

Read this manual before operation

# Installation & Operation Manual

## GAS RANGE WITH OVEN

### HFSSO-24/36/60

### HFSSO-36-G12/HFSSO-36-G24

### HFSSO-60-G24/HFSSO-60-GS24

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.

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.

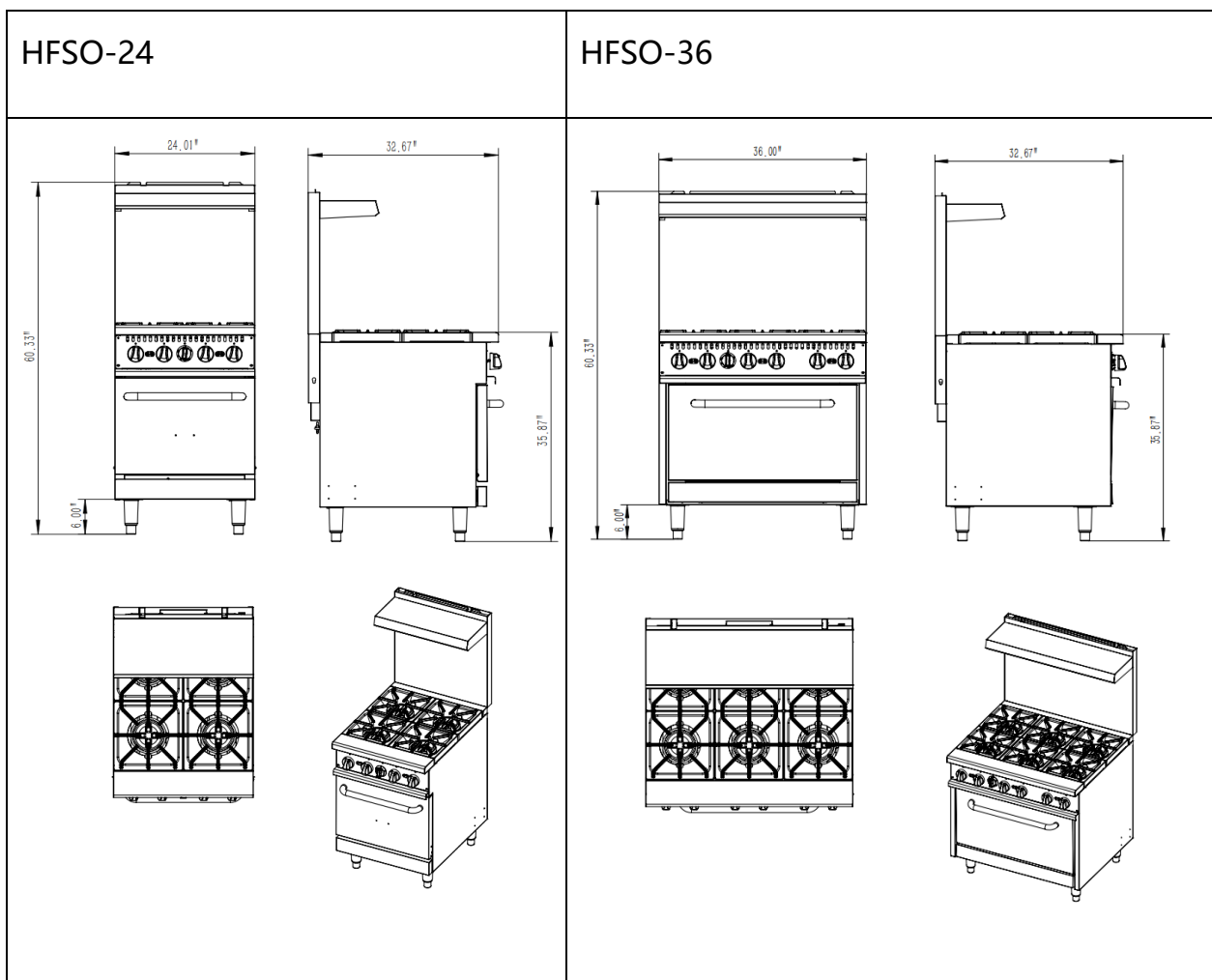
# WARNINGS

- Do not touch any hot surfaces
- Do not immerse unit in liquid at any time
- Do not operate unattended
- Do not use this unit for anything other than intended use
- Do not use outdoors
- Always use on a firm, dry and level surface at least 12" from walls or any other obstruction
- Keep children and animals away from unit
- Any incorrect installation, alterations, adjustments and/or improper maintenance can lead to property loss and injury. All repairs should be done by authorized professionals only
- If gas odor is detected, shut unit down at main shutoff valve and contact service company
- Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any appliance
- Do not ship or store upside down
- This unit should be stored in a well ventilated area that contains no corrosive gases.
- Do not get this unit wet
- This product is for commercial use only.

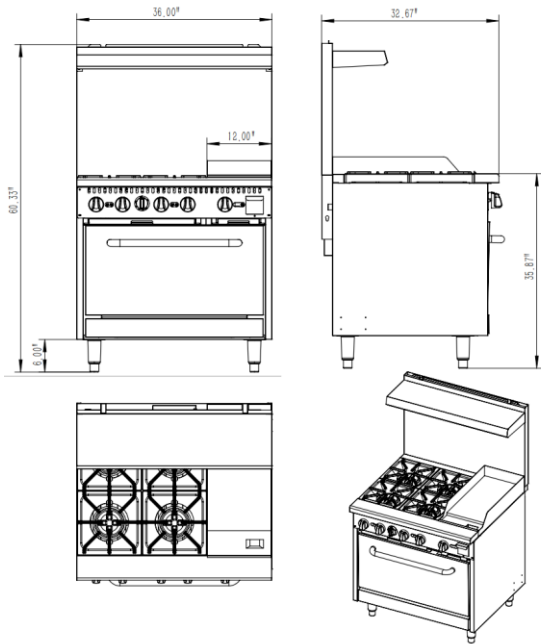
## Product parameters table

Model No.	Dimension(mm)	Oven Temp. Range (°F)	Power (Top Burner)	Power (Oven)	Power (Griddle)
HFSO-24	610*827*1532mm	250-550°F	4×30000BTU	30000BTU	/
HFSO-36	915*827*1532mm	250-550°F	6×30000BTU	30000BTU	/
HFSO-60	1524*827*1532mm	250-550°F	10×30000BTU	2×30000BTU	/
HFSO-36-G12	915*827*1532mm	250-550°F	4×30000BTU	30000BTU	20000BTU
HFSO-36-G24	915*827*1532mm	250-550°F	2×30000BTU	30000BTU	2×20000BTU
HFSO-60-G24	1524*827*1532mm	250-550°F	6×30000BTU	2×30000BTU	2×20000BTU
HFSO-60-GS24	1524*827*1532mm	250-550°F	6×30000BTU	2×30000BTU	3×12000BTU

