure adjustment screw on the regulator installed at the appliance.

FOR HEEGM48 & 60 SIZE UNITS

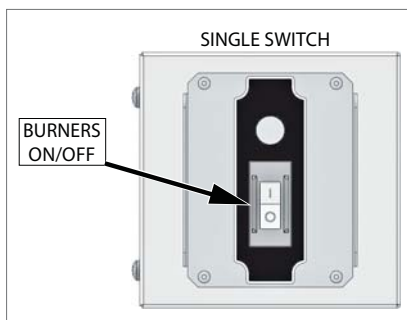
- Connect a manometer to the test spigot on the LEFT manifold.
 - Turn on the LEFT side of the unit only (by activating the left switch) and adjust the burners so that they are all set to high.
 - If necessary, adjust the pressure so that the reading on the manometer matches the pressure value stated on the rating plate. To adjust the pressure, access and rotate the pressure adjustment screw on the regulator installed at the appliance.
6. Inspect the flame of each burner to determine whether adjustments to the burner air shutter are necessary. Adjustments are made by loosening the air shutter screw; rotating the shutter and re-tightening the screw. If the tips of the flame appear too yellow, the shutter should be turned to allow MORE air to enter the burner cavity. If the flames appear to be lifting off the burner ports, the shutter should be turned to allow LESS air to enter the burner cavity.

USE AND CARE

Operation

IF FOR ANY REASON YOU SMELL GAS, BEFORE, DURING OR AFTER OPERATION, TURN THE POWER OFF AND CLOSE THE MANUAL SHUT-OFF VALVE TO THE APPLIANCE. CONTACT AN AUTHORIZED SERVICE AGENT FOR SERVICE BEFORE ATTEMPTING TO RESTORE GAS SUPPLY. FOR A LIST OF AUTHORIZED SERVICE AGENTS, PLEASE REFER TO THE MANITOWOC FOODSERVICE WEB SITE AT <http://www.ManitowocFoodservice.com>

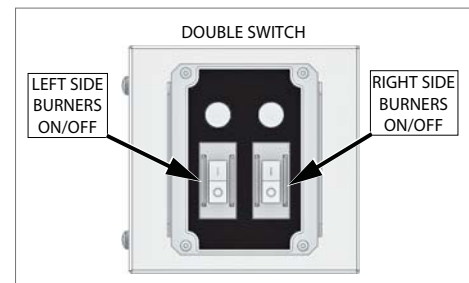
1. To turn on and use this appliance, the operator simply needs to turn on the power switch(es).
2. Models HEEGM24CE and HEEGM36CE have one power switch on the lower right side of the unit. Once pushed to the "ON" position, gas is supplied to all the burners. At the same time a spark is supplied to each burner to ignite the gas. Sparking occurs for a pre-determined amount of time (approx. 4 seconds) and then stops.



At this time all burners should be lit. To verify, each burner flame can be inspected visually through view holes in the valve panel. Also, the indicator light above the switch will be illuminated if ignition of all burners is successful. If ignition of all burners is unsuccessful, the indicator light will shut off and gas valve will automatically close. The unit will wait a set amount of time (approx. 15 seconds) and then attempt ignition again. If ignition is unsuccessful a second time the unit will go into lockout. To take the unit out of the lockout mode, turn the power switch to the "OFF" position and remove power to the unit.

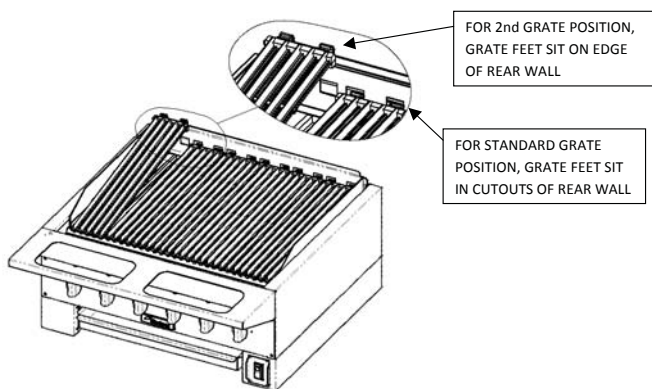
Ignition can be attempted again by turning the power switch to the "ON" position and restoring power to the unit. **IMPORTANT:** Wait 5 minutes between ignition attempts. If ignition fails again and the unit goes back into lockout, turn the power off and have a qualified service technician inspect the unit.

3. Models HEEGM48CE and HEEGM60CE have two power switches on the lower right side of the unit. Once pushed to the "ON" position, they operate in the same manner as the single switch, except they allow the operator to run the left and right side of the broiler independently as shown below:
 - HEEGM48CE: The left switch operates burners 1 to 4 on the left side of the unit. The right switch operates burners 5 to 9 on the right side of the unit. The entire unit runs when both switches are used.
 - HEEGM60CE: The left switch operates burners 1 to 6 on the left side of the unit. The right switch operates burners 7 to 11 on the right side of the unit. The entire unit runs when both switches are used.



