

MICROPROCESSOR CONTROL

G line

PROGRAMMING and TROUBLESHOOTING MANUAL





WARNING!

Failure to install, maintain, and/or operate the ironer according to the manufacturer's instructions may result in conditions which can produce body injury and/or property damage.



WARNING!

For your safety and to reduce the risk of fire or explosions, do not store or use flammable substances or substances that can generate flammable vapours and in proximity of this appliance.
Do not process with this appliance fabrics containing residuals of flammable substances.

NOTE: The WARNING and IMPORTANT instructions appearing in this manual are not meant to cover all possible conditions and situations that may occur.

It must be understood that common sense, caution, and carefulness must be applied whenever installing, operating or servicing the ironer.

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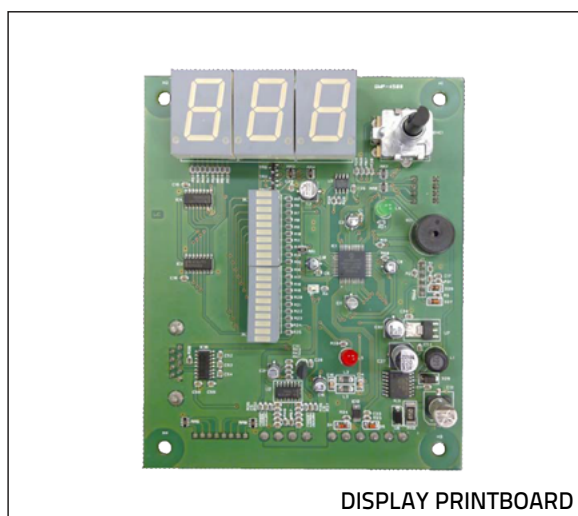
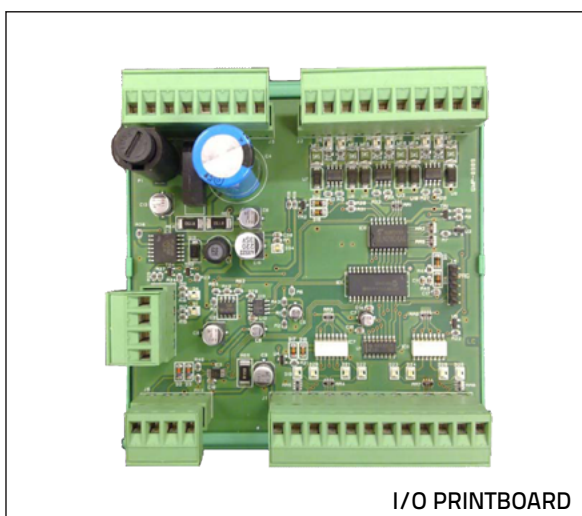
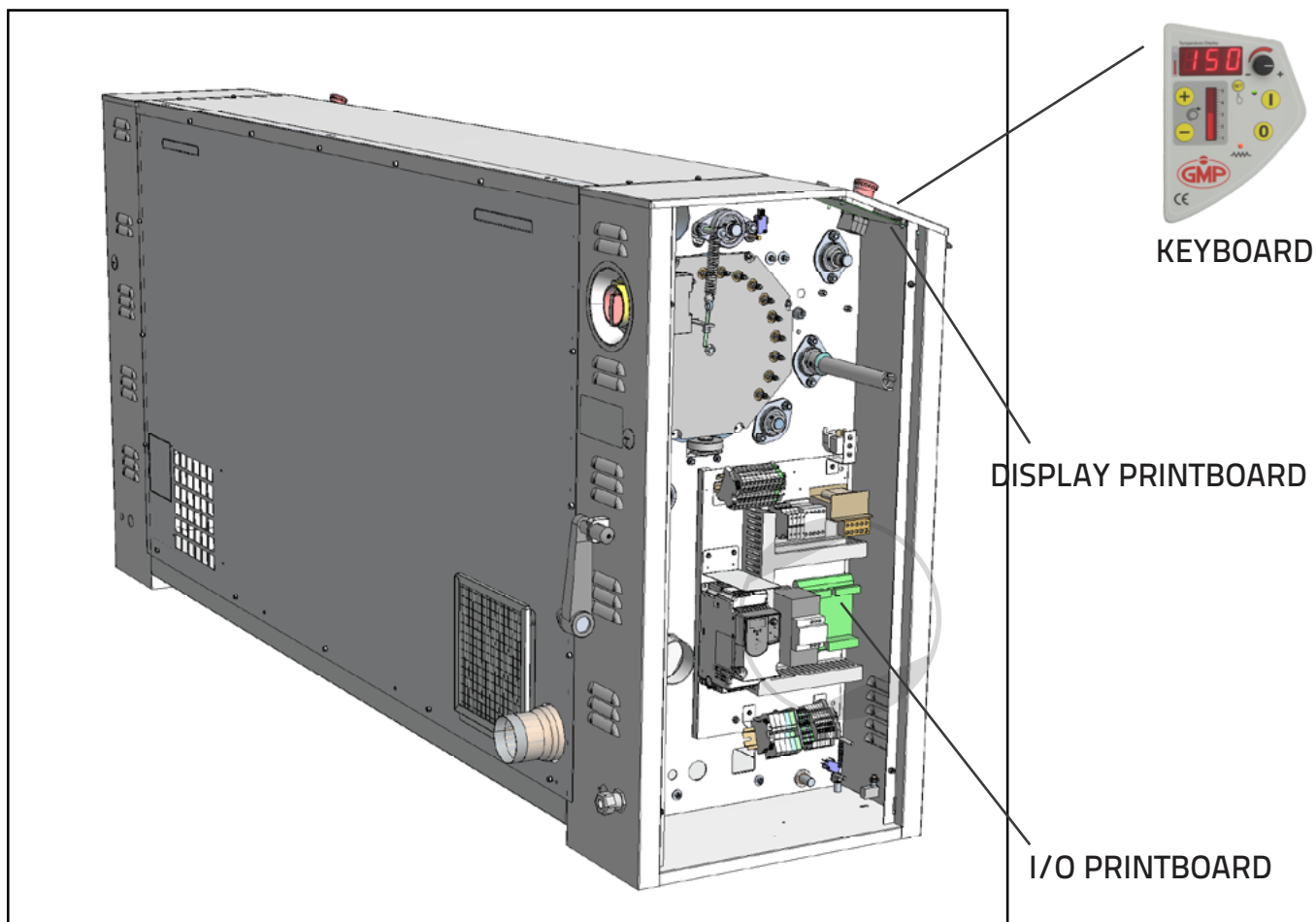
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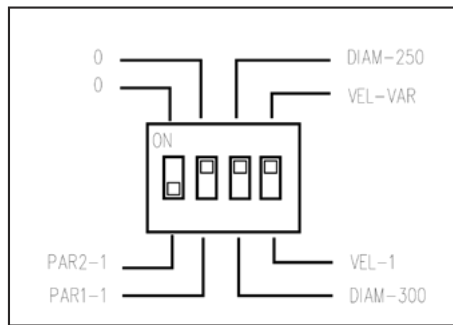


I/O PRINTBOARD is common for all the models, independently from their roller diameter or their version.

DISPLAY PRINTBOARD contains a different program according to the model.

