

MASTRO[®]

Service



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FRY – TOP GAS - SERIES 65

MOD. 65-40 FTG
65-40 FTRG
65-40 FTGS
65-70 FTG
65-70 FTRG
65-70 FTGS
65-70 FTRRG
65-40 FTG – CR
65-40 FTRG – CR
65-70 FTG – CR
65-70 FTRG – CR
65-70 FTRRG – CR

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THIS APPLIANCE HAS BEEN MADE FOR COOKING FOOD AND MUST ONLY BE USED BY PROFESSIONALLY SKILLED PERSONNEL IN THE WAY DESCRIBED IN THIS INSTRUCTION MANUAL.

1 WARNINGS

- Read this handbook through carefully as it provides important information for safe installation, use and maintenance.
- Keep this handbook in a safe place for future reference.
- Only professionally skilled personnel must install the appliance and, if required, convert it to receive a different type of gas.
- Only call one of the manufacturer's authorised technical assistance centres for repairs and demand original spare parts.
- The parts which have been sealed by the manufacturer must not be tampered with. Any adjustments (only for gas changeover) must be performed by professionally qualified personnel.

Failure to observe the above could undermine the safety of the appliance.

2 COMPLIANCE WITH "EEC" DIRECTIVES FOR GAS APPLIANCES

THIS APPLIANCE HAS OBTAINED THE "CE" TYPE APPROVAL CERTIFICATE AS IT COMPLIES WITH THE ACCEPTANCE TESTS CARRIED OUT IN ACCORDANCE WITH THE FOLLOWING STANDARD:

"ESSENTIAL REQUIREMENTS ANNEX I EEC DIRECTIVE 90/396 MD 26/06/1990"

ATTENTION:

WHEN THE FRY-TOP IS PART OF A COOKING LINE IT IS INSTALLED AT THE TOP END AND THE SIDES ARE VISIBLE, CONSEQUENTLY, WHEN IT IS IN USE THE USER CAN COME INTO CONTACT WITH PARTS THAT ARE EXTREMELY HOT.

4. TECHNICAL DATA TABLE FRY -TOP

MODEL	BURNERS X POWER No. x kW	TOTAL POWER kW	TOTAL GAS CONSUMPTION		DIAMETER OF NOZZLES IN HUNDREDTHS OF A MILLIMETRE	
			LPG G30 – G31 kg/h	NATURAL GAS G20 m³/h	LPG G30 – G31 30mbar 37mbar	NATURAL GAS G20 20 mbar
65-40 FTG 65-40 FTRG 65-40 FTG-CR 65-40 FTRG-CR 65-40 FTGS	1 x 5.7	5.7	0.443	0.603	120	185
65-70 FTG 65-70 FTRG 65-70 FTGS 65-70 FTRRG 65-70 FTG-CR 65-70 FTRG-CR 65-70 FTRRG-CR	2 x 5.7	11.4	0.886	1.206	120	185
BY-PASS					70	ADJUSTABLE
PILOT					19	36
PRIMARY AIR POSITION A mm =					12	25

THESE VALUES ARE APPROXIMATE - ALWAYS MAKE SURE THE FLAME IS REGULAR.

4.1 GAS CHARACTERISTICS

The data relative to powers and consumption refer to the following types of gas:

TYPE OF GAS	NET HEAT VALUE (NHV)	PRESSURE	SUPPLY
		mbar	mm water
G20 (natural gas) CH ₄	9.45 kW m ³ /h	20	200
G30 (butane) C ₄ H ₁₀	12.68 kW/kg	30	300
G31 (propane) C ₃ H ₈	12.87 kW/kg	37	370
G25 (G20L – DE)	8.12 kW m ³ /h	20	200
G25 (aardgas NL)	8.12 kW m ³ /h	25	250

When installing the appliances, the gas supply pressures must be those given above in order to have maximum burner efficiency.

