

MERCURY



Mercury Gas Oven

Model: M24S-4F M36S-6F

Installation and Operation Instructions

NOTICE: This manual contains important safety instructions which must be strictly followed when using this equipment.

CAUTION: These models are designed, built, and sold for commercial use only. If these models are positioned so the general public can use the equipment, make sure that cautions, warnings, and operating instructions are clearly posted near each unit so that anyone using the equipment will use it correctly and not injure themselves or harm the equipment.

IMPORTANT FOR FUTURE REFERENCE

Please complete this information and retain this manual for the life of the equipment. For Warranty Service and/or parts, this information is required.

Model Number

Serial Number

Date Purchased



WARNING: For your safety, do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliances. Keep the area free and clear of combustible.



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.



WARNING : Instructions must be posted in a prominent location. All safety precautions must be taken in the event the user smells gas. Safety information can be obtained from your local gas supplier.



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Introduction

We are confident that you will be delighted with your Mercury Gas Oven, and it will become a most valued appliance in your commercial kitchen.

To ensure you receive the utmost benefit from your new Gas Oven, there are two important things you can do.

Firstly:

Please read the instruction book carefully and follow the directions given. The time taken will be well spent.

Secondly:

If you are unsure of any aspect of the installation, instructions or performance of your appliance, contact your dealer promptly. In many cases a phone call could answer your question.

CE Only:

These instructions are only valid if the country code appears on the appliance. If the code does not appear on the appliance, refer to the supplier of this appliance to obtain the technical instructions for adapting the appliance to the conditions for use in that country.

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 APPLIANCE.

WARNING:

INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THE USER SMELLS GAS ARE TO BE POSTED IN A PROMINENT LOCATION. THIS INFORMATION SHALL BE OBTAINED BY CONSULTING THE LOCAL GAS SUPPLIER.

WARNING:

GREAT CARE MUST BE TAKEN BY THE OPERATOR TO USE THE EQUIPMENT SAFELY TO GUARD IT AGAINST RISK OF FIRE.

- THE APPLIANCE MUST NOT BE LEFT ON UNATTENDED.
- IT IS RECOMMENDED THAT A REGULAR INSPECTION IS MADE BY A COMPETENT SERVICE PERSON TO ENSURE CORRECT AND SAFE OPERATION OF YOUR APPLIANCE IS MAINTAINED.
- DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPOURS OR LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.
- DO NOT SPRAY AEROSOLS IN THE VICINITY OF THIS APPLIANCE WHILE IT IS IN OPERATION.

CAUTION:

THIS APPLIANCE IS;

- FOR PROFESSIONAL USE AND IS TO BE USED BY QUALIFIED PERSONS ONLY.
- ONLY QUALIFIED SERVICE PERSONS ARE TO CARRY OUT INSTALLATION, SERVICING AND GAS CONVERSION OPERATIONS.
- COMPONENTS HAVING ADJUSTMENTS PROTECTED BY THE MANUFACTURER SHOULD NOT BE ADJUSTED BY THE USER/OPERATOR.
- DO NOT OPERATE THE APPLIANCE WITHOUT THE LEGS SUPPLIED FITTED.

Specifications

General

Commercial heavy duty oven.

Pack Contents

The following is included:

- Mercury Gas Oven
- 2pcs racks
- 4pcs Feet
- Instruction Manual

Gas Supply Requirements

	Natural Gas			Propane		
	M24S-4F	M36S-6F	M36S-4F-12F	M24S-4F	M36S-6F	M36S-4F-12F
Single burner Heat Input	32.5 MJ	32.5 MJ	32.5 MJ	32.5 MJ	32.5 MJ	32.5 MJ
Oven burner	26.5MJ	26.5MJ	26.5MJ	28MJ	32.5 MJ	32.5 MJ
Heat Total	156.5 MJ	221.5 MJ	189MJ	158 MJ	227.5 MJ	195MJ
Burner Operating	1.0 kPa			2.75 kPa		
Supply Pressure	1.0 kPa			2.75 kPa		
Gas Connection	¾" BSP Male			¾" BSP Male		

	Natural Gas			Propane		
	M24S-00-24F	M36S-2F-24F	M36S-00-36F	M24S-00-24F	M36S-2F-24F	M36S-00-36F
Single burner Heat Input	32.5 MJ	32.5 MJ	32.5 MJ	32.5 MJ	32.5 MJ	32.5 MJ
Oven burner	26.5MJ	26.5MJ	26.5MJ	28MJ	32.5 MJ	32.5 MJ
Heat Total	91.5 MJ	156.5 MJ	124MJ	93 MJ	162.5MJ	130MJ
Burner Operating	1.0 kPa			2.75 kPa		
Supply Pressure	1.0 kPa			2.75 kPa		
Gas Connection	¾" BSP Male			¾" BSP Male		

The burner operating pressure is to be measured at the gas control valve outlet test point with two burner operating at 'High' setting. The operating pressure is ex-factory set, through the appliance regulator and not to be adjusted, apart from when carrying out gas conversion, if required. (Refer to the 'Gas Conversion' section for details).

Minimum input of burner: Open burner: 23MJ for NG
 'U' burner: 21MJ for NG

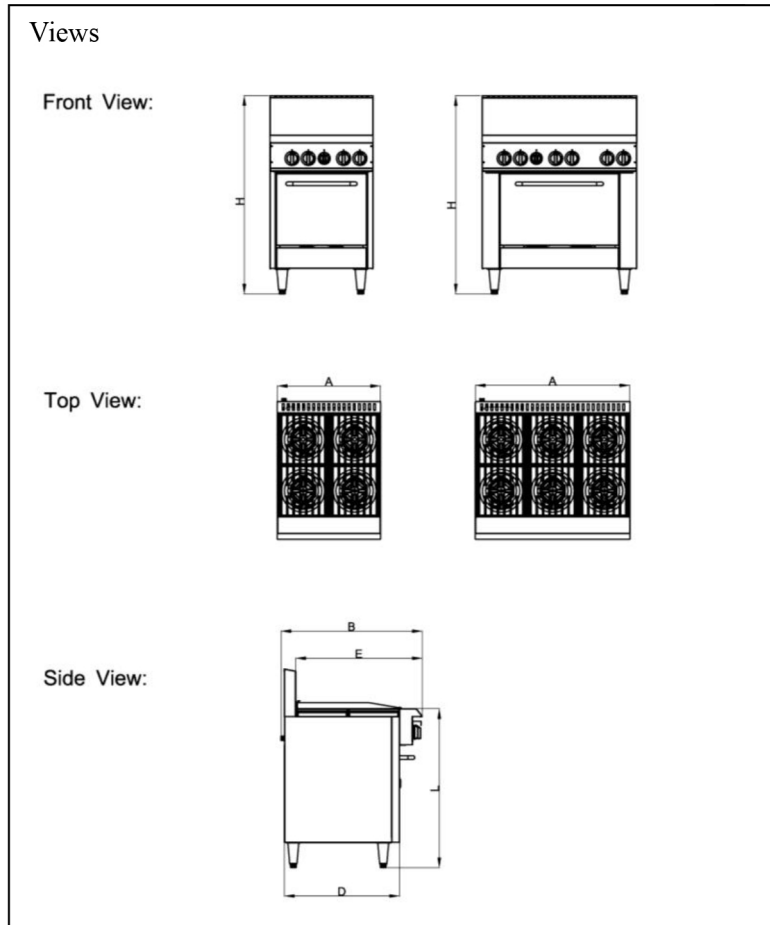
Size of the pan: The smallest pan for open burner is 100mm;
 The biggest pan for open burner is 300mm.

The highest temperature of griddle plate is 290°C (thermostat valve)

The highest temperature of griddle plate is 390°C (safety valve) .The burner operating pressure is to be measured at the gas control valve outlet test point with one burner operating at 'High' setting. The operating pressure is ex-factory set, through the appliance regulator and not to be adjusted.

Dimensions

Dimensions for Freestanding Oven



Model Number	Exterior Dimensions (Millimeters)							
	A	B	C	D	E	F	H	L
M24S-4F	610	835		680	750		1175	940
M36S-6F	915	835		680	750		1175	940

Installation

Installation Requirements

NOTE:

- **It is most important that this appliance is installed correctly and that operation is correct before use. Installation shall comply with local gas, health and safety requirements.**
- **This appliance shall be installed with sufficient ventilation to prevent the occurrence of unacceptable concentrations of substances harmful to health.**

Our Gas Ovens are designed to provide years of satisfactory service and correct installation is essential to achieve the best performance, efficiency and trouble-free operation.

This appliance must be installed in accordance with National installation codes and in addition, in accordance with relevant National / Local codes covering gas and fire safety.

Australia:

AS 5601/AG 601 (to be AS 5601)- Gas Installations

New Zealand:

NZS 5261 - Gas Installation.

United Kingdom:

Gas Safety (Installation and Use) Regulations 1998

BS 6173-Installation of Catering Appliances.

BS 5440-1&2 Installation Flueing & Ventilation.

Ireland:

IS 820-Non Domestic Gas Installations.

Installations must be carried out by qualified persons only. Failure to install equipment to the relevant codes and manufacturer's specifications shown in this section will void the warranty.

Components having adjustments protected by the manufacturer are only to be adjusted by an authorized service agent. They are not to be adjusted by the installation person.

