### **FORESTAL**





### Caldera

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



### Stell boiler

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



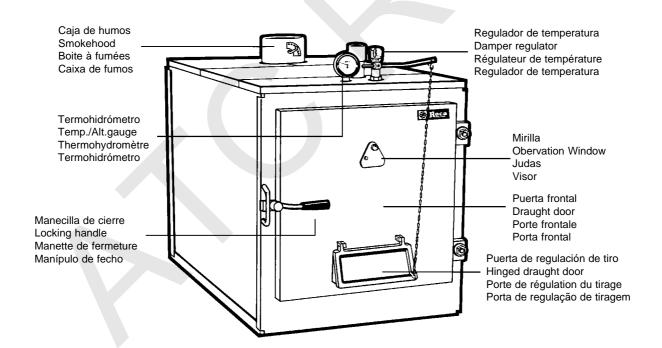
## Chaudière

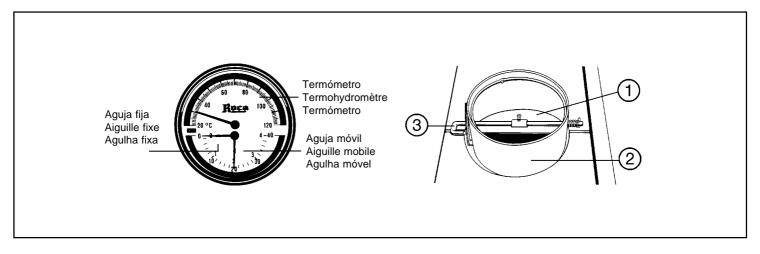
Instructions de Fonctionnement Nettoyage et Entretien pour l'**USAGER** 

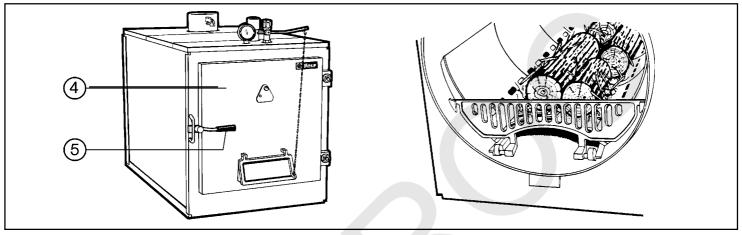


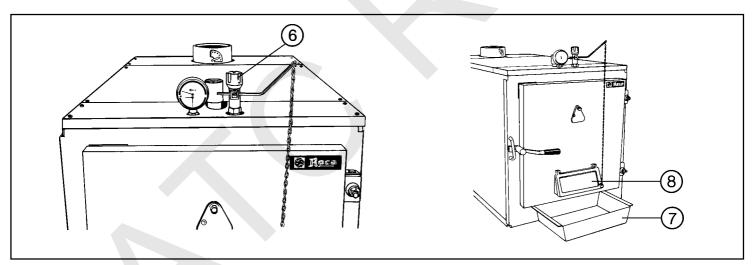
### Caldeira

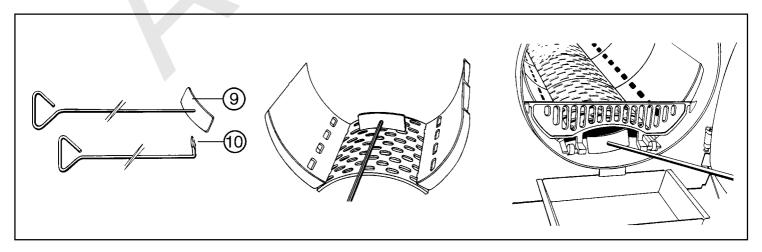
Instruções de Funcionamento Limpeza e Manutenção para o **UTENTE** 

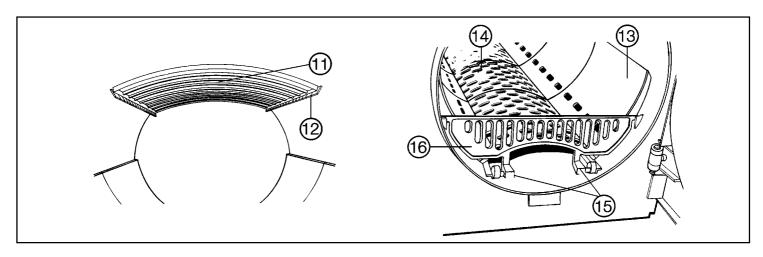


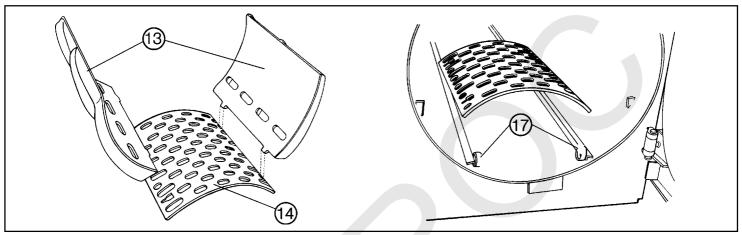














The FORESTAL boiler you have chose for your installation is a product of unbeatable quality which will let you enjoy the comfort afforded by central heating for many years. We are sure you will obtain the level of comfort you expect from its use.