Pressure mbar = 1 millibar = 1 mbar = 10 mm c.d.a. (water column millimetres)

Power = 1 kW = 860 kcal = 3.6 MJ = 3412 BTU

6 INSTRUCTIONS FOR THE QUALIFIED INSTALLER

6.1 APPLIANCE INSTALLATION

- Take the unit out of the packaging. Check that it is in good condition. If in doubt, do not use it and contact professionally qualified personnel.
Always place the unit under an aspiration hood. After installation, it will need to be levelled by using the feet.
- Always use rigid galvanised steel or copper pipes for connecting the appliance
All the seals on the joining threads must be made using materials that are certified for use with gas.
- If the appliance is wall mounted, in contact with flammable material, place a layer of heat-resistant insulating material between the appliance and the wall or leave a space of 200 mm between the appliance and the wall.
- The appliance gas system and the characteristics of the room in which the appliance is installed must comply with current laws.
- Before connecting the unit, you must check what kind of gas it is set up to use, and whether the gas which is available to power it is suitable. If the available gas is not suitable for the appliance, proceed as described in the paragraph "Changeover for operation with other types of gas".
- Always install a cutoff cock between each appliance and the gas pipe.
- Check that aeration in the room is sufficient when the appliance is working, considering that the necessary quantity of air for combustion is 2 m³/h of air for each kW of installed power.

6.2 LAWS, TECHNICAL REGULATIONS AND GENERAL RULES

- Standard UNI-CIG 8723, Ministerial circular no. 68 dated 25/11/69 and variations.
- Accident prevention laws.

6.3 DISCHARGE OF FUMES FOR TYPE "A" APPLIANCES

The appliances must be installed on premises that are suitable for the discharge of the combustion products and must comply with the installation rules. Our appliances are considered type "A" gas appliances (see the Technical Data Tables) and are not for connecting to a natural discharge duct for combustion products.

These appliances must discharge through specific extractors, or similar devices, connected to a properly working flue or discharged directly outside.

If this is not possible, an air suction device can be used connected directly to the outside, with a capacity that must be no less than that required, see Table 1, plus the quantity of fresh air that is necessary for the well-being of the workers.

6.4 CHECKING FOR GAS LEAKS

- Once installed, check there are no gas leaks from the pipe joints by using a soapy water solution. You will know if there are leaks by the foamy bubbles that form. Never use bare flames to check for leaks.
- When the appliance is ready to use, check there are no gas leaks, by checking on the gauge, if used (for a period of 30 minutes), that there is no passage or consumption of gas.

7 MAINTENANCE

There is very little maintenance thanks to the correct way the appliances have been made. However, we do advise having the systems checked by qualified personnel at least twice a year.

N.B.: the manufacturer declines all responsibility for direct or indirect damages caused by incorrect installation, bad maintenance, tampering, improper uses and by the failure to comply with the accident prevention norms regarding the prevention of fire and safety for gas systems.

7.1 CONVERSION FOR USE WITH A DIFFERENT TYPE OF GAS – FRY TOP

The appliance is tested and set for working with gas according to the characteristics table affixed in proximity to the appliance's gas inlet.

In order for it to function with a different type of gas, proceed as follows:

- The conversion must be carried out by qualified personnel
- The set of nozzles for changeover to another type of gas, different from the type for which the unit was set up, is normally contained in a nylon bag with relative additional labels that show all the types of gas.
If the set is not provided, it must be requested from the dealer/importer, first ascertaining that the unit can in fact work with other types of gas.
Once changeover and necessary adjustments are complete, the label for the corresponding gas must be placed in the appropriate place on the characteristics tag, cutting out the correct one.
- Changing the burner nozzle (Fig. 1):
remove the panel (12). Open the burner's air regulating bush completely (24) and change the nozzle (27), if necessary unscrew the gas connection pipe fitting (3), unscrew the nozzle holder (17) and change the nozzle (27). Put everything back in place; place the burner air regulating bush (24) at the distance specified ("A") in the Technical Data table according to the type of gas (Fig. 3).
- Changing the pilot nozzle (23):
remove the panel (12), unscrew the small pilot connecting pipe (16), change the nozzle, inserting it and the small pilot connecting pipe in the nozzle holder together.
Check there are no gas leaks by using a soapy water solution.