Step 1: Unpacking

IMMEDIATELY INSPECT FOR SHIPPING DAMAGE

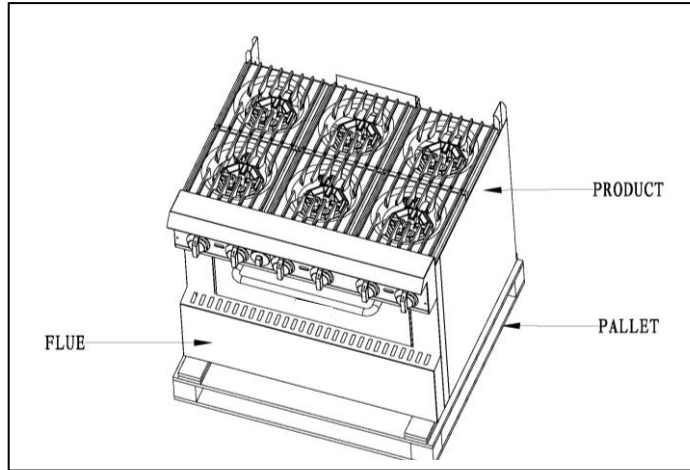
All containers should be examined for damage before and during unloading. The freight carrier has assumed responsibility for its safe transit and delivery. If damaged equipment is received, either apparent or concealed, a claim must be made with the delivering carrier.

Apparent damage or loss must be noted on the freight bill at the time of delivery. The freight bill must then be signed by the carrier representative (Driver). If the bill is not signed, the carrier may refuse the claim. The carrier can supply the necessary forms.

A request for inspection must be made to the carrier within 15 days if there is connected damage or loss that is not apparent until after the equipment is uncreated. The carrier should arrange an inspection. Be certain to hold all contents plus all packing material.

Installation (Continued)

1. Remove screws and disassemble the top and side wood packaging.
2. Remove plastic wrap and set aside the flue box.
3. Remove the Gas Oven from the pallet for installation.

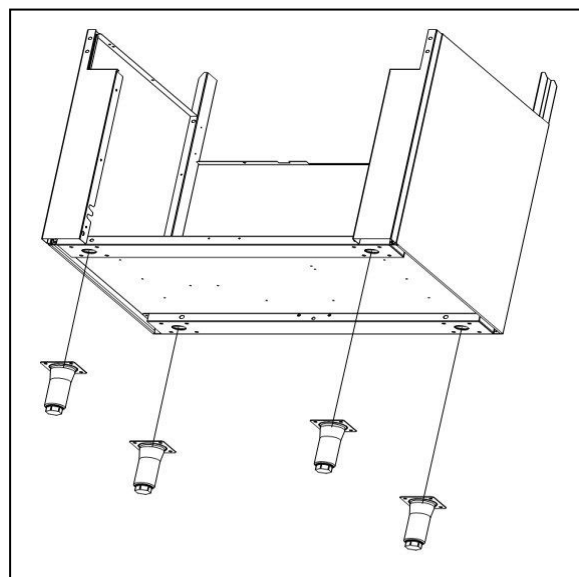


Step 2a: Install the Legs

A set of four legs is packed with units ordered with legs. (For units ordered with casters (option), go to step 2b).

A threaded leg pad is fastened to the base frame at each corner. Each leg has a corresponding mating thread. The leg can be adjusted to overcome a slightly uneven floor.

1. Raise unit sufficiently to allow leg pads and legs to be attached. For safety, "shore up" and support the unit with an adequate blocking arrangement strong enough to support the load.
2. Attach the four leg pads to the bottom of the range using the lock washers and machine screws. The mounting holes are pre-drilled and threaded.
3. Screw the legs into the holes in the centers of the leg pads.
4. Lower unit gently onto a level surface. Never drop or allow the unit to fall.
5. Use a level to make sure that the range surface is level. The legs can be screwed in or out to lower or raise each corner of the range.
6. Go on to installation Step 3.



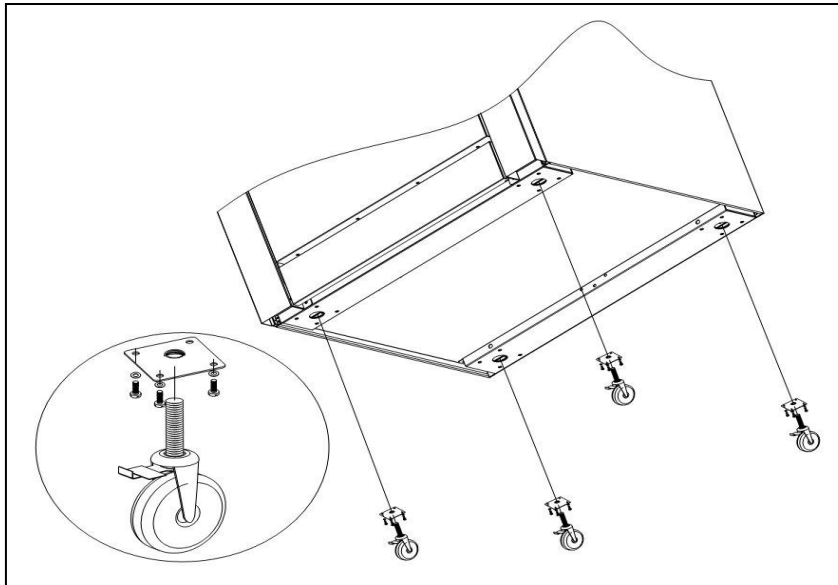
Installation (Continued)

Step 2b: Install Casters (options)

A set of four casters is packed with units ordered with casters (instead of legs).

A threaded leg pad is fastened to the base frame at each corner. Each caster has a corresponding mating thread. The caster can be adjusted to overcome a slightly uneven floor. Casters are provided with a Zerk fitting for proper lubrication when required.

1. Raise unit sufficiently to allow leg pads and casters to be attached. For safety, "shore up" and support the unit with an adequate blocking arrangement strong enough to support the load.
2. Attach the four leg pads to the bottom of the range using the lock washers and machine screws. The mounting holes are pre-drilled and threaded.
3. Screw the caster into the holes in the centers of the leg pads. Install the casters that have a locking brake under the front of the unit.
4. Lower unit gently onto a level surface. Never drop or allow the unit to fall.
5. Use a level to make sure that the range surface is level. The casters can be screwed in or out to lower or raise each corner of the range. After the unit has been leveled, tighten the lock nuts.
6. Secure the restraining-device bracket to a wall stud located as close as possible to the appliance connector inlet and outlet connections. Use four screws.



NOTICE

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 to limit the appliance movement.

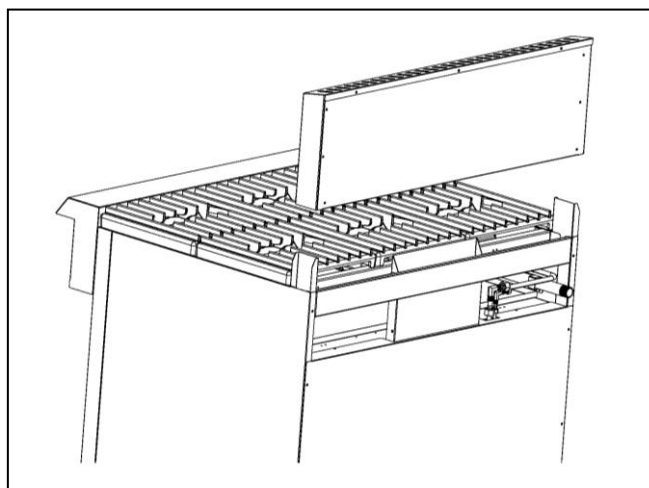
The restraining means should be attached to a frame member on the back of the unit.

Installation (Continued)

Step 3: Attach Flue Riser

1. Place the flue riser assembly on the range as shown on the appropriate diagram below.
2. Slide the flue riser assembly over the bayonets until it bottom out, as shown below.
3. Secure ends of flue riser assembly with two M6 hex head bolts, flat washers and lock-washers

Single-Oven Models



Location

1. Installation must allow for a sufficient flow of fresh air for the combustion air supply.
2. Installation must include adequate ventilation means, to prevent dangerous build-up of combustion products.
3. Any gas burning appliance requires adequate clearance and ventilation for optimum and trouble-free operation. The minimum installation clearances shown below are to be adhered to.
4. Position the appliance in its approximate working position.
5. All air for burner combustion is supplied from underneath the unit. The legs must always be fitted and no obstructions placed on the underside or around the base of the unit, as obstructions will cause incorrect operation and / or failure of the appliance.
6. Components having adjustments protected by manufacturer are only allowed to be adjusted by an authorized service agent. They are not to be adjusted by the installation person.

Clearances

NOTE: Only non-combustible materials can be used in close proximity to this appliance.

	Combustible Surface	Non Combustible Surface
Left / Right Hand Side	355mm	0mm
Rear	250mm	0mm

Assembly

NOTE:

- This appliance is assembled before delivery except feet.
- This appliance is fitted with adjustable feet to enable the appliance to be positioned securely and level. This should be carried out on completion of the gas connection. Refer to the 'Gas Connection' section.
- IM will be stated that the appliance shall be installed in such a way that side body surfaces are not accessible in the installed position.

Installation (Continued)

Gas Connection

NOTE: ALL GAS FITTING MUST ONLY BE CARRIED OUT BY A QUALIFIED PERSON.

