Gas Lava Rock Grill

(Counter-top)

JUS-TRH40

JUS-TRH60

User's Manual

Dear client & user,

Firstly, thanks for purchasing and using our product. All the information and guidelines of this user's manual comply with certain applicable regulations, which come out from our long-term accumulated knowledge and experience as well as current project development situations.

Limited to some special structures, additional specified items or new technology changes, the actual usage situation might be some different from what stated in this user's manual. Should you have any question, please do not hesitate to contact the manufacturer via the method shown in back cover page of this manual.

For safety purpose and efficient operation, please make this document available to users for reference. Do have them to read this manual carefully before carry out any action on this device, especially when starting.

The manufacturer declines any responsibility in the event users do not follow the instructions or guidelines stated here.

The user's manual should be placed close to the device, in convenience of users' reading before operation. We have the full authority to reserve the further technical changes of the device, in the scope of further performance improvement characteristic development.

Warning

- Any self-modification, wrong installation, adjustment or maintenance can lead to property loss or casualty. Please contact the manufacturer for any adjustment or maintenance, and have the work done by a trained & qualified person.
- For your safety sake, please keep the machine away from any liquid, gas or other object, which is flammable or explosive.
- The device should not be operated by those who have physiological, perceptual or psychological barrier or disability, as well as those who are lack of necessary knowledge or experience to use, including children. Only in conditions of being given sufficient supervise & guarantee of personal safety, as well as proper instructions & guidance, those who were mentioned above can make some particular operation of this device.
- Keep children away from the device.
- Preserve this manual safely. When passing on/selling the device to a third party, the manuals must be handed over along with the device. All users must operate the device complying with the user's manual and related safety guidelines.
- If the appliance is placed near walls, partitions or kitchen furniture and the like, it is advisable to make these facilities with non-combustible material, otherwise cover them with non-combustible heat-resistant material, and pay attention to fire prevention regulations.
- The appliance should be installed in a well-ventilated area, if possible under a vent hood, in compliance with all applicable regulations in force. This will ensure that all burnt gases produced during the combustion process are completely exhausted.
- To avoid accidents, please do not change the damper and smoke vent that are needed during combustion.
- This appliance is only applicable to low-pressure gas regulating valve. It may cause loss and casualty if you use other regulating valves.
- Fire warning: If you smell the gas, please keep away from fire. Do not light up any device or touch the electronic switch. Do not use any phone in the building either. Close the main gas valve immediately and call the professional personnel to maintain it. The gas valve controller should operate only in hands without any tools. Do not rotate the controller by force or try to fix it if you fail to do so. Operate by force or maintain improperly will lead to large gas leakage or deflagration easily. The manufacturer won't bear any responsibility for fire accidents caused by improper operation or maintenance.

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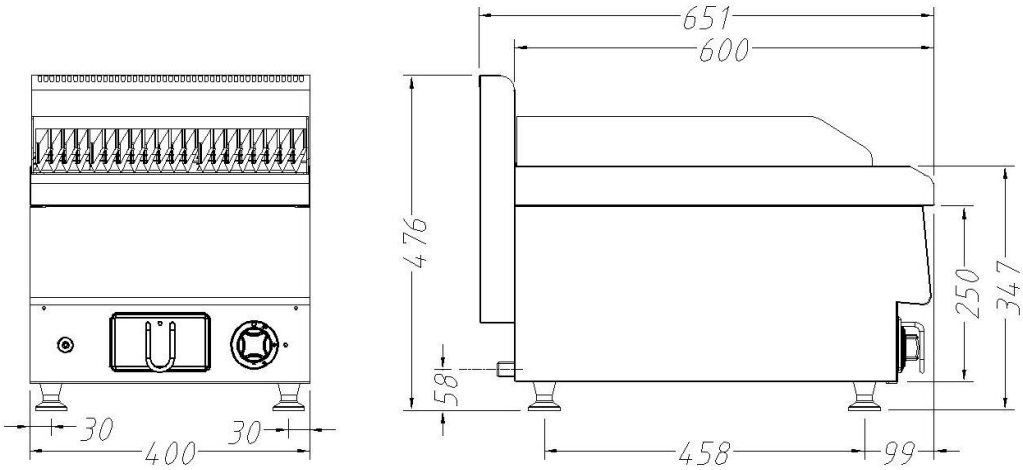
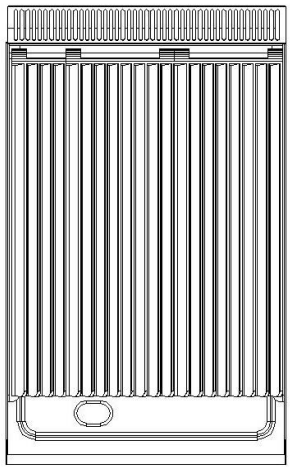
1. Functional Introduction

