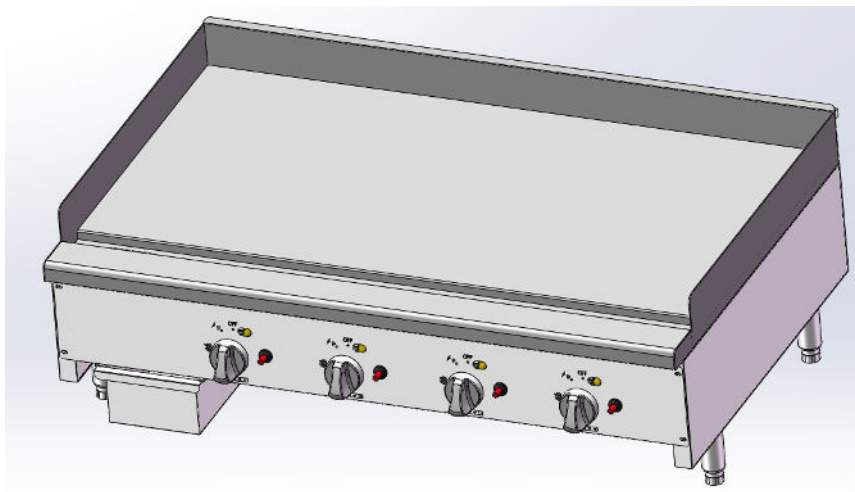




## Installation & Operation Manual

### Gas Griddle

HAR-PGR600, HAR-PGR900, HAR-PGR1200



If you smell gas, follow the instructions provided by the gas supplier.

Do not try to light the burner; do not use a telephone within close proximity.

#### FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other equipment.

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

Read this manual before operation

Dear Customer & User,

Thank you for purchasing our appliance. Before use and operation, please read and familiarize yourself with the following operating and safety instructions. **SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.** Save the original box and packaging. Use this packaging to ship the equipment if repairs are needed.

This manual contains important information, please read the manual thoroughly prior to equipment set-up, operation and maintenance. Failure to comply with regular maintenance guidelines outlined in this manual may void the warranty.

The user's manual should be always available for operation. So make sure this manual book is properly placed. We have the full authority to reserve the further technical changes of the device, in the scope of further performance improvement characteristic development.

# WARNINGS

- Remove all transit protection before installation.
- Do not spray aerosols in the vicinity of this appliance while it is in operation.
- Do not use or store flammable material in or near this appliance.
- Do not place articles on or against this appliance.
- Do not modify this appliance.
- Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death.
- Read the installation and maintenance instructions thoroughly before installing or servicing this equipment.
- Have the equipment installed by a qualified installer in accordance with all federal, state and local codes.
- Do not install or use without all 4 legs.
- This equipment is for use in non-combustible locations only.
- Do not obstruct the flow of combustion and ventilation air.
- Do not spray controls or the outside of the equipment with liquids or cleaning agents
- This equipment should only be used in a flat, level position.
- Do not operate unattended.
- Any loose dirt or metal particles that are allowed to enter the gas lines on this equipment will damage the valve and affect its operation.
- If you smell gas, follow the instructions provided by the gas supplier. Do not try to light the burner; do not use a telephone within close proximity.
- Never attempt to move machine while cooking.
- NEVER use an open flame to check for gas leaks. Fire and explosion may result.
- This griddle is supplied with a gas pressure regulator. Failure to properly install the supplied regulator will result in an extremely hazardous condition. Flow arrow stamped on body of regulator must point toward the griddle. Vent hole must point UP.
- If the pilot light should be extinguished, turn off the gas shut-off valve and remove

the grate and drip pan. Allow the appliance to vent for five minutes before attempting to re-light.

