GAS RANGE WITH OVEN

GBS Series

Read this manual carefully before using the appliance.

Keep the manual for future consultation after installation. And to instruction of how to use This manual contains information for FED appliances.

See the appliance data plate positioned at the front of appliance onthe control panel in order to identify the appliance product code.

Only install the appliance in a well ventilated place. Inadequate ventilation causes asphyxia. Do not obstruct the ventilation system in the place where the appliance is installed. Do not obstruct the vents or ducts of this or other appliances.

Installation must be in accordance to AS /NZS 5601.1 GASCODES Maintenance and conversion to other gas types must only be carried out only by an authorised person(s). For after sales assistance, contact an authorised service agent or the supplier. Demand original spare parts.

This appliance is designed for cooking foodstuffs. It is intended for commercial use only. Any other use is to be considered improper.

Personnel using the appliance must be trained. Do not leave the appliance unattended when it is working.

Turn off the appliance in case of fault, poor operation or if you smell gas.

Do not use products (even diluted) containing chlorine (sodium hypochlorite, hydrochloric or muriatic acid, etc.) to clean the appliance or the floor under the appliance.

DO NOT SPRAY AEROSOLS IN THE VICINITY OF THIS APPLIANCE WHILE IT IS IN OPERATION.

Do not use metal tools to clean steel parts (wire brushes or Scotch Brite type scouring pads).

Do not store chemicals in or near this appliance.

Do not allow dirt, fat, food or other to form deposits on the appliance.

Do not clean the appliance with direct jets of water.

Failure to observe the above instructions can compromise the safety of the appliance.

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

The area where the appliance is installed must be kept clear of combustibles and flammables. This includes mops, rags, grease wrapping paper and electrical equipment (cords)

Dimensions:

Model	Height	Width	Depth	Weight	Gas Cons MJ/h	
GBS4T	1128mm	610mm	855mm	132KG	162 NG	168 ULPG
GBS6T	1128mm	914mm	855mm	167KG	228 NG	234 ULPG
GBS4TS	1128mm	610mm	855mm	132KG	182 NG	204 ULPG
GBS6TS	1128mm	914mm	855mm	167KG	258 NG	288 ULPG
Gas Connection at right side rear 50mm from side, 150mm from top						

Technical Information:
Gas:

Burner : Hotplate burner for GBS4T & GBS6T	**Natural Gas**	**ULPG**
Gas Consumption MJ/h	**33 / burner**	**33 / burner**
Injector Size mm	**2.72**	**1.7**
Test Point Pressure kPa	**1.0kPa**	**2.65kPa**
Inlet Pressure Range KPA	**1.13- 1.2 KPA**	**2.75- 2.80 KPA**

Burner : Hotplate burner for GBS4TS & GBS6TS	**Natural Gas**	**ULPG**
Gas Consumption MJ/h	**38 / burner**	**42 / burner**
Injector Size mm	**3.26**	**1.9**
Test Point Pressure kPa	**1.0kPa**	**2.65kPa**
Inlet Pressure Range KPA	**1.13- 1.2 KPA**	**2.75- 2.80 KPA**

Burner : Oven	**Natural Gas**	**ULPG**
Gas Consumption MJ/h	**30 / burner**	**36 / burner**
Injector Size mm	**2.72**	**1.8**
Test Point Pressure kPa	**1.0kPa**	**2.65kPa**
Inlet Pressure Range KPA	**1.13- 1.2 KPA**	**2.75- 2.80 KPA**

Packaging
Packing materials are environmentally friendly and can be stored without risk, or burned in a special waste incineration plant OR recycled

Use
During operation some parts of the appliance may be very hot! Never touch any hot parts without gloves on.
Our appliances offer high performance and efficiency. To reduce consumption of gas, electricity or water, do not use appliance when empty or in conditions that compromise its optimal efficiency (e.g. with doors or lids open, etc.). When possible, preheat only before use.

Cleaning
In order to reduce the emission of pollutants into the environment, clean the appliance (externally and when necessary internally) with products which are more than 90% biodegradable.

Installation
Installation must be carried out only by authorised, licensed installers in accordance with these instructions, local gas fitting regulations, local building codes, water supply regulations, electrical wiring regulations, the Gas Installation Code AS/NZS 5601.1 and any other relevant statutory regulations.

Unpacking
Remove the packing.
Carefully remove the protective film from metal surfaces.
Remove any traces of glue using a suitable solvent.

