



Goldstein

Established 1911 • Proudly Australian Made

Installation and Operation Manual

800 SERIES GAS PASTA COOKER

Models: FRG-1PL

FRG-24PL



Manufacturer:

Goldstein Eswood Commercial Cooking PTY LTD

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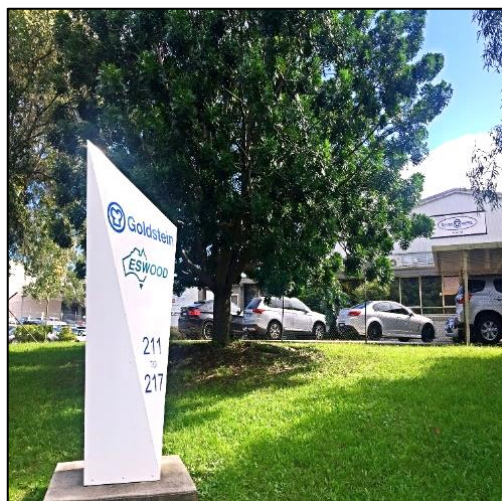
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2. Introduction

Congratulations on purchasing your Goldstein commercial cooking appliance. Goldstein Eswood Commercial Cooking is an Australian company and has been operating since 1911, building high quality products.

The information contained in this manual will assist your installer and ensure correct location and connection. Thoroughly read the user instructions and the user maintenance sections, as understanding your products, its operation, and its cleaning and service requirements will provide you with long and satisfactory service. Neglecting regular cleaning and maintenance could shorten the life of the product and decrease its efficiency. Please ensure only authorised service technicians are called to any difficulties that may arise.

2.1 Safety Notice

The below symbols may be used in isolation or combination throughout this manual. Where used, these symbols are intended to alert personnel of potential risk, either to themselves or to the equipment and/ or convey important messages regarding the safe operation and maintenance of the appliance.

WARNING



Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Please read the installation, operating and maintenance instructions thoroughly before installing or servicing this appliance.

CAUTION



This appliance is intended for professional use and is only to be used by trained, qualified personnel.

Installation, maintenance and repairs should be performed by an authorized Goldstein Eswood service agent or other qualified personnel. Installation, maintenance or repairs by an unauthorized and unqualified personnel will void the warranty.

WARNING



DO NOT store or use gasoline, flammable vapours and liquids or any other flammable material near this or any other appliance. Do not spray aerosols near this appliance whilst in operation.

3. Specifications

3.1 General Description

A commercial, heavy-duty gas pasta cooker with fast heating and manual water fill. The tank can hold up to 6 or 9 large stainless steel portion baskets. The tank and body is made from high grade stainless steel for lasting durability and finish.

3.2 Model numbers covered in this manual:

- **FRG-1PL** - Single 32L Tank with 6 portion baskets.
- **FRG-24PL** - Single 46L Tank with 9 portion baskets.

3.3 Gas Supply Requirements:

	Natural Gas	LPG (Propane)
FRG-1P (NGHC)	80 MJ/hr	80 MJ/hr
FRG-24PL (NGHC)	80 MJ/hr	80 MJ/hr
Supply Pressure	1.13 – 5.0 kPa	2.75 – 5.0 kPa
Operating Pressure	0.95 kPa	2.65 kPa
Gas Connection	¾" BSP Male	

The operating pressure is factory pre-set and should not be adjusted. However, if further adjustment is required, measure the operating pressure at the test point and proceed to adjust pressure at the appliance gas valve with the unit running. Refer to the Gas Conversion section of this manual for more detailed instructions.