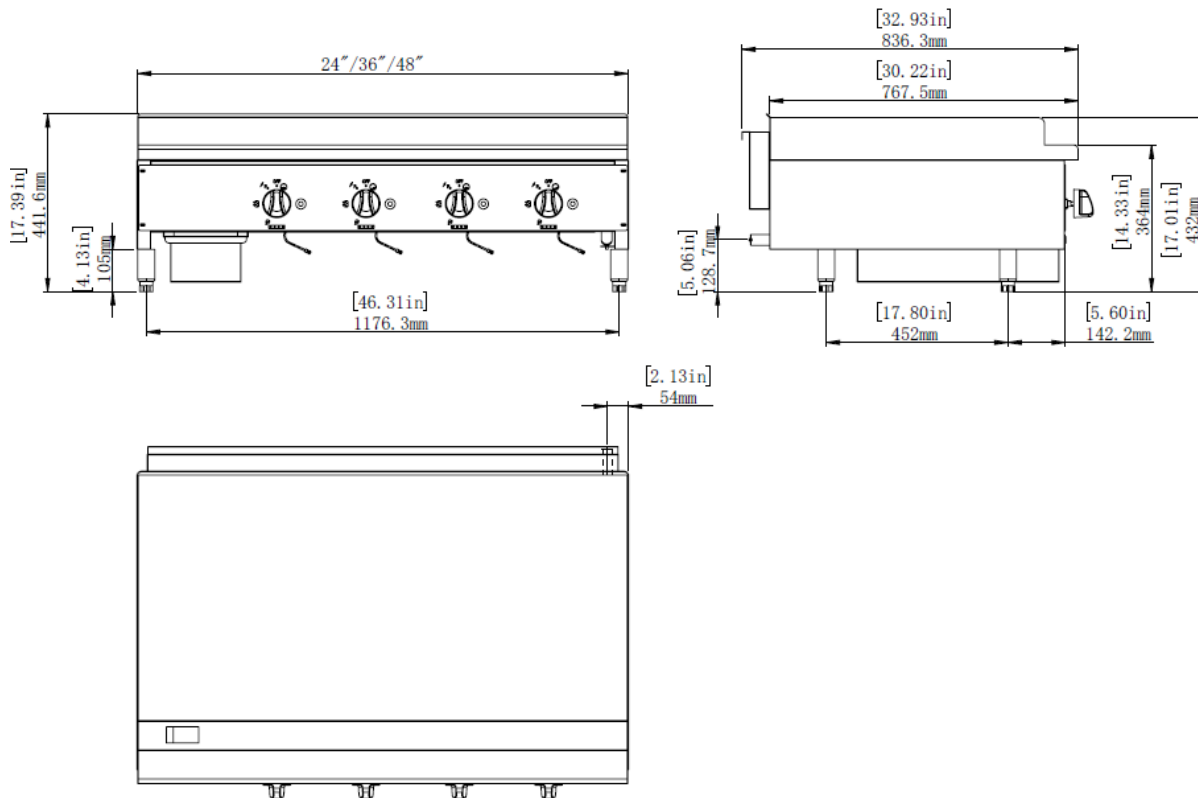
- DO NOT spill or pour water into burners or controls, DO NOT submerge griddle cabinet in water. Damage to internal components will occur. Damage to internal components from water damage is NOT covered by warranty.

## Product parameters table

Model No.	HAR-PGR600	HAR-PGR900	HAR-PGR1200
Dimension(WxDxH)	609*837*441mm	914*837*441mm	1220*837*441mm
Griddle Plate Size	605*612*20mm	910*612*20mm	1216*612*20mm
Orifice size(Natural gas)	36#(ø2.71mm)	36#(ø2.71mm)	36#(ø2.71mm)
Orifice size(Propane)	51#(ø1.70mm)	51#(ø1.70mm)	51#(ø1.70mm)
Input per burner(MJ/H)	31.5	31.5	31.5
Total input(MJ/H)	63	94.5	126
Gas type	Natural or Propane	Natural or Propane	Natural or Propane
Natural gas pressure	1.0KPa	1.0KPa	1.0KPa
Propane gas pressure	2.45KPa	2.45KPa	2.45KPa
Burner	2	3	4