1. The Gas Ovens do not require an electrical connection, as they function totally on the gas supply only.
2. It is essential that the gas supply is correct for the appliance to be installed and that adequate supply pressure and volume are available. The following checks should therefore be made before installation:-
 - a. Gas Type required for the appliance is shown in the rating label. Check that this is correct for the gas supply the appliance is being installed for. The gas conversion procedure is detailed in this manual.
 - b. Supply Pressure required for this appliance is shown in the 'Gas supply requirements' section of this manual. Check the gas supply to ensure adequate supply pressure exists.
 - c. Input Rate of this appliance is stated on the Rating label. The input rate should be checked against the available gas supply line capacity. Particular note should be taken if the appliance is being added to an existing installation.

NOTE: It is important that adequately sized piping runs directly to the connection joint on the appliance with as few tees and elbows as possible to give maximum supply volume.

NOTE: Ensure the regulator is converted to the correct gas type that the appliance will operate on. The regulator outlet pressure is fixed ex-factory for the gas type .

3. Correctly locate the appliance into its final operating position and using a spirit level, adjust the legs so that the unit is level and at the correct height.
4. Connect the gas supply to the appliance through the regulator. A suitable jointing compound which resists the breakdown action of propane must be used on every gas line connection, unless compression fittings are used.
5. Check all gas connections for leakages.

WARNING:

DO NOT USE A NAKED FLAME TO CHECK FOR GAS LEAKAGES.

6. Check that the gas operating pressure.
7. Turn off the mains gas supply and bleed the gas out of the appliance gas lines.
8. Turn on the gas supply and the appliance.
9. Verify the operating pressure remains correct.

Low Flame Setting

Check the low flame setting by lighting the oven and heating to a set temperature. When the set temperature has been reached the thermostat will reduce the oven burner flame to its low rate. Check that rapid closing of the oven door does not extinguish the flame. If necessary, adjustment to the low flame setting is made by removing the oven knob and turning the bypass adjustment screw (Clockwise to decrease and anti-clockwise to increase the flame). Care should be taken, as the appliance will become hot during commissioning.

Note: To obtain the above burner pressures adjust the regulator as supplied with the unit. When the correct operating pressure has been obtained then re-assemble unit.

WARNING: Failure to check and set the oven low flame setting may initiate an un-necessary service call due to the oven burner "going out".

Commissioning

1. Before leaving the new installation;
 - a. Check the following functions in accordance with the operating instructions specified in the 'Operation' section of this manual.
 - Light the Pilot Burner.
 - Light the Main Burner.
 - Turning 'Off' the Main Burner/Pilot.
 - b. Ensure that the operator has been instructed in the areas of correct lighting, operation, and shutdown procedure for the appliance.
2. This manual must be kept by the owner for future reference and a record of the Date of Purchase, Date of Installation and the Serial Number of the Appliance must be recorded and kept with this manual. (These details can be found on the Rating label, refer to the 'Gas Connection' section).

NOTE: If for some reason it is not possible to get the appliance to operate correctly, shut off the gas supply and contact the supplier of this appliance.

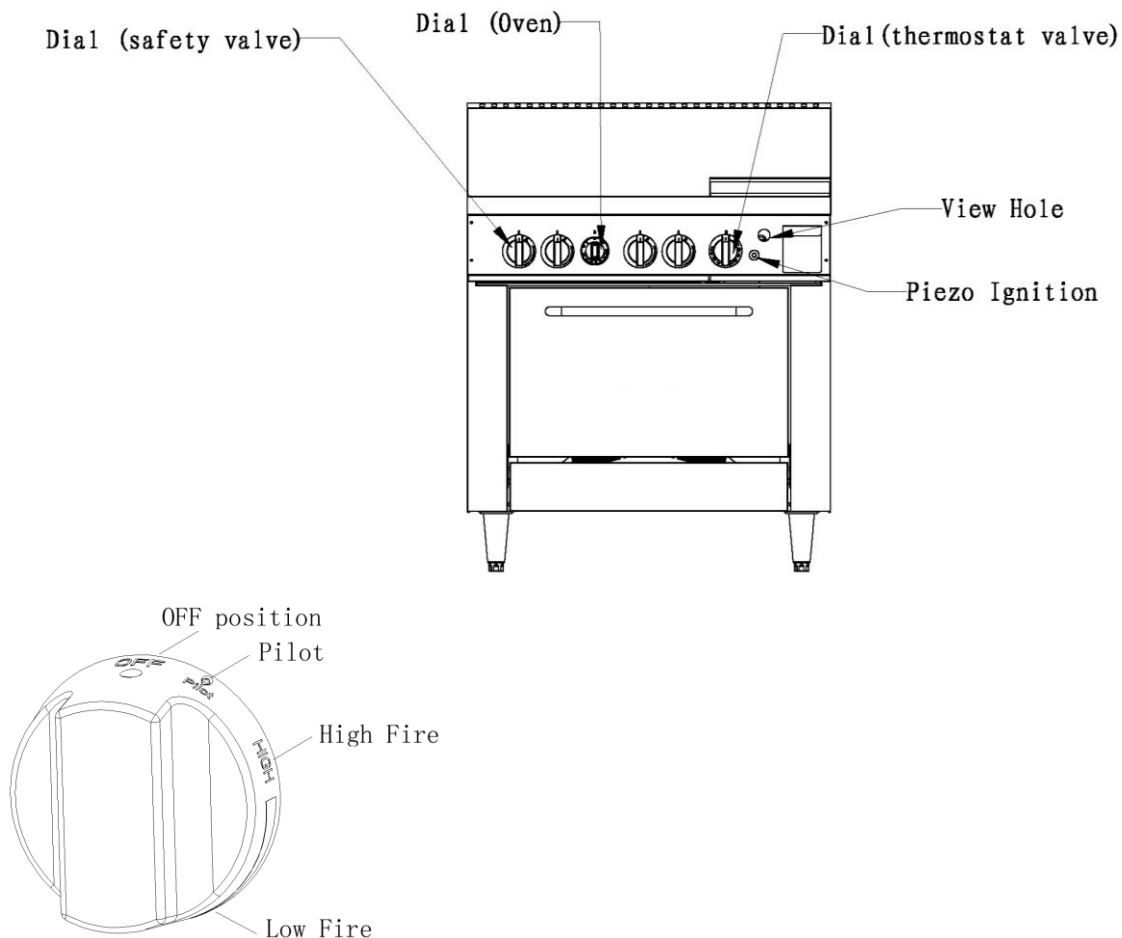
Operation

Operation Guide

CAUTION:

- THIS APPLIANCE IS FOR PROFESSIONAL USE AND IS ONLY TO BE USED BY QUALIFIED PEOPLE.
- ONLY QUALIFIED SERVICE PERSONS ARE TO CARRY OUT INSTALLATION, SERVICING OR GAS CONVERSION OPERATIONS.
- COMPONENTS HAVING ADJUSTMENTS PROTECTED (E.G. PAINT SEALED) BY THE MANUFACTURER SHOULD NOT BE ADJUSTED BY THE USER/OPERATOR.

1. The Gas Ovens have been designed to provide simplicity of operation and 100% safety protection.
2. Improper operation is therefore almost impossible, however bad operation practices can reduce the life of the gas char-broiler and produce a poor quality product. To use this appliance correctly please read the following sections carefully:-
 - Lighting the Top Burners.
 - Turning off the Top Burners / Pilots.
 - Lighting the Oven.



Operation

WARNING:

SURFACE TEMPERATURE OF THE GRIDDLE CAN REACH OVER 300°C WHEN THE APPLIANCE IS OPERATED AT FULL SETTING.

1. Lighting the Top Burners

The burners are fitted with individual standing pilots which allows the main burners to be turned ON-OFF without the need to manually re-light the burner each time that it is turned ON, as the burner will be automatically lit itself by the pilot burner.

Flame Failure Protection is incorporated for each burner by way of a thermo-electric system which will shut off the gas supply to that burner in the event that the burner goes out, so that un-burnt gas is not expelled.

1. Select the burner required, depress and turn the corresponding gas control knob anti-clockwise to the 'PILOT' position.
2. With the gas control knob depressed, manually light the pilot burner or use the piezo igniter provided (optional).
3. Release the gas control knob after approximately 10-20 seconds after lighting the pilot burner.
4. The pilot burner should stay alight - if not, repeat Steps (b. to c. above.)
5. 'Full Flame' can now be achieved by depressing and rotating the gas control knob anti-clockwise to the first stop 'HIGH' flame position.
6. Low flame can be achieved by depressing the gas control knob and rotating fully anti-clockwise to the 'LOW' flame position.
7. To achieve simmer control, depress the gas control knob and rotate between the 'HIGH' and 'LOW' positions to achieve the temperature required.

2. Turning 'OFF' the Main Burners / Pilots

1. To turn off the main burner, but keep the pilot burner alight, rotate the gas control knob to the 'PILOT' position. The main burner will extinguish and the pilot will remain alight.
2. To turn off the 'PILOT', depress and turn the gas control knob clockwise back to the 'O' position. The 'PILOT' burner will extinguish.

3. Lighting Oven

The oven is controlled by a knob on the front control panel.

To light the pilot of an oven, do the following:

1. Turn oven thermostat to "Pilot" position.
2. Depress the gas control knob.
3. Light the pilot.
4. Hold in the gas control knob for approximately 10-15 seconds, then release. The pilot flame will be established.

