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Grupos Térmicos

Instrucciones de Funcionamiento,
Limpieza y Mantenimiento
para el **USUARIO**

GB

Heating Units

Operating, Cleaning
and Maintenance Instructions
for the **USER**

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Groupes Thermiques

Instructions Fonctionnement
de Nettoyage et de Maintenance
pour l'**USAGER**

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Heizkessel

Betriebs-, Reinigungs-
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für den **BENUTZER**

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Istruzioni di Funzionamento
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per l'**UTENTE**

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Grupos Térmicos

Instruções de Funcionamento
Limpeza e Manutenção
para o **UTENTE**

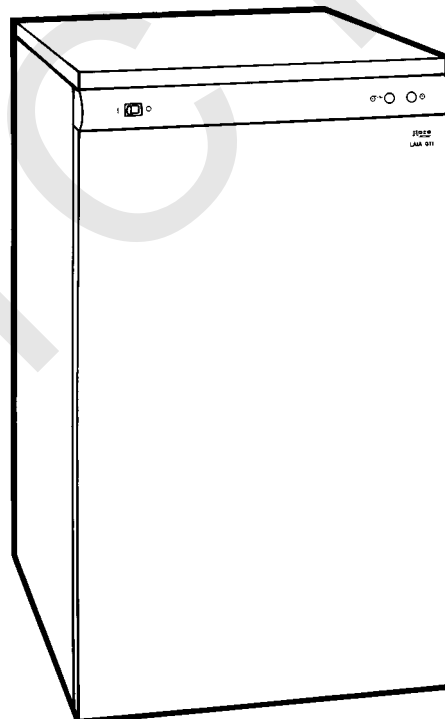


Fig. 1

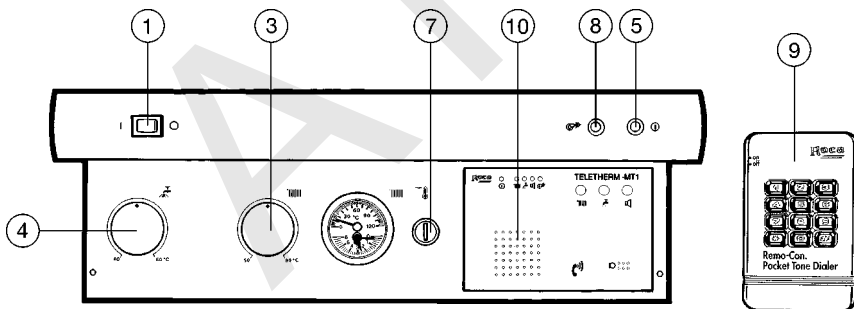
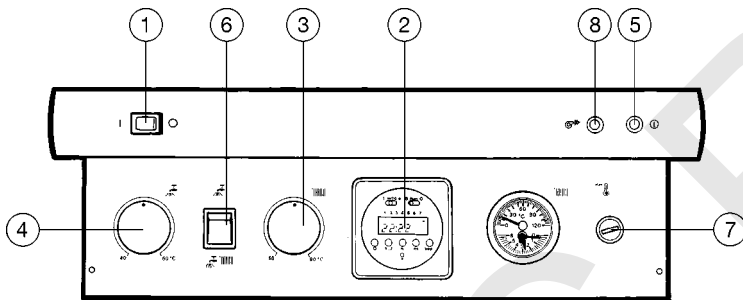
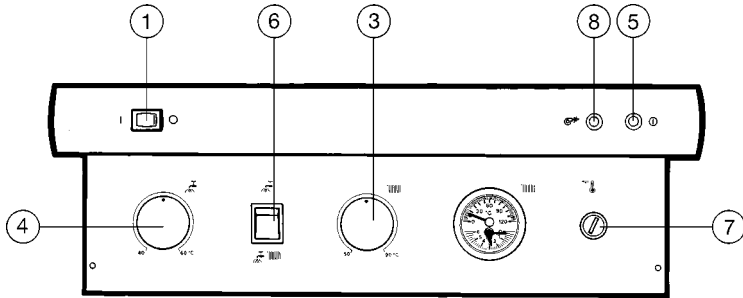