4. It is recommended that the unit run for approximately 30 minutes on start up to reach the desired temperature.
5. For temperature adjustment, each burner has a control knob which will adjust the height of the flame from a high to a low position.
6. To shut off the unit, the operator simply needs to turn off the power switch(es). When shutting down for longer periods of time, it is best to also close the manual shut-off valve to the unit.

USE AND CARE continued



7. The cooking grates can be installed in 2 positions, to provide flexibility when preparing different types of food. To install the cooking grates in the standard position, the rear feet on the grates should be placed through the square cutouts on the rear wall of the broiler. To install the cooking grates in the elevated position, the groove in the feet of the grates should be placed on the top edge of the rear wall of the broiler. Grates must be manually moved from one position to another; and therefore, should be moved when the grates are cool.

THE SIDE SHIELDS MUST ALWAYS BE IN PLACE WHEN OPERATING THIS UNIT. THE SIDE SHIELDS PREVENT THE COOKING GRATES FROM SLIDING OFF THE SIDE OF THE UNIT, WHEN THEY ARE PLACED IN THE ELEVATED POSITION.

Warnings

To ensure consistent and dependable performance of this appliance, the following are recommended:

- Do not use an extension cord to connect this unit to a power supply. Do not use this appliance if the power cord is damaged. Do not attempt to repair a damaged power cord. Take care not to expose the power cord to heat (ie: under grease tray, near flue or grate support etc) and be careful not to damage the cord by pinching under unit or rubbing on sharp edges.
 - Do not lift unit by the front rail or apply excessive force to the rail to move the unit. Under no circumstances should the front rail be used as a step or standing platform (ie: to access light bulbs or grease bucket in ventilation hood). Doing so may result in serious injury and/or death; and may cause damage to your broiler and/or property.
 - This appliance generates significant amounts of heat and the operator should take caution when touching accessible surfaces that are likely to get hot. Surfaces close to the cooking surface including the side panels, side shields, front rail, grease tray handle and valve panel may get hot enough to burn skin.
- Do not operate the broiler without the side shields in place as it may adversely affect the performance of the unit and/or allow heat to migrate to neighboring equipment/property causing damage. The shields also prevent the cooking grates from sliding off the side of the unit when they are placed in the elevated position.
 - Use of foil in the grease tray is not recommended. However, if foil is being used, it must be kept tight to the tray so that it does not obstruct the flow of air into and around the unit, particularly between the grease tray and the valve panel.
 - Do not operate the unit with water in the grease trays. Evaporating water in the tray has the potential to damage electrical components in the unit.
 - It is important that the grease trays are emptied on a regular basis. Flare ups in the grease tray are possible with this type of appliance and excessive amounts of grease in the tray can lead to a sustained flare up or fire, which can be dangerous and result in personal injury and/or property damage.
 - Do not operate the broiler without the grease drawers in place and ensure they are always fully pushed in. Failing to do so may result in grease and/or debris spilling onto the counter, stand and/or refrigerated base top.
 - Do not attempt to service this appliance unless you are a qualified service technician. This appliance is connected to live electrical power. Disconnect power before attempting to clean/remove accessible metal panels.
 - Without proper cleaning & maintenance, this appliance will accumulate oil and grease. This may result in reduced performance, excessive flare ups and/or fire. It is the user's responsibility to prevent the hazards of grease accumulation by cleaning & maintaining their appliance on a regular basis. Garland will not be responsible for performance reductions and/or fires resulting from misuse and/or poor cleaning & maintenance habits.
 - If this appliance experiences abnormal flare ups and/or sustained fire in any area other than the combustion chamber (ie: the grease tray, behind the valve panel or in the leg channel), the unit must be shut down

USE AND CARE continued

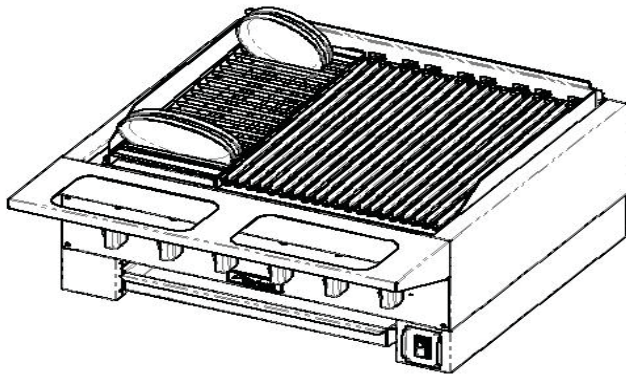
immediately and should not be used until it has been serviced by a qualified technician and deemed safe to operate.