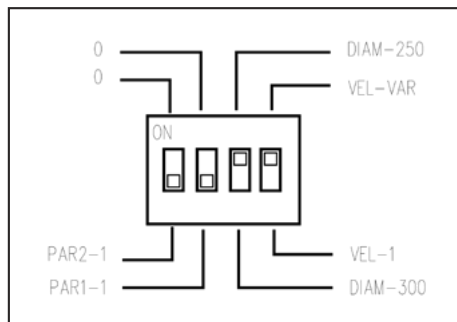
SOFTWARE CONFIGURATION

Appropriate software is pre-programmed in the factory according to model ordered, using DIP switches located on the back of DISPLAY PRINTBOARD:



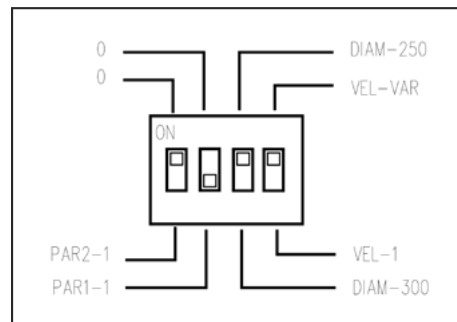
G 25

single temperature
sensor



G 35

single temperature
sensor



G 35 - G 50

double temperature
sensor

Switch off the ironer before carrying out any modification of the software configuration.

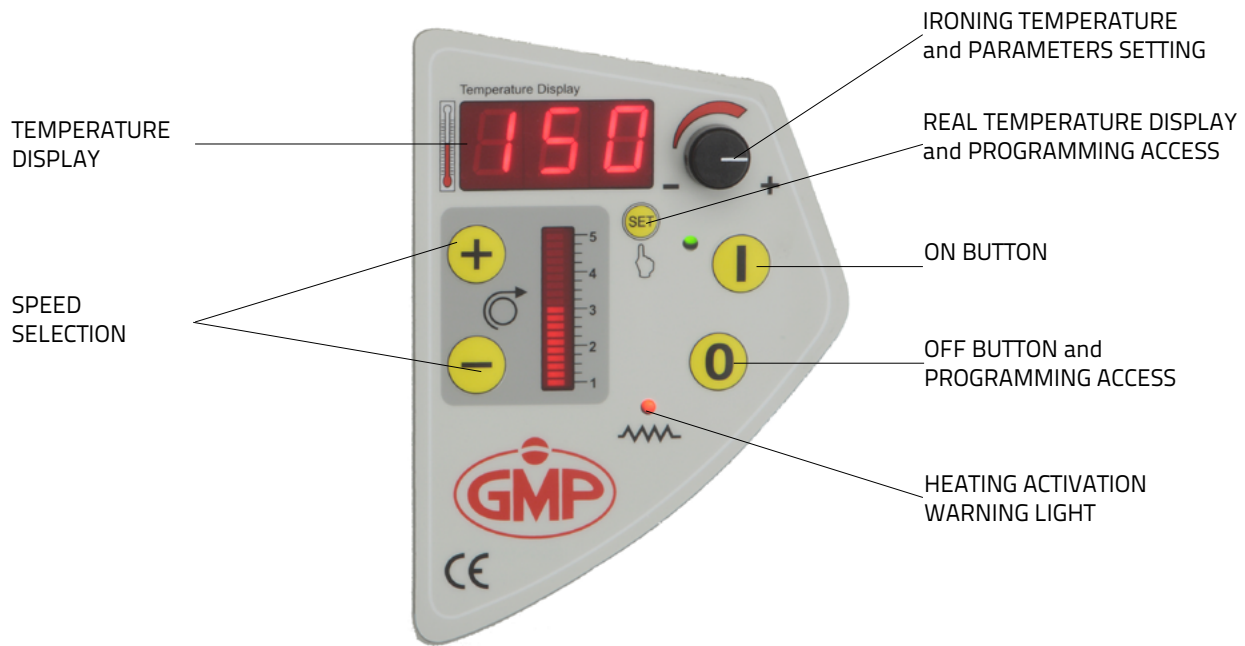
COMMUNICATION CABLE

Display board is powered through a cable, which at the same time has the function of communication between the display board and the I/O board.



IMPORTANT!

Never disconnect the communication cable while the ironer is powered.
Failure to respect this procedure might lead to irreversible printboard damage.



POWER UP

- 1) When power is connected to the ironer main terminals, the display shows 'B.B.B' followed by software code.
- 2) The display is now switched off and the machine waits for user input.

IRONER OPERATION

Pressing the "I" button on the control panel, the ironer switches on and the set temperature is displayed.

The LED bar shows the selected ironing speed.

By pressing the foot pedal, the heating is activated and the cylinder starts rotating with the previously selected speed, after a short acceleration of few seconds.

Steam extraction system is automatically activated.

Pressing the foot pedal while the cylinder is turning, the cylinder stops and heating goes off.

ADJUSTING THE TEMPERATURE

Temperature shown on the display is the selected ironing temperature.

To adjust the ironing temperature, use the black knob on the keyboard.

The temperature can be set in the range between 10°C and 150°C for the model **G14.25**, while you can choose from 10°C to 170°C for the models **G.35** and **G.50**.

On steam heated models, thermostat only functions as a thermometer, since the ironing temperature is given by the steam pressure that has been set on the steam pressure controller outside the ironer.

The red LED on the control panel switches on as soon as heating is activated.

To read the real temperature read by the probe 1 and 2, press the "SET" button.

ADJUSTING THE IRONING SPEED

By pressing the "+" or "-" buttons on the keyboard, you can modify the ironing speed, choosing between 20 different steps.

SWITCHING OFF THE IRONER

Pressing the "O" button, the display board and all the active devices switch off (cylinder rotation, extraction motors, heating).

When switching off the ironer, the thermostat will detect the cylinder temperature and if this is above the safety level (90°C), the ironer will automatically start the COOL-DOWN process: the cylinder continues turning till temperature drops to 90°C, then the machine will automatically switch off.

REVERSING CYLINDER ROTATION (option)

If linen are not introduced as wished and it is required to reverse cylinder rotation to extract them, it is possible to do so by pressing the blue REVERSE button on the control panel, till the complete extraction of the linen.

For security reasons, it is necessary to keep the REVERSE button pressed to invert the cylinder rotation.

When releasing the REVERSE button, the ironer will automatically go back to the normal operating mode and the cylinder will turn forward.

COOL-DOWN FUNCTION

If the '0' button on the control panel is pressed, and the cylinder temperature is still above 90°C, the ironer will automatically start a cool down procedure and subsequently switch off.

During the cool down phase, the display shows '**coolInG**': the heating is switched off and the cylinder continues rotating till the temperature reaches the safe level of 90°C.

During this phase, pedal and temperature regulation functions are unabled, while speed control and safety devices (finger bar, emergency stop buttons) work.

Activating a safety device (finger bar, emergency stop buttons), the cool down process can be interrupted.

If the '0" button is pressed, and the cylinder temperature is below 90°C, the ironer immediately switches off.

INTERNAL MENU

The display printboard features an internal menu that can be used to:

- Modify some of the configuration parameters
- Read the data about machine functioning (timers, etc.).

ACCESSING THE INTERNAL MENU & PROGRAMMING

To access the menu, it is necessary that ironer is powered but OFF.

1) Press the "0" button to switch off the display.

2) Press the "0" and 'SET' buttons together until the display shows "P00".

You have now entered the internal menu.

3) To scroll the parameters or to modify their value, turn the black knob on the control panel.

4) To enter the parameter or to confirm the new set value, press "SET" button.

Once the new data is saved into the memory, the display will go back automatically to the parameter name.

