

metos

GAS DEEP FAT FRYERS

700 - Restaurant Serie

TYPE: 72/02FRG, 73/02FRG, 74/02FRG

Installation and Operation Manual



S/N:

Rev.: 1.0

Dear Customer,

Congratulations on deciding to choose a Metos appliance for your kitchen activities. You made an excellent choice. We will do our best to make you a satisfied Metos customer like thousands of customers we have around the world.

Please read this manual carefully. You will learn correct, safe and efficient working methods in order to get the best possible benefit from the appliance. The instructions and hints in this manual will give you a quick and easy start, and you will soon note how nice it is to use the Metos equipment.

All rights are reserved for technical changes.

You will find the main technical data on the rating plate fixed to the equipment. When you need service or technical help, please let us know the serial number shown on the rating plate. This will make it easier to provide you with correct service.

For your convenience, space is provided below for you to record your local Metos service contact information.

METOS TEAM

Metos service phone number:.....

Contact person:.....

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1. General information

Read the instructions in this manual carefully, as they contain important information on how to install, use and service the appliance safely, properly, and effectively.

Keep this manual in a safe place so that it can be used as reference by other operators of the appliance.

This appliance should be installed following the instructions provided by the manufacturer and in compliance with all applicable local regulations. This appliance should be connected to the power supply by qualified personnel only.

All personnel in charge of using this appliance should be specifically trained in its operation.

In the event of failure or malfunction, switch off the appliance. The periodic functional checks requested in this manual should be carried out according to the instructions. Have the appliance serviced by a technically qualified person duly authorized by the manufacturer that uses genuine spare parts.

Failure to comply with the above may jeopardise the appliance's safety.

1.1 Symbols used in the manual



This symbol informs about a situation where a safety risk could be imminent. The instructions provided are mandatory in order to prevent injury.



This symbol informs about the right way to act in order to prevent bad results, damage to the appliance, or hazardous situations.



This symbol informs about tips and hints that help the user to get the best performance out of the appliance.



This symbol informs about a function that should be taken into account for self-control purposes.

1.2 Symbols used on the appliance



This symbol on a part warns the user that there are electrical terminals behind it. Therefore, the concerned part should only be removed by qualified personnel.

1.3 Checking correspondence between the appliance and the manual

The rating plate of the appliance shows its serial number. If the manuals are missing, it is possible to order new ones from the manufacturer or your local representative. When ordering new manuals it is essential to quote the serial number shown on the rating plate.

2. Safety

2.1 Using the appliance safely



Being an appliance designed for professional use only, it should be operated by qualified personnel exclusively. Never leave the deep fat fryer unattended while in operation.



Cooking with old and filthy oil is a safety risk; make sure that you always use fresh or purified oil.

Foodstuffs to be fried should always be as dry as possible. Cooking foodstuffs with high moisture content causes oil to foam and overflow.



Do not try to fry too much food at the same time. The maximum recommended quantity to be fried at the same time is about half of the basket capacity.

If oil level approaches the minimum level line marked on the side panel of the tank, pour some more oil into the tank until you reach the maximum level. If you should need to add oil while the appliance is in operation, use cold oil and pour it into the tank very carefully. In this way, you will prevent oil from splashing (fire hazard). In any case, do not mix large amounts of fresh and old oil or fat because fresh oil will spoil much faster when in contact with old oil.



Too little oil in the tank may result in overheating.

Never leave the deep fat fryer on without oil in the tank! Should this happen accidentally, the safety thermostat will turn off the appliance.

Do not move the appliance while hot.



IF OIL SHOULD CATCH FIRE, NEVER USE WATER TO EXTINGUISH IT.

2.2 Safety instructions in the event of a fault



Always keep the lid close at hand, in an easily accessible place.

Should oil catch fire, use the lid as first extinguishing means and then smother the fire with a fire blanket.

In the event of a fault or malfunction, switch off the appliance and call the service.

If an emergency occurs, turn off the gas shut off valve on the gas supply line.

2.3 Additional prohibitions (hazardous procedures)



Never tamper with the seals on the adjusting screws that are found on the gas valves

2.4 Disposing of the appliance

This appliance was built by using recyclable raw materials and does not contain any hazardous or toxic substances. To dispose of the appliance and all its packaging materials, strictly follow all local regulations in force in the place where it is installed. Packaging materials should be divided according to the type and delivered to a specific collection site. Ensure compliance of applicable environmental protection regulations.

3. Functional description

3.1 Application of the appliance

The deep fat fryer is intended to cook fresh or deep-frozen products and to fry half-cooked products continuously.

3.1.1 Prohibited use/Use for unintended purposes

The deep fat fryer is not designed for use as a bain-marie or pasta cooker.



The manufacturer cannot be held liable for any faults caused by defective installation or inappropriate use of the appliance. In such cases the warranty shall be null and void.

3.2 Construction

Exterior finish and adjustable feet are all AISI 18/10 stainless steel.

Tanks are stainless steel type AISI 18/10 with cool zone and foam area.

Worktops are pressed and have rounded corners.

3.3 Operating principle

Oil is heated up to the desired temperature by means of tubular steel burners fitted outside the tank. Burners can withstand both mechanical and thermal stresses. The pilot flame and the burners are fitted with fixed nozzles.

Oil temperature can be selected between 100°C (212°F) and 190°C (374°F) (item 1 in Fig. 1) and intermediate values.

The easiest way to cook foodstuffs is to fry them in the frying baskets supplied with the appliance.



The deep fat fryer is equipped with a safety thermostat (item 3 in Fig. 1) that stops gas flow in the event that oil temperature exceeds 230°C (446°F) for whatever reason.

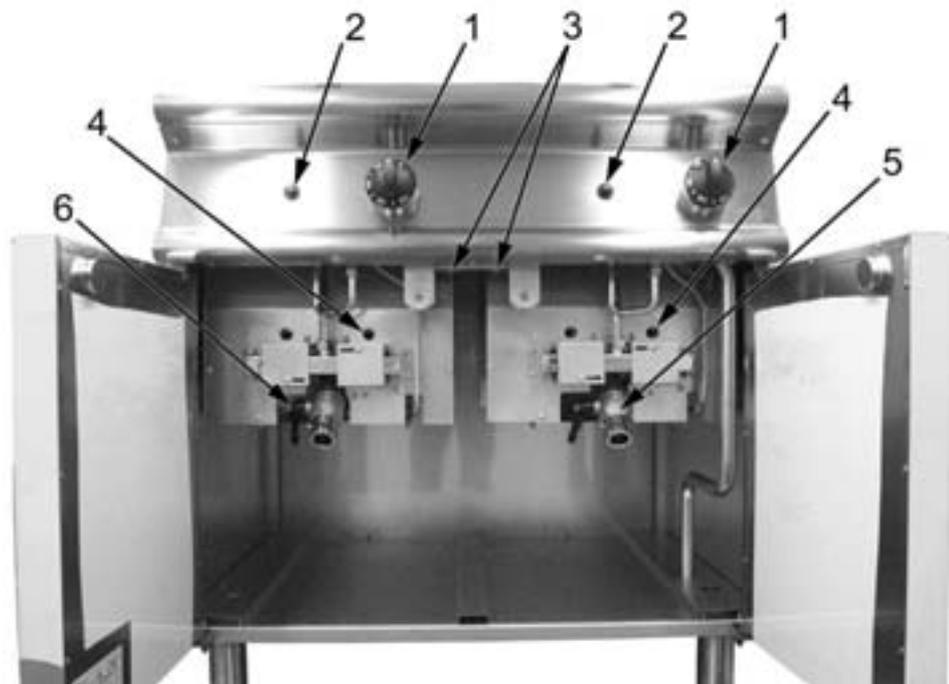


Fig. 1

1. Gas valve knob
2. Piezoelectric ignition
3. Safety thermostat
4. Pilot flame inspection hole
5. Oil drain valve
6. Lever to open/close the drain valve

4. Operating instructions

4.1 Prior to use

4.1.1 Preparing the appliance for use

Before cooking food for the first time, we recommend cleaning the appliance --and especially the tanks-- thoroughly. Remove all packaging materials and adhesive films from the deep fat fryer very carefully. Clean the deep fat fryer using hot water.