Importantly:
Immediately check for any caused during transport.
Inspect the packs before and after unloading.
The forwarder is responsible for the safety of the goods during transport and delivery.
Notify the forwarder in the event of apparent or hidden damage. Specify any damage or shortages on dispatch note.
Keep all documentation contained in the packing.
PLEASE notify supplier of any damages

Positioning
The installation diagrams give the overall dimensions of the appliances and the positions of connections (gas, electricity and water).
Appliances can be installed separately or in combination with other appliances in the same range.
Leave at least 150mm between the appliance and the side or rear walls, and 1500mm from flue outlet/top of the appliance to the combustible material overhead.
When positioned under a grease filter, the appliance must have at least 1050 mm between the top of the appliance and the grease filter
Maintain an adequate distance between the appliance and any combustible walls.
Leave an adequate distance between the appliance and any side walls in order to allow subsequent servicing or maintenance operations.
Suitably insulate any surfaces that are less than the specified distances from the appliance.

Securing To the Floor or Bench
To avoid accidental tipping of certain modules, fix them to the floor or bench surface. This must be done in situations where hose assemblies are used for gas connection

Exhaust
The appliance must be installed under a ventilation exhaust system complying with the local building regulations and AS/NZS 5601.1 – Gas Installation code.
Place the appliance under the extractor hood to ensure removal of fumes and steam produced by cooking.

The correct clearance between the appliance outlet and the grease filter must comply with the current standards and be not less than1050mm.

Where there is no exhaust hood, contact local authority for information and guidance on installation.

Connections

Refer to appliance data plate for information relating to gas consumption, pressures etc.
A 3/4" male BSP located at rear 150mm from top, 50mm in from side,or optional under appliance connection. Check the appliance connections to ensure the unused inlet is capped off and gas tight.

An appliance gas pressure regulator must be fitted for Natural gas and ULPG appliances.
Fit an appliance isolating valve before the inlet. This must be a ¼ turn type, and be Australian approved to AS4617 andbe in an accessible location when the appliance is installed and working.

Test point for checking gas pressures is located on the manifold behind the front cover. Remove knobs, and screws to access test point. Ensure test point is resealed and leak tested after use.

Important!

For all gas appliances, the regulator supplied with the appliance must be fitted between the gas valve and the appliance inlet.
Clean the pipes to remove any dust, dirt or foreign matter which could block the supply.
Do not use pipes of a diameter smaller than that for which the appliance is designed. Refer AS/NZS 5601.1 Gas Installations for Pipe sizing tables.
After installation the pipework should be checked for gas leaks in accordance with standard operations. Use soapy water to check connections for leaks.
Make certain the appliance is arranged for the type of gas to be used. Otherwise the appliance will have to be converted to the applicable gas type. If not certain contact local gas supplier for confirmation of gas type, any conversion to be carried out must be undertaken by an authorised person in accordance with the supplied instructions.

Use of Flexible Hoses: Where it is intended to connect the appliance to the gas supply using a flexible, it is important to use the correct type assembly for the application. Refer to AS/NZS 5601 for hose connection requirements. The hose assembly must comply with AS/NZS1869 – Class B or D and be kept as short as possible. A chain must be fitted to restrict the appliance movement to no more than 80% of the hose length. Ensure hose is adequate for appliance gas consumption.

Supply Pressure Check

Make sure the appliance is suitable for the type of gas available, according to that given on the data plate.
The supply pressure must be measured with the appliance operating, using a manometer (min 0.1kPa)
Ensure gas is turned off.
Remove control panel.
Remove test point screw from the pressure test point and connect the manometer.
Turn the gas on slowly, light the applicable burners and compare the value read on the manometer with that given on the data plate.

If the manometer gives a pressure outside the range adjust the gas regulator supplying the appliance. If the pressure cannot be adjusted to the correct value check the installation to determine problem.

Gas Pressure Regulator

The section of the gas supply line must be sufficient to ensure the gas flow necessary for full operation of all of the appliances connected to the piping.
The gas pressure regulator will ensure constant outlet pressure over varying inlet pressures. When the regulator is fitted, it must be adjusted to the correct pressure when the burners are operating.
Test point pressures are: 1.0kPa for Natural Gas
2.65kPa for ULP GAS

Adjusting the Air for the Burners

When the primary air is correctly adjusted, the flame does not detach with the burner when cold and there is no flashback with burner hot. Burners can be adjusted accordingly.

At the completion of the installation, test the appliance for correct operation.

Advice on Service

At the completion of the installation, start the appliance and check operation – Refer 'operating instructions'. If the appliance does not operate correctly, check the following:-

- Appliance has been installed correctly to the correct gas type;
- Gas regulator has been installed and the pressure set to the correct pressure;
- Burner has been adjusted to correct flame type.
- Ignition set correctly and battery fitted to ignition module.
- Safety device (thermocouple) is being sufficiently heated during burner start up.