3.4 Injector Sizes

	Natural Gas	LPG (Propane)
FRG-1PL	2.85	1.80
FRG-24PL	2.85	1.80
Pilot	No.26	No.16

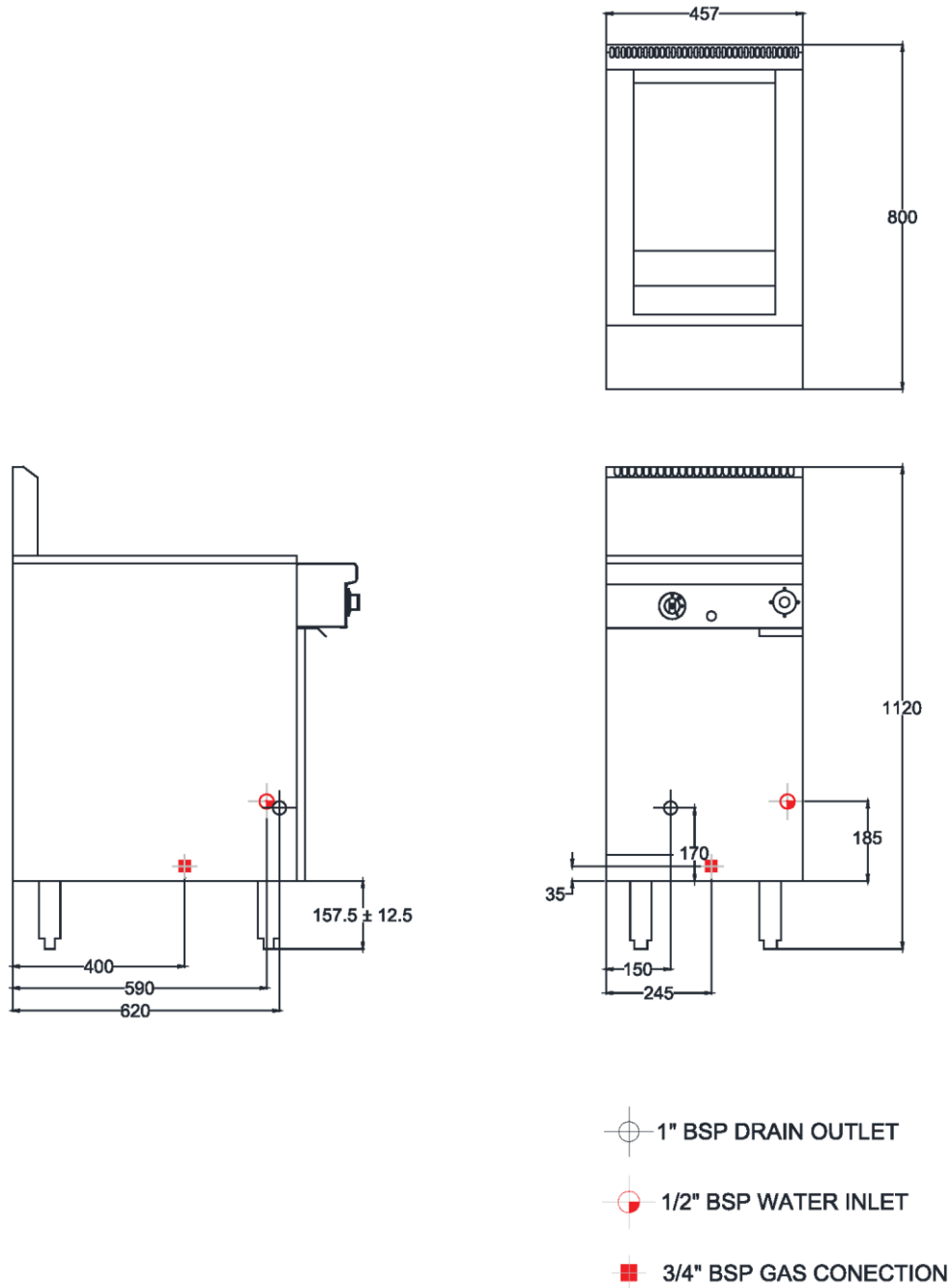
3.5 Water Supply Requirements:

Inlet Pressure	100 - 400 kPa
Inlet Connection	½" BSP

Dimensions

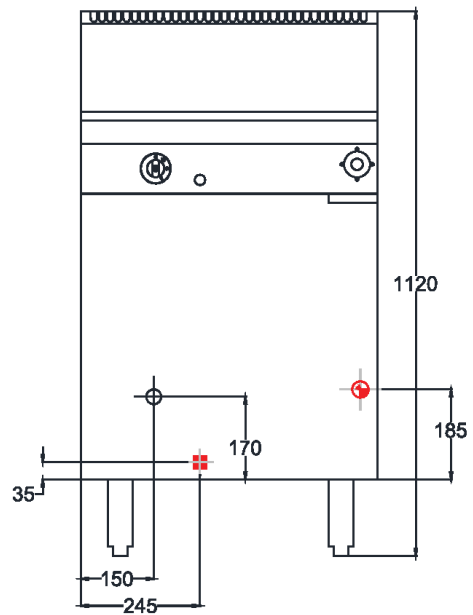
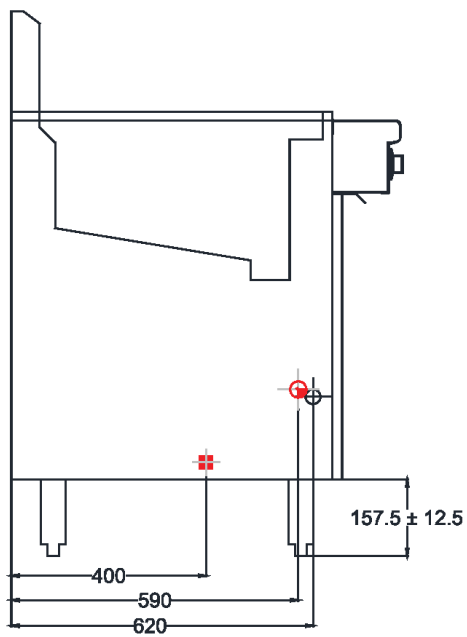
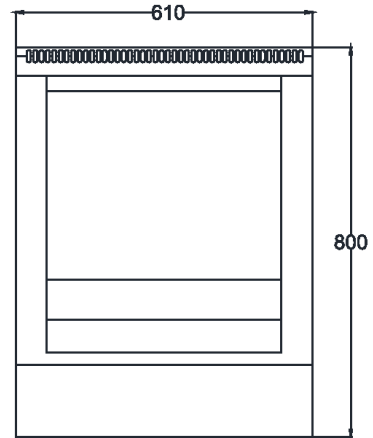
4. Dimensions