Injector/Jet sizes: #36 Drill for Natural gas, #51 Drill for LPG

# Product Structure



## INSTALLATIONS

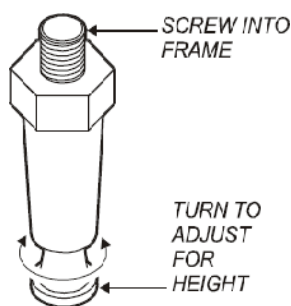
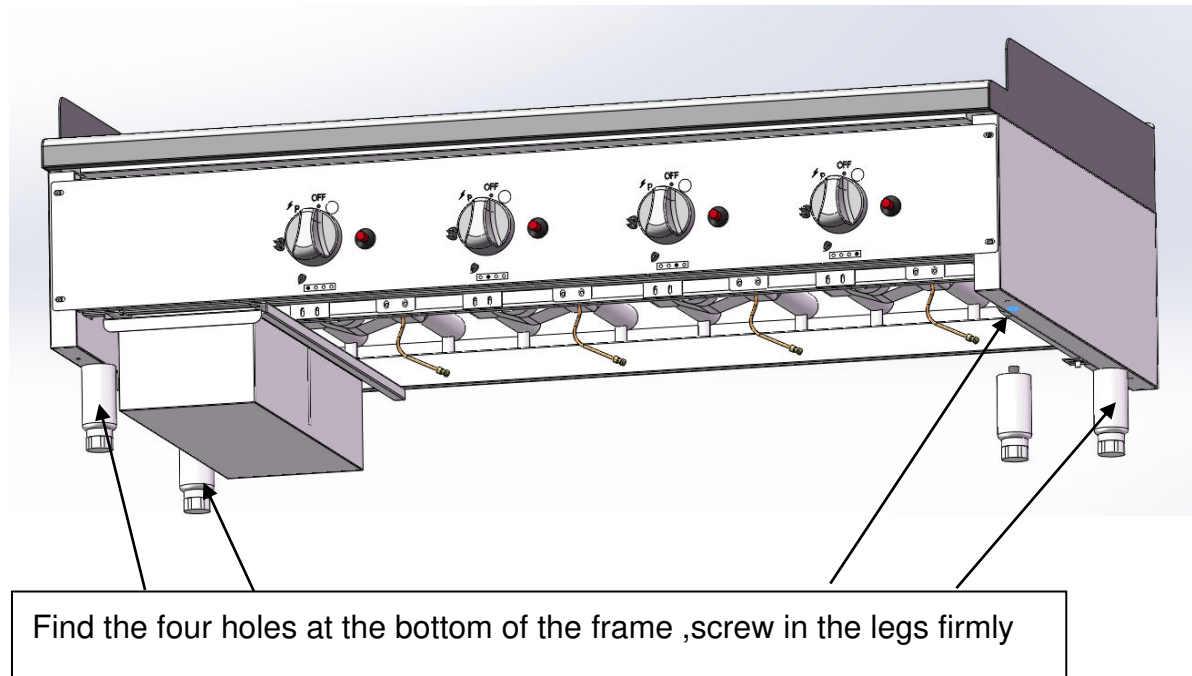
### UNPACKING & INSPECTION

Carefully remove the appliance from the carton. Remove all protective plastic film, packing materials and accessories from the appliance before connecting performing any installation procedure. Carefully read all instructions in this manual and the Installation Instruction Sheet packed with the appliance before starting any installation.

### SETUP

This appliance shall be installed only by authorized persons and in accordance with these installation instructions, local gas fitting regulations, municipal building codes, AS 5601 - Gas Installations and any other statutory regulations.

Setup the griddle only on a firm, level, non-combustible surface. Verify local codes for requirements. Concrete, tile, terrazzo or metal surfaces are recommended. Metal or tile over combustible material may not meet code for non-combustible surfaces. Install the provided adjustable legs, one on each corner of the appliance.



Verify that the unit sits firmly ON ALL FOUR LEGS. With the adjustable legs, adjust as required to level the appliance. All four legs must be adjusted to firmly contact the countertop in order to prevent tipping.

Adequate clearance for air openings in the cabinet must be provided. Refer to the dataplate for required clearances. Maintain required clearances between the appliance and adjacent combustible surfaces.

The griddle must be installed in an area with sufficient make-up air for proper combustion, and must be installed such that the flow of combustion and ventilation air will not be obstructed. Extreme environment should be avoided ,such as marine environment.

When used with an exhaust fan, special precautions must be observed to avoid interference with the operation of the griddle, such as drafts and air starvation.

## GAS APPLIANCE CODE COMPLIANCE

The installation of gas piping from the outlet side of the gas meter or service regulator to the griddle must be performed by a technician qualified and certified or licensed to install gas-fired equipment.

A licensed and qualified technician must perform the initial startup and adjustment of this appliance.

The installation must conform with all local codes and ordinances and the installation must conform with code AS 5601/AG 601.

The servicing shall be carried out only by authorized personnel, and that the appliance shall not be modified.