If after checking the above items, the appliance does not operate correctly, contact FED for advice and nearest service agent.

If you smell gas, immediately turn off the gas supply at the burner control valve. If smell still persists, turn appliance isolation valve off and call FED for advice. If smell is still evident, leak is probably on piping, therefore contact plumber and gasfitter for advice.
Where the burner flames begin to burn yellow, the appliance requires cleaning. Remove and clean burners, then thoroughly dry them before restarting burners.

APPLIANCE OPERATION

The operation of this appliance must only be carried out by trained and competent personnel!

Preparing the appliance for use:

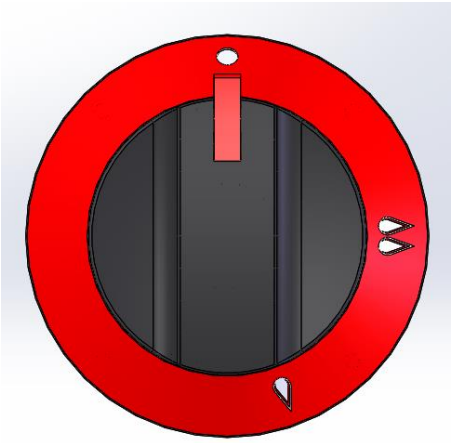
Before cooking food for the first time, we recommend cleaning the appliance thoroughly. Remove all packaging and adhesive films from the appliance very carefully and wash appliance with warm soapy water or similar cleaning agent.

Appliance Functions
Gas Range

Off

Maximum fire

Minimum fire

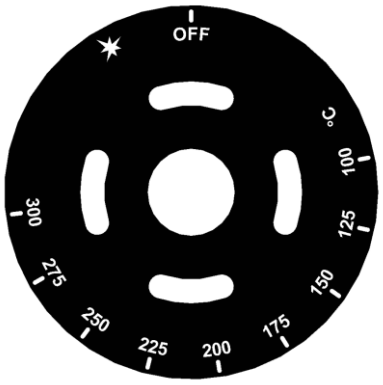


- The burners are ignited by the piezo ignition fitted to the front panel of the appliance or by using a match or similar ignition method. Ensure ignition is operated at the same time as the valve is operated. If the gas does not ignite immediately, turn valve off before build-up of gas becomes hazardous. Do not place any part of the body close to the burner, or have loose clothing near burner area.
- To light the burner, press the knob in and turn it anti-clockwise to the position.
- Hold down the knob and at the same time depress the ignition button near the burner;
- After lighting the flame, hold down the knob for 15 more seconds to allow the thermocouple (safety device) to heat. If the flame goes out when you release the knob, repeat the operation;
- Turn the knob to the desired heat setting within the ranges between positions ‘ ’ and ‘ ’.
- To turn off the burner, turn the knob clockwise to the position ‘ ● ‘.

- Allow sufficient time to enable the stove or oven to heat before commencing cooking e.g. 5 – 10 minutes.

Oven

- Before initial cooking, it is advisable to clean the appliance completely, especially the oven chamber. Remove all the packaging materials and film. Before cleaning the stainless steel accessories, make sure that the detergent used for cleaning is suitable for stainless steel surface cleaning, not containing any corrosive substance. Then dry the appliance with a clean cloth.
- For initial use, it is normal that unpleasant odour is smelled. (Making sure that it is not caused by gas leakage) Actually, it is caused by overheating of insulating materials and oil residue during the heating process of metal. When first using, leave the oven chamber empty and set the temperature to 300°C to heat till the odour is eliminated.
- Initial duration of ignition may be a little longer due to the air existing in the pipeline. It cannot be lit up until the air is exhausted completely.
- Each knob position of the oven stands for corresponding chamber temperature: 100,125,150,175,200,225,250,275,300°C



- To light up the oven, open the door box cover downward first, press the knob and rotate it counter-clockwise to align mark ✷ with the salient point then push down, light up the pilot flame with an igniter via the fire hole.
- After ignition, hold pressing the knob no less than 20s to heat up the thermocouple, if the pilot flame goes off when the knob is released, repeat the operations.
- Keep rotating the thermostat knob counter-clockwise to light up the main burner of oven. Choose suitable temperature in accordance with food requirement.
- To turn off the burners: rotate the knob clockwise to align the strip mark with the salient point
- Note: To convert has supply from NG to LPG, just substitute the main nozzle and pilot nozzle. Gas regulator must also be changed to suit new gas- i.e. Natural or LPG gas.
- If the burner does not ignite, turn the control knob to the off position and wait 5 minutes before repeating the ignition procedure.

Warning:

Do not leave the burners operating unattended. If the flame goes out, the burner will shut off and will have to be restarted as detailed above.