4.1 FRG-1PL



Note: Dimensions may change without notice in accordance with product design and development

4.2 FRG-24PL



⊕ 1" BSP DRAIN OUTLET

⊙ 1/2" BSP WATER INLET

■ 3/4" BSP GAS CONECTION

Note: Dimensions may change without notice in accordance with product design and development

5. Installation

Goldstein 800 Series Pasta Cookers are designed to give long and satisfactory service and incorporate the best possible materials and workmanship. Proper installation and preventative maintenance are vital for optimum performance and efficiency.

WARNING



This appliance must be installed by authorized personnel and in accordance with AS5601 & AS/NZS5601 – Gas Installations, AS/NZS3500 – Plumbing and Draining along with manufacturer’s specifications outlined in this manual. Installation, maintenance or repairs by unauthorized and unqualified personnel will void the warranty.

5.1 Receiving Inspection & Unpacking

- Remove carton, packaging and all plastic protective material from the appliance.
- Check for damages to the appliance and report any damage to the transport company and dealer.
- Ensure all loose packaged items i.e. legs, portion baskets, basket holder, trays and warranty cards are provided with the unit and report any missing items to the dealer.
- Check that the rating plate (located on the back of the door) corresponds with the available gas supply.

5.2 Installing into Location

- This appliance must be installed under an exhaust hood with adequate means of ventilation. Do not block, obstruct or connect a ventilation system directly to the appliance flue.
- Lift off the base and screw in the adjustable legs provided with the appliance. Do not install the appliance without the legs or place any obstructions in and around the base. Primary air for burner combustion is supplied through the base of the appliance and must be kept clear of obstructions.
- Position the appliance into the correct position.
- Level off the unit from left to right with a spirit level by rotating the feet. Also, level front to back with a fall of 2-3mm to the front to improve appliance ventilation & flue efficiency.

5.3 Installation Clearances

The following table shows the required clearances around this appliance to ensure correct and safe operation to the user, the appliance and its surroundings. Please refer to AS5601 or AS/NZS5601 for detailed gas installation requirements.

	Combustible material	Non-combustible material
Back	50mm	0mm
Sides	50mm	0mm

5.4 Gas Connection

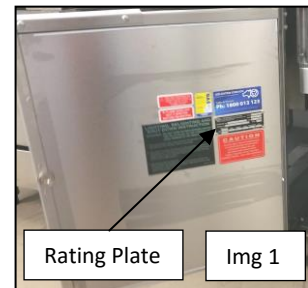
This appliance has been tested and pre-set before leaving the factory, however minor adjustments may be necessary to suit the gas supply pressure. Correct operation of the appliance must be tested as part of the installation procedure.

WARNING



This appliance must be installed by a qualified gas fitter & plumber and in accordance with AS5601 & AS/NZS5601 – Gas Installations & AS/NZS3500 – Plumbing and Drainage.

1. Have a licensed gas fitter or your gas supply company connect & check that the gas supply line pressure and volume are adequate for the appliance being installed. The required pressure and input rating is shown on the rating plate behind the door.
2. Install the appliance in accordance with AS5601 & AS/NZS5601. Ensure that the appliance gas type corresponds with the gas supply. Different gas types are NOT compatible; however, the appliance can be converted from one gas type to another. Please see conversion instructions for more details and contact the dealer for any necessary components.
3. **Fit an individual manual isolating valve and regulator (Pintossi PEL23S models only) to the appliance gas supply and as close as conveniently possible to the appliance.**
4. Connect the appliance to the gas supply. Location of the connection is shown in Dimensions section 3 and is at the rear of the appliance with a $\frac{3}{4}$ " B.S.P male fitting.
Note: White Rogers gas valve models have an inbuilt regulator, do not fit an external regulator as this will cause the appliance to run inefficiently.
5. Ensure all gas connections are tight and free of leaks using appropriate gas detecting equipment.