Drain cleaning water from the tank (see chapter "*Emptying the tank*" further below). Wipe the appliance dry with a clean cloth.



All stainless steel parts should be cleaned using a detergent free from abrasive substances and specifically suited to clean steel surfaces.



Never use water jets to clean the appliance.

4.2 Using the appliance

4.2.1 Filling the tank with oil



First of all, check that the drain valve is closed (item 5 in Fig. 1 further above).

Fill the tanks with good quality deep-frying oil up to the maximum level mark (see Fig. 2). To find out tank capacities, refer to the “*Technical specifications table*” at the end of this manual.

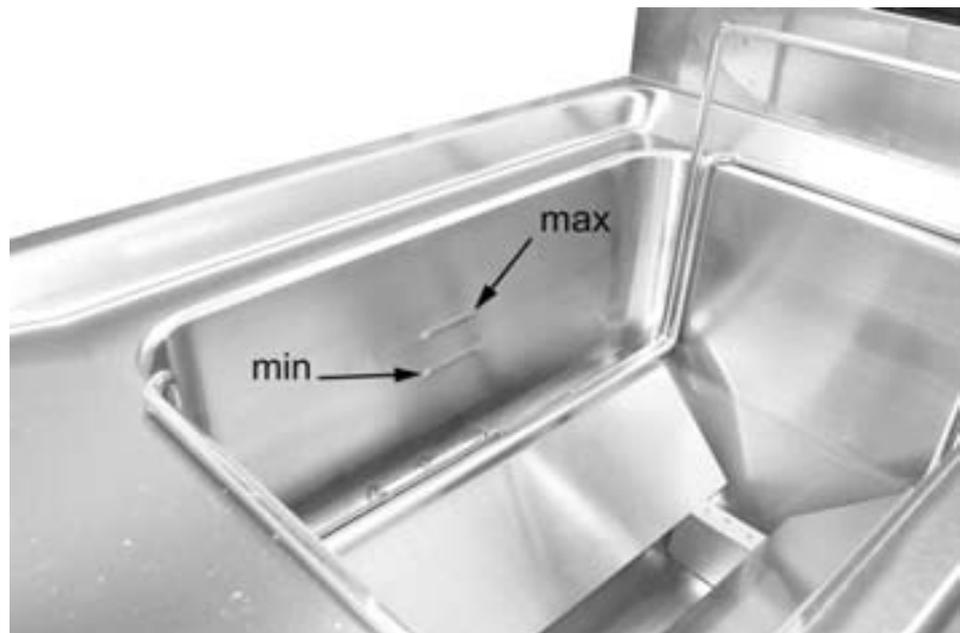


Fig. 2



Use liquid deep-frying oil only.

If you should use solid fat to fry, melt it in a separate pan before using it to avoid overheating the heat exchanger, which could result in a fire hazard.

During normal operation, oil level should always be kept between the maximum and minimum level marks.



It is dangerous to use the deep fat fryer when oil has dropped below the minimum level because this may pose a fire hazard.

To find out the amount of oil you need to add to reach the maximum level when oil is at the minimum level, refer to the “*Technical specifications table*” at the end of this manual.

Operating instructions

4.2.2 Lighting the pilot flame

Push the knob and turn it towards the left to the position shown as item 11 in Fig. 3. Press and hold down the knob and at the same time push the ignition button (item 2 in Fig. 1). After lighting the pilot flame, hold the knob down for 15-20 seconds to allow the thermocouple to heat. If the pilot flame goes out, repeat the lighting process.

Proper pilot flame lighting can be checked through the viewing hole provided for that purpose (item 4 in Fig. 1 further above).

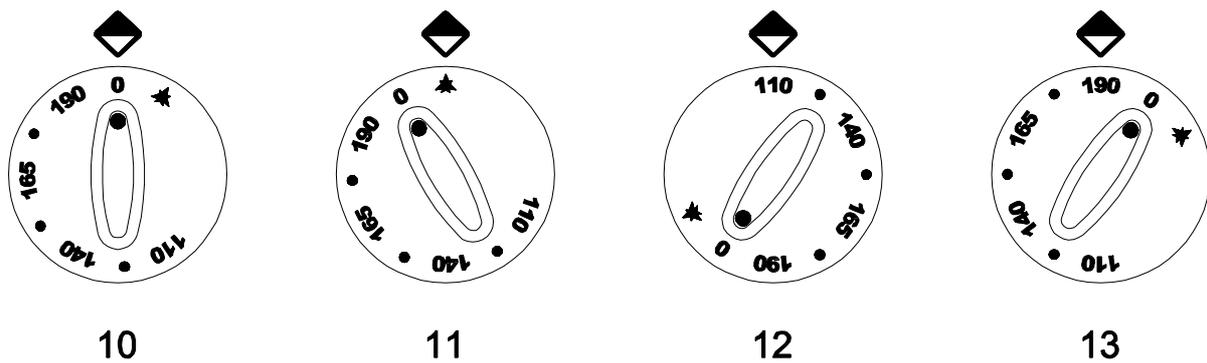


Fig. 3

- 10. OFF position
- 11. Pilot flame lighting position
- 12-13. Temperature control range

4.2.3 Lighting the main tank burner

To light the main burner, exercise a slight pressure and turn the knob to the position corresponding to the desired temperature (item 12-13 in Fig. 3). Oil temperature will be kept at the set value by means of a thermostat that automatically turns the main burner on and off.

Operating instructions

4.2.4 Frying

Prior to frying, remove as much moisture as possible from the foodstuffs with a twofold purpose: to prevent oil from overflowing due to foam build-up and to avoid excessive hot oil splashes. Total weight of product to be cooked should not exceed 1.5 kg in 10-litre tanks (models 73) and 2.5 kg in 15-litre tanks (models 72 and 74).

- Use the thermostat to set the desired cooking temperature; the ideal temperature is 180°C (356°F).
- Place the products into the basket; fill the basket to 1/3 or 1/2 (maximum load) of its full capacity.
- Shake frozen products well before dipping them into the oil.
- Lower the basket into the oil.
- When product is ready, lift the basket and hang it from the basket support to allow excess oil to drip away.



Always monitor oil quality during operation. Overused oil can be recognized by its typical dark colour, viscosity and tendency to smoke even at low temperatures.



Never leave the appliance unattended while in use.

4.2.5 Switching off the appliance

To turn off the main burner, turn the knob towards the right to the position shown by item 11 in Fig. 3: only the pilot flame will remain lit. Exercise a slight pressure and turn the knob to the position shown as item 10 to extinguish the pilot flame too.

4.2.6 Safety thermostat

This appliance is equipped with a safety thermostat. Should oil temperature exceed the maximum value, i.e. 230°C (446°F), gas flow will be automatically shut off to prevent oil from overheating to such an extent that there may be a fire hazard or that poisonous fumes may be produced. This is a safety feature that protects the appliance when a component breaks down or the fryer is used against the instructions (too little oil in the tank, using solid fat without melting it first, using oil that is dirty and/or too old).