To exit from programming you have to go back to parameter 'P00' and press the 'SET' button. The display switches off and the ironer can be switched on by pressing the 'I' button.

PARAMETER LIST

P00 PROGRAMMING EXIT

Using this parameter you can exit from the programming menu.

P01 MINIMUM TEMPERATURE SET

This is the minimum temperature that can be adjusted by the user rotating the knob

Range 0-190°C Default 10°C

P02 MAXIMUM TEMPERATURE SET

This is the maximum temperature that can be adjusted by the user rotating the knob

Range 0-190°C Default **G**14.25: 150°C - **G**.35/ **G**.50: 170°C

P03 TEMPERATURE RANGE

Advancement steps of the SET temperature for each impulse of the knob

Range 1-50°C Default 1°C

P04 BALANCE TEMPERATURE (only for models with 2 sensors)

Safety temperature gap between right and left side sensors switching off the heating system

Range 10-100°C Default 60°C

P05 ANTICYLCE DELAY

Delay used to activate the heating after the thermostat has given input to start heating

Range 1-50 sec Default 3 sec.

P06 INVERTER RANGE

Used for inverter control

Range 5-10V Default 5V

P15 RESET FUNCTION

This function is used to re-establish the default parameter of the ironer.

P16 COOL-DOWN TEMPERATURE

Modifies the safety level for cool down temperature.

Range: 0-180°C Default: 90°C

READ ONLY PARAMETERS:

P07 PARTIAL IRONER FUNCTIONING TIME 1

P08 PARTIAL IRONER FUNCTIONING TIME 2

To calculate the total minutes: (P08x1000) + P07

P09 PARTIAL MOTOR FUNCTIONING TIME 1

P10 PARTIAL MOTOR FUNCTIONING TIME 2

P11 PARTIAL HEATING FUNCTIONING TIME 1

P12 PARTIAL HEATING FUNCTIONING TIME 2

To calculate the total minutes: (P12x1000) + P11

MESSAGES AND ERROR LIST

During the ironer functioning the display can show error codes or messages that temporarily hide the set temperature. These messages help in a quick identification of a possible problem.

CODES LIST

- Er1** TEMPERATURE PROBE 1 DISCONNECTED OR INTERRUPTED
- Er2** TEMPERATURE PROBE 1 IN SHORT CIRCUIT
- Er3** TEMPERATURE PROBE 2 DISCONNECTED OR INTERRUPTED
- Er4** TEMPERATURE PROBE 2 IN SHORT CIRCUIT

These error messages are displayed whenever the printboard cannot read the temperature data. This problem might be originated by a wrong connection of the sensors terminal on the printboard, or by a defective sensor. In such a case the ironer will continue to function but the heating will not be activated.

Er6 BLOCKED FOOT PEDAL

This error message is shown when the microswitch of the foot pedal is kept pressed for more than 10 seconds.

Er7 EMERGENCY STOP BUTTON ACTIVATED

When the emergency stop button is activated, the chest goes back to the 'open' position and the display is switched off. If the safety device is not released before switching on the ironer again with the 'I' button, the display shows 'Er7'.

Er8 COMMUNICATION INTERRUPTED

This error code is displayed when the communication cable between the display board and the I/O board is blocked or when you disconnect the cable with machine switched on (-> boards can burn). Check then if this cable is properly connected.

If necessary, remove the communication cable ONLY when the ironer is switched off and disconnected from the mains. Differently, disconnecting the communication cable will irreparably damage the communication ports of the printboards.

tE WRONG USE OF THE IRONING SURFACE

This error code is displayed when the temperature gap between the 2 sensors exceeds the value set on parameter 'P04' (Default 60°C). In such a case the heating elements are switched off until the temperature gap drops down under the set value to avoid partial overheating of the chest.

Important: linen introduction has to be always alternated across the entire ironing surface.

PrB BRASS TEMPERATURE SENSOR SUPPORT PLATE WORN

Replace the brass temperature sensor support plate(s), which has worn out. When this error occurs, machine cannot work because of safety reasons.

rSt ELECTRONIC IGNITION RESET (ONLY FOR GAS HEATED MODELS)

If electrodes detect any anomaly during the ignition or functioning of the burner, the electronic ignition activates a safety stop and the display shows 'rSt'.

Press the 'I' button to reset the electronic ignition and make a second trial. If the problem persists, you have to check:

- Phase/neutral proper connection on the main terminals;
- Gas pressure at the solenoid valve entrance;
- Gas pressure at the nozzle (solenoid valve exit);
- Position of the electrodes above the burner.

NB: According to the position of the dot in the rSt message, we can understand which burner is in protection. Example:

r.St left burner in protection;

rSt. right burner in protection (if applicable);

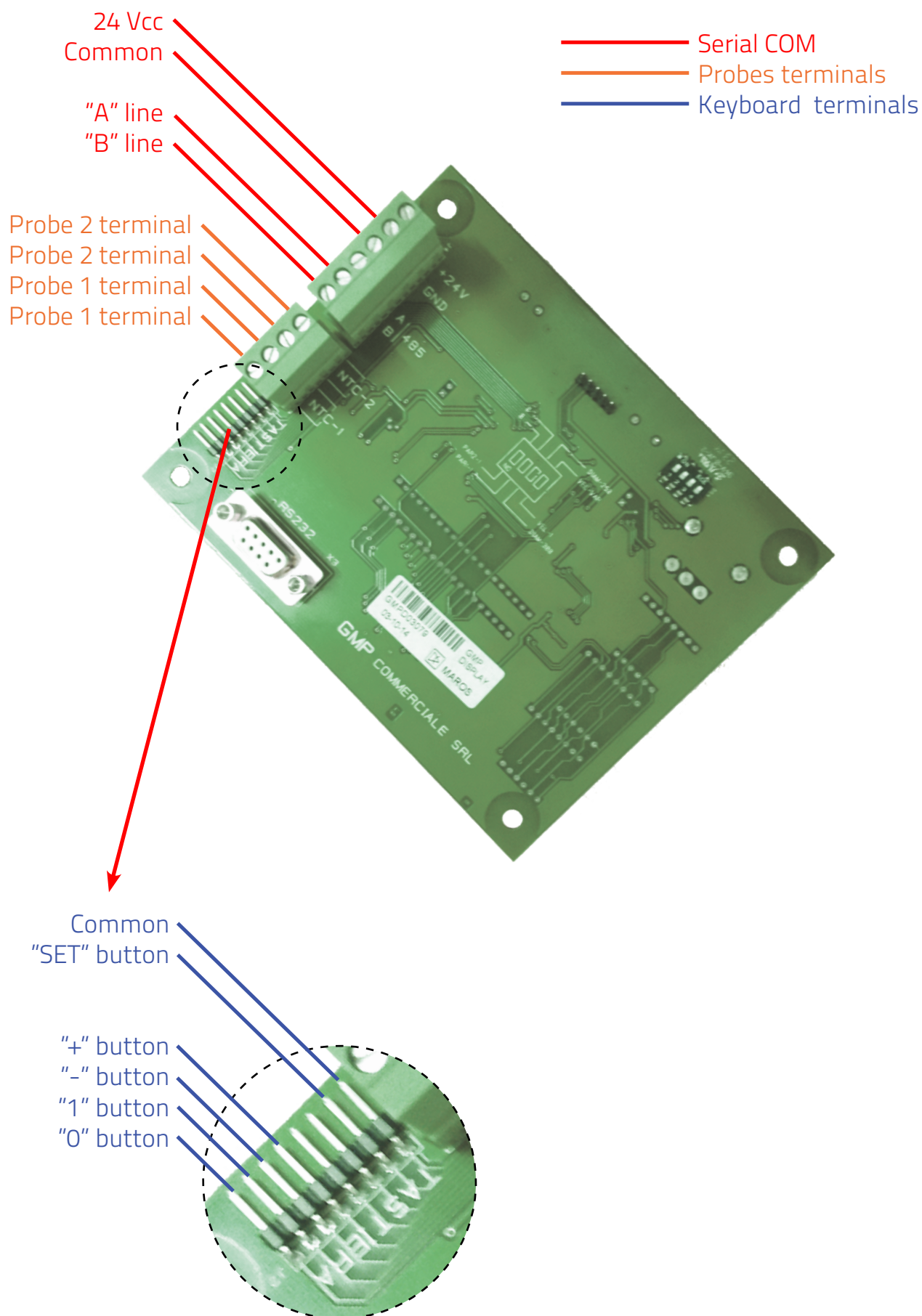
r.St. both burners in protection (if applicable).