### IT IS THE RESPONSIBILITY OF THE INSTALLER TO ENSURE

The venting of this appliance must not be obstructed, nor may such venting interfere with the flow of combustion air required for proper operation of the gas burners.

### Additionally:

1. The gas supply line used to connect the griddle to the gas supply system must be copper pipe, or a certified flexible hose assembly.

2. Gas supply piping must be inside 3/4" diameter or greater.

3. Use pipe sealant made specifically for gas piping on all pipe joints. Apply sealant sparingly to the male threads only.

Sealant must be resistant to the action of LP gas.

4. Verify that all supply piping is clean and free of obstructions, dirt, chips and pipe sealant compound prior to installation.

5. All pipe joints must be checked for leaks before lighting. Leak checks should be performed with a soap and water solution. NEVER CHECK FOR LEAKS WITH AN OPEN FLAME.

### **Check clearance and ventilation:**

Ventilation must be in accordance with AS5601.1 - Gas Installations

There must be adequate clearance between griddle and construction. Clearance must be provided in front for servicing and for operation. Minimum clearance from combustible surface is 40cm at the sides and rear, and 100cm at the overhead.

Improper ventilation can result in personal injury or death. Ventilation that fails to

properly remove flue products can cause headaches, drowsiness, nausea, or could result in death. Unit must be installed under a ventilation hood. Be sure to inspect and clean the ventilation system according to the ventilation equipment manufacturer's instructions.

Due to the variety of problems that can be caused by outside weather conditions, venting by canopies or wall fans is preferred over any type of direct venting.

It is recommended that a canopy extend **15cm** past the appliance and the bottom edge be located **200cm** from the floor. The exhaust fan should be installed at least **61cm** above the venting opening at the top of the appliance. Make sure all ventilation meets local code requirements.

All units must be installed in such a manner that the flow of combustion and ventilation air is not obstructed. Do not obstruct the bottom, front of the unit, as combustion air enters through this area.

Refer to the dataplate. Verify the fuel type and pressure, which must match the dataplate specifications. Connecting the griddle to the wrong fuel type and/or pressure will compromise the safety and/or performance of the appliance.

**BE SURE TO MAINTAIN REQUIRED CLEARANCES TO COMBUSTIBLE SURFACES.**

The griddle must be placed in its final operational position and leveled front-to-back and side-to-side, with a spirit level, prior to beginning the gas piping installation. Re-check the level of the unit at the conclusion of the gas piping installation.

Each gas griddle is supplied with a separate gas pressure regulator, which must be installed on the inlet gas pipe protruding from the rear of the griddle. Ensure that the regulator is installed such that the flow arrow stamped on the body of the regulator points toward the griddle. Failure to properly install the supplied regulator will result in an extremely hazardous condition.

A moisture trap (drip leg) consisting of a tee, **10cm** nipple pointing down, and cap must be installed upstream of the gas pressure regulator.

A manual gas shut-off valve may be required by local codes and is, in any case, strongly recommended. The shut-off valve must be installed between the gas supply piping and the gas pressure regulator.

Shut-off valves, moisture trap and all associated piping must be supplied by the gas piping installer.

It is the installers duty to test the operation of the appliance after installation. If the appliance cannot be adjusted to operate correctly, contact an authorized service provider.