- Regulating the minimum flame:
remove the cock knob (8), use a screwdriver to turn the cock (6) adjustment screw (7) until you get the minimum flame required.
- Adjustment of minimum (Fig.2): **(machines set up to use LPG and changed over to natural gas)**
Remove the knob (8) from the cock and use a screwdriver on the adjustment screw (7) to tighten it all the way down.
- Supply pressure:
it must be that specified on the appliance's data plate and in the instruction handbook (see the Technical Data table). Check the supply pressure by inserting a rubber pipe, with a water gauge or similar, in the pressure tap (10) welded on the gas shaft (9) removing the screw (11). After it has been checked, tighten the screw. If the supply pressure is different to that specified, find the cause and correct it.

7.2 CHANGING SPARE PARTS

Safety cock (6): remove the panel (12), unscrew the nut connecting the cock to the supply shaft (9) and to the burner supply pipe, unscrew the thermocouple (15) and the pilot pipe (16) from the cock, change the cock.

Thermocouple (15): remove the panel (12), unscrew the thermocouple (15) from the cock (6) and from the pilot support (18) and then change it.

Ignition plug (20): remove the panel (12), unscrew the plug connection nut from the pilot support (18). Remove the plug and change it.

Piezoelectric lighter (19): remove the panel (12), pull the plug connecting cable out (21), remove the piezoelectric stop nut and change the lighter.

Pilot burner (18): remove the panel (12), unscrew the pilot connecting nut (23), the thermocouple (15), remove the ignition plug connecting nut, remove the pilot securing screws and change the pilot. Now put everything back in place.

8.1 TURNING THE NORMAL FRY-TOP PILOT ON

Push the knob (8) and turn it counter clockwise round to the pilot position ✨ (spark symbol). Simultaneously press the piezoelectric lighter knob and button and the pilot burner will light. Keep the knob pressed for 10 to 15 seconds and then let it go. Check the flame is lit through the holes (22) on the panel (12). If it hasn't, repeat the operation.

8.2 TURNING THE NORMAL FRY-TOP MAIN BURNER ON AND OFF

From the pilot position ✨ turn the knob again counter clockwise round to the maximum position 🔥 (big symbol). The burner lights automatically. By the turning the knob again counter clockwise round to the 🔥 position (small symbol), the burner will be on minimum. To turn the burner off turn the knob clockwise until it reaches the ✨ position. Now only the pilot burner will be alight.

8.3 TURNING THE NORMAL FRY-TOP OFF COMPLETELY

To turn the fry-top off completely, press the knob in the ✨ position and turn it clockwise round to the ● position (closed).

8.4 INSTRUCTIONS FOR USE OF THE THERMOSTATIC MULTIGAS COCK PEL 25 ST FOR THE CHROME FRY-TOP

To light the burner, connected to the cock, push the knob until it will go no further and then turn it in the direction of the arrow, round to the ★ "PILOT" position (fig. 1). (Fig. 1).

Press the knob right down and, keeping it depressed, light the pilot burner. When it is lit, keep the knob pressed for at least 15". When you let it go the pilot should stay alight. If it hasn't, repeat the operation.

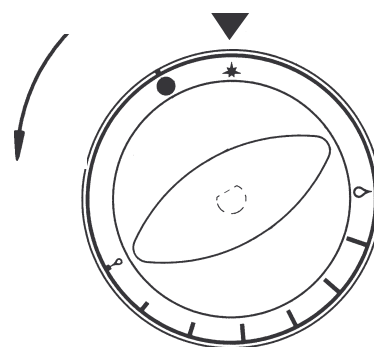


Fig. 1

Once you have let go of the knob and the pilot is lit, turn the knob again until it clicks " 🔥 ", the main burner lights (fig. 2).