This product is manufactured by our company, which is combined with advantage from home and abroad. It is novel in design, reasonable in structure, easy in operation, durable in using, convenient in maintenance. It is equipped with efficient stainless steel tubular combustor, flame failure protection device and pulse igniter. Also, it has pilot flame standby function. Therefore, it is the ideal equipment for hotel, supermarket, western restaurant, fast-food restaurant and food industry.

2. Structure Schematic Diagram:

JUS-TRH40





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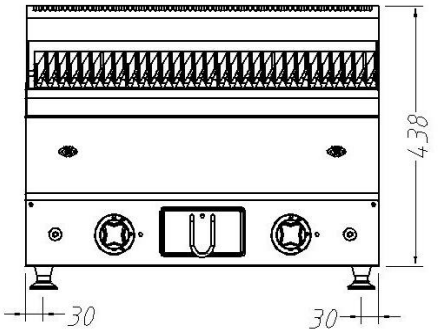
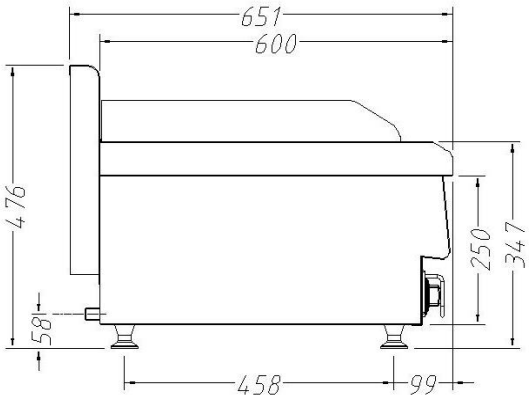
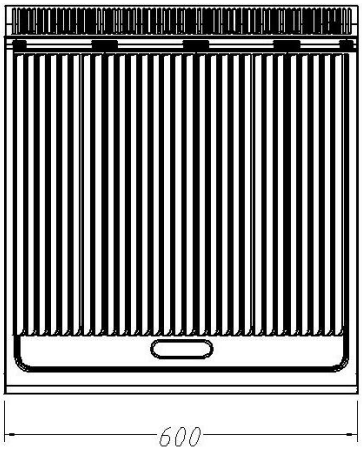






Structural & functional features:

1. The countertop is made under high drawing craft; smooth and no corner to hide dirt.
2. The grill netting is firm and durable, not easy to be out of shape.
3. Equipped with flame failure protection device and thermocouple safety device
4. High thermal efficiency, energy saving, small quantity of flue gas produced, safety and reliability.
5. Suitable for various gases.

3. Basic Features & Parameters

Model			**JUS-TRH40**	**JUS-TRH60**
Dimension（mm）			400×650×475	600×650×475
Height of Working Table（mm）			335	335
Thermal Power（kW）			7.2	14.4
Gas Type	LPG	Pressure（Pa）	2800-3700	2800-3700
		Gas Consumption（kg/h）	0.6	0.6×2
	NG	Pressure（Pa）	2000-2500	2000-2500
		Gas Consumption（m^3/h）	0.73	0.73×2
Temperature（℃）			120-200	120-200
Gas Inlet Size			R 1/2″	R 1/2″
Weight（kg）			45	67

4. Precautions & Recommendations

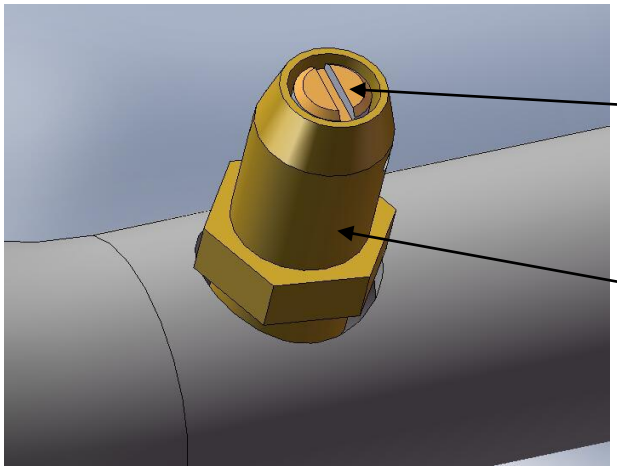
4.1 Transportation and Storage

During transportation, the machine should be carefully handled and do not put it upside down to prevent from damaging to the shell and inside. The packaged machine should be stored in a ventilated warehouse without corrosive gas. If it needs to be stored in open air temporarily, measurement against raining is needed.