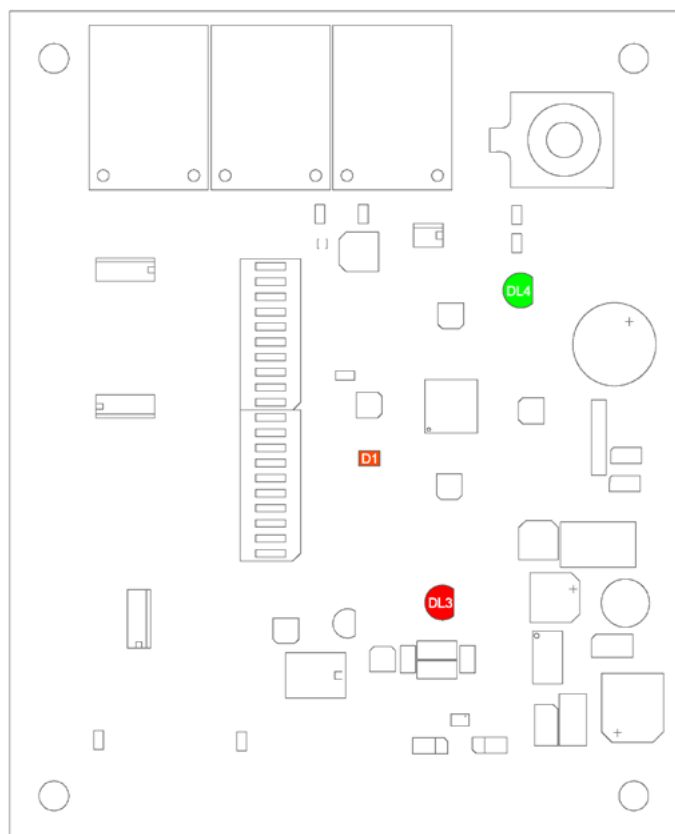
DISPLAY BLINKING (ONLY FOR GAS HEATED MODELS)

Display blinks when: burners have not switched on, in spite of a thermostat signal to activate the heating, and although electronic ignitions are not in protection mode. In the majority of the cases, this happens when the pressure switch blocks the heating. In such a case, double-check that the exhaust fumes extraction motor properly works and that the exhaust piping is clean.

Other possible causes:

- Safety thermostat has been activated;
- Inverter internal minirelay failed;
- Electronic ignition contactor or fumes extraction motor contactor failed;
- Electronic ignition fuse or fumes extraction motor fuse failed;
- Contactor activated by the pressure switch not working.