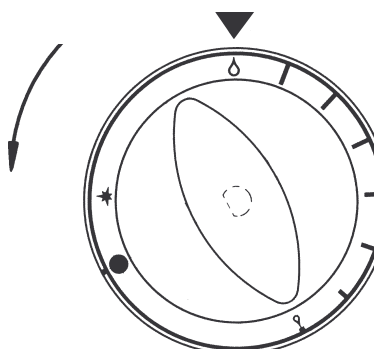


Fig. 2

Turn the knob again to choose the temperature you want (fig. 3).

Remember that in the big flame 🔥 position (maximum capacity) you have maximum temperature and in the small flame 🔥 position you have minimum temperature.

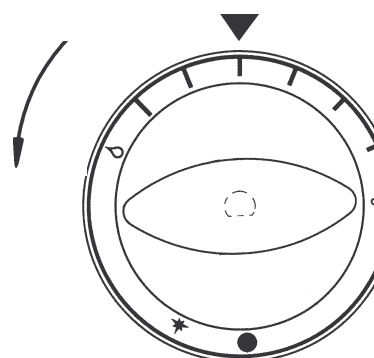


Fig. 3

To turn the main burner off turn the knob counter clockwise round to the 🔥 position without forcing the knob at all (fig. 4), now press the knob right down and turn it into the "PILOT" ★ position. To turn off completely press again and turn it until it stops.

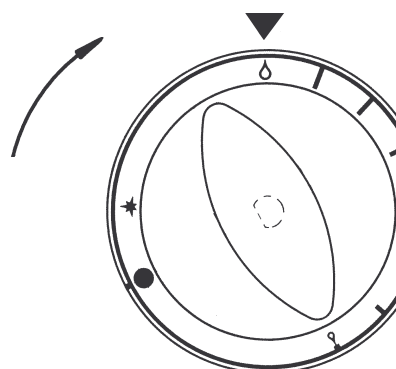


Fig. 4

N.B: the thermostatic cock's adjustment range goes from 120°C to 320°C and you will hear a click at each division, giving a temperature difference of ~ 28 °C.

Always disconnect the appliance from the gas supply before embarking on any maintenance work.

9.1 FRY – TOP MAINTENANCE

There is very little maintenance to do thanks to the correct way the appliances have been made. However, we do advise having the systems checked by qualified personnel at least twice a year.

Normal fry-tops

- Control cocks: they should be checked and greased by a qualified technician every 6-12 months

IMPORTANT!!

Chromed fry-tops

- The thermostatic cocks must never be tampered with because if the components' securing screws ever become slack, shown by the red lacquer seal, the operating calibration is altered. Should this happen the thermostatic cocks are no longer covered by the guarantee.

9.2 MAINTENANCE, CLEANING AND CARE

Particular indications

Once the plates are cold they must be cleaned. Leftovers of food must be removed with a spatula or damp cloth. This will stop fumes.

9.2.1 Instructions for cleaning the plate of chromed fry-tops

- Do not use metal blades or spatulas to clean the chromed plate as they could scratch the cooking surfaces and undermine the plate reliability with time.
- Clean the cooking plate regularly, using a damp cloth or soap and water.
- To remove food that has hardened use a plastic spatula when cold.
- If detergents are used they must not contain chlorate or abrasive substances.
- Lastly wash all the chromed fry-top parts (plate – conveyor channel and oil drip tray) with water and dry thoroughly.

9.2.2 General cleaning of the fry-top

To clean the appliance each day extract the oil collection tray, empty it, remove food leftovers with a spatula or damp cloth, cleaning thoroughly.

Clean steel parts with water, detergent and a wet cloth. The detergents used must not contain corrosive or abrasive substances as they will damage the steel surfaces.

After washing, rinse with clean water and dry with a dry cloth.

Frequent and thorough cleaning of the plates, fat collection channels and oil collection trays will guarantee perfect working order of the appliance.