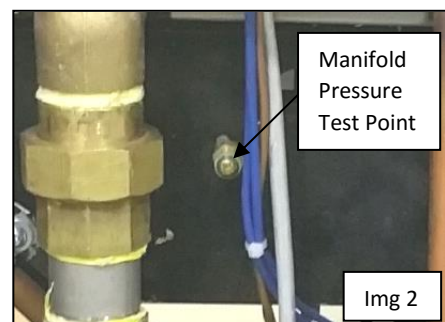


WARNING



Never use an open flame to detect gas leakages.

6. Bleed out any air in the lines.
7. Measure the appliance operating pressure at the manifold test point with the appliance running. If required, adjust the pressure at the appliance regulator (Pintossi valve models) or at the gas valve (White Rogers valve models) to the value shown in Specifications section 3.3- Gas Supply Requirements.



Installation

5.5 Water & Drain Connection

1. Connect the drain from the unit via a trap or tundish to a drain outlet. Note: Drain piping used must be suitable for boiling water and continuous temperatures of above 100°C. It is recommended to use copper pipe and brass fittings when making direct connections to the drain outlet.
2. Connect the water inlet to the dual check valve and an isolating valve adjacent to the machine where easily accessible.
3. Connect the unit to the cold-water supply and check supply pressure is between 200-400kPa. A pressure reducing valve should be fitted for pressure above 400kPa.
4. Ensure there are no leaks.

5.6 Commissioning

Once the appliance has been installed always ensure its functions are operating as per the following check list. Refer to Operation in section 6 for further details on how to operate each control.

1. Remove any plastic coating from steel panels.
2. Ensure all gas and water connections are correct and tight.
3. Ensure all parts are in their correct positions e.g. scrap arrestor, portion baskets and basket holder etc.
4. Turn on the gas and check for correct gas pressure as specified in section 3.
5. Turn on and check the pilot flame, sparker, thermostat & high-limit switch (if fitted), gas control and main burner are all operating correctly.
6. Instruct the operator on correct lighting procedures, filling and draining water, starting up and shutting down the appliance.

5.7 Before First Use

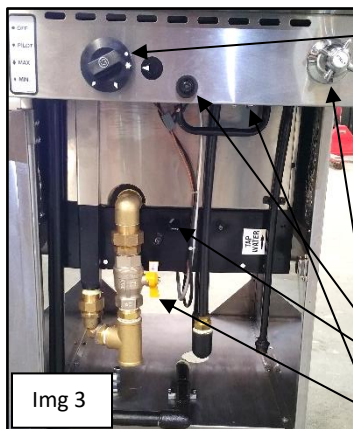
Before initial start-up, clean the protective oil from the interior of the pan with washing soda solution or other grease dissolving material. If required, the pan may be boiled using water and detergent solution filled to the water fill line inside the tank. Drain through the valve in the bottom then rinse thoroughly. (Note: The tank must be completely rinsed out as even a small particle of cleaner in the pan will ruin the cooking medium). Also, clean the baskets and strainer. Wipe the tank and all components dry.

6. Operation

6.1 Operational Controls

Flame failure protection and permanent pilots are fitted as standard on all Goldstein pasta cookers as required by safety regulations and convenience to the operator. If the pilot flame goes out, the flame failure protection will shut off any gas to the burner. The permanent pilot allows for the appliance to go on stand-by and the operator to continuously re-light the main burners without re-ignition.

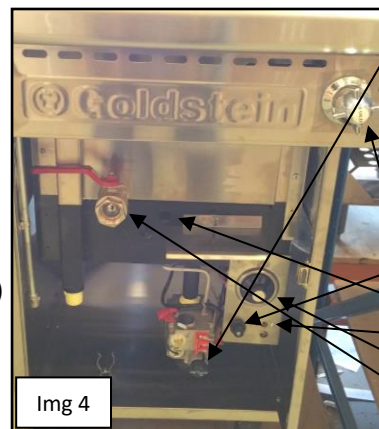
Pintossi Gas Valve Models



1. Gas Control Valve
 - OFF Position
 - ★ PILOT Position
 - 💧 MAX High Flame
 - 💧 MIN Low Flame
2. Water tap (Manual)
3. Sparker
4. Pilot Viewing Hole
5. High-Limit Switch
6. Drain Valve