Fig. 2

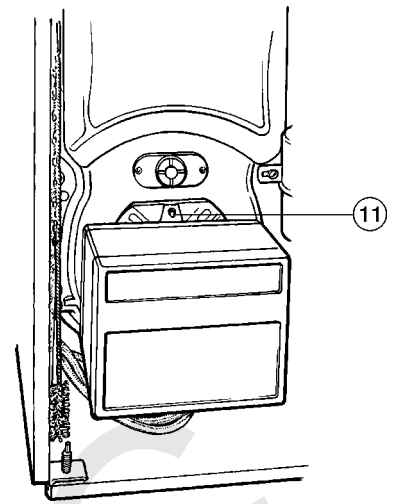


Fig. 3

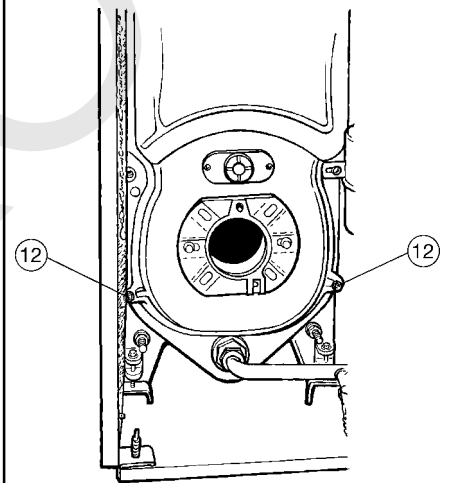
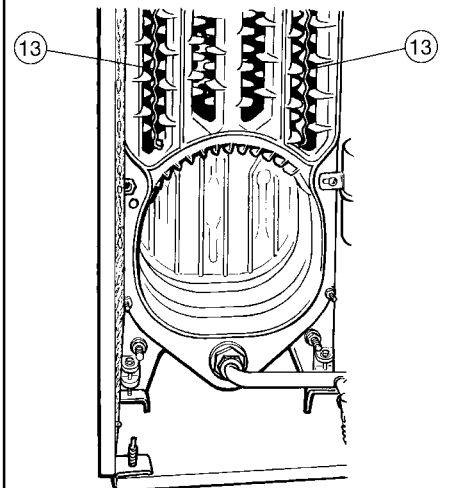


Fig. 4



The LAIA Heating Unit selected will give you the services of Heating and instant generation of Hot Water for household use.

These instructions give you the main characteristics of the Heating Unit as well as the steps required for its correct operation and maintenance.

Our Clients' Technical Service is at your disposition for helping to solve any problems that may arise.

Main characteristics

Model	Operating power	
	kcal/h	kW
LAIA GTI-R-T	25.000	29,07

Maximum operating temperature: 100°C

Maximum pressure (heating circuit): 3 bar

Maximum pressure (hot water circuit): 7 bar

Continuous production: 13.9 l/min at $\Delta t=30^{\circ}\text{C}$

Operation

Checks and steps to follow during service to the Heating Unit, and at the beginning and end of every heating season.

Operations prior to first use

- Check that the Out and Back cocks, if any, are open.
- Open the door of the boiler.
- Check that the unit is full of water and that the fixed hand of the thermohydrometer has been placed in the position corresponding to the height of the unit.

1 bar = 10m

- Purge the air from the unit and the emitters, using the purge traps.
- Fill up with water, if necessary, until the mobile hand of the thermohydrometer is slightly higher than the fixed one.

First use

- * LAIA Heating Units incorporate a burner which ignites for the first time some 6 minutes after the general switch (1) is flicked. Subsequently, ignition is almost instant. [Figure 1](#).
- * With regard to the operation of the programme clock (2) of LAIA GTI-R Heating Units, consult the Instructions provided.
- Adjust the boiler thermostat (3) to between 50°C and 90°C. Move the dial of the ambient thermostat, if any, to the position corresponding to the ambient temperature required.
- Adjust the boiler thermostat for hot tap water (4) to between 40°C (summer) and 60°C (winter).
- Flick the general switch (1). The pilot (5) will light up.
- Use the switch (6) to select "heating/hot water" or "hot water".