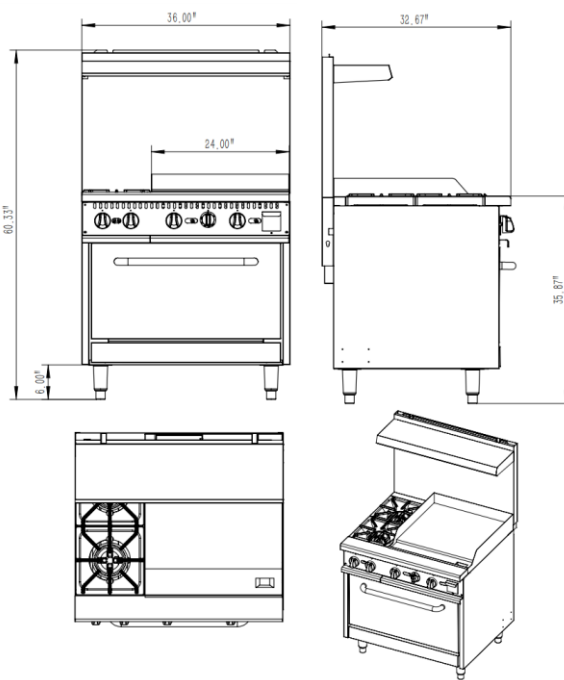
## Product Structure



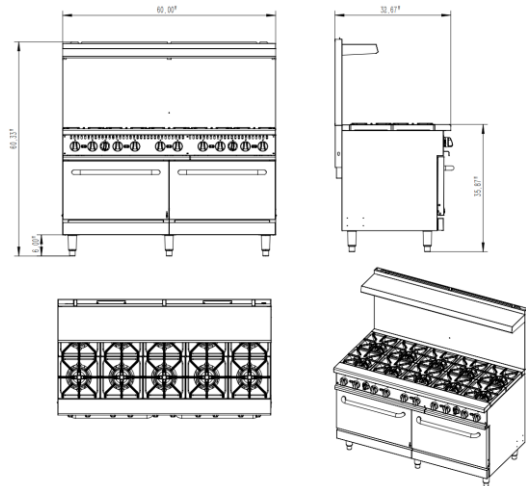
### HFSO-36-G12



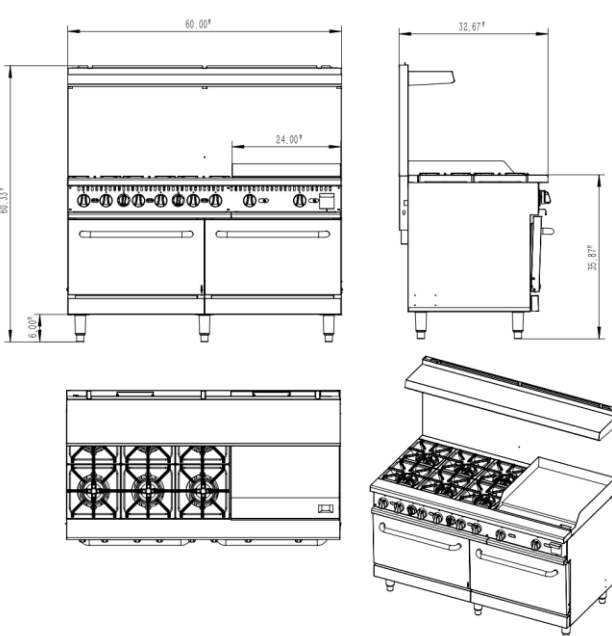
### HFSO-36-G24



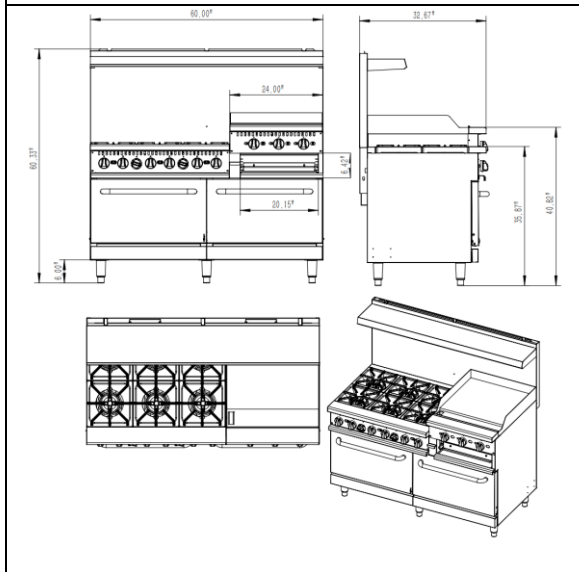
### HFSO-60



### HFSO-60-G24



## HFSO-60-GS24



## INSTALLATIONS

### Before Installation

1. Installation of this device should be operated by professional technicians.
2. This device is suitable for area whose altitude is lower than 2000 ft. If it is higher than this altitude, please contact the manufacturer
3. Installation of this unit should conform to provisions of gas safety, installation and usage.
4. This device should be kept a minimum clearance of 4" away from non-combustible objects on both sides and 8" at the back (e.g. walls, windows etc.). Do not install on a flammable floor or around other combustible objects.
5. This item is intended to sit on a solid and level floor.