Img 3

White Rogers Gas Valve Models



1. Gas Control Valve
 - OFF Position
 - ★ PILOT Position
 - ON Position
2. Water tap (Manual)
3. Sparker
4. Pilot Viewing Hole
5. High-Limit Switch
6. Thermostat
7. Drain Valve

Img 4

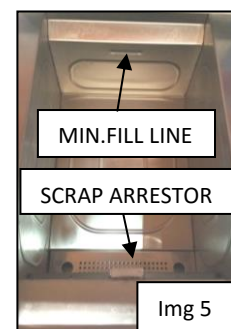
CAUTION



Never allow burner to operate with the appliance empty. Light only with water at operating water level mark and refill the tank should the water drop below the minimum fill line.

6.2 Filling the Tank

1. Ensure that the drain valve is closed.
2. Place the scrap arrestor in the tank as shown.
3. Fill to the indicated level on the tank by turning on the water tap. An overflow drain point is designed into the tank to prevent any water spilling over the sides.



Img 5

6.3a Lighting the Pilot (Pintossi Gas Valve Models)

1. Turn the gas control knob to the PILOT position. Push and hold the knob in while simultaneously pressing the SPARKER button. Continue holding in the PILOT position for approximately 10 seconds to establish the pilot flame. The pilot flame can be seen through the viewing hole. If the pilot does not remain alight after 10 seconds, repeat step 1.
2. Ensure the pilot is lit through the viewing hole then close the fryer door.

Operation

6.3b Lighting the Pilot (White Rogers Gas Valve Models)

1. Open the appliance door.
2. Turn the gas control knob to the PILOT position. Push and hold the knob in while simultaneously pressing the SPARKER button. Continue holding in the PILOT position for approximately 10 seconds to establish the pilot flame. The pilot flame can be seen through the viewing hole. If the pilot does not remain alight after 10 seconds, repeat step 1.
3. Ensure the pilot is lit through the viewing hole then close the fryer door.

6.4a Turning on the Main Burner (Pintossi Gas Valve Models)

1. Once the tank is filled and pilot is lit, turn the gas control to the MAX high flame position for fast initial boil up.
2. Turn and select to the desired flame setting i.e. MAX High Flame or MIN Low Flame.

6.4b Turning on the Main Burner (White Rogers Gas Valve Models)

1. Once the tank is filled and pilot is lit, turn the gas control knob to the ON position.
2. Turn and select to the desired temperature setting on the thermostat.

6.5a Turning off the Main Burner and Pilot (Pintossi Gas Valve Models)

1. Turn the gas control knob to the PILOT position to turn off the main burner. The pilot will remain alight. During service while the appliance is not in use, it is recommended to keep the pilot alight.
2. To completely shut down the main burner and pilot, push the gas control knob in and turn to the OFF position and close the fryer door.

6.5b Turning off the Main Burner and Pilot (White Rogers Gas Valve Models)

1. Turn the gas control knob to the PILOT position to turn off the main burner. The pilot will remain alight. During service while the appliance is not in use, it is recommended to keep the pilot alight.
2. To completely shut down the main burner and pilot, push the gas control knob in and turn to the OFF position and close the fryer door.

6.7a Draining (Pintossi Gas Valve Models)

1. Shut the appliance down completely and wait until the water has cooled down before draining. For fast cooldown turn the tap on briefly to add cold water to the tank.
2. Open the drain valve.

6.7b Draining (White Rogers Gas Valve Models)

1. Shut the appliance down completely and wait until the water has cooled down before draining. For fast cooldown turn the tap on briefly to add cold water to the tank.
2. If required, screw on the drain extension tube to the drain outlet. Open the drain valve and empty the water into a bucket or large pan. Do not use glass or plastic containers.

WARNING



Always completely shut down the appliance including the pilot before draining the tank. Extreme caution is advised when draining hot water. Use protective clothing and ensure the water has cooled to a safe temperature before draining.

7. Cleaning and Maintenance

7.1 General

Build-up of grease, fat and carbon will impede effective heat transfer from the heat source to the cooking medium. Keeping the appliance clean will ensure it operates correctly and efficiently.

CAUTION



Do not use steel wool, abrasive materials or caustic detergents on this appliance. Do not use metal knives, spatulas or any other metal utensils to scrape the tank or stainless steel surfaces. Use protective clothing for cleaning to avoid dangerous contact with hot surfaces.

CAUTION



Never use wash hoses on this appliance. The appliance is not waterproof and caution is advised when hosing down floors near this appliance. Appliance regulators are commonly connected near the bottom of the appliance and water in this area can create blockages.