Heating/Hot Water

LAIA GTI and GTI-R with switch at (6) / . LAIA GTI-T with Teletherm / functions activated. (See "telephone module".)

- A - WITHOUT EXTRACTION OF HOT WATER**
- The burner operates under the control of the boiler potentiometer (3). See [figure 1](#).
 - The circulator operates continuously, unless the ambient thermostat overrides it.
- B - WITH EXTRACTION OF HOT WATER**
- The boiler goes to the maintenance temperature (about 80°C).
 - The circulator works under the control of the electronic circuit, in function of the flow and the temperature selected for this service.

Hot Water

LAIA GTI and GTI-R with switch (6) at . LAIA GTI-T with Teletherm function activated. (See "telephone module".)

- A - WITHOUT EXTRACTION OF HOT WATER**
- The boiler remains at the maintenance temperature (about 80°C).
 - The circulator does not work.

- B - WITH EXTRACTION OF HOT WATER**
- The boiler continues at the maintenance temperature.
 - The circulator operates under the control of the electronic circuit, in function of the flow and the temperature selected for this service.

In any event, the safety thermostat (7) will disconnect the burner whenever the temperature of the water in the boiler becomes too high.

To reset it, press the button under the protective cover.

Any blockage of the burner will cause the pilot (8) to light up.

- Check that the circulator is operating correctly and unblock it, if necessary, by removing the twist control cap, pressing on the groove of the shaft and turning at the same time with a screwdriver.
- Check the performance of the burner, following the specifications of the Instructions manual.
- Purge and check that all emitters reach the temperature selected on the boiler potentiometer (3) when in operating conditions.
- Flick the general switch (1) to "Off".

LAIA GTI-T Telephone module

This module is constituted by two elements: a **portable emitter control** (9) which incorporates a service switch, keypad and loudspeaker, and also a **receiver** (10) for connection to the telephone line, mounted at the control panel (See [Figure 1](#)).

Remote control

The maximum duration of the telephone call is four minutes; once this time has elapsed, communication is cut off. If the receiver does not receive any tone from the emitter for thirty seconds, communication will be cut off.

- Enter the number where the receiving device is installed. At the eighth tone, the receiver will emit the following message: "Roca Heating. Enter the code". This message can be heard through the earpiece of the phone.
 - Bring the emitter up close to the microphone in the speaker and key in the four digits of the access code. The initial access code is "0000".
- a) If the code is not correct, the receiver issues the message, "Code incorrect. Enter the code". After five inaccurate attempts, the line is cut off. If less than four digits are entered, the line is cut off after thirty seconds. If more than four are entered, depending on which ones, some special function may be started (if the first four correspond to the correct code and the remaining ones to the function).
- b) If the code is correct, the receiver issues the message, "Code correct. Select function", and awaits reception of one of the following digits: 1, 2, * (depending on the function required).

Change of code

- Press the * and 1 keys, in this order. The receiver says, "Enter new code".
- Enter the four digits of the new code (* and # may not be included), followed by *. The receiver repeats, "Enter new code".
- Enter the four digits of the code again.

- a) If the two series of digits were not the same, the receiver gives the message, "Enter the code" and the steps for changing the code must be repeated from the beginning.
- b) If the two series of digits were the same, the receiver says, "Code correct. Select function", and awaits reception of one of the following digits: 1, 2, * (depending on the function required).

Consultation or change of status of the "Heating" service

- By pressing key 1 of the emitter, you will be informed of the status of the heating service. The receiver will state, "Heating on" or "Heating off".

If you wish to change the status, press key 1 again.

Consultation or change of status of the "H.W.S." service

- By pressing key 2 of the emitter, you will be informed of the status of the hot water service. The receiver will state, "Hot water on" or "Hot water off".

If you wish to change the status, press key 2 again.

Operation over the receiver

When the receiver is connected to the supply voltage, the LED remains off and the receiver does not accept any tones emitted via the microphone and does not issue any messages via the loudspeaker (see "off position"). The receiver incorporates three switches: (heating), (HWS) and (loudspeaker).