## To Install

1. Level the device with a level gauge. The height can be adjusted by the adjustable feet.
2. The mounting position should be well-ventilated with proper hood exhaust system that will ensure that all the burnt gases produced during use are completely disposed of.
3. After installation, level the device and keep stable. Do not sway or tilt during operation.
4. A quick-acting switching-off gas valve should be installed upstream the device where is easy to be reached before installation.
5. Make sure you are using the correct gas supply that is specified for this model. If the gas supply is not intended for this model, do not proceed with installation.
6. This unit is applicable to low pressure regulating valves only. High pressure regulating valves and medium pressure regulating valves are not to be used.
7. Check to make sure the connection pipe to the unit has no leaks.
8. If the connecting pipe pressure is 10% higher or lower than the rated pressure, please install a pressure regulator.
9. 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 Test!"
10. Check the gas supply pressure after installation.
11. Gas supply pressure can be measured with a liquid-filled pressure gauge (e.g. a U-shaped pressure gauge, minimum scale division 0.1mbar) or a digital gauge. Procedure as follows:

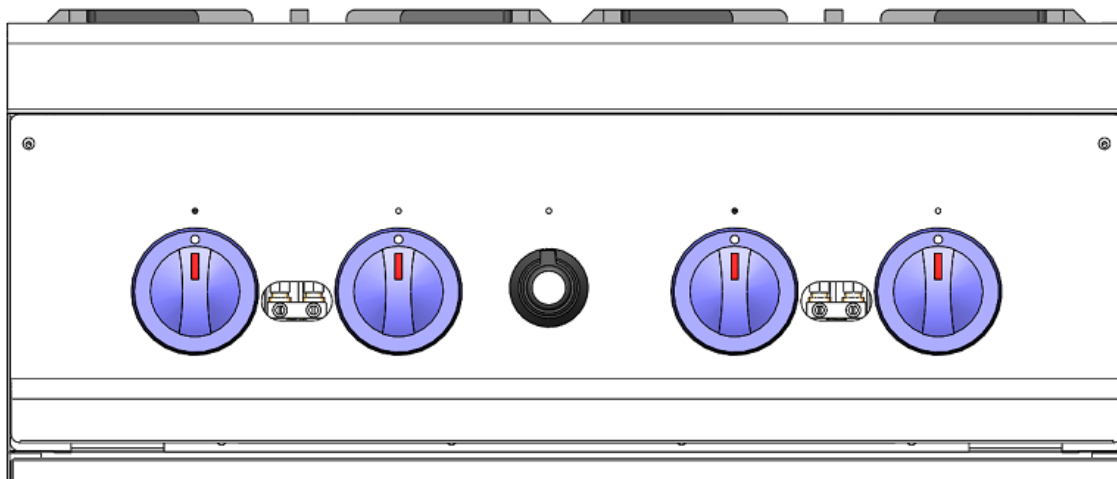
1. Remove the panel and unscrew the screw on the pressure port

2. Place the pressure gauge
3. Start up the appliance by following the instructions in this owner's manual
4. Check supply pressure
5. After the check, remove the pressure gauge
6. Replace the sealing screw.

## OPERATING INSTRUCTIONS AND CONTROLS:

When turning on for the first time please be advised that it might take a little longer to ignite due to the air existing in the pipe. If the ignition does not light, turn off the ignition switch and wait 3 minutes to try again.

### Controls



### Burner

1. Connect the gas supply and ignite the pilot flame with a lighter. If the unit hasn't been used in a while or if this is the first lighting, ignition might take a little longer (about two or three minutes).

2. Press the corresponding valve knob of burner and turn 90 degrees counterclockwise.



The burner will be ignited, and the flame is Max. To set the flame to Min, rotate 180 degrees counterclockwise to the Min flame position, the flame is Min.

3. When finished turn off main burner by rotating the knob anticlockwise to off position.

## **Oven**

1. Before using the oven, please clean the unit completely, especially the oven chamber. Remove all the packing materials and film from shipping. Before cleaning the stainless steel accessories, please make sure that the used detergent contains no corrosive substance and is okay for stainless steel surface cleaning. Then dry with a clean cloth.

2. When first using, it is normal that there is unpleasant smell. (Make sure that the smell is not caused by gas leakage.) In fact, that is produced by overheating of the insulating material and oil residue during heating process of the metal. If the oven is used for the first time, do not put any food into the chamber, set the temperature to 550°F and heat till the smell is gone.

3. When first using, the duration of ignition may be a little longer due to the air existing in the new pipe. It cannot be ignited until all the air is exhausted.

4. During ignition, please open the lid under the door downward, press down the knob and rotate 61° counterclockwise, align with the salient point and press down. Ignite the pilot flame with lighter via the ignition hole.

5. After the pilot flame is ignited, press the knob for more than 20 seconds to heat up the thermocouple. If the ignition is out when you loosen the knob, repeat this operation.

6. Keep rotating the temperature control knob anticlockwise to ignite the main burner of the oven. Select appropriate temperature according to food requirement. The oven temperature can be controlled between 250°F and 550°F..

7. To turn off the burner: Rotate the knob clockwise to strip mark and align with the salient point.

**Note:**If the gas type needs to be changed from NG to LPG,the nozzles of main burner and pilot flame should be replaced.

### **GAS CONVERSION:**

- Conversion from Natural Gas to Liquid Propane (LP) or vice versa may 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.
- Natural Gas Orifice is 39# (top)/ 33#(oven) / 47#(griddle)/53#(griddle/salamander)
- Liquid Propane Gas Orifice is 52# (top)/ 50#(oven) /54#(griddle)/57#(griddle/salamander)
- Orifice size is marked on the spud

## **CLEANING & MAINTENANCE**

It is important to check the machine daily. Checking the machine regularly can avoid serious accidents. Stop using if user feels that there are some problems with the unit. Check the situation of the machine before and after using every day.

Before using: Is the machine tilted?

Is the control panel damaged?

During using: Is there a strange smell or vibration noise?

Is the flame color of burner normal? Any light back or flame out?

1. Before cleaning, please turn off all gas valves.

2. Please clean the burners and tray for odds and ends regularly.
3. Clean the stainless steel surface with warm soapy water every day and rinse it completely. During cleaning, do not clean the stainless steel surface with abrasive detergent, brush or scraper etc. The residual iron scale may cause rusting. Do not clean the surface with chlorine cleanser (bleach, hydrochloric acid etc.). Do not clean the floor where the device locates with corrosive substance (e.g. KCL).
4. Clean the dirt on the burners and baffle regularly.
5. Do not modify the ventilation volume needed during combustion.
6. Accumulation of the iron substance (e.g. Material that formed by iron rust dissolving in water in the pipe, especially when the device is not used for a long time.). Therefore, to avoid accumulation of such substance, clean the food swill that is difficult to clean with stainless steel scraper or brush containing no iron substance instead of steel brush.
7. Accumulation of substance containing acidic ingredient, e.g. vinegar, lemon juice, spices, salt etc. Thus, please keep these substances away from long contacting with the stainless steel accessories. Vapor of acid solution will damage the surface of the device seriously.
8. A complete cleaning every day will ensure a good service and extend the service life of the unit. Clean the unit with a wet towel containing suds or a detergent, rinse it with water and dry it with a clean cloth. Do not clean the device with steel brush, which may cause rust. Similarly, do not contact the unit with substance containing iron.
9. Splotch and abrasion of the stainless steel surface: Scrape and black stain can be cleared away by artificial sponge. During cleaning, the direction should be the same as the polishing.
10. Rusting: To remove the rusting, please contact the industrial detergent manufacturer to find a proper detergent to remove such rusting. Industrial rust removal

products may do. After cleaning, rinse it with clear water. If necessary, neutralize the residual acid chemical compound with alkaline detergent.