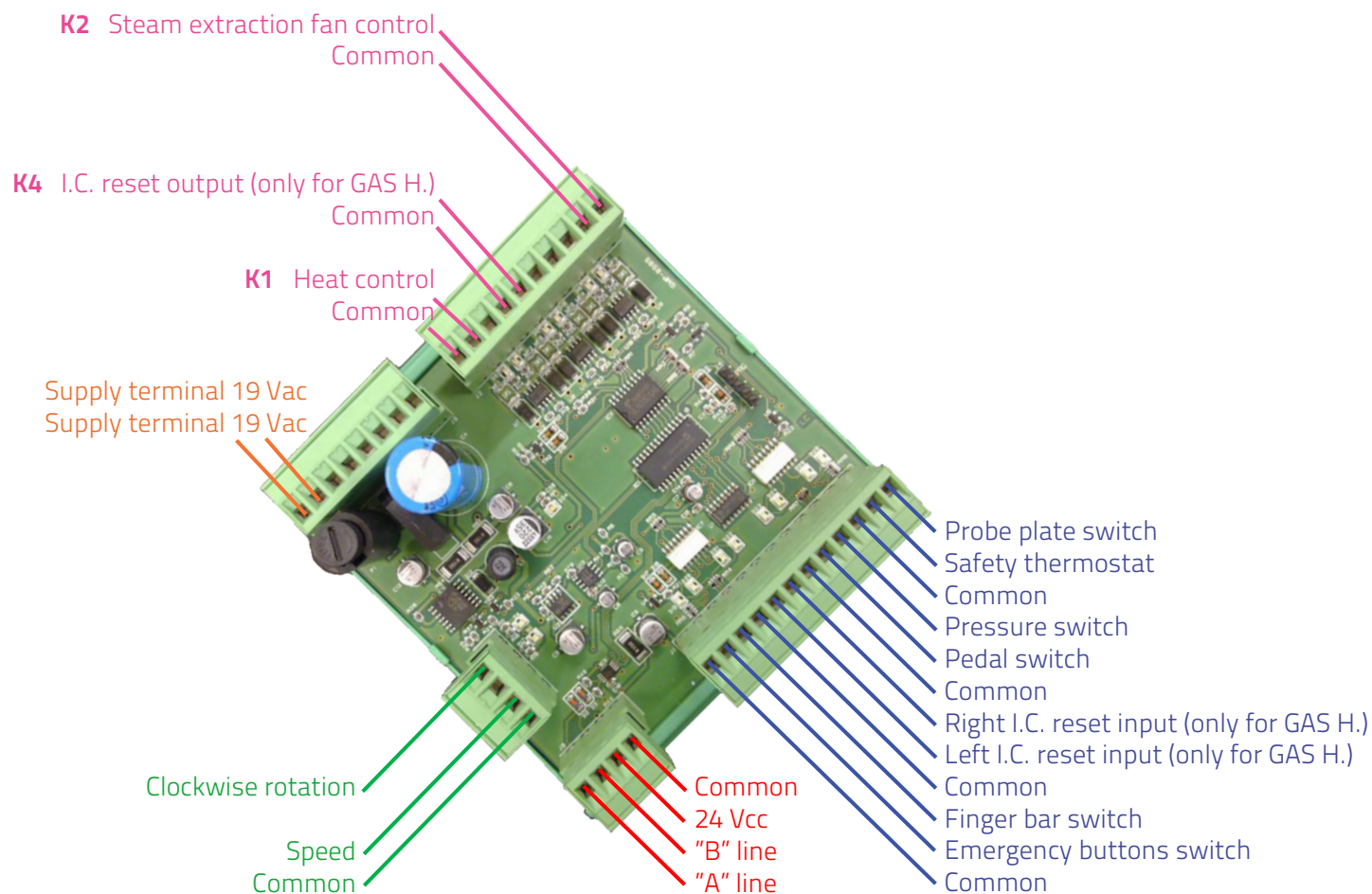


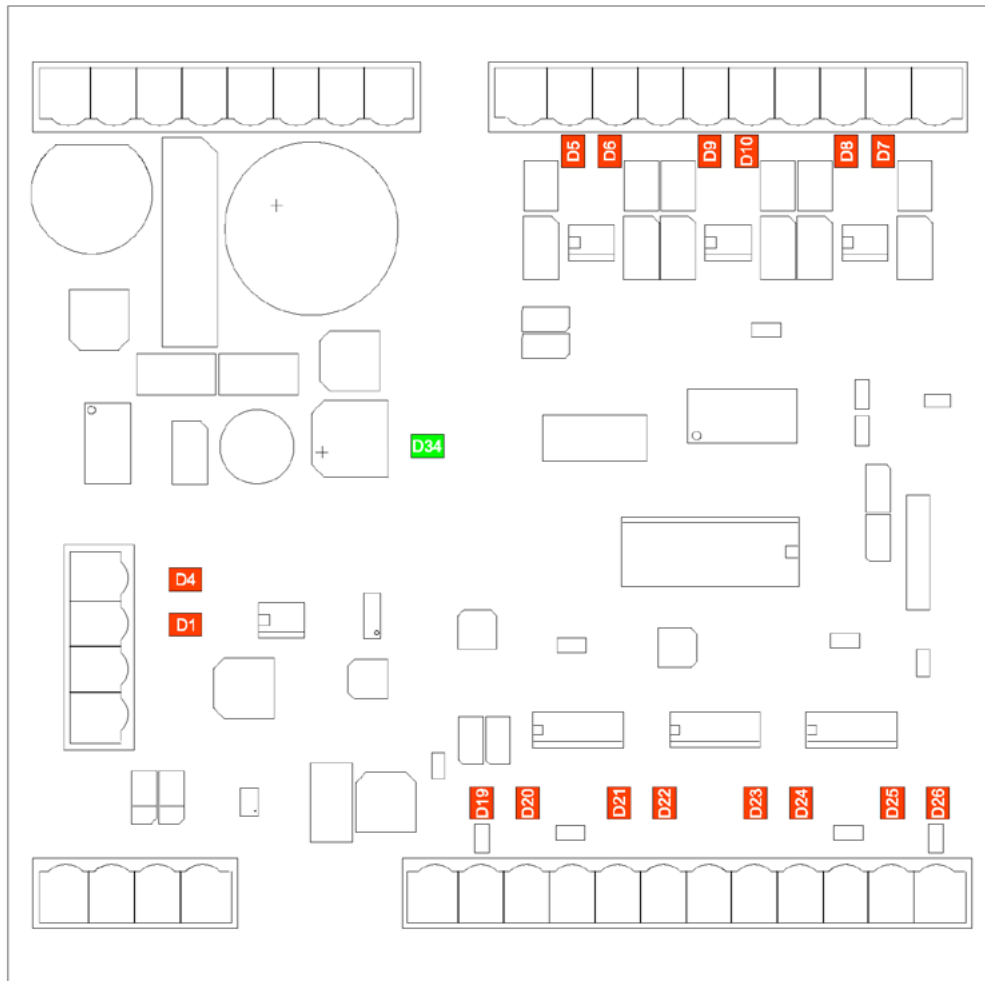


LED CORRESPONDENCE:

D1	Display printboard powered
DL4	Ironer switched on
DL3	Heating elements output activated

- Output terminals
- Supply terminals
- Inverter terminals
- Serial COM
- Input terminals





LED CORRESPONDENCE:

D34 I/O printboard activated

OUTPUTS:

- D5** Heating output 1 enabled
- D7** Steam extraction motor enabled
- D9** Reset function enabled (gas heated models only)
- D4** Cylinder motor for 'forward" function activated (for inverter)

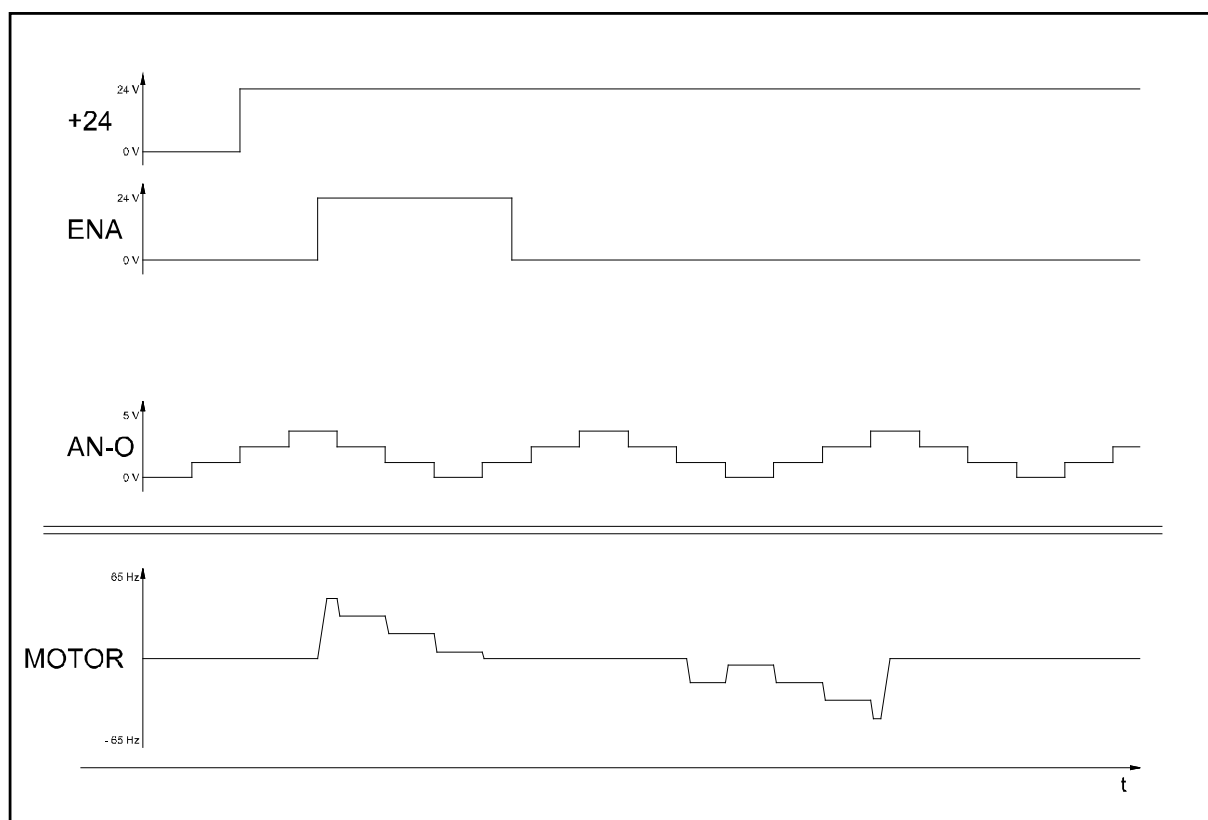
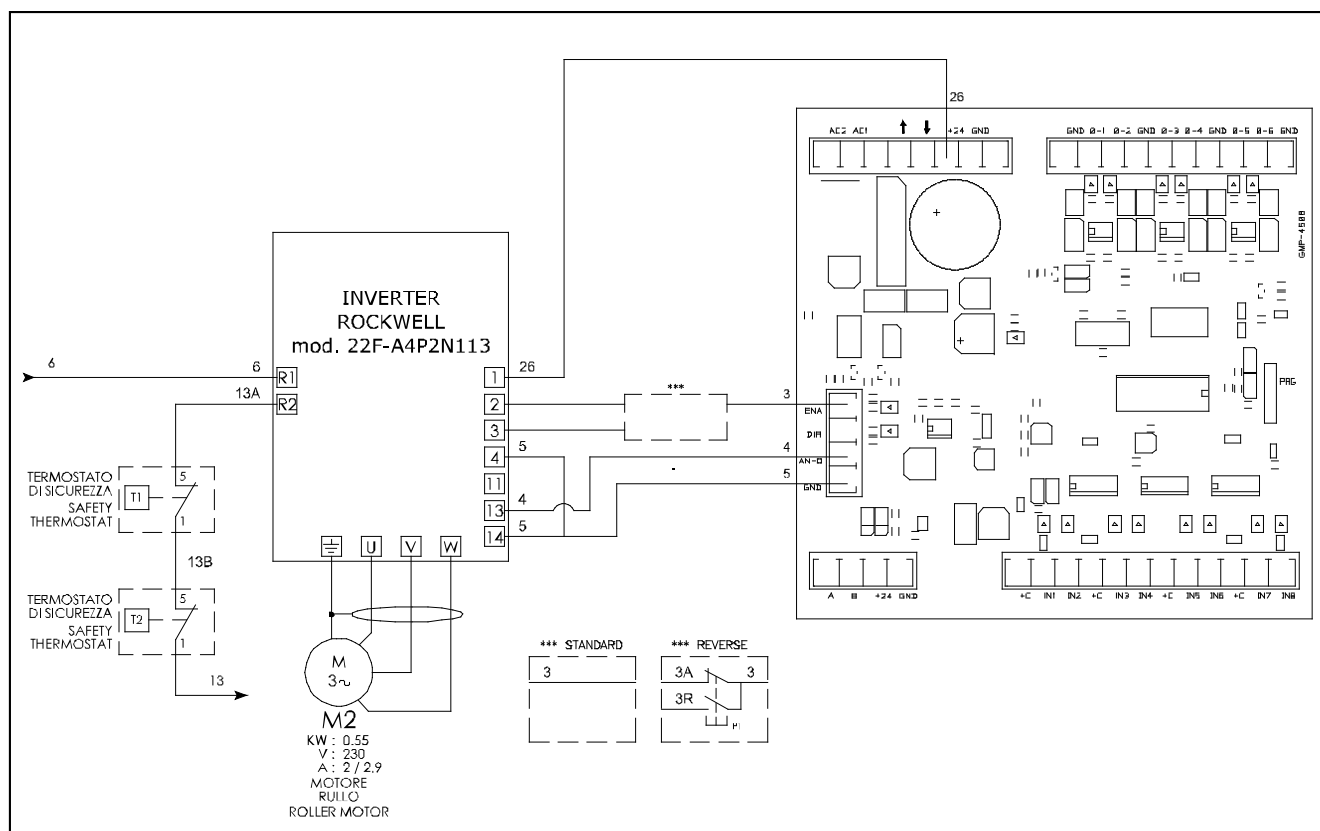
INPUTS:

- D19** Emergency stop button(s) activated
- D20** Finger bar microswitch activated
- D21** Left electronic ignition in protection (if applicable)
- D22** Right electronic ignition in protection (if applicable)
- D23** Foot pedal microswitch activated
- D24** (Gas heated models only) Pressure switch contacts closed between L7G and L7I (L8G and L8I), waiting for depression to switch
- D25** Safety thermostat and inverter enable
- D26** Temperature support plate activated

COMMUNICATION BETWEEN I / O PRINTBOARD AND INVERTER

The I/O BOARD output signals:

- + 24:** Enables the reception channel of the inverter (digital signal, 0V= not activated, 24V= activated)
- ENA:** Activates the clockwise rotation of the motor (digital signal, 0V= not activated, 24V= activated)
- AN-O:** Sets the motor speed during the rotation (analog signal, 0-5 V)



TROUBLESHOOTING FLOWCHART



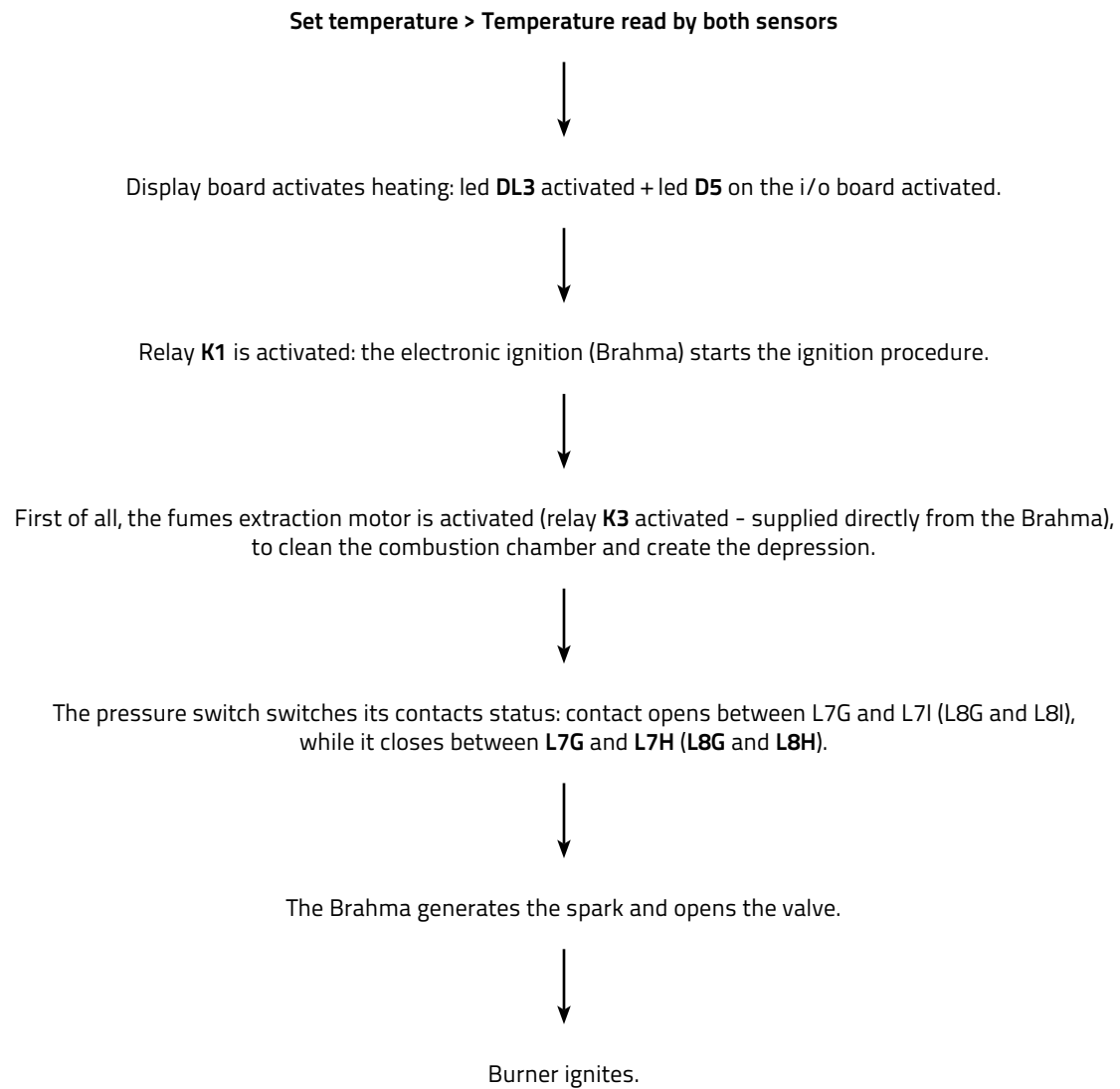
WARNING!