Once the receiver is receiving supply voltage, the green voltage LED will light up.

"Heating" selection

- Press the key. The LED:
- lights up = the heating service is operating normally.
- does not light up = the heating service is disconnected.

"Hot water" selection

- Press the key. The LED:
- lights up = the HWS service is operating normally.
- does not light up = the HWS is disconnected.

"Loudspeaker" selection

At OFF.

- Press the key. (*)

(*) This is not necessary when connecting the receiver to the mains for the first time.

The LED is off and the receiver:

- Does not admit tones from the emitter via its microphone.
- Does not issue messages via its loudspeaker.
- Admits messages on the phone line at the eighth call.
- Issues messages on the phone line.

At ON


- Press the key. The LED lights up and the receiver:
- Admits tones from the emitter via its microphone.
- Issues messages via its loudspeaker.
- Admits messages on the phone line at the eighth call.
- The "loudspeaker" LED flashes slowly while a call is being answered by the receiver

Disconnected

- Press the key for 3 seconds. The LED will flash rapidly and the receiver:
- Is disconnected from the phone line.
- Does not answer any calls.




Press the key to return to the ON position.

Blockage

The red  LED lights up to indicate blockage of the boiler.

Direct operation on the microphone of the receiver

All functions performed via telephone may also be performed locally by holding the loudspeaker of the emitter against the microphone of the receiver.

- Put the  key in the ON position. The  LED will light up.
- Bring the loudspeaker at the back of the emitter up close to the microphone  of the receiver.
- Follow the operations described in "Remote Control", remembering:
- The digits of the access code need not be entered.
- Press the 0 key. The following message will be emitted: "Roca Heating. Select function."

If any calls come in on the telephone line while the emitter is being used, the call is given priority and all messages sent via the receiver's microphone are cancelled.

Cleaning

General cleaning must be done by specialised personnel whenever necessary, but at least once a year. The most common operations are described in this chapter.

- Interrupt the electrical supply to the boiler using the switch (1).
- Close the valves for access of fuel to the burner.
- Open the door of the boiler and disconnect the earth point connection with the right panel.
- Remove the door, separating it from its supports and chains.
- Remove the securing nut (11) from the burner at the flange and separate from the boiler, taking care not to damage the fuel or electrical connections. See [Fig. 2](#).
- Remove the 4 securing nuts (12) from the front cover of the boiler, and remove the cover itself. See [Fig. 3](#).
- Remove the turbulisers from the fume ducts (13) and clean them. See [Fig. 4](#).
- Clean the silencer incorporated in the front cover.
- Protect the furnace bed with paper or similar, and clean it with the brush provided. Proceed similarly for the fume ducts.
- Remove the paper etc. from the furnace with all traces of cleaning materials, as well as any deposits left in the draught plate (optional) at the base of the chute.
- Repeat the above operations in reverse order to reassemble the components.

Maintenance

Maintenance operations must be performed by specialised personnel, in accordance with current regulations. At minimum, they must include:

- At the end of each heating season or before a long period of disuse, the generator must be cleaned without letting the soot harden.
- At least once a year, the maintenance operations described in the burner instructions must be carried out.
- A "combustion analysis" must be performed once a year. Regulation when suitable to adjust the indexes to the levels determined by current regulations.
- The chute must be cleaned at least once a year.
- All regulation, control and safety devices must be checked for correct operation at least once a year.

Important Recommendations

- In the event of prolonged periods of disuse, the unit must not be emptied.
- Water must only be added to the unit when unavoidable fill-ups are necessary.

This operation must only be performed when the water in the generator is cold.

- Frequent fill-ups may cause lime furring in the generator and damage it greatly, causing it to lose efficiency.
- If the unit is located in an area prone to freezing, some anti-freeze agent must be added to the water in proportion to the minimum outside temperature of the place.

EC Compliance

LAIA GTI, GTI-R and GTI-T boilers and Heating Units conform to European Directive 89/336/EEC on Electromagnetic Compatibility.