11. To avoid rusting of the unit, please make sure that the residual salt inside or outside the device is cleared away.

12. After cleaning, to avoid short-time incomplete combustion, the fire hole of the burner should be clear.

13. If not going to use the item at any time, please turn off the gas valve upstream the device or the power main switch.

14. If not going to use the device for a long time, please clean the stainless steel surface with a gasoline cloth and store it in a well-ventilated area without corrosive gas.

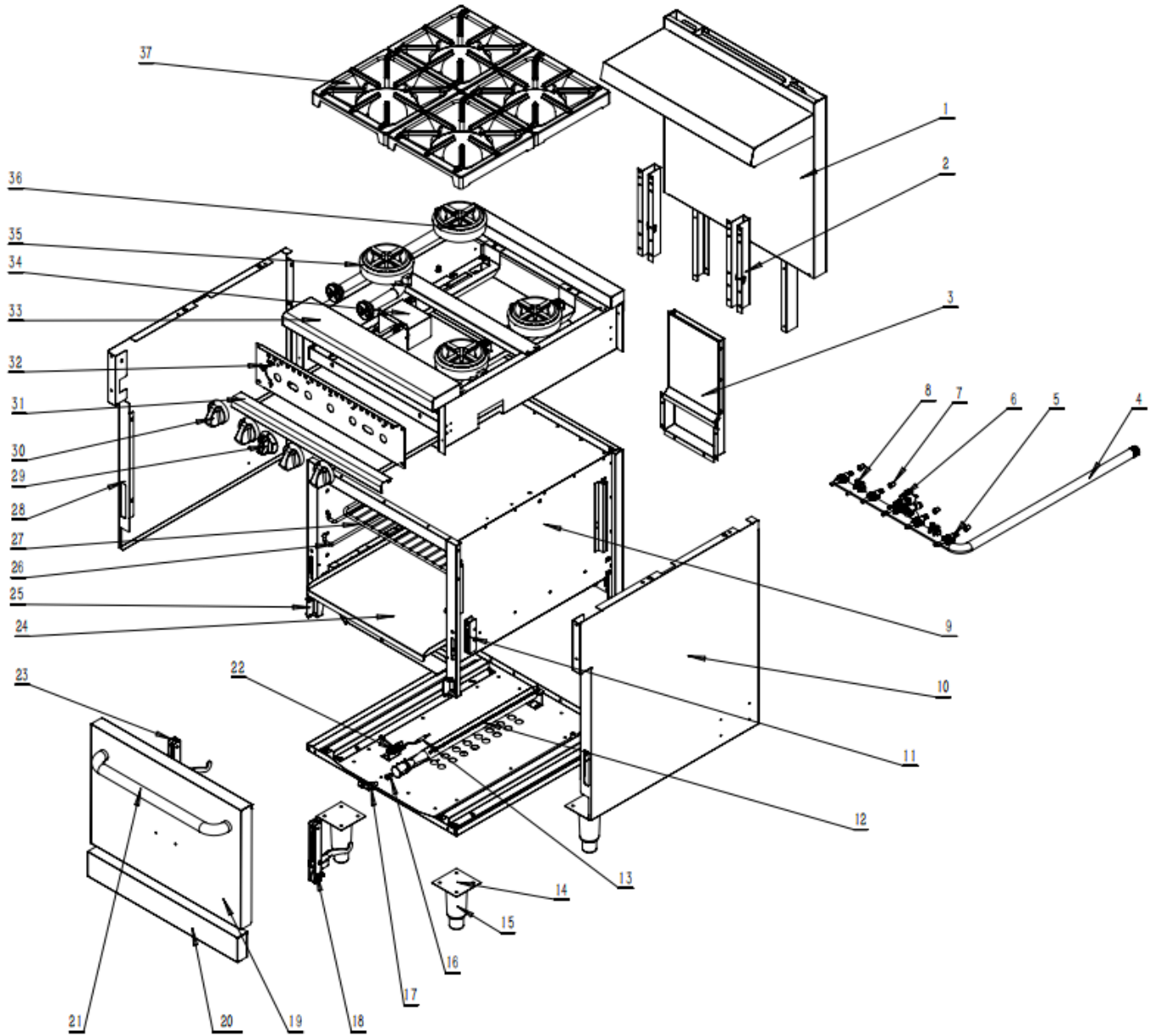
15. 90% of the device is metals (stainless steel, iron, aluminum, galvanized metal sheet) which can be recycled by appointed treatment plant according to environmental standards of the equipment installation countries. (No littering!)

## Failure Analysis & Trouble Shooting:

Symptoms	Causes	Solutions
The pilot flame cannot be ignited.	1. The gas pressure is not enough.	1. Adjust the relieve valve to get a proper pressure.
	2. The nozzle is blocked.	2. Unblock the nozzle.
	3. Connection of the thermocouple is loose.	3. Please screw the thermocouple.
	4. The thermocouple is defective.	4. Replace the thermocouple
	5. The gas control valve is malfunctioning.	5. Please replace the gas control valve.
The pilot flame is on but the main burner cannot be ignited.	1. The gas pressure is not enough.	1. Adjust the relieve valve to get a proper pressure.
	2. The main burner nozzle is blocked.	2. Unblock the nozzle.
	3. The gas control valve is defective.	3. Replace the gas control valve.
It has a light-back sound when the gas supply is turned off.	1. The diameter of nozzle does not match with the gas supply.	1. Please adjust the nozzle diameter.
	2. The damper is too large.	2. Adjust the damper.
	3. The gas pressure is too low.	3. Adjust the relieve valve.
	4. The flow of the connected pipe is not enough.	4. Increase the permitted flow.
It has red flame, and black smoke.	1. The diameter of nozzle does not match with the gas supply.	1. Please adjust the nozzle diameter.
	2. The damper is too small.	2. Adjust the damper.
	3. The gas nearly runs out. Please replace the gas.	3. Replace the gas.
	4. The gas ingredient reduces the gas flow in gas peak demand.	4. Decrease the gas flow and increase it after the peak demand of the gas.