If the safety thermostat trips, proceed as follows:

1. wait for a few minutes so that oil temperature drops below 180°C (356°F);
2. reset the safety thermostat as follows:
 - open the doors;
 - press the small red reset button until you hear a metal click;

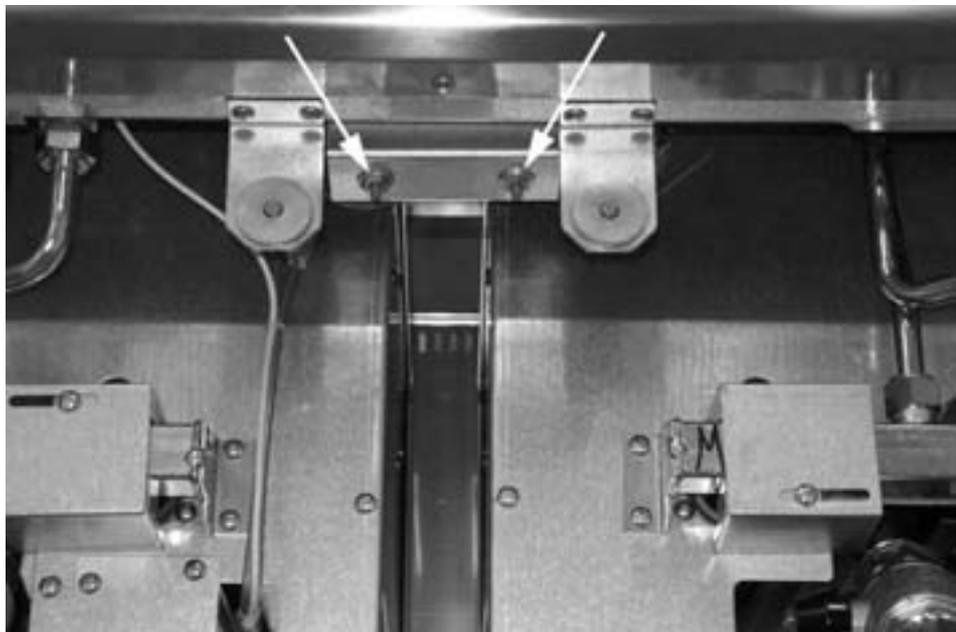


Fig. 4

3. filter or change used oil or top up oil to the maximum level mark;
4. switch on the appliance.

If the safety thermostat trips again, call service.

4.2.7 Emptying the tank



Empty the tank every day to clean it and to filter oil with the purpose of removing any frying residues. Give utmost attention to this operation, which should not be carried out before oil temperature has dropped to 100°C (212°F).

Empty the tank as follows:

1. insert the drain pipe (item 15 in Fig. 5) into the drain valve and turn the pipe to lock it;
2. place either a container with a capacity of at least 20 litres or the oil drain pan supplied as accessory, under the drain pipe;
3. turn the lever (item 16) to open the valve.

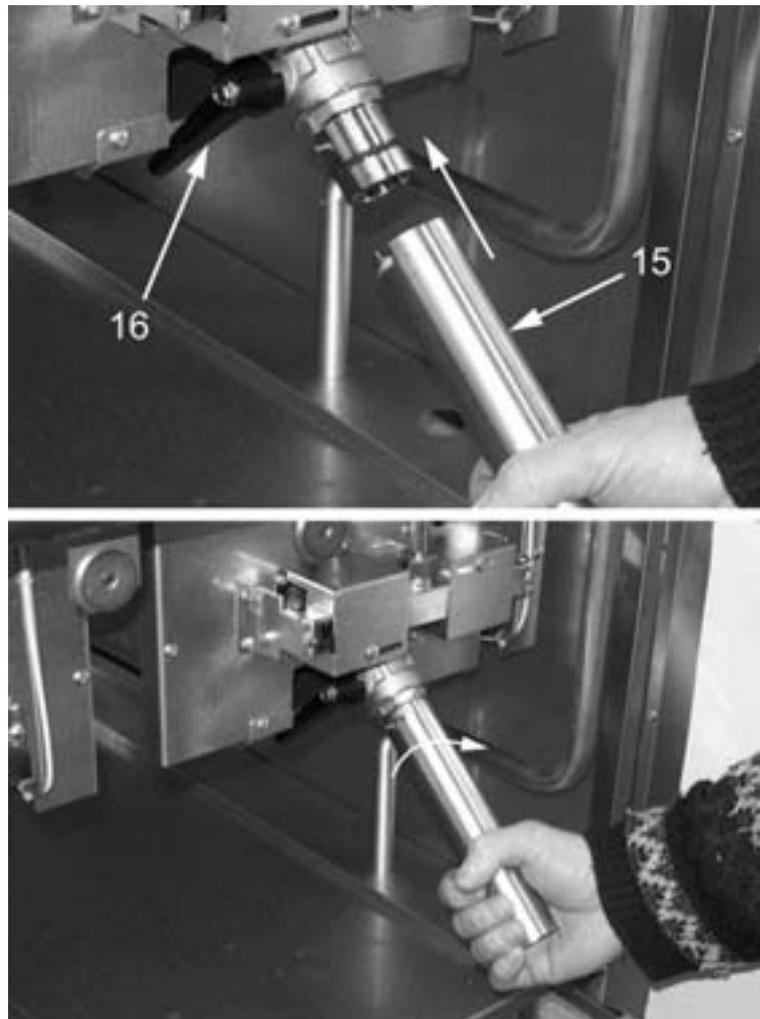


Fig. 5

- 15. drain pipe
- 16. lever to open drain valve

4.3 After-use care

4.3.1 Cleaning



Before cleaning, turn off the appliance and shut off gas supply upstream of it.

Wait until the deep fat fryer has cooled down before you start cleaning it.

Drain all oil from the tank, see chapter "*Emptying the tank*" further above.

General information

The main causes for stainless steel wear or corrosion are:

- using abrasive or acid detergents, especially chlorine-based products such as hydrochloric acid or sodium hypochlorite (bleach). Therefore, before buying a cleaning product, make sure it does not corrode stainless steel (see also paragraph "*Routine cleaning*" below);
- stagnation of ferrous deposits (such as those created by rust dissolved in the water flowing through the piping, especially after the appliance has remained idle for some time). Therefore, avoid such stagnation. Do not use wire wool pads to remove the most stubborn food residues. Use, rather, pads or spatulas made of stainless steel or softer, non-ferrous materials;
- stagnation of substances having acid components such as vinegar, lemon juice, sauces, salt, etc. Avoid prolonged contact of the stainless steel parts of the appliance with those substances. The evaporation of saline solutions over the surfaces of the appliance is particularly harmful to them.

Routine cleaning

Cleaning the appliance thoroughly on a daily basis is the key to keep it in perfect working condition and prolonging its life. Clean the appliance with a damp cloth using water and soap or detergents, provided that they are not acid or abrasive as discussed further above. Such detergents should not even be used to wash the floor near the appliance, as their fumes may deposit on the steel surfaces and damage them. If the deep fat fryer is very dirty, use a Scotch-Brite™ type synthetic scrub sponge. Rinse it off with clean water and wipe it dry with a clean cloth. Do not rub the appliance with steel wool pads as they could leave rust stains. For the same reason, avoid touching the appliance with ferrous objects.



In order to prevent corrosion spots from forming, ensure that any salt residues are carefully removed from the tank's sides and bottom.



Never use direct water jets to clean the appliance because this could result in water entering into it and damaging it.

Stains and abrasions on the steel surface

Scratches and dark stains may be smoothed or removed using stainless steel wool pads or synthetic abrasive sponges, which should always be rubbed in the same direction as the satin finish.

Rust

If you need to remove rust stains, contact manufacturers of industrial detergents to find a suitable product. Industrial descaling products can also be used to that end. After using the descaler and rinsing off the appliance with clean water, an alkaline detergent may be required to neutralize any acid compounds left on the surface.

4.3.2 Idle period

If the appliance will remain idle for a certain period of time, clean it and wipe it dry first, and then apply a film of a suitable product (such as vaseline oil spray or similar products) to protect it.

Turn off the gas shutoff valve fitted upstream of the appliance.

4.3.3 Periodic maintenance

Only qualified personnel are allowed to carry out service and maintenance operations.

The following maintenance operation should be carried out at least once a year:

- checking for proper operation of all control and safety devices;
- checking combustion, i.e.:
 1. ignition;
 2. combustion safety;
 3. checking for proper operation throughout the ON-OFF-ON control range;



We recommend signing a service agreement providing for at least one check-up a year.

5. Installation

5.1 General information



The manufacturer cannot be held liable for any injuries to persons or damage to property resulting from installation errors or from inappropriate use of the appliance and is not responsible for any faults caused by defective installation. In such cases the warranty shall be null and void.



Installation, maintenance, connection to gas supply and start-up should all be performed by an authorised installer who must ensure compliance with all applicable safety regulations in force in the location where the appliance is being installed.

5.1.1 Regulatory installation conditions

We remind you that all appliances installed in public assembly buildings must meet the requirements specified below. The appliance must be both installed and serviced in compliance with all applicable rules and legal regulations in force, namely:

- safety regulations on fire hazard and panic in public assembly buildings.
- general regulations applicable to all appliances;
- systems burning combustible gas and liquefied hydrocarbons.