4.2 Notice for Installment

1. Installation should be operated by professional technician.
2. The appliance can be installed as a counter top type. Also you can dismantle the 4 legs, and then screw the body with the cabinet, but first you should have a matched cabinet.
3. The appliance should be both installed and serviced in accordance with all applicable regulations and standards in force.
4. The appliance should be installed separately or assembled with other device in stated range.
5. The appliance is not suitable for built-in installation. Because the appliance will be working without enough oxygen supplying due to the restriction space and the combustion products cannot be discharged from the kitchen immediately and completely, which is very harmful to the operators' health.
6. Do not install it on flammable floor or other combustible objects. If it is installed on the countertop, please use refractory material or material that is uneasy to be lit up on the countertop to ensure the safety of users and normal operation of machine.
7. Consider the weight of the appliance, please install on the floor or countertop.
8. It is advisable to install the appliance in a well ventilated room or under an extractor hood. The appliance may be installed as a single unit or together with others. In both cases, if it is installed near a wall of inflammable material, a minimum distance of 150mm from the side and back walls must be observed. In the event that it is not possible to observe this distance, protective measures must be taken (e.g. use of sheets of refractory material) which ensure that the temperature of the walls is within the established safety limits.
9. After installation, please place horizontally and keep firm. Do not sway when using.
10. Before installation, please remove the outer plastic film and sweep away residue on the stainless steel sheet with a proper material.
11. Do not use gas that is not applicable for this appliance as fuel, neither do high pressure and medium pressure regulating valves. (This appliance is only use low pressure regulating valve.)
12. A gas quick-acting switching-off valve which should be installed upstream the appliance and easy to reach is needed before installation.

13. Make sure that the applicable gas is the same as the gas supply. If not, please stop using.
14. The pipeline that connecting to the appliance should be connected with proper metal tube. Make sure that there is no gas leakage.
15. If the gas pipe pressure is higher or lower than the rated pressure at 15%, please install a pressure regulator to adjust the gas pressure to ensure the rated pressure.
16. After connecting the appliance to the gas system, check for leaks at joints and pipe fittings; to do so, use soapy water or a specific leak detector (spray). “No flaming!”
17. Check the gas supply pressure after installation.
18. Gas supply pressure can be measured with a liquid-filled pressure gauge (for example, a U-shaped pressure gauge, minimum scale division 0.1 mbar) or a digital gauge. Procedure as follows:
    - Remove the panel, unscrew the screw on the pressure port (picture 2)；
    - Place the pressure gauge；
    - Start up the appliance by following the instructions in the user’s manual；
    - Check supply pressure；
    - After the check, remove the pressure gauge；
    - Replace the sealing screw.



Picture 2

4.3 Special Notice

1. Installation and maintenance should be operated by professional personnel or qualified person when first using.
2. This product is a commercial machine which needs to be operated by trained people. Not applicable for home use.
3. Please keep the integrity of the appliance and remove the outer wrapping. If you have any questions, call the specialist and stop using the appliance. In case of danger, keep the wrapping materials away from children. (For the materials are plastic bags, nails and so on.)
4. When first using, the duration of ignition is a little longer because of the air in the new pipe. If the ignition cannot be light up, turn off the Ignition switch and turn on it 3 minutes later to prevent from deflagration.
5. Do not use gas which is not applicable as fuel. Neither do high pressure and medium pressure regulating valves. Make sure the applicable gas is the same as the gas supply. If not, please stop using.
6. Turn the appliance off when leaving or finish working.
7. This product is only for commercial use.
8. This product is only designed for meat grilling, not applicable for other uses.
9. No swaying or tilting when using!
10. Do not dismantle or self-modify the appliance.
11. Dismantlement and self-modification may cause casualty.
12. Do not pat the product and put heavy object onto the product.
13. Do not put any object in the smoke vent of the heater.
14. Abnormal operation may cause damage and danger.
15. High temperature may cause scald.
16. Do not touch the appliance directly with hands due to high temperature during or after operation.
17. Do not destroy the control panel with hard or sharp objects.
18. Do not spray water directly to the product to prevent damages of fittings like electrical equipment and control valve.
19. To prevent damages caused by surface oxidation and chemical action, please clean the stainless-steel surface regularly.
20. Correct installation, professional operation and continuous maintenance can ensure a good performance and extend the machine’s service life.
21. Satisfactory performance is guaranteed. To save energy, please avoid using the appliance under circumstance of finishing working or bad performance.