- What to do if the appliance is going to be out of use for long periods of time: first of all disconnect the gas supply, clean the appliance thoroughly, following the instructions and dry it. Oil the plate with cooking oil.
- In the case of malfunctions: turn the appliance off and notify the assistance service.

10.1 Exploded tables of normal Fry-Tops

Mod. 65-40 FTG
 65-40 FTRG
 65-40 FTGS
 65-70 FTG
 65-70 FTRG
 65-70 FTGS
 65-70 FTRRG

FIG. 1

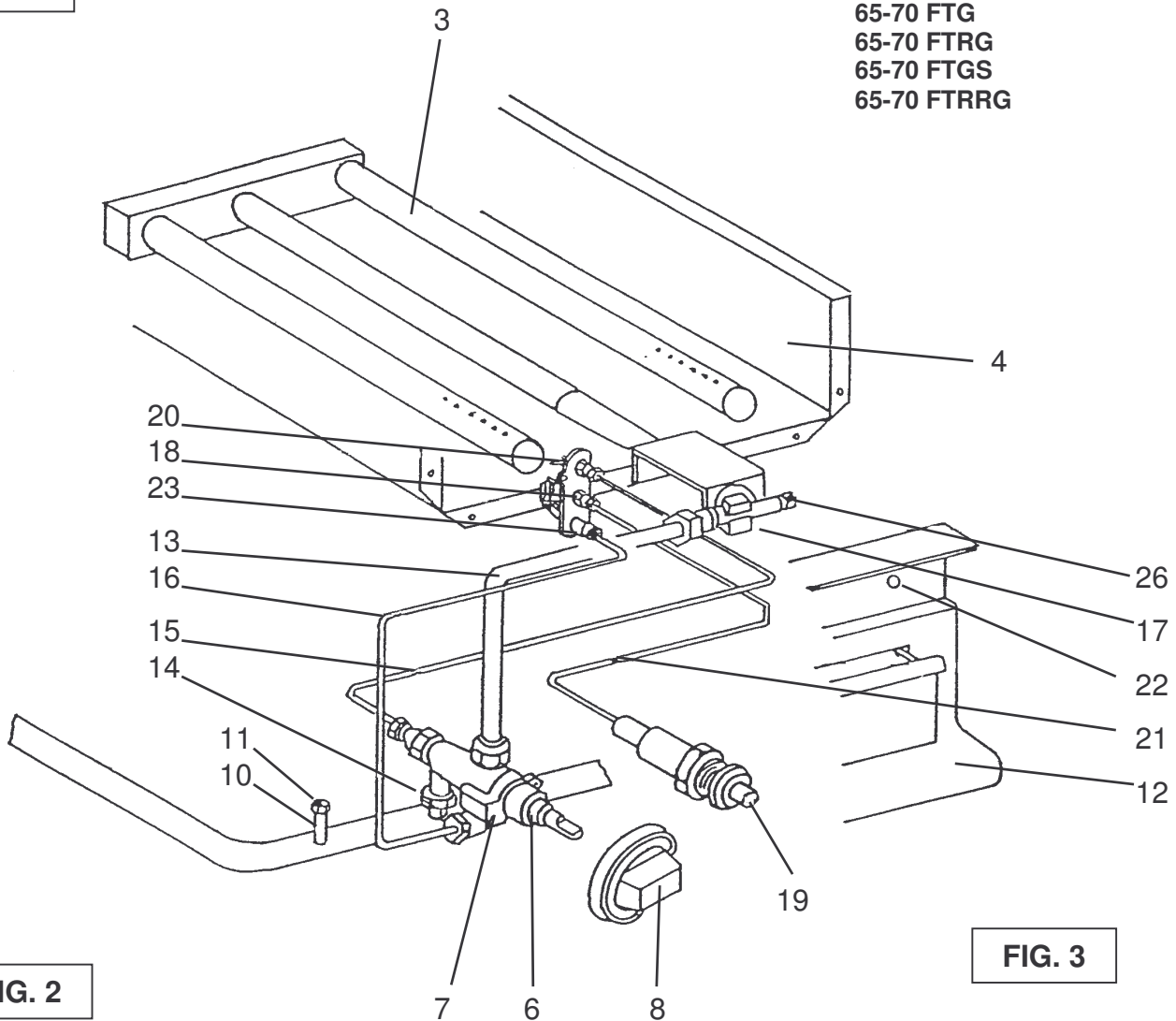


FIG. 2

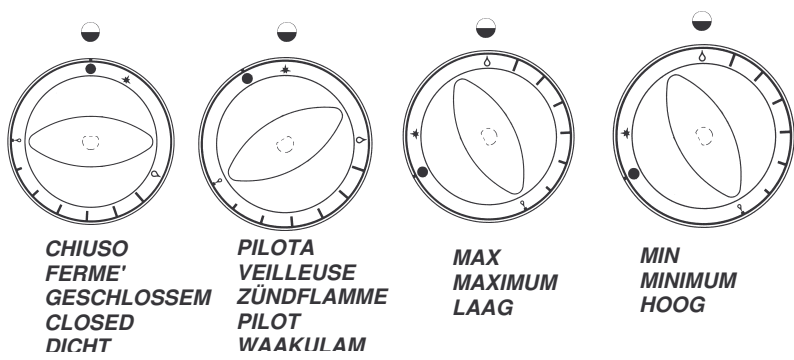
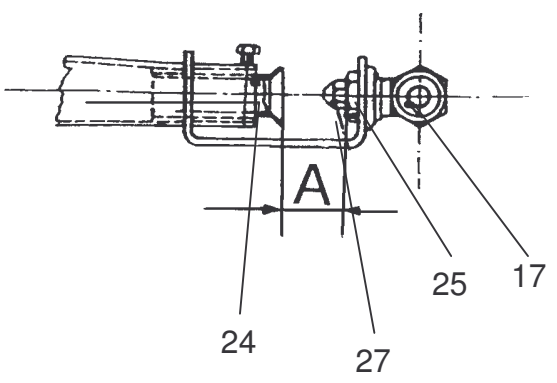