# Exploded Drawing

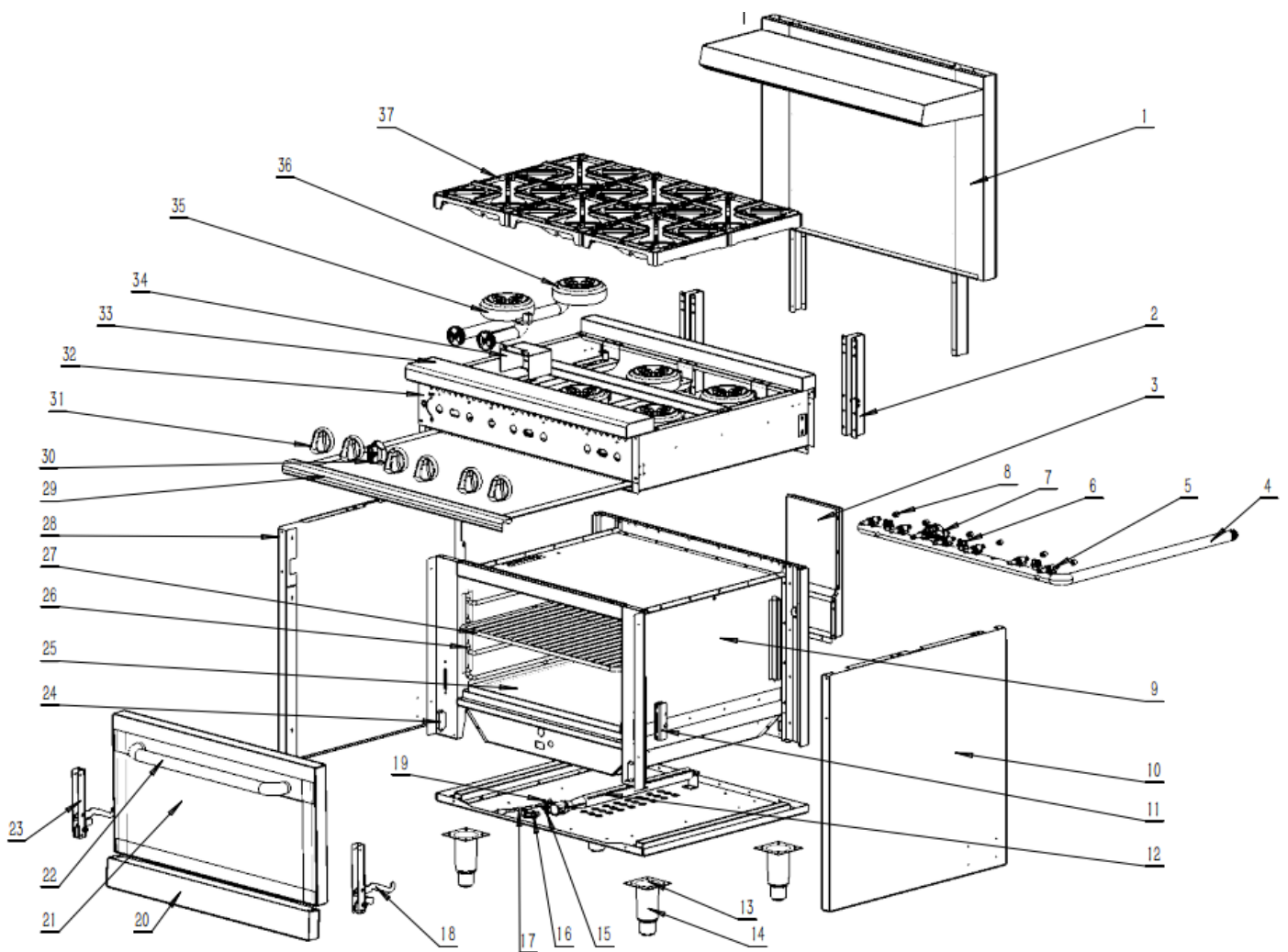
HFSO-24



## Part List

No.	Description	Qty.
1	Back board	1
2	Guiding rail groove	2
3	Flue assembly	1
4	Inlet pipe	1
5	Gas valve	4
6	Thermostat	1
7	Nozzle	4
8	Adjusting valve	2
9	Chamber assembly	1
10	Right board	1
11	Door hinge base	2
12	burner	1
13	Thermocouple	1
14	Installation board	4
15	Adjustable foot	4
16	Nozzle	1
17	Elbow for nozzle	1
18	Door hinge,right	1
19	Outside board	1
20	Front decoration plate	1
21	Handle	1
22	Nozzle	1
22	Nozzle	1
23	Door hinge,left	1
24	Bottom plate	1
25	Door hinge base	2
26	Grid holder	4
27	Oven grid	2
28	Left board	1
29	Knob	1
30	Knob	4
31	Crumb tray	1
32	Front board	1
33	Front board	1
34	Insulation board	1
35	Burner,short	2
36	Burner,long	2
37	Grate	4