Operation (Continued)

Main burner air supply:

1. For efficient burner operation, a proper balance of gas volume and primary air supply must be maintained which will result in complete combustion. Insufficient air supply results in a yellow streaming flame. Primary air supply is controlled by an air shutter on the front of the burner.
2. Loosen the screws on the front of the burner and adjust the air shutter to just eliminate the yellow tips of the burner flame. Lock the air shutter in place by tightening the screws.

CAUTION

The space between the legs at the bottom admits combustion air. DO NOT BLOCK THIS SPACE.

All burners are lit from constantly burning pilots. Turning the valve to the desired flame height is all that is required to put the unit in service.

Do not permit fans to blow directly at the unit. Wherever possible, avoid open windows next to the units' sides or back. Avoid wall type fans which create air cross-currents within a room.

It is also necessary that sufficient air should be allowed to enter the room to compensate for the amount of air removed by any ventilating system. Otherwise, a subnormal atmospheric pressure will occur, affecting operation and causing undesirable working conditions.

A properly designed and installed hood will act as the heart of the ventilating system for the room or area in which the unit is installed, and will leave the unit independent of changing draft conditions.

All valves must be checked and lubricated periodically. This must be done by an authorized service representative in your area.

Note:

Please wait at least 15 seconds to restart the main burners to maintain the best function of the thermostat valve after turning off the main burners.

IMPORTANT

Should any abnormal operation like;

- ignition problems,
- abnormal burner flame,
- burner control problems,
- partial or full loss of burner flame in normal operation, be noticed, the appliance requires IMMEDIATE service by a qualified service person and should not be used until such service is carried out.

Cleaning and Maintenance

INITIAL CLEANING:

Prior to operating your new oven, thoroughly wash the exterior with a mild detergent or soap solution. Do not use abrasive cleaners, since this might damage the cabinet finish. If the stainless steel surfaces become discolored, scrub by rubbing only in the direction of the finished grain.

When the oven is first heated, it will smoke until oil used in manufacturing, preservation and dust from storage and shipping are burned off. An hour at "max." on all burners is usually sufficient.

DAILY CLEANING:

Remove, empty, and clean grease drawers and dirt trays.
Clean griddle drain chutes.

VENT SYSTEM

At least twice a year the unit venting system should be examined and cleaned.
Following daily and periodic maintenance procedures will enhance long life for your equipment. Climatic conditions (such as salt air) may require more thorough and frequent cleaning or the life of the equipment could be adversely affected.

STAINLESS STEEL SURFACES

1. To remove normal dirt, grease and product residue from stainless steel that operates at LOW temperature, use ordinary soap and water (with or without detergent) applied with a sponge or cloth. Dry thoroughly with a clean cloth.
2. To remove grease and food splatter, or condensed vapors, that have BAKED on the equipment, apply cleanser to a damp cloth or sponge and rub cleanser on the metal in the direction of the polishing lines will not mar the finish of the stainless steel. NEVER RUB WITH A CIRCULAR MOTION. Soil and burnt deposits which do not respond to the above procedure can usually be removed by rubbing the surface with SCOTCH-BERITE scouring pads or STAINLESS scouring pads. DO NOT USE ORDINARY STEEL WOOL, as any particles left on the surface will rust and further spoil the appearance of the finish. NEVER USE A WIRE BRUSH, STEEL SOURCING PADS (EXCEPT STAINLESS), SCRAPER, FILE OR OTHER STEEL TOOLS. Surfaces which are marred collect dirt more rapidly and become more difficult to clean. Marring also increases the possibility of corrosive attack. Refinishing may then be required.

To remove heat tint- Darkened areas sometimes appear on stainless steel surfaces where the area has been subjected to excessive heat. These darkened areas are caused by thickening of the protective surface of the stainless steel and are not harmful. Heat tint can normally be removed by the foregoing, but tint which does not respond to this procedure calls for a vigorous scouring in the direction of the polish lines, using SCOTCH-BRITE scouring pads or a STAINLESS scouring pad in combination with a powered cleanser. Heat tint action may be lessened by not applying, or by reducing heat to equipment during slack periods.

BURNERS- GENERAL

Little attention is needed, but if spillage should occur, it may be necessary to clean around pilot areas, air mixer and under burners. Use a wire brush if necessary. Periodically, burners (particularly open top type) should be removed and cleaned. Allow interior to drain. Dry thoroughly before replacing.

HOT TOPS

Allow range to cool. If water is used on tops while still hot, they may crack. Avoid this practice. Remove tops from range and clean surfaces with hot water and detergent. A wire brush may be used on the underside of the hot pot plate. It is recommended not to clean tops while still on range, even if cooled, as excessive water will drip into the burner box and deteriorate the metal.

Cleaning and Maintenance (Continued)

Do not waste gas and abuse equipment by leaving all burners "FULL ON", if not required. During idling periods, adjust burner valves to keep top warm. Re-adjust burner valves as required for periods of heavy loads.

CARE OF GRIDDLES

New griddles should be carefully tempered and cared for in order to avoid possible damage. To break in a new griddle, first wipe it clean. Next, light all the griddle burners and turn them to low for one hour. Then gradually bring each griddle up to frying temperature. Next, spread three or four ounces of beef suet, or as a substitute, baking soda, to season it. Never allow water on a hot griddle and never wash it with soap and water.

Use a Norton Alundum Griddle Brick to clean the griddle. Always remember to heat griddle slowly because quick heat may cause costly damage. Griddle plates cannot be guaranteed against damage due to carelessness. Never place utensils on griddle. Do not overheat griddle above 575F (300°C), as this will cause warpage or breakage.

Do not use any type of steel wool. Small particles may be left on the surface and get into food products. Do not clean spatula by hitting the edge on the griddle plate. Such action will only cut and pit the griddle plate, leaving it rough and hard to clean.

Do not waste gas or abuse equipment by leaving valves at "FULL ON" position or thermostat at high temperature if not required. During idle periods, set valves at "LOW" position or thermostat to low temperature settings to keep griddle warm. Reset valves or thermostats, as required, for periods of heavy load. Turn valves or thermostat to "OFF" at the end of daily operation.

OPEN TOP PLATE

Remove enameled top plate and spiders, clean with a solution of hot water and strong soap or detergent.

The area around the charge port, where the splash tube is attached to the burner, must be free from any spillage or residue, or other obstructions.

The splash tubes must be clean and properly aligned with the pilot housing to insure good top burner ignition. Pilot should be 12 to 15mm blue flame. Avoid carbon producing tip or unstable blowing or lifting of flame.

OVEN INTERIOR

Allow oven to cool. Remove porcelain enameled oven bottom. Clean by rubbing with strong detergent and Brillo pad or similar scrubber. "Spill-over" should be cleaned from the bottom as soon as possible to prevent carbonizing and a "burnt-on" condition. For stubborn accumulations, commercial oven cleaners are recommended.

The porcelain oven door lining can be cleaned in a similar manner.

The side, rear and top lining should be wiped only with a cloth dampened with a mild detergent and water. Avoiding using excessive amounts of water, as this may drip into burner compartment and deteriorate the metal in that area. Do not use strong commercial cleaners or abrasive pads on the side, rear or top linings, as they may damage the finish or leave gray residue.

NOTE:

- If the gas Oven usage is very high, we recommend that the weekly cleaning procedure is carried out on a more frequent basis.
- Ensure that protective gloves are worn during the cleaning process.
- DO NOT use harsh abrasive detergents, strong solvents or caustic detergents as they will damage the grate and burners.
- DO NOT use water on the cooking grid while they are still hot as warping may occur. Allow these items castings to cool and remove for cleaning.
- Parts protected by the manufacturer or his agent are not to be adjusted by the installer, unless the installer is an authorized service agent **Weekly Cleaning**

Adjustments

Warning: Adjustments and service work may only be performed by a qualified technician who is experienced in, and knowledgeable with, the operation of commercial cooking equipment. However, to assure your confidence, contact your authorized service agency for reliable service, dependable advice and other assistance, and of genuine factory parts.

In case of problems in operation at initial installation, check type of gas and manifold pressure and compare information listed on the serial plate.

ALL TOP BURNERS

All open-top burners are primarily adjusted by means of an air shutter on the mixer face.

To adjust a burner, loosen the screw that holds the air shutter in position and rotate the mixer cap until a clear, stable blue flame is obtained. The flame should not be yellow tipped nor should it blow off the burner ports.

All orifice sizes and burner rate are properly set at the factory and should not be altered.

Over-rated burners cause poor burner and pilot performance, resulting in less heat, and wasted gas.

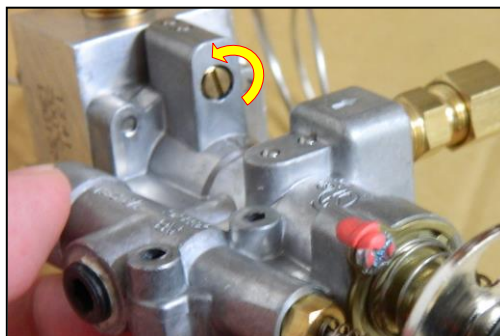
OVEN BURNER FLAME

The oven burner orifice is of the fixed type, sized for the specified gas supply. The burner flame characteristics are controlled by varying the primary air mixer cap. There should be a clear blue flame with a distinct inner cone at each port. Excessive primary air can result in "blowing" or the flames leaving the ports. Lack of primary air causes soft or yellow tipped flame.