FIG. 3



10.2 EXPLODED TABLES OF CHROMED FRY-TOPS

MOD. 65-40 FTG-CR
 65-40 FTRG-CR
 65-70 FTG-CR
 65-70 FTRG
 65-70 FTG-CR
 65-70 FTG-CR

FIG. 2
 BILD 2

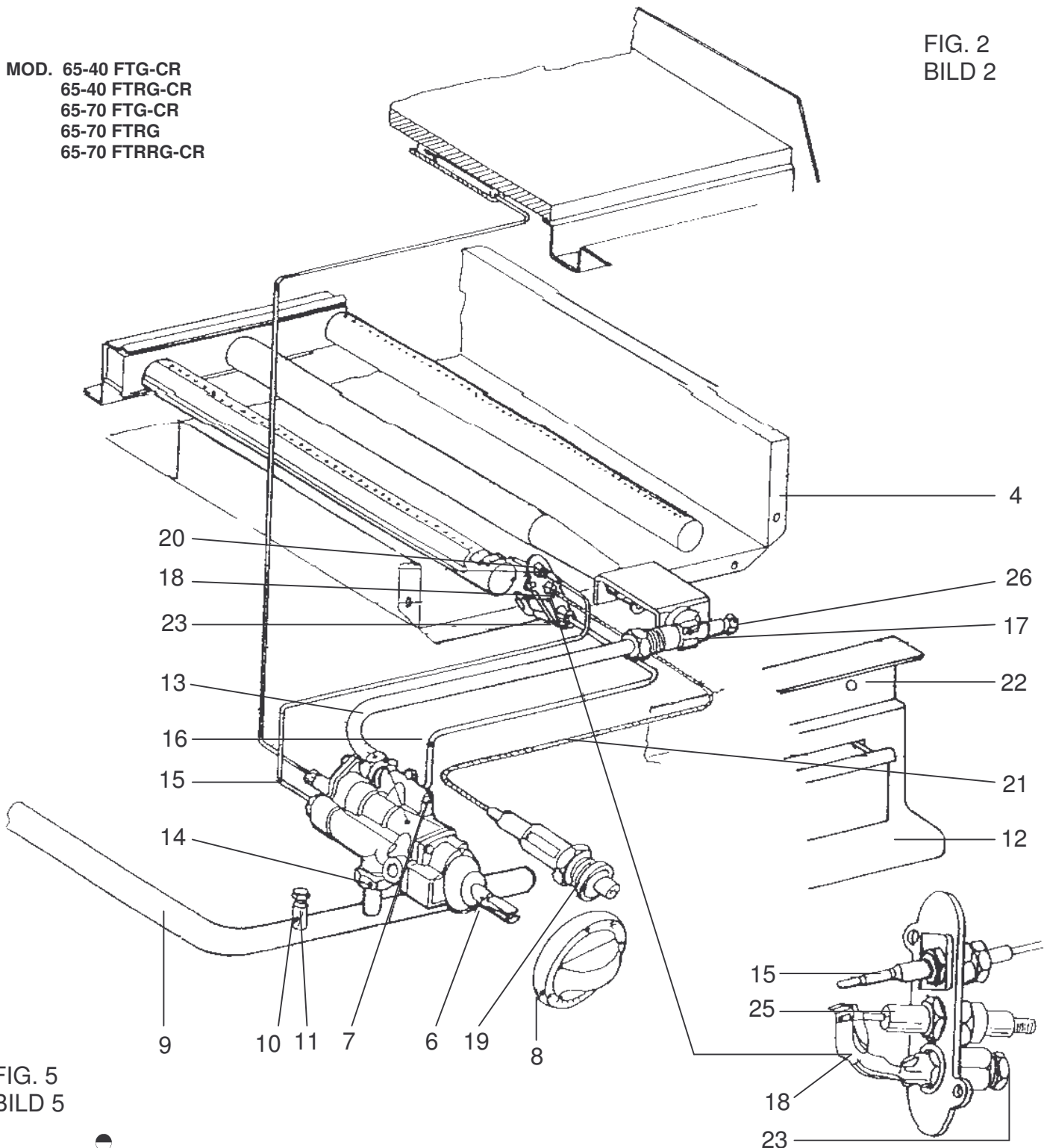
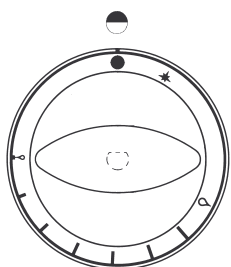


FIG. 5
 BILD 5



- POSIZIONE CHIUSO (SPEGNIMENTO)
 FERME' GESCHLOSSEM. CLOSED. DICHT
- ★ POSIZIONE PILOTA (ACCENSIONE)
 VEILLEUSE. ZÜNDFLAMME. PILOT. WAAKULAM
- 🔥 POSIZIONE BRUCIATORE PORTATA MASSIMA
 MAX. MAXIMUM. LAAG
- 🔥 POSIZIONE BRUCIATORE PORTATA MINIMA
 MIN. MINIMUM. HOOG.

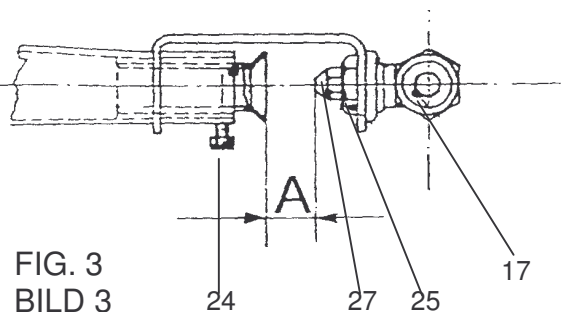


FIG. 3
 BILD 3