Do not place the hand (or other parts of the body) in a position where it may be affected during starting or operating the burners. Flames may be evident from the sides of utensils during ignition and operation of the burners.

Cleaning and Maintenance

- Before cleaning, turn off the appliance and the gas supply valve upstream.
- Clean the burners and crumb pan regularly.
- Clean the stainless steel surfaces with warm soapy water every day, and rinse it completely. (Do not aim at appliance with squirt gun directly during cleaning.)
- During cleaning, do not clean the stainless steel surfaces with abrasive detergent, brush or scraper etc. Scraps may cause rusting. Rub according to the satin direction. Do not clean the steel surfaces with chlorine products (bleach, hydrochloric acid etc.) though such products are dilute.
- Do not clean the floor where the appliance located with corrosive substance (e.g. KCL)
- Clean the dirt on burners and baffle regularly.
- Do not modify the ventilated space required for combustion.
- Accumulation of iron substance (e.g. substance formed by iron rust dissolving in the water of the pipeline, especially when the appliance is idle for a long period of time.) Therefore, to avoid such accumulation, do not clean the most stubborn food residue with wool brush. Instead, use a scraper or brush that made from stainless steel and not containing iron.
- Accumulation of acidic substance, e.g. Vinegar, lemon juice, spices, salt etc. Thus, avoid contacting the stainless steel accessories with such substances in long periods. Steam of acid solution is extremely harmful to the appliance surfaces.
- Perfect running condition and longer service life are guaranteed by a complete cleaning of the appliance every day. Clean the appliance with a wet towel containing soapy water or detergent, rinse it with clear water and dry it with a clean cloth. Do not clean the appliance with steel wool brush that may leave rusting. For the same reason, do not touch the appliance with iron articles.
- Stains and abrasions on stainless steel surfaces: remove the scrape and black stains with artificial sponge. During cleaning, comply with the polishing direction.
- Rusting: To remove the rusting, if necessary, contact the manufacturer of industrial detergent to find an appropriate detergent. Also industrial rust removal products may do. After cleaning, rinse with clear water, if necessary, neutralize the residual acid chemical compound with alkaline detergent.
- To avoid occurrence of rust stains, make sure that the salt residue on walls internally or externally is removed.
- After cleaning, fire hold of burner should be out of obstruction. Otherwise it may cause short time incomplete combustion.
- If not going to use appliance at any time, turn off the gas valve upstream of the appliance.
- 90% of the appliance is made of metal (stainless steel, iron, aluminium, galvanised metal sheet) which can be recycled by appointed treatment plant according to the environmental standards of the equipment installed.

APPLIANCE SERVICE

Appliance must only be serviced by an FED authorised person.

Appliance should be serviced at least every 2 years or more frequently depending on use. This service is not covered by warranty.

- Service should include check operation of valves, safety devices, all other components and for gas leaks.
- Any parts which have deteriorated or not working correctly should be replaced by genuine parts available from FED.
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Troubleshooting

If the appliance fails to operate, check gas supply to appliance

Users are not allowed to perform any maintenance operations on any parts of this appliance. Maintenance must be carried out exclusively by authorized technical service personnel.

TROUBLE	CAUSE	SOLUTION	
		FOR THE USER	FOR THE TECHNICAL SUPPORT SERVICE
Burner won't light:	the ignition plug is not securely fixed, or the connection with the cable is wrong;		check the connection;
	ignition plug insulator damaged / dirty;		Clean / replace the plug;
	clogged nozzle;		clean the pilot flame nozzle or replace it;
	pressure drop in gas pipe;		Check appliance inlet supply, pipe sizes, contact the gas utility company;
	gas valve damaged;		replace it
After releasing the knob, the flame goes out:	the thermocouple is not sufficiently heated by the burner flame;	Wait 2 minutes and repeat the ignition procedure;	Clean burner assembly and reposition thermocouple
	thermocouple faulty;		replace the thermocouple;
	gas valve faulty;		replace it
Main burner does not seem strong enough:	pressure drop in gas pipe;		Check inlet gas pressure, pipe sizes, contact the gas utility company;
	burner nozzle is clogged;		clean the burner nozzle (see chapter, Replacing the main burner nozzles);
	gas valve damaged;		replace it

Minimum flame adjustment			Light burner and turn to minimum setting. Remove knob, insert screw to adjust flame.
Burner aeration			Remove front panel, adjust aeration disc to suit correct colour flame.

Valves, igniter, aeration adjustment etc can be accessed by removing front panel. This can be done by removing knobs, undoing screws which hold the front panel. This will enable the equipment to be accessed and adjusted where necessary.