OVEN LOW FLAME LEVEL SETTING

When the oven reaches the temperature at which the dial is set, the oven thermostat reduces the flow of gas to the amount required to keep the oven at that temperature. However, the thermostat must always supply enough gas to keep the entire burner lighted. To maintain this minimum flame, the low flame setting must be set carefully and accurately using the following procedure:

1. Turn on the oven and set the oven thermostat to 200°C.
2. When the oven reaches this temperature, the flame will reduce to the low flame setting.
3. Open the kick panel and look through the pilot hole to see if the flame is even and minimal along the entire length of the burner. Also open and close the oven door to ensure the low flame does not extinguish. If the flame is even and minimal and the flame does not extinguish then, the low flame setting level does not need adjustment. If the flame extinguishes, then continue with this procedure to adjust the low flame setting.
4. Remove the control knobs, thermostat dial (using an allen key to loosen a screw on the side) and the front panel.
5. Using a screwdriver, turn the low flame setting adjustor on the stem of the thermostat counterclockwise to increase the flame or clockwise to decrease the flame until the flame is even and minimal along the entire length of the burner.
6. Replace the front panel, control knobs, and thermostat dial. Turn all control knobs to the OFF position.



Adjustments (Continued)

CONVERTING FROM LPG TO NG AND VICE-VERSA

1. Turn-off the pilot.
2. Shut-off the main isolation valve and follow the lock-out/tag-out procedure.
3. Remove the gas regulator.
4. Remove the converter cover from the regulator. Use a 22mm spanner.
5. Pull-out the converter and position it to your desired gas type.
6. Install the converter cover to the regulator.
7. Re-install the regulator to the unit. Follow the direction of the arrow on the regulator when installing.
8. Replace the burner injectors. Follow the burner injector removal procedure. See the parts list for injector orifice size for specific gas type.
9. Replace the ODS injector. Follow the ODS injector removal procedure. See parts list for injector orifice size for specific gas type.

OPENING OF THE RANGE TOP FOR PARTS REPLACEMENT

1. Remove the trivets.
2. Remove the griddle plate assembly (for M36S-4F-12F model)
3. Remove the control knobs.
4. Remove the thermostat control knob. Loosen the lock screw at the knob side.
5. Remove the griddle drip tray. (for M36S-4F-12F model)
6. Remove the mounting screws of the control panel cover. For M36S-4F-12F model, there are two mounting screws inside the griddle drip tray slot that must be removed to fully remove the control panel cover.
7. Remove the piezo igniter wire.
8. Remove the control rack mounting screws.
9. Remove the control rack.

Trouble shooting

This section provides an easy reference guide to the more common problems that may occur during the operation of your equipment. The fault finding guide in this section is intended to help you correct, or at least accurately diagnose problems with your equipment.

Although this section covers the most common problems reported, you may encounter a problem not covered in this section. In such instances, please contact your local authorized service agent who will make every effort to help you identify and resolve the problem. Please note that the service agent will require the following information:

TROUBLESHOOTING RANGE TOP BURNERS

Consult the following table and the flowchart that begins on the following page.

Problem	Look for-
All burners and pilots in unit will not turn on	- Main gas supply to unit is "OFF".
All burners produce excessive carbon deposits	- Incorrect gas type supplied to unit. -Incorrect supply pressure
Only some burners in a unit produce excessive Carbon deposits	-Incorrect orifices. - Primary air not adjusted properly.
Only some pilots produce excessive carbon Deposits	- Pilot gas not adjusted properly.
Top burner (not oven) will not come on	- Safety valve for top burner in "OFF" position. - - Pilot out
Top section pilot will not stay ignited	-Clogged orifice -Draft condition -Improper ventilation system. -Air in gas line.

Troubleshooting

RANGE TOP BURNER TROUBLESHOOTING

Common checks of all top configurations.

Check that the burners are set level in the support brackets.

Check that the burners are clean and all ports are clear.

Remove each burner and check that the venture is clean and free of buildup and debris.

With each burner removed check that the orifice size is correct and clean and free of buildup and debris.

Remove the knobs and carefully lower the top valve cover panel. **CAUTION!** Wiring attached behind panel on C.O base models.

Check that each burner valve and orifice is in alignment with the burner

Shut off the main gas supply.

Install a pressure tap in the main gas line before the range pressure regulator and install a manometer.

Turn on the main gas supply.

Re-light all pilots.

NOTE: Griddle Tops

NOTE: Griddles and Hot Tops must be raised and secured or removed.

CAUTION! Before raising or removing Griddle Tops.

Remove the knobs and carefully lower the control panel. **CAUTION!** Wiring attached behind panel.

Pull the Griddle thermostat bulbs out of the tubes.

Light all burners on the range. **NOTE:** Leave the oven door open.

Observe the inlet pressure.

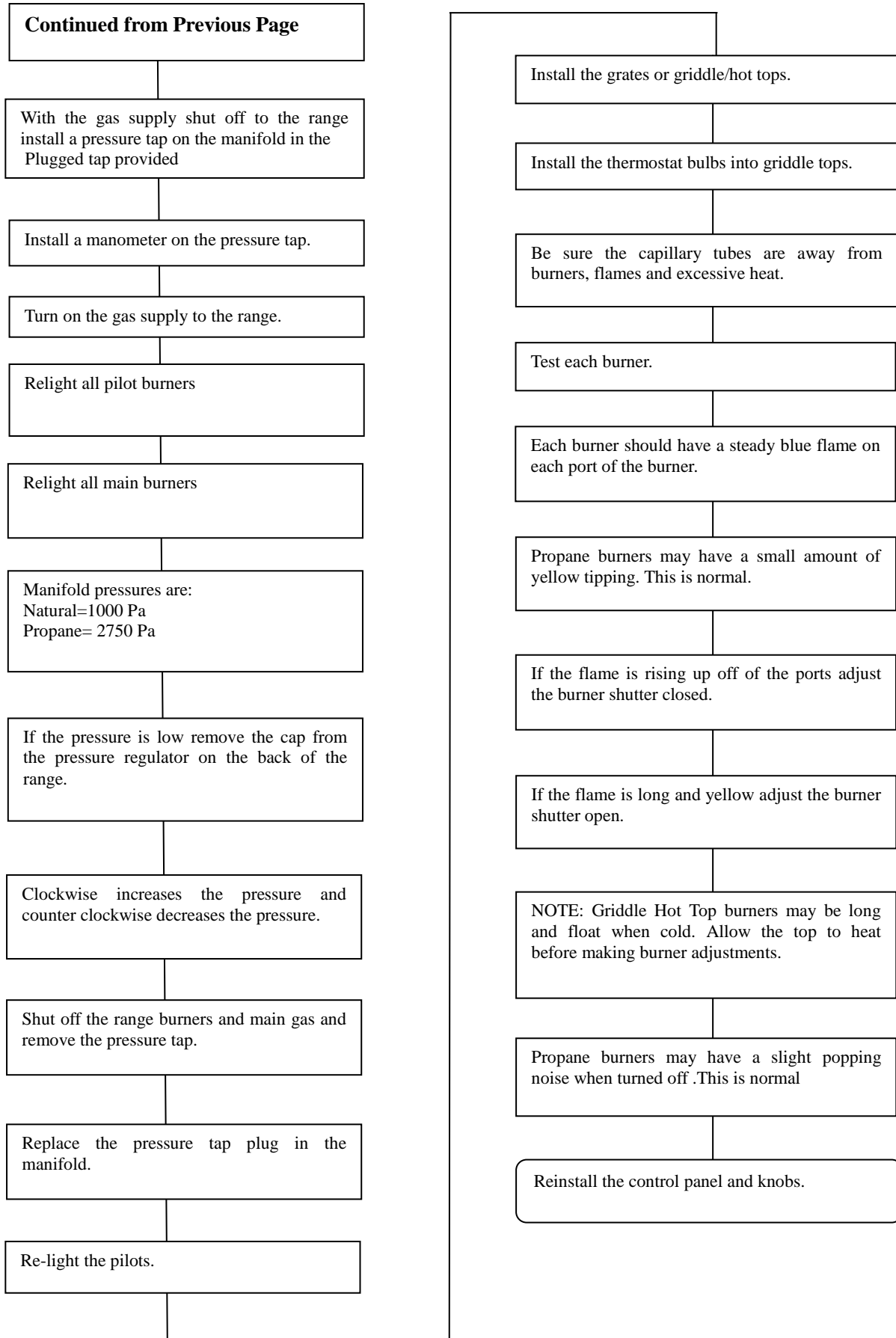
Inlet pressures for gases are:
See rating label.