Optional Equipment

As an option, your appliance may have been supplied with a special top grate designed to hold and heat fajita pans. This appliance is certified to use only one of these fajita pan grates at a time. Installing multiple fajita pan grates on one appliance is prohibited and could void your warranty.

The fajita pan grate has been designed to accommodate only one fajita pan per slot, in either the vertical or horizontal position, as shown in the image below. Placing multiple fajita pans in one slot and/or placing fajita pans flat on this grate or the standard grate may cause damage to the broiler and could void your warranty.

THE FAJITA PAN GRATE IS INSTALLED ON THE UNIT IN THE SAME MANNER AS THE STANDARD GRATE IN THE STANDARD POSITION. FEET ON THE REAR OF THE FAJITA GRATE SIT IN THE SQUARE CUTOUTS ON THE REAR WALL.

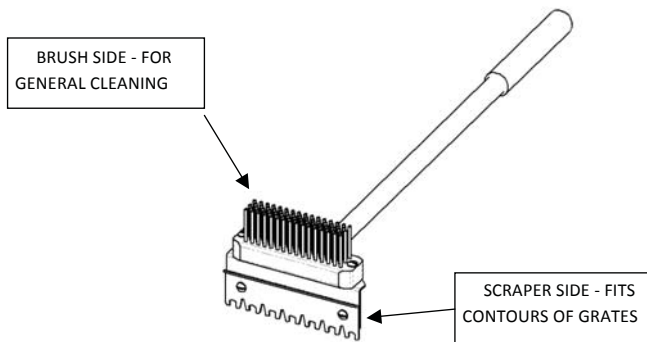


CLEANING AND MAINTENANCE

THIS APPLIANCE WILL PERFORM OPTIMALLY AND LAST LONGER IF IT IS PROPERLY MAINTAINED. FOLLOWING A CLEANING SCHEDULE AND HAVING THE UNIT CHECKED PERIODICALLY BY AN AUTHORIZED SERVICE AGENT ARE STRONGLY RECOMMENDED. FOR A LIST OF AUTHORIZED SERVICE AGENTS, REFER TO THE MANITOWOC FOODSERVICE WEB SITE AT <http://www.ManitowocFoodservice.com>

General

This appliance has been supplied with a combination brush/scrapper tool for cleaning your cooking grates. The scraper side of the tool has stainless steel teeth, designed specifically to fit the contours of the cooking grate and will clean hard to remove debris. The brush side of the tool has stainless steel wire bristles which can be used to remove finer debris and for general cleaning.



- Do not attempt to clean the grates by burning off grease/debris. The cooking grates on this unit are shielded from open flame by the radiants. Attempting to burn off grease/debris will likely have the opposite effect and cause the grease/debris to stick even more.
- When cleaning cast iron components such as the cooking grates; radiants; and burners, do not handle these components roughly. Dropping them on the floor or in the sink may cause them to crack and/or break.
- Cast iron components are susceptible to cracking/ breaking if they are thermally shocked. Do not expose hot cooking grates, radiants; and/or burners to cold water. These components must be allowed to properly cool before they are washed with water.
- Do not use steel wool, abrasive cloths, cleaners or powders to clean stainless steel. Do not use a metal scraper, knife or other tool to scrape stainless steel. Doing so may cause permanent damage to the stainless steel material.

Cleaning During Operations

1. It is important to clean the grates periodically during daily operations, using the tool provided or any other cleaning tool of preference. Cleaning the grates as needed throughout the day will limit the effects of grease accumulation, which include excess smoke; flare ups; fires and sub-par product.
2. The grease trough and chute should be kept clean during daily operations to prevent grease from accumulating near the cook surface. If necessary, stagnant grease and/or food particles should be directed to the grease chute using a standard 3" wide turner. If necessary, this turner can also be used to push items/grease in the grease chute down into the grease drawer.
3. The grease drawer(s) should be emptied periodically during daily operations. Every environment differs, so the frequency of this action will vary depending on amount and type of product being cooked. Keeping the amount of grease in the drawer to a minimum greatly reduces the chance of flare ups and sustained fire.

Warnings



HOT SURFACE

Char-Broiler
Temperatures Will
Cause Severe Burns



PPE

Approved Personal
Protective Equipment
Must be worn

- Never place a sheet pan or other large obstruction over the grates when the broiler is hot. Covering the grates and running the broiler as a method of cleaning is prohibited. Doing so, may cause damage to your broiler and/or property; endanger the safety of others; and void your warranty.
- This appliance is connected to live electrical power. Disconnect power before attempting to clean/remove accessible metal panels.
- Do not spray or pour water on the unit to clean. This appliance has several electronic components behind access panels that can be damaged or become unsafe if exposed to water. This unit should only be cleaned by wiping down with a damp cloth.