5. Working Instructions & Operation Flow

➢ Heat the grill for more than half an hour before food cooking. Preheat the lava rock and chute grate. The lava rock and cast iron can save heat.

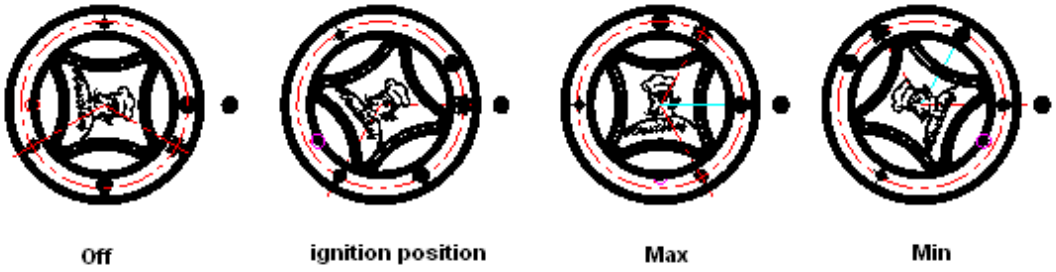
5.1 Ignition: (see Picture 3 & 4)

- Turn ● on control knob to align with 0 position and make the valve in off state.
- Turn the control knob to ✷ position and press the pulse igniter simultaneously. See Picture 4 (It cannot be lit up after several ignitions due to the air existing in the pipe when first ignition. The pilot flame can be lit up when the air is exhausted completely and the gas outflows.)
- Loose the knob after ignition. (That is to say, do not press the knob.)
- Turn the control knob to , the main combustor works in maximum power.
- Turn the control knob to , the main combustor works in minimum power.

5.2 Flameout: (see Picture 3 & 4)

- Turn the control knob to ● and align with 0 position. Cut the gas off.

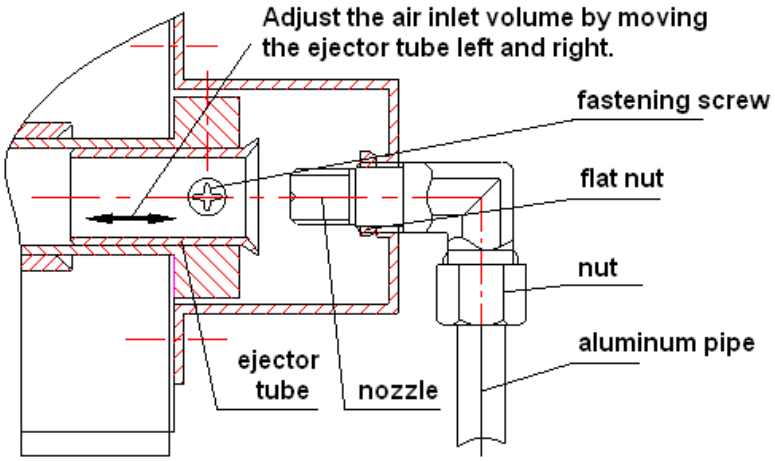
Picture 3



Picture 4

5.3 Replace the main flame nozzle: (see chart below)

- Prepare two proper open spanners and a cross screwdriver.
- Discharge the control panel with cross screwdriver. Then discharge the nozzle with two open spanners. Replace with a matched one, screw the flat nuts tightly and connect the nut and aluminum pipe.
- Make sure the parts are screwed tightly and there is no gas leakage. Then install the control panel with a cross screwdriver.

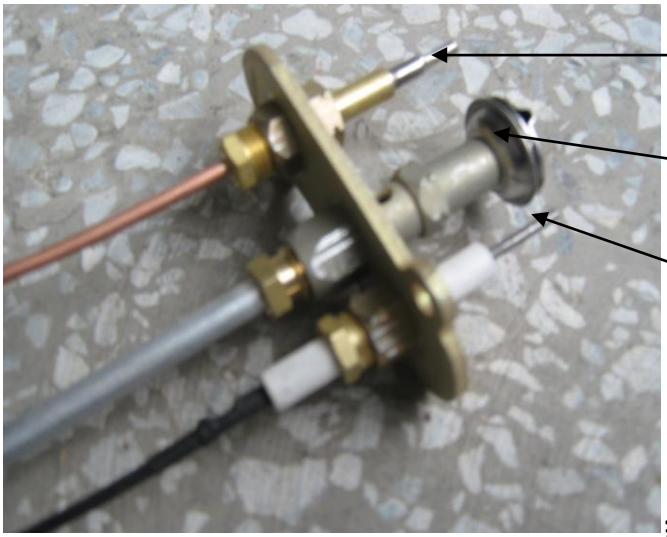


5.4 Adjust the air inlet volume:

- Unscrew the fastening screw with a cross screwdriver. Pull the ejector set out or push into to reduce or increase the air inlet volume.