# HFSO-36



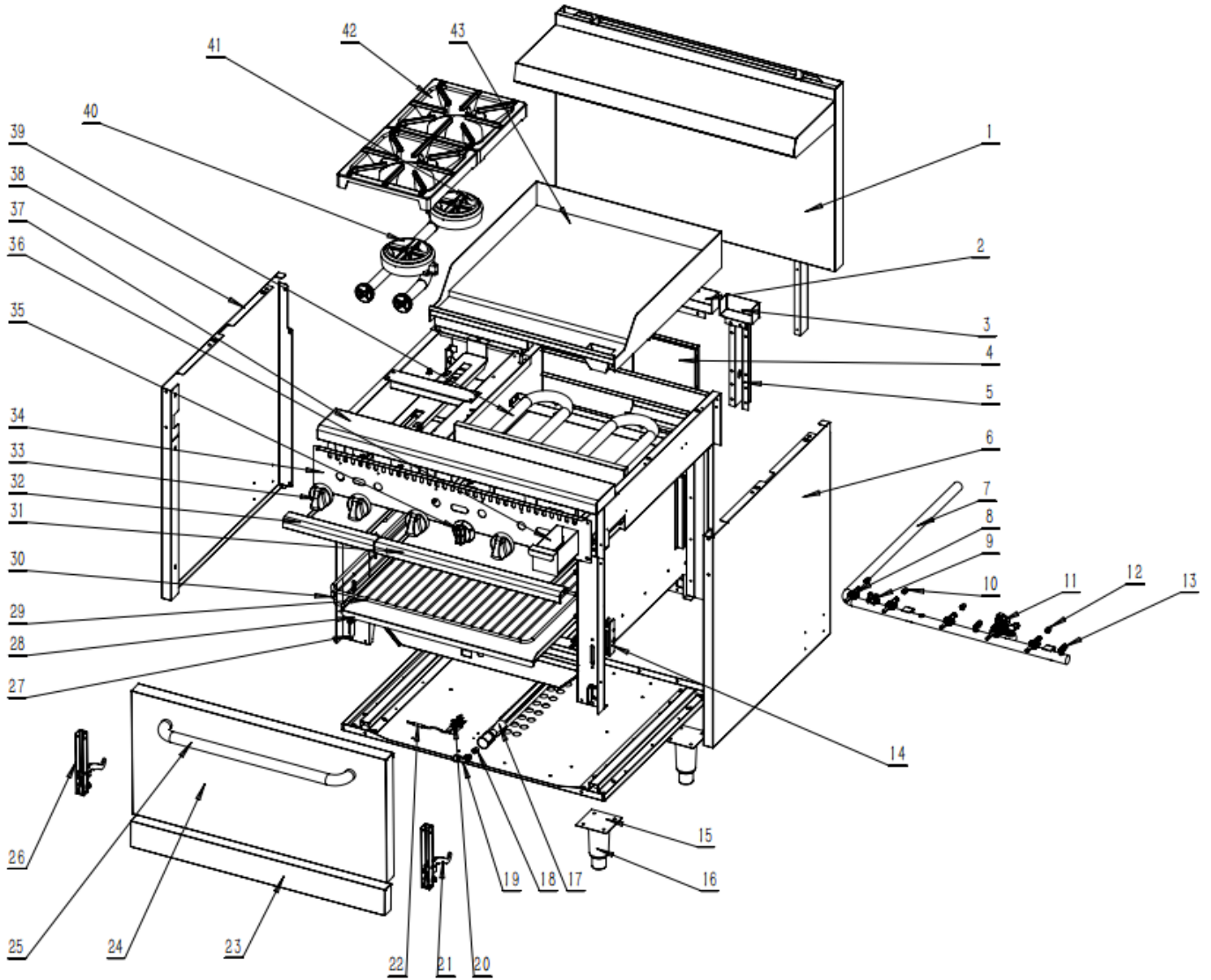
## Part List

No.	Description	Qty.
1	Back board	1
2	Guiding rail groove	2
3	Flue assembly	1
4	Inlet pipe	1
5	Gas valve	6
6	Adjusting valve	3
7	Thermostat	1
8	Nozzle	6
9	Chamber assembly	1



10	Right board	1
11	Door hinge base	2
12	burner	1
13	Installation board	4
14	Adjustable foot	4
15	Nozzle	1
16	Elbow for nozzle	1
17	Thermocouple	1
18	Door hinge,right	1
19	Nozzle	1
19	Nozzle	1
20	Front decoration plate	1
21	Outside board	1
22	Handle	1
23	Door hinge,left	
24	Door hinge base	2
25	Bottom plate	1
26	Grid holder	4
27	Oven grid	2
28	Left board	1
29	Crumb tray	1
30	Knob	1
31	Knob	6
32	Front plate	1
33	Front plate	1
34	Insulation board	1
35	Burner,short	3
36	Burner,long	3
37	Grate	6