In this information we offer you the main features of the boiler as well as the operations that are necessary for its correct use and proper maintenance.

We are at your disposal, through your Installer, to solve any problem that may arise.

### **Main Features**

Heat output: 30,000 kcal/h Heat output: 34.9 kW

Maximum working temperature: 100 °C Maximum working pressure: 3 bar

### Operation

Checks and operations to follow at the beginning of each heating season and during continuous use of the boiler.

#### Operations prior to the first firing

- 1 Check that the installation is full of water and set the fixed pointer on the combined temp./ altitude gauge in the position corresponding to the static head of the installation.
- 2 Check that the pump runs correctly.
- 3 Bleed the air from the installation and radiators.
- 4 In installations with an open expansion vessel, top up with water until the mobile pointer on the combined temp./altitude gauge levels with the fixed one. Where a sealed expansion vessel has been installed, refill with water until the mobile pointer is slightly above the fixed one.

This operation should be done when the boiler is cold.

### Start-up

#### First lighting

- 5 Before doing this, check that the damper (1) in the flue outlet (2) is open. If not, open it by means of the handle (3). Position C on the quadrant means "closed", while A is "open".
- 6 Just as important as the previous check is making sure that the pump turns correctly. If not, or if air bubbles are noticed, remove the turn and bleed plug and turn the axle with a screw driver.

#### **Stoking**

- Open the front door (4) using the locking handle (5).
- 8 Place the logs that are going to be used as fuel lengthwise on the grates. Pile paper or straw along both sides of the logs, then cover with small pieces of kindling, resting them on the grates and on the logs.
- 9 Light the paper or straw.
- 10 Once the fire has kindled and combustion is maintained, add two or three logs, being careful not to put the fire out.
- 11 Close the front door and adjust the damper regulator (6) according to the specific instructions that come with its packing.
- Put the ash-pan (7) under the hinged draught door (8).
- 13 Bleed all the radiators and ensure that they reach the required operating temperature.

#### Successive Stoking

The burning of wet wood or running at low capacity can cause condensation that will soil and damage the boiler. Use dry wood (two years after cutting) and keep the damper regulator above 70-75°C.

### Cleaning

The cleaner the boiler the lower fuel consumption. Consumption increases about 3% for every millimetre thickness of soot.

To aid managing and cleaning the FORESTAL boiler, the following necessary tools are supplied:

- Scraper (9)
- Slice bar (10)

The scraper (9) with double-curved blade is adapted on one side for the shape of the grate, and the other for the sides of the fire chamber and the chamber itself. Combustion products deposited on these surfaces can be removed with its help.

It should be used to draw ashes and cinders that have fallen below the grates to the ash-pan (7). The slice bar (10) is used to stir up the fuel when necessary and remove combustion products sticking to the grates.

### **Maintenance**

The internal surfaces of the combustion chamber and all its interior parts should be carefully cleaned periodically. To do this, proceed to:

- Open the front door to leave completely free access to the combustion chamber.
- 2 Lift the three domes (11) resting on the supports (12), take them out and clean them with the scraper.
- 3 Lift the three pairs of side pieces (13) resting on the grates (14), take them out and clean them with the scraper.
- 4 Remove the three grates from their supports and the feet (15) of the grille (16) from the rings (17) by a sideways movement. Clean them outside using the scraper and the slice bar.
- 5 Clean the combustion chamber with the help of the scraper, then replace all the interior components, assembling them in reverse order to their withdrawal. Close the front door.
- At the end of the heating season repeat these operations before the soot hardens.
- Check all the regulation and control devices.
- Clean the chimney every year.

#### Important recommendations

- In case of long periods of non-use, the installation must not be emptied.
- Water should be added to the system only when absolutely necessary.

# Always wait until the boiler is cold before adding water.

- Frequent adding of water may cause lime deposits to form in the boiler, seriously damaging the boiler, or at least reducing its efficiency.
- If the installation is located in a frost-risk area, some anti-freeze solution should be added to the water in proportion to the minimum outside temperature of the place.

After a long period of non-use of the installation it is possible that:

- The circuit of radiators or panels does not warm up, even when the temperature of the water in the boiler is correct. In this case check that:
- The pump runs correctly; otherwise proceed as indicated under "Operation-6"
- The valves on each radiator are open and their spindle (headwork) is not jammed.

Should no positive result be obtained after these checks, report it to your Installer.