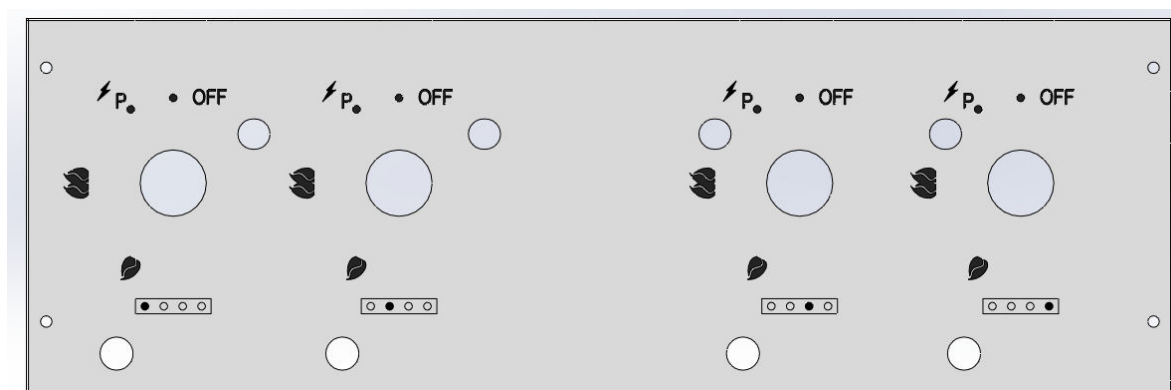


## SET GAS PRESSURE:

**Notes: Switch on one burner to set gas pressure.**

- All commercial cooking equipment must have a pressure regulator on the incoming gas line for safe and efficient operation. Two regulators are provided for this equipment model# 7015-4000 is for Natural gas and model#7015-5010 is for propane gas.
- Regulator specifications:  $\frac{3}{4}$ " NPT inlet and outlet, factory set for 1.0ka Natural Gas standard and 2.45Kpa for propane gas standard.

### Control panel feature:



**OFF:** The burner and pilot will be shut off at this position.



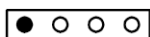
: This is pilot symbol, depress and hold the knob at this position to ignite the pilot



: This is the maximum flame symbol ,the flame is maximum when turn the knob to this position.



: This is the minimum flame symbol ,the flame is minimum when turn the knob to this position.



:This is the marking indicate the burner be controlled by corresponding gas valve

## ADJUST BURNER FLAME:

Remove all burner control knobs, then remove the front panel. Ignite an individual burner on.

Loosen the locking screw on the shutter.

Turn the shutter to admit more or less air as required. Adjust the air shutter until the flame is mostly blue in color.

Tighten the locking screw when finished. Replace the front panel and all knobs before returning the unit to service.

## GAS CONVERSION:

- Conversion from Natural Gas to Liquid Propane (LP) or vice versa must only be performed by the factory or its authorized service agent. In case of troubleshooting, ensure the correct orifice sizes of the spuds have been provided.

The conversion kit include below 4 parts:

- Propane Gas Orifice is #51( $\varnothing$ 1.7mm), orifice size is marked on the spud.
- 2.45Kpa gas pressure regulator, the model# is 7015-5010.
- Propane pilot
- Dataplate for propane gas

## Gas conversion from natural gas to propane instructions for Griddle:

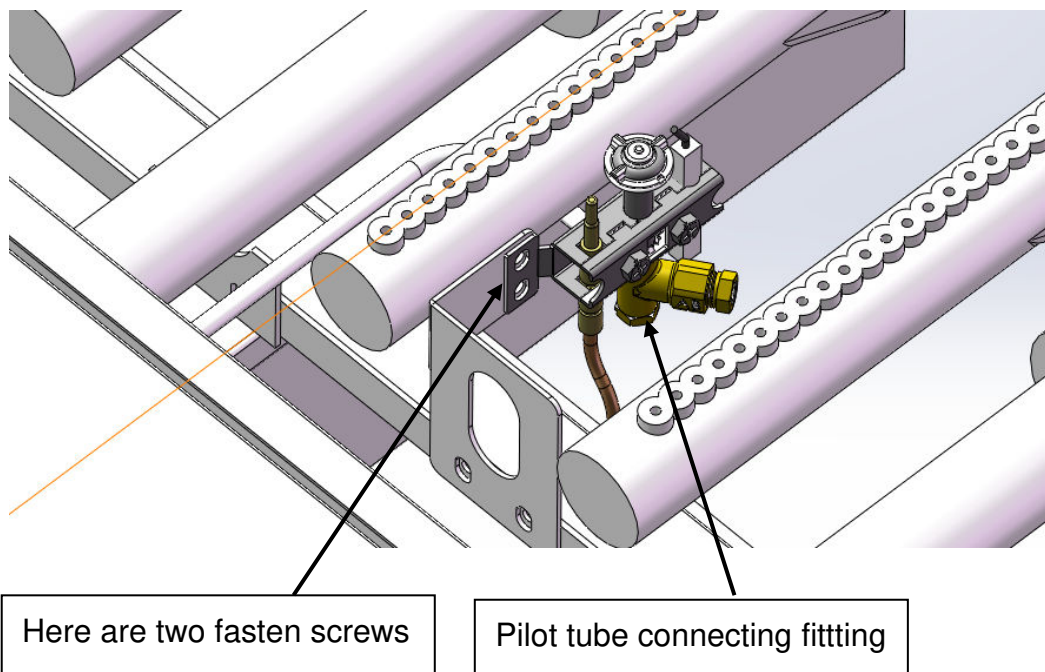
### Caution:

**ENSURE THE GAS SUPPLY IS SHUT OFF AT THE MANUEL SHUT OFF VALVE BEFOREM PRODEEDING WITH THE CONVERSION.**

1. Switch off the gas at the main supply valve and allow the unit to cool down before commencing with the conversion.
2. Lift off the complete griddle plate assembly to expose the burners and valves.
3. Remove the burners sealing plate by loosening the fastening screws at the front of the burner, lift the rear of the burner and slide backwards to take down the

burners.