7.2 During Service Cleaning

1. Check and inspect the water quality and water level. If required, fill the tank back up to the fill mark if water level has reduced. If the appliance is under heavy use and requires new water, shut it down and re-fill the water safely as instructed in section 6 - Operation.
2. Remove any foreign matter from the scrap arrestor before refilling to prevent blockages.

7.3 After Service Cleaning

1. Drain the water safely and remove any matter left at the bottom of the tank with a nylon or wooden scraper.
2. Wipe off any particles from surfaces and clean with a suitable cloth and cleaning agent.
3. Remove and wash all removable parts i.e. baskets, basket holder, drain extension and scrap arrestors.
4. Wipe the appliance exterior and tank completely dry.

7.4 Periodic Cleaning

1. Drain and completely empty any water in the tank. Scrape away any excess debris using a nylon or wooden scraper.
2. Clean the tank with a good grade cleaner or fill it with hot water and a strong detergent. Bring to a rolling boil, turn the heat down and let the mixture stand until deposits and/ or carbon spots can be rubbed off with a brush.
3. Clean the exterior panels with a hot cloth or soft scrubbing brush and cleaning agent suitable for stainless steel. For stubborn or encrusted deposits, soak the area with the cleaning agent and hot water and use a wooden or nylon scraper to remove.
4. Scrub the tank walls, then drain and rinse with clean water.
5. Refill the tank with clean water and boil again.
6. Drain, rinse and dry thoroughly.

Cleaning and Maintenance

7.5 Periodic Maintenance

Incorporating a regular maintenance schedule will optimise and keep services running efficiently. Goldstein can provide an MIS (Machine Inspection Service) that delivers regular inspection and maintenance to reduce problems before they occur. For more information or to setup an MIS, please contact the nearest Goldstein branch.

CAUTION



This appliance is intended for professional use and is only to be used by trained, qualified personnel.

Installation, maintenance and repairs should be performed by an authorized Goldstein service agent or other qualified personnel. Installation, maintenance or repairs by an unauthorized and unqualified personnel will void the warranty.

8. Trouble-Shooting

Please refer to the following guide as reference to diagnose and repair some of the more common problems encountered. Should a problem not listed arise, or in doubt, please contact Goldstein or an authorised service agent.

Fault	Cause	Solution
Pilot does not light.	No gas to appliance. Pilot injector blocked. Air in gas line.	Turn on the gas isolation valve and/ or check LP bottles are not empty. Contact Goldstein service. Hold in pilot position for 30 seconds while attempting to light.
Pilot lights but does not hold when releasing gas control knob.	Knob is released before heating thermocouple. Faulty thermocouple Flame on pilot too small. Wavy or uneven pilot flame.	Hold the knob in for at least 20 seconds. Replace thermocouple. Call Goldstein service. Gas pressure too low. Blocked injector. Contact Goldstein service. Check and minimise strong draughts near the appliance.
Burner does not light.	Incorrect gas supply pressure. Faulty gas control.	Contact Goldstein service. Contact Goldstein service.
Piezo sparker not lighting pilot	Sparker lead is loose, damaged or faulty. Faulty or cracked electrode. Faulty piezo sparker.	Repair a loose connection or replace the lead. Replace the electrode. Replace sparker.

9. Gas Conversion

WARNING



Gas conversion procedures should only be performed by an authorized Goldstein Eswood service agent or qualified personnel. Unauthorized and unqualified personnel will void the warranty. Gas isolator MUST be turned off before commencing any service work.

1. Remove the injectors from the burner manifold. Injectors can be accessed from under the front of the appliance.
2. Replace the injectors with the new appropriate type. See section 3 – Specifications.
3. Remove the pilot assembly bracket and replace the pilot injector with the new appropriate type.
4. Measure the gas pressure at the test point on the manifold and adjust the pressure on the appliance regulator (Pintossi valve models) or at the gas valve (White Rogers valve models) for the appropriate gas type.
5. Adjust the pilot flame on the gas valve.

9.1 Commissioning

1. Check all work for leakage using appropriate gas detecting equipment.
2. Refer to section 4.6 Commissioning for a check list.
3. Replace the rating plate and any markings associated with the fuel type with the appropriate type.

ATTENTION



Gas conversion is not complete until the appliance has been re-commissioned. Please refer to the Installation section 5.6 Commissioning of this manual for details.