If the inlet pressure is low, all equipment on the main gas line should be lit and the pressure adjusted

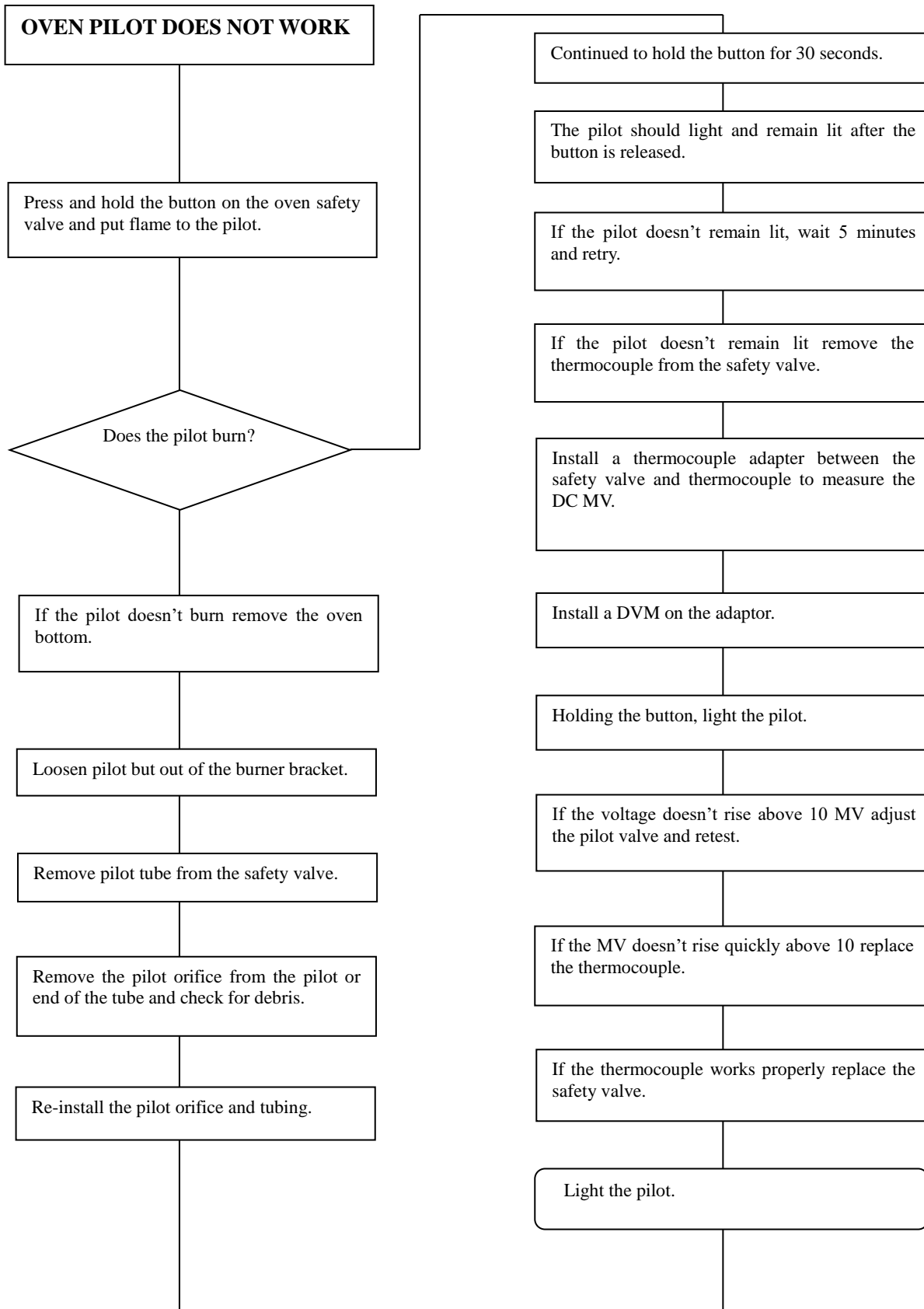
Shut off the range burners and main gas and remove the pressure tap.

Continues on next page.

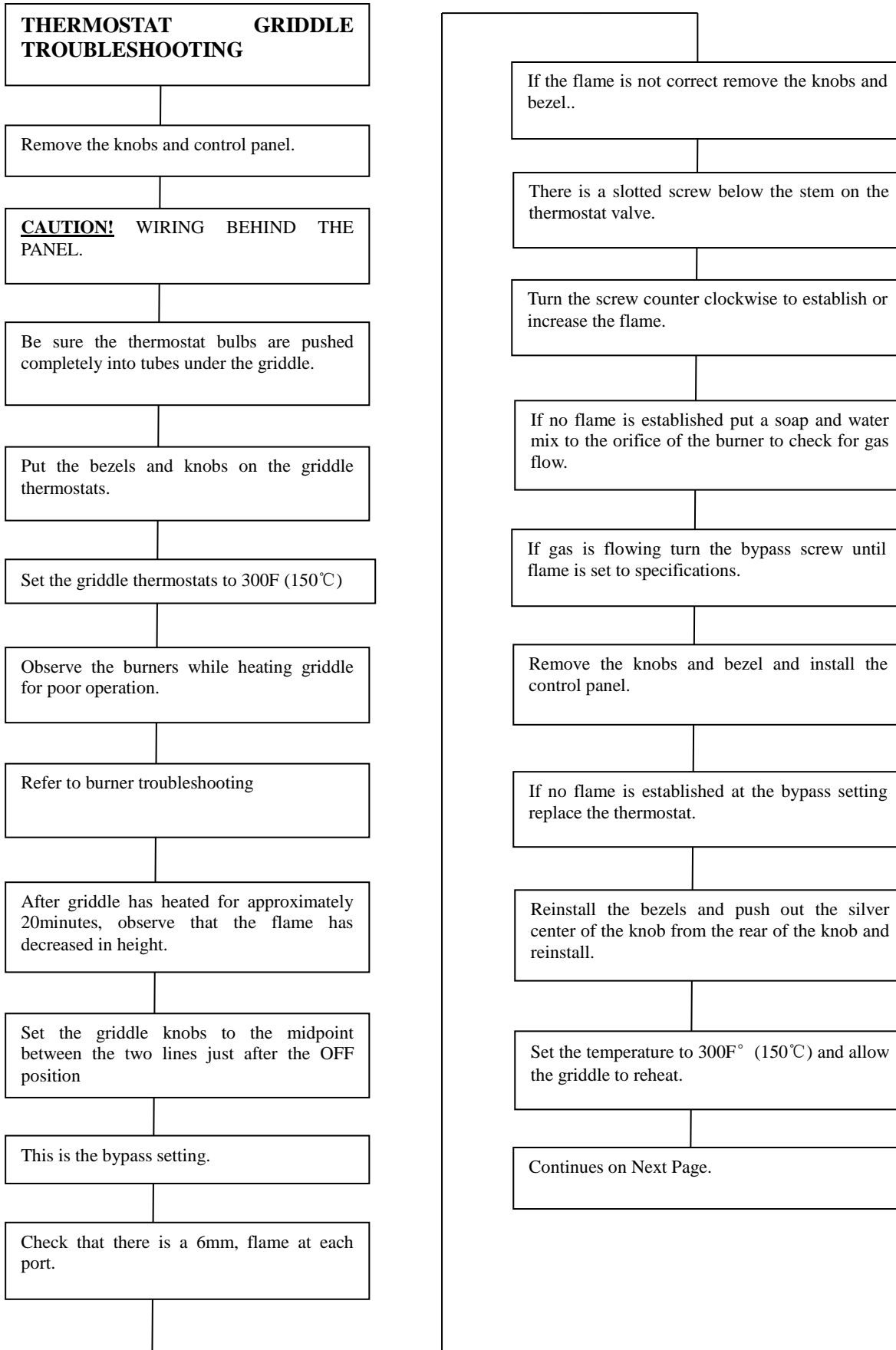
Troubleshooting (Continued)



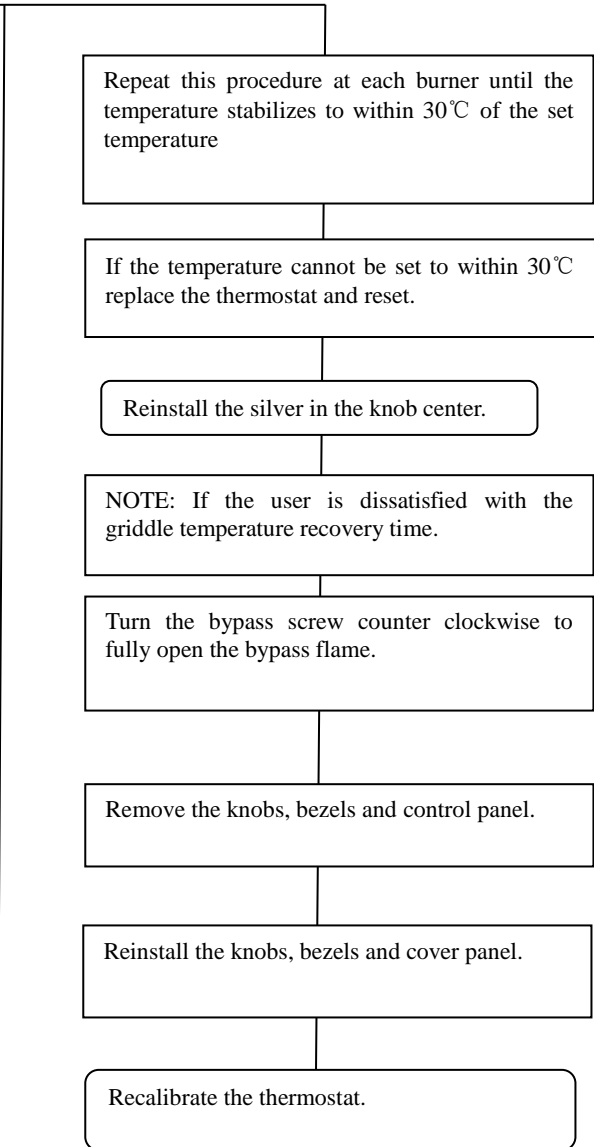
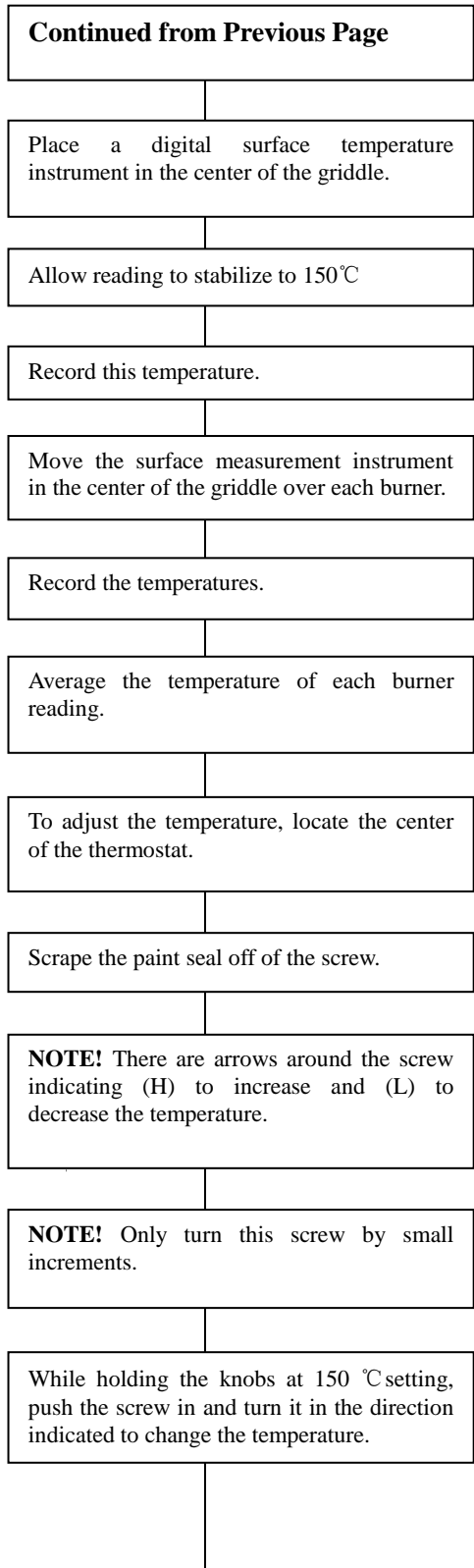
Troubleshooting (Continued)