Then, follow the specific regulations according to the type of gas being used.

- heating, ventilation, refrigeration, air conditioning, and generation of steam and hot water for sanitary use;
- installation of foodservice cooking appliances;
- specific regulations applicable to each type of public assembly building (hospitals, shops, etc.).

5.2 Exhausting fumes

The appliance should be installed in a well-ventilated area, if possible under an exhaust hood, in compliance with all applicable regulations in force. This will ensure that all burnt gases produced during the combustion process are completely exhausted. The amount of air required for combustion is shown in the "*Technical specifications table*" at the end of this manual, under "Air required for combustion".



In compliance with applicable installation regulations in force, our appliances belong to the type shown under "Construction type" in the "*Technical specifications table*".

5.3 Possible environmental interference



If the appliance is installed with its sides next to flammable walls (made of wood or similar materials) or to heat-sensitive walls (made of plasterboard or similar materials), suitable protective measures should be taken to keep such walls undamaged. Either apply a coating over the wall to insulate it from radiative heat or keep a minimum clearance of 100 mm (4") from the sides and back of the appliance.

5.4 Storage

If the appliance is stored in a warehouse where room temperature is below 0°C (32°F), it should be warmed up to at least +10°C (50°F) before switching it on.

5.5 Unpacking the appliance

Prior to installation, remove all packaging materials from the deep fat fryer. Some parts are wrapped in adhesive film, which should be thoroughly removed. Remove any glue traces left on the surfaces of the appliance using a suitable non-flammable solvent. Absolutely avoid using abrasive substances.

5.6 Disposing of packaging materials

All packaging materials should be disposed of in compliance with the local regulations in force where the appliance is installed. Packaging materials should be separated according to their types and delivered to specific collection sites. Please abide by environmental protection regulations.

5.7 Positioning

Level the appliance using a bubble level. Small adjustments can be done with the help of the adjustable feet.

5.8 Connecting gas supply

This appliance is designed to burn natural and liquid gas. To find out the category to which this appliance belongs in the country where it is installed, please refer to the table below.

Table 1: gas categories and pressure values

COUNTRY	APPLIANCE CATEGORY	GAS	RATED PRESSURE (mbar)	MINIMUM PRESSURE (mbar)	MAXIMUM PRESSURE (mbar)
Belgium France	II2E+3+	G20	20	17	25
		G25	25	17	30
		G30	28	25	35
		G31	37	25	45
Spain Great Britain Ireland Greece	II2H3+	G20	20	17	25
		G30	28	25	35
		G31	37	25	45
Italy Italian Switzerland Portugal	II2H3+	G20	20	17	25
		G30	30	25	35
		G31	37	25	45
Austria German Switzerland	II2H3B/P	G20	20	17	25
		G30	50	42.5	57.5
		G31			
Germany	II2ELL3B/P	G20	20	17	25
		G25			
		G30	50	42.5	57.5
		G31			
Finland	II2H3B/P	G20	20	17	25
		G30	30	25	35
		G31			
Denmark	II2H3B/P	G20	20	17	25
		G30	30	25	35
		G31			
Sweden	II2H3B/P	G20	20	17	25
		G30	30	25	35
		G31			
Luxembourg	I2E	G20	20	17	25
Netherlands	II2L3B/P	G25	25	20	30
		G30	30	25	35
		G31			
Norway	I3B/P	G30	30	25	35
		G31			
Hungary	II2HS3B/P	G20	25	20	33
		G25.1			
		G30	30	25	35
		G31			
Czech Republic	II2H3B/P	G20	20	17	25
		G30	30	25	35
		G31			

Installation

The appliance should be connected to the gas supply by means of metal tubing --either rigid or flexible-- having a proportionate diameter (see "*Technical specification table*" at the end of this manual). When joining pipe fittings, never use oakum or Teflon as their residues could get to the valve/regulator and jeopardise its operation. Instead, interpose a seal gasket suitable for use in gas systems. Do not forget to fit a shutoff valve on the gas supply line upstream of the appliance, which should be closed whenever the appliance is not in operation. Operating pressure values are shown on the rating plate and in the previous "*Table 1: gas categories and pressure values*"



Once connection to the gas supply is completed, check for leaks at joints and pipe fittings; to do so, use soapy water or a specific leak detector (spray).

5.8.1 Checking supply pressure after installation

Gas supply pressure can be measured with a liquid-filled pressure gauge (for example, a U-shaped pressure gauge, minimum subdivision 0.1 mbar) or a digital pressure gauge. Proceed as follows:

- remove the knobs;
- loosen all screws on the guide collars (item 22 in Fig. 8);
- remove the screws shown on item 23 from the control panel;

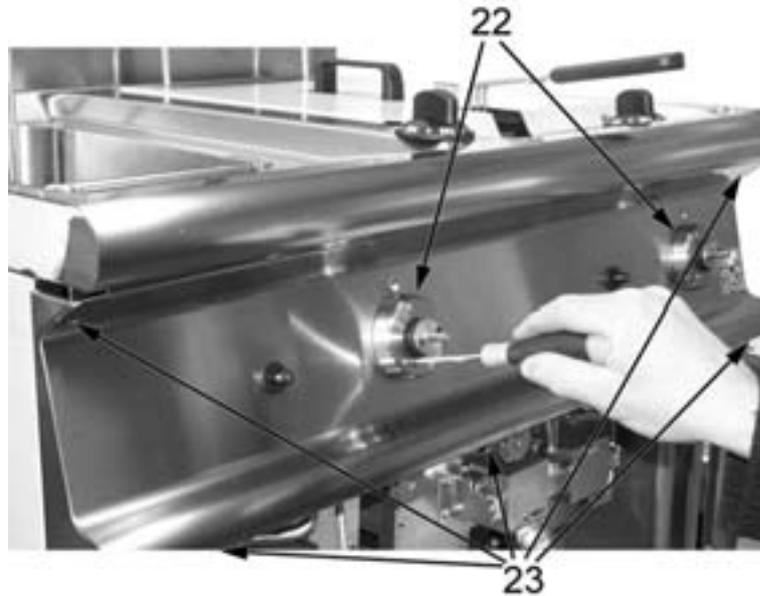


Fig. 8

- 22. Guide collar
- 23. Control panel fixing screws

- remove the control panel as shown in Fig. 9 below;



Fig. 9

- unscrew the screw (item 24 in Fig. 10) on the pressure port (item 25);

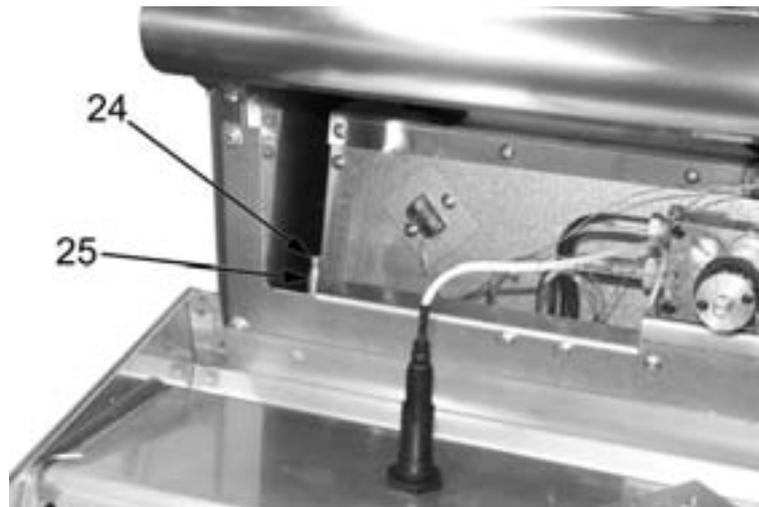


Fig. 10

- 24. Sealing screw
- 25. Pressure port

- place the pressure gauge;
- switch on the appliance as discussed in the user's manual;
- check supply pressure;
- if the measured pressure value is within the range shown in "Table 1: gas categories and pressure values" further above, the appliance can be started up. Otherwise, contact the gas utility company
- remove the pressure gauge;
- replace the sealing screw (item 24 in Fig. 10);
- check for leaks (see chapter "Connecting gas supply" further above);
- replace the control panel and make sure the guide collar is in the position shown in Fig. 11;