4. The brass orifice located on the end of the brass elbow fitting, and can be loosened and removed using a 1/2" wrench.
5. Replace with the 51# orifice from the conversion kit, first applying a small amount of jointing sealant to the thread on the end of the elbow, this will ensure a good gas tight seal.
6. Remove the natural gas pilot by loosen the pilot tube connecting fitting at the bottom of the pilot and loosen the two fasten screws at the front of the pilot.
7. Replace with the propane pilot ,first fasten the pilot tube connecting fitting ,then use two screws fasten the pilot to the fix bracket. see below figure.



8. Replace the burner by sliding the open end over the orifice and then locating the stud through the slot in the support bracket.
9. Install the burners sealing plate back and fasten with screws.
10. To operate with LPG gas, the regulator must be changed to model# 7015-5010 .
11. Prior to connecting the regulator, check the incoming line pressure, as the regulators can only withstand a maximum pressure of 3.45KPa. If the line pressure is beyond this limit, a step down regulator will be required. The arrow forged into the bottom of the regulator body shows gas flow direction, and should point downstream to the appliance.
12. Check for gas leaks. A soapy water solution is recommended for locating gas

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

13. Replace the Griddle plate assembly into position.
14. Take down the natural gas dataplate and place the propane dataplate at the position..

#### **Setting the propane gas regulator:**

1. turn on the manual shut-off valve.
2. Ignite one burner and turn the flame to maximum
3. Inspect the manifold gas pressure and make sure the gas pressure is 2.45Kpa

## **OPERATION**

#### **Griddle plate seasoning:**

1. Preheat the griddle surface to 191° C.
2. Spread a light film of cooking oil over the entire griddle surface.
3. Allow the oil film to cook in for approximately 2 minutes, or until it smokes.
4. Wipe the griddle surface with a clean damp cloth until all oil is removed.
5. For new griddles, repeat this procedure 2-3 times until the griddle has a slick, clean surface.

#### **Preparation:**

Inspect the unit for cleanliness before use.

The burner control knobs must be turned by hand only. Never use tools to turn the control knob.

The control used in this gas griddle provides a continuous range of settings from OFF to ON.

Be sure the gas shut-off valve is ON and the appliance has had time(5 minutes) for the air to be purged from the lines.

## **LIGHTING THE PILOT FLAME AND TO USE**

Be sure the manual gas shut-off valve is ON and the knobs are at OFF position , the appliance has had time for the air to be purged from the lines. Depress and turn the knob to "P" position, hold down the knob at "P" position and depress and hold down the piezo igniter at the same time to light the pilot ,please hold down the safety valve for 30 seconds to light the pilot successfully ,then release .

If ignition does not occur in 5 seconds,turn the burner control(s) off,wait 5 minutes,and repeat the lighting procedure.

It may take longer time to ignite the pilot for the first time to use due to air in the gas pipe

When the pilot be lighted ,set the control knob to the desired position. The setting can be readjusted at any time.

## **SHUT DOWN INSTRUCTIONS**

Turn all burner knobs to OFF.

Turn the main gas supply OFF.

## **DAILY CLEANING AND MAINTENANCE INSTRUCTIONS:**

- Pour a small amount of water on the griddle surface and let it "sizzle".
- Clean the griddle surface. Use a pumice stone or griddle brick to scrape food waste.
- Clean the griddle surface down to bright metal. Wipe off any remaining powder residue.

**IMPORTANT: NEVER USE STEEL WOOL TO CLEAN THE GRIDDLE SURFACE!**

- DO NOT use detergent or oven cleaner to clean the griddle surface.
- Use a soft-bristled fiber brush in a circular motion to remove any remaining food particles.
- Turn control to OFF. Allow the griddle surface to cool, and then wipe the surface with a clean cloth. Dry the griddle surface thoroughly.
- At least once each day, the grease trough must be thoroughly cleaned. Using a

scraper, remove all grease and food waste from the grease trough by pushing it down the waste hole and into the grease tray.