# HFSO-36-G24

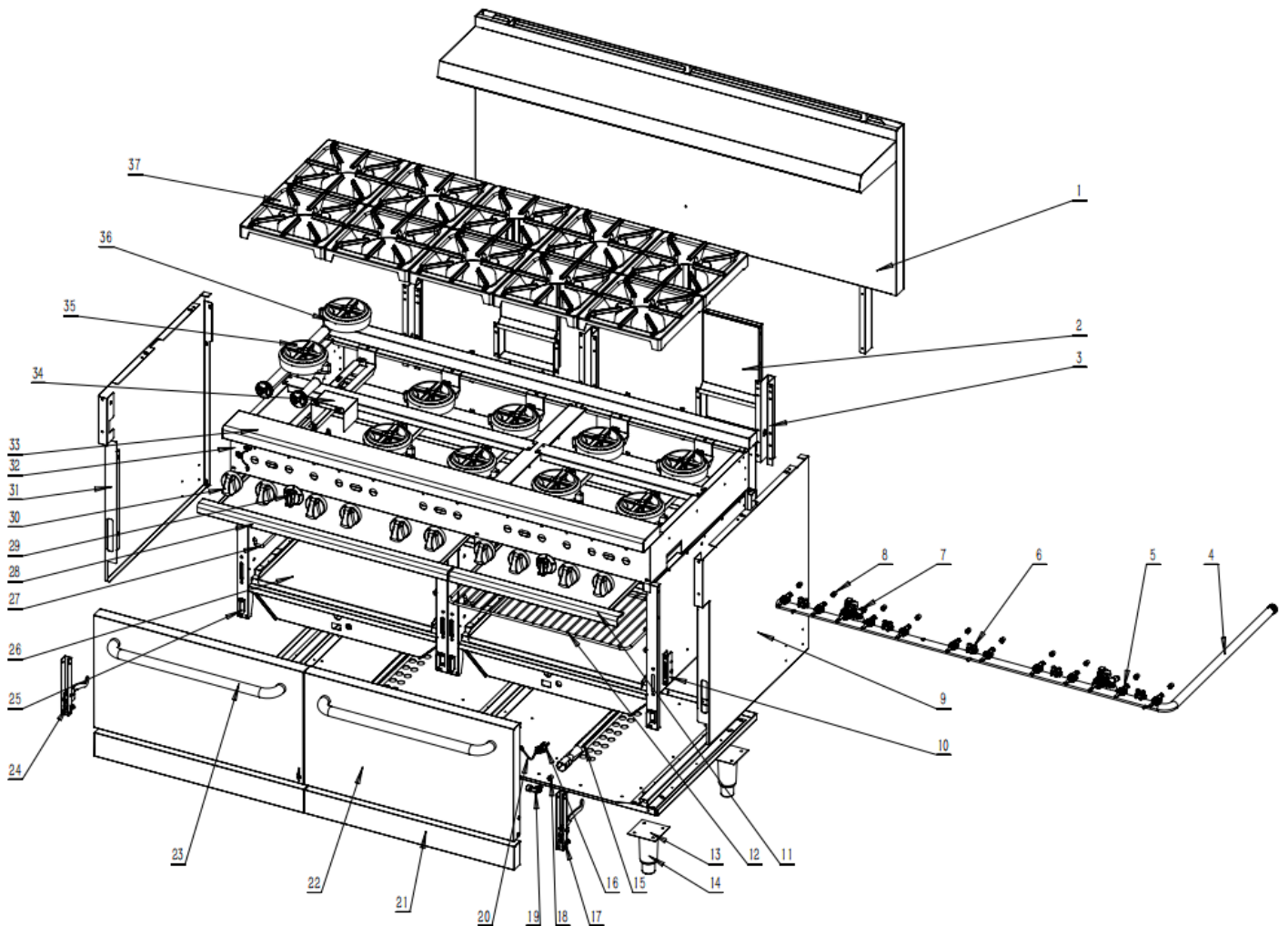


## Part List

No.	Description	Qty.
1	Back board	1
2	Flue plate	1
3	Flue plate	1
4	Flue assembly	1
5	Guiding rail groove	2
6	Right board	1

7	Inlet pipe	1
8	Gas valve	4
9	Adjusting valve	1
10	Nozzle	2
11	Thermostat	1
12	Nozzle	2
13	Adjusting valve	2
14	Door hinge base	2
15	Installation board	4
16	Adjustable foot	4
17	burner	1
18	Nozzle	1
19	Elbow for nozzle	1
20	Nozzle	1
20	Nozzle	1
21	Door hinge,right	1
22	Thermocouple	1
23	Front decoration plate	1
24	Outside board	1
25	Handle	1
26	Door hinge,left	1
27	Door hinge base	2
28	Bottom plate	1
29	Oven grid	2
30	Grid holder	4
31	Crumb tray	1
32	Crumb tray	1
33	Knob	2
34	Front plate	1
35	Knob	1
36	Crumb tray	1
37	Front plate	1
38	Left board	1
39	Burner assembly	2
40	Burner,short	1
41	Burner,long	1
42	Grate	2
43	Griddle	1

# HFSO-60

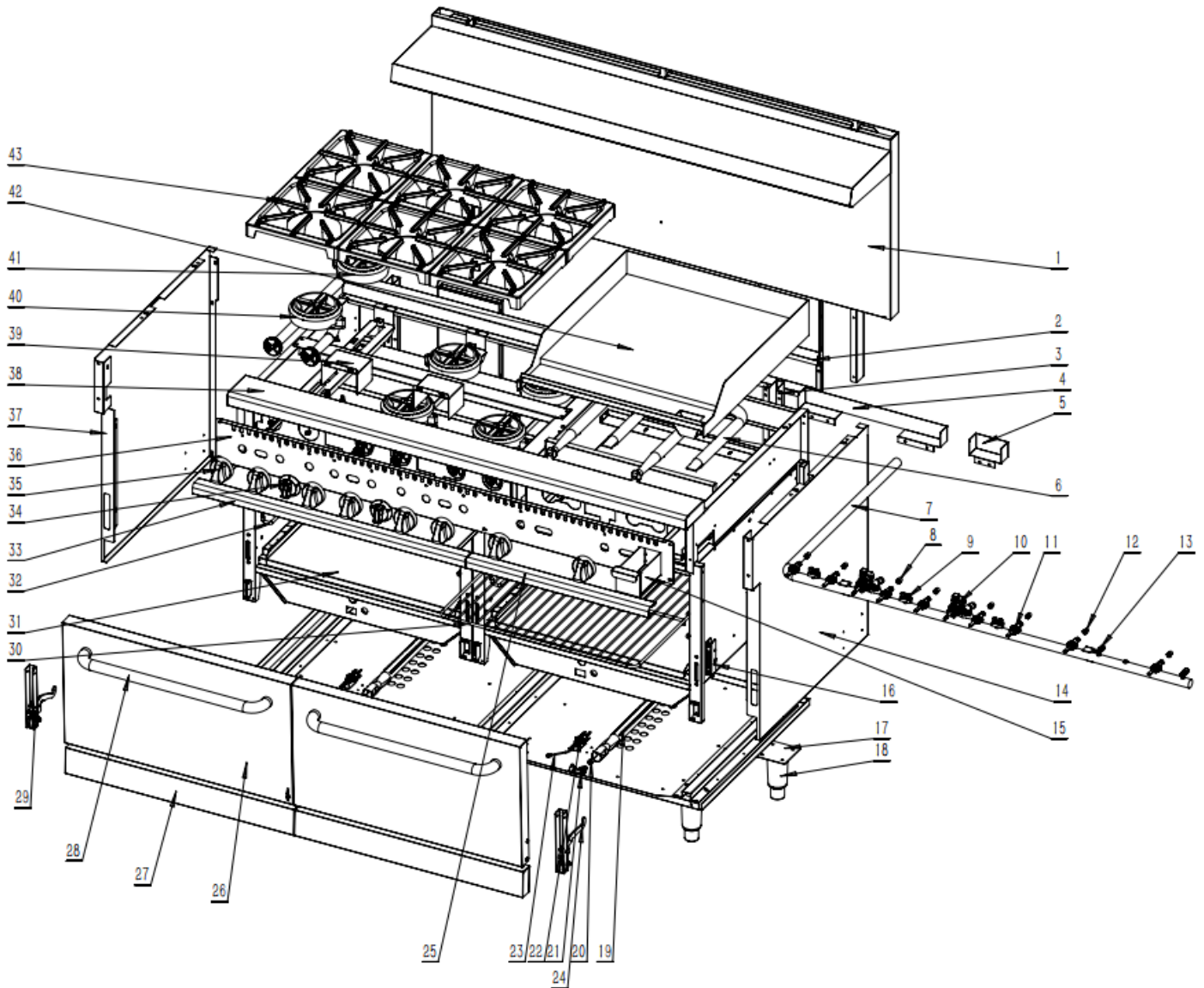


## Part List

No.	Description	Qty.
1	Back board	1
2	Flue assembly	2
3	Guiding rail groove	3
4	Inlet pipe	1
5	Gas valve	10
6	Adjusting valve	5
7	Thermostat	2
8	nozzle	10
9	Right board	1
10	Door hinge base	4
11	Crumb tray	1