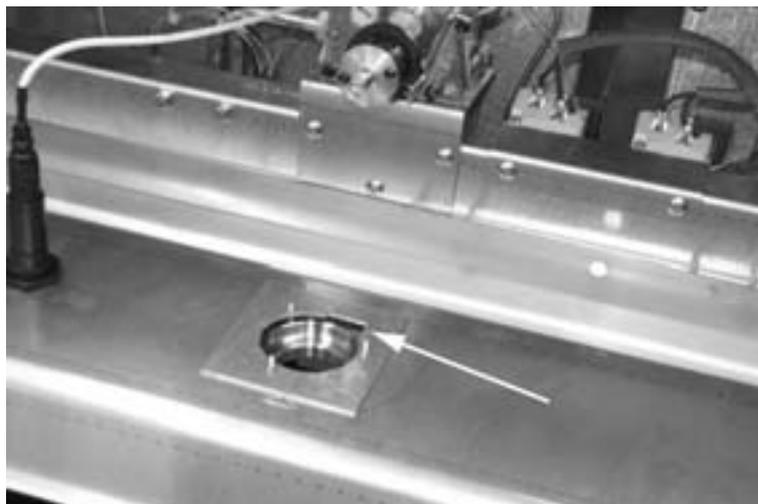


Fig. 11

Installation

5.8.2 Gas technical specifications



The appliance should be started up at its rated power using the nozzle shown in the "Table 2: burner specifications" below. All the nozzles required are provided in a small bag together with the appliance. The nozzles of the main burners are marked in hundredths of mm, while those of pilot flames have a reference number.

Table 2: burner specifications

		72/02 FRG	73/02 FRG	74/02 FRG
Rated power (kW)		13	9.5 + 9.5	13 + 13
Minimum output (kW)				
Natural gas consumption (m ³ /h)	G20	1.4	2.0	2.8
	G25	1.6	2.3	3.2
	G25.1	1.6	2.3	3.2
Liquid gas consumption (kg/h)		1.0	1.5	2.0
Town gas consumption (m ³ /h)	G110			
	G120			
G20 20mbar				
Rated pressure (mbar)		20		
Reduced pressure (mbar), minimum				
Nozzles (1/100 mm)	Pilot flame	27·2	27·2 x 2	27·2 x 2
	Max.	210 x 2	170 x 4	210 x 4
	Min.			
Primary air distance (mm)		20		
G25 20mbar				
Rated pressure (mbar)		20		
Reduced pressure (mbar), minimum				
Nozzles (1/100 mm)	Pilot flame	27·2	27·2 x 2	27·2 x 2
	Max.	245 x 2	195 x 4	245 x 4
	Min.			
Primary air distance (mm)		20		
G25 25mbar				
Rated pressure (mbar)		25		
Reduced pressure (mbar), minimum				
Nozzles (1/100 mm)	Pilot flame	27·2	27·2 x 2	27·2 x 2
	Max.	230 x 2	185 x 4	230 x 4
	Min.			
Primary air distance (mm)		20		
G30/31 28/37 mbar				
G30/31 30 mbar				
G30/31 30/37 mbar				
Rated pressure (mbar)		28 / 30 / 37		
Reduced pressure (mbar), minimum				
Nozzles (1/100 mm)	Pilot flame	16·2	16·2 x 2	16·2 x 2
	Max.	130 x 2	110 x 4	130 x 4
	Min.			
Primary air distance (mm)		10	7	10

Table 2: burner specifications

		72/02 FRG	73/02 FRG	74/02 FRG
G30/31 50 mbar				
Rated pressure (mbar)		50		
Reduced pressure (mbar), minimum				
Nozzles (1/100 mm)	Pilot flame	16·2	16·2 x 2	16·2 x 2
	Max.	115 x 2	100 x 4	115 x 4
	Min.			
Primary air distance (mm)		5		

5.8.3 Checking operation

1. Start up the appliance as described in the user's manual.
2. Check for gas leaks.
3. Check flame stability throughout the whole ON-OFF-ON temperature control range.
4. Check the lighting process along the entire main burner. Check that flames are even.
5. Check for proper operation of the pilot flame. If the pilot flame has been properly adjusted, the flame will wrap around the thermocouple and have a uniform appearance. Otherwise, check that the appropriate nozzle has been fitted.
6. Check that burnt gases come out from the exhausting pipes in a regular manner.
7. Check that there is a good inflow of fresh air.

5.9 Rating plate

The rating plate showing the specifications of the corresponding model is applied in the position shown in the installation and connection drawings and includes the data listed below:

Manufacturer:	
Model:	(see front page)
Serial number:	
Year of manufacture:	
Category:	(see "Technical specifications table")
Heating power:	(see "Technical specifications table")
Natural gas consumption:	(see "Technical specifications table")
Liquid gas consumption:	(see "Technical specifications table")
Supply pressure :	
natural gases: G20	(see "Table of gas categories and pressure values" further above)
liquid gases (butane/propane): G30/G31	(see "Table of gas categories and pressure values" further above)
town gas: G110/G120	(see "Table of gas categories and pressure values" further above)
Gas inlet pipe size:	(see "Technical specifications table")
Supply voltage:	(see the label on the packaging and on the appliance)
Appliance adjusted to use:	

6. Adjustment instructions

6.1 Converting the appliance to burn a different type of gas

To convert (for example) from natural gas to liquid gas, you need to change the nozzles of main and pilot burners; the appropriate nozzles are shown in "*Table 2: burner specifications*" further above.

6.1.1 Replacing main burner nozzles

1. Remove the screw shown as item 28 in Fig. 13 and then remove the air sleeve;

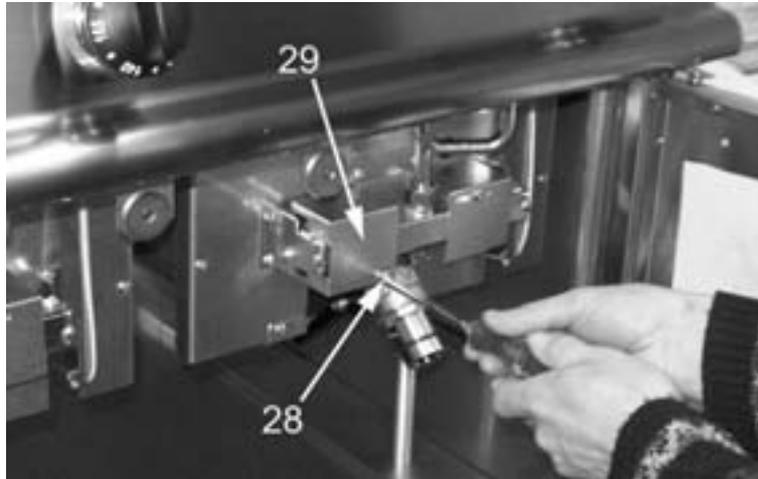


Fig. 13

- 28. Primary air adjusting screw
- 29. Primary air sleeve

2. remove the nozzle (item 30 in Fig. 14) and replace it with the nozzle shown in "Table 2: burner specifications";

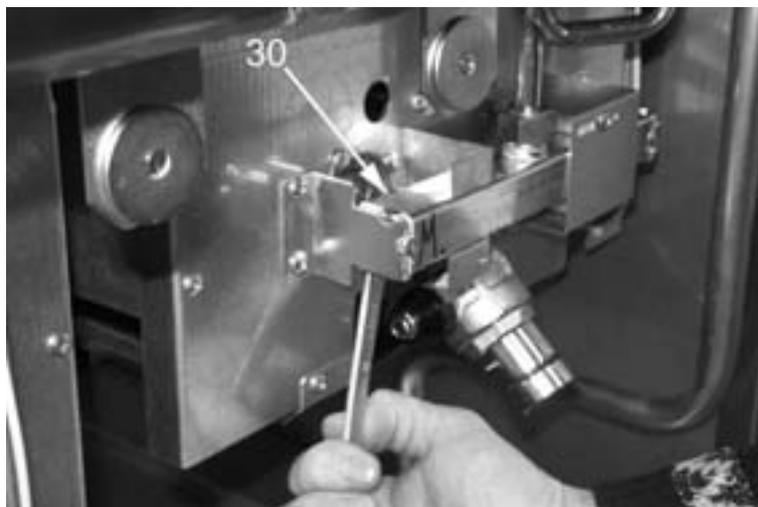


Fig. 14

- 30. Burner nozzle

After replacing the nozzle, you should adjust primary air (see the following chapter "Adjusting primary air").