10. Wiring Diagrams (White Rogers gas valve models only)

No	AMENDMENT	DATE	By	
①	WAS HAND DRAWN	30.04.04	ROA	
		JIG No	Sample No	
Specific Instructions ALL WIRE 1.5mm² SILICON				

ISSUE	01	DRAWN BY:	M.S.	
<p style="margin: 0;">TOLERANCES ON DIMENSIONS UNLESS OTHERWISE SPECIFIED WHOLE mm:±0.5 ANGULAR:±1°</p>				

KEY	DESCRIPTION	P/N
G	Gas Control Unit (White Rodgers 35C)	GCUR690
T	Thermostat	MTH0205
OT	Over Temperature Control	MTH0245
P	ThermoPow	GP00900

GAS FRYER FRG/TGF-1M-400

WIRING DIAGRAM

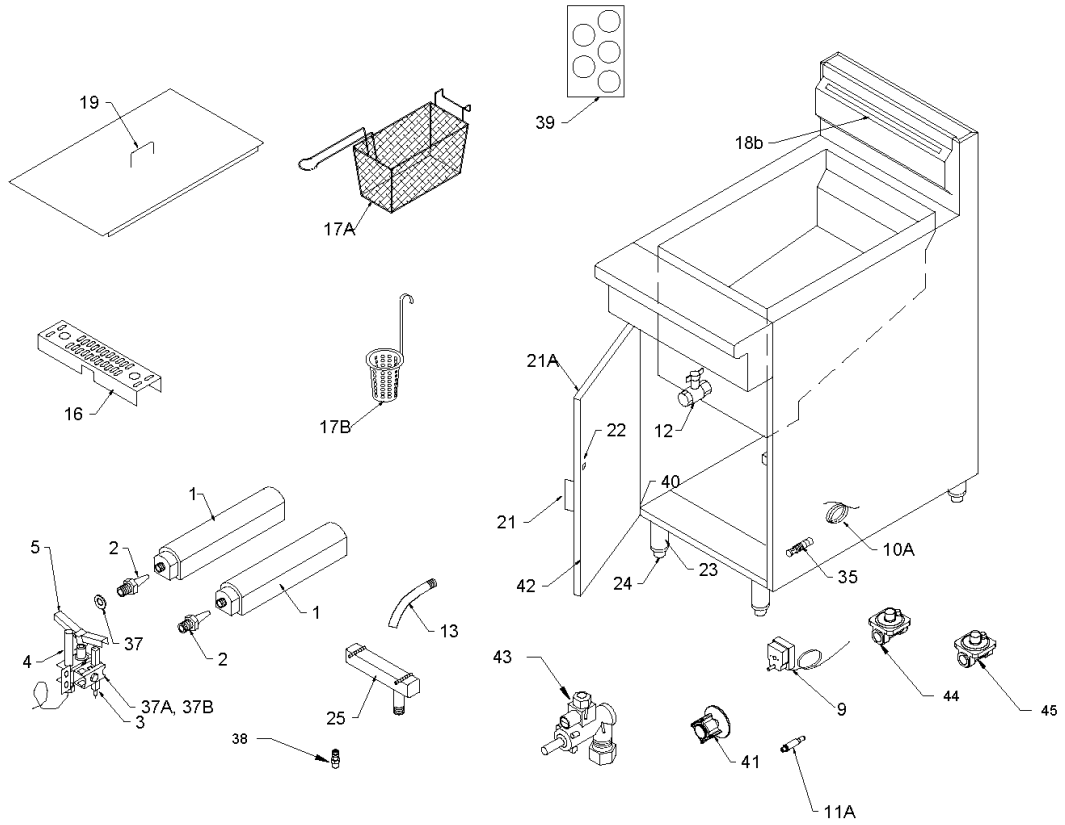
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PROGRAMS				
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Spare Parts

11. Spare Parts

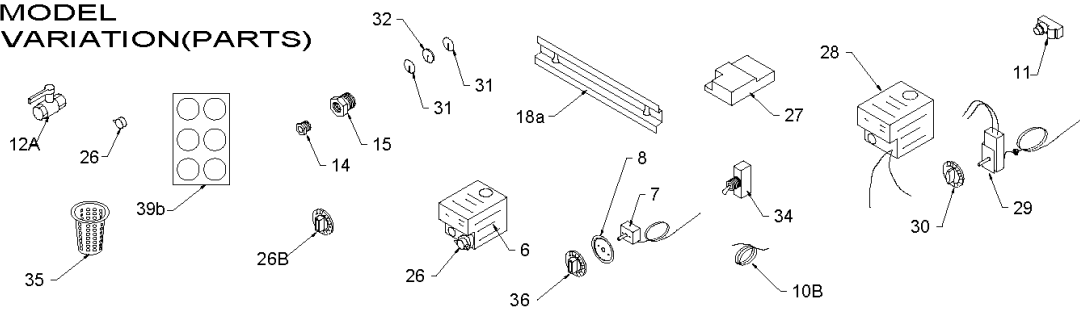
11.1 Parts Diagram – All Models



PASTER COOKER

FG07

MODEL VARIATION(PARTS)