Operations described in the following chapter shall only be performed by qualified service engineers.



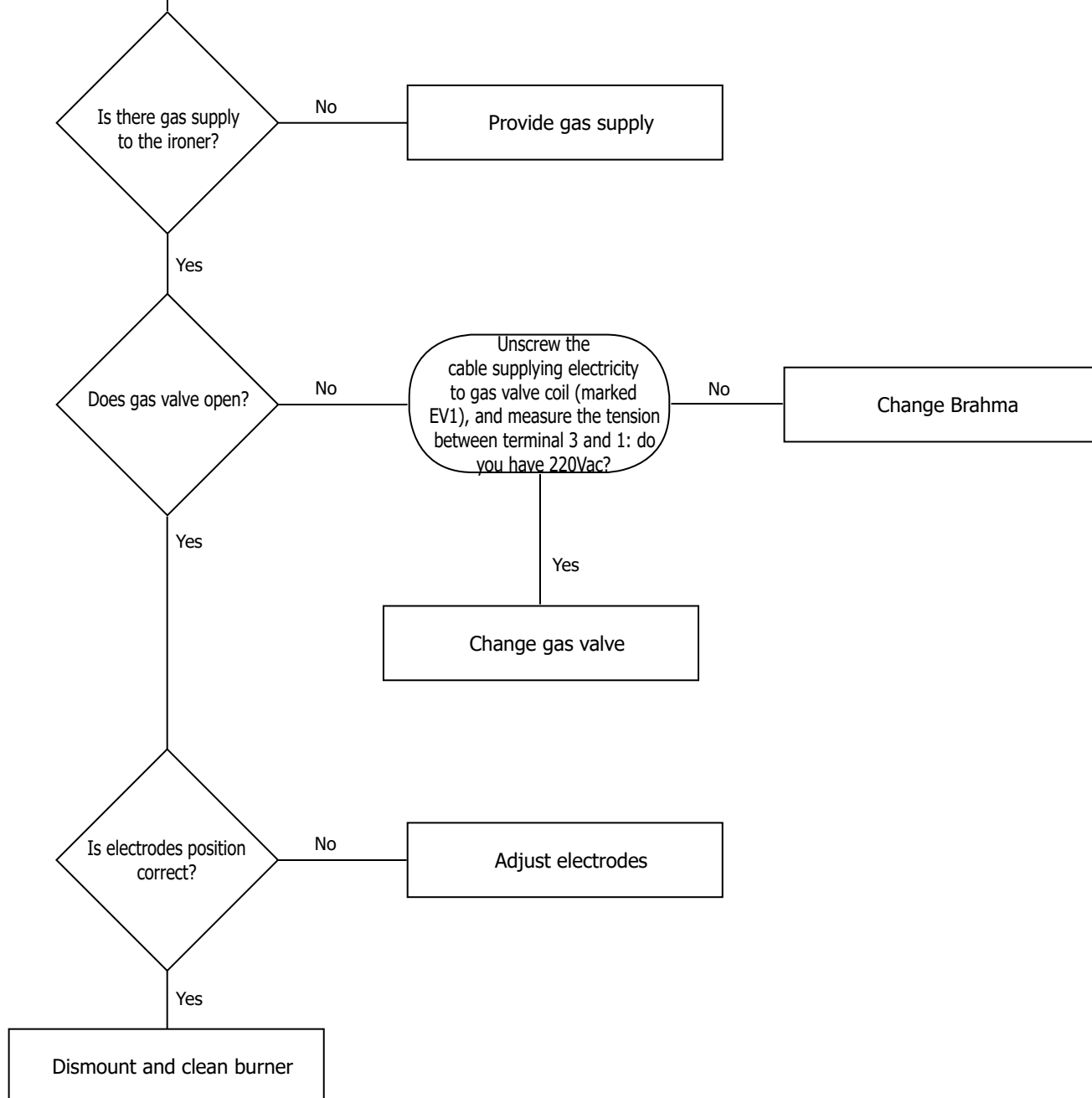
DANGER!

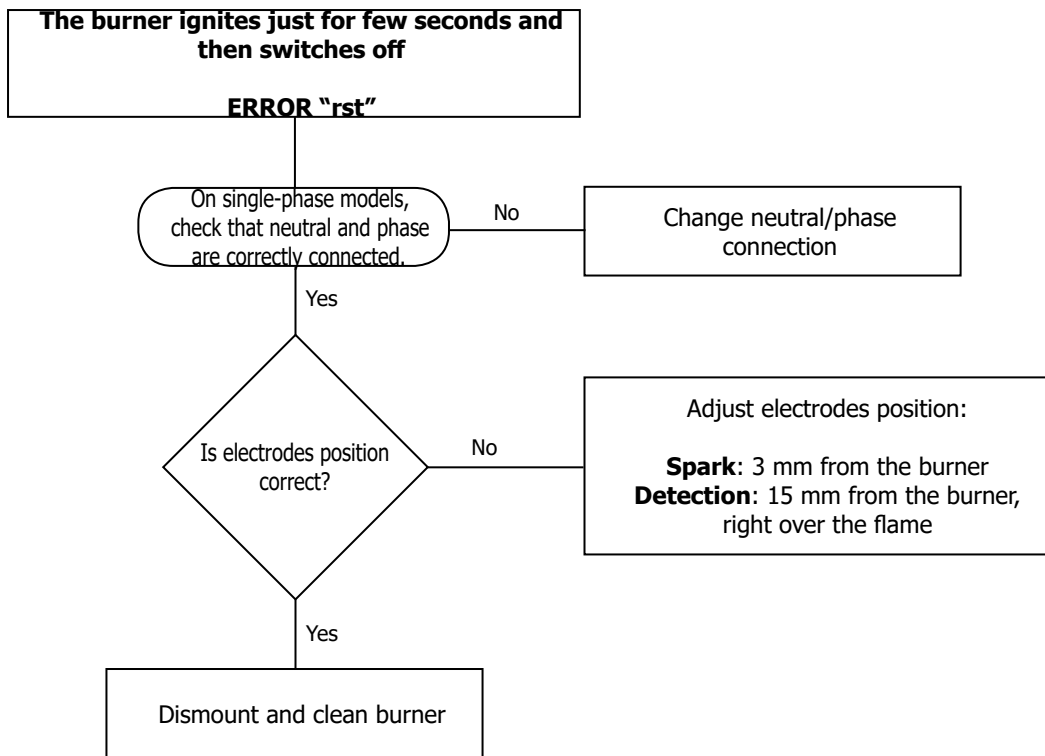
Some of the listed electric controls are carried out while appliance is powered, precaution shall be applied to avoid contact with electrically powered components.