There is no need to adjust the minimum output as thermostat operation is of the "ON-OFF" type.

6.1.2 Adjusting primary air

To adjust primary air (item 31 in Fig. 15), loosen the screw shown in item 32 and move the sleeve until you obtain the values indicated in "Table 2: burner specifications".

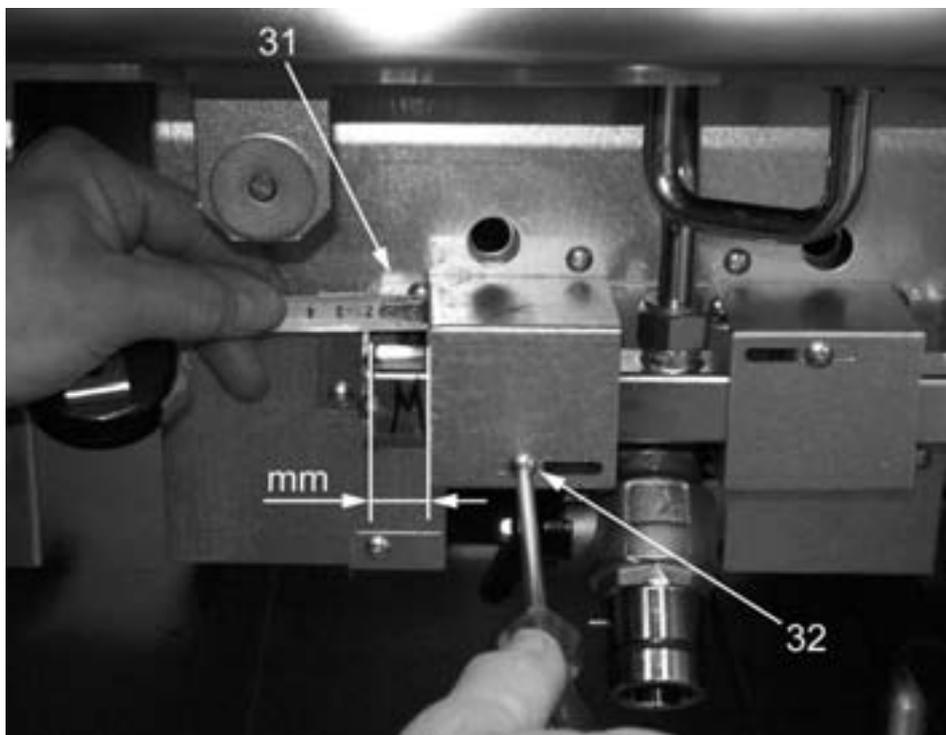


Fig. 15

- 31. Primary air distance
- 32. Primary air adjusting screw

6.1.3 Replacing pilot burner nozzle

The pilot burner has fixed nozzles and fixed air sleeve. To operate the appliance with other types of gas, you need to replace the nozzle (item 35 in Fig. 18) with the nozzle shown in "Table 2: burner specifications" according to the type of gas used. You do not need to adjust primary air.

1. Remove the drain valve closing lever;
2. remove the lower flue box cover by unscrewing the several front screws;

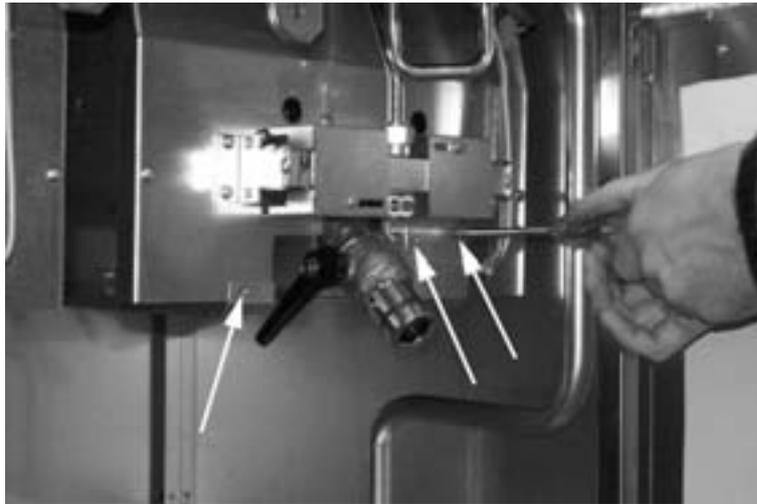


Fig. 16

3. temporarily remove the ignition plug by unscrewing the nut;



Fig. 17

34. Ignition plug

Adjustment instructions

- replace the pilot burner nozzle with a suitable one by unscrewing the nut shown as item 35 in Fig. 18 and using a fixed spanner (wrench) to counterbalance torsion;

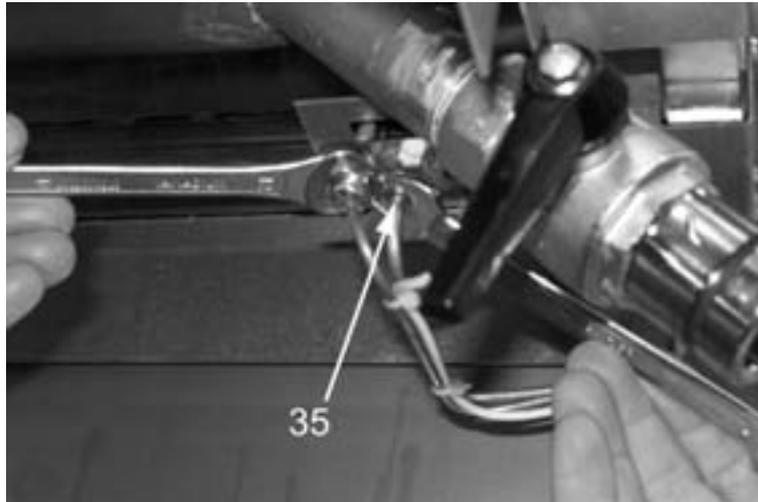


Fig. 18

35. Pilot burner nozzle

When nozzle replacement is completed, check for proper operation of the appliance (see chapter "*Checking operation*" at the end of the previous section "*Installation*").

7. Troubleshooting



This appliance contains no parts that can be repaired by the user. Maintenance should be carried out by an authorized technician.

TROUBLE	POSSIBLE CAUSES	WHAT TO DO	
		FOR THE USER	FOR THE MAINTENANCE TECHNICIAN
Pilot flame won't light:	the ignition plug is not securely fixed, or the connection with the cable is wrong;		check the connection;
	piezoelectric ignition device faulty;		replace it;
	ignition plug insulator damaged;		replace it;
	pressure drop in gas supply pipe;		contact the gas utility company;
	clogged nozzle;		clean the pilot flame nozzle or replace it (see chapter "Replacing pilot burner nozzle" in section "Adjustment instructions");
	gas valve faulty;		replace the gas valve (see chapter "Replacing the gas valve" in section "Service").
After releasing the knob, the pilot flame goes out:	the thermocouple is not sufficiently heated by the pilot flame;	repeat the ignition procedure;	
	thermocouple faulty;		replace it;
	gas valve faulty;		replace the gas valve (see chapter "Replacing the gas valve" in section "Service").
	safety thermostat has tripped;	reset the safety thermostat (see chapter "Safety thermostat" in section "Operating instructions").	