Troubleshooting (Continued)



Troubleshooting (Continued)



Replacement Parts

IMPORTANT:

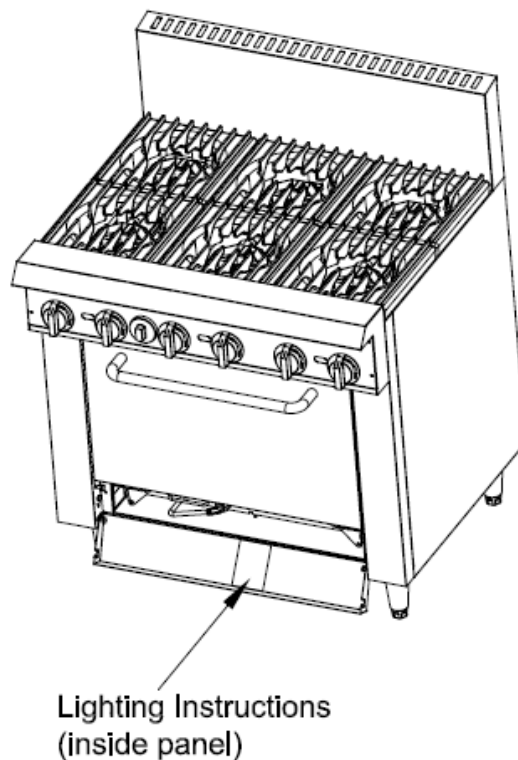
Only genuine authorized replacement parts should be used for the servicing and repair of this appliance. The instructions supplied with the parts should be followed when replacing components.

For further information and servicing instructions, contact your nearest authorized service branch.

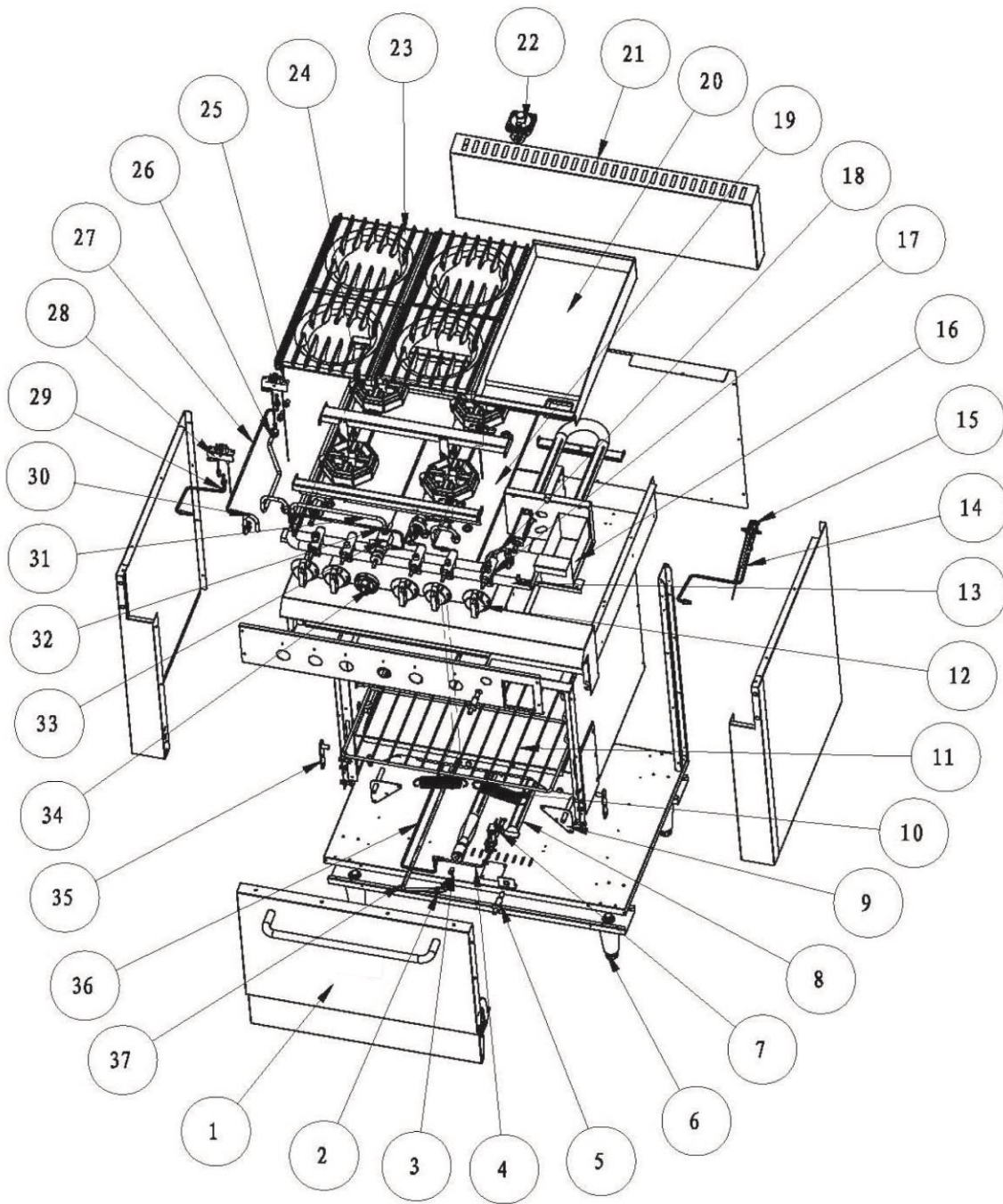
When ordering replacement parts, please quote the part number and the description listing below. If the part required is not listed below, request the part by description and quote model number and serial number which is shown on the rating plate.

CAUTION: Please replace the corresponding warning label that shows the gas type operated when the qualified person will convert to another gas in order not to cause death or injury or damage.

Lighting instructions, warning label, rating label are located on the interior side of the kick panel, as shown below.