12	Oven grid	4
13	Installation board	6
14	Adjustable foot	6
15	burner	2
16	Nozzle	2
16	Nozzle	2
17	Door hinge,right	2
18	nozzle	2
19	Elbow for nozzle	2
20	Thermocouple	2
21	Front decoration plate	2
22	Outside plate	2
23	Handle	2
24	Door hinge,left	2
25	Door hinge base	4
26	Bottom plate	2
27	Grid holder	8
28	Crumb tray	1
29	Knob	2
30	Knob	10
31	Left board	1
32	Front board	1
33	Front board	1
34	Insulation board	2
35	Burner,short	5
36	Burner,long	5
37	Grate	10

# HFSO-60-G24

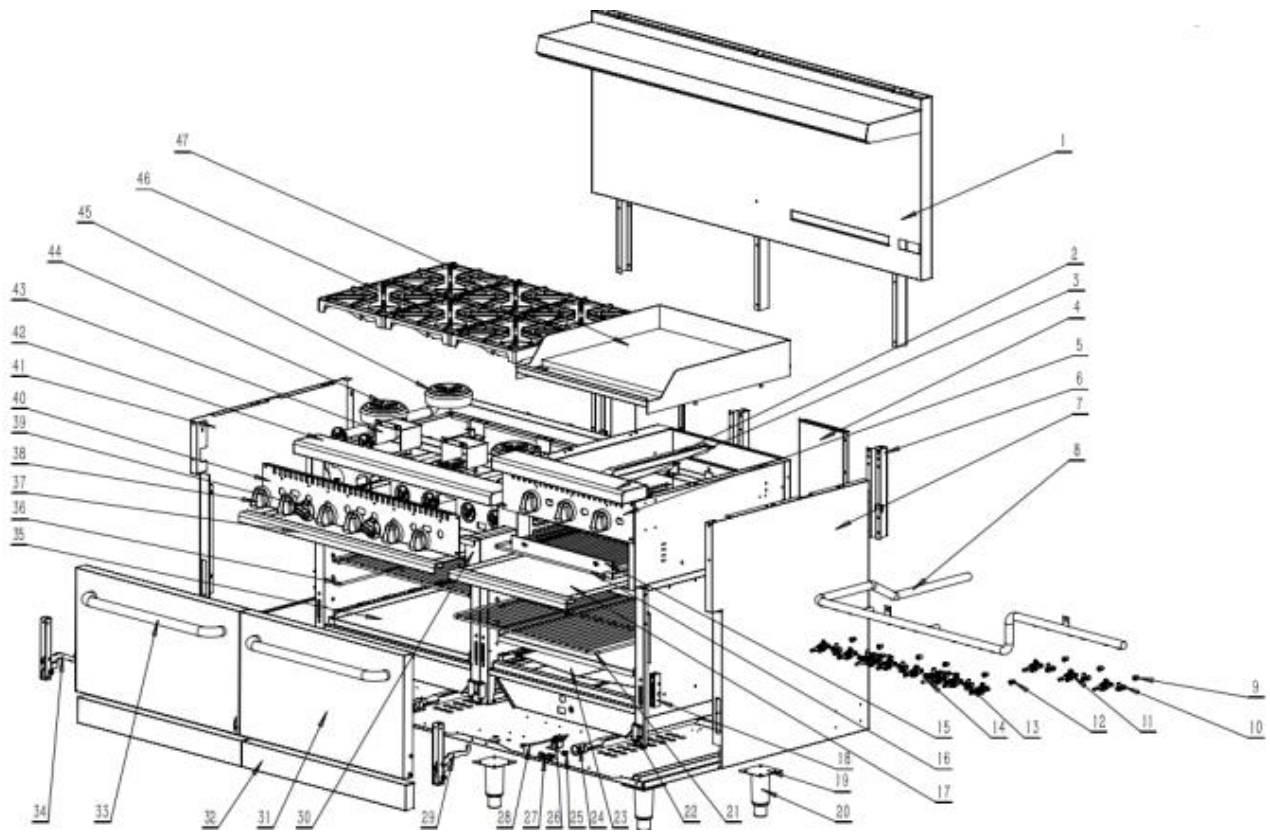


## Part List

No.	Description	Qty.
1	Back board	1
2	Flue assembly	2
3	Guiding rail groove	3
4	Flue plate	1
5	Flue plate	1
6	Burner assembly	2
7	Inlet pipe	1
8	Nozzle	6

9	Adjusting valve	3
10	Thermostat	2
11	Gas valve	8
12	Nozzle	2
13	Adjusting valve	2
14	Right board	1
15	Crumb tray	1
16	Door hinge base	4
17	Installation board	6
18	Adjustable foot	6
19	Burner	2
20	Nozzle	2
21	Elbow for nozzle	2
22	Nozzle	2
22	Nozzle	2
23	Thermocouple	2
24	Door hinge,right	2
25	Crumb tray	1
26	Outside board	2
27	Front decoration plate	2
28	Handle	2
29	Door hinge,left	2
30	Oven grid	4
31	Bottom plate	2
32	Grid holder	8
33	Crumb tray	1
34	Knob	2
35	Knob	8
36	Front plate	1
37	Left board	1
38	Front plate	1
39	Insulation board	2
40	Burner,short	3
41	Burner,long	3
42	Griddle	1
43	Grate	6

# HFSO-60-GS24



## Part List

No.	Description	Qty.
1	Back board	1
2	burner	3
3	Front plate	1
4	Flue assembly	2
5	Front plate	1
6	Guiding rail groove	3
7	Right board	1
8	Inlet pipe	1
9	Nozzle	3
10	Adjusting valve	3
11	Gas valve	9
12	Nozzle	6
13	Adjusting valve	3
14	Thermostat	2



15	Insulation board	1
16	Grid for Salamander	1
17	Crumb tray	1
18	Door hinge base	4
19	Installation board	6
20	Adjustable foot	6
21	Oven grid	4
22	Door hinge base	4
23	Partition board	2
24	burner	2
25	Nozzle	2
26	Nozzle	2
26	Nozzle	2
27	Elbow for nozzle	2
28	Thermocouple	2
29	Door hinge,right	2
30	Crumb tray,griddle	1
31	Outside board	2
32	Front decoration plate	2
33	Handle	2
34	Door hinge,left	2
35	Bottom plate	2
36	Grid holder	8
37	Crumb tray	1
38	Knob	9
39	Knob	2
40	Front plate	1
41	Left board	1
42	Front plate	1
43	Insulation board	2
44	Burner,short	3
45	Burner,long	3
46	Grate	6
47	Griddle	1