Troubleshooting

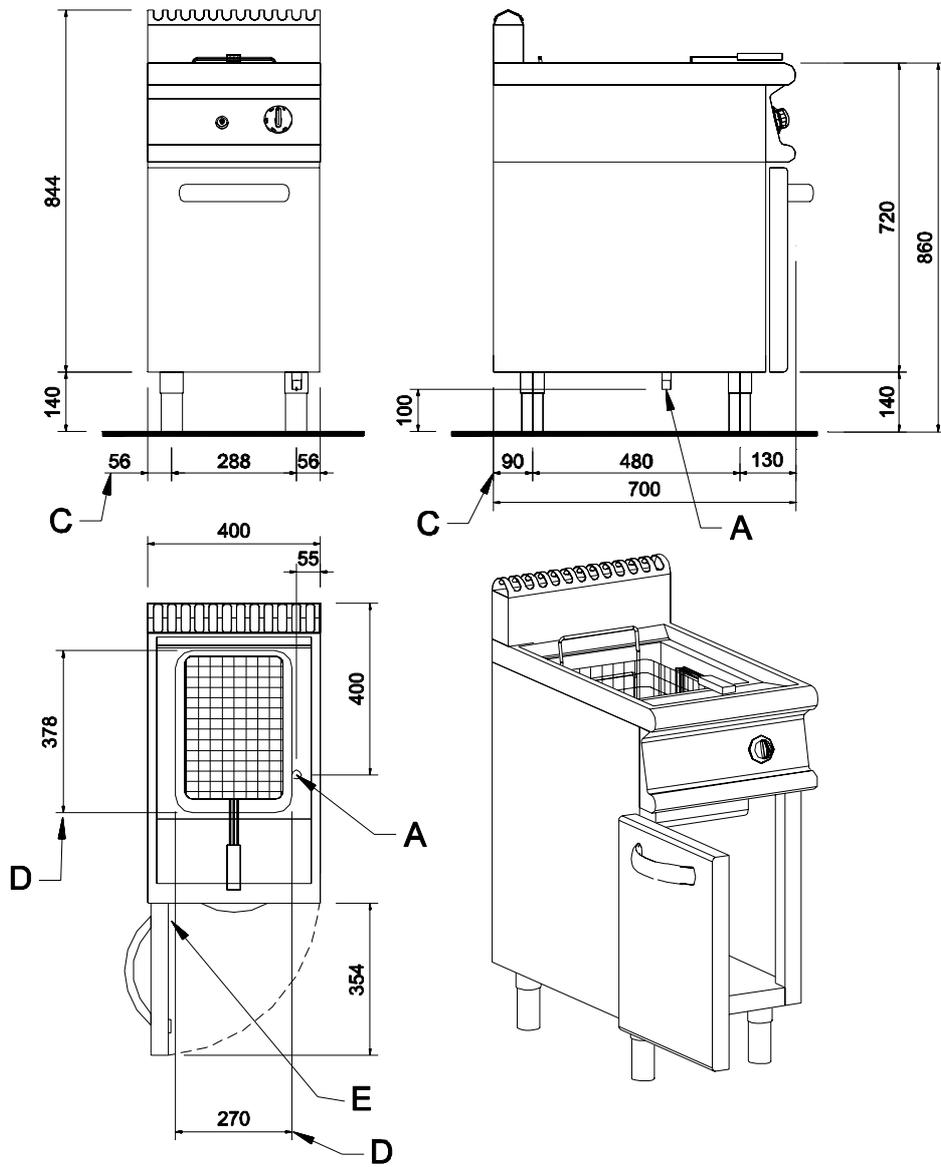
TROUBLE	POSSIBLE CAUSES	WHAT TO DO	
		FOR THE USER	FOR THE MAINTENANCE TECHNICIAN
Pilot flame stays lit, but main burner won't light:	pressure drop in gas pipe;		contact the gas utility company;
	burner nozzle is clogged;		clean the burner nozzle or replace it (see chapter "Replacing main burner nozzles" in section "Adjustment instructions");
	gas valve faulty;		replace the gas valve (see chapter "Replacing the gas valve" in section "Service").
The safety thermostat trips:	oil in the tank has dropped below the minimum level;	top the oil up to the rated level;	
	operating thermostat damaged or setting wrong;		replace the gas valve (see chapter "Replacing the gas valve" in section "Service").
Oil temperature can't be adjusted:	operating thermostat damaged or setting wrong;		replace the gas valve (see chapter "Replacing the gas valve" in section "Service").
Too much foam builds up while frying:	product to be fried has high moisture content;	dry it (see chapter "Frying" in section "Operating instructions").	
	old oil (overused);	change it (see chapter "Frying" in section "Operating instructions");	
	product quantity exceeds the recommended load.		

9. Technical specifications

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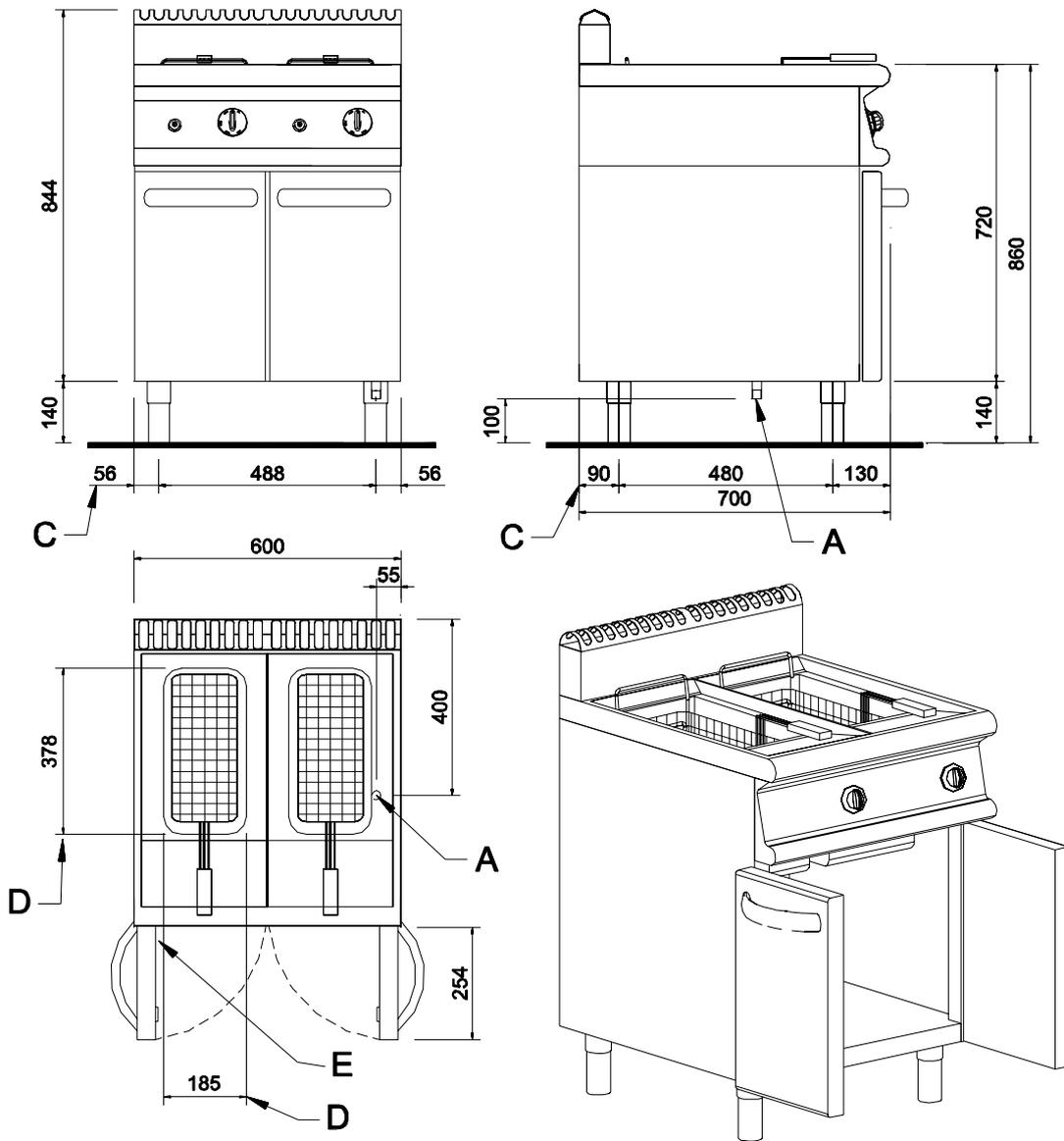
Technical specifications