Explosion drawing



Spare Parts List

NO.	DESCRIPTION	MODEL	CODE	QTY
1	Door Assembly	M24S-4F	20713.6122	1
		M24S-00-24F	20713.6122	1
		M36S-6F	20713.6114	1
		M36S-4F-12F	20713.6114	1
		M36S-2F-24F	20713.6114	1
		M36S-00-36F	20713.6114	1
2	L-Connector	M24S-4F	10203.6022	3
		M24S-00-24F	10203.6022	3
		M36S-6F	10203.6022	4
		M36S-4F-12F	10203.6022	4
		M36S-2F-24F	10203.6022	4
		M36S-00-36F	10203.6022	4
3	Orifice	M24S-4F	10208.6059 (oven)	1
		M24S-00-24F	10208.6059 (oven)	1
		M24S-4F	10208.6058	4
		M24S-00-24F	10208.6058	2
		M36S-6F	10208.6058	7
		M36S-4F-12F	10208.6058	6
		M36S-2F-24F	10208.6058	5
		M36S-00-36F	10208.6058	4
		M24S-4F	10208.6043	5
		M36S-6F	10208.6043	7
		M36S-4F-12F	10208.6043	6
		M24S-00-24F	10208.6043	3
		M36S-2F-24F	10208.6043	5
		M36S-00-36F	10208.6043	4
4	Pilot Pipe Assembly - Oven	M24S-4F	22201.6169	1
		M36S-6F	22201.6169	1
		M36S-4F-12F	22201.6169	1
		M24S-00-24F	22201.6169	1
		M36S-2F-24F	22201.6169	1
		M36S-00-36F	22201.6169	1
5	Piezo Igniter	M24S-4F	10101.6058	1
		M36S-6F	10101.6058	1
		M36S-2F-24F	10101.6058	2
		M24S-00-24F	10101.6058	3
		M36S-2F-24F	10101.6058	3
		M36S-00-36F	10101.6058	4
6	Adjustable Foot	M24S-4F	10209.6012	4
		M36S-6F	10209.6012	4
		M36S-4F-12F	10209.6012	4
		M24S-00-24F	10209.6012	4
		M36S-2F-24F	10209.6012	4
		M36S-00-36F	10209.6012	4
7	Pilot rack	M24S-4F	10204.6067	1
		M36S-6F	10204.6067	1
		M36S-4F-12F	10204.6067	1
		M24S-00-24F	10204.6067	1
	ODS-Injector(0.01" for LPG)	M36S-2F-24F	10208.6032	1
	ODS-Injector(0.02" for NG)	M36S-00-36F	10208.6033	1

Spare Parts List

8	U Burner Assembly(OVEN)	M24S-4F M36S-6F	20713.6130	1
		M24S-00-24F M36S-4F-12F	20713.6130	1
		M36S-00-36F M36S-2F-24F	20713.6130	1
	U Burner Assembly(Griddle)	M36S-4F-12F	20802.6001	2
		M24S-00-24F	20802.6001	3
		M36S-2F-24F	20802.6001	3
		M36S-00-36F	20802.6001	4
9	Door Hinge Assembly	M24S-4F	20713.6110	2
		M36S-6F	20713.6110	2
		M36S-4F-12F	20713.6110	2
		M24S-00-24F	20713.6110	2
		M36S-2F-24F	20713.6110	2
		M36S-00-36F	20713.6110	2
10	Door Spring	M24S-4F	10204.6013	2
		M24S-00-24F	10204.6013	2
		M36S-6F	10204.6011	2
		M36S-4F-12F	10204.6011	2
		M36S-2F-24F	10204.6011	2
		M36S-00-36F	10204.6011	2
11	Oven Rack	M24S-4F	10205.6060	2
		M24S-00-24F	10205.6060	2
		M36S-6F	10205.6059	2
		M36S-4F-12F	10205.6059	2
		M36S-2F-24F	10205.6059	2
		M36S-00-G36	10205.6059	2
12	Dial	M24S-4F	20603.6016	4
		M36S-6F	20603.6016	6
		M36S-4F-12F	20603.6016	5
		M24S-00-24F	20603.6016	2
		M36S-2F-24F	20603.6016	4
		M36S-00-36F	20603.6016	3
13	Manifold Assembly	M24S-4F	20713.6079	1
		M36S-6F	20713.6080	1
		M36S-4F-12F	20713.6081	1
		M24S-00-24F	20713.6082	1
		M36S-2F-24F	20713.6083	1
		M36S-00-36F	20713.6084	1
14	Pilot Pipe Assembly - Right	M36S-4F-12F	22201.6160	1
		M24S-00-24F	22201.6160	1
		M36S-2F-24F	22201.6160	1
		M36S-00-36F	22201.6160	2
15	Flame Device System	M36S-4F-12F	10502.6042	1
		M24S-00-24F	10502.6042	2
	ODS Injector-0.2	M36S-2F-24F	10208.6025	2
	ODS Injector-0.4	M36S-00-36F	10208.6026	3
16	Oil Tray Assembly	M36S-4F-12F	20714.6345	1
		M24S-00-24F	20714.6345	1
		M36S-2F-24F	20714.6345	1
		M36S-00-36F	20714.6345	1

Spare Parts List

17	Safety Valve	M24S-4F	10208.6021	4
		M36S-6F	10208.6021	6
		M36S-4F-12F	10208.6021	5
		M24S-00-24F	10208.6021	2
		M36S-2F-24F	10208.6021	4
		M36S-00-36F	10208.6021	3
18	Main Pipe Assembly - Right	M36S-4F-12F	22201.6161	1
		M24S-00-24F	22201.6161	1
		M36S-2F-24F	22201.6161	1
		M36S-00-36F	22201.6161	2
19	Tray	M24S-4F	20713.6030	1
		M36S-6F	20713.6024	1
		M36S-4F-12F	20713.6030	1
		M36S-2F-24F	20713.6034	1
20	Griddle Plate Assembly	M36S-4F-12F	20714.6344	1
		M24S-00-24F	20715.6242	1
		M36S-2F-24F	20715.6242	1
		M36S-00-G36	20715.6245	1
21	Flue Assembly	M24S-4F	20802.6002	1
		M24S-00-24F	20802.6002	1
		M36S-6F	20802.6003	1
		M36S-4F-12F	20802.6003	1
		M36S-2F-24F	20802.6003	1
		M36S-00-36F	20802.6003	1
22	Regulator	M24S-4F	10208.6096	1
		M36S-6F	10208.6096	1
		M36S-4F-12F	10208.6096	1
		M24S-00-24F	10208.6096	1
		M36S-2F-24F	10208.6096	1
		M36S-00-36F	10208.6096	1
23	Trivet	M24S-4F	10401.6084	4
		M36S-6F	10401.6084	6
		M36S-4F-12F	10401.6084	4
		M36S-2F-24F	10401.6084	2
24	Burner	M24S-4F	20726.6257	4
		M36S-6F	20726.6257	6
		M36S-4F-12F	20726.6257	4
		M36S-2F-24F	20726.6257	2
25	Flame Device System-Back	M24S-4F	10108.6003	1
		M36S-6F	10204.6067	2
	ODS Injector-0.2	M36S-4F-12F	10208.6025	3
	ODS Injector-0.4	M36S-2F-24F	10208.6026	1
26	Main Pipe Back Assembly	M24S-4F	20708.6314	1
		M36S-6F	20708.6314	2
		M36S-4F-12F	20708.6314	3
		M36S-2F-24F	20708.6314	1
27	Pilot Pipe Back Assembly	M24S-4F	20708.6317	1
		M36S-6F	20708.6317	2
		M36S-4F-12F	20708.6317	3
		M36S-2F-24F	20708.6317	1

Spare Parts List

28	Flame Device System - Front	M24S-4F	10108.6002	2
		M36S-6F	10108.6002	3
	ODS Injector-0.2	M36S-4F-12F	10208.6025	2
	ODS Injector-0.4	M36S-2F-24F	10208.6026	1
29	Pilot Pipe Front Assembly	M24S-4F	20708.6316	2
		M36S-6F	20708.6316	3
		M36S-4F-12F	20708.6316	2
		M36S-2F-24F	20708.6316	1
30	Main Pipe Front Assembly	M24S-4F	20708.6315	2
		M36S-6F	20708.6315	3
		M36S-4F-12F	20708.6315	2
		M36S-2F-24F	20708.6315	1
31	Main Pipe Connect	M24S-4F	20713.6123	1
		M36S-6F	20713.6126	1
		M36S-4F-12F	20713.6126	1
		M24S-00-24F	10206.6161	1
		M36S-2F-24F	20403.6022	1
		M36S-00-36F	20403.6022	1
32	Pilot Pipe Connect	M24S-4F	20713.6124	1
		M36S-6F	20713.6125	1
		M36S-4F-12F	20713.6125	1
		M24S-00-24F	10206.6162	1
		M36S-2F-24F	20403.6023	1
		M36S-00-36F	20403.6023	1
33	Thermostat Valve	M24S-4F	10208.6031	1
		M36S-6F	10208.6031	1
		M36S-4F-12F	10208.6031	1
		M24S-00-24F	10208.6031	1
		M36S-2F-24F	10208.6031	1
		M36S-00-36F	10208.6031	1
34	Dial	M24S-4F	10401.6088	1
		M36S-6F	10401.6088	1
		M36S-4F-12F	10401.6088	1
		M24S-00-24F	10401.6088	1
		M36S-2F-24F	10401.6088	1
		M36S-00-36F	10401.6088	1
35	Door Hinge	M24S-4F	20713.6111	2
		M36S-6F	20713.6111	2
		M36S-4F-12F	20713.6111	2
		M24S-00-24F	20713.6111	2
		M36S-2F-24F	20713.6111	2
		M36S-00-36F	20713.6111	2
36	Main Pipe Connect Assembly	M24S-4F	10206.6151	1
		M24S-00-24F	10206.6151	1
		M36S-6F	10206.6148	1
		M36S-4F-12F	10206.6148	1
		M36S-2F-24F	10206.6148	1
		M36S-00-36F	10206.6148	1
37	Pilot Pipe Connect Assembly	M24S-4F	10206.6152	1
		M24S-00-24F	10206.6152	1
		M36S-6F	10206.6149	1
		M36S-4F-12F	10206.6149	1
		M36S-2F-24F	10206.6149	1
		M36S-00-36F	10206.6149	1

PLEASE RETAIN THE MANUAL CAREFULLY FOR REFERENCE

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.

NOTICE

Under warranty period of the appliance, All the part must be replaced by authorized service provider which approved by Middleby, If not, the warranty may be void.

NOTICE

Any parts that aren't made by MERCURY may void warranty.

NOTICE

Middleby and manufacturer of Middleby keep the right to modify the product.

MERCURY

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