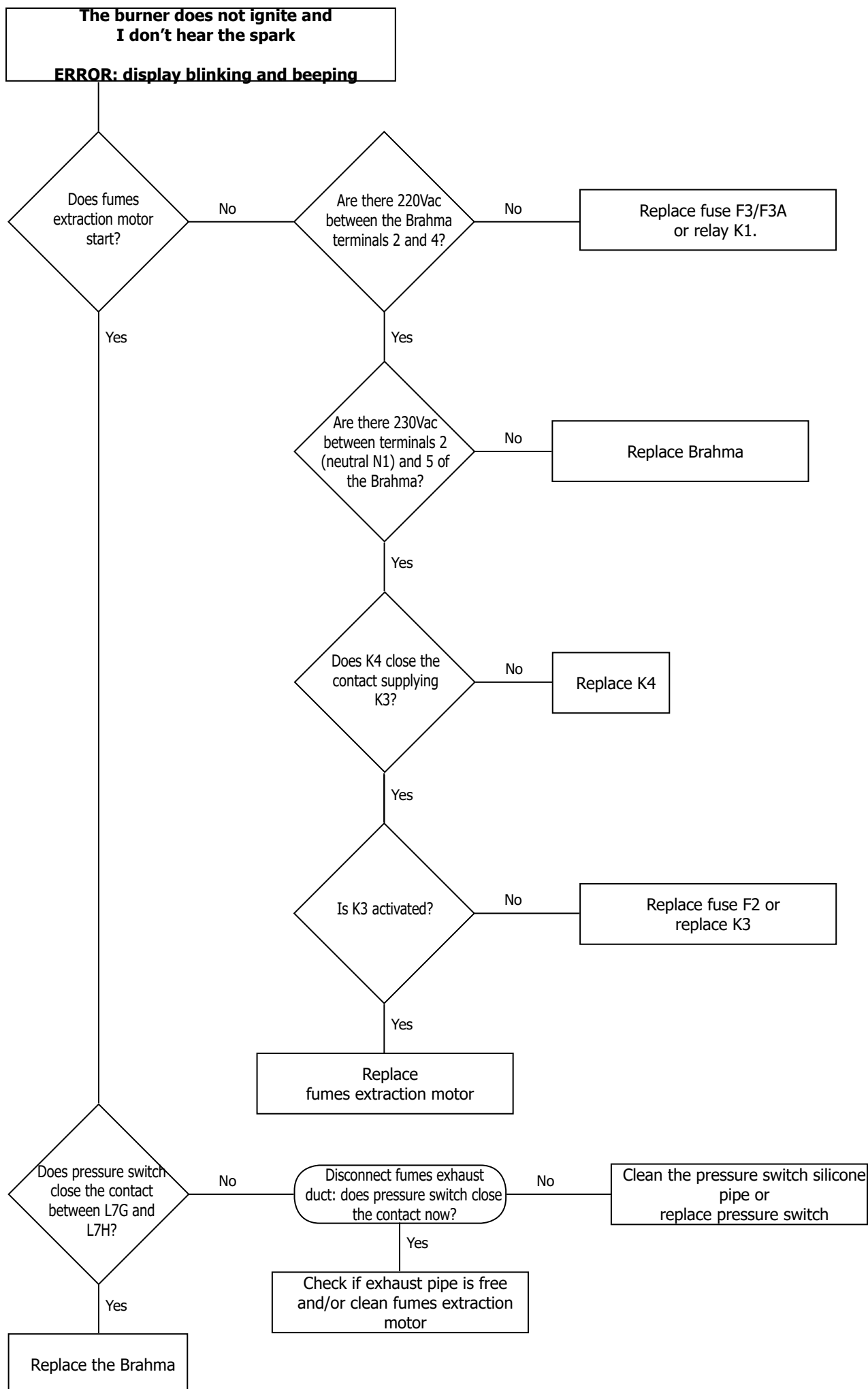


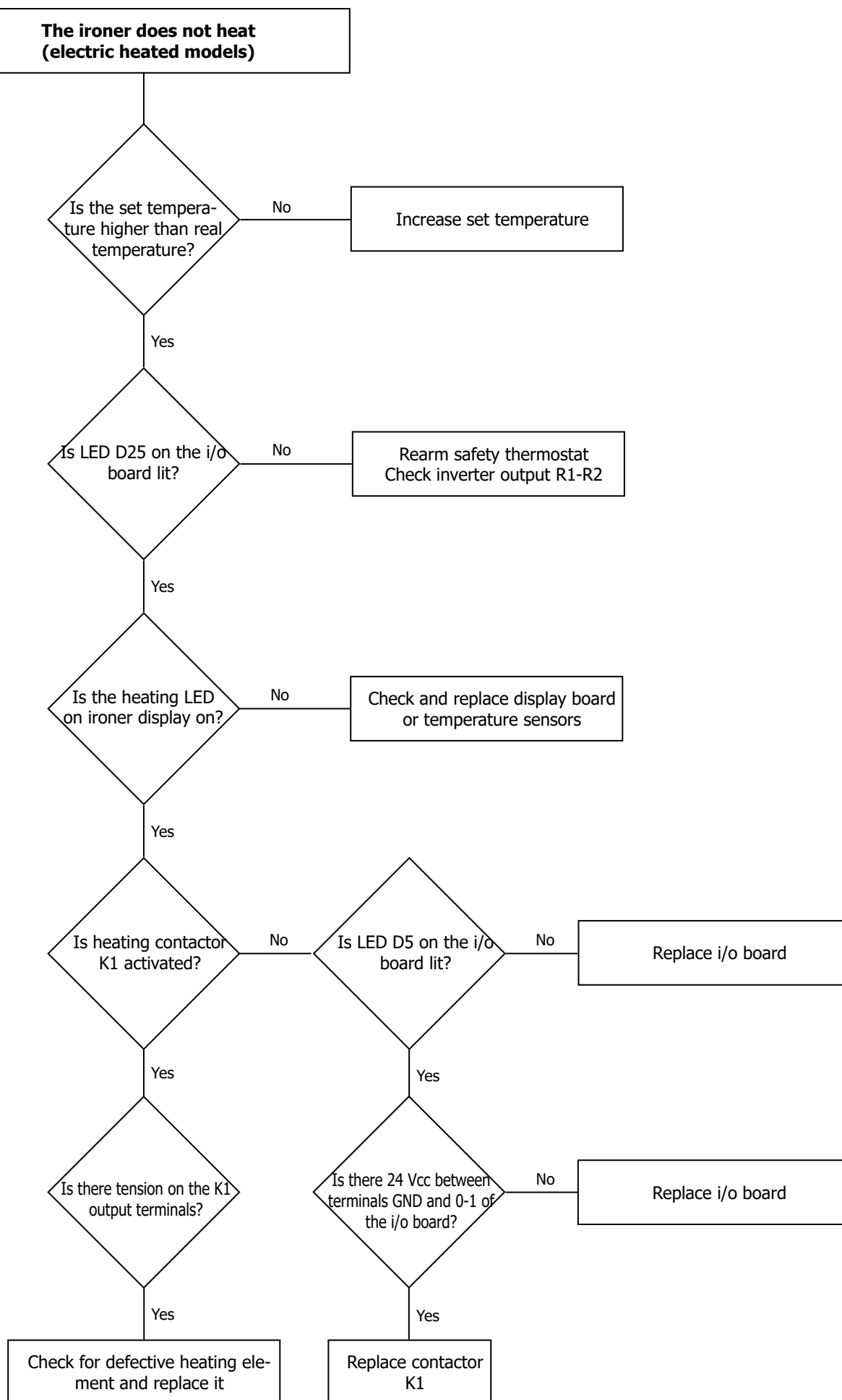
**I can hear the spark,
but the burner does not ignite**

ERROR: "rst"









Ironing speed cannot be adjusted