- After scraping all cooking waste from grease trough into the grease tray, take the grease drawer to the kitchen cleaning area and properly dispose of all waste.
  - a.Clean drawer with hot water and a mild detergent.
  - b.Dry drawer thoroughly and re-install in griddle.
- Wipe down exterior of griddle cabinet with a clean cloth and nonabrasive cleanser. Rinse thoroughly with water and a clean cloth.Dry with a soft clean cloth.Procedure is complete.

## **PREPARATION**

- Turn gas shut-off valve OFF.
- Allow griddle to cool before cleaning. FREQUENCY As Needed.

## **CLEANING BURNERS**

- If one or more individual flame openings does not light, or if the flame is intermittent or uneven, the burner may need to be cleaned.
- Turn shut-off valve OFF. Remove all control knobs and remove front panel.
- Note position of burner assemblies in cabinet. Remove burners. Examine burner assemblies. Note position of air shutters before cleaning. Clean food particles from burners with warm water, mild detergent and a bristle brush. Rinse by wiping with a soft cloth dampened with clean water. Wipe exterior surfaces dry with a soft clean cloth. Allow burners to air dry so that interior passages are completely free of water.
- Examine burners to be sure the air shutters are in their proper position. Re-install burners with flame openings “up” . The venturi / air shutter slides over the nozzle of the unit. The pegs on the rear of the burner set in corresponding notches in the rear burner support bracket. Turn shut-off valve ON and light pilot.
- Re-install front panel and all control knobs.
- Test all burners for proper operation.
- Procedure is complete.

## **Abnormal Operation**

Any of the following are considered abnormal operation and may indicate service is required:

Offensive fumes or odor during operation.

Yellow burner flames.

Incomplete ignition of the burner.

Burner failing to remain alight.

Gas valves which seize or are difficult to turn.

Formation of heavy soot.

If the appliance operates abnormally, contact an authorised service provider.