Installation drawing 72/02FRG



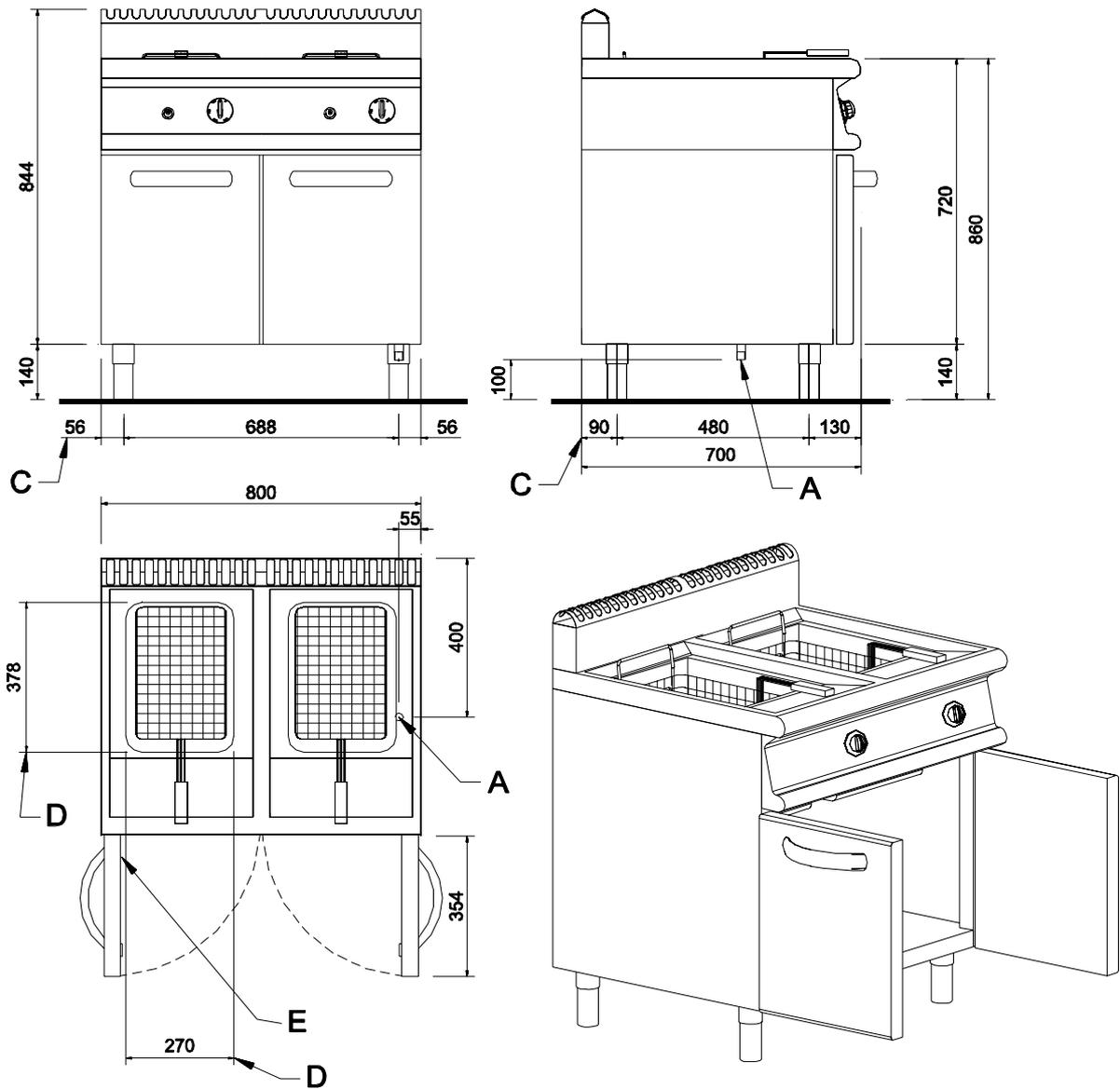
Technical specifications

Installation drawing 73/02FRG



Technical specifications

Installation drawing 74/02FRG



A	Gas inlet 1/2" ISO 7-1
C	Distance between feet
D	Tank dimensions
E	Rating plate

Technical specifications

Item	Model	Type	Voltage	Specification
Overall dimensions (WxLxH)		72E, 72G		400x700x860/900 mm
Overall dimensions (WxLxH)		73E, 73G		600x700x860/900 mm
Overall dimensions (WxLxH)		74E, 74G		800x700x860/900 mm
Volume with package		72E, 72G		0.43 m ³
Volume with package		73E, 73G		0.62 m ³
Volume with package		74E, 74G		0.8 m ³
Total weight	G	72G		71 Kg
Total weight	G	73G		91 Kg
Total weight	G	74G		123 Kg
Number and capacity of basins		72E, 72G		1 tank, 15 liters
Number and capacity of basins		73E, 73G		2 tanks, 10 liters
Number and capacity of basins		74E, 74G		2 tanks, 15 liters
Difference between minimum and maximum level		72E, 72G, 74E, 74G		2.5 liters
Difference between minimum and maximum level		73E, 73G		1 liters
Baskets dimensions		72E, 72G		242x320x120 mm
Baskets dimensions		73E, 73G		157x320x120 mm x 2 pz.
Baskets dimensions		74E, 74G		242x320x120 mm x 2 pz.
Tank size		72E, 72G		270 x 378 mm
Tank size		73E, 73G		185 x 378 mm x 2 pz.
Tank size		74E, 74G		270 x 378 mm x 2 pz.
Maximum quantity of food per tank		72E, 72G, 74E, 74G		2.5 Kg
Maximum quantity of food per tank		73E, 73G		1.5 Kg
Rated power	G	72G		13 kW
Rated power	G	73G		9.5 + 9.5 kW
Rated power	G	74G		13 + 13 kW
Gas inlet	G			1/2" ISO 7-1
Air requirement for combustion	G	72G		26 m ³ /h
Air requirement for combustion	G	73G		38 m ³ /h
Air requirement for combustion	G	74G		52 m ³ /h
Construction type Italy	G	72G		A
Construction type Italy	G	73G, 74G		B11
Construction type Germany	G			B11
Construction type valid for other countries	G			A

Technical specifications

Item	Model	Type	Voltage	Specification
Oil temperature range				100°-190° C (212°-374° F)



DICHIARAZIONE DI CONFORMITÀ CE
CE CONFORMITY DECLARATION
DECLARATION DE CONFORMITE CE
CE KONFORMITÄTSEKLRUNG
DECLARACIÓN DE CONFORMIDAD CE

Si dichiara che il seguente apparecchio: **Friggitrici a gas serie 700 New**
We declare that the following equipment: **Gas Heated fryer series 700 New**
Nous déclarons que l'appareil suivont: **Friteuse gaz gamme 700 New**
Wir erklären, dass dieses Gerät: **Gas-Friteusen serie 700 New**
Se declara que el siguiente aparato: **Freidora a gas gama 700 New**

Mod.: 72/02FRG, 73/02FRG, 74/02FRG

è conforme alla direttiva **90/396 CEE**
is in specification with the directive **90/396 CEE**
est conforme aux directives **90/396 CEE**
entspricht die **90/396 CEE Richtlinie**
esta conforme las directrices **90/396 CEE**

Certificato CE AFNOR **Nr. 3845 del 15-01-2003** e successive revisioni
AFNOR CE certificate **Nr. 3845 on 15-01-2003** and subsequent revisions
Certificat CE AFNOR **Nr. 3845 du 15-01-2003** et révisions suivantes
AFNOR CE Certificat **Nr. 3845 vom 15-01-2003** und darauffolgende Revisionen
Certificado CE AFNOR **Nr. 3845 con fecha 15-01-2003** y siguientes revisiones

Bribano, 21/03/03

OLIS S.p.A.
Amministratore Delegato
P. Candiago