5.5 Replace the pilot flame nozzle: (see chart below)

- Place a proper spanner on the nut of the pilot flame nozzle to balance the twisting stress.
- Discharge the screw that fixed the thermocouple and remove the thermocouple with a proper spanner.
- Discharge the nut that fixed the Aluminum pipe and remove the Aluminum pipe. Then discharge the pilot flame nozzle.
- Replace with a proper one. The primary air needs no adjustment.



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6. Routine Inspection

It is necessary to check the machine daily.
Check the machine regularly can avoid serious accident happens.
Stop using if user feels that there are some problems in the circuit or machine.
Check the situation of the machine before or after using every day.

Before using: Whether the machine is tilted?
Whether the control panel is damaged?

During using: Whether there is strange smell or vibration noise?
Whether the flame of the combustor is normal? Any light back or flameout?
Whether the power is normal?

7. Cleaning and Maintenance

1. Clean the grate before using: take the grate down, remove the dirt on the cast iron surface with a Nylon brush. Then clean it with mild detergent and water, wipe it with a cloth.
   - Place the cast iron plain grate on the grill, fill it with lava rock. Then install the chute grate to the pre-set location. Pay attention that the semi-circle side of the chute grate should be set in the stainless steel cylinder to fix.
   - Two ways to put the chute grate: flat and tilted. Set the slot of chute grate in the round steel to fix according to your requirement. Heat the grill for more than half an hour before cooking, preheat the lava rock and chute grate. The lava rock and cast iron can save heat.
   - Do not clean the surfaces of the appliance and grate with abrasive material or scrape it with wire brush or anything sharp that may damages the surfaces.
2. Do not clean the surface with spraying water or caustic material (HCL).
3. Do not change the ventilation rate that needed in combustion.
4. If not going to use, shut the gas off.
5. If not going to use the appliance for a long time, please clean the surface with a gasoline cloth and store it in a well-ventilated warehouse.
6. General inspection should be made at least once a year by professional personnel.
7. 90% of the appliance are metals (stainless steel、Iron、Aluminum、galvanized metal sheet) which can be recycled by appointed treatment plant according to the environmental standards of the equipment installation countries. (No littering!)

8. Failure Analysis &Trouble Shooting

Troubles	Causes	Solutions
The pilot flame cannot be ignited.	1. Installation or connection of the igniter is incorrect. 2. The plug or plug cord of igniter damages. 3. The gas pressure is not enough. 4. The nozzle is block. 5. The thermocouple is unscrewed. 6. The thermocouple breaks down. 7. The gas control valve is defective.	1. Please install correctly. 2. Replace corresponding parts. 3. Adjust the relief valve. 4. Unblock the nozzle. 5. Screw the thermocouple. 6. Replace the thermocouple. 7. Replace the gas control valve.
The pilot flame is on but the main burner cannot be ignited.	1. The gas pressure is not enough. 2. The nozzle of the main burner is block. 3. The gas control valve is defective.	1. Adjust the relief valve to get a proper pressure. 2. Unblock the nozzle. 3. Replace the gas control valve.
It has a light-back sound when the gas valve is turned off.	1. The diameter of nozzle does not match with the gas source. 2. The gas pressure is too low. 3. The flow of the connected pipe is not enough.	1. Please adjust the nozzle diameter. 2. Adjust the relief valve. 3. Increase the permitted flow.
It has red flame, and black smoke.	1. The diameter of nozzle does not match with the gas source. 2. The gas nearly runs out. Please replace the gas. 3. The gas ingredient reduces the gas flow in gas peak demand.	1. Please adjust the nozzle diameter. 2. Replace the gas. 3. Decrease the gas flow and Increase it after the peak demand of the gas.

Aforementioned troubles are just for reference. If any failure occurs, please stop using, and inform the professional technicians to check and repair. Safety is first and maintenance should be done after shut down power supply and gas supply.