## Failure Analysis & Trouble Shooting

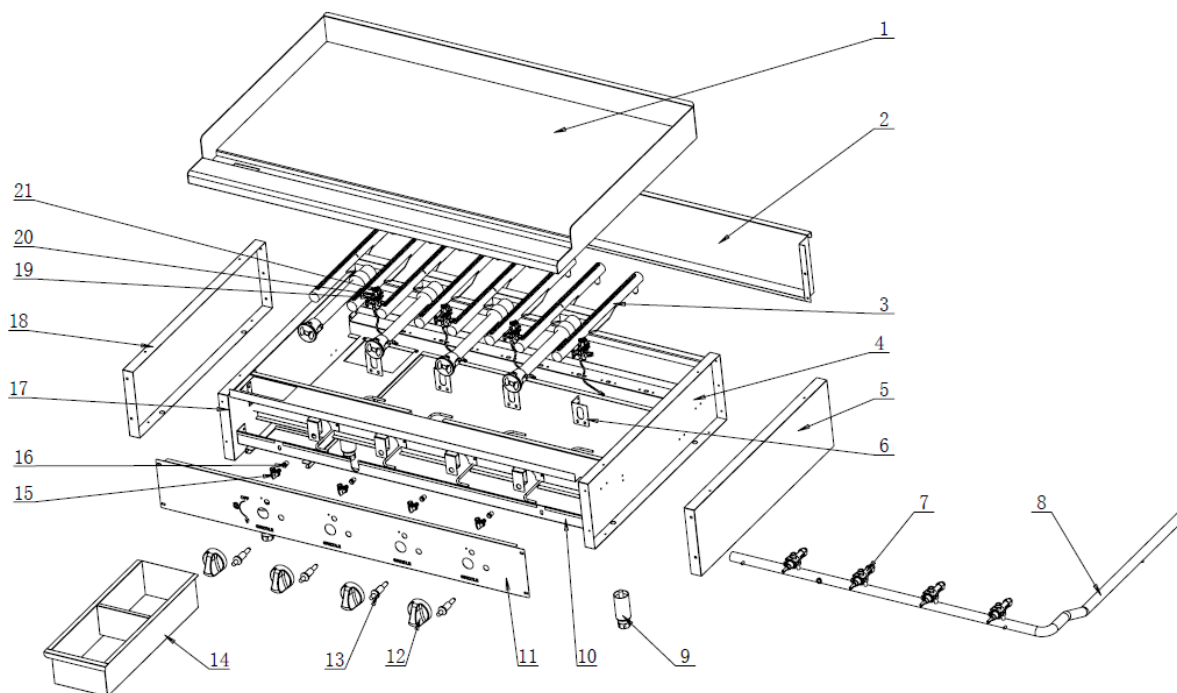
Symptoms	Causes	Solutions
The pilot flame cannot be lit up.	<ol style="list-style-type: none"> <li>1. Pressure in gas pipeline is not enough.</li> <li>2. The fire hole is blocked.</li> <li>3. The valve is defective.</li> </ol>	<ol style="list-style-type: none"> <li>1. Regulate the reducing valve.</li> <li>2. Unblock the fire hole.</li> <li>3. Replace the valve.</li> </ol>
The pilot flame is on but the main burner cannot be lit up.	<ol style="list-style-type: none"> <li>1. Pressure in gas pipeline is not enough.</li> <li>2. Main nozzle is blocked.</li> <li>3. The gas control valve is defective.</li> <li>4. The damper is too large.</li> </ol>	<ol style="list-style-type: none"> <li>1. Regulate the reducing valve.</li> <li>2. Unblock the nozzle.</li> <li>3. Replace the gas control valve.</li> <li>4. Turn down the damper.</li> </ol>
It has a light-back sound when turning off the gas supply.	<ol style="list-style-type: none"> <li>1. Nozzle diameter does not match with the gas supply.</li> <li>2. The damper is too large.</li> <li>3. The supply pressure is too low.</li> <li>4. Flow of connected pipe is not enough.</li> </ol>	<ol style="list-style-type: none"> <li>1. Regulate the nozzle diameter.</li> <li>2. Adjust the damper.</li> <li>3. Regulate the reducing valve.</li> <li>4. Increase the permitted flow.</li> </ol>
It has red flame and black smoke.	<ol style="list-style-type: none"> <li>1. Nozzle diameter does not match with the gas supply.</li> <li>2. The damper is too small.</li> <li>3. Gas nearly runs out.</li> <li>4. Gas ingredients are volatile in gas peak period.</li> </ol>	<ol style="list-style-type: none"> <li>1. Regulate the nozzle diameter.</li> <li>2. Adjust the damper.</li> <li>3. Replace the gas.</li> <li>4. Decrease the gas flow. Increase it after the peak.</li> </ol>

For Service and spares, contact Hargill, 53 Competition Way, Wangara, Western Australia, 6065.  
PH: 08 9249 7222

**Servicing shall be carried out by authorized personnel only**



## Exploded drawing and parts:



## Parts list:

Item	Part description	HAR-PGR1200	HAR-PGR900	HAR-PGR600
		Usage		
1	HRG-48 griddle plate	1	x	x
	HRG-36 griddle plate	x	1	x
	HRG-24 griddle plate	x	x	1
2	HRG-48 flue plate	1	x	x
	HRG-36 flue plate	x	1	x
	HRG-24 flue plate	x	x	1
3	burner	4	3	2
4	chamber right plate	1	1	1

5	right side panel	1	1	1
6	thermocouple/ignition electrode mounting plate	4	3	2
7	gas valve	4	3	2
8	HRG-48 inlet gas pipe	1	x	x
	HRG-36 inlet gas pipe	x	1	x
	HRG-24 inlet gas pipe	x	x	1
9	leg,adjustable	4	4	4
10	HRG-48 front lower beam	1	x	x
	HRG-36 front lower beam	x	1	x
	HRG-24 front lower beam	x	x	1
11	HRG-48 front panel	1	x	x
	HRG-36 front panel	x	1	x
	HRG-24 front panel	x	x	1
12	knob	4	3	2
13	piezo ignitor	4	3	2
14	oil tray	1	1	1
15	orifice elbow	4	3	2
16	36# orifice,for natural gas	4	3	2
	51# orifice,for propane gas	4	3	2
17	chamber left plate	1	1	1
18	left side panel	1	1	1
19	thermocouple	4	3	2
20	pilot	4	3	2
21	ignition electrode	4	3	2