CLEANING AND MAINTENANCE continued

Daily Cleaning

1. Scrape and/or brush the cooking grates using the tool provided or any other cleaning tool of preference while the grates are still warm. Once the grates have cooled, remove them from the unit and wash them in a hot soapy solution. Dry the grates immediately after washing and lightly season with non-toxic oil (liquid vegetable oil or spray) before re-installing on the unit. Properly drying and seasoning the grates will prevent them from rusting.

DO NOT SEASON GRATES WHILE THEY ARE ON THE APPLIANCE. SEASONING GRATES OVER AN OPEN FLAME MAY RESULT IN DANGEROUS FLARE UPS AND/OR A FLASH FIRE.

2. Wire brush the radiants clean using the tool provided or any other cleaning tool of preference. Once the radiants have cooled, remove them from the unit and wash them in a hot soapy solution.
3. Scrape the grease trough and chute, directing any grease/debris into the grease drawer (s). Empty the grease drawer(s), scraping out stubborn grease/debris. Wash the grease drawer(s) in a hot soapy solution.
4. Once the unit has cooled, accessible stainless steel panels should be cleaned with a hot soapy solution and/or a food safe liquid cleaner designed to clean stainless steel. Never spray or pour water on the unit to clean. Always disconnect electrical power before cleaning accessible panels.

Weekly/Periodic Cleaning

In addition to the daily cleaning tasks outlined above, the following should be done weekly/periodically:

1. Once the unit has cooled, remove the side shields from the unit by sliding them up and then off the shoulder bolts. Clean the side shields with a hot soapy solution and/or a food safe liquid cleaner designed to clean stainless steel.

2. Remove the burners and hanging shields from the unit as follows:
 - Remove the pins at the rear of the burner
 - Lift the burner peg up and out of the bracket at the rear
 - Slide the burner back and off the orifice
 - Angle the front of the burner down and then remove from unit

The burners on the far left and right of the unit should be removed last

WHEN REMOVING BURNERS FROM THE UNIT, TAKE CARE NOT TO MOVE AND/OR BEND THE IGNITION PROBES. MOVING OR BENDING THE PROBES CAN CRACK THE CERAMIC INSULATING MATERIAL, ALTER THE SPARK GAP OR MISALIGN WITH BURNER LIGHTING PORTS WHICH MAY RENDER THE UNIT INOPERABLE.

Clean the burners and their hanging shields in a hot soapy solution, paying attention to ensure that all burner ports are free and clear of debris. Pay particular attention to the small lighting holes at the front of the burner. These holes must remain clear to ensure the appliance ignites and functions properly.

ENSURE THE POWER SUPPLY IS DISCONNECTED BEFORE PROCEEDING.

3. With all the components removed from the cooking chamber, wipe down the interior with a hot soapy solution taking care to avoid the ignition probes. With the cooking chamber cleaned, components can be put back in.

WHEN PUTTING THE BURNERS BACK IN THE UNIT, TAKE CARE NOT TO MOVE AND/OR BEND THE IGNITION PROBES. BURNERS ON THE FAR LEFT & RIGHT SIDE OF THE UNIT MUST BE PUT IN FIRST. ENSURE THE PINS AT THE REAR ARE RE-INSTALLED TO SECURE THE BURNERS IN PLACE.

4. Once the unit has been returned to its original state, verify that the burners ignite correctly. Slight front to back adjustments may be required to ensure quick and accurate lighting after cleaning.

CLEANING AND MAINTENANCE continued

Maintenance

Any maintenance involving the disassembly of components should be performed by a qualified service technician as part of a regular kitchen maintenance program. Periodic inspections should be done to check temperatures, verify performance and make any adjustments as necessary. In addition, cleaning behind non-accessible panels; such as the front panel and/or leg panels, should also be done during regular maintenance.

Service and Parts

If for any reason this appliance requires service, contact your local authorized Manitowoc service agency. All repairs must be performed by a qualified technician, using genuine Garland replacement parts or risk negating the warranty. For a list of Authorized Service Agents or to view a Genuine Parts list for your appliance, visit the Manitowoc Foodservice website at: <http://www.ManitowocFoodservice.com>

Refer to the rating plate when calling for service. It contains the model number and serial number for your appliance. Properly identifying the appliance will help the factory or your local service agent provide faster and more accurate service. The rating plate can be found on the inside face of the left leg. The grease drawer may need to be removed in order to read the information

NOTES

 **Garland** Installation and Operation Manual
High Efficiency Radiant Char-Broiler — HEEGMxxCE

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