11.2 Parts List

ITEM NO.	PART NUMBER	DESCRIPTION
1	FRG18A18	26.37mJ BURNER
2	GIJFR285	2.85mm NG INJECTOR
2	GIJFR180	1.80mm LPG INJECTOR
3	GPIC0007	CERAMIC ELECTRODE
4	GPG00900	900mm POWER GENERATOR
5	GPIB0005	WING PILOT BODY
6	GCUFRG00	CONTROL UNIT
7	MTH20205	THERMOSTAT
8	MKNPE001	ESCUTCHEON PLATE
9	MTH00225	OVER TEMP THERMOSTAT
10A	ESPL0800	800MM HT LEAD
10B	ESPL0402	400mm HT LEAD
11	GRG72M05	SINGLE PROBE ELEC SPARKER
11A	ESP00009	PIEZO SPARKER
12A	MTAC0026	BALL VALVE
12	MTAC0025	BALL VALVE T HANDLE
13	FRE18T09	DRAIN PIPE
14	GAT00009	FRG PART B
15	GAT00010	FRG PART A
16	PAG45P16	SCRAP ARRESTOR
17A	MBKPAG02	SS PASTA BASKET
17B	MBKPAG03	PASTA BASKET
18A	FRG18P27	OLD BASKET HOLDER
18B	FRG18P70	NEW BASKET HOLDER
19	FRG18A17	OPTIONAL NIGHT COVER
20	MHDCP001	HANDLE
21A	STG00P36	NEW DOOR HANDLE
21B	MHDPL095	PLASTIC HANDLE
22	MCA00002	DOOR MAGNETIC CATCH
23	MLEPLA03	SS LEG WITH ADJ PLASTIC INSERT
24	MFT00050	PLASTIC BULLET FEET
25	FRG18A14	MANIFOLD ASSEMBLY
26	MKNPLFRP	FRG GAS CONTROL KNOB
26	MKNPLFR1	NEW FRG GAS CONTROL KNOB
27	ESP00016	SCARIO ELECTRIC BOX
28	GCU00008	W/R GAS CONTROL
29	MTH00200	THERMOSTAT
30	MKNFR000	THERMOSTAT KNOB
31	MWS00004	BRASS WASHER
32	MWS00005	RUBBER WASHER FOR GLAND
33	MCK00002	WR438 LPG CONVERSION
35	MCC00001	SS BASKET
36	MKNPLTS8	THERMOSTAT KNOB
37A	GPU00001	LPG PILOT SPUD
37B	GPU00002	NG PILOT SPUD
38	GNIC0001	1/8" TEST NIPPLE
39	PAG45P02	PASTA BASKET HOLDER
40	STG00A12	BOTTOM HINGE
41	MTAW0001	WATER TAP ASSY
42	DOOR ASSY	DOOR ASSY
43	GCUAS000	GAS COCK PINTOSI PEL23S
44	GRL00024	3/4" LPG REGULATOR
45	GRL66019	3/4" NG REGULATOR

12. Warranty

Installation must be carried out according to local regulations by qualified trade persons.

Isolating switch(es), shut-off valves etc. must be within easy reach of the machine for future service and maintenance requirements.

If in doubt call GOLDSTEIN/ESWOOD or their representative for further information. No responsibility will be accepted for defects or damages by improper installation, for changes to the product not authorised by GOLDSTEIN/ESWOOD or for operation outside the technical specifications.

GOLDSTEIN/ESWOOD warrants their products to be free from defects in material and workmanship under "normal use and service". This does not include normal wear and tear of parts.

GOLDSTEIN/ESWOOD will repair or replace any parts, which in GOLDSTEIN/ESWOOD's sole judgement are defective in material or workmanship, in accordance with the warranty offered.

This undertaking covers the provision of labour and parts for 12 months from the date of delivery to the purchaser. This undertaking applies only to state capitals. Remote areas are not covered by this commitment and special enquiries should be made. (Note: Travel time not covered by warranty).

"To the maximum extent permitted by law, any liability on Goldstein/Eswood's part or on the part of its servants or agents for loss or damage of any kind whatsoever in connection with the products, including liability for or in respect of any claim arising out of contract, negligence or statute, shall not, in any event, exceed \$100"

Labour under warranty is supplied free of charge during normal working hours, Monday to Friday. Should warranty work be requested outside of our normal working hours a labour charge will be applied equivalent to a normal hour rate, without out of hours' penalty rates. (Refer to last page of this manual for your closest branch for warranty repair services).